

# Catalogue of Partner Expertise from Widening Countries - Part 1

www.healthncp.net



#### INTRODUCTION

The HNN3.0 project tool "Catalogue of Partner Expertise from Widening Countries - Part 1" was developed collecting information from participants of the Horizon Europe Cluster "Health" Centralised Brokerage Event\*, that was held online in 2023.

The catalogue represents a comprehensive dataset that contains detailed profiles of individuals and their organizations, highlighting their specific skills, areas of expertise and competencies. Profiles are arranged in alphabetical order according to the last name of the participant.

A catalogue of partner expertise profiles has the potential to connect individuals and organizations based on their skills, knowledge, and collaboration needs. It leverages detailed profiles to facilitate successful collaborations under Horizon Europe and enhances the efficiency of the partner selection process.

The immediate purpose of the Catalogue is to provide a reliable, accessible and time-efficient resource for individuals and organizations looking to identify and engage with partners from Widening Countries who have the right expertise and capabilities to provide added value to their project, benefitting from the possibility to expand their consortium and the associated budget thanks to the Hop-On Facility call, open until September 26th 2024\*\*.

In summary, this tool is valuable for Horizon Europe consortia building to identify and engage with potential partners from the Widening Countries who possess the specific skills and knowledge required for enhanced collaboration under Cluster "Health" calls.

<sup>\*</sup> This partnering event was organised as support for consortium building for the Horizon Europe Health Cluster calls ( <a href="https://cluster-health-horizon-europe-brokerage2023.b2match.io/">https://cluster-health-horizon-europe-brokerage2023.b2match.io/</a>)

<sup>\*\*</sup>More information on the Hop-on Facility here: (1) <a href="https://www.healthncp.net/pdf/hop-hnn-toolkit">https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-widera-2023-access-06-01</a>

# Elif Damla Arisan, **Gebze Technical University, Director of Institute of Biotechnology**

the following mission and vision:

# **ABOUT**

At the centre of 12 organized industrial zones, GTU has embarked on its journey to becoming the regional leader of R&D, technology and innovation. The Institute of Biotechnology at GTU also shares this goal and maintains its activities in line with

#### **Mission**

Lead regional, national and international research, education, technology production and applications, and entrepreneurship in the fields of medical, industrial, environmental, food, plant, and synthetic and systems biotechnology.

#### **Vision**

Become a regional, national and international center of research and education that uses advanced technology that is research and innovation oriented and forms creative and robust collaborations with the industry in various fields of biotechnology.

Under this mission and vision, we aim to raise a qualified workforce with an innovative spirit in this field by producing graduates who will be the future founders of biotechnology start-ups and in line with the Biotechnology Strategy and Action Plan (2015-2018) of the Turkish Ministry of Science, Industry and Technology.



https://www.gtu.edu.tr/



# **Burcu Avcibay Vurgec, Cukurova University, Department of Midwifery**



Cukurova University is a member of the European University Association (EUA). Its chosen by the Turkish Supreme Council of Higher Education, as one of the universities in the field of research and internationalization among nearly two hundred universities in Turkey.

The midwifery department provides education at undergraduate, graduate, and doctoral levels within the Faculty of Health Sciences of Çukurova University.

Our team consists of midwifery and obstetrics-gynecology nurses. Our general fields of study are maternal and child health, refugee/asylum seeker/women's health under temporary protection, and risky pregnancy. Our current special fields of study are the mental health of immigrant pregnant women and the effects of climate change on maternal-fetal health and the mental health of women.



O https://www.cu.edu.tr/en/

Sara Abalde-Cela, **International Iberian Nanotechnology Laboratory** 

#### **ABOUT**

The INL International Iberian Nanotechnology Laboratory, located in Braga (North of Portugal) was founded by the governments of Portugal and Spain under an international legal framework to perform interdisciplinary research, deploy and articulate nanotechnology for the benefit of society.

INL aims to become the world-wide hub for nanotechnology addressing society's grand challenges. The Research and Technology activities are focused on six clusters: Health, Food, Energy, Environment, ICT and Future Emerging Technologies, which complement each other and provide a base for interdisciplinary interactions between our research. The full-fledged nanotechnology laboratory enables leading research of the highest international standard.

Q https://www.inl.int/





# John Abe, Ablny Technologies & Partners(ATP)

## **ABOUT**

ATP and its partners are **enabling AI solutions to speed up the process of learning and understanding, which enables faster scientific discovery.** This can be applied to finding new solutions in areas such as climate change mitigation, or developing technologies that support the transition to a circular economy.

ATP with industry partners is creating the Internet of Things (IoT) system that allows manufacturers to control and analyze performance, and to collect data in order to increase productivity. It also supports remanufacturing and enables parts to be harvested. ATP is partnering with vendors, developers and IT consulting firms to shape the future of manufacturing through predictive analytics, augmented reality, and additive manufacturing.

Our technology and design are helping companies of all shapes and sizes thrive in a digital world. Also, ATP is partnering with a number of stakeholders for HORIZON Europe calls especially as we have some demonstrators, use case providers, management experience, and research partners that are ready to work along with us in the Construction, Building system, Electricity distribution, Textiles and white goods industries with related systems.

We are deploying a variety of IT/AI solutions, product and web services. In the view of technological advances, ATP focuses on **combining broad IT solutions and deep technology** skills to help you draw business value from these new technological capabilities.

ATP other activities and deliverables are:

- \*\* integrating AI into IoT networks is becoming a prerequisite for success in today's IoT-based digital ecosystems.
- \*\* Use analytics and AI to help transform the customer journey, create next-generation supply chains and rethink the way you do business.
- \*\* Developing systems that enable circularity so as to keep everything in a closed-loop cycle using and reusing raw materials in a way that avoids as much waste and emissions as possible.

## **OPPORTUNITIES**

# **◆ Project Cooperation**

Digital technologies, Industry 4.0/5.0 Technology and Media Solutions for health delivery

Generating and leveraging health data for critically important providers, health plans, life sciences companies, and other stakeholders Predicting and optimizing quality – we can use health records data to automatically define quality through objective measures of patient outcomes. Determining and driving quality with data for robust performance reports to doctors (e.g., score carding, patient compliance).



# Cesar Agostinis-Sobrinho, Klaipeda University

## **ABOUT**

Klaipėda University (KU) – is a multidisciplinary national and Baltic Sea Region research a studies leader, promoter of cultural heritage, and lifelong learning center integrated international academic networks. Health sciences as a unique interdisciplinary area of research are consistently and systematically developed at Klaipeda University.

Health Research and Innovation Science Center provides a high-level fundamental and applied research and experimental (social) development work, integrated education and learning process. The vision of the Center is with the competence in Klaipeda University develop a multidisciplinary and interdisciplinary unit which brings knowledge to society in the field of Health. The mission - to conduct high-quality projects that would enable health research breakthrough and innovations. There main fields are:

- **Public Health Department's** subprogram is planned to be conducted by analysis of public health and health care needs and scientific proof and development of rational prevention of disease and health strengthening oriented integrated health care models.
- **Medical Technologies Department's** subprogram is planned to be conducted by creation and development of smart bioengineering technologies for early diagnosis and treatment, assessment of the marine environmental factors impact on the operator's condition, assuring balanced human-environment interaction.
- **Rehabilitation Department's** subprogram is planned to be conducted by effectiveness assessment of non-traditional methods of rehabilitation, ergotherapeutic methods applied for children with disabilities and aspects of quality of life of patients with neurological and orthopaedic disorders.
- **Recreation and Tourism Department's** subprogram is planned to be conducted by the assessment of coastal environment components and factors affecting human health and well-being analysing aspects of recreation and tourism and prediction of this effect on demographic and climate changes in the Lithuanian costal region.
- **Nursing Department's** subprogram is planned to be conducted by development of research fields, such as biotechnology, common tools and technologies for human health, application of research results to improve people's health and optimization of the health care public services.



# Zehra Betül Ahi, KCL R&D

## **ABOUT**

KCL was established in 2007 to **develop products and technologies based on the collagen molecule.** For this purpose, we aim to develop the collagen ecosystem by developing projects that evaluate the leather industry products, waste, and by-products as new value-added products.

KCL Research Focus is Divided into Three Main Areas:

**KCL BIOMATERIALS:** We are developing innovative biomaterials from animal tissue wastes for tissue engineering, biomedicine, regenerative medicine, and bioprinting applications. The company bases its activity on its technology creation and has obtained patents for two product families, with more applications pending.

**KCL HEALTH & NUTRITION:** Our team, which conducts research in this field, work to develop alternative food and food additives from waste products. In addition, the development of new protein sources using biotechnological methods and their use for nutritional purposes are also in our fields of interest.

**KCL LEATHER & TECHNOLOGY:** We work to make the leather industry a non-polluting industry that recycles all of its waste and produces with the principle of zero waste. Re-evaluation of wastes in production, alternative bio-solutions to replace substances prohibited by REACH regulation, and circular economy are among our working areas.

KCL R&D has its own offices, laboratories with top-of-the-line equipment, and a pilot plant for chemical synthesis and fertilizer production. Our laboratories' equipment to synthesize, characterize and process bio-polymers and advanced composites; laboratories are completely equipped for process and characterization concerning the funded project background. KCL is currently involved in 2 Eureka projects, 1 of them coordinated by KCL, and has participated in more than 25 TUBITAK-funded projects.





# Sofia Aires Martins, **Institute for Bioengineering and Biosciences (iBB)**



The Institute for Bioengineering and Biosciences (iBB) is a research unit at Instituto Superior Técnico, Universidade de Lisboa, that aims to merge biological, chemical and engineering disciplines for the benefit of the health, agro-food, industrial, marine and environmental sectors.

## **KEY WORDS**

Gene and Cell therapies Organoids Regenerative Medicine Biomaterials & disease modelling **Drug Delivery systems** Microbiome

Microbial drug resistance and opportunistic infections

Over the last five years, iBB has been an active partner in R&D projects, collaborating in 12 international projects, including H2020 and European partnerships and more than 55 national research or industry-driven projects. Having a strong drive for knowledge sharing, iBB is a founding member of the Portuguese Roadmap of Research Infrastructures in biodata and bioimaging (Biodata.pt and PPBI.pt), and belongs to the national nodes of ELIXIR, EATRIS and EUROBIOIMAGING European Research Infrastructures.



https://tecnico.ulisboa.pt/pt/

#### **OPPORTUNITIES**

# ◆ Project Cooperation

#### Innovative non-animal human-based tools and strategies for biomedical research

We offer to our partners our human tissue/regenerative medicine expertise in the fields of:

- 1) derivation of human pluripotent stem cell (hiPSCs) lines by reprogramming cells from healthy individuals and patients;
- 2) standard and scalable propagation of hiPSCs using different bioreactor configurations and under chemically-defined conditions;
- 3) controlled differentiation of hiPSCs into 3D advanced models of the neural, cardiac and hepatic tissues, in particular organoids, and
- 4) molecular, structural and functional characterization of these 3D models, including global characterization by transcriptomics and further bioinformatics analysis.



# Project Cooperation

# Microbiome analysis

The Biological Sciences Research Group at iBB is a multidisciplinary group conducting research in fundamental and applied biological sciences combining Molecular and Cellular Biology; Biochemistry; Functional, Comparative, and Meta- Genomics assisted by Bioinformatic tools, and exploring Systems and Synthetic Microbiology strategies to understand how biological systems orchestrate multiple functions.

## **Expertise:**

- Multidrug/multixenobiotic resistance transporters;
- Microbial genome sequencing, annotation and in silico information exploitation;
- Deciphering complex virulence and microbe-host interaction mechanisms;
- Tackling diversity of human-, animal-, and bioprocesses-associated microbiomes.

# **Type**

Partner seeks Consortium/Coordinator

# **♦ Project Cooperation**

# **Fungal infections and NCDs**

Looking for partners interested in fungal infections and NCDs.

The FunPath Lab (<a href="https://sites.google.com/view/ibb-tecnico-bsrg-funpath-lab/?pli=1">https://sites.google.com/view/ibb-tecnico-bsrg-funpath-lab/?pli=1</a>) at iBB is focused on understanding fungal infections caused by pathogenic yeasts of the Candida genus, on a genome-wide perspective, and on using this information to improve therapeutic options.

#### **Expertise:**

- Genomics, transcriptomics, proteomics and chemogenomics to unravel the evolution of C. glabrata clinical isolates towards clinically-relevant phenotypes.
- The development of computational tools and models to study transcriptional regulation and metabolism in C. glabrata, C. albicans and C. parapsilosis at a genomic scale, including particularly the PathoYeastract database. (<a href="http://pathoyeastract.org/index.php">http://pathoyeastract.org/index.php</a>)

# **Type**

Partner seeks Consortium/Coordinator

# Project Cooperation

Manufacturing of Advanced Therapy Medicinal Products (ATMPs)

We offer our partners expertise and technological platforms for:

- RNA and plasmid DNA based therapeutics
- Stem cell derived Extracellular Vesicles
- CRISPS cas9 technology
- Metagenomics and genomic analysis

# **Type**



# Ilona Aleksandravica, UL Institute of Clinical and Preventive Medicine



#### **ABOUT**

The Institute of Clinical and Preventive Medicine, University of Latvia (LU ICPM) is among the leading research institutes of the country to **bridge basic medical research to the clinics.** Biomarker and new technology research, in particular for gastrointestinal cancer early detection and screening are among the key priority research areas. The Institute has a long-standing expertise in running a clinical biobank. Strategic partnership has been developed with the Riga East University Hospital (REUH), the leading clinical institution for managing cancer patients. Broad international collaboration, including with industry sector (Microsoft, ROCHE) has been developed; this is mainly related to gastric cancer research.

LU ICPM is running a large population-based project GISTAR (www.gistar.eu) having recruited 11,000 subjects in this digestive cancer prevention project. The institute has long-standing experience in participation and leading Horizon and EU4HEALTH projects.



https://www.lu.lv/en/

Raluca-Oana Andone, Institutul de Chimie Macromoleculara Petru Poni, BioNanoTech Support Center

#### **ABOUT**

The aim of the BioNanoTech Project Support Centre is to promote the European Cooperation in Horizon 2020/Europe projects for Romanian key actors in the field of material science: eco-nano-technologies and advanced materials (including nanomaterials, nanomedicine etc.). This is one of the main issues to be tackled by the Romanian Smart Specialization Strategy in the next programming period and it is addressed at both regional and national levels. The BioNanoTech also comes as a direct response to the need of an improved collaboration in the field of research, one of the targets of the Horizon Europe program. Cooperation is built on excellence, a solid collaboration network and on the ability of institutions to mould their profile based on the scientific trends and opportunities offered. Using the experience of one of the best research institutes in Romania – "Petru Poni Institute of Macromolecular Chemistry, we offer services and consultancy for setting up consortiums and partner search support, consultancy concerning proposal writing and also in project management for research projects.



https://portal.bionanotech.ro/



# Aneta Andrzejczyk, Medical University of Lodz, Office for Research, Strategies and Development



Medical University of Lodz (MUL) is the largest medical university in Poland dedicated to medicine, pharmacy, life sciences and public health.

MUL combines research excellence with clinical expertise:

- Three faculties (medicine with dentistry, nursing and obstetrics, pharmacy, and health sciences)
- Three Clinical and Teaching Hospitals with over 1,800 test beds (over 2,900 clinicians and over 113, 000 patients annually)
- Centre for Support of Clinical Research,
- •State-of-the-art laboratories: BRaIn (Research Development Innovations in Biomedicine and Pharmacy Campus in Lodz) and MolecoLab (Lodz Center for Molecular Research of Civilization Diseases), Medical Simulations Centre
- Current participation in 11 H2020 projects (including IMI), 2 Horizon Europe, and 1 EU4Health project



O https://en.umed.pl/

#### **OPPORTUNITIES**

# ♦ Project Cooperation EDCs, thyroid gland and oxidative stress

The research will be carried out on homogenates and primary cell lines derived from porcine tissues (thyroid, non-lactating breast, salivary glands, stomach, small intestine, colon, ovaries, uterus or spleen and also – as reference tissues – liver and kidney) obtained at a slaughter-house during the routine process of slaughter carried out for consumption. Therefore, no experimental animals will be used in this research. Additionally, research will be carried on commercially available human cell lines (normal and cancerous). To induce oxidative damage to macromolecules the following EDCs, possessing NIS inhibition activity, will be applied in the project: potassium perchlorate (KClO4), ammonium thiocyanate (NH4SCN), potassium nitrate (KNO3), but also sodium chlorate (NaClO3), potassium selenocyanate (KSeCN), and sodium fluoride (NaF); all of them are widely used for agricultural, industrial and pharmaceutical purposes. A number of oxidative stress parameters will be measured with the use of multiplexed quantitative analysis, spectrophotometry, flow cytometry and real-time PCR. Potential protective effects of melatonin and indole-3-propionic acid (two indole substances possessing significant antioxidative properties, confirmed in numerous, among others in our, experimental and clinical studies), and of endogenous 17β-estradiol will also be examined against oxidative damage caused by above mentioned EDCs.

# **Type**





# Project Cooperation

# Cancer, thyroid and melatonin

Experiments in vitro will be performed with the use of porcine thyroids, livers and mammary glands, which will be collected from animals (Sus scrofa f. domestica) at a slaughterhouse. Tissue homogenates, nuclear DNA or single cell suspension will be incubated in the presence of potential carcinogens (e.g. iron) with/without melatonin. Experimental animals will not be used in the study. The following parameters will be measured: indices of oxidative damage to macromolecules, indices of antioxidative defense, levels of free radicals and reactive oxygen species, thyroid antigens (participating in thyroid hormone synthesis), cytokines.

The mammary gland and liver will be chosen for comparative experiments, as sodium-iodide symporter (NIS) is present in the mammary gland, which possesses high potential for cancer initiation, and as myeloperoxidase (MPO) (revealing among peroxidases the greatest similarity to thyroperoxidase, TPO) is present in the liver, which is most frequently used to evaluate oxidative damage to macromolecules and possesses the most effective detoxifying properties. The species swine has been chosen, as the porcine thyroid is characterized by the highest similarity to human thyroid regarding thyroid morphology.

Practical applicability of project results comprises two issues. First, if oxidative imbalance associated with exposure to carcinogens is confirmed in the thyroid, the breast and the liver, this – together with other measured indices – may be helpful in early detection of thyroid, breast and liver cancer but also malignancies of other organs. Second, possible application of exogenous melatonin may be considered in humans and other organisms to prevent thyroid, breast, liver and other types of cancer and also other diseases of oxidative etiology.

# **Type**

Partner seeks Consortium/Coordinator

# Project Cooperation Cancer, aging and oxidative stress

Cancer prevalence increases with age. Both cancerogenesis and aging are associated with the increased oxidative damage to macromolecules. Ageing is defined as a progressive, endogenous and irreversible physiological decline that increases vulnerability to disease and finally to death. Aging comprises functional, structural and morphological changes observed between birth and death, starting just after reaching the end of development, although according to some authors it starts immediately after birth; Therefore, the discussed issue relates not only to elderly but to all age ranges.

Practical applicability of project results relies on early detection of aging-related cancer with the use of parameters of oxidative stress.



# **Type**



# Alexandra Antunes, Centro de Química Estrutural, Instituto Superior Técnico, ULisboa

#### **ABOUT**

Centro de Química Estrutural (CQE) is a Research Unit of the University of Lisbon (ULisboa) with sites at Instituto Superior Técnico (IST) and Faculdade de Ciências (FCUL). It is the largest Research Unit of Chemistry of UL, covering a broad and interdisciplinary group of areas within the scope of Chemistry.

CQE general mission concerns the strengthening of the contribution of Chemistry to the welfare of Society through high-level Research, Development, Innovation, Transfer of Knowledge, Advanced Training and Teaching activities, building-up scientific and technological skills in both fundamental and oriented/applied research in science and engineering.



https://cqe.tecnico.ulisboa.pt/

Cláudia Antunes, Institute of Public Health of the University of Porto (ISPUP)

#### **ABOUT**

ISPUP hosts the R&D - Unit Epidemiology Research Unit (EPIUnit) - classified as "excellent" and nurtured by a multidisciplinary team of researchers that covers population, clinical and translational aspects of Epidemiology. In 2021, it joined the Associate Lab for Integrative and Translational Research in Population Health (ITR). ITR is an interdisciplinary community of 180 scientists who promote innovative research in Population Health, and its translation into evidence-driven policy. ISPUP has a large population biobank and 10 research cohorts, which feed several national and international multistakeholder studies. ISPUP promotes a strategic liaison with key academic hospitals, national and international scientific bodies, national and local government, and patient organisations, to promote persistent population health improvement and wellbeing.



O https://ispup.up.pt/en/





# Theofylaktos Apostolou, **EMBIO Diagnostics LTD**



#### **ABOUT**

EMBIO Diagnostics LTD is a biotechnology company, certified with ISO9001 and ISO13485, that designs, develops, and commercializes complete custom-based hardware and software solutions. EMBIO's activities have resulted in internationally known diagnostic and disease monitoring devices with outstanding reliability, speed, and cost efficiency. Embio Diagnostics aims to change the lifestyle and disease landscape for the health of mankind by providing diagnostic devices for the early detection of rare diseases (that are difficult or almost impossible to diagnose) as well as life-supporting diagnosis methods of everyday illnesses. EMBIO's star product is B.EL.D.™ (Bio Electric Diagnostics), a multi-purpose handheld analyzer that instantly tests for pesticides, bacteria, and other harmful chemicals.

#### What do we offer:

- · Molecular, microbiological, and cell culture (normal or cancer cells) labs for tests and research;
- Prototyping lab to develop from the scratch hardware and software solutions;
- Experience in the diagnostic field;
- Commercialization experience.



https://embiodiagnostics.eu/

# Asma Arfaoui, Polydisciplinary Faculty of Béni-Mellal **Sultan Moulay Slimane University**

#### **ABOUT**

The Polydisciplinary Faculty of Béni-Mellal is a public institution of higher education in science, technology, economics and law. Its network of training courses are delivered in teaching and research programmes. These are organised into several cycles (basic and professional bachelor's degrees, master's degrees, doctoral cycles and continuing education) and are offered by several departments: Biology and Geology, Physics, Chemistry, Mathematics and Computer Science, Language and Communication, Economics and Management, and Legal sciences.



O https://www.usms.ac.ma/





# Ela Ari, **Istanbul Medipol University**

#### **ABOUT**

Istanbul Medipol University is among the universities that have the highest rate of the accredited programs. With the School of International Medicine, Medicine, Health Sciences, Engineering and Natural Sciences, Pharmacy, Business Management, Fine Arts Design and Architecture, Communication, Law, Education, Humanities and Social Sciences, Istanbul Medipol University offers 183 undergraduate, 94 graduate programs. Also, there are nearly 20 research centres parallel with the study fields of these schools. Istanbul Medipol University ranked in the 401+ band of the best young universities created by the Times Higher Education (THE), in which global higher education performances for the UN's Sustainable Development Goals are evaluated, and the world's best universities are ranked.



https://www.medipol.edu.tr/

# Seyma Aydinlik Sanli, **TUBITAK Marmara Research Center**

#### **ABOUT**

We are a public research institution (The Scientific and Technological Research Council of Turkey (TUBITAK), Turkey) focused on molecular biology, histology, toxicology, molecular cell biology, and animal experiments. We have guite experience in the field of molecular pathways mechanisms of cancer cells including angiogenesis, autophagy, apoptosis, drug resistance, and EMT within the scope of development of potential drug candidates in vitro and in vivo. In this context, We can evaluate cellular apoptosis, autophagy, angiogenesis, cell proliferation, and viability, activation of inflammatory signaling pathways, wound healing, intracellular antioxidant epithelial/endothelial/primary cell lines and cancer stem cells in vitro by flow cytometry, western blot, PCR, ELISA, etc. methods within the scope of the project. For biomaterials, scaffolds, and implants, we can conduct cell culture and staining, cell viability and cell adhesion, immunochemical staining, mineralization assay, gene expression, osteoconductivity assay, SEM image, intracellular NO measurement, immunofluorescent, angiogenesis, In vivo rodent analysis.







# Ayça Arslan Ergul, **Bilkent University UNAM**

#### **ABOUT**

Bilkent University National Nanotechnology Research Center (UNAM), with its qualified human resources and management based on reason and knowledge, is an internationally competitive research center in nanoscience / nanotechnology, biotechnology / nanobiotechnology, materials science / engineering and related fields of activity in its supra-disciplinary ecosystem. It works to bring competitive R&D capability to Turkey with its focus on qualified science, social benefit and innovation at the global level, and its "national laboratory" identity, and to create quality information and high value-added technology at the international level.



O https://unam.bilkent.edu.tr/

## **OPPORTUNITIES**

# **♦ Project Cooperation** In vitro models for cellular aging

Ayça Arslan Ergül is a group leader in Bilkent University UNAM, Ankara, Turkey. Arslan-Ergul Lab is a young and dynamic group with six graduate and >10 undergraduate students. The lab is interested in brain aging, cellular senescence, brain cancer, and works on cell culture, **zebrafish**, and C. elegans. The research in Arslan-Ergul Lab is funded through two international EU-JPND projects and a national funding. The funded projects are titled as "Unlock the early life pathological imprinting of Alzheimer's disease via lifestyle" and "Early indicators of nervous system dysfunction in gut-first and brain-first animal models of Parkinson's Disease" and "Slowing Cell Division and Growth in Glioblastoma Cells by Senesens Induction". Ayça Arslan-Ergul is running the Friends, let's do science project for six years and was nominated as a Changemaker by Sabancı Foundation. She has attended more than 100 events in high schools to promote students into science. On her YouTube channel she is teaching molecular biology.

# **Type**



# **Burhan Ates**, **İnönü University**

#### **ABOUT**

Inonu University was founded and started serving education at 1976-1977. İnönü University, which is among the well-respected and established universities of our country, provides education for approximately 41,000 students with 33 research and application centers, including 14 faculties, 2 colleges including 1 State Conservatory, 4 vocational schools, 6 institutes, 1 technopolis, and Turgut Özal Medical Center. Our university, which is 10 km away from the city center, continues its education, scientific research and application activities with the Malatya Vocational School in the city center and the Malatya OSB Vocational School in Malatya Organized Industrial Zone, next to the central campus of 7000 decares.



O https://www.inonu.edu.tr/

## **OPPORTUNITIES**

# **♦ Project Cooperation** Development of Functional Carrier Systems for Biotechnological Enzyme Drugs

Many enzymes are used as medicines in the treatment of metabolic diseases. The common feature of enzyme-drugs is that their substrates are present in the human blood fluid system and the enzyme drugs scavenge these substrates and thus allow the treatment of the disease. The catalytic activity and in vivo half-life of the enzyme drugs significantly affect the success of the treatment. However, since most of these drugs are biotechnological products, their production process is expensive and they are also used in high doses, thus, they cause serious side effects in patients. Therefore, to limit both the side effects of these clinical enzymes and to increase the half-life in vivo, the only way is immobilization. However, the handicap of immobilization process is the reducing of the catalytic activity of the enzyme. Therefore, innovative approaches are absolutely needed to increase the catalytic activity of immobilized enzyme drugs. We are thinking that it can be developed alternative carrier system for biotechnological enzyme drugs by preventing the activity decreasing of the immobilized enzyme drugs.



# Bouabid Badaoui, Mohammed V University in Rabat



#### **ABOUT**

Mohammed V University in Rabat: was founded in 1957 and is the oldest modern university in Morocco. UM5 is a huge coeducational Moroccan higher education institution (uniRank enrolment range: over 45,000 students). UM5 is ranked 1 nationally and 1064 internationally (2019-2020). Its alumni include leading government officials, ambassadors, academics, engineers, lawyers, and executives. UM5 is divided into two campuses:

- •The Agdal campus has three faculties: Science, Social Sciences, Economics, Law, Letters, and Human Sciences.
- •The Souisi campus which includes: the Faculty of Medicine and Pharmacy of Rabat, the Faculty of Dentistry Rabat, the Faculty of Educational Sciences, the Institute for the Study and Research for Arabization, the National School of Computer Science and Systems Analysis, the Ecole Normale Superieure of Technical Education, the University Institute for Scientific Research, the Institute of African Studies, and two Faculties of Law, Economics, and Social Sciences.

UM5 also dispenses many facilities and services to students including housing, a library, financial aid or scholarships, sports facilities, exchange programs, distance learning, as well as administrative services.

# Indre Baradinske, Siauliu ilgalaikio gydymo ir geriatrijos centras

#### **ABOUT**

Our center ready to cooperate in two fields:

- 1. Palliative care services;
- 2. Mental and physical health in changing working environments (post-pandemic workplaces).

The center provides first-level inpatient long-term treatment and palliative care services. Up to 236 patients can be treated simultaneously in three long-term treatment units.

Doctors, general practice nurses, nursing assistants, social workers, physical medicine and rehabilitation specialists provide health care services individually and holistically. The center provides therapeutic massage, physiotherapy and other procedures required by patients.

Please contact us by email: info@gerc.lt



https://gerc.lt/



# Cagla Balta,

# **Guven Future Health Technologies INC**

#### **ABOUT**

Guven Future is a part of Guven Healthcare Group developing digital home care and telehealth solutions. Guven Healthcare Group was founded in 1974 and has been at the forefront of medicine for 45 years. Guven Future is an R&D centre focused on breakthrough medical technology and innovation, supported by artificial intelligence, and operating in Health Informatics. The most important goal is to put patients at the centre of data-based prediction algorithms and bring preventive medicine to the fore, transforming the "reactive" healthcare approach into a preventive, predictable "healthy life" approach. We constantly embrace new technologies as a crucial part of a new model and approach to optimize healthcare's reach, impact, and cost-effectiveness. We use Artificial Intelligence-powered innovative mobile applications that we've developed to increase healthcare services' effectiveness.

Güven Future creates GDPR and HIPAA-compliant digital platforms to enable patients to access their doctors online, patient records, and past and previous appointments. Ultimately, we believe in the transformation of health care from "sick care" to "health care" and adopt a preventive and predictive approach.

#### In this context:

- 1. Guven Future develops artificial intelligence algorithms,
- 2. Works with multinational manufacturers to produce value-added solutions and establishes strategic partnerships,
- 3. With easy access to Guven Health Groups Clinics, Physicians and Patients, Guven Future can model developed products and solutions in with accordance to the needs of end-users,
- 4. It gives the highest importance to research, development, and innovation,
- 5. Focuses on all kinds of artificial intelligence, supports innovative projects in the fields of genetics, medical technology, and telemedicine,
- 6. With its focus on value-added product and solution development, Guven Future allocates resources to national and international clinical research, joint studies, and project activities.

#### Partnership and collaboration:

We have dedicated doctors, nurses, clinical psychologists, machine engineers, biomedical engineers, software engineers, mobile application developers, AI specialists, industrial designers, and UI/UX Experts on our team. We are also in contact and cooperation with different universities, and academicians. We implement telemedicine to track related patients, collect real-time, online data and develop AI-based reporting systems to act predictive and preventive. In addition, we have software-integrated personal medical devices (glucometers, bpm, weight scale, ECG, pulse oximeter, and others). Our latest project is clinical research and a digital serious game set to enhance the cognitive functions of Alzheimer's patients. We got funded by the government to facilitate the clinical and gamification phases. With our project, we aim to slow down the progress of the decay of cognitive functions in Alzheimer's patients, and we plan to measure this data with EEG. We are working with a hospital, research centre, government, technical and AI team.



https://en.guvenfuture.com/



# Mikhail Baryshev, Riga Stradiņš University

#### **ABOUT**

Riga Stradins University is the leading in Europe in the higher medical education and one of the largest university in the Baltic States in the area of medicine. Over 20% students and 200 PhD are international. Within last five years infrastructure of the University was significantly improved. The research team of the Institute of Microbiology and Virology has extensive experience in methylation-based technologies to detect pattern, level and allelespecific CpG-, non-CpG- and site-specific CCWGG DNA methylation. Current research areas of our group are related to molecular diagnostics and prognostic biomarkers of prostate cancer, as well as the role of epigenetics in the occurrence and progression of cancer.



https://www.rsu.lv/en

## **OPPORTUNITIES**

# **♦ Project Cooperation**

Development of a new diagnostic tool for medical needs using a new methylation-based approach to distinguish between aggressive and indolent prostate cancer

Our research team has extensive experience in methylation-based technologies to detect pattern, level and allele-specific CpG-, non-CpG- and site-specific CCWGG DNA methylation. According to our study of prostate cancer cell lines, a cell line representing the indolent, aggressive, and benign prostatic hyperplasia phenotypes has a characteristic allele-specific PSA promoter methylation pattern affecting PSA expression. Lack of PSA expression, as in PC3 cells (aggressive PCa), due to biallelic methylation of the PSA promoter, in clinic will be lead to false negative results in PSA-based PCa testing due to gene silencing in a growing population of cancer cells. Determining the allele-specific methylation status of the PSA promoter can explain the discrepancy between PSA levels and PCa disease in PSA-based PCa testing and can significantly improve PSA-based PCa analysis.

# **Type**



# Nuno Batalha, Universidade de Évora



The University of Évora is one of the universities belonging to the Portuguese public higher education system.

As such, its mission involves:

- The production of knowledge through scientific and artistic research, experimentation and technological and humanistic development;
- The socialization of knowledge, providing the traditional student population, as well as the working population, with academic qualification through undergraduate, master's and doctoral courses, ad hoc training courses and informal training throughout life;
- The transmission of knowledge to the community, fostering innovation and business competitiveness, the modernization of public services, as well as the social and cultural development of the broader community.



https://www.uevora.pt/

# Sinem Bağçe, **Acibadem University**

#### **ABOUT**

Acıbadem University was founded in 2007 and is dedicated to the field of health sciences. By using dynamic and contemporary educational programs, a strong academic teaching team trains healthcare students to be future healthcare professionals who continually research innovations in all fields of medical science. With the mission of being a strong researchoriented university, the research laboratories are fitted out with the latest state-of-the-art equipment, designed to complement the life sciences and biotechnology fields.

The Clinical Simulation and Advanced Endoscopic-Robotic Surgery Training Center - CASE is one of the world's most comprehensive medical training centres, accommodating of multiple departments and advanced technological infrastructure.

Acıbadem University offers its students the opportunity to study abroad at esteemed partner universities under the Erasmus Programme having bilateral agreements with Europe's mostnotable universities. With 100,000 square meters of in-closed area centrally located on the Asian side of Istanbul, the Kerem Aydınlar Campus is replete with high-technology equipment and offers students a privileged university life.



# Meltem Bayraktar, Uskudar University

#### **ABOUT**

Usküdar University is the first thematic university of Turkey in the field of Behavioral Health and Sciences. Our main research focuses are Behavioral Health, Neuroscience, Digital Health, Artificial Intelligence, Wearable Technologies, Forensic Science, Personalized Medicine. UU as NP Group aims to contribute to the world medicine through accumulating large database and using hi-tech devices such as QEEC, volumetric MR, functional MR, one and only MR compatible EEG, EPMRS, EKT, Pharmacogenetic Laboratory, and rTMS. The results of the researchers and projects have been shared with the psychiatry world and published in renowned scientific magazines. UU has 2000 m2 of laboratory area; Brain Mapping (QEEG), Genetics (DNA Isolation), Neurobiofeedback, Neuropsychology, Brain Stimulation, Neuroimaging, and Pharmacogenetics, Neuropsychopharmacology Phase1 (NPF). lab.



https://uskudar.edu.tr/en

## **OPPORTUNITIES**

**♦ Project Cooperation**Tissue engineering-supported stem cell applications

#### **Competences offered:**

- \* 2D and 3D Cell culture techniques
- \* Primary cell culture especially neuronal cell culture
- \*Laboratory opportunities, Flow cytometer, ELISA, RT-PCR, xCelligence Real Time Cell Analyzer, Inverted Fluorescence Microscope and Molecular biology (Immunocytochemistry and Immunohistochemistry, Western blot, PCR, RT-PCR, qPCR) The topic of the offer:
- \* Cellular and molecular mechanisms of neural differentiation and neurodegeneration
- \* Stem cell based therapy strategies for the treatment of neurodevelopmental and neurodegenerative diseases, especially Alzheimer's Disease, Parkinson's Disease and Autism spectrum disorder
- \* Biological characterizations of stem cells on scaffolds engineered for tissue enginering purposes
- \* Cellular and molecular mechanisms of nanomaterials designed for gene delivery.



# Project Cooperation

# TRANSGENIC CELL TECHNOLOGIES AND EPIGENETIC APPLICATION AND RESEARCH

Competences offered:

- \* CRISPR gene modification techniques
- \* Immune profiling (peripheral blood mononuclear cell and cytokine profiling)
- \* CAR-T cell development
- \* Virus production
- \* Cell culture techniques
- \* Primary T cell culturing and modifications
- \* Laboratory opportunities, Flow cytometer, ELISA, RT-PCR, xCelligence Real Time Cell Analyzer, Fluorescence microscopy and Molecular biology (Western blot, PCR, RT-PCR, qPCR) The topic of the offer:
- \* Gene Therapies strategies for Rare Diseases
- \* CAR-T cell development for Cancer Immunotherapy
- \* CRISPR gene editing approaches for Rare Diseases
- \* Virus vector including Lentivirus and Adeno-Associated Virus (AAV) production for gene therapies
- \* Primary focused rare diseases including spinal muscular atrophy (SMA), retinitis pigmentosa (RP), and recessive non-syndromic deafness

# Natalia Bednarz-Knoll, Medical University of Gdańsk, Laboratory of Translational Oncology

## **ABOUT**

We are focused on biology of tumor dissemination, and liquid biopsy in different solid tumors, in particular breast and prostate carcinomas.

We use variable methodology dedicated to circulating tumor cells isolation and characterization incl. novel and sensitive imaging flow cytometry enabling multimarker-based detection of different subtypes of cells and their detailed morphological analysis.

We have > 15 years of exeperience in CTC detection as well as experience in working on international projects, and even buisness partners.



# Sadok Ben Yahia, Tallinn University Of Technology

#### **ABOUT**

Founded in 1918, TalTech is the sole technological university in Estonia. It is also the mointernational university in Estonia. TalTech is a research-based university offering Bachelo Master's and Doctorate degrees in **technology**, **applied science**, **IT**, **business and maritime studies**. Renewed study programmes that target the needs of the labour market make TalTech graduates the expected experts.



https://taltech.ee/en/

#### **OPPORTUNITIES**

# ◆ Project Cooperation SmartToothBrush

We began forming a consortium with the goal of developing and clinically validating compact, cost- and energy-efficient, extended reality-enabled, reliable, and capable of integration into clinical settings and workflows devices and systems with fast, real-time response times as needed and reliable and capable of integration into clinical settings and workflows. The initial idea is to develop a **non-obtrusive toothbrush with a camera that is capable of saliva analysis**. For example, sodium levels in saliva could give an early warning of problems. The device would be a simple way to incorporate heart check-ups into daily routines and could prompt heart patients to adjust their medications as required.

# **Type**

Consortium/Coordinator seeks Partner



# Alex Bensenousi, Athens Medical Group



Athens Medical Group (AMG) was established in 1984. Its goal is to provide high qua integrated healthcare services, based on a patient - centered approach. In Greece, AMG 7 hospital units with a total number of 1,200 hospital beds, 2,800 highly qualified associate physicians, and 3,000 highly specialized full-time employees. Additionally, being present in the Balkans, AMG owns 4 diagnostic centers in Romania, through the subsidiary company «Medsana».



https://www.iatriko.gr/?cl=609

#### **OPPORTUNITIES**

**♦ Project Cooperation** Implementation of Clinical Studies / Trials | Hospital Pilot Site | Expert Clinical **Knowledge | Infrastructure Provider** 

We are interested in participating and/or leading i) clinical study/trial activities, ii) data acquisition or system validation pilots, iii) elicitation of end-user requirements tasks in the upcmoning Horizon Calls. Furthermore, if you have in mind any other collaboration opportunity do not hesitate to share.

# **Type**

Partner seeks Consortium/Coordinator

Ion Berdeu,

State university of Medicine and Pharmacy Nicolae Testemitanu

#### **ABOUT**

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova is a nationally and internationally recognized competitive institution in the field of higher medicaland pharmaceutical education, postgraduate studies (Residency program and Continuing

Medical Education), scientific research and medical-pharmaceutical services, that puts a strong focus on quality, excellence, access and collaboration.



https://www.usmf.md/ro



# Daiga Katrīna Bitēna, Riga Stradins university

#### **ABOUT**

PhD psychology student at Rīga Stradiņš University (Latvia). I'm currently working on my promotional work about spiritual practices and spiritual experiences as a resource or a threat to self-help – for cancer patients.

Research shows that spirituality can play a significant role in the quality of life of oncology patients. Therefore, I'm working on the development of quality recommendations for cancer patients on how to approach spiritual practices and experiences to benefit from them in the cancer prevention or treatment process.

Looking forward to opportunities to participate in the project "Enhance primary cancer prevention through sustainable behavioural change" or "Establish best practices and tools to improve the quality of life for childhood cancer patients, survivors and their families in European regions."

# Nehir Biyoteknoloji Ltd.

#### **ABOUT**

Nehir BT is a microfluidics lab-on-a-chip focused biotech company that offers innovative products and solutions for the university labs and Medical, Pharmaceutical, and LifeSciences Industries. We're an R&D friendly team offering a broad portfolio of technologies, products and solutions to our clients globally!



https://en.guvenfuture.com/

#### **OPPORTUNITIES**

# ♦ Project Cooperation Microfluidics Lab-on-a-Chip Devices

We are, as a custom microfluidics solution provider, seeking to join project applications, requiring chips for drug nano-encapsulation such as liposomes, drug testing such as organ mimmicking chips, biosensors for in situ pathogen detection.

# Type



# Peter Bluska, AGEL Rádiológia s.r.o.

#### **ABOUT**

AGEL Radiologia Ltd. is a health care provider that also has experience in collecting high-quality radiological data for secondary use from digital images from CT and MRI examinations. The images are labeled on the one hand with spatial coordinates with appropriate descriptions and on the other hand with classifications of all the most common diagnoses. Until now, the data has been used for scientific purposes, where algorithms were created on academic grounds for automatic searching for diagnoses with the help of artificial intelligence. We can offer know-how to the consortium on how to label, classify and pre-process data for further use by the scientific or IT sector. We can also provide series of datasets for testing the developed methodologies from any examinations scanned with CT or MRI and marked by senior radiologists.

Therefore, we would like to participate in a consortium that will address challenges related to the preparation of datasets for the use of artificial intelligence, or the semantic analysis of text of radiological reports and their transformation into a structured form.



https://www.agel.sk

# David Bogataj, Alma Mater Europaea - ECM

#### **ABOUT**

Under the patronage of the European Academy of Science and Arts, Alma Mater Europaea strives to mold a new international leadership elite in the fields of **health**, **gerontology**, **education**, **culture**, **economy**, **law**, **nutrition** and **environment**.

Alma Mater Europaea is an independent higher learning institution that specialises in the provision of career-focused education in career-deficient fields of study. Our study programs are relevant, up-to-date, interdisciplinary and interactive. Alma Mater Europaea is committed to producing graduates whose qualifications are nationally and internationally recognized and accepted.

Alma Mater Europaea strives to continuously improve our career-oriented academic programs in accordance with the global marketplace and in line with international education organizations, and we submit to a continuous process of self-evaluation and self-improvement by means of internal and external quality validation.

Alma Mater Europaea provides students with a rich and varied academic environment that ensures opportunities for both intellectual development and the acquisition of professional knowledge and skills. Our teaching methods are in line with international standards. We are focused on real-world career development and offer a flexible, customized and effective approach.



https://www.almamater.si/



# Tomasz Bieńkowski, Masdiag sp. z o.o.

#### **ABOUT**

Masdiag is highly specialised medical diagnostic laboratory with high R&D capabilities. The company main focus is the development of new competitive method for important biomarkers. Our method of choice is mass spectrometry coupled with liquid chromatography (LC-MS, LC-MS/MS). Additionally we are involved in the project were other techniques are used (EDX. NMR, CLIA, ELISA). Since beginning except, routine materials like serum, plasma, whole blood and urine we are developing our assay using dried spot matrix, especially dried blood spot (DBS). We have experience with standard cards, quantitative devices and separation cards.

We are developing methods, validating them and following IVDR rules introducing them to regular offer. We are able to deliver the whole solution for DBS test, we can develop the method, validate it, measure the samples and with our partners we are able to deliver hardware solution for DBS analysis like puncher, sample evaporators and software for checking quality of DBS samples.

We have a strong interdisciplinary team of experts representing following disciplines: **medicine, chemistry, biotechnology, IT and mathematics** (The whole team consist of more than 20 people) Masdiag is opened for scientific cooperation with partners representing different health aspect: medical, diagnostic and pharma sectors.

List of company's remote diagnostics methods below

**Dried blood spot**: Vitamin D metabolites (25(OH)D3, 25(OH)D2, 24,25(OH)2D3, epi3-25(OH)D3, Vitamin A, E and coenzyme Q10, Amino acids profile, Homocysteine, TSH and fT3 / fT4, THC / THC-COOH, CBD / THC and their metabolites profile, Psychoactive substances, Borrelia antibodies (Lyme disease screening and conformation);

#### **Newborn screening**;

**Saliva**: Cortisol and cortisone;

 $\textbf{Urine} : \ Psychoactive \ substances, \ \gamma\text{-hydroxybutyric acid, Organic acids profile, Purine and}$ 

pyrimidine profile



https://masdiag.pl/



# Carmen-Veronica Bobeanu, Beia Consult International

#### **ABOUT**

BEIA is a R&D performing SME, founded in 1991, and one of the leading providers of ICT solutions and services in the Balkan/Danube region for cloud communications and IoT telemetry. The company's references include over 5,000 turn-key projects for advanced IT and communications solutions. BEIA is certified ISO 9001, 14001, 18001 and 27001. We are active in the following domains:

- **service innovation** (AI, blockchain, cloud, big data, quantum, etc.)
- hardware (sensors, actuators, IIoT, IoMT, etc.)
- **information technologies** (data analytics, processing back end, interfaces, front end)
- **integration** (software/hardware), communication technologies (speech processing, chatbots, ASR/TTS, NLP/NLU, AI, sentiment analysis, emotional computing, contact centers, tele-systems)
- learning & training, standardization, communication / dissemination / marketing, business development, consultancy, project management.



https://beiaro.eu/

#### **OPPORTUNITIES**

# ♦ Project Cooperation Telemetry M2M / JoT / Blockchain / AI / Quanty

# Telemetry M2M / IoT / Blockchain / AI / Quantum Applications across a Distributed Cloud Platform

BEIA has delivered several open innovation R&D projects where IoT, cloud and wireless heterogeneous network technologies are studied and experimented, including usage of Blockchain, AI and Quantum technologies. BEIA is interested to create new partnerships and participate in collaborative project to extend ongoing projects such as: eWALL: Electronic Wall for Active Long Living (FP7); SAFECARE: SAFEguard of Critical heAlth infrastructure (H2020); INNO4HEALTH: Stimulate continuous monitoring in personal and physical health (ITEA); STAMINA: Demonstration of intelligent decision support for pandemic crisis prediction and management within and across European borders (H2020); MOBILISE: A novel and green mobile One Health laboratory for (re-) emerging infectious disease outbreaks (HORIZON EUROPE); ONCOSCREEN: A European "shield" against colorectal cancer based on novel, more precise and affordable risk-based screening methods and viable policy pathways (HORIZON CL1 MISS-2021-CANCER-02-01); SHIFT-HUB: Smart Health Innovation & Future Technologies Hub (HORIZON CL1 HLTH-2022-IND-13-04); ALPHA: Alternative Proteins for Healthy Ageing (AAL); Mad@Work: Mental Wellbeing Management and Productivity Boosting in the Workplace (ITEA);

**AICOM4HEALTH**: AI-powered communication for Health Crisis Management (Celtic); **ESTABLISH**: Environmental Sensing To Act for a Better quality of LIfe: Smart Health (ITEA); **Toilet4Me**: iToilet Study on personalised toilets supporting active living in (semi-) public environments (AAL); **ArtIPred**: Smart health system based on artificial intelligence as a predictor for chronic kidney disease development (Nat.), etc.



# Zbigniew Bohdanowicz, National Information Processing Institute - Laboratory of Interactive Technologies

#### **ABOUT**

We are an interdisciplinary team of researchers, from the fields of **psychology**, **sociology**, **economics**, **computer science**. We carry out research projects in which we assess the impact of technological innovations on people's lives, what behavioral changes these innovations induce, how they change social interactions, in which aspects they help us and in which aspects they hinder us in performing everyday tasks.

The projects we undertake cover a wide range of technologies - for example we have recently looked at the potential of VR technology in education and remote working, the impact of remote working on collaboration within teams, and analysed the impact of voice assistants on older people's use of IT. We are currently working on a H2020 project (eBalance+), in which we are assessing the social aspects of technology that aims to make electricity demand of individual households more flexible, in order to better match demand with variable levels of renewable energy production.



https://opi.org.pl/en/

#### **OPPORTUNITIES**

# ◆ Project Cooperation Social aspects of innovations in health care

We are currently looking for a consortium that is developing a new technology and needs a partner to assess the social aspects of its implementation, assess the needs of individual consumer groups, their barriers and motivations. In the area of health, the range of topics may include various issues concerning the application of innovative solutions for health care, e.g. the use and confidentiality of health monitoring technologies, current environmental and climate challenges and their impact on the health of populations, the impact on health of changing work and leisure patterns due to pandemics, energy crises and declining purchasing power, and the development of technologies facilitating remote working and social interaction.

Our work results in social research reports, reports describing the **social aspects of innovations**, support for project partners to help incorporate the user's perspective into the innovation process, and scientific publications and presentation of research results at scientific conferences.

# **Type**



#### **ABOUT**

CISTER (Research Centre in Real-Time and Embedded Computing Systems) is a research unit established in 1997, based at the School of Engineering (ISEP) of the Polytechnic, Institute of Porto (IPP), Portugal. CISTER is focusing its research, development and innovation activities in Real-time and Embedded Systems (RTES), becoming one of the leading European research units in the fields of: real-time communication networks and protocols; wireless sensor networks; cyber-physical systems; real-time programming paradigms and operating systems; distributed embedded systems; cooperative computing and quality of service-aware applications; scheduling and schedulability analysis (including multiprocessor systems). The research developed has application in (safety-)critical systems such as automotive, railway and avionics but also in industrial Internet of Things, smart grids, and smart cities. CISTER is a truly international research centre, with full time researchers and PhD students coming from more than 20 countries (amongst which Belgium, Germany, Greece, Italy, Spain, and Sweden in Europe and Brazil, Cameroon, Chile, China, Cuba, Egypt, India, Mexico, Nigeria, Pakistan, Russia, Serbia, Tunisia, and Ukraine, from outside Europe). Many of the CISTER PhD graduates are now in prominent positions in either academia or industry, in Portugal or outside of Portugal.



https://cister-labs.pt/

#### **OPPORTUNITIES**

# ♦ Project Cooperation Social aspects of innovations in health care

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# **Type**





## Nezha Bouhaddou,

# Faculty of Sciences - Mohammed V University

#### **ABOUT**

The Faclty of Sciences is a public higher education institution accessible for science high school diploma holders. It guarantee fundamental training according to the system; bachelor (3 years), Master's degree (2 years) and PhD. The specialties available are **biology**, **earth sciences**, **physics**, **chemistry**, **mathematics and computer sciences**.



http://www.fsr.ac.ma/

#### **OPPORTUNITIES**

neurotoxicity

◆ Project Cooperation

Role of the circadian system in cognitive impairment related to Manganese

The mechanisms of manganese toxicity towards dopaminergic neurons are still unclear. This project aims to understand the **implication of neuro-inflammatory processes** in the manganese toxicity by focusing our interest on the early inflammatory response in structures that control timing into the brain. This particular interest is motivated by the fact that in Parkinson like diseases, non-motor symptoms, like sleep wake cycle disturbance, manifest years before the motor symptoms. Moreover, the investigation of these parameters (circadian rhythms disturbance and immune response to neuro-inflammation), will allow the determination of factors that might be used in order to decelerate the evolution of the disease

Nadiya Boyko, Uzhhorod National University, R&D centre of Molecular Microbiology and Mucosal immunology

## **ABOUT**

UzhNU is a classical multidisciplinary University situated in Transcarpathia (Western Ukraine). The region borders Slovakia, Hungary, Poland and Romania. UzhNU occupies one of the leading places in Ukraine and the world in the implementation of innovative technologies in medicine. In particular, the Research and Development Educational Center of Molecular Microbiology and Mucosal Immunology of UzhNU is engaged in the **prevention of various non-communicable diseases and the development of an individual selection of a nutrition plan**, as well as regularly conducts clinical cohort studies, including those financed by national and international funds and programs.



http://www.uzhnu.edu.ua/en/)



# Živa Brglez, Cosylab

#### **ABOUT**

Cosylab is the leading provider of software solutions for the world's most complex, precise and advanced systems, including state-of-the-art cancer treatment and healthcare innovations. It is a global leader in control system integration for proton therapy. It is a well-established company with more than 300 employees globally, of which more than 130 are active in research on medical software, medical products for proton and radiotherapy, nuclear and particle physics, theoretical physics, control systems and space technologies.

Recently, Cosylab has been developing OncologyOne software suite, which includes all the software needed to run radiation therapy devices: from LINACs to complex systems for particle therapy and BNCT.



https://cosylab.com/

#### **OPPORTUNITIES**

# ◆ Project Cooperation

**Projects in Cancer - Radiation Therapy** 

We are interested in projects, which are related to **cancer radiation therapy**: be it proton therapy, hadron therapy, classical radiation therapy, BNCT, FLASH... and its related fields radiobiology/dosimetry, AI, optimisation, evaluation and validation of algorithms for irradiation therapy, which will bring personalised treatment solutions to the patient. Recently, Cosylab has been developing OncologyOne software suite, which includes all the software needed to run radiation therapy devices: from LINACs to complex systems for particle therapy and BNCT.

# **Type**



# Daniela Buleandra, Software Imagination & Vision



Software Imagination & Vision (SIMAVI) is an IT company with experience in the following fields of activity: R&D, Education & eTraining, eHealth, Security, eAgriculture, Customised Applications, ERP & BI, eCustoms, and Government with +1500 commercial clients and +300 successful projects in Europe, Middle East, North Africa, CIS area.

SIMAVI staff consists of IT specialists with complementary technological capabilities: **IoT**, **Analytics**, **Big Data**, **Data mining**, **Cloud computing**, **Decision Support Systems**, **User interfaces**, **UX design**, **Virtual Reality (VR)**, **Augmented Reality (AR)**, **Serious Games and Training**. Our team is covering all stages of projects development from solution design, proof of concept to prototyping and end-user implementation. Tools:

- Real-time Early Detection and Alerting Framework for collecting, processing and storing online data related to terrorist activities
- Social Media Data Acquisition Engine
- Machine Learning Based Event Information Fusion
- Collaborative virtual community of practice
- Face recognition biometrical tool for secured access
- Access management system for ticketing (metro stations, stadium, concert, events)
- Decision Support System for air quality management control
- IoT Smart devices reading data tool
- Tool for tracking people with special health conditions and measuring biological parameters



https://simavi.ro/

## **OPPORTUNITIES**

# **♦ Project Cooperation** *IT solutions and services*

Our multi-disciplinary team is involved in commercial and R&D projects, from system Architecture & Design, UI/UX Prototyping, Software Development, till end-user testing and continuous support. Innovation is the foundation of our values as a company and we are using latest ICT technologies to bring added value into all projects.



# Tomasz Ślebioda, Medical University of Gdansk, **Department of Histology**

## **ABOUT**

Medical University of Gdańsk is the leading medical university in Poland. Our institution is involved in teaching, providing healthcare to patients and in conducting research focused both on basic and applied studies. Our university clinic has been certified for the use of CAR-T cells as one of a few such centers in Poland.

Our institution is looking for opportunities to expand its scientific profile and to contribute to the development of state-of-the-art medicinal products and research.



https://gumed.edu.pl/

## **OPPORTUNITIES**

# ◆ Project Cooperation

Development of novel CAR-T and CAR-NK cells

Introduction of new costimulatory domains and antigen-binding fragments into chimeric antigen receptors, as well as changing expression levels of genes affecting survival and activation of CAR-T or CAR-NK cells may result in their increased efficacy and persistence, and overcome common problems associated with currently available CAR-T cells such as their limited survival and serious adverse effects. Also, different conditioning regimes of CAR-T/NK cells may contribute to changes in their activity. Such modifications may result in generation of cells superior and competitive to currently available CAR-T cells in terms of their effectiveness and availability to patients.

Our laboratory has a long-term experience in studies on T cells, especially in the context of regulation of their activity and factors affecting costimulation and survival of T cells, including TL1A and its receptor DR3 - important members of the tumor necrosis factor superfamily and potential costimulatory factors for CAR-T or CAR-NK cells. We also specialize in tumor biology, cell biology and molecular biology. Currently, we would like to begin more in-depth studies on genetically modified lymphocytes and can provide certain proposals aiming to enhance their effectiveness.

Our research team can take part in in vitro and in vivo testing of CAR-T/NK cells preceding clinical trials. We can offer to our potential consortium leaders the following biological tests:

- In vitro culturing of primary T and NK cells.
- In vitro and in vivo biological tests of proposed CAR-T and CAR-NK cells (co-cultures with target cells, killing assays, cytokine release, survival tests, biological analyses of laboratory animals).
- Flow cytometry, quantitative PCR, immunohistochemistry, and western blotting analyses.
- Transcriptomic analyses (RNA-Seg).
- Live-imaging, fluorescent and light microscopy.



We also offer cooperation with Department of Hematology and Transplantology of Medical University of Gdańsk in terms of potential clinical trials of CAR-T/NK cells (subject to legal regulations and individual agreement with the clinic).

We have developed certain potential modifications for CAR-T and CAR-NK cells that aim to achieve the goals mentioned above and would like to begin laboratory studies in this area. We are looking for a consortium or a coordinator with experience in studies on CAR-T/NK cells and preferably GMP-compliant facilities to cooperate in generation of novel CAR cells according to our proposals or tailored to the requirements of other research partners.

# **Type**



## Inese Cakstina-Dzerve, Riga Stradins University

#### **ABOUT**

**The Institute of Oncology** is a part of Riga Stradins University. It was established as Institute of Hereditary Cancer in 2001 by Riga Stradins University in collaboration with Professor Jan Lubinski (Pomeranian Medical University, Szczecin, Poland). The first director of the Institute was Professor Jānis Gardovskis. Since then the Institute has expanded its activities and research fields to become the Institute of Oncology in 2012.

The Institute of Oncology is involved in national and international grants, cooperation programs, scientific projects and clinical trials, provides support for students, residents in training and doctoral students in their research work. We are interested to become a part of consortium focused on personalized functional approach for cancer patient treatment.



#### **OPPORTUNITIES**

### **♦ Project Cooperation**

Towards functional personalized therapy for cancer patients

AThe laboratory is focused on **targeting cancer cell death**. I am working with the method, called **dynamic BH3 profiling**, **that shows which drugs will prime the cancer cells to death most effectively**. In brief, cells are exposed to possible drugs and/or their combinations for 24h followed by addition of one of the Bcl2 family peptides (most commonly used is BIM) to activate cytochrome C release if the drug has an effect on cells. The read-out of cytochrome C is performed by high throughput immunofluorescent microscopy, or flow cytometry (FACS). Priming is calculated as delta priming from drug dilutant (mostly DMSO) treated cells and visualized as % of cells that release cytochrome C. The higher the delta priming, the better drug primes mitochondria towards apoptosis.

I am interested in bringing this method to our country and region. Dynamic BH3 profiling for use in helping to chose the therapy in oncohematology is submitted for FDA approval. However, more verification and validation is needed for solid tumours. Our laboratory in Riga Stradins university is focused but not limited to breast and bladder cancers. However, we have a strong and good cooperation with Pauls Stradins Clinical University hospital.

The laboratory at Institute of Oncology is fully equipped for cell culturing and analysis including high throughput immunofluorescent microscope. In addition we have genetic analysis branch allowing to perform NGS and microarray analysis. In this event I am looking for transdisciplinary (basic and clinical research) cooperation in field of cancer therapies and drug testing and discovery by applying dynamic BH3 profiling. Other research interest includes the effect of acute and chronic hypoxia on cell survival and in future - the effects of hypoxia on drug response.



Partner seeks Consortium/Coordinator



## Veronica Calancea, Republican Clinical Hospital "Timofei Mosneaga"



The Republican Clinical Hospital Timofei Mosneaga in Moldova it is the largest tertiary level, public hospital located in the capital city of Chisinau, with over 800 beds and a staff of more than 1700 employees.

The hospital was founded in 1817 and has a long history of providing high-quality medical care to the people of Moldova. It is a teaching hospital, affiliated with the State University of Medicine and Pharmacy "Nicolae Testemitanu" in Chisinau, and trains medical residents. The hospital offers a wide range of medical services, including general surgery, cardiovascular surgery, ICU and therapy for adult population from all over the country. It is the only institution from Moldova which has a cardiovascular surgery department for newborns and kids. In our institution we have the Psychological Assistance and Rehabilitation Service, which includes clinical evaluation, differentiated psychodiagnosis, psychotherapeutic interventions.



https://scr.md/

## Diana Campelo Delgado, Value for Health Colab

#### **ABOUT**

VOH.CoLAB is a non-profit private organization whose mission is to measure value in Health. The founding partners have centralized competencies and resources to create this CoLAB to accelerate the fundamental restructuring of Healthcare delivery towards a paradigm shift to **Value-Based Healthcare**, in which Citizens' engagement is essential.



https://vohcolab.org/

#### **OPPORTUNITIES**

### ◆ Project Cooperation Value for Health Colab

Value for Health CoLAB is a non-profit association, funded and certified with the "Collaborative Laboratory" title by the Portuguese Funding agency (FCT), whose mission is to help people and organizations to measure the value of their health. Value for Health CoLAB validates innovative methodologies to measure outcomes and costs and provide trustful scientific evidence under Value-based Healthcare (VBHC) principles. We are an **interdisciplinary group composed by biomedical engineers with skills in software development, data science and processes design, economist and linguistics**. We work in health related projects. with healthcare stakeholders we work in modulation and optimization of health pathways.



#### Adelinda Candeias,

## **University of Evora - School of Health and Human Development**



#### **ABOUT**

The University of Évora is one of the universities belonging to the Portuguese public higher education system. As such, its mission involves:

- The production of knowledge through scientific and artistic research, experimentation and technological and humanistic development;
- The socialization of knowledge, providing the traditional student population, as well as the working population, with academic qualification through undergraduate, master's and doctoral courses, ad hoc training courses and informal training throughout life;
- The transmission of knowledge to the community, fostering innovation and business competitiveness, the modernization of public services, as well as the social and cultural development of the broader community.

#### **ANCHOR AREAS**

Having as its mission the transmission and production of knowledge, and basing its strategies on the regional context in which it operates, the University of Évora bases its performance on 4 anchor areas that distinguish it from other Portuguese public higher education institutions.

- **Mediterranean and Environment**: based on the idea that more important than knowing the territory and its geoclimatic characteristics, it is to preserve this cultural space resulting from a rich civilizational confluence that bequeathed us its heritage and traditions.
- Material, Intangible and Human Heritage: celebrates the different types of expressions, practices, knowledge and representations that, passed from generation to generation, manifest a sense of identity and contribute to respect for cultural diversity and human creativity.
- Paths of Life and Well-Being: promotes, in the area of health, a plural approach that focuses on specialized training and attentive to the care provided for the individual's quality of life.
- **Aerospace and Digital Transformation**: it encourages, with an eye to the future, technological evolution, transversal to all areas of society.



https://www.uevora.pt/



### Mafalda Carvalho,

#### Centro Hospitalar Universitário Lisboa Norte, E.P.E.

#### **ABOUT**

CHULN is the main Medical Centre in Lisbon, having expertise across 44 medical and surgical specialties, being a Reference Center in 17 clinical areas, including **ECMO**, **Cystic Fibrosis**, **Neuroradiology and Adult Oncology**, namely in Soft Tissue and Bone Sarcomas. CHULN is also a member of 10 "European Reference Networks", in Pediatrics, Rheumatology, Neurosurgery, Clinical Genetics and Endocrinology. Hence, CHULN is an optimal Test Bed facility, being able to provide real world scenarios to test innovations which can translate into the best possible care, improving health in the region by integrating patient care, research, and education. Finally, since 2002, there is a record of approximately 3 million patients, 19 million appointments, 57 million exams in this Hospital Center.



## Angela Cazacu-Stratu, Nicolae Testemitanu State University of Medicine and Pharmacy

#### **ABOUT**

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova is a higher education establishment that has been evaluated by international bodies (2001, 2005) and accredited at both national (2001, 2007, 2018) and international (2019) level according to the standards of World Federation for Medical Education (WFME).

The institution offers optimal conditions for medical and pharmaceutical specialists' undergraduate and postgraduate training through residency, in line with the requirements of the European education space and global requirements, subsequently ensuring continuing medical education throughout their entire activity.

The teaching process is closely related to **scientific research**, **provision of qualified medical assistance to the population**, **dissemination of new achievements in modern medicine and pharmacy**. Nicolae Testemitanu SUMPh's teaching and scientific capabilities are characterized by high professionalism coupled with the knowledge of foreign languages and information technologies.



https://www.usmf.md/ro



# YUKSEL CETİN, The Scientific and Technological Research Council (TUBITAK), Marmara Research Center (MAM)

#### **ABOUT**

TUBITAK is the leading agency for management, developing science, technology and innovation policies contributing to the establishment of infrastructure and instruments to implement policies; supporting and conducting research and development activities; playing a leading role in the creation of a science and technology culture in line with national priorities and in cooperation with all sectors and related establishments with the aim of improving competitive power and prosperity in Turkey since 1963. TÜBİTAK funds research projects carried out in universities, other public and private organizations, conducts research on strategic areas, develops support programs for public and private sectors, publishes scientific journals, popular science magazines and books, organizes science and society activities and supports undergraduate and graduate students through scholarships. TÜBİTAK acts as an advisory agency to the Turkish Government on science and research issues, and is the secretariat of the Supreme Council for Science and Technology (SCST), the highest S&T policy making body in Turkey. The Council is an autonomous institution and is governed by a Scientific Board whose members selected from prominent scholars from universities, industry, and research institutions. More than 1,500 researchers work in 15 different research institutes of TÜBİTAK where contract research as well as targeted and nation-wide research is conducted.

Medical Biotechnology aims to production and characterization of human primary and adult stem cells, and to develop cellular and vaccine technologies in terms of prevention strategies, diagnosis and targeted novel treatments. The main activities of the medical biotechnology group are the determination of disease factors (in terms of protein and gene), identification and characterization of new diagnostic molecules, development of biopolymer microspheres, improvement of recombinant antibody and peptide structures. The Unit consists of four laboratories:

**Research Interests:** 

- Advanced diagnostic technologies
- Biopolymer technology and tissue engineering
- Controlled release technology
- Human primary and adult stem cell production and characterization
- Genomics and proteomics
- Generation of recombinant structures (antibody and peptide) by genetic engineering
- Methods for therapeutic and diagnostic purposes
- Molecular and cellular technologies for protection and therapy
- Vaccine technology
- Molecular immunology







## Richard Cimler, University of Hradec Kralove

#### **ABOUT**

UHK is a public research organisation. Center of Advanced Technology is a part of Faculty of Science focusing on developement of smart sensor solutions and data analysis mainly in Healthcare.

Unobtrusive monitoring of vital functions and behaviour changes Onset of various diseases, including mental disease, are connected to changes in vital functions, circadian rhythm, and behavioural changes. Modern smart solutions can monitor alterations in all of these and give an early warning on disease onset as well as monitor disease progression. The project team has wide experience in remote monitoring and evaluation of vital data using modern smart solutions. We are focused on remote diagnostics methods using micro-vibration data generated by heart movement, (ballistocardiography) and respiration analysis from wearable sensors and sensors in beds. We can offer special unobtrusive pads for detailed monitoring of vital functions heart rate, breath rate, heart rate variability (HRV), arrhythmias, apnea, heart failure before death and pain monitoring, which is related to HRV changes. The pads are also suitable for palliative care for long term vital function monitoring, notification and prediction.

We own server solutions for vital data gathering, evaluation, reacting, reporting, and have led a research study in the field. Our server systems are also capable of working and reacting on data gathered from commercial solutions, such as FitBit or Apple Watch. We have also developed a smartphone application for automatic surveys of study participants, with personalized questionnaires and prompts reacting nearly in real time on the measured data.



https://www.uhk.cz/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Unobtrusive monitoring of vital functions and behaviour changes

Onset of various diseases, including mental disease, are connected to changes in vital functions, circadian rhythm, and behavioral changes. Modern smart solutions can monitor alterations in all of these and give an early warning on disease onset as well as monitor disease progression. The project team has wide experience in remote monitoring and evaluation of vital data using modern smart solutions. We are focused on remote diagnostics ethods using micro-vibration data generated by heart movement, blood flow (ballistocardiography) and respiration analysis from wearable sensors and sensors in beds.





## Esra CINAR, Idea Teknoloji

#### **ABOUT**

In the Bioinformatics area, we have been working to develop end-to-end innovative solutions, with an aim to significantly increase the number of diagnoses for rare diseases, at an unprecedented speed from DNA sample collection to diagnosis. For this, our solutions are powered by a cutting-edge proprietary technology for the transfer, storage and analysis of genomic data and we provide an ultimate user experience. We have a team of computational biologists and computer engineers that are working to develop new solutions according to customer needs and we constantly consult with medical genetics practitioners. Our customer portfolio is growing constantly, we work with companies from Europe, Asia and the Persian Gulf. We have two companies for bioinformatics solutions, one Turkey based, the other Boston based. We are an R&D performing SME. We work to develop tools that use AI for developing advanced diagnostic tools. In 2014, Idea Teknoloji received R&D Center Certificate, given to the R&D performing private companies, by the Ministry of Science, Industry and Technology. Since then we have successfully conducted over 20 R&D&i projects, with collaborations from top-tier universities, companies, government offices and hospitals.



https://gene2info.com/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Analysis of genomics and transcriptomics data with statistical methods, machine learning and designing tools and platforms

We are interested in taking part in projects where we can use our skills for analyzing data and software development, either as a use case owner or research partner. We have a team of computational biologists and computer engineers that are working to develop new solutions according to customer needs and we constantly consult with medical genetics practitioners. Our customer portfolio is growing constantly, we work with companies from Europe, Asia and the Persian Gulf. We have two companies for bioinformatics solutions, one Turkey based, the other Boston based. We are an R&D performing SME. We work to develop tools that use AI for developing advanced diagnostic tools. In 2014, Idea Teknoloji received R&D Center Certificate, given to the R&D performing private companies, by the Ministry of Science, Industry and Technology. Since then we have successfully conducted over 20 R&D&i projects, with collaborations from top-tier universities, companies, government offices and hospitals.



## **Type**

Partner seeks Consortium/Coordinator



## Krzesimir Ciura, QSARlab



#### **ABOUT**

The foundation of the QSAR Lab Ltd. business is transferring chemistry from traditional laboratories to virtual space. The company's offer includes several specialized services in the field of **computational chemistry and (eco)toxicology**. Using in silico methods, data analysis, machine learning and artificial intelligence, the R&D Team helps our partners increase the efficiency of the research, reduce costs and boost innovation. Knowledge and services of QSAR Lab support the development of industrial and scientific units in such industries as chemical, agrochemical, pharmaceutical and cosmetics.

Main activities are a synergy of digitization and Green Deal assumptions in the field of computational chemistry. As a result of international research projects continued in cooperation with partners from Europe, North America and Asia, our Scientists participate in the creation of legislation and research standards regarding chemical safety in Poland, Europe, and the wider world.

QSAR Lab's research and development activities primarily concern the **development of innovative computer methods for the design and health risk assessment of technologically advanced nanoparticles and nanomaterials**. QSAR Lab is a pioneer in **computer modeling of biological activity / (eco)toxicity / physicochemical properties of nanomaterials**. QSAR Lab Experts were the first to adapt the QSAR / QSPR methodology to the specificity of nanoparticles.

Among the R&D projects listed in the first part of the tender documentation, an important focus of QSAR Lab development are projects that develop computer tools to assess the risk posed by nanomaterials to human health and life.

Our transdisciplinary Research Team consists Experts in the field of computer design and analysis of new, safe chemicals, nanomaterials & nanotechnology, toxicological hazard assessment and ecotoxicological hazard assessment. Furthermore, our Experts are proficient in the field of literature data mining, including preparing and using text/data mining scripts and in managing scientific projects.



https://www.qsarlab.com/



#### Mila Cizkova,

## **Institute of Hematology and Blood Transfusion (IHBT)**



#### **ABOUT**

The Institute of Hematology and Blood Transfusion (IHBT) is an expanding centre offering state-of-art medicine and top-notch research, as well as a friendly and safe organization for both patients and personnel.

The IHBT provides cutting-edge diagnosis and treatment of adult patients with severe disorders of hematopoiesis. Most often, these patients suffer from acute and chronic leukemias, myelodysplastic syndromes, myeloproliferative diseases, anemias and congenital or acquired disorders of blood clotting. A team approach plays an essential part in the treatment of patients; it is secured by the cooperation of experienced physicians, nurses, and other specialists, such as nutritional therapist, physical therapist, or a clinical pharmacist. Thanks to this concept, we can take care of the patients with severe hematological diagnoses and provide them with modern therapies such as allogeneic bone marrow transplantation and CAR T cells. In the field of medical-preventative care, it successfully fulfils the role of highly specialized medical establishment and supercounselling unit.

An essential part of the activities of the IHBT is science and research. A strong background of routine and research laboratories makes it possible to perform diagnostics at the level commensurate with the global standard. The research section in cooperation with clinical and transfusion division focuses mainly on the research of hematological tumors, monitoring of gene and protein expression in onco-hematological diseases, research of low molecular weight metabolites in the treatment, study of tumor markers, and the development of new therapeutic protocols including cellular immunotherapy.

In addition, the IHBT has a large program devoted to the development, GMP manufacturing and clinical testing of original Advanced Therapy Medicinal Products (ATMPs) based on gene-engineered CAR-T cells.

The Institute is also significantly involved in educational and training activities, in cooperation with 1st Medical Faculty, Charles University contributes distinctly to the scientific postgraduate education.



https://www.uhkt.cz/ihbt



## Clara Correia, **Stemmatters**

#### **ABOUT**

Stemmatters is a Portuguese CDMO offering development and GMP manufacturing services for cell and tissue-based therapies as well as blood-derived biologics. We are a vertically integrated company with resources and competences addressing all product development stages, from exploratory R&D to cGMP production. Our domain of expertise is Regenerative Medicine and we have the ability to work across a wide range of cells and product types. Stemmatters' innovation offering is also sustained by an innovative biomaterial product platform supporting formulation of combination products for multiple indications. Partnering with Stemmatters can benefit the development and clinical translation of assets through access to our scientific know-how and extensive network of Scientific and clinical partners.



https://www.stemmatters.com

## Ines Costa. Universidade de Coimbra - Faculty of Medicine

#### **ABOUT**

The Faculty of Medicine of the University of Coimbra (FMUC) is an organic unit of the University of Coimbra, considered to be one of the most important schools of medicine in Portugal. Fosters a privileged environment for higher education and specialized training, graduated, post-graduated, and professional specialization Internationally recognized for its innovative and ground-breaking fundamental, clinical and translational research, searching for solutions for impactful and complex questions on health sciences. Expertise and Ecossystem Wok in close collaboration with Coimbra University Hospital (also a EIT Health partner), in a fruitful and successful partnership in research, project proposals and project implementation, providing us access to all medical areas, to healthcare professionals, samples and patients; Vast experience in international funding programmes, resulting in a considerable and extended international network with partners from different backgrounds, areas of knowledge and expertise.



https://www.uc.pt/en



## ◆ Project Cooperation

#### Faculty of Medicine of the University of Coimbra

The Faculty of Medicine of the University of Coimbra (FMUC) is considered to be one of the most important schools of medicine in Portugal. Fosters a privileged environment for higher education and specialized training, through graduated, post-graduated, and professional specialization courses. Is internationally recognized for its innovative and ground-breaking fundamental, clinical and translational research, with a particular focus on the development of new therapeutic strategies, biomarkers, therapeutic targets, digital health, health literacy and community engaging projects, searching for solutions for impactful and complex questions in health sciences.

Works in close collaboration with Coimbra University Hospital, in a fruitful and successful partnership in education and research, providing access to all medical areas, healthcare professionals, samples and patients.

FMUC has a vast experience in international funding programmes, resulting in a considerable and extended international network with partners from different backgrounds, areas of knowledge and expertise.

Major Research Lines: Vision Diseases; Brain Health; Oncology; Cardiovascular and Metabolic Diseases; Active and Health Ageing.

### **Type**

Partner seeks Consortium/Coordinator

## Zoe Cournia, Ingredio SME

#### **ABOUT**

ingredio is a mobile phone app with which users are informed in seconds about the potential hazards of food and cosmetics products. Novel algorithms using artificial intelligence (Natural language Processing) are used to mine the world-wide peer-reviewed literature and institutional databases (e.g. NIH/European Commission). Our application is aimed at informing the growing share of consumers who want to know what is contained in the products they use and embrace healthy eating and cosmetics without toxic chemicals. We inform consumers whether the ingredients of a cosmetic or food product are safe or have potential hazards and if they are of natural origin. Our app can be used without geographical restrictions for chemical ingredients listed in English.



https://ingred.io/





## Paula Coutinho, **Polytechnic Institute of Guarda**

#### **ABOUT**

Under IPG capacitation the CPIRN - Center of Potential and Innovation of Natural Resources was created in 2014 to be a research laboratory that assumes as a valuable and differentiator resource, in which the connection of natural resources to the health and industrial sector highlights its potential as a pivot. The CPIRN-IPG research team is composed of 12 researchers (12 PhD, +4 MsC students + 2 BsC students) with complementary expertise, with a track record of publications in international peerreviewed journals, as well as the development of research projects in co-promotion. Currently, CPIRN-IPG is involved in five collaborative projects (2 INTERREG and 2 FCTfunded 1 CENTRO2020 funded (RHAQ)) with the main focus on the development of bio(nano)devices for drug delivery and hydrogels for wound healing.



https://politecnicoguarda.pt/

## Dmitri Covalciuc, Nicolae Testemitanu State University of Medicine and Pharmacy

#### **ABOUT**

Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova is a nationally and internationally recognized competitive institution in the field of higher medical and pharmaceutical education, postgraduate studies (Residency program and Continuing Medical Education), scientific research and medical-pharmaceutical services, that puts a strong focus on quality, excellence, access and collaboration.



https://usmf.md/ro

#### **OPPORTUNITIES**

**♦ Project Cooperation** 

Treatment of portal hypertension, liver cirrhosis and treatment of refractory ascites

A PhD research project is being carried out on the topic: The use of transjugular intrahepatic portosystemic shunts (TIPS) and peritoneovenous shunts (PVS) in the prophylaxis and treatment of complications of portal hypertension syndrome.



## Rodica Cristescu, **INFLPR**

#### **ABOUT**

Research interests of INFLPR targets the forefront of science and technology based on laser, plasma and electron accelerators and it aims to provide new understanding and new solutions for industry and global society.

The main research areas of INFLPR are:

- A High power lasers and applications: active centers in photonic materials, quantum electronic processes, X-ray laser development, laser biomedicine, laser micromachining, high energy secondary standard dosimetry;
- B Bio/Nano Photonics & Nanomaterials: nanoparticles synthesis by laser pyrolisis, nanometrology, nanostructured films & particle functionalization, nanomaterials synthesis by plasma, biomolecular laser spectroscopy, biocompatible thin film deposition by PLD and MAPLE, soliton waveguide arrays ultrafast parallel interconnections, nonlinear nanophotonics, quantum dots and metamaterials, plasmonic structures, micro/nano patterning;
- C Plasma Research for Fusion: atomic processes and fusion related atomic physics, atomic particle trapping, hot plasmas and nuclear fusion, plasma surface engineering, plasma theory, X ray tomography analysis; plasma coatings for fusion technology, plasma sources.



https://inflpr.ro/en

#### Stefan Căliman

## Rohealth - Romanian Health & Bioeconomy Cluster

#### **ABOUT**

Established in 2015 with the goal to support the need to associate various types of entities in the fields of **health and bioeconomy** in order to increase their competitiveness in the targeted fields, through its activities, ROHEALTH promotes and supports cooperation through sustainable national and international partnerships between private companies, universities, research organizations and public entities/authorities.

The community represented by the ROHEALTH cluster has members with extensive experience in research and development, acquired through participation in large national and international projects, such as those funded by programs FP6, FP7, H2020, INTERREG IVC, structural funds, National Research Plan, etc. Their experience covers a wide range of

skills, from consulting and project development to research and development of new advanced materials for the medical field and various techniques for characterization and measurement of various parameters.



https://rohealth.ro/



## Elsa Cristina Carona de Sousa Lamy, University of Evora

#### **ABOUT**

The University of Évora is one of the universities belonging to the Portuguese public higher education system. This institution integrates 5 schools: Fine arts, Science and Technology, Social Sciences, Health and Human development and Nursery School. Moreover, this university contains different research units, classified as excellent, by the National Foundation of Science and Technology.

The University of Evora has a long history of participation in national and international projects, participating in a diversity of national and international consortia, as member or leaders. The diversity of scientific areas in this institution has the main advantage of allowing multidisciplinary and transdisciplinary research. This successful interchange of knowledge with different institutions is the reason for the recognition that this institution has at national and international level.

I am researcher from the Mediterranean Institute for Agriculture Environment and Development (MED), in the area of biological determinants of ingestive behavior, with major focus on the **biochemical composition of oral medium as a factor responsible for inter-individual differences in oral food perception**. At the moment, I am the leader of the Laboratory of Applied Animal Physiology, which is mainly dedicated to salivary biomarkers (focusing in proteomics). We have facilities and equipment that allow us to work in saliva biochemistry with two main purposes:

- 1) As non-invasive biomarkers able to evaluate stress and well-being, and predict or diagnose different pathological states;
- 2) For understanding differences in food oral perception, helping to understand variations in acceptance, preferences and choices. Moreover, the potential interaction between salivary and food molecules may result in variations in nutrient/bioactive compounds bioavailability, influencing the effect of foods at individual level.



https://www.uevora.pt/en

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Analysis of genomics and transcriptomics data with statistical methods, machine learning and designing tools and platforms

At the University of Evora, we have facilities and equipment that allow us to work in **saliva biochemistry**. The main lines being currently developed, and that may be of interest for Health cluster projects, are: 1) Saliva as a source of non-invasive biomarkers for stress and

well-being evaluation; 2) Saliva as a source of non-invasive biomarkers of different pathologies diagnoses and prognosis (mainly in the case of non-communicable food-related pathologies); 3) Food oral perception, and biological determinants of food acceptance, preferences and choices. 4) Interaction between salivary and food molecules conditioning nutrient/bioactive compounds bioavailability and influencing the effect of foods at individual level.



## Kristína Csolleiova, Medirex Group Academy, n.p.o.

#### **ABOUT**

Biomedical research at MEDIREX GROUP ACADEMY (MGA) is focused primarily on the development of new diagnostic and screening methods, the search for potential diagnostic and predictive biomarkers useful in the prevention, diagnostics and potentially also in the therapy of cancer.

Researchers at MGA also closely focus on lifestyle disease, for which early diagnosis and prevention are equally of key importance. Since 2020, the team of scientists has been actively involved in the research of the new infectious disease COVID-19. The research activities are mainly focused on the creation of a universal system for early and rapid detection of coronavirus infection.

The aim of our scientific research is to transfer the acquired knowledge into clinical practice in order to make screening and diagnosis of diseases more efficient and also to increase the treatment effectiveness.

#### Carla Cunha,

#### i3S - Institute for Research and Innovation in Health

#### **ABOUT**

i3S - Institute for Research and Innovation in Health is a multidisciplinary research institute with the main focus on **Health**, **with an environment of breakthrough research and translation of discoveries into the clinic**.

i3S is headed by the University of Porto, comprising different institutes and schools from Oporto, is strategically located in a campus next to Faculty of Medicine, Centro Hospitalar São João and the Oncology Institute of Porto (IPO) and has long and fruitful collaborations with all largest hospitals in the Northern region. i3S has several transversal units that assure all management, financial and communication aspects to successfully implement R&D projects. i3S has also the conditions to support the entrepreneurship and clinical translation resulting from its research activities.

i3S has state-of-the-art infrastructures, resources and known-how to work on regenerative therapies for unmet clinical needs, including the **design of innovative biomaterials, host-tissue interaction analysis and preclinical studies.** 



https://www.i3s.up.pt/





## Zanda Daneberga, Riga Stradiņš University



#### **ABOUT**

Riga Stradins University Institute of Oncology (RSU IO) is the leading scientific centre in hereditary cancers, cancer genetics and molecular biology in Latvia. RSU OI is located in the campus of Pauls Stradiņš Clinical University Hospital, Riga, Latvia. This provides for good cooperation with clinicians and availability of consecutive series of tissues from cancer patients treated at the Hospital, mainly breast cancer, colorectal cancer, prostate cancer and a number of other locations. At present RSU IO possesses collection of biological samples from cancer patients of various localisations and control groups. Within last five years infrastructure of the Institute was significantly improved as a part of National Research Center. At present main research directions are related to the molecular epidemiology of hereditary cancers, diagnostic and predictive biomarkers for various cancers as well as microbiome role in cancer onset and progression.



https://science.rsu.lv/en/organisations/rsu-institute-of-oncology-3

# Özlem Demirci Turgunbayer, Dicle University/Molecular Cancer, Nanoscience and Toxicology Laboratory

#### **ABOUT**

Dicle University was established in 1973 and has 15 Faculties, 12 Vocational Schools, 4 Colleges, 1 Art School, 4 Institutes, 30 Research Centers. In the Molecular Cancer, Nanoscience, and Toxicology Laboratory at Dicle University (2018); Studies are carried out on **Mutagenicity, Antimutagenicity, Nanoparticle synthesis and characterization, and Investigation of Environmental Toxic Compounds with Bioindicators**. Specific therapeutic studies are carried out by targeting cancer cells with nanoparticle vectors by transporting drugs to the target. A team of molecular biologists, analytical chemists, and toxicologists conduct multidisciplinary searches in the laboratory.

#### **OPPORTUNITIES**

◆ Project Cooperation
Impact of emerging xenobiotics and POPs on human health

We are looking for partners in environmental health and toxicology. We have experience in both in vivo and in vitro studies on the investigation of single and combined effects of xenobiotics. In particular, we can support the investigation of the in vivo and in vitro effects of hydrophobic environmental pollutants alone and together with tools such as nano-/microplastics.

#### **Type**

Partner seeks Consortium/Coordinator Consortium/Coordinator seeks Partners



## Berk Deniz, emoda



At Emoda Software, as a Turkish technology company specializing in healthcare research and development solutions, we are dedicated to creating **innovative mobile health** (mHealth) apps that work with Internet of Things (IoT) devices to monitor patient health data in real-time. With experience in using Artificial Intelligence (AI) for clinical decision support systems (CDSS) and a track record of successfully customizing solutions for healthcare providers, we have also participated in 3 European Union projects and have expertise in working with large amounts of patient data such as electronic health records (EHRs). Our ability to collect, process, and analyze data from different sources allows us to build and maintain effective digital twin platforms. Now, we are looking for partners to join us in this endeavor and bring innovative solutions to the healthcare industry.



https://www.emodayazilim.com/

## Melis Denizci Öncü, TUBITAK MRC

#### **ABOUT**

TÜBİTAK MAM is one of the leading organizations of the advanced technology world thanks to its ability and capacity of research, research infrastructure and world class administrative and operational process management. With its customer oriented approach, it offers original solutions to public, private and military agencies and institutions. These solutions are materialized through basic researches, applied research and development, technology transfer, innovation, system and facility construction, national standard and norm setting, professional consulting and training activities.

The pharmaceutical technologies research team has specialized in **biological activity** assays, cell line development and characterization, photodynamic therapy, protein physico-chemical characterization, and antibody engineering. The team at Pharmaceutical Technologies Research is still working on various health-related projects, including the development of new biopharmaceutical drugs, biosimilar mAbs, and herapeutic agents, as well as the discovery of original and biosimilar antibodies, primarily for

the treatment of cancer and other pathogen-induced diseases. The team works on multidisciplinary projects that receive national and international funding, such as the creation of antibodies that can neutralize the Sars-CoV-2 virus, the creation of the first biosimilar antibody to receive national funding for the treatment of cancer, the development of nanoparticle-based molecules, and the production of photodynamic therapy agents.



https://mam.tubitak.gov.tr/en



## Andras Dinnyes, BioTalentum Ltd

#### **ABOUT**

ATMP: as a human stem cell SME company we are generating **hiPSC-based ATMPs and complex in vitro models for advanced human-relevant preclinical testing of ATMPs.** We are the coordinator of a T1D - hiPSC-derived beta cell treatment ongoing H2020 project (iNanoBIT). We have generated multiple rare-disease patient derived cell lines and complex 2D/3D disease models. Validation of human translational value of in vivo and ex situ pig models in comparison with human in vitro (multi)organotypic models.

Coordination support: as BioTalentum successfully coordinated 13 EU projects, our consulting branch has a considerable experience in supporting consortia in submitting and managing EU projects - thus besides our scientific contribution, we also provide full project life-cycle support in management, IP and business development and dissemination/outreach.



https://biotalentum.eu/

#### **OPPORTUNITIES**

### **♦ Project Cooperation**

Methodology of endocrine-disrupting chemical neuro- and immuno toxicology assessment by in vitro methods (NAMs)

Toxicology: BioTalentum is an SME that benefits from the know-how generated over 17 years in numerous EU framework projects (15), in by services for pharma and chemical industry. We implement human induced pluripotent stem cell derived neuronal, neuroimmune, beta cells and cardiac cell types to develop in vitro assays to detect different kinds of toxic events by endocrine disruption or other pollutants and their mixtures. For ED particularly, we have the capacity to assess effects on oligodendroglia in 3D neuronal systems, complemented with microglia. We can assess the endocrine disruption potential of priority substances (pesticide residues, drugs) and their mixtures. We can also assess omics (transcriptomics, metabolomics) changes, thus decipher the key molecular events triggered by the chemical exposures. We collaborate with in silico modelling companies which ensure complemental analysis by QSAR methods.

## **♦ Project Cooperation**

Supporting ATMP clinical trials by human CNS and cardiac advanced preclinical models

BioTalentum has overy 14 years experience in Human iPSC-methods, developing **advanced organotypic models of the CNS**, **the endocrine pancreas and the heart**. This system is ideal to bridge the gap between the animal models and human clinical trials, thus reducing risk of failures for ATMP clinical trials, especially for gene therapy in the above mentioned organs.

## **Type**

Partner seeks Consortium/Coordinator Consortium/Coordinator seeks Partners



## Natália do Espírito Santo,

### EIA, SA

#### **ABOUT**

The Atlantic School of Health (ESSATLA) is more than a quarter century old and is proud of its history of educating and preparing professionals for health care delivery, but also for leadership roles, for developing new research programs, and for increasing health knowledge locally and globally. ESSATLA has a long-standing commitment to health equity, inclusion and social justice. A goal of ESSATLA research is to be a valuable tool in search of excellence and good practices for progress and development from innovation and social commitment. ESSATLA considers the internationalization policies of pedagogical level, as well as scientific research and community services of great importance for the quality of teaching. The main areas of research and training are:

#### VI HEALTH

- a. Health Policies and Health Systems Management
- b. Prevention of road crashes in the elderly population
- c. Sociocultural factors in the prevention of chronic diseases of the elderly population
- d. Evaluation of food habits
- e. Characterization of functional properties in food
- f. Nutritional and chronic diseases epidemiology, nutrigenetics and food composition
- g. Environment
- h. Public health and health literacy
- i. The role of food, intestinal microbiota, body composition, oxidative and inflammatory status, and training in the physical performance of athletes.
- j. Mental Health



https://essatla.pt/

## Alina Dragomir,

## National Institute for Optoelectronics

#### **ABOUT**

The institute develops fundamental and applied research in the field of **optoelectronics**, based on the interaction processes of the optical field with matter, in conjunction with the development of complementary methods in the field of **analytical chemistry and high pressure physics**, being aligned with the priority scientific directions of the European Research Area.



https://inoe.ro/ro/



## Anca Dobrean, **Universitatea Babes-Bolyai**



The Babeṣ-Bolyai University is today the oldest, the largest and, in many ways, the most prestigious university in Romania. The Department of Clinical Psychology and Psychotherapy is a School of Excellence that is part of the Faculty of Psychology and Educational Sciences, Babes-Bolyai University of Cluj-Napoca.

Types of research:

**Fundamental/key/exploratory research** – identification of psychological mechanisms involved in mental disorders. The work paradigm is "clinical cognitive (neuro)sciences".

Translational research - utilization of mechanisms involved in mental dissorders identification of other new research groups as to elaborate new psychological treatments. The work paradigm is "clinical science".

**Applied research** – testing new and innovative clinical protocols through controlled clinical trials. Their analysis is done in a multilevel approach: (1) "efficacy" and "effectiveness" type of results, (2) theory/mechanisms of change, (3) cost-benefit analysis. In these protocols we utilize advanced robotic technologies, virtual reality, online, "telecommunication", "computer-based". The main paradigm is "personalized evidence-based psychological treatments".

**Development-innovation research** – involves research that investigates how innovative treatments are assimilated as standards of good practice and the barriers that prevent their dissemination.



https://clinicalpsychology.psie du.ubbcluj.ro/en/research/

## Vesselin Drobenov,

#### The 40 Foundation

#### **ABOUT**

The 40 foundation have more than 40 causes, but only one mission - to achieve significant positive social impact in any project, initiative or policy. We strive for social change by building the baseline for one healthy society; harvesting the power of **new technologies**, science, and imagination; building the chapter and verse of new therapies, medicines and medtech innovations. Based in Sofia, Bulgaria we work worldwide stretching our activities between 3 continents and 40+ countries. With a diverse and proliferative network of contacts we partner with hospitals, regulators, industry and startups, policy makers and media in many deep tech projects. Although we follow our imagination, we build our work and projects on statistically significant evidence, but not on vague concepts. We embrace complexity and deep thoughts. Happy to share some of our recent projects to all partners interested in partnership.



https://www.40foundation.org





#### Robert Doczi.

### **Oncompass Medicine**

#### **ABOUT**

Our Precision Oncology Program presents the possibilities of personalised targeted treatments for cancer patients. All cancers have genetic components though most are not inherited. Personalised targeted treatments are now available for many of these genetic defects contributing to tumorigenesis. Molecular diagnostics reveals the underlying cause of tumor development. Based on the identified gene defects a proprietary oncology AI software determines both the molecular targets and its' associated personalised targeted compounds. Our Headquarter is in Budapest, Hungary.



https://oncompassmedicine. com/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Digital tools for precision oncology

Oncompass develops an end-to-end workflow for precision oncology. We seek partners interested in developing new molecular diagnostic tools, bioinformatic solutions. We can contribute with our proprietary AI system for targeted therapy matching that has won numerous awards including DIGITALEUROPE's Future Unicorn Award. This system enables multiparameter-based digital drug-assignment for treatment planning in precision oncology.

#### Arita Dubnika,

#### **Baltic Biomaterials Centre of Excellence**

#### **ABOUT**

The Baltic Biomaterials Centre of Excellence (BBCE) is established by three internationally recognized research institutions Riga Technical University (RTU), Latvian Institute of Organic Synthesis (LIOS), Rīga Stradinš University (RSU) and clinical partner LTD "Rīga Stradinš University Institute of Stomatology (RSU IS) operating in Latvia with a support from the international leading research institutes AO Research Institute Davos, Switzerland and Friedrich- Alexander University of Erlangen-Nuremberg, Germany, which main tasks in the project is support for research, research commercialization, knowledge transfer and management.

Strategic research direction of BBCE is development of patient specific personalized solutions for bone regeneration in 3 levels: biomaterial composition, geometry and bioactive compound delivery. Full cycle of biomaterials for bone regeneration development consists of continuous steps: 1.Development of biodegradable, osteoconductive osteoinductive materials, composites and drug delivery systems. 2. Preclinical in

vitro/in vivo investigations. 3. Clinical trials.



https://bbcentre.eu/





#### **Erica Doutel,**

### **Faculty of Engineering of University of Porto**



#### **ABOUT**

Our R&D unit, CEFT, is glad to announce a R&D partnership with Clinical Academic Center of Braga (2CA-Braga). Erica Doutel (our PhD researcher) and Dr.Carlos Braga( Interventional Cardiologist in Cath lab of Hospital de Braga) are in charge of this partnership.

We have an emerging topic related to **human circulatory system** which has begun around 2008. It is focused on the left coronary artery, and the effects of geometry, blood rheology, and pulsatile flow were isolated and analysed. Experimental techniques were created to enable the analysis of the flow field using particle **image velocimetry (PIV)** and, simultaneously, numerical codes were developed and validated by the experimental results.

The Clinic Academic Center – Braga, Association (2CA-Braga), is a non-profit partnership, be tween the University of Minho (UM), through the School of Medicine (EM) and the Life and Health Sciences Re search Institute (ICVS), and, Hospital de Braga. Founded in 2012, and headquartered at Hospital de Braga (Braga, Portugal), the 2CA-Braga has as its corporate purpose the development of clinical research, framed in an environment of health care provision, promotion and knowledge, in order to make clinical care more effective and, thus, improving the quality of assistance. 2CA-Braga's vision is to create a paradigm shift in the health field, with the capacity to adequately monitor a larger number of individuals and health care professionals -participants in clinical research- to proactively provide for more personalized health care. Strengthening this vision, 2CA-Braga seeks to ensure that advances in medical research result in direct clinical benefits for patients.

This R&D partnership are in line with the innovative strategy of our group. This kind of research with multidisciplinary environment will allow to discover relevant **morphological and hemodynamic indicators (MHI) of coronary arteries (CA)** and could help to get a deep knowledge of CAD progression. CAD is the leading cause of death worldwide and may present in its most severe forms as acute myocardial infarction, sudden death, or heart failure.

CEFT & 2CA-Braga share a mission relating CAD progression and it is consider to be of the utmost importance, in order to develop a strong, long-lasting multidisciplinary research partnerships, that we believe will bring out the best of a symbiotic relationship between engineering and medicine.

In this way, as a R&D partners we must provide, share and looking for national and international research funds or in-kind contributions which may include access of clinical data, services, facilities, equipment, intellectual property or other resources, where all ethical issues of both parts must be respected.







## Zoltan Dr. Balogh, Kinepict Health Ltd.



#### **ABOUT**

Who we are? A team of experts revolutionizing angiography.

KINEPICT Health Ltd. is a Budapest (Hungary) based company founded in 2015 as a start-up that raised €1.6m in venture capital and underwent fast growth since then. Today KINEPICT has 25 experienced employees specialized in radiology, software development, medical affairs, and sales. We completed several clinical studies validating our patented imaging technology and published eight studies in leading radiology journals. Our software solution is CE-marked, and FDA-cleared medical device used in a wide reference site network across Europe. In 2021, we were one of just 38 winners (from over 4200 applications) of the EIC Accelerator Grant.

What do we offer? Patented imaging technology and MedTech expertise.

KINEPICT software technology enhances dramatically the quality of x-ray angiograms used in interventional radiology procedures and vascular surgery. KINEPICT reveals lesions and feeding arteries in case of tumors and visualizes tissue blush and small vessels. CO2 as a contrast agent can be also utilized. In addition, KINEPICT offers a 70% reduction in radiation dose, as well as a 50% reduction in iodinated contrast agent volume.

KINEPICT gives clinicians more information to support their diagnoses, and treatment strategy, and is particularly compelling to high-risk groups. This includes children, people with kidney function issues, diabetics, and obese patients. In addition to patient safety, KINEPICT brings significant risk reduction to clinicians, who may be exposed to radiation as a routine part of their work.

Who are we looking for? Physicians who want to form the future of care.

With this technology in our hands and with our excellent team, we want to gain further clinical evidence that KINEPICT has significant benefits for cancer patients undergoing minimally invasive diagnostics. Therefore, we are looking for clinical institutions to conduct randomized or cluster-randomized academic investigator-initiated pragmatic clinical trials to deliver effective and evidence-based diagnostic interventions with KINEPICT.



https://kinepict.com/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Digital tools for precision oncology

KINEPICT software technology enhances dramatically the quality of x-ray angiograms used in interventional radiology procedures and vascular surgery. KINEPICT reveals **lesions and feeding arteries in case of tumors (TACE) and visualizes tissue blush and small vessels (PAE)**. CO2 as a contrast agent can be also utilized. In addition, KINEPICT offers a 70% reduction in radiation dose, as well as a 50% reduction in iodinated contrast agent volume.

KINEPICT is looking for clinical institutions to conduct randomized or clusterrandomized academic investigator-initiated pragmatic clinical trials to deliver effective and evidence-based diagnostic interventions with KINEPICT.



# Agnieszka Dzikiewicz-Krawczyk, Institute of Human Genetics, Polish Academy of Sciences

#### **ABOUT**

I am a leader of the Independent Research Group of Non-coding Parts of the Genome. Our main focus is **functional characterization of various non-coding sequences in the genome** (miRNA, lncRNA, eRNA, enhancers, promoters and transcription factor binding sites) in basic cellular processes and in cancer pathogenesis.

We are particularly interested in molecular biology and pathogenesis of B-cell lymphomas. We have experience in genome-wide CRISPR/Cas9 screens: from the design and generation of custom CRISPR libraries, through conduction of the screen, to data analysis and validation.

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Expertise in genome-wide CRISPR/Cas9 screens

We are seeking to join project application where we could offer our expertise in high-throughput CRISPR/Cas9 screens. We have experience in all steps: from the design and generation of custom CRISPR libraries, through conduction of the screen, to data analysis and validation.

## **Type**

Partner seeks Consortium/Coordinator

# Mohamed Edfawy Soliman Hussien HEMEX AG

#### **ABOUT**

HEMEX is an SME based in Liestal, Switzerland with subsidiary in Germany that supports start-ups and established biotech and medical device companies with a wide range of expertise. HEMEX focuses on **Regulatory Affairs**, **Quality Management**, **CMC**, **Project Management**, **Data & Documentation Management**, **Medical Affairs for Medical Devices**, **IVD and Pharmaceuticals**. HEMEX is also a Contract Research Organization (CRO) and covers all Clinical Development aspects of a product's lifecycle. HEMEX interacts with all European health authorities, as well as patient groups, CROs, and Key Opinion Leaders. HEMEX's experts have supported multiple organizations in successfully bringing innovative drugs, medical devices, and combination products to the market.



O https://hemex.ch/



## Anthi Dzouveleidou, Collaborate Healthcare IKE

#### **ABOUT**

Collaborate is an AI-driven application for data collection and unification, which concerns medical, clinical, lifestyle and health conditions real world data.

All of them are easily retrieved by utilizing data collection from wearables, specialized multiomics diagnostics, data centers as well as medical data from EHR (Electronic Healthcare Records), that is used by healthcare practitioners, Hospitals, Clinics in their daily practice for patients/cases management and finally the data provided by patients themselves.

The platform scope is to unify multiple health data aggregation, aiming to contribute to scientific research and innovative interventions, based in biomarkers identification, which prevent and improve disease management.



https://collaborate247.com/

#### **OPPORTUNITIES**

### **♦ Project Cooperation**

AI-driven, longevity-focused clinical application for the prevention, management and treatment of Chronic Conditions

Our solution is a substantial tool for scientific research and better patient outcomes. Not only does it facilitate healthcare professionals' daily practice in the prevention, management and treatment of patients' chronic conditions, but it also provides meaningful reports and analysis results to healthcare stakeholders. This process is accomplished via a sophisticated mobile app that is constantly in sync with our cloud-based platform.

More specifically, Collaborate Health Cloud's technology contributes to facilitating the scientific community to:

- collect data using API interconnection with specialized diagnostic systems and wearables
- store and organize precise data
- aggregate biomarkers data and investigate their effect on the development of chronic diseases
- analyze and export reports
- proceed comprehensive biomarkers interpretation
- correlate biomarkers with the prediction of specific diseases

The collaboration between different stakeholders (academy, healthcare providers, technology companies, patient associations etc.) might lead to validated health management protocols. Consequently, health management recommendations (medical guidelines, lifestyle habits etc.) can be delivered to individuals through their mobile app leading to the ultimate improvement of their health.

## **Type**

Partner seeks Consortium/Coordinator





# Ana Espada, Centro de Química Estrutural/ Institute of Molecular Sciences - IST Uni. Lisboa

#### **ABOUT**

Centro de Química Estrutural (CQE) is the largest Chemistry-focused R&D Unit of Universidade de Lisboa (ULisboa) with sites at Instituto Superior Técnico (IST) and Faculdade de Ciências (FCUL). It is organized around 11 research groups that work associated with four interconnected and overlapping thematic lines ranging from synthesis, catalysis and reactivity to materials, soft matter and nano-chemistry and with impact in fields as diverse as sustainable chemistry for the environment, energy and manufacturing or medicinal and biological chemistry for health. CQE is involved in several collaborative cross-functional projects merging fundamental research with potential industrial applications to strengthen the contribution of Chemistry to society. CQE has been engaging in technology transfer and outreach activities, with multiple patents, spin-offs, collaborations with the industry and international partnerships to promote knowledge valorization. The CQE is an active participant in several networks included in the Portuguese Roadmap of Research Infrastructures, with application in drug design, proteomics and metabolomics, materials science, or structural biology at both fundamental and applied levels, namely:

- the mass spectrometry, (RNEM);
- the nuclear magnetic resonance (PTNMR);
- and the national chemistry and biology network (PT-OPENSCREEN).

These infrastructures are the national nodes of the European Research Infrastructures INSTRUCT-ERIC and EU-OPENSCREEN ESFRI.

#### Keywords:

Synthesis
Novel bioactive molecules
New organic, inorganic/organometallic drugs
New applications in healthcare



https://tecnico.ulisboa.pt/pt/





#### **OPPORTUNITIES**

## **♦ Project Cooperation** *COE EXPERTISE*

The CQE research is directed towards the development of innovative solutions for Health. To that end, CQE gathers researchers with transdisciplinary scientific and experimental expertise in the fields of pure and applied chemistry to i) study biological processes at the cellular and molecular level and ii) design, synthesize, characterize, and develop compounds and materials with the desirable properties for specific Health and industrial applications. In collaboration with academic and industry partners, pharmacologists and clinicians, CQE can contribute to developing research projects from an early stage of low technological readiness level (TRL) to its validation in relevant environments (TRL6) in the following areas:

- 1) DESIGN AND EVALUATION OF NEW THERAPEUTIC AND THERANOSTIC AGENTS (e.g., bioactive organic or organometallic compounds, BioMOFs, Biobuffers) FOR THE TREATMENT OF CANCER, INFECTIOUS DISEASES, NEURODEGENERATIVE DISORDERS (e.g., Alzheimer's disease, Parkinson disease), METABOLIC DISEASES (e.g., diabetes) AND REGENERATIVE MEDICINE;
- 2) DEVELOPMENT OF SMART METALLODRUG DELIVERY SYSTEMS (SMDS) FOR THERAPY OF METASTATIC CANCERS;
- 3) DEVELOPMENT OF LIGHT-BASED TECHNOLOGIES FOR MOLECULAR-TARGETED PHOTODYNAMIC THERAPY;
- 4) ANALYTICAL STRATEGIES (e.g., calorimetry and mass spectrometry-based methodologies for targeted/untargeted metabolomics and proteomics/adductomics) FOR IDENTIFICATION AND VALIDATION OF EARLY BIOMARKERS OF DISEASE AND/OR EXPOSURE TO ENDOGENOUS AND XENOBIOTIC AGENTS;
- 5) DESIGN AND DEVELOPMENT OF BIOACTIVE COATINGS FOR PROSTHETIC MATERIALS, MEDICAL DEVICES, AND BIOFOULING (e.g., water treatment);
- 6) DESIGN AND EVALUATION OF BIOCOMPATIBLE POLYMERS AND NANOMATERIALS FOR OPTICAL AND ELECTROCHEMICAL SENSORS;
- 7) COMPUTATIONAL-AIDED DRUG DESIGN AND STRUCTURE-BIOLOGICAL FUNCTION/ACTIVITY CORRELATIONS (e.g., drug-carrier/receptor interactions, speciation in biological fluids and intracellular compartments);
- 8) INNOVATIVE GREEN SYNTHESIS STRATEGIES TO PRODUCE PHARMACEUTICALS;
- 9) CRYSTAL ENGINEERING TO IMPROVE ACTIVE PHARMACEUTICAL INGREDIENTS (APIs) PERFORMANCE;
- 10) USE OF SUGARS OR NATURAL RESOURCES FOR SYNTHESIS AND DEVELOPMENT OF NOVEL BIOACTIVE ORGANIC MOLECULES TO BE USED AS FUNCTIONAL FOOD INGREDIENTS AND DRUG LEADS FOR FOOD/PHARMACEUTICAL INDUSTRIES AND BIOMASS VALORIZATION;
- 11) IDENTIFICATION AND EVALUATION OF SIGNALLING AND BIOCHEMICAL REGULATION PATHWAYS INVOLVED IN RESPONSES TO TOXICOLOGICAL, ENVIRONMENTAL AND ENDOGENOUS CHALLENGES (e.g. radiation, nutrients, and xenobiotics).
- 12) DEVELOPMENT, OPTIMIZATION, VALIDATION AND APPLICATION OF NOVEL ANALYTICAL METHODS AND DEVICES FOR THE DETERMINATION OF TRACES AND BIOGEOCHEMICAL KNOWLEDGE OF THE SPECIATION, TRANSPORT, FATE AND EFFECTS ON BIOTA OF EMERGING CONTAMINANTS (e.g., drugs, medicines, platinum-group elements) AND PRIORITY POLLUTANTS (e.g., Hg toxicokinetics and toxicodynamics) IN AQUATIC AND TERRESTRIAL ENVIRONMENTS.



## Susana Espadaneira,

## **Bound - Intelligent Health Capital**

#### **ABOUT**

Bound offers an intelligent health risk engine to set a systematic and consistent framework to manage workers' total health within organizations.

Our integrative health management solution is able to converge data "to and from" occupational medicine, occupational mental health services, well-being and health promotion programs, incidents/accidents management, risk assessments and HR case management practices.

Our mission is to build and reinforce organizations' ability to manage workers' health as an asset, generating critical insights through continuous automated processes and livein analytics/big data.



O https://bound.health/

## Carlos Ferreira **INESC TEC**

#### **ABOUT**

INESC TEC is a private institution dedicated to scientific research and technological development, technology transfer and advanced consulting. Located mainly at Porto, Portugal, hosts +800 integrated researchers (+350 PhDs). INESC TEC has health track record in 5 core competences: artificial intelligence, biomedical instrumentation, information systems, health management and medical robotics.

INESC TEC was the Portuguese RTO with the most funds from Horizon 2020, more than 36M€ distributed across 75 projects, and several projects have passed through there that were the starting point for solutions that are on the market today.



https://www.inesctec.pt/en



#### Johanna Farkas,

#### Heim Pál National Pediatric Institute

#### **ABOUT**

The Heim Pál Children's Hospital is the leading and largest public hospital in the Central European region, under the Ministry of the Interior, and provides high-quality healthcare services. Highly qualified professionals work in all clinical areas. In addition to Pediatric Primary Care, we also treat Specialty Care patients, participate in education, and conduct research and innovation. We have experience in clinical trials, epidemiological surveys and improving health services. It provides 500,000 outpatient and 35,000 inpatient services a year in 22 wards and 4 specialised clinics. We honor a mission that goes back more than a century, and we strive to provide health, prevention, and well-being for children.

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Mental Health: resilience and mental wellbeing

We are interested in the topic of 'Resilience and mental wellbeing of the health and care workforce' because the effects of the pandemic and the Russo-Ukraine war have affected not only the mental health of children and adolescents in Hungary but also the health and care workers. As the stress of coping with new situations increased, this was exacerbated by a heavier workload; and psychological support for health and care workers was increasingly needed. Our aim is to reduce mental vulnerability and increase resilience among health and care workers. The project would be implemented through data collection (validated questionnaires), training (developing new skills with PFA), and mental support (supervision). We would like to give recommendations for government action, prevent mental problems or disorders (e.g. anxiety, burn-out, PTSD, etc.), and give innovative solutions (e.g. telemedicine) in this field. As a public hospital, we have the opportunity to make recommendations to policymakers based on the results of our research activities. Our SSH experts work not only as psychologists but also in the academic field. They cooperate between health and care professionals associations and institutions in our country and international level too. We are keen to participate in the development and expansion of our Network through collaboration, joint activities, dissemination of results, development of guidelines, and the collection of information on best practices.

## **Type**

Partner seeks Consortium/Coordinator



### Martina Fekete-Gál,

### **European Prevention and Therapeutic Medicine Foundation**

#### **ABOUT**

The foundation was established in 2019 with the aim of raising awareness of the **importance of adverse childhood experiences** (ACEs), not only for experts in the helping professions, in the social and educational spheres, and in health care, but also for lay adults, parents, and peers. We want the subject of child abuse, sexual abuse, emotional or physical neglect not to be taboo in our daily lives, if we dare to talk about it, thereby setting an example and providing an interface for abused, neglected children to dare to talk about and dare to ask for help. However, this requires the help of all professionals who come into contact with children, parents, adults around the child and even the help of their peers, that is, a level of collaboration that is able to "retain" children who have experienced adverse experiences, thereby preventing the subsequent negative, adverse health effects of ACEs.

In the future, we want to take steps to promote not only primary but also secondary and tertiary prevention in order to break the cycle of adverse childhood experiences.



https://eptma.eu/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

The adverse health effects of adverse childhood experiences (ACEs)

The adverse health effects of adverse childhood experiences (ACEs) and their association with alcohol and drug use have been demonstrated in several studies. The first comprehensive research study examining the effects of negative experiences in childhood was published in 1998 in America. The Adverse Childhood Experiences (ACE) Study was created by Vincent J. Felitti, Robert F. Anda, Dale Nordenberg, David F. Williamson, Alison M. Spitz, Valerie Edwards, Mary P. Koss, and James S. Marks. The results show that individuals who cumulatively experienced negative childhood experiences had more health risks later in life. Also, individuals who experienced four or more than four ACEs had a multiple-fold increased risk of alcoholism and drug use compared with those who did not experience such an experience. Several studies have shown the negative effects of adverse childhood experiences on certain psychological factors such as happiness, anxiety, depression, or suicide attempts. However, the occurrence of adverse childhood experiences and their correlations with the abovementioned factors have not been studied in Hungary so far. The aim of the foundation and our research group is to map the patterns of negative childhood experiences in our country and to explore their lifelong negative effects.



## Silvia Ferreira, i3s-Instituto de Investigação e Inovação em Saúde, Universidade do Porto

#### **ABOUT**

I3S combines research with innovation and develops activities in basic, applied and translational Health and Life sciences. Our group has transdisciplinary expertise in biomedical engineering. At i3S, we have transversal units with experience supporting all dimensions of R&D projects and cutting-edge facilities (e.g., high throughput advanced imaging, atomic force microscopy, nanoindenter, biomaterials synthesis and characterization, omics, medical devices, animal facility, etc.

I have expertise in advanced therapies, biomaterials, cell-matrix interactions, cellular crosstalk, mechanobiology, stem cell biology, basic immunology and neovascularization.

Who do I want to meet? Academics, healthcare, biotech enterprise and pharmaceutical industries focused on regenerative medicine; human tissue and stem cells biobanks; patients associations and clinicians focused on cardiovascular diseases.



https://www.i3s.up.pt/personal-info.php?id=3851&idg=126

## Nelma Figueiredo, Science 351

#### **ABOUT**

Science 351 is a company founded by a group of scientists with industrial and academic experience.

The company provides innovative and disruptive R&D services in the chemistry and materials fields working side-by-side with its clients on R&D projects from the idea to the final product. S

cience 351 is certified by the National Innovation Agency and operates in the European and Asian markets. Its clients include some of the largest Fortune Global 500 companies.

Science 351 offers Disruptive Research (product development), Specialized Consultancy and Lab Tests.

We aim to use reinvention, innovation and sustainability as tools to develop solutions to society's key challenges and meet market needs.

To learn more about us and how we can help you, visit our website.



https://science351.pt/





## Vanessa Ferreira Humanized Solutions

#### **ABOUT**

Let's discover how Humanized Solutions can elevate Patient and Citizen Engagement in Healthcare:

At Humanized Solutions, Lda, we are passionately dedicated to enhancing patient and citizen participation throughout the entire healthcare journey. Our primary focus lies in consultancy, research, training, coaching, and mentoring services, specifically tailored to patient and public involvement and engagement. We recognize the potential for a strong synergy between your profile and our mission. Thus, we are eager to explore how we might collaborate to create impactful healthcare solutions.

We believe that by collaborating, we can delve deeper into these areas and develop initiatives that align with our shared organizational goals.

Humanized Solutions is committed to being a bridge between patient groups, advocates, citizens, and healthcare stakeholders. We ensure that **every aspect of healthcare, from research and drug development to access to medicines, digital solutions, and medical devices, is not only responsive to the needs of the end-user but is also co-created with their active participation.** Our approach is deeply collaborative, emphasizing the critical role of patient voices in shaping healthcare solutions. We employ a variety of scientific methods, such as participatory research, qualitative, quantitative, and mixed research methods, and human design thinking. This systematic engagement and listening to endusers are vital, especially as funding entities increasingly emphasize the involvement of end users right from the project conception.

To learn more about Humanized Solutions and how we can work together towards a transformative healthcare experience, please don't hesitate to contact us. We look forward to the opportunity of collaborating with you to make a meaningful difference in healthcare.



https://humanizedsolutions.com/

#### Sean Finn,

#### **Kresk Healthcare Solutions**

#### **ABOUT**

Kresk are a Portuguese SME focused on **innovative healthcare technologies**. We can offer to a consortium: 1. Development of AI algorithms and models, data, signal and image processing and analysis – particularly deriving insights from patient data and applying AI to medical images as part of cancer diagnosis & treatment. 2. Secure patient portals and targeted social mobile apps, with a particular focus onctive and assisted living. 3. Secure GDPR compliant storage and transmission of sensitive patient data. 4. Software development, supplying both customer-facing and internal operations-management software to large clinical groups.



https://www.kresk.com/



## Ana Teresa Freitas, INESC-ID

#### **ABOUT**

INESC-ID, "Instituto de Engenharia de Sistemas e Computadores: Investigação e Desenvolvimento em Lisboa" is a Research and Development and Innovation Organization (R&D+i) in the fields of **Computer Science and Electrical and Computer Engineering.**INESC-ID's research impact is focused on four Thematic Lines to which it makes the more relevant contributions: digital transformation and citizenship, life and health technology, energy transition, and security and privacy.



https://www.inesc-id.pt/

## Linda Gailīte, Riga Stradins university

#### **ABOUT**

The Riga Stradinš University (RSU; www.rsu.lv) is the leader in the field of medical research in Latvia, conducting excellent cutting-edge studies, both fundamental and applied in general medicine, including cardiology and pharmacy. RSU is also actively involved in developing novel methods for diagnostics and treatment for the most prevalent diseases in the EU, providing its services and expertise to the healthcare sector, industry and other research institutions. The Scientific Laboratory of Molecular Genetics (SLMG) at RSU lead by Dr. Linda Gailīte, is an accredited medical laboratory, according to the ISO:1589 standard, holding the Latvian National Accreditation Bureau LATAK-633-2020 accreditation certificate. It regularly participates in different External Quality Schemes for different disorders/ pathogenic variant testing and interpretation (Providers: EMQN, INSTAND, CF-Network, RFB), there is a certified molecular geneticists. SLMG mainly focuses on the analysis and interpretation of genetic data and also conducts research to delineate the genetic causes of diseases and their characteristics, mainly in the field of rare diseases, as well as the identification of novel biomarkers for diagnosis and prognosis of various diseases. The Laboratory has been involved in numerous scientific projects funded by European regional development fund (ERDF) and Latvian Council of Science.



https://www.rsu.lv/



## João Gancho Figueiredo, Mediceus SA

#### **ABOUT**

Mediceus is a health data operator, developing a **digital health platform with extremely robust personal data protection features**, fully compliant with GDPR and aligned with EHDS. We have designed a mobile app and a data base platform to manage fully pseudonymised health data in a citizen-centric system, to enable both primary and secondary uses of health data, at European level.



https://www.mediceus.pt/

## Nenad Gligoric,

#### **Zentrix**

#### **ABOUT**

Zentrix is a research and development company based in two countries. Our mission is to position on the market as service and a solution provider for environment, healthcare, automotive, industry 4.0, and telco industry. We integrate latest technological trends and research results, into own solutions design, using **DLT** (**distributed ledger technology**), **IoT** (**Internet of Things**), **and Machine Learning**. Zentrix Lab is seen as a "Rising star" in the research space, where we cooperate with the biggest names in the research. The company has its solutions for federated AI (automotive, health), Blockchain, Circular Economy, environment and water monitoring, etc.



https://zentrixlab.com/

#### **OPPORTUNITIES**

## ♠ Project Cooperation

Project drafting, consortium building and submission

Our company averages 40% on the Horizon Europe submitted proposals. We are interested to join/ help as well as to discuss on cooperating on existing proposals we are preparing. Beyond others, we have one climate-health from Horizon Europe won, and another IMI2, as the best rated proposal for the last H2020 call, with largest pharma players in the consortium (Bayer, Pfizer, AstraZeneca, Takeda, and Sanofi).



## **Type**

Partner seeks Consortium/Coordinator Consortium/Coordinator seeks Partners



## Vassilis Giannakopoulos, Science For You (SciFY)

#### **ABOUT**

SciFY is an IT SME and a not-for-profit organization that develops cutting-edge information technology systems and freely offers them to all, including the design, the implementation details, and the support needed, in order to solve real-life problems.

We use our expertise in artificial intelligence and other technologies, and a strong network of collaborators (universities, research institutes, NGOs and companies) to bridge scientific innovation with society's needs and collaboratively produce new solutions.

Founded in 2012, in crisis-stricken Greece, SciFY has already reached a personnel of 7, a volunteer base of more than 10 people, and some awards, including one from the President of the Hellenic Republic. SciFY has been evaluated to be in the top 5% of the NGOs in Greece in terms of Transparency, Organization and Effectiveness by independent evaluators.

SciFY's current Areas of Interest and expertise are:

- Artificial intelligence
- Assistive technologies for people with disabilities
- eDemocracy
- Education and skills development
- Supporting the civil society
- Entrepreneurship

We bring about social change through successful technology transfer initiatives that stem from real societal needs.

To do this, we combine four kinds of actions: a) We create and freely share IT tools, b) we mobilize ecosystems that jointly produce value, c) we manage the innovation process and d) we disseminate knowledge to deliver results on the above impact areas, as described below. SciFY creates and shares IT tools: by offering them for free, under open source licences. We employ agile development methodologies (scrum) to effectively produce results in a costeffective manner. It manages the innovation process and mobilizes ecosystems that cocreate value: SciFY engages key stakeholders and interested parties in every project throughout the whole process (from needs analysis and design to dissemination and exploitation activities).



https://scify.org/

#### **OPPORTUNITIES**

**♦ Project Cooperation** 

ICT, AI, Serious Gaming and Dissemination Services offered

SciFY is an experienced partner in EU projects. We are for seious collaboration requests, offering our expertise in ICT, Artificial Intelligence, Serious Gaming and Dissemination/Exploitation services.

## **Type**

Partner seeks Consortium/Coordinator



## OANA GINGU, University of Craiova



Founded in 1947, the University of Craiova (UCV) is one of the largest public institutions of higher education in Romania, in the South-West region of Romania (at the territorial-administrative level, it counts 5 counties). Currently, UCV comprises 12 faculties and provides a wide-range field of study programmes in **engineering**, **sciences**, **humanities**, **social studies**, **history**, **economics**, **agriculture**, **law**, **theology and arts**, organised in Bachelor, Master and Ph.D. study programmes.

The staff and students are involved in fundamental, applied and advanced technological research, design, consulting and expertise. There are ongoing research programmes financed through European funds, Romanian Ministry of Education, as well as by economic environment. Thus, UCV plays an important role for:

- developing appropriate skills for the integration of graduates on the labour market;
- promoting research programs that meet market needs;
- identifying economic demands for training, technical assistance, legal advice;
- developing collaborations at regional, national and international level.



https://www.ucv.ro/en/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Bone grafts development from the technological and functional perspectives

Alloplastic bone grafts have been already designed, produced and characterized (in-vitro and in-vivo) from **hybrid biocomposites: nanostructured hydroxyapatite matrix reinforced by micronic titania**. The indented next level to be reached by the future project proposal is regarding new technological approaches, mainly by 3D printing as well as **grafts biofunctionalization for bone cancer healing, especially for children and young adult patients.** 

## **Type**

Consortium/Coordinator seeks Partners



## Kamila Goderska, Poznań University of Life Sciences; **Faculty of Food Science and Nutrition**

#### **ABOUT**

The Poznań University of Life Sciences is a leading university of life sciences in Poland. Faculty of Food Science and Nutrition performs research activity and academic studies in the fields related to: food technology, food quality and safety, human nutrition, commodity science, dietetics. Scientific research is also conducted in the fields of: biotechnology.

My research interests focus on four areas: (1) microbial production of lactobionic acid, (2) probiotic microorganisms, (3) microbial synthesis of bacteriocins, (4) application of the human alimentary tract model to investigate metabolism of food components and viability of microorganisms. Research performed at Faculty of Food Science and Nutrition, which my group is interested focuses on the following problems: studies on functional properties of food components, determination of chemical changes occurring in natural plant antioxidants taking into consideration interactions with intestinal microflora, application of by-products in biotechnological processes.

Research concern the following problems: characteristics of properties of bacteria, particularly those, which should be found in strains of potentially probiotic bacteria, such as e.g. an antagonistic effect in relation to pathogenic bacteria, survival rates under selected environmental conditions of the human alimentary tract, i.e. at varied pH and in the presence of bile salts in vitro; characteristics of the effect of addition of selected sugars to the medium, including those considered to be prebiotics, on the dynamics of bacterial growth; the amount of produced lactic acid and contents of isomeric forms of lactic acid; preservation of bacteria by liquid core microencapsulation and evaluation of the effect of microencapsulation on their survival rates in the environment with varied pH; studies on the effect of various drying methods on stability of bacterial preparations during storage; attempts at application of bacteria to juices as a carrier of functional attributes acceptable for consumers. We have also experience in investigation of antagonism of bacteria from the species Lactobacillus acidophilus in relation to selected bacteria pathogenic to humans including the characteristics of antagonistic substances.

In our laboratory the most important apparatus, which we have: bioreactors, in vitro model of the alimentary tract for observation the changes taking place in the food products and bioactive compounds under digestion process including interactions with intestinal microflora, a UHPLC apparatus coupled with a Corona® detector, HPLC.

The in vitro alimentary tract model at the Department of Food Technology of Plant Origin (Fermentation and Biosynthesis Group) reflects environmental conditions found at individual sections of the alimentary tract (the oral cavity, stomach, small intestine and the large intestine) including selected microbial families Lactobacillaceae, Enterobacteriaceae and Enterococceae.



https://puls.edu.pl/en/





## Bárbara Gomes, AccelBio

#### **ABOUT**

AccelBio is a collaborative laboratory that aims to be the bridge that brings biomedical science closer to the market. With a set of partners that cover all the necessary capacities and expertise to drive drug discovery, AccelBio selects fundamental research discoveries and cutting-edge technology platforms and tools and guides the transformation of breakthrough science into validated and investment-worthy assets. AccelBio complements academic research groups with industry-standard drug discovery capabilities - target validation, assay development, high-throughput screening, in silico modelling, medicinal chemistry, in vitro and in vivo testing, IP support and business development. Innovative platforms are also being developed within a well-defined R&I agenda that will further boost drug discovery - namely the development of organoids based on iPS cells.

Target Validation: Structure, Human validation

Screening: Chemical Libraries, RNAi, siRNA & CRISPR screening

Chemistry: MedChem, Analytical Lab, Mass Spec

Pharmacology: Molecular imaging, Pk/ADME/TOX, In vivo models, Organoids

Biology: Genomics, Transcriptomics, Proteomics, Metabolomics. Advanced in vitro models,

Human samples, GMP cell culture

Therapeutic modalities: Antibody discovery and development, Gene therapy, Small

molecules



https://accelbio.pt/

## Eluana Gomes, Clínica Espregueira

#### **ABOUT**

Clínica Espregueira is a private clinic - FIFA Medical Centre of Excellence - that encompasses several medical specialties, but specialized in musculoskeletal conditions. The clinic has the latest technology in diagnosis and management of **orthopaedic and sports injuries**. It has a strong background in treating musculoskeletal injuries with a dedicated team comprising of high-quality and specialized orthopedists and physiotherapists. The orthopaedic medical staff is also involved in University teaching and research and innovation activities, with a strong background in research (having a dedicated research center) and educational activities (official teaching center of ESSKA, ISAKOS and ICRS).



https://clinicaespregueira.com





## Vinicius Gorczeski, Centre for Social Sciences

#### **ABOUT**

The Centre for Social Sciences is a research institution where over 250 Hungarian and international researchers engage in exploratory and innovative national and international research projects in the Social Sciences. Part of the Eötvös Loránd Research Network and a Hungarian Academy of Sciences Centre of Excellence, the Centre's charter established its freedom to perform research without political influence. Comprising four institutes and research units in the Social Sciences, the Centre has greatly contributed to understanding and addressing far-reaching societal issues that pertain to Hungarian and European societies.

The Centre's research activities focus on **sociology**, **political science**, **computational social science**, **network science**, **minority studies**, **and legal studies**. Researchers take an interdisciplinary approach in their scientific work. The Centre's main goals are to extend the quality of Hungarian research to Europe and beyond, to take a prominent regional lead in social science research, and to serve as a point of scientific reference in Hungary.



https://tk.hun-ren.hu/en

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

#### Social Sciences Expertise Offer for Topics in Cluster 1

The Centre for Social Sciences, the leading SSH institution in Hungary having participated in and coordinated several EU-funded projects, offers expertise for projects being developed in HE Cluster 1.

Expertise offer: Research team led by Éva Perpék and Ágnes Győri (see expertise offer attached) may offer contributions with:

- Literature review,
- Quantitative research (survey),
- Qualitative research (policy review, interviews, focus groups, civic preference forum),
- Research on mental well-being, resilience, turnover, working conditions, socioeconomic status of social care professionals,
- program evaluation,
- local case studies.

## Type



## George Gotsadze, **Curatio International Foundation**

#### **ABOUT**

Curatio International Foundation (CIF) is a not-for-profit, non-governmental organization with a mission to improve health through better functioning health systems. CIF's work is underpinned by three core values: Hearing Needs, Building on Local Strength; and **Delivering Innovative Context-specific Solutions.** 

Our work is based on network of national and international professionals and researchers to bridge the gap between what is known about the problems at hand and what has to be done in order to solve them. Our work intends at improving functionality health care systems and adequacy of and health policies.



https://curatiofoundation.org/

## Mara Guerreiro, **Egas Moniz School of Health & Science**

#### **ABOUT**

Egas Moniz School of Health & Science is a civic university that drives development through integrated projects, services with high social impact and research. We contribute to research and innovation with increasing international reach through the Egas Moniz Interdisciplinary Research Centre (CiiEM) and the One Health Research Center. CiiEM embraces the paradigm of translational research through work in four interwoven areas -Clinical Research, Environmental Health, Public Health Microbiology, Forensic Science and Psychology - aligned with national and international research agendas, and with the UN's Sustainable Development Goals, contributing to tackle current and future societal challenges. The Center's staff is comprised by over 250 investigators with diverse backgrounds, facilitating interdisciplinary approaches.

The One Health Research Center, part of the Almada Innovation District, drives innovation through teaching, research, social responsibility and interaction with the community. Research is leveraged by Egas Moniz human and veterinary clinics on and off-campus, providing over 8000 consultations/month, a residential care home, and by working closely with public and private partners, such as Madan Parque, a technology incubator.



https://www.egasmoniz.com. pt



## Táňa Grauzelová, Zdravé regióny - Healthy regions

#### **ABOUT**

Since 2017, the Healthy Regions organization (contributory organization of Ministry of Health of Slovak republic) works on further development of the original Healthy Communities health-mediation model via a series of National Projects (NP Healthy Communities 2A, 2B, 3A), drawing on the previous long-term NGO participatory building of related human resources, cooperation networks, procedures and data. Expanding beyond health mediation and assistance with access to healthcare services, the projects' current practice spans across the whole health promotion field, including health education, prevention, advocacy as well as informing of central policy-making processes and **planning.** At the community level, the intervention work is being delivered via the projects' over 300 health promotion assistants (HPAs), over 90% of them themselves marginalized Roma coming from the very communities they serve in full-time, and the assistants' 25 regional coordinators (HPACs), majority of them regionally respected Roma, too, but also holding university diplomas. At present, the largest of the NPs, Healthy Communities 2B, thus covers more than 450 marginalized Roma communities across over 260 municipalities. In addition, under this project the Healthy Regions also employs 14 Roma HPAs serving directly within regional hospitals within departments understood as traditionally most problematic by both MRC patients and health professionals alike (Gynecology & Obstetrics, Pediatric, Internal medicine). Specific goals and procedures within the HC projects continue to be developed and implemented collaboratively, based on focus-group consultations across the projects' organizational levels to ensure their highest both practical and ethical standards. Thanks to this methodological history and setup, the HC NPs present exceptionally inclusive, bottom-up designed EC employment projects. We are currently also involved in international research project PRESCRIP-TEC focused on innovations in screening for HPV via self-testing. We are responsible for all fieldwork within marginalised Roma communities.



https://www.zdraveregiony.eu

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Healthy Regions - health promotion and community health mediation

We can provide field work, health needs assesment and SSH component to RIA projects that are oriented on **vulnerable low - income groups.** 

## **Type**





## Federico Guede, Value for Health CoLAB



Value for Health CoLAB is a non-profit association, funded and certified with the "Collaborative Laboratory" title by the Fundação para a Ciência e a Tecnologia, whose mission is to help people and organizations to measure the value of their health. Value for Health CoLAB validates innovative methodologies to measure outcomes and costs and provide trustful scientific evidence under Value-based Healthcare (VBHC) principles.

We are an interdisciplinary group composed by biomedical engineers with skills in software development, data science and processes design, economist and linguistics. We work in health related projects.

With healthcare stakeholders we work in modulation and optimization of health pathways. For this purpose, VOH.CoLAB supports the collection of clinical and patient-reported outcomes, based on sensors and mobile technologies, and develops digital health literacy tools that drive society to adopt healthier behavioral changes.



https://vohcolab.org/

#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

#### We measure value in health

Driven by transdisciplinarity and digital transformation in Healthcare, the VOH.CoLAB works with healthcare stakeholders in modulation and optimization of health pathways. For this purpose, VOH.CoLAB supports the collection of clinical and patient-reported outcomes, based on sensors and mobile technologies, and develops digital health literacy tools that drive society to adopt healthier behavioral changes.

#### We offer:

- Expertise in Patient pathway design for outcomes measurement, Outcomes and Cost Analysis, Impact assessment, Scorecards for value analysis and Value-based Reimbursement models to start implementing VBHC.
- Development of pilot studies to include VBHC requirements in digital health solutions and support clinical validation for medical device certification.
- Design and Development of Participatory Research methodologies involving patients, clinical teams, innovators and industry.
- Application of data analysis and artificial intelligence techniques to health data.
- Our skills in digital health, data science, health economics & management and health literacy.
- Link to relevant international networks in Value-based Healthcare, Digital Medical Devices and Clinical Researchers.



### **Type**



## Gamze Guney Eskiler. Sakarya University



My current research focus on cancer cell biology, drug resistance mechanisms, nanoparticle based drug delivery systems, cell death types and pathways and combine treatment strategies in cancer. Additionally, I focus on precision treatment options with new biomarkers including exosome, circular DNA/RNA in the sample of cancer patients.

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

#### **Drug resistance and immunotherapy**

I am interested in the reversal of **drug resistance in cancer treatment**. Additionally, I focus on nanoparticle drug delivery systems. I am involved in several studies investigating the effects of different chemotherapic drugs loaded nanoparticles on different types of cancer especially breast cancer. Additionally, I produced drug resistance cell lines and analyzed the combination of different drugs to overcome drug resistance. I also interested in cancer immunology.

My team consists of scientists specializing in cancer cell biology, in vitro and in vivo analysis, histologist and clinicians

Cancer and drug resistance cell lines culture

Flow cytometry, RT-PCR, immunohistochemistry, and western blot analyses, fluorescent, light and electron microscopy.

## **Type**

Partner seeks Consortium/Coordinator

## OZDEN HATIRNAZ, Acibadem University

#### **ABOUT**

Rare Diseases and Orphan Drugs Application and Research Center-ACURARE was established in Acıbadem Mehmet Ali Aydınlar University in 2017, aims to improve the diagnostic and treatment opportunities in the field of **rare diseases and orphan drugs** used in the treatment of these diseases, to increase scientific and clinical research, and to increase the quality of life of patients, also participation, development of existing resources and using them more efficiently.



https://www.acibadem.edu.tr/rare





# Zoltán Gáspári. Pázmány Péter Cathoplic University, Faculty of Information technology and Bionics



Our objective is to provide multidisciplinary education in human-centered information technology, taking the rapidly changing advanced technologies into consideration. Furthermore, we aim at forming our students into becoming creative experts capable of handling various problems in all areas of modern life and scientific research with the help of their deep and comprehensive academic knowledge, classic education and modern, ethical management skills.



https://itk.ppke.hu/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Experimental and computational characterization of postsynaptic protein complexes

Our aim is to contribute to the generation of a structural and functional model of the **postsynaptic density**. We are applying experimental methods for the preparation of selected proteins and their segments, also variants associated with neurological disorders. The structure and interactions of these are characterized, and the obtained data are used to build structural models. In addition, we are using agent-based models to estimate **the abundance of protein complexes** formed. We are looking for additional data to incorporate, new experimental tools and in vivo systems that can be adapted for validation purposes.

## **Type**

Partner seeks Consortium/Coordinator

#### Inete Ielite,

**Women's NGOs Cooperation Network of Latvia** 

#### **ABOUT**

Women's NGOs Cooperation Network (Latvian Women's Lobby) has been established in 2003 to coordinate participation of Latvian non-governmental organisations in national and international dialogue on women's rights and ensure women's participation, it is registered as the association of organisations and networks and also holds national charity (organisation for the benefit for society) status. Latvian Women's Lobby unites 42 organisations representing 167 associations representing women of all walks of life, age, social class, ethnic origin and colour, place of origin, citizenship, religion, sexual orientation, political views and ability. The association is accredited adult education provider, it participates in research and innovation actions.



https://sadarbibastikls.lv/





## Najet Hadhri, Institut Pasteur de Tunis

#### **ABOUT**

IPT is a public health institution under the authority of the Ministry of Health and is affilated to Unversity Tunis El Manar. IPT is commissioned to carry out epidemiological and clinical studies, biomedical investigations, as well as research activities pertaining to human and animal health. IPT also produces vaccines and sera and contributes to higher education at both the national and regional levels. Since its creation, IPT has focused its research activities on infectious diseases, including zoonotic and vector-borne diseases. Research and training programs at IPT are mainly oriented towards national health priorities and/or economic problems including rabies, viral hepatitis, measles, enteroviral infections, pap- illomavirus infections, leishmaniases, hydatidosis, tuberculosis, mycoplasmosis, bovine theileriosis and other tick born diseases including Lyme disease, avian diseases and other veterinary microbial diseases, and more recently mosquito-borne viral infections (West Nile) and influenza. Other research include immune scorpion and snake envenoming, hemoglobinopathies and orphan genetic diseases. IPT has a dedicated core facility for bioproduction and process development of selected biomolecules for therapeutical or vaccine use.

## Erika Halasova, Comenius University in Bratislava, Jessenius Faculty of Medicine in Martin

#### **ABOUT**

Biomedical Centre Martin is an interdisciplinary institute of Jessenius Faculty of Medicine, where scientific teams perform theoretical and clinical research focused on up-to-date health-threatening challenges using state-of-the-art technologies, latest knowledge and methods in biomedicine and biotechnologies. The research center also focuses on development of new diagnostic and therapeutic methods, particularly in the field of oncology, neuroscience, respirology and regenerative medicine.

The center is an excellent research institute in Europe using state-of-the-art methods in experiments and clinical practice in major research areas, such as **molecular diagnostic methods**, **including entire genome sequencing**, **methods of proteomics and metabolomics**, **pharmacokinetic and toxicological analysis**, as well as methods for autonomic nervous system analysis, or respiratory disease in adults and children. We search for partnership in the selected areas of activity.



https://www.biomedmartin.sk/en/



## Abolfazl Heydari,

#### **Polymer Institute of the Slovak Academy of Sciences**



#### **ABOUT**

The Polymer laboratory established by Dr. Milan Lazar at the end of 1962 created the conditions for founding the Polymer Institute in 1967. The Institute initiated the focused research in polymer chemistry as a part of the chemical research at the Slovak Academy of Sciences. Currently Polymer Institute SAS represents an important research and training center for basic and applied research in the contemporary topics of polymer chemistry. The Institute activities cover four areas: **synthesis and characterization, composite polymeric materials, polymeric biomaterials and molecular simulation of polymers.** 

As a result of the PISAS accreditation for years 2016 – 2021, the international accreditation panel of experts evaluated the Institute with the highest rating A characterized as "The research is internationally leading within the European context. The Institute has demonstrated important contributions to the field."

#### **OPPORTUNITIES**

## **♦** Project Cooperation

#### Polysaccharides and cyclodextrin derivatives: from synthesis to applications

We are experts in the field of biomaterial research with a focus on carbohydrate, bioorthogonal, and supramolecular chemistry. Currently, we focused on the modification of polysaccharides and cyclodextrins in a reproducible way and also the preparation and characterization of self-healable hydrogels using covalent and non-covalent click chemistry based on modified carbohydrates under physiological conditions.

Our group is capable of:

- Synthesizing and characterizing various polysaccharides and protiens derivatives by introducing permanent ionic charges and clickable moieties on the backbone of polymers. These derivatives will be used in the designing of biomaterials for cell encapsulation and drug delivery systems.
- Synthesizing various cyclodextrin polymers.
- **Designing polymeric implantable devices** stabilized by dual crosslinking using the non-covalent (host-guest interactions) and irreversible/reversible covalent bonds.
- Preparing the dynamic bioinks for 3D bioprinting of cell-laden constructs.

## **Type**



## Irina Holodnuka Kholodnyuk, Riga Stradins University



Rīga Stradiņš University (RSU) is focused on medical education and research since 1950, when it was established as the Rīga Medical Institute. Nowadays, RSU is providing a full research cycle from laboratory to hospital bed. This applies particularly to oncology, infections, pediatrics, rehabilitation, and dentistry. RSU ranks 1st in Latvia and 641th in the world in the SCImago Institutions Rankings 2022 international ranking of academic and research institutions. RSU was ranked among the world's best medical universities in the QS World University Rankings by Subject (in Medicine) 2022 and reached the 501-550 place.



https://www.rsu.lv/en

#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

Epstein-Barr virus (EBV) infection and autoimmunity

Expertise 1. Epstein-Barr virus (EBV) biology; EBV – host B cell interaction; EBV infection and autoimmunity (20 years of the research experience). Expertise 2. Immunology: inflammatory chemokine receptors; immunophenotyping of the peripheral blood lymphocytes by multiparameter (12-color) flow cytometry (10 years of the research experience). Work team: Two experienced PhD researchers (> 20 years of the research experience), the Leading Scientists, and one MSc-/PhD-student at Riga Stradins University, Institute of Microbiology and Virology. One Partner at the Latvian Biomedical Research and Study Centre, PhD Senior Researcher, specialist in genome research. Two collaborators, MD, PhD at Riga East University Hospital (REUH), experienced practicing clinical endocrinologist and rheumatologist.

## **♦ Project Cooperation**

# Epstein-Barr virus associated B-cell lymphomas and B-cell lymphoproliferative disorders versus chronic lymphocytic leukemia

Expertise 1. Epstein-Barr virus (EBV) biology; EBV – host B cell interaction; EBV associated B-cell lymphomas and B-cell lymphoproliferative disorders; chronic lymphocytic leukemia (CLL) (20 years of the research experience); Expertise 2. Immunology: inflammatory chemokine receptors; immunophenotyping of the peripheral blood lymphocytes by multi-parameter (12-color) flow cytometry (10 years of the research experience); Expertise 3. Nucleotide-modified RNA-aptamers to the malignant B cells (15 years of the research experience); Work team: Two experienced PhD researchers (> 20 years of the research experience), the Leading Scientists, and one MSc-/PhD-student at Riga Stradins University, Institute of Microbiology and Virology.

One Partner at the Latvian Biomedical Research and Study Centre, PhD Senior Researcher, specialist in genome research. Two collaborators, MD, PhD at Riga East University Hospital (REUH), the Clinic of Chemotherapy and Hematology, experienced practicing clinical hematologists.

#### **Type**



## Ildikó Horváth, National Koranyi Institute of Pulmonology

#### **ABOUT**

The Koranyi Institute is the largest specialist hospital of pulmonology in Hungary and belongs to the largest ones in Europe. As a national centre it provides tertiary care in respiratory medicine covering the full spectra from primary prevention through high-tech diagnosis and treatment to rehabilitation, chronic care and hospice. Beside pulmonology the institute has a large thoracic surgery with more than 900 surgical interventions yearly and operates a major respiratory ICU with a large ECMO centre. We care more than 12.000 in-patients yearly (lung cancer, asthma, COPD, adult cystic fibrosis, COVID-19, tuberculosis, interstitial lung diseases) and are part of the European Reference Network for CF, A1AT deficiency and mesothelioma). The institute has threee research departments (tumor biology, pathophysiology and translational medicine ) and a major clinical trial unit. With previous experience in EU consortia we are actively searching for collaboration with potential partners on the field of respiratory diseases.



https://www.koranyi.hu/

## Krisztián Horváth, GE Healthcare

#### **ABOUT**

GE HealthCare is a leading global medical technology, pharmaceutical diagnostics, and digital solutions innovator, dedicated to providing integrated solutions, services, and data analytics to make hospitals more efficient, clinicians more effective, therapies more precise, and patients healthier and happier. Serving patients and providers for more than 100 years, GE HealthCare is advancing personalized, connected, and compassionate care, while simplifying the patient's journey across the care pathway. Together our Imaging, Ultrasound, Patient Care Solutions, and Pharmaceutical Diagnostics businesses help improve patient care from prevention and screening, to diagnosis, treatment, therapy, and monitoring. We are an \$18 billion business with 51,000 employees working to create a world where healthcare has no limits.

#### **OPPORTUNITIES**

#### **♦Project Cooperation**

#### Paving the way for personalized theranostics solutions

The specific challenge to be solved by this topic is to provide personalised anticancer care with theranostic solutions using radiopharmaceuticals. Radiopharmaceuticals combine a radioisotope with a targeting molecule (antibody, peptide, small molecule, etc) that binds to cancer-specific biomarkers.



# Anca Iftene, BioNanoTech Projects Support Centre / "Petru Poni" Institute of Macromoleculary Chemistry



The aim of the BioNanoTech Project Support Centre is to promote the European Cooperation in Horizon 2020/Europe projects for Romanian key actors in the field of material science: Eco-nano-technologies and advanced materials (including nanomaterials, nanomedicine etc.). This is one of the main issues to be tackled by the Romanian Smart Specialisation Strategy in the next programming period and it is addressed at both regional and national levels. The BioNanoTech also comes as a direct response to the need of an improved collaboration in the field of research, one of the targets of the Horizon Europe program. Cooperation is built on excellence, a solid collaboration network and on the ability of institutions to mould their profile based on the scientific trends and opportunities offered. Using the experience of one of the best research institutes in Romania – "Petru Poni" Institute of Macromolecular Chemistry, we offer services and consultancy for setting up consortiums and partner search support, consultancy concerning proposal writing and also in project management for research projects.



https://www.bionanotech.ro/

#### **OPPORTUNITIES**

# ♦ Project Cooperation BioNanoTech

The BioNanoTech comes as a direct response to the need of an improved collaboration in the field of research, one of the targets of the Horizon Europe program. Cooperation is built on excellence, a solid collaboration network and on the ability of institutions to mould their profile based on the scientific trends and opportunities offered. Using the experience of one of the best research institutes in Romania – "Petru Poni" Institute of Macromolecular Chemistry, we offer services and consultancy for setting up consortiums and partner search support, consultancy concerning proposal writing and also in project management for research projects.

## **Type**



## Inna Inashkina, Latvian Biomedical Research and Study Centre



Medical Genetics and Mitochondrial Research Group. The main focus of our group is the projects associated with human genetic pathologies and the underlying molecular mechanisms of disease development. At the moment we are concentrating our research on **mitochondrial**, **neuromuscular and other rare inherited diseases**. We are also planning to widen our portfolio with a neurodegenerative disorder that has a definite genetic background – Focal Cortical Dysplasia. The methodological approach – next generation sequencing techniques (WES, WGS, RNAseq) with the following functional analysis is our common strategy for all aforementioned diseases. Our achievements in science during the last years were related to discoveries of hereditary disease aetiologies, including the identification of a causative gene/ mutation in a novel inherited neuromuscular disease, as well as the biological characterization of the corresponding cellular and transgenic animal models.

Areas for searching partners: mitochondrial diseases, transmitochondrial cytoplasmic hybrid cell models, mitochondria – nucleus crosstalk, neuromuscular disorders, rare inherited diseases, whole genome sequencing, muscle biomechanical research, focal cortical dysplasia, congenital malformations. LBMC is also hosting a Latvian biobank.



https://biomed.lu.lv/home/

## Hajnalka Jankovics, Research Institute of Biomolecular and Chemical Engineering, University of Pannonia

#### **ABOUT**

We have an excellent track record in **N-glycan profiling based biomarker research and related diagnostics development**. We have extensive experience in the development of recombinant immobilizable proteins that can be used for specific capture of various targets from body fluids. We can design and engineer exoglycosidase enzyme arrays for robust glycan analysis utilizing high resolution, automated capillary electrophoresis separation.



https://richem.hu/index.php/en/





## Ewa Jablonska,

## **Nofer Institute of Occupational Medicine**

#### **ABOUT**

#### **DEPARTMENT OF TRANSLATIONAL RESEARCH:**

- we are focused on molecular biomarkers of exposure, effects, and individual genetic susceptibility, using medium and large-scale analyses in epidemiological and experimental (in vitro) studies, we are specialized in transcriptomics, epigenetics (DNA methylation), DNA genotyping, telomere length, and mitochondrial DNA copy number analyses
- broad experience in molecular epidemiology research projects and experimental studies (in vitro laboratory)
- strict cooperation with the biomonitoring laboratory from our Institute (exposure to chemicals and carcinogens) and clinical hospitals (material from cancer patients)
- our main research interests: cancer studies, environmental health
- we are also interested in Covid-19 studies (we offer ready SNP genotyping tests for Covid-19 susceptibility)

#### We are part of the NOFER INSTITUTE OF OCCUPATIONAL MEDICINE:

- \* the only Polish institute specialized in the area of workers' health
- \* highly specialized and multidisciplinary scientific research unit
- \* deals with the issues of broadly understood, occupational and environmental health
- \* our mission: to provide the best possible practical systemic solutions that improve conditions of life and work
- \* accreditation (Polish Centre for Accreditation), GLP, GMP
- \* broad experience in the coordination and implementation of international and European projects

#### **OUR ACTIVITIES:**

- postgraduate training of medical professionals, particularly of physicians in occupational medicine
- occupational diseases registration
- programs for health promotion at workplace
- epidemiological studies: occupational diseases ad chronic diseases (mainly cancer)
- risk assessment: occupational exposure to chemical, physical and biological factors (materials and technological processes)
- biological monitoring and assessment of occupational and environmental exposure to chemical agents basic science: toxicology (in vitro, in vivo studies), molecular biology (biomarkers of cancer and chronic diseases, molecular (genetic, epigenetic) markers of exposure, effect and individual susceptibility.

#### **OUR SERVICES:**

- laboratory studies: biomarkers of exposure, effect, and susceptibility (molecular biology and epigenetics)
- in vitro studies (toxicology)
- epidemiological studies (experience in conducting extensive studies at the population level)



https://www.imp.lodz.pl/stronaglowna



#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

## Pandemic preparedness and response

DEPARTMENT OF TRANSLATIONAL RESEARCH seeks partners/consortiums in the area of pandemic preparedness and response.

We are experienced in the recruitment of subjects for cohort studies and offer molecular biology analyses.

Our offer includes:

- molecular biomarkers of exposure, effects, and individual genetic susceptibility (including ready tests for Covid-19 susceptibility)
- transcriptomics, epigenetics (DNA methylation), DNA genotyping, telomere length, and mitochondrial DNA copy number analyses
- in vitro studies (we have in vitro laboratory)

We have broad experience in molecular epidemiology research projects and experimental studies (in vitro laboratory). Our Institute (NOFER INSTITUTE OF OCCUPATIONAL MEDICINE) is experienced in the coordination and implementation of international and European projects.

## **Type**

Partner seeks Consortium/Coordinator

#### **♦ Project Cooperation**

#### Cancer, endocrine disruptors and environmental health studies

DEPARTMENT OF TRANSLATIONAL RESEARCH seeks partners/consortium in the area of environmental health, with a special emphasis on cancer and/or endocrine disruptors. We are experienced in the recruitment of subjects for epidemiological studies (cohort studies/case-control studies) and offer molecular biology analyses.

Our offer includes:

- molecular biomarkers of exposure, effects, and individual genetic susceptibility (including ready tests for Covid-19 susceptibility)
- transcriptomics, epigenetics (DNA methylation), DNA genotyping, telomere length, and mitochondrial DNA copy number analyses
- in vitro studies (we have in vitro laboratory)
- strict cooperation with the biomonitoring laboratory from our Institute (exposure to chemicals: endocrine disruptors and carcinogens) and clinical hospitals (material from cancer patients)

## **Type**



## Arkadiusz Jasiński, Instytut Medycyny Doświadczalnej i Klinicznej im. Mirosława Mossakowskiego Polskiei Akademii Nauk

#### **ABOUT**

Mossakowski Medical Research Institute Polish Academy of Sciences (MMRI PAS) is the largest Institute of the Division of Medical Sciences PAS as well as being the only PAS Institute that conducts research both in medical biology and clinical medicine. Pursuant to the Resolution of Polish Academy of Sciences MMRI PAS was established on July 1, 1967 (originally as Mossakowski Medical Research Centre PAS). The Institute conducts basic and clinical research in: **physiology**, **neurobiology**, **oncology**, **nephrology**, **pharmacology**, **gerontology**, **medical chemistry and cell biology**. Parametric evaluation of scientific entities in 2013-2016 ranked the Institute as 'A' category research centre.



https://www.imdik.pan.pl/pl/

## Ana Jegundo,

**IPN - Instituto Pedro Nunes** 

#### **ABOUT**

The IPN is an RTO aiming to promote innovation and technology transfer, by linking academia with the market and industry, developing activities in three areas: RTD and technology transfer; incubation and acceleration of tech business and ideas; specialized training. IPN has six RTD laboratories: **Materials; Automation; IT Geothecnics; Electroanalysis and Phytosanitary**. Most of them use techniques accredited by the Portuguese Institute for Accreditation (IPAC). IPN also develops innovation activities, innovation management, support for the development of new products, technological brokerage initiatives, and support for Intellectual Property issues. Also, promote the creation of spin-offs in the IPN-incubator (an association of which the IPN is a major associate), and host the ESA BIC Portugal, one of the incubation centres of the European Space Agency (ESA) at the European level, boosting support for start-ups employing space technologies in non-space industrial and commercial uses. IPN has a Business Accelerator aimed at more mature companies, promoting their internationalization and technological intensity.



https://www.ipn.pt/



## Marija Jevtic,

#### **Faculty of Medicine University of Novi Sad**

#### **ABOUT**

The Faculty of Medicine of Novi Sad is a higher education institution within the University of Novi Sad which conducts higher education study programmes, as well as scientific research in the fields of **Medical Sciences, Social Sciences and Humanities, and Interdisciplinary Programmes**. Within the field of higher education, the Faculty conducts studies of the first, second and third level, as well as various forms of studies of knowledge innovation and vocational education. With its educational, scientific and healthcare activities, the Faculty contributes to the provision of personnel whose knowledge and skills correspond to the needs and standards of a wider area, and thus participates in improving and preserving the health of the population. Within the field of scientific research, the Faculty of Medicine seeks to contribute to the scientific development and the provision of young scientists among students and associates. Apart from educational and scientific research activities, the Faculty of Medicine in Novi Sad nurtures publishing, disposes of a rich library fund, and works on the development of information infrastructure.



https://www.mf.uns.ac.rs/En/Abo ut\_Eng.php

## Gonçalo Justino, xxx

## Centro de Química Estrutural, Instituto Superior Técnico, ULisboa

#### **ABOUT**

Centro de Química Estrutural (CQE) is the largest Chemistry-focused R&D Unit of Universidade de Lisboa (ULisboa). It is organized around 11 research groups that work associated with four interconnected and overlapping thematic lines ranging from synthesis, catalysis and reactivity to materials, soft matter and nano-chemistry and with impact in fields as diverse as sustainable chemistry for the environment, energy and manufacturing or medicinal and biological chemistry for health. CQE has been engaging in technology transfer and outreach activities, with multiple patents, spin-offs, collaborations with the industry and international partnerships to promote knowledge valorization. The CQE is an active participant in several networks included in the Portuguese Roadmap of Research Infrastructures, with application in drug design, proteomics and metabolomics, materials science, or structural biology at both fundamental and applied levels, namely:

- the mass spectrometry, (RNEM);
- the nuclear magnetic resonance (PTNMR);
- and the national chemistry and biology network (PT-OPENSCREEN).

These infrastructures are the national nodes of the European Research Infrastructures INSTRUCT-ERIC and EU-OPENSCREEN ESFRI.



https://cqe.tecnico.ulisboa.pt/



## Rafał Jóźwiak,

## **National Information Processing Institute**

#### **ABOUT**

We operate in the research and development sector. We build computer systems and create software for the science and higher education sector to share up-to-date and comprehensive information and data.

Our computer systems are designed comprehensively. From methodology and technological aspects, to the gathering and verification of information (organisation of processes, exploration of resources with the use of semantic analysis and artificial intelligence tools), to the aggregation and visualisation of data.

We employ over 200 IT experts. Programming languages used by our software developers include JavaScript, Java, Python, SQL, HTML, CSS, TypeScript, jQuery.

We provide services mainly to the Ministry of Science and Higher Education. Our computer systems organise and integrate data concerning higher education and science in Poland, and the results of our research projects and analyses are used by the Ministry of Science as a tool to support the decision-making process. Other important entities to which our services are offered include two central research funding agencies.

Everything we do is based on interdisciplinarity. Our research is conducted in six laboratories, bringing together professionals from many fields; apart from information technology experts, our team is composed of economists, sociologists, lawyers, statisticians and psychologists. This fusion of different scientific approaches is conducive to in-depth analysis of research issues and drives innovation. Our key areas of research include: machine learning algorithms, natural language processing algorithms, sentiment analysis, neural networks, discovering knowledge from text data, human-computer interaction (HCI), computer-assisted decision making systems and artificial intelligence.

Applied Artificial Intelligence Laboratory:

A research team working on designing systems that provide information during decision-making processes with machine learning algorithms and artificial intelligence tools. Expertise / Areas of our scientific activity:

- databases and data collection platforms for scientific usage;
- analysis and formalization of decision-making processes;
- intelligent decision-making support systems;
- novel structured reporting methodologies with AI integration.

Special application areas:

- structured-reporting systems for medical applications;
- computer-based decision support systems in radiology;
- medical image processing and analysis (including radiomics);
- deep learning for medical image analysis and indexing.

Clinical application areas:

- prostate cancer;
- AI in ophthalmology.



https://opi.org.pl/en/





#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

## Novel medical databases for better patient management and improved clinical outcomes

Current project ideas (related to call HORIZON-HLTH-2023-TOOL-05-04: Better integration and use of health-related real-world and research data, including genomics, for improved clinical outcomes):

The project aims to develop the concept of an innovative reference database of ophthalmic images, integrating data from many sources (fundus imaging, genomic, clinical). Ophthalmology is just an example use-case.

The scope of research work includes:

- development of rules and methods for secure (GDPR compliant) acquisition, storage, and access to data:
- development of mechanisms and forms of a unified, structured description at the database level, ensuring data consistency and interoperability;
- development of modern indexing mechanisms, integrating data from a structured description and image features (e.g., radiomic features, features extracted using AI methods), enabling monitoring patients' health status and building diagnosis recomendation securely and ethically with public acceptance and trust;
- developing analytical tools enabling data analysis, formulating new clinical paths, and increasing the quality of diagnostic outcomes (e.g., new care solutions, personalized disease management, advanced diagnostic tools).

#### **Type**

Partner seeks Consortium/Coordinator

# Maria Kalogeropoulou, IQVIA

#### **ABOUT**

IQVIA is a leading global provider of advanced analytics, technology solutions and contract research services to the life sciences industry. Formed through the merger of IMS Health and Quintiles, IQVIA applies **human data science** — leveraging the analytic rigor and clarity of data science to the ever-expanding scope of human science — to enable companies to **reimagine and develop new approaches to clinical development and commercialization**, speed innovation and accelerate improvements in healthcare outcomes. Powered by the IQVIA CORE™, IQVIA delivers unique and actionable insights at the intersection of large-scale analytics, transformative technology and extensive domain expertise, as well as execution capabilities. With more than 80,000 employees, IQVIA conducts operations in more than 100 countries. IQVIA global revenues are 14bn\$ originating solely from services provided to the life sciences industry. This makes IQVIA by far the leading provider for the healthcare sector globally, while retain the same leading position also in Greek affiliate.



HNN3.0 (The Cluster 1 Health consortium of NCPs for Horizon Europe) has received funding from the European Union's Horizon EUROPE research and innovation programme under Grant Agreement number 101057279

## Nikos Kanellopoulos, National Research Center Demokritos

#### **ABOUT**

The Institute of Nanoscience and Nanotechnology (INN) of NCSR "Demokritos" was established from the merger of the Institutes of Materials Science, Microelectronics and Physical Chemistry, as a result of a national reorganization of research institutions in Greece. INN efficiently organizes and integrates most of the best research and human resources available in Greece to address the innovation challenge and to increase the European competitiveness of the Country in Key Enabling Technologies (KETs) such as nanotechnology, micro- and nanoelectronics, advanced materials, biotechnology and photonics. INN provides a unique environment to promote and support world-class multidisciplinary basic and applied research, while forging ties with industry and SMEs it promotes the transfer of innovation to the market.



https://www.demokritos.gr/

## Maria Karampela, UniSystems S.M.S.A.

#### **ABOUT**

Uni Systems is one of the most reliable European Information and Communication Technology companies that delivers a wide range of products and services, helping its customers adapt and excel in a rapidly changing and challenging business environment. Uni Systems is a long-standing strategic partner to financial institutions, public organizations, telecom operators, enterprises and institutions in the European region. It has a proven track record of successful large scale, complex and critical ICT projects in more than 26 countries through its business entities in Athens, Brussels, Bucharest, Luxembourg, Milan and Barcelona, in tandem with on site or remote project teams.

UniSystems has recently established the iQnovus Innovation Center, which essentially runs Research and Innovation activities not only for UniSystems but also for other Quest Group companies: ACS (logistics/courier services), Info Quest Technologies (ICT & cloud services), Quest Energy (energy company with solar parks), BriQ (real-estate company managing primarily commercial buildings), Cardlink (payments/fintech), and UniSystems. Our Innovation Center has a strong portfolio of EU funding proposals and awarded projects in various domains, incl. energy, mobility, industry 4.0, e-gov, smart cities, cultural heritage, health, etc., and are always interested to find new partners for collaboration in EU projects (e.g. Horizon Europe, Digital Europe, Creative Europe, etc.). We also participate in numerous collaborative structures, incl. clusters, competence centers and digital innovation hubs, and have established the Pleiades IoT cluster.



https://www.unisystems.com/





## Hamza Umut Karakurt, Idea Technology Solutions

#### **ABOUT**

In the **Bioinformatics** area, we have been working to develop end-to-end innovative solutions, with an aim to significantly increase the number of diagnoses for rare diseases, at an unprecedented speed from DNA sample collection to diagnosis. For this, our solutions are powered by a cutting-edge proprietary **technology for the transfer, storage and analysis of genomic data** and we provide an ultimate user experience. We have a team of computational biologists and computer engineers that are working to develop new solutions according to customer needs and we constantly consult with medical genetics practitioners. Our customer portfolio is growing constantly, we work with companies from Europe, Asia and the Persian Gulf. We have two companies for bioinformatics solutions, one Turkey based, the other Boston based. We are an R&D performing SME. We work to develop tools that use AI for developing advanced diagnostic tools. In 2014, Idea Teknoloji received R&D Center Certificate, given to the R&D performing private companies, by the Ministry of Science, Industry and Technology. Since then we have successfully conducted over 20 R&D&i projects, with collaborations from top-tier universities, companies, government offices and hospitals.

## Pania Karnaki, Prolepsis Institute

#### **ABOUT**

The Institute of Preventive Medicine, Environmental and Occupational Health Prolepsis is a nongovernmental organization, active in the field of **medical research**, **health promotion**, **environmental and occupational health** since 1990. We strongly support the belief that health is a fundamental, nonnegotiable and inalienable right for every human being. Our vision is a society that maintains and promotes physical and mental health and prosperity equally and justly for all people, especially the most vulnerable, while respecting human freedom and protects our planet for future generations. Our mission is to respond to major public health needs of Greece and Europe, by conducting rigorous academic research and translating it into action through education, advocacy and direct service. We promote health and health equity for all Europeans. This mission is rooted in the belief that health equality is a necessary pre-requisite for broader social justice. We are committed to equality, social inclusion and respect for individual differences and choices.



https://www.prolepsis.gr/gr/





## Muhammet Karaman, Kilis 7 Aralik University

#### **ABOUT**

IKilis 7 Aralık University is based on 6 faculties, 2 schools and 4 vocational schools. Every Department offers a broad array of academic programs and grants both undergraduate and graduate degrees. The university is continuing its activities in three campuses, namely the Central Campus, the Karataş Campus and the Mercidabik Campus, the University has approximately 10,000 students studying at undergraduate, graduate and postgraduate levels with 403 academic and 204 administrative staff.

Molecular Biology and Genetics Departments currently includes 10 faculty members interdisciplinary technological expertise in emerging areas, such as **human genetics**, **microbilogy**, **bacteriology**, **plant biotechnology**, **molecular oncology**, **nano-medical biotechnology and nutritional genomics**, and 1 pos-doc researcher and 1 research fellow supported by research project.

Along with the target of the pathways causing cancer and hampering cancer treatment, we design and synthesize the chemical compounds in our lab. In order to improve cisplatin treatment, our research group have concentrated on the discovery of novel drugs that inhibit nucleotide excision repair and pentose phosphate pathways proteins through virtual screening and molecular dynamic simulations methods and investigate the efficiency of the designed and synthesized compounds using in vivo and in vitro experiments.



https://kilis.edu.tr/

#### **OPPORTUNITIES**

## **♦** Project Cooperation

## Targetting Nucleotide Excision Repair and Pentose Phosphate Pathway for Cancer Treatment

In order to improve cisplatin treatment, we have concentrated on the discovery of novel drugs that inhibit nucleotide excision repair and pentose phosphate pathway's proteins through virtual screening and molecular dynamic simulations methods and investigate the efficiency of the designed and synthesized compounds using in vivo and in vitro experiments.



## Popi Karaolia, University of Cyprus



Nireas-IWRC helps counter this trend through the creation of a "home" for water-related research, and through the hosting of an internationally-recognized research institute for the advancement of water-related research. Consequently, Nireas-IWRC ultimately offers a platform not just for more effective technologies, but also for an entirely new generation of functionality for sustainable management of water resources, harnessing the synergies of integrated interdisciplinary research on water quality, quantity, and management and economics through a single knowledge repository. Nireas-IWRC generates a responsive environment for technology-enhanced research to motivate, engage and inspire citizens, and one that is embedded directly in the social web.

The activities of the Center aim at dependable, flexible and user-centric shared solutions for sustainable use of water resources and for better management of ecosystems including the mitigation of environmental degradation and associated threats. Nireas-IWRC's research delivers visionary concepts and techniques, and strategic integrated approaches addressing water-related applications that are cost-effective, easy to set up and to operate.

The aforementioned activities include interdisciplinary research aiming at the solution of complex scientific and engineering problems under the unifying theme of water management. The goal is to develop further expertise that will enable an integrated approach to this important issue, coupling chemistry, biology, hydrology, geohydrology, advanced modeling capabilities and experimental/analytical work, computational mechanics, risk assessment, environmental science and education, economics and of course various specialties of engineering in order to face various emerging problems in this field. The implementation of the various projects that are stem from the Center are spearhead research at a pioneering level internationally. The projects of Nireas-IWRC are true inter-sectorial, effectively linked and integrated since the working schedule is structured so that various members are involved in several inter-related projects and activities. Each of the research pillars and tasks described below promotes competence and practical skills in various disciplines within the thematic area of water management. The overarching aim of Nireas-IWRC is to integrate and leverage this interdisciplinary research for the solution of complex scientific and engineering problems. Although distinct, the pillars have commonalities both in the scientific content and the industrial and real-life scale applications.





## Tamás Kitka, Vascular Venture Ltd



Our mission is to cure diseases via targets and MoAs that cannot be reached with traditional approaches.

Using our unique platform, we **optimize peptides/proteins of natural origin using directed evolution to create cutting-edge CGT products or peptide-based pharmaceuticals.** 

VRG's management and staff members were selected based on their international research experience and outstanding pharma industry achievements. Our people have outstanding professional expertise in preclinical/clinical R&D and scientific project management, pharmacology, business development and medical marketing. For years, they have worked in the most prestigious academic institutes, such as Fred Hutchinson Cancer Research Center, Karolinska Institute, Harvard University, Weizmann Institute of Science and several leading pharma companies.



https://vascular.hu/venture/en/home/

## Anda Kivite-Urtane, Institute of Public Health, Riga Stradins University

#### **ABOUT**

Rīga Stradiņš University (RSU) is one of the most modern universities in the Baltic States with an extensive choice of study programmes in health care and social sciences, a strong foundation in research and international recognition. RSU has been recognised as the university with the best reputation in Latvia for four years in a row, gaining the highest rating among the 10 largest Latvian universities.

The objective of the RSU Institute of Public Health is to carry out research, undertake academic training and promote the acquisition and improvement of scientific qualifications in the area of **public health and healthcare organisation**.



https://www.rsu.lv/sabiedribas-veselibas-instituts



# Julianna Kobolak, Institute of Aquaculture and Environmental Safety, Hungarian University of Agriculture and Life Sciences

#### **ABOUT**

The Institute of Aquaculture and Environmental Safety insists on training environment-conscious professionals with an ecological approach, who are able to interpret fish farming and environmental safety as a complex system. By getting acquainted with nature protection, environment protection, and environmental safety, they will possess theoretical and practical knowledge adequate for the planning, organization, and control of general and specific challenges of these sectors. Research and Innovation activities are focusing on both areas aiming to develop innovative methods, new technologies, or field applications.

The Department of Environmental Toxicology, within the Institute of Aquaculture and Environmental Safety, is actively involved in research and higher education at the University of MATE. Our research interests include the **toxicological analysis of environmental samples and the application of environmental microbiology**. Through the application of state-of-the-art aquatic toxicology tests, we can evaluate the endocrine-disrupting effects of substances or conduct risk assessments of individual compounds, mixes, and processes. Beyond these analyses, we utilize in vivo and in vitro models, including our self-developed, estrogen-sensitive zebrafish model (Tg(vtg1.mCherry), which allows us to determine the estrogenic potential of environmental samples



https://aquaculture.uni-mate.hu/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

#### Impacts of endocrine-disrupting chemicals

Activities and abilities related to the specific points of the call

Point 2 - Health endpoints: We have experience in the **molecular detection and analysis of lipid and protein markers of disease in model organisms (mammalian and non-mammalian) that are applicable to human disease conditions**. We are able to utilize RT-PCR, various protein analyses and analytical techniques (LC-MS/MS) to detect and/or measure these key metabolites and indicators of diseases like cancer and obesity.

Point 4- Developmental origins of health and disease: We have experience in planning and performing **sub-chronic** (e.g. FELS - fish early life stage) and chronic (2 generations) tests on zebrafish with both pure active ingredients and mixtures. In addition to testing classic toxicological endpoints (e.g. molarity, body size, body weight changes), we can provide samples for carrying out molecular biological, epigenetic, histological and genome damage tests (e.g. micronucleus test).



Point 5 - Windows of susceptibility: Zebrafish are highly suitable for studying fundamental embryonic development processes, since their embryogenesis is very similar to higher vertebrates, including humans. The development of zebrafish embryos is well documented and easy to observe due to their ex-utero development. For this reason, treatments can be timed to the sensitive developmental phases of target organs. In addition to classic water exposure, we are also able to perform toxicological treatments with a zebrafish embryo microinjection method. This method allows us to examine the effects of the parent compound, as well as the metabolites which are characteristic of mammals after a preliminary MAS (mammalian metabolic activation system, e.g., rat S9-mix, microsomes, or hepatocytes) activation, which can also help in the detection of a pro-teratogenic and pro-oncogenic effects

Point 7- Microbiome detoxification: ED chemicals can have an effect on microbial communities. Some bacterial species could be sensitive to these kinds of agents, while others could help with the elimination of them via biodegradation. Our facilities are able to **monitor the changes in bacterial communities caused by these chemicals using methods such as new-generation amplicon sequencing.** Additionally, we are able to isolate any biodegradable strains as well as determine and verify biodetoxification by our self-developed toxicological tests, such as embryo microinjection. Point 9 - Non-mammalian model: Zebrafish, as a non-mammalian vertebrate model, are widely used in toxicological and ecotoxicological testing and can be successfully used for **investigating the mode of action of estrogenic substances and their reproductive and developmental effects**. Toxicity effects on organ, tissue, and cellular phenotypes can be monitored in the transparent, ex-utero developing embryo. In addition, embryos of zebrafish up to the free feeding age at 5 days post fertilization (5 dpf) are considered as non-protected life stages by the EU Directive 2010/63/EU and relevant national directives, hence they represent a replacement method for the testing of adult fish or mammalian models.

## Project Cooperation

Tackling diseases and reducing disease burden: link between hydrocarbon contamination and the occurrence of multidrug-resistant microbes

The Institute of Aquaculture and Environmental Safety of MATE is a pioneer in **environmental antibiotic resistance research**: our research group explored the link between hydrocarbon contamination and the occurrence of multidrug-resistant Pseudomonas aeruginosa, proved the role of groundwater, soil and compost as possible sources of antibiotic-resistant P. aeruginosa, and was the first who isolated carbapenem-resistant Acinetobacter beijerinckii from an environmental sample. Our latest research focused on the **effects of pesticides on antibiotic resistance** leading to a recent publication in Scientific Reports verifying that glyphosate and glyphosate-based herbicides (GBHs) induce phenotypic imipenem resistance in P. aeruginosa. Besides the **examination, evaluation and monitoring of environmental antibiotic resistance** in context with environmental contamination, our Department owns a notable (n=400) environmental collection of Streptomyces strains with verified biodegradation ability that is a potential source of new types of antibiotic agents and other bioactive metabolites.





## Asuman Kolbaşı, Bogazici University LifeSci



Established in 2009 at the Kandilli Campus along the Bosphorus strait, the Center for Life Sciences and Technologies rests on approximately 7500m2, comprising two units 1-Research and Innovation, 2- Deep Tech Facility, the former comprising a Polymer Pilot Production Facility and an Advanced Genomic Analysis Unit. Furthermore, a biorefinery is in the pipeline within the scope of Istanbul Microalgae Biotechnologies Research and Development Unit. The latter unit is focused on accelerating research/development activities of SMEs active in the Life Sciences domain, with a focus on specific cutting-edge technologies and high value-added products. BULifeSci has 3 centers, which are: In vivo Medical Device Development Unit, Test Analysis Unit and Experimental Animal Production and Care Unit/Vivarium.

Since its establishment, the Center has attached great importance to the cooperation between university and industry. Major regional projects carried out within this context are "Inovita, Life Sciences and Technologies Istanbul Collaboration Platform" and "Inovita Health Technologies Hatching Center" which are supported by the Istanbul Development Agency, "Life Sciences and Technologies University-Industry Researcher Training Program" and "ISEK – Health Industry Cluster of Istanbul", backed by the Turkish Ministry of Development. Through the Inovita projects, the Center has taken on the function of an interface between university, industry and state.



#### **OPPORTUNITIES**

# ◆ Project Cooperation Preclinical PET/CT/MRI Imaging

We offer our expertise and our infrastructure for academicians/SMEs and potential projects. We have a 7T MRI device for rats and mice and a CT with 50 um resolution, a PET device can be clipped on both MR and CT devices for sequential PET/CT and PET/MRI procedures.

Boğaziçi University LifeSci Small Animal Imaging Laboratory is the first and only hybrid preclinical imaging facility in Turkey. We are ready to discuss the project opportunities. Please see our website (lifesci.boun.edu.tr) and feel free to contact me via e-mail (asuman.kolbasi@boun.edu.tr).



## **Evangelos Kolettas,**

## Biomedical Research Institute, Foundation for Research & Technology

#### **ABOUT**

The Biomedical Research Institute (BRI) of FORTH at Ioannina was founded in 1998 as an independent institute. In 2001, BRI joined the Foundation for Research and Technology (FORTH) becoming its seventh Institute. BRI consists of 18 research teams that comprise of 140 members (postdoctoral students, PhD candidates, post- and under- graduate students, technicians, administrating personnel). The groups of BRI work in basic molecular and cellular biology areas of biomedical research with high interest in public health and biomedicine, such as vascular biology, stem cell biology and regenerative medicine, cancer biology, neurobiology, and biomedical technology.



https://www.bri.forth.gr/en/

#### **OPPORTUNITIES**

- **♦ Project Cooperation Lung Cancer** 
  - 1. Functional roles and mechanisms of action of IKKα- and IKKβ-mediated NF-κB-dependent or -independent signalling pathways, and IKK/NF-kB-miRNA regulatory network in DNA damage and inflammation impacting on senescence and cancer, using novel in vitro cell culture models, and in vivo transgenic mice, and
  - 2. The identification of novel regulators of DNA damage, inflammation and cancer by employing domain-specific CRISPR/Cas9 screens

## **Type**

Partner seeks Consortium/Coordinator

## Marcin Kowalski.

Institute of Optoelectronics, Military University of Technology

#### **ABOUT**

The AI and biometrics laboratory at IOE WAT is addressing research on various aspects of computer vision. Our main fields of activities relate to facial biometrics, multispectral imaging and medical image analysis. Institute of Optoelectronics (IOE WAT) is the research institute within the Military University of Technology focused on basic and applied research in the fields of lasers, photonics, optics, security systems, spectroscopy, thermo-vision, biometrics, biotechnology, signal detection and the interaction of laser radiation with the matter



https://www.wojsko-polskie.pl/wat/





### Miklos Koller.

### Faculty of Information Technology and Bionics, Robotics Lab

#### **ABOUT**

In our Robotics research lab the main focus is at an anatomically correct prosthetic hand: we have a built prototype (built with rapid prototyping, already the 3rd gen), we have explorative work done in the directions of the different interfaces (EMG, ultrasound, dataglove) and also explorative work on the automatic control of movement sub-motifs with deepRL. The distinguishing positive property of our hand lays in its natural build-up, layer-by-layer recreation of the different structures of the human hand, in order to realize a more natural and intuitive replacement for the missing hand than ever before.



https://itk.ppke.hu/en

#### **OPPORTUNITIES**

### ◆ Project Cooperation

Offering expertise - prosthetic development, human-machine interfaces, biosignal measurements, biomechanical modeling, deepRL control

We would like to offer our key competencies. We have experience in research and development of a prosthetic device; we have done explorative work in the field of human interfaces (EMG, US, dataglove); and also we have professional experience with **deepRL control of kinematical** constructions. We would be very happy to join project that builds on these skills in order to produce something qualitative in the area designated by these calls.

## **Type**

Partner seeks Consortium/Coordinator

## Anna Kozajda,

## **Nofer Institute of Occupational Medicine**

#### **ABOUT**

We are the part of the NOFER INSTITUTE OF OCCUPATIONAL MEDICINE (NIOM):

- \* highly specialized and multidisciplinary scientific research unit
- \* the institution with activities covering various areas of occupational and environmental health including chemical safety, epidemiology, reproductive health, environmental toxicology and carcinogenesis, molecular genetics and epigenetics, health promotion, occupational exposure, occupational hygiene, work physiology and psychology, and the organization of the occupational health service
- \* the institution with longstanding experience in performing large-scale studies



https://www.imp.lodz.pl/



## Beata Kondraszuk, University of Warsaw, Biological and Chemical research Centre



The Center is an inter-faculty organizational unit that acts as a research platform enabling the cooperation of scientists from the faculties of Biology and Chemistry at the University of Warsaw. Analytical Chemistry Expert Centre is one of the laboratories of The University of Warsaw Biological and Chemical Research Centre which has accreditation Polish Centre for Accreditation. Laboratory fulfils system and technical requirement norm ISO/IEC 17025.

Our group perform research using modern analytical techniques

- Gas Chromatography Tandem Mass Spectrometry (GC-MS/MS)
- Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)
- Gas chromatography with time-of-flight mass spectrometry (GC-QTOF/MS)
- Liquid chromatography with time-of-flight mass spectrometry (LC-QTOF/MS)
- Inductively coupled plasma mass spectrometry (ICP-MS)
- Flame atomic absorption spectroscopy (FAAS)

We use advanced measurement techniques to study the processes taking place in industrial products, living organisms, clinical samples, environmental samples, food and feed and others. We can measure: elements, their speciation, heavy metals, organic pollutants – for example pesticides, polycyclic aromatic hydrocarbons (PAHs), pharmaceuticals. We can also identify unknown chemical compounds.

## SRĐAN KOŽETINAC, Cluster of medical and health tourism

#### **ABOUT**

Cluster of medical and health tourism has over 50 members (organizations in the medical, tourist, business and scientific sectors). Cluster is actively involved in EU projects, one of them is SI4CARE. In Cluster 1 Health, we are focus on diabetes, obesity, nutrition, physical rehab. Main founder and member is Special hospital Merkur, national center for diabetes. It is very good place for pilot project.



http://www.medicinskiturizam.rs/





## Aigli Korfiati, Deeplab



Deeplab (deeplab.ai) bridges the gap between state-of-the-art research and challenging industrial problems. Counts more than 20 researchers and engineers including junior talents and senior consultants working in real-life projects while conducting high-end deep-learning research as well as large-scale product-level pipeline development dealing with very large datasets e.g. >1B data per day. Deeplab has successfully applied deep-learning in diverse and long-term R&D projects: 1) recommendation systems, by incorporating multiple modalities such as image, text, and other diverse inputs 2) anomaly detection in fraud detection, 3) visual objects' relations recognition and explainable AI/ML, as well as with 4) bioinformatics fields such as virtual screening for drug discovery, single cell multi-omics, all related to the state- of-the-art of deep learning. Recent success highlights include 1) a self-funded project on COVID-19 drug discovery while being in the top-20 teams in the international JEDI grand challenge whose submissions are currently tested in vivo, 2) a high impactful two year industrial research project on transfer learning 3) publication of basic research in top-tier conferences such as ICCV'2021, 4) collaboration with academic institutions and universities by funding and/or hosting young talents in diploma thesis co-supervision or via research training internships.



https://deeplab.ai/

#### **OPPORTUNITIES**

## **♦** Project Cooperation

## Advanced ML and DL expertise and offering in bioinformatics, neuroinformatics and personalization

Deeplab is an SME with advanced Machine Learning (ML) and Deep learning (DL) industrial experience in large scale production pipelines, bridging the gap between state-of-the-art research and challenging industrial problems. Counts more than 20 researchers and engineers including junior talents and senior consultants working in real-life projects while conducting high-end deep-learning research as well as large-scale product-level pipeline development dealing with very large datasets e.g. >1B data per day. Offerings: 1. **Bioinfo In silico components for drug discovery**, such as virtual screening, drug target identification, as well as other optimizations in clinical trials or others. Bioinformatics and advanced ML/DL for omics data (including among others single cell and spatial single cell). 2. **Neuroinformatics and brain computer interfaces via EEG**, Real time Motor Imagery, BCI Across subjects generalization of EEG signals 3. **DL in Computer vision and language processing** 4. Personalization, generalization.



#### **Type**



## Ewa Kosycarz, Warsaw School of Economics

#### **ABOUT**

SGH Warsaw School of Economics (SGH) (in Polish: Szkoła Główna Handlowa w Warszawie) is the oldest university of economics in Poland. SGH was founded in 1906 as the first public university of economics and management in Poland. It maintains close links with business community that facilitate conducting research projects. SGH is ranked Poland's top research university in economic sciences, with the grade of excellency awarded by Ministry of Science and Higher Education. Annually about 2000 alumni graduate from the SGH. We are a part of the university alliance CIVICA. SGH Warsaw School of Economics employs over 700 members of research staff specialising in different disciplines of social science, such as economic and social policy, including healthcare system policy.

Our healthcare systems team has research (scientific) experience as well as practical experience in cooperation with institutions as: Ministry of Health, Agency for Health Technology Assessment and Tariffs, National Health Fund. Our healthcare systems team consists of specialists in economics, management, as well as quantitative and qualitative methods necessary in the conducted research.

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Well-being, intrinsic and extrinsic motivation, mental health

We are interested in in-depth research on the sources of satisfaction and professional burnout among the staff of medical entities. The aim of this research would be to develop tools to prevent professionals from leaving their jobs, to prevent from reducing the level of involvement in performed tasks, and to improve the quality of services provided. Tools that will improve working conditions, including the very important quality of personnel management, the impact of the external environment and within the organization. Elements related to the finances of the medical entity will also play an important role in our considerations.

During the pandemic, my research group conducted the study "COVID-19 and the role of human capital in healthcare organization's resilience", which, among other things, showed that there is a problem with the resilience of medical staff, which is the basis of an efficient health care system. Over 500 healthcare system employees took part in the research.

## **Type**



## Erika Kovács, Heim Pál National Pediatric Institute

#### **ABOUT**

HPI is one of the biggest paediatric hospitals in the Central European region. The mission of the Institute is to do the best for the well-being of children (physical and mental), quality of life, and to represent children's interests in healthcare. The hospital has 550 active beds, employs 370 doctors and 700 nurses. It has all the specialities in **paediatric medicine**, **e.g. Dermatology**, **Neurology**, **Orthopaedics and Urology**. There is a significant number of patients treated: 35,000 inpatients and nearly 500,000 outpatients visit the facility per year. We operate the largest children's emergency and child accident center in the region, and provide on-call duty in many professions for the whole country. The hospital is designated to care for COVID-19 infected children at the highest level. Our hospital is a national institute publicating medical protocols and tertiary care teaching hospital both for doctors and nurses.



http://heimpalkorhaz.hu/

#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

Mental health: resilience and mental wellbeing

We are interested in the topic of 'Resilience and mental wellbeing of the health and care workforce' because the effects of the pandemic and the Russo-Ukraine war have affected not only the mental health of children and adolescents in Hungary but also the health and care workers. As the stress of coping with new situations increased, this was exacerbated by a heavier workload; and psychological support for health and care workers was increasingly needed. Our aim is to reduce mental vulnerability and increase resilience among health and care workers. The project would be implemented through data collection (validated questionnaires), training (developing new skills with PFA), and mental support (supervision). We would like to give recommendations for government action, prevent mental problems or disorders (e.g. anxiety, burn-out, PTSD, etc.), and give innovative solutions (e.g. telemedicine) in this field. As a public hospital, we have the opportunity to make recommendations to policymakers based on the results of our research activities. Our SSH experts work not only as psychologists but also in the academic field. They cooperate between health and care professionals associations and institutions in our country and international level too. We are keen to participate in the development and expansion of our Network through collaboration, joint activities, dissemination of results, development of guidelines, and the collection of information on best practices.



## Konrad Kowalski, Masdiag Sp. z o.o.

#### **ABOUT**

Masdiag is highly specialised medical diagnostic laboratory with high R&D capabilities. The company main focus is the development of new competitive method for important biomarkers. Our method of choice is **mass spectrometry coupled with liquid chromatography (LC-MS, LC-MS/MS).** Additionally we are involved in the project were other techniques are used (EDX. NMR, CLIA, ELISA). Since beginning except, routine materials like serum, plasma, whole blood and urine we are developing our assay using dried spot matrix, especially dried blood spot (DBS). We have experience with standard cards, quantitative devices and separation cards. We are developing methods, validating them and following IVDR rules introducing them to regular offer. We are able to deliver the whole solution for DBS test, we can develop the method, validate it, measure the samples and with our partners we are able to deliver hardware solution for DBS analysis like puncher, sample evaporators and software for checking quality of DBS samples.



https://www.masdiag.pl/

#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

Diagnostic method development and validation based on blood microsampling techniques/devices (dried blood spot included)

The Masdiag laboratory is seeking scientific cooperation with partners that represent the medical, diagnostic, and pharmaceutical sectors with regard to microsampling techniques for scientific research.

In biomedical research, microsampling techniques are used because of their unique characteristics, including:

- low invasiveness (fingertip blood collection)
- a small sample volume (no more than 40 ul of blood),
- high stability of the analytes, it is easy to transport (by mail) and store (at room temperature).
- provide patients with the opportunity to collect samples at home on their own.
- low level of infectiousness (low cost of transport).

These features make techniques based on **microsampling suitable for conducting decentralized clinical trials or population studies**, as well as for testing various forms of telemedicine.

A wide range of laboratory techniques can be used to develop and perform assays in our laboratory, including:

- liquid chromatography
- mass spectrometry (LC-MS, LC-MS/MS),
- gas chromatography (GC-FID, GC-MS),
- immunoassays (CLIA, ELISA).

#### Type

Partner seeks Consortium/Coordinator



HNN3.0 (The Cluster 1 Health consortium of NCPs for Horizon Europe) has received funding from the European Union's Horizon EUROPE research and innovation programme under Grant Agreement number 101057279



## Luka Kropivšek, Adiper & Saluus

#### **ABOUT**

ADIPER & SALUUS, is a private organization with a wide network of Public and Private collaboration. Located in Extremadura, it collaborates in the management of Social Services, being a Care Service Provider, to different organizations, public, private and end user. It participates in different research, training, and development cooperation programs with various administrations and organizations. Attached to the Extremadura Health Cluster and the SIVI Cluster of Castilla y León. At Adiper & Saluus, we are representatives of the International Aging 2.0 Network for Andalusia and Extremadura and work in collaboration with the University of Extremadura (UEx) and other public or private research centers, providing resources, personnel and facilities to develop any research activity. social and health in the autonomous community of Extremadura (Spain).

Organization SAD - Home Help Service.

- Home Automation with specialization in Care
- Training for Technical Personnel
- Research Projects Digitization Projects
- Silver Economy.
- Friendly Spaces with the Elderly
- Consultancy specialized in Care and Friendly Spaces.
- Certification in Active Aging and Friendly Spaces



https://www.adiper.es/

## Nikolaos Labrou, EnzyCeuticals

#### **ABOUT**

EnzyCeuticals is a spin-off company from the Agricultural University of Athens. It is a research driven company that develops high quality innovative enzymes and enzymes-based products for the food, health and cosmetic industries. EnzyCeuticals brings together cross-disciplinary scientific expertise to develop novel solutions and products in the field of enzyme biotechnology. Continued R&D gives EnzyCeuticals the opportunity to exploit the natural biodiversity, synthetic biotechnology and protein engineering technologies to develop new and unique enzymes for a wide range of biotechnological and industrial applications. EnzyCeuticals also manufactures and sells a range of well-known recombinant and native enzymes.



https://enzyceuticals.eu/





## Maryna Kryvtsova, Uzhhorod national university

#### **ABOUT**

Uzhhorod National University belongs to classic universities of Ukraine, holding the highest 4th level of accreditation. It is one of the largest and best universities of the Carpathian region, situated in a wonderful student city Uzhhorod on the slopes of the Carpathian Mountains in Western Ukraine. The university is young, it was founded in 1945 but it has acquired a well-deserved reputation in a scientific world, becoming the landmark and the alma-mater for generations of students who are working successfully both in Ukraine and other countries of the world. Uzhhorod University has formed powerful scientific schools of the world acclaim. It collaborates with many top universities abroad.



https://www.uzhnu.edu.ua/

#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

Genetic, microbial and immune factors in appearance of inflammatory periodontal diseases: Prognostic pattern of periodontitis treatment

In view of the multifactorial character of diseases of periodontal tissues, their contemporary prevention concept is based on assessment of the risk factors and development of prognostic development patterns for these diseases. Thus, we consider it relevant and timely to apply molecular-genetic methods to clarify the reasons for heightened risks of development of **periodontal diseases**. The purpose of the project is to study the genetic background (genetic determinants), and the role of the microbial factor and the immunity status of periodontitis progression; to develop a prognostic treatment pattern with due account for the multifactorial character and genetic background of its genesis. To identify the genetic determinants of periodontitis progression in adult patients, the following genetic predictors for its formation. To assess the microbial status of periodontal tissues, the composition of periodontopathogens, aerobic, facultative anaerobic and anaerobic microbial complexes will be established; dominating representatives of the microbial associations will be identified. The main periodontopathogens will be identified by PCR and cultural method. A study of the local immunity status will be conducted to assess the immune status. The genetic determinants of the inflammatory process and the degree of dysbacteriosis of the oral cavity will be identified for patients with different morbidity rates. Based on the correlation analysis, the role of the genetic, microbial and immune factors in the correlation analysis, the role of the genetic, microbial and immune factors in the development of periodontitis will be clarified. The results of the project will serve the basis for a prognostic pattern of periodontitis treatment with due account taken for the multifactorial character of its genesis.



## **Type**



# Aslıgül Kurt, IVBIO TECHNOLOGY



IVBIO founded in 2021 (SME), is a biotechnology company that conducts research on biotechnology for devoloping products to help industry. In addition to providing **in vitro biotechnological solutions with indigenous designs**, IVBIO also represents leading companies and investors in the areas of biotechnology, pharmaceuticals, medical technology, wellness and cosmetics. IVBIO team has extensive experience in the health care and life sciences field, both in Turkey and abroad.

#### **OPPORTUNITIES**

## ◆ Project Cooperation EU Project Partnership

IVBIO has 2 main facilites as: Analysis and Product Development

Analysis: In vitro Biocompatibility Tests, Sterility Tests, Biological Load Tests, Bacterial Endotoxin Tests (All testing services at IVBIO Technology Inc. are carried out in accordance with ISO standards)

Product development stages:

- **De-cellularization strategies for regenerative medicine** (Bone grafts, soft tissue grafts... etc)
- **Gel formation of decellulerized tissue grafts** (Injectable Type 1 collagen...ect)
- Re-cellularization of tissue scaffolds
- Cancer and non-cancer related cell therapies (including regenerative medicines approaches)
- Molecular level R&D studies including western blot, PCR, elisa, gel electrophoresis, spectrophotometric measurements like antioxidant capacity testing, HPLC analyses, cell culture cytotoxicity xtt, mtt tests.. etc
- In vitro impact assessments on biochemical pathways at the molecular level (mRNA and Protein level) in cell culture.
- Organoid studies for drug trials
- Bioinc

#### **Type**



## Denis Kutnar, Deep Art Medicine, s. r. o.



Deep Learning technologies allows us to supplement conventional practices with inventive ones, thanks to which we are providing innovative solution based on AI, interested in various of bio-medical problems, which enables radiologists to make confident and fast decisions and enabling substantial improvements to the accuracy of diagnosis.

The solution helps to analyze large amounts of data to find while reducing time and effort. Contrary to the conventional techniques which are required significantly higher computational power and memory, we present a novel two-phase approach for a highaccuracy automatic segmentation prediction tool. The proposed approach consists of two phases; (1) Localization, where the rough target position is detected on the 2D slices by adopting detection model, (2) target Segmentation, where the segmented region is produced by refining the candidate region with 3D segmentation model on the 2D sub slices generated in the first phase. This allows for real time and accurate prediction.



https://deepartmedicine.com/

#### Andreia Leite,

### Instituto Nacional de Saúde Doutor Ricardo Jorge

#### **ABOUT**

The National Institute of Health Doctor Ricardo Jorge (Instituto Ricardo Jorge) is a public body integrated in the indirect administration of the State, under the supervision of the Ministry of Health, endowed with scientific, technical, administrative, financial autonomy and its own assets. The Ricardo Jorge Institute has operating units at its headquarters in Lisbon, in centers in Porto (Doctor Gonçalves Ferreira Public Health Center) and in Águas de Moura (Doctor Francisco Cambournac Center for the Study of Vectors and Infectious Diseases). The Ricardo Jorge Institute is organized, in technical and scientific terms, into six major departments: Department of Food and Nutrition; Department of Infectious Diseases; Department of Epidemiology; Department of Human Genetics; Department of Health Promotion and Prevention of Noncommunicable Diseases; Department of **Environmental Health.** 



https://www.insa.min-saude.pt/





## Mafalda Laranjo, University of Coimbra



University of Coimbra (UC) has a robust internationalization due to substantial investment in Education and Training and Research and Innovation. UC is an undeniable reference in R&D, recently acknowledged as the Portuguese Institution with higher Horizon 2020 funding. UC's outstanding advances in scientific and translational research are promoted through its Faculties, such as the Faculty of Medicine (FMUC) and R&D units such as Center for Innovative Biomedicine and Biotechnology (CIBB), recently awarded with Associated Laboratory status with a 100% score. FMUC is one of the most important schools of Medicine in Portugal, has its research centre - Coimbra Institute for Clinical and Biomedical Research (iCBR) - and promotes the link between research and the clinical practice with Coimbra Hospital and University Centre. CIBB integrates iCBR and the Center for Neuroscience and Cell Biology, resulting in a hub of excellence in Biomedicine and Biotechnology research.



https://www.uc.pt/

#### **OPPORTUNITIES**

### **♦ Project Cooperation**

#### Seeking a Consortium for Horizon Europe call

My main research area is photodynamic therapy for cancer. Our team developed and patented new photosensitiser with selective cytotoxicity in several cancer types and theranostic ability, shown in vitro and in vivo studies.

As our group at the Faculty of Medicine, UC, PORTUGAL, comprises basic researchers, clinicians, and statisticians, other research projects focusing on oncology, dentistry, gynaecology, and other medical specialities are developed.

Specifically, the group goals are:

- (1) to take advantage of ionizing and non-ionizing radiation biologic effects for the improvement of diagnostics, treatment and theranostic,
- (2) to develop innovative treatment strategies based in novel compounds, biomaterials and drug combinations, and
- (3) to understand physiopathology and response to treatment through translational man-labmen models.

## **Type**



## Marcis Leja, Institute of Clinical and Preventive Medicine, University of Latvia

#### **ABOUT**

The Institute of Clinical and Preventive Medicine, University of Latvia (LU ICPM) is among the leading research institutes of the country to bridge basic medical research to the clinics. Biomarker and new technology research, in particular for gastrointestinal cancer early detection and screening are among the key priority research areas. The Institute has a long-standing expertise in running a clinical biobank. Strategic partnership has been developed with the Riga East University Hospital (REUH), the leading clinical institution for managing cancer patients. Broad international collaboration, including with industry sector (Microsoft, ROCHE) has been developed; this is mainly related to gastric cancer research.

LU KPMI is running a large population-based project GISTAR (www.gistar.eu) having recruited 11,000 subjects in this digestive cancer prevention project. The institute has long-standing experience in participation and leading Horizon and EU4HEALTH projects.



https://www.kpmi.lu.lv/

## Tamas Letoha Pharmacoidea Ltd.

#### **ABOUT**

Pharmacoidea is a biotech SME, participating in Innovative Medicines Initiative (MI) projects since 2012. Currently, we run two IMI projects: ARDAT, focusing on ATMPs (www.ardat.org), and IM2PACT, focusing on brain delivery (www.im2pact.org). Our R&D focus is the therapeutic exploitation of cell surface proteoglycans, an expertise becoming very valuable for understanding SARS-CoV-2 infection. Thus we would be eager to participate in the new Horizon Pandemic preparedness and response calls and contribute to project execution with our proteoglycans assays, vaccinated/unvaccinated COVID patent samples, data and knowledge management IT platform, and administrative (i.e., grant writing) personnel.



https://pharmacoidea.eu/



## Yoram Lev-Yehudi, **Vilnius University Life Science Centre**

#### **ABOUT**

The Vilnius University Life Sciences Center is home to three academic branches that take part in joint activities: the Institutes of Biochemistry, of Biotechnology and of **Biosciences.** It is a new and innovative center possessing modern laboratory equipment and top-level scientific research services. The Life Sciences Center of Vilnius University comprises a large amphitheater 340-seat auditorium, 34 smaller lecture halls, generaluse classrooms & meeting rooms as well as spacious hall areas. The Center is open to scientific events in the fields of life and physical sciences, biotechnologies, innovations, higher education policy and STEAM education.



https://www.gmc.vu.lt/en/

## Belkis Levent, MoH, General Directorate of Public Health

#### **ABOUT**

General Directorate of Public Health (HSGM) is a part of Ministry of Health in Turkiye. HSGM is national institute include all departments about communicable diseases, noncommunicable diseases and chronical diseases. I've been working in Mücrobiology Reference Laboratories and Biological Products Department. I'm responsible from National Reference Laboratory for Enteric Pathogens and interesting especially food and water-borne pathogens.



https://hsgm.saglik.gov.tr/tr/



## Ioannis Liakos,

#### SOUTHEASTERN RESEARCH INNOVATION AND EDUCATION

#### **ABOUT**

SOUTHEASTERN is an independent private educational institution offering a wide range of postsecondary career-oriented programs for the past four decades. Since its creation, SOUTHEASTERN has been focusing on **Science**, **Technology**, **and Engineering**, and Math (STEM) courses, following the rigorous curriculum and syllabi of Boston University. Southeastern is focusing on research and development as well as on higher education.



https://www.southeastern.edu.gr/

#### **OPPORTUNITIES**

#### ◆ Project Cooperation

Antifouling and antimicrobial membranes for waste water treatment

Graphene oxide (GO) treated polyethersulfone (PES) **Ultrafilltration membranes** with enhanced antifouling and antibacterial properties for waste water treatment.

## **♦ Project Cooperation**

Antimicrobial and anticancer micro and nano particles

Creation of **micro and nano particles to treat infections diseases and cancer cells.** Use of biodegradable raw materials such as PLA, cellulose acetate, Suberin and graphene with pharmaceutical compounds and natural derived active ingredients to treat infections, microbial growth and cancer.

## **♦ Project Cooperation**

Novel antimicrobial, antifouling and antiviral surfaces

Creation of **antimicrobial and antiviral membranes and surfaces to fight infections**. Such membranes and filters can be used for water waste management and the surfaces to create coatings and/or surfaces with antimicrobial and antiviral activities in public areas such as nosocomial areas.

## **♦ Project Cooperation**

Production of low-cost of Methanol and Ammonia based green propellant fuels

Contribution in the "production of low-cost of bio-methanol and Ammonium Dinitramide (ADN) green propellants", based on membrane intensified processes. Development of membranes for the production of green propellant fuels.

## **Type**

Consortium/Coordinator seeks Partners



## Ľubica Libičová, Faculty hospital with polyclinic Žilina

#### **ABOUT**

The Faculty Hospital with Polyclinic in Žilina is a state hospital under the founding authority of the Ministry of Health of the Slovak Republic. It is the third largest teaching hospital in Slovakia. The medical facility has recently undergone radical changes and modernizations and continues to develop the quality and availability of top expertise with a long-term tradition.

Our mission is to provide high-quality health care and a complex of services in a safe environment for the satisfaction of clients and employees through a professional team of workers and modern medical technology.

FNsP Žilina provides health care for a catchment area of a quarter of a million inhabitants. The hospital employs more than 1,900 medical and non-medical staff working within 33 medical inpatient or outpatient departments, a hospital pharmacy including three public dispensaries and 17 non-medical departments and departments.



https://www.fnspza.sk/

## Petra Lipnicka, MultiplexDX

#### **ABOUT**

Founded by a Slovak scientist in the US, who previously worked at the top research and government institutions, MultiplexDX is one of the most innovative biotech companies, created to bring its revolutionary technologies to the market of personalized molecular diagnostics. Based on the scientific breakthrough of Dr. Cekan (CEO) and Prof. Tuschl (Rockefeller University), the company is developing an innovative multiplexed BCa diagnostic (DX) test reducing misdiagnosis to almost 0% in a single test.

MultiplexDX IP-based and innovative platforms merge histopathology methods, biomarker quantification, visualization, and gene expression with a single-cell resolution by combining MDX proprietary visual and sequencing technologies. This cross-validation approach eliminates diagnostic errors and creates precise cancer profiling, which enables clinicians to suggest targeted and personalized treatment for each individual patient. This approach will reduce unnecessary, life-affecting treatments, saving lives and healthcare costs.



https://www.multiplexdx.com/





## Balázs Ligeti,

### **Neural Bioinformatics Research Group (PPCU-FITB)**

#### **ABOUT**

The Neural Bioinformatics Research Group at the Faculty of Information Technology and Bionics, Pázmány Péter Catholic University is primarily interested in the **development of new neural architectures**, **representations and algorithms for sequence analysis and their potential applications**. In recent decades, a large amount of genomic sequence data has become available, but these are mostly from small-element studies (typically 3-15 samples/group), which makes it difficult to apply classical machine learning approaches. We believe that the unconventional use of available data, e.g. the application of neural representation, can help to solve a number of complex problems, such as understanding complex host-microbiome-bacteriophage relationships, predicting gene resistance, and help to develop microbiome-based diagnostic tools.

Our areas of expertise are neural bioinformatics i.e. developing sequence based solutions for multi-omics applications.



https://itk.ppke.hu/en

#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

## Deep multi-omics integration and interpolation using dna-context dependent representations

Many diseases, including respiratory, inflammatory bowel and cancer diseases, and responses to treatment, are associated with changes in the bacterial communities that populate the skin, lungs and gut. The microbiome is a complex ecosystem whose members not only communicate with each other through physical and chemical signals, but also interact continuously with the host organism. Quantitative characterisation of these processes allows e.g. the optimisation and complementation of existing therapies (e.g. to increase the efficacy and personalisation of targeted immunotherapies). By altering the microbiome, it is also possible to create novel and effective therapies e.g. for the treatment of obesity, intestinal infections (e.g. c. difficile).

We aim to develop novel bioinformatics and machine learning tools and algorithms that allow e.g. quantification of microbiome divergences (biomarker identification) and identification of complex processes and molecules involved in host-microbiome interactions.

## **Type**





## Maria Liontou, Hellenic Cancer Society



Hellenic Cancer Society (HCS) was founded in 1958 and operates at least 54 branches throughout Greece in order to inform the general population, to promote prevention and early cancer detection, to provide psychosocial support to cancer patients and their caregivers, to contribute to scientific research and health care professionals' education. During the last 65 years, HCS has contributed to the creation and operation of most Greek Oncological Hospitals and Day - Care Centers for cancer patients. HCS' branches provide free medical screening, counselling and health educational programs, while its two Mobile Mammography Units and its Mobile Pap Test Unit reach out to the most remote and underdeveloped areas.

Hellenic Cancer Society participates to major EU and national funded research projects (HORIZON, EU4HEALTH,) focusing to a wide range of subjects such digital images repositories, lung cancer, breast cancer prevention, Joint Action for Tobacco Control and educational material for SmokeFreeGreece (1st Prize).

Last but not least, Hellenic Cancer operates a hotline and provides online counselling services to oncological patients. Its psychologists, psychiatrists, art therapists and social workers provide specialized support to children, adolescents and young adults based on the axes of psychonocology through a certified unit of Mental Health supervised by the Greek Ministry of Health.



https://cancerhellas.org/

#### **OPPORTUNITIES**

## **♦** Project Cooperation

Data Providers (Breast, Lung) / Psychongology, supportive care, palliative care, personalised care at home for cancer patients

Hellenic Cancer Society has a vast experience in national and EU funded projects in preparing and providing data in collaboration with the biggest Greek Ongological hospitals and Clinics in AI Federated Learning (Data sharing/ data altruism/ common data space/ shared repositories).

HCS is pioneering in Psychongology in Greece providing psychosocial support to cancer patients of all ages with a special interest to children, adolescents and young adults (and their caregivers). HCS has developed curriculum and educational materials for healthcare professionals and general public. During the last years, HCS has developed art based and wellness projects for cancer patients and survivors of different age groups. We are interested in advancing our practices and expanding our research in both sectors of our association.

## Type





## Adela Ljajić,

## **Institute for Artificial Intelligence of Serbia**

#### **ABOUT**

The Institute for Artificial Intelligence Research and Development of Serbia was established by the Government of Serbia based on the initiative from the Strategy for **development of artificial intelligence in the Republic of Serbia**: 2020-25. The Institute was formally founded on March 18, 2021, and is headquartered in Science and Technology Park in Novi Sad.

We have brought together AI enthusiasts from around the world - scientists, researchers, and industry experts - dedicated to researching AI and its application in various fields. Our expertise can be applied wherever you may need it: automotive industry, medical diagnostics, financial technologies, increasing business efficiency, and even in the discovery of new drugs and materials.

On our R&D journey, we use a robust multidisciplinary approach and collaboration with scientific institutions and the industry through JOINT PROJECTS. With a vision of becoming a "foundry" of future AI leaders, our institute has an inventor-focused IP policy, as we intend to patent and help our partners and staff commercialize much of what we learn and invent.



https://ivi.ac.rs/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Large language models for different tasks in Biomedical domain

We are looking to join consortia and offer expertise in the field of **Artificial Intelligence** - **Natural Language Processing (NLU) and Natural Language Understanding (NLU).** 

Our past projects in the health domain are the following: "Addressing COVID-19 Vaccine Hesitancy Using Data Science and AI to Analyze Vaccination and Social Network Data" and "Zero-Shot Named Entity Recognition in Biomedical Domain" Methods: ML classification methods, Neural networks, All topic modeling methods, Transformer-based Language Models.



## Gabriella Lung-Molnár, Goodwill Pharma Plc

#### **ABOUT**

The company is originally a Hungarian, family-owned pharmaceutical company. which operates in several countries, such as Hungary, Serbia, North-Macedonia, Montenegro, Kosovo, Albania, Bosnia-Herzegovina, Czech Republic, Slovakia, Romania and Poland. The company is looking for partners for research and development cooperation in the pharma industry, like common development of medicine dossiers, cooperation in new product development, clinical trials and testing (food supplements, medical devices, medicines, special focus on herbal medicines).

The core business is in-licensing, out-licensing, promoting, distributing and developing pharmaceutical products and also providing outsourcing services in the Central and Eastern European region, to companies who are willing to enter or strengthen their positions in Europe via Hungary. Beyond sales and distribution support, the company can offer regulatory, pharmacovigilance and marketing services to its partners. The company is offering private label contract manufacturing services in EU-GMP environment for small to mid-scale batch sizes (Rx, OTC, FS, FSMP products, solid and liquid forms).



https://goodwillpharma.com/

## Dávid Líška, Matej Bel University

#### **ABOUT**

Matej Bel University is a public university which achieved university status in 2010 and is a member of the European University Association. The university provides both high quality university and further education by encouraging creative scientific and artistic research. Knowledge is advanced whilst combining the requirements of both scientific developments and practical issues.

As well as educational, scientific and artistic activities, a significant part of creative MBU activities is represented by basic and applied research in cooperation with national and international institutions. The University is a centre of research excellence and scientific and development projects are funded by means of European Structural Funds. Furthermore, it implements lifelong learning in a variety of courses and forms of the MBU Children's University and the MBU University of the Third Age. Finally, it provides students with sufficient opportunities for a variety of social activities through a wide range of sport clubs, artistic ensembles and student organisations functioning at MBU.



https://www.umb.sk/en/





## Mihály Makara Dr.,

#### **European Prevention and Therapeutic Medicine Foundation**

#### **ABOUT**

The foundation was established in 2019 with the aim of raising awareness of the importance of adverse childhood experiences (ACEs), not only for experts in the helping professions, in the social and educational spheres, and in health care, but also for lay adults, parents, and peers.

We want the subject of child abuse, sexual abuse, emotional or physical neglect not to be taboo in our daily lives, if we dare to talk about it, thereby setting an example and providing an interface for abused, neglected children to dare to talk about and dare to ask for help. However, this requires the help of all professionals who come into contact with children, parents, adults around the child and even the help of their peers, that is, a level of collaboration that is able to "retain" children who have experienced adverse experiences, thereby preventing the subsequent negative, adverse health effects of ACEs. In the future, we want to take steps to promote not only primary but also secondary and tertiary prevention in order to break the cycle of adverse childhood experiences.



https://eptma.eu/

#### **OPPORTUNITIES**

#### ◆ Project Cooperation

The adverse health effects of adverse childhood experiences (ACEs)

The adverse health effects of adverse childhood experiences (ACEs) and their association with alcohol and drug use have been demonstrated in several studies. The first comprehensive research study examining the effects of negative experiences in childhood was published in 1998 in America. The Adverse Childhood Experiences (ACE) Study was created by Vincent J. Felitti, Robert F. Anda, Dale Nordenberg, David F. Williamson, Alison M. Spitz, Valerie Edwards, Mary P. Koss, and James S. Marks. The results show that individuals who cumulatively experienced negative childhood experiences had more health risks later in life. Also, individuals who experienced four or more than four ACEs had a multiple-fold increased risk of alcoholism and drug use compared with those who did not experience such an experience. Several studies have shown the negative effects of adverse childhood experiences on certain psychological factors such as happiness, anxiety, depression, or suicide attempts. However, the occurrence of adverse childhood experiences and their correlations with the above-mentioned factors have not been studied in Hungary so far. The aim of the foundation and our research group is to map the patterns of negative childhood experiences in our country and to explore their lifelong negative effects.



## Luminita Marcu, Beia Consult International

#### **ABOUT**

BEIA Consult International, SIEMENS partner, is a R&D performing SME, founded in 1991 and one of the leading providers of ICT solutions and services in Romania for cloud communications and IoT telemetry.

BEIA is ISO certified and has experience in coordinating and participating in more than 40 R&D and Innovation projects (FP6, FP7, H2020, Eureka, etc.) Geographically, BEIA covers the Balkan/Danube region with offices in Romania, Austria and Belgium, and as fields of activities we target ICT solutions in the following domains: **local and central administration**, cities and municipalities, industry, agriculture, energy sector, environmental protection, public health, education and culture, national defense and intelligence.

BEIA also has over 50 medical stakeholders as customers: hospitals, clinics, elderly homes, home care, child care, pharmacies, pharmaceutical drugs producers, insurers, sports association, medical spas, university hospital, health research institutes, etc.



https://beiaro.eu/

## Paweł Marczak, The Civil Affairs Institute

#### **ABOUT**

The Civil Affairs Institute is a civic organization independent of political parties. Since 2004, we have been acting on the side of the citizens. Our mission is to develop, shape and promote active citizenship.

The Institute of Civil Affairs is classified as an organisation that, in its activities, encompasses the social sciences and humanities (SSH), i.e. sociology, economics, psychology, political science, history and cultural sciences. We are a watchdog organisation with experience in **the preparation of watchdog reports**, and we also assist in the preparation of research projects, e.g. on the presence of glyphosate in beer. We released a consumer report titled "We investigate: Polish beers", in which we analyze the quality of beers available in the Polish market in terms of presence of pesticide residue, mainly glyphosate. In one of the studied beers, we discovered a 400-fold exceedance of the maximum concentration of glyphosate residue in water – one of the three main ingredients that beers are made from. We also propose legislative changes to the Changing Citizen Initiative Act. We initiate public actions to raise awareness in the areas of environment and health. We also follow trends and initiatives in artificial intelligence, including in healthcare.



https://instytutsprawobywatelskich.pl/about-us/



## Michal Markuszewski, Medical University of Gdansk

#### **ABOUT**

The Medical University of Gdańsk (MUG) is the largest medical university in northern Poland, located in one of the most beautiful cities in Europe with an old town and beautiful sandy beaches. According to the 2020 higher education ranking of the Perspektywy Education Foundation, the MUG is the first medical school in the country and ranks among the top ten of the best Polish state universities. The Medical University of Gdańsk has been acknowledged as the member of an elite group of the best 10 Polish universities awarded in the prestigious Excellence Initiative – Research University competition. Every year, many young people make efforts to study at the largest medical school in Northern Poland. The MUG educates more than 6000 undergraduate and postgraduate students at 4 Faculties: Faculty of Health Sciences, Faculty of Medicine, Faculty of Pharmacy and the Intercollegiate Faculty of Biotechnology. The MUG offers Premedical Course, Medicine Doctor Programme, Pharmacy Programme, Nursing Programme which are taught fully in English.

O,

https://mug.edu.pl/

## Joana Marques,

## Universidade de Lisboa - Faculty of Dental Medicine

#### **ABOUT**

UICOB which means Unidade de Investigação em Ciências Orais e Biomédicas (Oral and Biomedical Research Unit) is a newly formed research unit at FMDUL. However, and albeit being recently founded, it aggregates experienced researchers from every department at the Faculty and has an important number of links with major stakeholders within the field of biomedical research worldwide with great emphasis on oral sciences. The Faculty is integrated in the biggest Portuguese University (University of Lisbon) and is the oldest dental school in Portugal. It has unique features such as holding courses in all areas of the dental field. Highly dynamic in both research and teaching activities the Faculty is presently placed at the top of national Faculties whereas Portuguese and Shanghai rankings are concerned. So, building on historical standards of excellence, our objective is to foster competitive and innovative research in every domain of oral sciences, from the lab bench to the patient chairside, in a marked translational perspective. We seek **oral research solutions highly applicable from a patient centered perspective**, which can bring improved quality of life to the community in which we are inserted and with whom we interact on a daily basis though our University Medical Centers.



https://www.fmd.ulisboa.pt/



## Ricardo Martins, NOVA IMS

#### **ABOUT**

Aside from all technological advancements, user/citizen/consumer behaviour is considered the main concept for understanding, managing, and accomplishing sustainability. UNL (NOVA IS & Analytics Lab) provides a deep understanding of the individual's acceptance, engagement, and behaviour journey (co-creation included), enabling social innovation. Promoting inclusiveness to all citizens is our aim. We deliver research that supports the design, implementation, and use of the most upcoming technological innovations. Our services include **Market analysis, Behaviour analysis; Data Analysis; Surveys.** 



https://www.novaims.unl.pt/

## Teresa Mata, INEGI

#### **ABOUT**

The INEGI - Institute of Science and Innovation in Mechanical and Industrial Engineering from the University of Porto is an industry-oriented RTO - Research & Technology Organisations, with research activity in the areas of new technologies for advanced production processes, experimental mechanics, applied mechanics, energy, new materials and the development of new products and systems. INEGI's research activity is integrated in the national network of research founded and coordinated by FCT - Portuguese Foundation for Science and Technology, as member of LAETA - Associate Laboratory of Energy, Transports and Aeronautics, seal of Excellence awarded by the Ministry of Science and Education. It is considered one of the most effective Research and Technology Organisations, transforming R&D investment in economic and social value, with more than 50% of its total turnover of 10 million euros comes from R&D and innovation projects founded by the industry.

Mainly oriented to the activities of Research & Development, Innovation & Technology Transfer, INEGI is currently considered an active agent playing a significant role in the development of the Portuguese industry. INEGI has more than 100 associate members, and a workforce of about 250 people, including more than 120 PhD researchers, being the largest research group in the Mechanical Engineering Field in Portugal.

INEGI is actively participating in several national and international expert panels, consulting committees, groups and societies, sectorial industry clusters (automotive, aeronautics, tooling, additive manufacturing, sea economy and energy.



https://www.inegi.pt/en/



## Gergely Marton, MindRove Kft.



MindRove develops and commercializes wearable devices for human-computer interfacing, brain-computer interfacing, neurofeedback, physical and mental health tracking, performance boosting and rehabilitation applications. We have expertise in hardware, software development, neurosciences and life sciences. We have a number of research grants, e.g. a neurofeedback application for training astronauts is funded by the European Space Agency, and we are developing a multimodal EEG research device which will be launched to the International Space Station. We are also developing solutions for rehabilitation at the patients' home.



https://mindrove.com/

#### **OPPORTUNITIES**

## ◆ Project Cooperation Horizon Europe Project Consortium

MindRove is looking for partners for upcoming Horizon Europe porjects. We have experience in the development and commercialization of wearable devices for human-computer interfacing, brain-computer interfacing, neurofeedback, physical and mental health tracking, performance boosting and rehabilitation applications. Our expertise comprises software development, neurosciences and life sciences. We would be eager to join or manage a partnership which can utilize these skills, for example (but not limited to) one that aims to develop telemedicine systems. Our strong collaboration with the Research Centre for Natural Sciences (Hungary) allows us to undertake management roles if needed.

## **Type**

Partner seeks Consortium/Coordinator Consortium/Coordinator seeks Partners



## Ana Mesquita, ProChild CoLAB



ProChild CoLab Against Poverty and Social Exclusion (ProChild CoLAB) is a private non-profit Association recognized by FCT as a Collaborative Laboratory since November 2018. At ProChild CoLAB, our mission is to **fight poverty and social exclusion in childhood**. Like all CoLABS, in ProChild CoLAB, we seek to generate economic and social value, being our main differentiating factor the transdisciplinary and holistic scientific approach, based on the alliance between social intervention and technological innovation.

Our main goal is to contribute to an **effective social change**, placing the needs of children at the center of research and innovation through an articulated collaboration between several public and private entities, linking academics and professionals in the field, developing and applying intervention programs based on scientific evidence and supported by technology.



https://prochildcolab.pt/

## Jakub Mieczkowski, Medical University of Gdansk

#### **ABOUT**

International Research Agenda 3P – Medicine Laboratory (Preventive, Personalized, Precision) is a new scientific unit specializing in research on acquired genetic anomalies as risk factors for cancer and other illnesses. This research unit is an innovative partnership between the Medical University of Gdańsk and Uppsala University.

We are interested in cellular responses to environmental stimulations in the context of their genetic, epigenetic, and environmental background. We use single-cell and spatial methods to study cell transitions, cell-cell communications, and chromatin transformations, particularly in cancer cells to provide diagnostic and therapeutic solutions. Our key focus is using of computational and experimental approaches to dissect, model, and interrogate changes in chromatin structure and gene expression regulations triggered by genetic modifications and/or extracellular stimulations. We pursue multi-disciplinary projects aiming to uncover patterns in chromatin and gene expression profiles relating to the cell state.



## Catarina Milho, AguaValor

#### **ABOUT**

AquaValor - Water Technology Transfer and Valorisation Centre, is a Collaborative Laboratory (CoLAB - FCT) located in the Alto Tâmega region, focused on the thematic area of Water. It aims to boost natural mineral waters as an asset for regional development, along with other endogenous resources. The AquaValor main core areas are **Health**, **Food and Beverages**, **Cosmetics and Cosmeceuticals**, **and Information Systems & Digital Technologies**. It also has water characterization laboratories and analysis (accredited by IPAC – Portuguese Institute for Accreditation), focused on providing specialized services. The developed Research, Development & Innovation (R&D&I) activities are based on a co-creation model with all stakeholders, and on low-carbon circular economy and digital transition principles. It has an international focus on generating value for society in a broad sense, particularly for economic and social enterprises.



https://prochildcolab.pt/

Jorge Mota, Research Center in Physical activity, health and Leisure faculty of Sports

#### **ABOUT**

The Research Center in Physical Activity, Health and Leisure (CIAFEL) is a research unit funded by the Fundação para a Ciência e Tecnologia (FCT) hosted by Faculty of Sport at the University of Porto. The object of CIAFEL intervention is developed in the area of interaction between physical activity and health, in a preventive and therapeutic perspective.

The CIAFEL's scope is focused on (i) to promote and disseminate basic/applied research in the field of health-related physical activity; (ii) to promote advanced academic training and development of human resources; (iii) to develop community intervention programs for health prevention; and (iv) to provide consultancy and services. CIAFEL has a multidisciplinary action, covering the biological, psychological and social domains, valuing and fostering socially relevant areas, such as aging, cardiovascular diseases, metabolic diseases, cancer and mental health.



https://ciafel.fade.up.pt/





## Andrej Minich, Medirex Group Academy n.p.o.



MEDIREX GROUP ACADEMY is a non-profit organization whose activities are focused predominantly on science and research in biomedicine as well as on supporting education.

Our goal is to search for new biomarkers, preventive, diagnostic and therapeutic procedures with the potential to implement the know-how from science and biomedical research into diagnostic and therapeutic practice. With regards to the rapid development of technological infrastructure and information and communication technologies (ICT), we are aware of the need to link biomedical research with bioinformatics. Last but not least, the implementation of multidisciplinary research across various fields related to biomedicine is also among our priorities.



https://www.medirexgroupacademy.sk/

#### **OPPORTUNITIES**

## **♦** Project Cooperation

Medirex and Medirex Group Academy n.p.o.

Our company is the largest laboratory in Middle Europe, we are situated in Slovakia and we would like to join Horizont projects in 2023 for the first time. We can offer flexibility, cooperation since we have connections to biggest slovak universities, we operate 12 hospital laboratories, 3 cytology and biopsy laboratories as well as 20 sample collection points and centers for patients. We have new entity called Medirex Group academy n.p.o. and its main objective is to **create**, **cooperate new biomedical studies mostly in cancer research but also infectious diseases**. Based on these mentioned characteristics, we handle big sets of data, we handle biobank with physical samples and we offer them for more analyses. Moreover, we have and had multiple project on national level and we would like to mention out Trisomy test as the most successful commercial product. It follows from this that we have big network in bioinformatics and software developement.

## **Type**



## Ahsen Morva Yilmaz, TUBITAK MARMARA RESEARCH CENTER

#### **ABOUT**

We are a public scientific and technological center conducting research projects on life science topics. We have expertise in human and murin immunology, molecular and cell biology, histology, and toxicology. We are highly experienced in **cellular and molecular pathways of pro-/anti-inflammatory responses and immune regulation processes mediated by regulatory T and B cells implicated in the pathophysiology of autoimmune diseases and infectious diseases in adults and neonates.** We can perform in vitro and in vivo studies to work immune regulation and inflammation signaling pathways within the scope of developing new immunotherapeutic tools. In this context, our technical fields of competence are:

- In vitro cell culture (peripheral or cord blood/tissue primary cell culture, cell lines)
- Cell enrichment, Cell sorting (Magnetic isolation, FACS)
- Multicolor flow cytometry analysis
- Mass cytometry sample preparation and data analysis
- ELISA techniques
- Western Blot
- In silico B cell T cell epitope prediction
- Molecular docking studies

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

Design of new diagnostic and preventive tools in post-COVID-19 non-communicable disease patients.

Currently, we are preparing a proposal to HORIZON-HLTH-2023-DISEASE-03-07: "Relationship between infections and noncommunicable diseases". We already have expertized researchers in immune response evaluation in **infectious and non-communicable diseases** (autoimmunity), cell signaling mechanisms, bioinformatics/AI, and genetics.

Our consortium particularly looks for clinical and non-clinical partners who can determine patients infected with COVID-19 from different countries and ethnicity, collect and process data from patients suffering from non-communicable diseases according to the nature and the course of pathology, therapeutic measures, etc. Patient's cohorts include COVID-19-patients free of non-communicable disease prior to COVID-19 infection and developing short and long-term post-COVID sequelae, and COVID-19-fragile patients (neonates and children, patients with chronic illness, patients with organ deficiency, patients with obesity, solid/liquid organ transplant recipients, patients with immunologic diseases (autoimmune and non-autoimmune diseases).

## **Type**

Partner seeks Consortium/Coordinator Consortium/Coordinator seeks Partners





## Agnieszka Możejko, Industry Contact Point Digital Transformation, Lukasiewicz Network - Poznan Institute of Technology

#### **ABOUT**

We support polish organisations from the digital transformation industry in obtaining financing from Horizon Europe Programme for innovative research and implementation of innovative technologies.

ICP Digital Transformation covers primarily issues related to the **development of technologies**, **including the Internet of Things (IoT)**, **Artificial Intelligence (AI) or automation contributing to the optimization and improvement of processes.** In addition, it focuses on improving communication and information exchange, based on the use of large amounts of data allowing for predictions and better operational planning and relationship building. Carried out activities are aimed at all areas of life and sectors of the economy, and are aimed at the development of intelligent solutions.



https://pit.lukasiewicz.gov.pl/e n/industry-contact-point/

## Cristian Munteanu, Institute of Biochemistry of the Romanian Academy (IBRA) Protein Chemistry Facility (PCF)

#### **ABOUT**

The protein chemistry facility (PCF) is a research and service platform of IBAR performing protein, peptide, proteome and subproteome analysis. Its main research topics are closely related with the focus-area of other groups and departments of IBAR: proteome and subproteome characterization in melanoma, protein-protein interactions in biological systems, co- and post-translational modification analysis with a special focus on glycosylation, imunopeptidome investigation, identification of specific protein interactors. Another priority is the study of protein phosphorylation, a dynamic process that implies the complementary activities of protein kinases and protein phosphatases. Mass spectrometric analysis of the samples implies the use of CID, HCD and ETD fragmentation methods. Data analysis and interpretation of results is made using Thermo Scientific™ Proteome Discoverer™ software.

As a service unit the facility can provide the following methods of analysis:

- analytical and preparative HPLC of small molecules and biomolecules
- nanoHPLC separation of peptides low-/high-resolution mass spectrometry (MS) and tandem MS
  - sample preparation of proteins and peptides for LC/MS analysis (spectrophotometric -UV-VIS, fluorimetric and electrophoretic methods -SDS-PAGE) bioinformatic
  - MS data analysis
  - batch or column fast protein chromatography



https://www.biochim.ro/facility-1/



# Vassilios Myrianthopoulos, National and Kapodistrian University of Athens

#### **ABOUT**

Our main expertise is **early stage drug discovery.** We employ biophysical and computational methodologies to screen the available chemodiversity and discover biologically active hit compounds which can be rationally optimized to leads for drugs and chemical probes. Our main interest is on **emerging targets such as protein kinases and epigenetic regulators.** 



https://www.uoa.gr/

#### **OPPORTUNITIES**

#### ◆ Project Cooperation

Screening of chemical collections for bioactive compounds which target protein kinases and epigenetic regulators.

We use biophysical methodologies such as DSF, NMR and ITC to recover promising scaffolds from the available chemodiversity and we employ sophisticated computational algorithms such as free energy calculations and solvation mapping to optimize selected hits toward drug candidates.

## **Type**

Partner seeks Consortium/Coordinator

#### Eva Nečasová,

**South Moravian Agency for Public Innovation** 

#### **ABOUT**

JINAG's vision is to co-create a better region for life with **participation**, **sustainability and innovative technologies**, **building a SMART REGION**. The South Moravian Region is known for prestigious universities, fostering innovation, a supportive business environment as well as agriculture and tourism. We are looking for new ways and solutions to make municipal services, government and social services more efficient through innovative tools, participatory planning and interdisciplinarity.



https://jinag.eu/



## Dorota Niedzialek, Cheminformatics Research Group at the Institute of Biochemistry and Biophysics Polish Academy of Sciences

#### **ABOUT**

The Cheminformatics Group at IBB PAS integrates high-level expertise in both molecular biology, (bio)chemistry and computer science to leverage the design of new molecules. We also give a high-level background in **structural biology and all-atom molecular simulations of biological targets (proteins and nucleic acids) by the means of various state-of-the-art computational methods and data analysis tools.** 

Our research focuses on topics such as chemical databases, library design, computational chemistry, structural biology, structure activity relationship (including assessment of enzymatic catalysis mechanisms), data sequencing, visualization and structure-based drug design.

To guide drug discovery and development processes, we implement 'deep' (machine) learning based on large-scale neural networks that allow us to navigate (bio)chemical space of investigated biological systems intelligently.

We seek motivation in solving challenging, real-world problems. Our research is always based on team working with experimental colleagues to understand and prioritize the important problems, produce and analyze large volumes of data and disseminate results. If you are interested in collaboration but it is hard to find a convenient slot to meet, please contact me directly: dniedzialek@ibb.waw.pl

IBB PAS is the institution of the highest scientific category (A+) in Poland, ranked as the best scientific institute in Poland according to the most recent SCIMAGO ranking. During the last 5 years research at the Institute led to a number of findings which resulted in over 600 publications and 45 pending and 32 granted national and international patents. The Institute is associated with Biology Faculty of Warsaw University, closely cooperates with leading Polish universities, and with companies both in terms of basic and applied research. The scientific interests of the Institute have evolved over the years from classical biochemistry, biophysics and physiological chemistry towards up-to-date molecular biology. Currently, the IBB PAS scientists are engaged in 56 statutory research topics and over 130 research projects – both national and EU funding. IBB PAS is involved in extensive cooperation with foreign scientific institutions from Europe and USA (26 agreements and 53 research topics). The Institute is a member of consortia and clusters such as CePT, Bio-KNOW and Biocentrum Ochota. Participation in more than thirty 5th, 6th and 7th Framework Program projects made IBB PAN the number one beneficiary of EU projects among the Polish Academy of Sciences institutes. Currently, IBB PAS groups are involved in two EU projects. One of the Institute's main aims is to apply its facilities and the talents of its staff in implementing new programs where synergy between theory and application achieves the highest scientific standards, solving at the same time specific problems indicated by end-users active in bio-medicine, food production and environment protection.



https://ibb.edu.pl/





## Mirjana Oblak, Biosistemika



BioSistemika specializes in software product development for laboratories and laboratory instruments. We join the expertise of life scientists, UX designers and software engineers to deliver user-friendly and innovative products. For in vitro diagnostic projects (IVD) we are working in accordance with ISO 13485 and IEC 62304.

We have done several IVD and non-IVD software projects for our customers. We have been working with companies such as Gilson Inc. and ADInstruments for which we have developed the entire software products, starting from requirements, design specification then coding and testing. We have vast experience in **software-hardware integrations** and are supporting standardization efforts that enable interoperability.

We also have our own global producs GENEIO, PlatR and SciNote, which further emphasizes that we understand software product development. BioSistemika has a great track record as a partner, project lad or a subcontractor in national and EU-funded grant projects. Our experience in project management has resulted in successfully completed projects and commercialized solutions. We are looking forward to speaking with any company that is looking to **develop a software product for laboratories and laboratory instruments.** 



https://biosistemika.com/

## Ana Pais,

## Hospital Distrital da Figueira da Foz EPE

#### **ABOUT**

Figueira da Foz District Hospital (HDFF) is a Portuguese public hospital, located in Gala-Figueira da Foz in the Central Region of Portugal. HDFF provides comprehensive healthcare services across several medical and surgical specialties, distributed through surgery areas, medical areas, paediatrics, short-stay inpatient unit, outpatient rooms, operating rooms and an emergency service for adult and children 24/24 hours alongside with an emergency medical and resuscitation vehicle from the National Medical Emergency Institute (INEM). HDFF is also a teaching and research hospital, to improve the health and quality of care, new treatments and test state-of-the-art technologies and boost the social and economic development of the region. Aware of healthcare sector challenges HDFF is looking for a consortium to join as a partner and we will be happy to collaborate.



https://www.hdfigueira.minsaude.pt/



## Alican Oktay, Borda Technology

#### **ABOUT**

Borda Technology is a R&D company that focuses on the health sector for 16 years. For the Borda, the transformation in healthcare is not just about the transition from conventional health to digital health. The real transformation will be possible with the transition from digital health to smart health. At this point, operations are not only managed digitally, but are also assisted by artificial intelligence – this is the third and final stage of the hospital evolution. While "IoT for Healthcare" brings valuable awareness to operations through descriptive analytics, AI brings insights and foresight through predictive and prescriptive analytics.

In this context, Borda developed following product as outputs of R&D projects:

- PATIENT: Patient Throughput Management, Infant Safety, Patient Safety
- ASSET: Asset Management, Asset Utilization, Asset Safety
- STAFF: Staff Safety, Staff Utilization
- FACILITY: Location-Aware Work Demand Management, Environmental Monitoring

These products are using in 15 different country in following metrics:

- over 5,000,000 square meters of the hospital area
- over 20,000 bed capacity
- the management of over 1,000,000 healthcare asset

With these products; the company brings awareness and insights regarding operational processes enabling these hospitals' managers to make more accurate decisions while managing unmanageable operations and minimizing human intervention in manual processes.

On the other hand Borda Technology has won many awards until today. Some of these awards are following:

- Intelligent Health Association IoT Solutions to Transform Healthcare: 2020 Winner (USA)
- RFID Journal Best healthcare RFID/IoT Implementation: 2020 Runner Up (USA)
- Fast Company IoT Awards: 2020 Top 3 (Turkey)
- Fast Company 50 Most Innovative Companies (Turkey)
- Ernst & Young Entrepreneur of the Year: 2019 Finalist (Turkey)
- RFID Journal Best healthcare RFID/IoT Implementation: 2018 Winner (USA)
- RFID Journal Best healthcare RFID/IoT Implementation: 2017 Runner Up (USA)

Today, 120 people are working full time for Borda. 84 of them are engineers and 23 of them have at least master degree



https://www.bordatech.com/



## Karina Palkova, **Rīga Stradinš University**



Reputation leader - Rīga Stradinš University (RSU) has been recognised as the university with the best reputation in Latvia for four years in a row, gaining the highest rating among the 10 largest Latvian universities according to a study conducted by market research company Kantar TNS in 2017, 2018, 2019 and 2020. Over the past seven decades, we have evolved from being a local medical institute to being a modern European university in the fields of medicine, healthcare, and social sciences. We believe that modern education cannot exist without technology, which is why we invest in world-class simulation equipment that allows our students to develop their skills and competencies in a safe environment. We understand that progress is driven by science, and we strive to actively create a favourable environment for research. We also promote an interdisciplinary approach, because we know that the interaction between fields generates new solutions for today's challenges. All processes take place in a distinctly international environment. One in four students at RSU and one in five lecturers come from abroad, making us the most international university in Latvia and placing us among the leaders in the Baltic states.



https://www.rsu.lv/en/about-US

## Paulina Pałasz. Instytut Medycyny Doświadczalnej i Klinicznej PAN

#### **ABOUT**

Mossakowski Medical Research Institute Polish Academy of Sciences (MMRI PAS) is the largest Institute of the Division of Medical Sciences PAS as well as being the only PAS Institute that conducts research both in medical biology and clinical medicine. Pursuant to the Resolution of Polish Academy of Sciences MMRI PAS was established on July 1, 1967 (originally as Mossakowski Medical Research Centre PAS). The Institute conducts basic and clinical research in: physiology, neurobiology, oncology, nephrology, pharmacology, gerontology, medical chemistry and cell biology. Parametric evaluation of scientific entities in 2013-2016 ranked the Institute as 'A' category research centre.



https://www.imdik.pan.pl/en/





## Panagiotis Papadimitroulas, BIOEMTECH

#### **ABOUT**

BIOEMTECH is a well-established Greek SME in the field of biomedical engineering and medical physics providing solutions in terms of instrumentation and services. BIOEMTECH offers unique expertise in terms of advanced simulations at multiscale level and Artificial Intelligence techniques for development of prediction models using ML/DL algorithms. BIOEMTECH laboratories, provide preclinical services that cover a wide range of studies, from an in vitro level, to radiochemistry, animal hosting, toxicology and multi-modal in vivo imaging (SPECT, PET, CT and Optical). There is a multidisciplinary team of 25 young scientists with strong background in biomedical engineering, medical physics, bioinformatics, Data science, radiochemistry, biology and nanomedicine. The company up to now participated in 9 H2020, 4 ERANET, 1 FF4EuroHPC, 2 COST and 3 NSRF funded research projects and is official member in ETPN, OpenGATE and EARA networks.



https://www.bioemtech.com/

#### **OPPORTUNITIES**

#### ◆ Project Cooperation

Collaboration in digital health projects using AI and MC computational techniques. Towards personalized medicine.

We can offer solutions by:

- Developing AI prediction models using omics and imaging data (eg radiomics for oncology)
- Exploiting MC simulation for ionizing radiation applications and dosimetry (ground truth) for novel radiopharmaceuticals.
- Using 4D populations of computational anthropomorphic phantoms for personalized medicine (optimize diagnosis and therapy protocols)
- Providing pre-clinical services (imaging, toxicology, radiochemistry, cell cultures etc).

We are eager to participate in innovative ideas and work within interdisciplinary consortia.

## **Type**



## Bárbara Patrício, Data CoLAB



Data CoLAB, recognized as a collaborative laboratory, is a non-profit private association, which resulted from a joint initiative of private companies, higher education institutions, research units and local administration. We aim to bring emerging knowledge and technologies closer to the market needs through the development and implementation of data-oriented solutions.

Our mission is to develop an intersectoral ecosystem with multidisciplinary stakeholders that will use data to reshape the way we produce, consume and live. Data CoLAB operates across the data value chain to provide services to citizens, companies and the public sector, actively contributing to their digital transformation.

Data CoLAB's main activity clusters are (i) Health and Pharma; (ii) Energy, Oceans and Communities; (iii) Agriculture, Forestry and Biodiversity; (iv) Industry and Maintenance. Services: Data acquisition; Data management; Data analytics and intelligence; Data tracking and integrity; Data compliance; Decision support services; Standardization and interoperability; Training.



https://datacolab.pt/

## Katerina Petelova, Ouanterall

#### **ABOUT**

Quanterall is an R&D Lab for software and hardware.

We specialize in the development of end-to-end customized solutions with high scalability, fault tolerance and high-performance capabilities. Our portfolio includes Enterprise software, Blockchain solutions, IoT infrastructure and Bioinformatics & Data management platforms.

Our team consists of 80+ experienced engineers in hardware, firmware, front-end, backend, mobile and web development. We value highly our engineers and researchers with strong academic background in physics, electronics and the biomedical sciences. Quanterall has a global client base that ranges from scale ups to industry leaders in FinTech, Telecom, Healthcare, Insurance, Logistics, Vending, Manufacturing, and more. In the Healthcare domain, we focus on data management, especially human genomic data and solutions with applications in precision medicine.



O https://www.quanterall.com/





## Elissavet Pavlitsa, IOIST Innovation Park



JOIST Innovation Park is an inclusive phygital ecosystem that boosts innovation and knowledge transfer in the fields of entrepreneurship, technology, science, art, and design. As the largest Innovation Park in Southeast Europe, JOIST embeds an innovation culture by creating new ways for innovation to reach individuals and businesses of diverse backgrounds and goals.

Comprising of 4 clusters (eHealth, EduTech, AgriTech, and eTourism), it offers a broad range of services and spaces to learn, network, collaborate, play, exhibit, and growth. JOIST enhances knowledge distribution and management, boosts entrepreneurial spirit, amplifies and accelerates impact and business results, establishes collaborative networks, facilitates local community development and inspires pupils, students and youth.

JOIST is the port of call for academic institutions, small and medium-sized enterprises, startups, business-minded individuals, scientists, innovation enthusiasts and anyone interested in developing new ideas, products and services.



https://joistpark.eu/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**JOIST Community

JOIST Innovation Park creates new ways for innovation to reach individuals and businesses of diverse backgrounds and goals. It ensures that its community is empowered and that its unique ideas grow and thrive.

Through our JOIST Community, we will **enhance knowledge distribution**, **boost entrepreneurial spirit**, **establish collaborative networks**, **and offer inclusive working practices**. Our community will function as the port of call for academic institutions, SMEs, business-minded individuals, innovation enthusiasts, startuppers, and anyone interested in developing, testing, and learning new things. Under its roof, its members can share knowledge and skills and form an ecosystem of partners. In each cluster and by combining all four of them, JOIST Innovation Park will cultivate an agglomeration where businesses, associated institutions, and stakeholders will be interconnected, to increase their innovation and productivity levels, making them expand as strong competitors on a national and global level.



#### **Gunnar Piho**,

## e-Medicine Centre at Tallinn University of Technology

#### **ABOUT**

E-Medicine Centre (eMedLab) with Digital Health MSc programme is the largest e-health research and education centre in Estonia. The research centre is focused on **developing IT solutions related to the digitalisation of health care (e-health) and studying the interoperability factors necessary for its implementation.** These factors include strategies, standards, IT architecture, data statuses and databases used for large (national or regional) e-health systems. The team at the e-Medicine Centre includes several top specialists and researchers with leading e-health and e-government expertise. The research centre is responsible for the Digital Health master's and PhD programmes at the university, and for numerous innovation projects and training programmes with partner organizations in Estonia and abroad. The e-Medicine Centre's personnel played a central role in the design and implementation of Estonia's nation-wide Health Information Exchange platform that opened up new dimensions in the research of shared databases and modern digital workflows in health care environments.



https://taltech.ee/en/emed-lab

## Bárbara Pinheiro, Stemmatters

### **ABOUT**

Stemmatters is a Portuguese CDMO offering **development and GMP manufacturing services for cell and tissue-based therapies as well as blood-derived biologics.** We are a vertically integrated company with resources and competences addressing all product development stages, from exploratory R&D to cGMP production. Our domain of expertise is Regenerative Medicine and we have the ability to work across a wide range of cells and product types. Stemmatters' innovation offering is also sustained by an innovative biomaterial product platform supporting formulation of combination products for multiple indications.

Partnering with Stemmatters can benefit the development and clinical translation of assets through access to our scientific know-how and extensive network of Scientific and clinical partners.



https://www.stemmatters.com





#### **ABOUT**

Centro de Química Estrutural (CQE) is the largest Chemistry-focused R&D Unit of Universidade de Lisboa (ULisboa) with sites at Instituto Superior Técnico (IST) and Faculdade de Ciências (FCUL). It is organized around 11 research groups that work associated with four interconnected and overlapping thematic lines ranging from synthesis, catalysis and reactivity to materials, soft matter and nano-chemistry and with impact in fields as diverse as sustainable chemistry for the environment, energy and manufacturing or medicinal and biological chemistry for health. CQE is involved in several collaborative cross-functional projects merging fundamental research with potential industrial applications to strengthen the contribution of Chemistry to society. CQE has been engaging in technology transfer and outreach activities, with multiple patents, spin-offs, collaborations with the industry and international partnerships to promote knowledge valorization. The CQE is an active participant in several networks included in the Portuguese Roadmap of Research Infrastructures, with application in drug design, proteomics and metabolomics, materials science, or structural biology at both fundamental and applied levels, namely:

- the mass spectrometry, (RNEM);
- the nuclear magnetic resonance (PTNMR);
- and the national chemistry and biology network (PT-OPENSCREEN).

These infrastructures are the national nodes of the European Research Infrastructures INSTRUCT-ERIC and EU-OPENSCREEN ESFRI.



https://cqe.tecnico.ulisboa.pt/

## Diogo Pinto,

## **CoLAB TRIALS - Collaborative Laboratory for Innovation in Clinical Trials**

#### **ABOUT**

The CoLAB TRIALS is a Portuguese private non-profit organization aiming to promote **innovation in clinical trials/clinical research.** Our mission is to support partners and other stakeholders on: i) clinical validation/evaluation of health technology products (medical devices, IVD, biologics (including ATMP)); ii) design of clinical and pre-clinical studies and regulatory pathways; iii) community literacy in clinical trials; iv) capacitation of clinical teams in trials' project management; and v) access to real-time and real-world clinical data for sharing and reuse according to FAIR principles and the GDPR. Our associate members include two hospitals, two universities, a company focusing on medical diagnosis equipment and two associations (one patient- and one pharma-focused).



https://colabtrials.pt/



## Vassilis Pitsikalis, deeplab



Deeplab (deeplab.ai) bridges the gap between state-of-the-art research and challenging industrial problems. Counts more than 20 researchers and engineers including junior talents and senior consultants working in real-life projects while conducting high-end deep-learning research as well as large-scale product-level pipeline development dealing with very large datasets e.g. >1B data per day. Deeplab has successfully applied deep-learning in diverse and long-term R&D projects: 1) personalization and recommendation systems, by incorporating multiple modalities such as image, text, and other diverse inputs 2) anomaly detection in mobiles and ad-tech for fraud detection, 3) visual objects' relations recognition and explainable AI/ML, as well as with 4) bioinformatics fields such as virtual screening for drug discovery, single cell multi-omics, and drug target identification, all related to the state- of-the-art of deep learning, 5) neuroinformatics and BCIs for across subjects' generalization. Recent success highlights include 1) a self-funded project on COVID-19 drug discovery while being in the top-20 teams in the international JEDI grand challenge and producing DENVIS, a ML system/pipeline for superfast virtual screening over billions of molecules, 2) recent advances on drug target identification, 3) collaboration with academic institutions and universities by funding and/or hosting young talents in diploma thesis co-supervision or via research trainings.



https://deeplab.ai/

#### **OPPORTUNITIES**

#### ◆ Project Cooperation

Advanced ML and DL expertise and offering in bioinformatics, neuroinformatics and personalization

Bioinfo

- In silico components for drug discovery, such as virtual screening, drug target identification, as well as other optimizations in clinical trials or others.
- Bioinformatics and advanced ML/DL for omics data (including among others single cell and spatial single cell).
- Neuroinformatics and brain computer interfaces via EEG
- Real time Motor Imagery BCI
- Across subjects generalization of EEG signals
- DL in Computer vision and language processing
- Personalization, generalization

We seek partners who aim to employ modern and sophisticated ML/DL empowered in silico approaches in (pre-)clinical cases for drug discovery, personalized medicine, and health wellbeing.





## Kinga Polanska, Nofer Institute of Occupational Medicine

#### **ABOUT**

DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH HAZARDS A multidisciplinary team of epidemiologists, physiotherapists, ergonomists and public health as well as health promotion specialists with long-lasting experiences in conducting population studies (both general and vulnerable populations including workers). Our research interests are related to

- the impact of environmental and lifestyle related factors on pregnancy outcomes, children's/adolescent's/adult's health (with the special focus on neurodevelopmental outcomes and respiratory health) we are the coordinators of REPRO\_PL cohort with the questionnaires and biological samples available from pregnancy, childhood to adolescent periods
- the promotion of health and wellbeing in working populations (with the experiences in conducting basic and interventional studies)

We are the part of the NOFER INSTITUTE OF OCCUPATIONAL MEDICINE (NIOM):

- \* highly specialized and multidisciplinary scientific research unit
- \* the institution with activities covering various areas of occupational and environmental health including chemical safety, epidemiology, reproductive health, environmental toxicology and carcinogenesis, molecular genetics and epigenetics, health promotion, occupational exposure, occupational hygiene, work physiology and psychology, and the organization of the occupational health service
- \* the institution with longstanding experience in performing large-scale studies



https://www.imp.lodz.pl/

#### **OPPORTUNITIES**

## **♦ Project Cooperation**

#### **Environmental and Occupational Health Studies**

DEPARTMENT OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH HAZARDS seeks partners/consortium in the area of environmental and occupational health. We are experienced in the recruitment of subjects and conducting epidemiological/occupational studies (cohort studies/case-control studies/cross-sectional studies, interventions).

Our offer includes:

- data (based on questionnaires and biological samples) and samples (biobank is created) from Polish Mother and Child Cohort (REPRO\_PL) from pregnancy, early childhood (1-2y), early school age (7y) to adolescent (14y) periods
- **experiences in conducting epidemiological analyses** and interpretation of results (including harmonization of data, individual participant data meta-analysis or pooled analysis)
- experiences in performing interventions for promotion of mental and physical health in working environments



## Hivda POLAT, TUBİTAK MRC

#### **ABOUT**

- Veterinary Microbiology (zoonoz infection), Bacteriology, Bacterial characterization and Taxonomy (Bacterial DNA/RNA/protein isolation, PCR, Protein analysis, Multiplex PCR, Real-Time PCR, DNA sequencing and Sequence analysis, RFLP (Restriction Fragment Length Polymorphism), PFGE (Pulsed- Field Gel Electrophoresis)), antimicrobial activity tests
- **Protein analysis techniques** (Native PAGE, SDS PAGE, Western Blot, BSA and Bradford assay etc)
- **Vaccine Studies**, Antigen-Antibody Relationship, antigen adjuvant relationship, monitoring of antibody responses with ELISA, monitoring of cellular immune responses with ELISA
- **İn vivo studies**; experimental animal models (Tumor model, disease model (helicobacter pylori etc.), infectious model creation)
- Challenge Assay against pathogenic bacteria and viruses,
- İn vivo biocompatibility and toxicity tests (ISO 10993 and OECD),
- GLP (Good Laboratory Practice), Clean room studies (feature BSL-3 Laboratory) and Creation of SOP (Standard Operation Procedure)
- Biosafety Level 2, Level 3 Laboratory (BSL 2, BSL 3) Installation and studies,

#### Andrei-Narcis Pricob,

"Petru Poni" Institute of Macromolecular - BioNanoTech Project Support Centre

#### **ABOUT**

The aim of the BioNanoTech Project Support Centre is to promote the European Cooperation in Horizon 2020/Europe projects for Romanian key actors in the field of material science: **Eco-nano-technologies and advanced materials (including nanomaterials, nanomedicine etc.)**. This is one of the main issues to be tackled by the Romanian Smart Specialisation Strategy in the next programming period and it is addressed at both regional and national levels. The BioNanoTech also comes as a direct response to the need of an improved collaboration in the field of research, one of the targets of the Horizon Europe program. Cooperation is built on excellence, a solid collaboration network and on the ability of institutions to mould their profile based on the scientific trends and opportunities offered. Using the experience of one of the best research institutes in Romania – "Petru Poni" Institute of Macromolecular Chemistry, we offer services and consultancy for setting up consortiums and partner search support,

consultancy concerning proposal writing and also in project management for research projects.



https://www.bionanotech.ro/



## **Duarte Miguel Prazeres,**

### **IBB - Institute for Bioengineering and Biosciences**

#### **ABOUT**

The Institute for Bioengineering and Biosciences (iBB) is a R&D unit at Instituto Superior Técnico, Universidade de Lisboa, that aims to merge biological, chemical and engineering disciplines for the benefit of the health, agro-food, industrial, marine and environmental sectors. Having a strong drive for knowledge sharing, iBB is a founding member of the Portuguese Roadmap of Research Infrastructures in biodata and bioimaging (Biodata.pt and PPBI.pt), and belongs to the national nodes of ELIXIR, EATRIS and EUROBIOIMAGING European Research Infrastructures.

iBB values partnerships and is committed in collaborative work to deliver the best outcomes for our partners and society at large. Over the last five years, iBB has been an active partner in R&D projects, collaborating in 14 international projects, including 10 H2020 and European partnerships and more than 55 national research or industry-driven projects.



https://tecnico.ulisboa.pt/en/

#### **OPPORTUNITIES**

#### **♦ Project Cooperation**

#### Plasmid DNA and mRNA manufacturing

The biopharmaceutical relevance of producing nucleic acids at large scale has increased steadily over the years due to the development of a growing number of direct and indirect applications. Plasmids are used routinely as vectors to deliver genes in the context of gene/cell therapies and DNA vaccination and mRNA reached the spotlight recently as a new platform for mass vaccination. Furthermore, plasmids play a key role as ancillary materials in the manufacturing of other biopharmaceuticals, including viral vectors, viral-vectored vaccines, mRNA vaccines, and even recombinant proteins via cell free protein synthesis (CFPS).

At iBB we have been focusing for several years on the engineering of bioprocesses and bacterial strains (E. coli, Lactococcus) for the manufacturing of nucleic acids (plasmid DNA, minicircles, mRNA) as therapeutics and ancillary reagents for viral vector or mRNA vaccine manufacturing. This research has led to significant contributions to the field of nucleic acids biopharmaceuticals in the areas of bioprocess engineering, including upstream and downstream processing. The team members combine backgrounds in biology and engineering with a variety of expertise, including bioprocess engineering, genetic engineering and bioinformatics.

## **Type**



# Elena Psederska, New Bulgarian University

#### **ABOUT**

New Bulgarian University is a private university based in Sofia, Bulgaria offering various study programs and diverse opportunities for interdisciplinary education and high-quality research. The Department of Cognitive Science and Psychology includes an interdisciplinary academic staff involved in active research in various fields of cognitive science and psychology.

I am an Assistant Professor of Psychology at the Department of Cognitive Science and Psychology at New Bulgarian University and a research scientist at the Bulgarian Addictions Institute in Sofia, Bulgaria. Over the past seven years, I have been actively involved in the implementation of an international research project conducted in collaboration between the Virginia Commonwealth University in USA and the Bulgarian Addictions Institute in Bulgaria. The study investigates common and substance-specific risk factors involved in addictions to different classes of drugs by incorporating various levels of analysis (i.e., personality, psychiatric, neurocognitive, neuroimaging, genomic and computational approaches).

My main research interests are related to:

- (1) investigating common and specific personality, affective and neurocognitive correlates of addictions to different classes of drugs;
- (2) examining the recovery stage of addictions and the effects of length of abstinence on neurocognitive and affective functioning;
- (3) development of novel preventive and therapeutic alternatives for addictions and implementation of evidence-based personality-tailored prevention and intervention programs.

I am interested in exploring collaborations with colleagues across Europe.

# João Quintas,

#### "Instituto Pedro Nunes

#### **ABOUT**

PN is a non-profit private organization that fosters **innovation and transfer of technology between university and industry**; Co-founder of the Ageing@Coimbra Reference Site EIP-AHA; Associated partner of EIT Health; Actively involved in AAL activities; Laboratory for Automation and Systems provides expertise on Telemedicine, Hospital@Home, Home-Care and Care-Home including the design, implementation and technology transfer of Medical Devices & Unobtrusive Monitoring, Human Activity Recognition and Robotics.





# Laszlo Puskas, ANTHELOS Reserarch, Development and Trading Ltd.



Anthelos (ANT) mission is to offer a portfolio of specialized research tools and solutions for drug discovery and molecular diagnostics focused on selected therapeutic areas, including the early detection and treatment monitoring of cancer and age-related diseases.

Our plan is to provide research laboratories, biotech companies and hospitals with analysis and molecular laboratory testing tools to deliver professional data for drug discovery, clinical trials or medical care. The other focus of Anthelos (ANT) is to identify novel small molecules and further develop into drug or clinical candidates in cancer indications. ANT has widespread international scientific and industrial partnerships in drug discovery (medicinal chemistry, screen development, HTS genomics, animal models). Besides in-house drug development programmes, the company provides services and products in the segment of pharmaceutical research, in the preclinical phase of analyzing different drug candidates (target and phenotypic-based hit identification, medicinal chemistry and lead optimization, proof of concept studies in vitro and in animal models, multitarget FACS and Cytof analysis of molecular targets, preclinical non-GLP toxicity and ADME/Tox studies). ANT has a Medicinal Chemistry Department (with highly trained chemists) where new drug-like molecules, novel drug-like and drug candidate molecules can be synthesized. ANT has access to SPF-like animal house and capable of working with different cancer models in immune deficient animals (capacity of 1000 mice). ANT can also conduct toxicology measurements in rodents in acute and chronic studies.

## **OPPORTUNITIES**

# **♦ Project Cooperation**

Providing chemical probes, drugs and small molecule libraries (targeted, natural compounds, preselected for MOA, etc.)

The company is able to provide chemical probes, drugs and small molecule libraries (targeted, natural compounds, preselected for MOA, etc.) for screening. ANT can synthesize novel anticancer drugs and candidates for in vitro and in vivo studies. ANT is able to screen compounds in cellular and animal models for their anticancer and immune system modulating effects. FACS analysis and sorting of solid tumors, cell cultures and blood samples (upto 30 markers parallel) and Cytof measurements (upto 50 multiplexing).

# **Type**





# Krzysztof Dionizy Pułaski, Biomax FMS Sp.z.o.o

#### **ABOUT**

People associated with the company, transferring organizational skills, knowledge and experience from Biomax Fms Sp.z.o.o, introduces inspiration to the European Union and around the world in the field of technical consulting and engineering services. Management of technologies and product programs in the project along with research and development. Since 2006, we started foreign cooperation on electronic systems. Related to **Product High-efficiency LED lighting, modern products for use in many products using new generation power supplies used not only in hospitals.** 

The hospital development project will be presented to the Ministry of Health under the name ZONE OF HEALTH, presented to many directors, enjoyed great recognition and interest.

Application number: RPMA.01.02.00-14-a898/18, new technologies 3.5 KW wind turbine connection and solar panels and foil to power hospitals and a production company: greenhouses, tunnels itp. or for water intake in small companies.

Half of our business is research and development and innovation - creating new innovations, products, services and product-related programmes, usually through joint European research. The second stage, i.e. our activities, focus on commercialization, after earlier implementation and scaling of new products and services that do not disturb borders, solve problems of competitiveness for our partners and clients. We act as a development aid by presenting solutions in which we are very involved not only in the energy sector, we support the intelligent development of a comprehensive program.

We are proud to work on the use and sustainable and green energy of harvesting from the environment, in our environments and territories we understand some of the challenges of the most extreme tools and technologies in Europe.



https://vivien.com.pl/

# Rui Jorge Raimundo, CHRC - Comprehensive Health Research Center (University of Évora)

#### **ABOUT**

Comprehensive Health Research Centre (CHRC) is a new, national centre of excellence, providing a unifying **environment for innovation and education in public health, lifestyles, nursing, rehabilitation and clinical research.** This holistic R&D unit aims at responding to societal needs in a multidisciplinary way. Our vision is that research should not be closed in a lab, but deemed to solve problems and issues with social impact, in line with the principles of development and sustainability goals of the United

with the principles of development and sustainability goals of the United Nations, and with the societal challenges of the Horizon Europe and European Commission.



O https://www.chrc.pt/en



# Vytautas Rafanavicius, AMITeam Tech

#### **ABOUT**

AMITeam tech is dedicated to advancing healthcare and biomedicine through innovative technologies and machine learning algorithms. Our team of experts has extensive experience in developing customized solutions for healthcare organizations, with a focus on delivering accurate and actionable results. We specialize in the identification, proposal, and implementation of new techniques and technologies that can make a meaningful impact in the healthcare industry. By leveraging our deep understanding of machine learning, AI, and predictive analytics, we are able to help healthcare organizations improve patient outcomes, reduce costs, and optimize operations. Whether it's developing new algorithms for drug discovery, personalized medicine, or clinical decision support, we approach every project with the same level of rigor and attention to detail. With a commitment to excellence and a reputation for delivering results, AMITeam tech is the ideal partner for healthcare organizations looking to drive innovation and achieve their goals.



https://amiteam.tech/

# Kubra Rifatoglu, Sistem Global Consultancy

#### **ABOUT**

Sistem Global Consulting is a leading Innovation and R&D Consulting Company in Turkey. We serve domestic and international companies that **develop technology from the planning phase to the execution and commercialization phases**. Since our establishment we have been dedicated to supporting the future of technology and fostering innovation in Turkey. We assist our clients in fostering innovation in their organizations and getting access to financial resources including R&D grants as well as venture capital. Our team in Sistem Global which is the biggest R&D consulting company in Turkey and we have carried out numerous successful EU Projects in Horizon, ECSEL, EUREKA and Eranet Programs with leading industry players and innovative technology providing SMEs. We are managing a huge international R&D portfolio composed of hundreds of successful EU partners, universities and institutions. And lately under the leadership of many respected coordinators we have successfully carried out similar projects by giving direct support to the coordinator.



# Celso Reis, I3S, Institute for Research and Innovation in Health, University of Porto

#### **ABOUT**

I am group leader of the Glycobiology in Cancer at the Institute for Research and Innovation in Health, University of Porto.

Health Research in a single and solid institution could be a definition for i3S, but the Institute for Research and Innovation in Health is so much more. The will of three research institutes to build a better future gave rise to a new building housing a new institution driven to face and overcome the most relevant health challenges society faces today such as: aging, infectious diseases, cancer, regenerative medicine and neurodegenerative diseases.

The move into a building – whose solidity is a statement in itself – was the realization of a long collaboration between IBMC, INEB and IPATIMUP and, in fact, a major step forward. Since our installation in the new premises late 2015, we have made remarkable progress. One of our main goals has for sure been attained: the integrative nature of i3S is now undeniable. The structure of our research integrative programs epitomize the vision driving us onward: they gather bright minds with expertise to match in a framework that effectively combines basic, applied and translational research in a rally to design a healthier future.

There are many other goals to be accomplished but it is the urge to be better and more ambitious in our contribution to society that motivates us and prompts our growth. Keeping in mind the intermeshed nature of the world today, to which the health sector is not indifferent, strengthening the established connections to the clinic and industry remains of pivotal importance. Similarly, considering the ever-pressing need to renew our research teams, we continue to invest in our highly competitive postgraduate programs. We also realize, of course, that nobody works alone and while offering state-of-the-art facilities, technology and training to our scientists is a priority, the ultimate objective is to be a key national and European player in the improvement of health care, solutions and approaches. Therefore, i3S scientific platforms and advanced training are made available to the entire scientific community.

Beyond the sheer purpose of developing superb health research supported by the concept of Responsible Research and Innovation, i3S is striving to engage the community and be an integral part of society's effort to flourish to its full potential. Therefore, to that end and the need i3S has to involve everyone, we open our doors.



https://www.i3s.up.pt/



# Diana Ribeiro da Silva, University of Coimbra (CINEICC - FPCE-UC)



CINEICC (Center for Research in Neuropsychology and Cognitive and Behavioral Intervention) is a Research and Development (R&D) Unit of the Faculty of Psychology and Educational Sciences from the University of Coimbra (FPCE-UC). Among others, CINEICC aims to contribute 1) to the study of (neuro)psychological factors and processes in health and psychopathology and 2) to develop and assess empirically-based (neuro)psychological interventions towards the promotion of health and wellbeing.

#### **OPPORTUNITIES**

# **♦ Project Cooperation**

#### (Un)Successful psychopathy in leaders: Shifting toxic workplaces into compassionate ones

Successful psychopathy can be defined as the presence of psychopathic traits with the absence of antisocial behaviors. Although there are some theoretical works pointing to a high prevalence of psychopathic traits in leaders, there is a lack of empirical studies on this topic as most individuals with these characteristics are not open to be studied. Moreover, there are no studies identifying psychopathic profiles in leaders and characterizing/comparing those profiles considering other deviant traits, (toxic) leadership styles, and the impact on the mental health and wellbeing of employees. Finally, there is a lack of studies on intervention efforts aimed to shift toxic workplaces into healthy/compassionate ones. **Developing a compassionate motivation is considered an accurate strategy and a fundamental therapeutic goal for the rehabilitation of individuals with several psychopathological symptoms/disorders (including psychopathic traits) and for the establishment of healthy relationships with friends, family, coworkers, and employees.** 

This work package aims to:

- 1) Identify, characterize, and compare psychopathic profiles in leaders, also testing its impact on the mental/physical health and wellbeing of employees
- 2) Develop and test the efficacy of interventions aimed to promote healthy and compassionate workplaces.

# **Type**



#### Luis Rocha,

# **DTx - Digital Transformation CoLab**

#### **ABOUT**

Digital Transformation CoLab (DTx) is a non-profit private association, founded in May 2018, which carries its activity doing applied research in different areas linked to digital transformation. DTx fosters collaborative research and technological development involving multidisciplinary academic knowledge and a wide range of industrial competences. DTx associate members include 3 universities, 1 international research laboratory, 1 innovation center, 2 interface units and 12 companies. Its industrial associates are key companies such as Accenture, Aernnova, Bosch, Cachapuz, Celoplás, DSTgroup, IKEA, Mobileum, Neadvance, NOS, Primavera, Simoldes and TMG Automotive. Our vision is to become a reference partner to our associates, in the fields of innovation and digital transformation, through knowledge, competency, quality and passion in the development of cyber-physical systems and other solutions. DTx's strategy is aligned with the European Commission's strategic goals to promote innovation among their member states.

Taking this framework as a basis and a guideline, DTx has structured its fields of action – Physical, Digital and Cybernetic – on the areas of Software and Information Systems (Data Science and Machine Learning; Data and Application Engineering; Computer Graphics and Vision), Hardware and Sensors (Embedded and Edge Computing), Advanced Materials (Functional and Sensitive Materials), Smart Manufacturing (Process and Equipment Simulation) and Human Factors (Ergonomics and Engineering Psychology). Leveraging on a multinational and interdisciplinary team, DTx intends to be a benchmark player and decisive in the development and industrialization of products, devices and smart applications, at a national, European and/or an international level.



https://www.dtx-colab.pt/en/homepage-en/

# Ana Sofia Rodrigues, University of Coimbra

#### **ABOUT**

University of Coimbra (UC) has a strong internationalisation and is an undeniable reference in R&D. UC outstanding advances in scientific and translational research is promoted through its Faculties, such as the Faculty of Medicine (FMUC). With a privileged environment for higher education and specialized training FMUC is also devoted to basic – translational and clinical research potentialized by the link with the clinical practice with

Coimbra Hospital and University Centre as vital partner. Through its 5 major research lines: Cardiovascular and Metabolic Diseases, Neuropharmacology and Neuropsychiatry, Vision Diseases, Environment, Genetics and Oncobiology and Healthy Living and Active Ageing we can be valuable partners.



# João Rodrigues,

# **Fraunhofer Portugal**

#### **ABOUT**

Fraunhofer Portugal's mission to undertake applied research of direct utility to private and public enterprises and of wide benefit to society is currently materialized through its two Research Centers.

The Research Center for Assistive Information and Communication Solutions (FhP-AICOS) is located in Porto and was born in 2009 following a partnership between the Fraunhofer Society (Fraunhofer Gesellschaft), the Foundation for Science and Technology and the University of Porto.

With a team of over 80 hired researchers and a client portfolio from a broad range of areas, such as **health**, **agriculture**, **retail or energy**, FhP-AICOS has consolidated competences in:

- Human-Centred Design
- Artificial Intelligence
- Cyber-physical systems

User analysis in different environments, computer vision, cognitive and decision support systems, and the internet of things are some of the fields of study in this research centre which steers its activities towards applied research and its clients' success, with whom it establishes close cooperation for the development of innovative, intuitive, accessible and ubiquitous technological solutions. Currently, the innovation themes of interest to FhP-AICOS are the following:

- Cognitive connected solutions
- Digital farming
- Accountable artificial intelligence
- Decentralised health technology
- Living and ageing with data

FhP-AICOS' track record in institutional and commercial collaborations has built a wide network of active partners. Since 2009, FhP-AICOS has been involved in more than 10 European projects and established partnerships with over 150 organizations in 30-plus countries.

A second centre for Smart Agriculture and Water Management – Fraunhofer Portugal AWAM –, operating under the roof of Fraunhofer Portugal, was founded in 2019 in partnership between the Fraunhofer Society (Fraunhofer-Gesellschaft), Fraunhofer Portugal, the Foundation for Science and Technology (FCT), the Universidade de Évora (UÉ) and the Universidade de Trás-os-Montes e Alto Douro (UTAD).



https://www.aicos.fraunhofer.pt/en/home.html





# Sílvia Rodrigues,

#### **Pharmaissues Consultoria**

#### **ABOUT**

Pharmaissues is a **pharmaceutical consultancy company** that strives to meet the needs of the industry by providing global and specialized services in the fields of Regulatory Affairs, Medical and Scientific Affairs and Pharmaceutical Affairs.

Pharmaissues team is composed of high qualified staff with multidisciplinary skills namely **Pharmaceutical Sciences**, **Chemical and Biomedical Engineering**, **Law and Biomedicine**. Its vast experience combines medical, regulatory and translation experiences with leadership and strategic vision, key attributes to support different innovative projects. Although the main focus of Pharmaissues is supporting big pharmaceutical companies in regulatory affairs, Pharmaissues has also being closely worked with start-ups and academic centres to propel their ideas and investigational interests.

Pharmaissues offers the following services:

- **Scientific & Regulatory expert advice:** Our service comprises advice on scientific and regulatory topics namely by providing support on the regulatory strategy, analysing internal and external relevant data and by performing comprehensive scientific review and gap analysis. Ethical issues can also be addressed.
- Support on Regulatory affairs & Quality: Contact us if you need support on technical and regulatory advice and communication with the competent authorities, designing and implementation of Quality Management Systems by creating Quality Manuals and Standard Operating Procedures (SOPs), training, help in implementation and ensuring compliance with Good Manufacturing and Distribution Practice, support on regulatory requirement for scaling up and preparing, participating in and following up on internal and external business partner self-inspections.
- Clinical Studies: PHARMAISSUES has a broad experience in the different phases of clinical studies. Before a project, PHARMAISSUES develops a well-organized plan, providing timely and high-quality deliverables throughout the project implementation. Under the scope of this service, writing and reviewing protocols and Informed Consent Forms (ICFs), the original documentation and CRFs and ensuring regulatory compliance by submitting all documentation to the applicable competent authorities are some of the activities taken by us.
- **Science communication:** Writing and reviewing of scientific communications in different formats (posters, original scientific articles, systematic reviews,), elaboration of expert reports (safety reports, non-clinical reports, clinical reports, quality reports) Scientific and product training, specialized support of a medical team and revision of promotional materials



https://pharmaissues.pt/





### Ricardo Roque,

## Portuguese Institute of Oncology of Coimbra Francisco Gentil

#### **ABOUT**

IPOCFG, EPE, is a reference institution in oncology with the main objective of developing actions within the fields of health care, primary and secondary prevention, research, training and education. Moreover, it has an active role in defining and monitoring national oncology policy implementation for oncology screening and registration.

Regarding health care in oncology, IPOCFG, EPE, responds to population needs in the area of influence of the Center Regional Health Administration (more de 2,5 million habitants), without prejudicing citizens from other regions and sustaining national demand in the areas of healthcare provision. The IPOCFG, E.P.E. also participates in the training of health professionals, in accordance with their training capacity and potentiates the design and development of projects and programs for oncological research, training, teaching and screening.

With total accreditation from Caspe Healthcare Knowledge Systems (CHKS) since 2005 and from the Organization of European Cancer Institutes (OECI) since 2011 as a Clinical Cancer Center, IPOCFG, EPE, is a recruiter for multiple clinical trials, both national and worldwide. In close proximity to Coimbra's Clinical Academic Centre (a consortium between Coimbra Hospital University Centre and the University of Coimbra), it also participates in multiple research projects, of basic, translational and clinical nature. Importantly, IPOCFG, E.P.E. articulates with the Francisco Gentil Oncology Institutes of Lisbon and Porto, through the coordinating committee, which integrates the technical group for monitoring the oncological health policy and the National Program for the Prevention and Control of Oncological Diseases, created under the terms of n. 10 of Order no. 19123 (2nd series), of the Minister of Health, published in the Diário da República of 2 September.



https://www.ipocoimbra.min-saude.pt/

#### **OPPORTUNITIES**

# **♦ Project Cooperation**

Longitudinal sample collection for biomarker research in gynecological cancers

As a clinician working in a multicentric academic-based study with a multidisciplinary team of physicians, nurses and laboratory technicians, supported by academic laboratories focused on health-related research, I am looking forward to collaborating with other partners developing research in the area of oncology, particularly in the field of gynaecological cancer or minimally invasive biomarker research. We are a team well equipped to collect minimally invasive

and surgical samples derived from cancer patients and apply multiple diagnostic approaches to characterize the molecular genotype and phenotype of cancer cells and patients. Particularly well qualified for NGS analyses, we are focused on the following premises:



- > **Study genetic biomarkers** that, when complemented by patient and cancer characteristics, will allow for predicting prognosis and patients' response to treatment. The discovery of such biomarkers will allow us to optimize patient follow- up, identify novel therapeutic targets, and, in the end, provide better patient personalized and centered care, that extends their survival and quality of life.
- > **Apply validated diagnostic methods** to explore their applicability in Gynaecological cancer, to answer clinical doubts that impact patients' treatment and the care provided and that may influence their outcomes in terms of survival.
- > **Integrate knowledge and services** provided by physicians, hospitals, academic scientists and labs, the patients and their caregivers, as well as companies and foundations connected with drug development.
- > **Create compelling evidence** to show the importance of such diagnostic biomarkers in clinical practice and how their generalization to the daily clinical activity will increase knowledge in cancer care, as well as measured and reported patient outcomes.

# **Type**

Partner seeks Consortium/Coordinator

# Natalia Rozwadowska, Institute of Human Genetics PAS

#### **ABOUT**

We are experienced in induced pluripotent stem cells (iPSC) culture, differentiation and 3D tissue formation. We have implemented a macro-sized Engineered Heart Tissue (EHT) that comprises human iPSC-derived cardiomyocytes and fibroblasts with ECM and possibly other cell types. We can create chamber specific i.e atrial and ventricular EHTs of great pharm. response (ISO EC50 <3nM). We have implemented organ-on-chip systems (e.g. for iPS-CMs culture), while having expertise in cardiology, oncology, autoimmune and human reproduction disorder and regenerative medicine. Additionally, we have broad molecular and cell biology and genetic engineering expertise including NGS and designing the cellular assays for high-troughput screening technologies. Our portfolio includes also molecular small animal imaging (BLI in house and MRI/PET/SPECT in collaboration) with advanced cell in vivo tracking evaluation. The expertise in mouse model include oncology, CVD and neurodegeneration. Team has ongoing collaboration with one of the biggest, ATMP producers for clinical use in Poland (and significant in EU). Our scientists have experience in designing cell and gene therapies and possible collaboration with GMP manufacturer strengthen potential consortium capacities.



# Gülseren Sakarya, Istanbul Provincial Health Directorate

#### **ABOUT**

With a human-centered approach, protecting and improving individual and public health, improving the quality of life of the people, providing quality and efficient health services by prioritizing patient and employee safety, ensuring the accessibility of these services to everyone, raising the health awareness of the society and taking all necessary measures on issues that threaten public health.

In the health services we aim to offer, with a wide range of health services, as well as making patients and employees feel safe and satisfied; To meet the expectations of patients and employees at the highest level in accordance with the policies and objectives of the Ministry of Health, which is based on the principle of continuous improvement, where information is produced and applied in the field of health sciences by using advanced technology, the satisfaction and safety of our patients and employees is at the highest level, preferred in terms of service quality. In addition to its own population, Istanbul accepts patients from all over the country and foreign countries, especially to secondary and tertiary health institutions, and is the health center of the world.



https://istanbulism.saglik.gov.tr/

#### **OPPORTUNITIES**

# **♦Project Cooperation**

#### Enhance primary cancer prevention through sustainable behavioural change

Cancer is one of the most important health problems today. It is a public health problem due to its high incidence and high lethality. Despite the many analysis, imaging and application possibilities developed in the diagnosis and treatment processes of diseases, the field that reveals the definitive diagnosis is the pathology department. The physical transportation of patients' materials to another institution or the physical realization of them using courier systems prolongs the diagnosis period. The difficulties in transferring the case to the specialist, the preparation of the materials to be examined in the laboratory internal processes and the problems that may be experienced during the procedures affect a patient's diagnosis in different ways. Establishing an advanced pathology center with sufficient number of pathology physicians, enabling physicians to analyze and report these images independently of the location by digitizing the slides to be diagnosed, and enabling the required minor pathologist to give an opinion to the physician who will report in this network, by making consultation with this center within a Telepathology network; We aim to contribute to the prevention of cancer,

shorten the diagnosis time by 80%, and contribute to its early and effective treatment, by fully digitizing the traditional pathology workflow and developing its software and supporting it with artificial intelligence.

# **Type**



# Kristine Salma Ancane, Riga Technical University Rudolfs Cimdins Riga Biomaterials Innovations and Development Centre



The Rudolfs Cimdins Riga Biomaterials Innovations and Development Centre (RBIDC) is part of the Riga Technical University, Latvia (RTU). The RTU RBIDC research team comprises chemists, chemical engineers and materials scientists. RTU RBIDC scientists are working on well-defined materials science research areas dedicated to developing biomaterials for bone and cartilage tissue replacement and regeneration. Materials such as calcium phosphate-based ceramics and bone cements as well as phosphate glasses and glass-ceramics are historically developed research areas in RTU RBIDC for more than 20 years. More recent research fields include calcium phosphate and polymer composites, microencapsulation of biologically active substances, scaffolds for controlled drug delivery and nanostructured implant composites with drug-eluting properties. RTU RBIDC is the biggest and the most modern biomaterial research centre in the Baltics, actively looking for new cooperation's in the field of biomaterials for tissue engineering and within the H2020 project RISEus2 ("Rising competitiveness of early stage researchers and research management in Latvia") we have the opportunity to visit the industry leaders and form new collaborations.

# Sophia Sarpaki, BIOEMTECH

#### **ABOUT**

BIOEMTECH is an SME based in Athens Greece with a vision to accelerate preclinical research, towards clinical translation for promising drugs, through its high-quality services and products. In doing so BIOEMTECH is a strong research partner who guides, consults, and supports all preclinical research studies of company's collaborators. As a preclinical CRO, BIOEMTECH offers a one-stop-shop at the company's state-of-the-art Laboratories that cover a full chain of preclinical studies, following Good Laboratory Practices in the daily routine. We do so by developing novel radiochemical protocols, exploring the kinetic stability of the radioactive nanomaterials, performing a variety of multimodal imaging experiments (PET, SPECT, CT, X-Ray, fluorescence, bioluminescence), efficacy studies and safety-toxicology studies in a variety of animal models that we can develop inhouse (e.g. oncology, muscle injury, lung fibrosis, intestine fibrosis, myocardial infarction). In addition, BIOEMTECH can provide its expertise on AI techniques to develop prediction models using Machine Learning and Deep Learning algorithms. Different data can be combined

(toxicology, imaging, -omics) for training models both for diagnostic, therapeutic and evaluation applications.





# **Eugene Sechkin,**

# **Program-Ace**

#### **ABOUT**

Program-Ace is a European company that offers R&D, Services, Solutions, and Custom **software development services** suited for a broad range of business verticals.

Our mission - creating unique innovative solutions and help enterprises achieve Digital Transformation success.

Our team of experienced developers and artists has delivered over 900 projects based on the latest technologies.

Program-Ace has accumulated great experience working with different industries and technologies. This has allowed it to branch out in a multitude of directions and offer diverse services related to AR/VR/MR/XR Solutions, MetaVerse, Digital Twins, enterprise training and simulations, 2D art, 3D modeling, animation, VFX, NFT/Blockchain, entertainment projects, product configurations, and versatile applications that engage modern technologies to push businesses to the top in their industry.



O https://program-ace.com/

# Thanasis Sfetsos. **NCSR Demokritos**

#### **ABOUT**

The Environmental Research Laboratory (EREL) of NCSRD is an established group combining complementary expertise in atmospheric research, climate change, complex systems and environmental decision support systems with important research potential (awarded the largest FP7-REGPOT ENTEC for climate research and coordinating the H2020 project EU-CIRCLE). EREL follows an integrated R&D approach to environment and climate, contributing to environmental protection and sustainable development in regional and global terms.

#### **OPPORTUNITIES**

# **♦ Project Cooperation**

#### Climate proofing of EU health care systems

The idea is to perform a future proofing of the European health care systems based on a holistic resilience assessment following WHO guidelines.

Development of Risk and Resilience Assessment for climate hazards and will expand on the resilience of the health care systems supply chains.





#### **Carlos Silva**

#### P-BIO (Portugal's Biotechnology Industry Organization)

#### **ABOUT**

Portugal's Biotechnology Industry Organization (P-BIO) is the only association that brings together the vast majority of companies linked to the biotechnology and life sciences sector. Since it was founded in 1999, it has been the cornerstone for development and support of biotechnology in Portugal. P-BIO seeks to develop an environment that is favourable to the creation and growth of start-ups, promoting their corporate development domestically and internationally. While developing this ecosystem, it contributes to raising the profile of this sector and its developments. As a member of EuropaBio, the Organization is key to linking companies and their relevant partners in government, investors, regulating agencies and other institutions linked to the industry.



https://p-bio.org/en/

# Margarida Simoes, University of Évora

#### **ABOUT**

The University of Évora is a public University organized in 5 Schools: Arts, Sciences and Technology, Social Sciences, Health and human development and Nursing. Research and Development (R&D) covers several scientific areas through a network of 18 Research Units, all of them submitted to international evaluation under the coordination of the Institute for Research and Advanced Studies. The University of Évora has established 7 Chairs in areas of excellence (Biodiversity, Renewable Energies, Heritage and Health, LifeSpan, Macau, Iberian studies, EDUWELL), participates in the National Roadmap of Research Infrastructures with areas of agronomy, biodiversity, environment, computer sciences, business studies and entrepreneurship, aerospace engineering, solar energy and heritage. Over the last years, the University has fostered a close link with the community. Such interaction has been possible through the creation of working networks, the participation in the Science and Technology Park as well as through the establishment of protocols and co-promotion research projects. The main R&D areas are: Geophysics; Landscaping; Materials and Surface Science; Economics; Social and Political Sciences, History, History of Art, Science and Cultures; Applied Mathematics; Education; Linguistics and Literature; Elderly Healthcare. The 255 running R&D projects are developed through national and international partnerships such as ERASMUS+, LIFE, H2020, PT2020, Alentejo2020 or private sponsorship.



# Bozena Smolkova,

#### **Biomedical Research Center, Slovak Academy of Sciences**

#### **ABOUT**

Biomedical Research Center of the Slovak Academy of Sciences is **the largest Slovak institution devoted to basic and applied research in biomedical sciences.** BMC SAS was officially established on January 1st 2016 by merge of four previously independent SAS institutes, namely the Cancer Research Institute (CRI), the Institute of Clinical and Translational Research (ICTR, former Center for Molecular Medicine), the Institute of Experimental Endocrinology (IEE), and the Institute of Virology (IV).

The principal mission of this novel research center is **to foster research excellence**, **develop interdisciplinary approaches**, and stimulate innovative potential for the improvement of our knowledge on human diseases, its better translation to clinic and more effective practical use for benefit of patients and the entire society. BMC SAS research is focused on understanding metabolic, neuroendocrine, autoimmune and cardiovascular disorders, cancer and infections, and their interrelationships when cooccurring in the same organisms.



http://www.biomedcentrum.sav.sk/

#### **OPPORTUNITIES**

# **♦ Project Cooperation**

Tumor microenvironment in pancreatic ductal adenocarcinoma

Our group focuses on **epigenetic therapy in cancer** and the possibilities of TME modulation. We use various preclinical models, including organoids and PDX. This could be provided for potential collaboration.

# **Type**



# Jacek Smyła,

## **National Information Processing Institute - National Research Institute**

#### **ABOUT**

Our project aims to develop the concept of an innovative reference database of ophthalmic images, integrating data from many sources (fundus imaging, genomic, clinical).

The scope of research work includes:

- development of rules and methods for secure (GDPR compliant) acquisition, storage, and access to data;
- · development of mechanisms and forms of a unified, structured description at the database level, ensuring data consistency and interoperability;
- · development of modern indexing mechanisms, integrating data from a structured description and image features (e.g., radiomic features, features extracted using AI methods), enabling monitoring patients' health status and building diagnosis recomendation securely and ethically with public acceptance and trust;
- · developing analytical tools enabling data analysis, formulating new clinical paths, and increasing the quality of diagnostic outcomes (e.g., new care solutions, personalized disease management, advanced diagnostic tools).



O https://opi.org.pl/

# Kristine Sneidere, Rīga Stradiņš University

#### **ABOUT**

Rīga Stradinš University is a higher education institution, focused on life and social sciences. MOBILE-COG (Modifiable bio and life-style markers in predicting cognitive decline) aims to investigate the role of cognitive and motor reserve in delaying cognitive decline and identify functional and structural biomarkers in the early identification of a predicted pathological cognitive decline.



O https://www.rsu.lv/

#### **OPPORTUNITIES**

**♦ Project Cooperation** Cognitive ageing and lifestyle

Our expertise lies in:

- cognitive and motor reserve;
- cognitive functioning and brain functional and structural measures
- we have developed an innovative measure for long-term physical activity research;
- have formed a successful collaboration with clinical university hospitals in Latvia.



# Tamas Sohajda, CarboHyde Zrt.



CarboHyde is a private preclinical pharmaceutical start-up company **specializing in the development of carbohydrate-based APIs.** Our team consists of a small group of seasoned scientists with over 50 years of cumulative experience in the field of carbohydrate chemistry, analysis and pharmaceutical development.

The company's core focus is neurodegenerative diseases, yet we also have other preclinical programs in various unmet medical indications.



https://www.carbohyde.com/

#### **OPPORTUNITIES**

# **♦ Project Cooperation**

Cyclodextrin and carbohydrate chemistry

Carbohydrate chemistry, the final frontier. These ubiquitous building blocks of life are still the most challenging biomolecules to manipulate due to their structural diversity and complexity. A realm where only the bravest creative chemists can go to deeply understand their biological importance, explore and embrace their therapeutic value.

From the discovery of the first carbohydrate antibiotic streptomycin, a widely used class of antibacterial aminoglycosides (tobramycin, gentamicin, netilmicin, or amikacin) was established; deoxy sugars (cladinose and desosamine) are essential constituents of the fascinating class of antibacterial/antifungal drugs known as macrolides (azithromycin, clarithromycin, erythromycin); amino sugars are key-constituent of nucleoside antibiotics such as puromycin or first-choice anthracycline chemotherapeutics such as doxorubicin.

The use of carbohydrates as API for the treatment of rare diseases is an emerging field with a worldwide consensus as demonstrated by the approval of miglustat (Gaucher disease) and by the orphan drug status exceptionally granted by the FDA to carbohydrates such as the iminosugar migalastat (Fabry disease) and the non-reducing sugar (2-hydroxypropyl)-β-cyclodextrin (Niemann–Pick type C). CarboHyde was unmet expertise in creating novel carbohydrate-based active ingredients and drug delivery systems including drug-carbohydrate conjugates.

# Type



# **Ana Raquel Sousa 4LifeLAB**

#### **ABOUT**

4LifeLAB is a recently established Collaborative Laboratory (CoLAB) in Portugal to create a agile and competitive ecosystem, bringing together excellence in science, medicine, engineering and industry, enabling the development of innovative solutions and practices to improve medical outcomes in rapid responses to emergency and crisis situations. 4LifeLAB is led by the second largest public hospital in the country - CHUSJ - and our associates include CEiiA, ICVS, Fraunhofer AICOS, 2CA, Atlantis (representing Brazilian Fiocruz), TMG, WiseHS and 4Life.

This ecosystem is developing a portfolio of projects, originated on the needs and the challenges of the covid-19 context.

#### **Current projects include:**

- a rapid manufactured medical ventilator
- a surgical helmet for high-risk environments with infectious diseases
- an emergency infrastructure hub, at the heliport of CHUSI, for test and early adoption of urban air mobility technologies, complimenting concepts for decentralized and remote healthcare and emergency response.

This portfolio is part of an R&I agenda defined and stirred by main global trends on innovative clinical practices and scientific and technical advancements. This CoLAB has established and reinforces solid foundations of network collaboration and open innovation, from a highly qualified team, which allows for an effective transfer of knowledge, for the development, industrialization and validation of medical devices and services, in close collaboration with hospitals, companies and others entities in the fields of science, technology and engineering.



O https://www.4lifelab.eu/

# **Dimitros Stagos**,

Department of biochemistry and biotechnology,

# **University of Thessaly**

#### **ABOUT**

The Department of Biochemistry and Biotechnology (DBB) was founded in 2000 in response to the needs of Greece for new highly trained graduates in the scientific area of Biochemistry and Biotechnology.

Facing the future, the Department's aspiration is to continue to provide high level Education in the modern disciplines of the scientific area of Biochemistry and Biotechnology, reinforcing in parallel its position in international scientific community acting as a pole of scientific

innovation in direct interaction with industry, through the development of new innovative products and practices but also with society through a continuous communication and transfer of knowledge.



O https://bio.uth.gr/en/home/



# Svitlana Surodina, Skein



We deliver data and mixed intelligence innovation for preventive health. Bias mitigation in health AI and data ethics assessment technology is a particular focus of our team's research. Leveraging our company's over 13 years of experience in user-centred digital product development and advanced analytic tools, Skein create novel technology solutions for healthier, longer lives.



O https://skein.co/

#### **OPPORTUNITIES**

#### ◆ Project Cooperation

Distributed data valuation technology and decision support

Ensuring ethical compliance of algorithms and data quality in AI-assisted decision making in the settings with limited data distributed across organisational silos, with the goal of assessing bias inherent in data, quantifying and reporting ethical risks.

This technology is essential for most AI-supported medial diagnostic projects. The compliance dashboard is easily integrated into clinical research and operation workflows, saving millions on current and future compliance risks.

# **Type**

Partner seeks Consortium/Coordinator

# Povar Tatiana,

Republican Clinical Hospital "Timofei Mosneaga"

#### **ABOUT**

The Republican Clinical Hospital Timofei Mosneaga in Moldova it is the largest tertiary level, public hospital located in the capital city of Chisinau, with over 800 beds and a staff of more than 1700 employees. The hospital was founded in 1817 and has a long history of providing high-quality medical care to the people of Moldova. It is a teaching hospital, affiliated with the State University of Medicine and Pharmacy "Nicolae Testemitanu" in Chisinau, and trains medical residents. The hospital offers a wide range of medical services, including general surgery, cardiovascular surgery, ICU and therapy for adult population from all over the country. It is the only institution from Moldova which has a cardiovascular surgery department for newborns and kids.



O https://scr.md/





# Dávid Sztahó, Budapest University of Technology and Economics, Laboratory of Speech Acoustics



#### **ABOUT**

The research of speech requires a special interdisciplinary thinking. The staff of the the Laboratory of Speech Acoustics has knowledge of psychoacoustics, linguistics, pshysics, maths and informatics. Our laboratory has a successful collaboration with well known national and international researchers. In our research, we keep the engineering point of view our main priority. Research topics: basic acoustic-phonetic research, database creation, automatic speech recognition, pathological and mental disorders in speech, forensic speech analysis.



http://lsa.tmit.bme.hu/en/

#### **OPPORTUNITIES**

# **♦Project Cooperation**

Speech and voice related biomarkers

Speech and voice can be used as biomarkers for a wide variety of diseases. We are seeking partners/consortium, with whom we can utilize these biomarkers in any HORIZON call.

We are an academic lab at Budapest University of Technology and Economics dealing with speech acoustics and AI (deep learning, machine learning).

We already have expertise in the medical field regarding to disease detection by speech signal (such as depression, Parkinson, pathological speech disorders). We also have contacts with clinical institutes who can record patient data, if needed.

# **Type**





Cytocast is a computational biology-driven medical technology company developing a comprehensive cell simulation platform that can revolutionize how we treat patient starting from discovering and developing drugs to selecting the best treatment option for patient. Cytocast was founded in March 2019 to revolutionize healthcare with a patientspecific cell model. Innovation, creativity, and care for patients are at the heart of everything we do.

We developed a comprehensive cell model integrating all available knowledge about how cells execute their functions. The Cytocast Simulated Cell can model protein interactions central for cell functioning in various cell types. It predicts qualitative and quantitative changes in protein complexes in response to drug treatment or combination of drugs in various cell types.



O https://www.cytocast.com/

#### **OPPORTUNITIES**

# **♦Project Cooperation**

In silico Cell Simulation to Support Personalized Treatment

The cell simulator that forms the basis of our technological solution integrates bioinformatics databases, multi-omics, and patient specific data into computer models to understand the effects of perturbations caused by disease and predict how drugs can modify cellular health. We are looking to further develop and validate our software solution in specific disease groups or therapies.

# **Type**

Partner seeks Consortium/Coordinator

# **♦ Project Cooperation**

**Digital Twin for Prevention** 

We are working on a project to develop a digital twin simulation platform that based on a personalized mechanistic multi-omics model, integrating patient data will be able to predict disease risks. The digital twin solution would be able to accurately analyze the associations between changes in multi-omics patterns and the risk of developing disease, therefore playing a significant role in prevention.

# **Type**





# Maciej Tankiewicz, Medical University of Gdańsk, **Department of Environmental Toxicology**



The Department of Environmental Toxicology (unit of the Faculty of Health Sciences with the Institute of Maritime and Tropical Medicine) performs laboratory and field studies related to the influence of various inorganic and organic pollutants on chemistry, environmental ecotoxicology and microbiology in outdoor and indoor air, water, sediments, soil, and their impact on ecosystem and human health. Understanding the processes involved in the interaction of pollutants with the environment is essential in prevention, reduction and mitigation of their impact on humans and the environment. In our studies we use a combination of analytical methods (GC-MS, GC-MS-MS, HPLC, LC-MS-MS), bioassays (YES-YAS, ELISA, etc.), ecotoxicological tests (Microtox, Phytotox), microbiological analysis (standard techniques, PCR, metagenomics analysis) and chamber techniques. We also educate students and young scientists in the field of environmental chemistry, microbiology and health assessment.



https://mug.edu.pl/

#### **OPPORTUNITIES**

# **♦Project Cooperation**

New emerging environmental contaminants - impact on human health

#### Our main focus is research on pesticides, endocrine disruptors and plasticizers.

We're looking for partners in the field of environmental health. We have experience in conducting laboratory and field studies related to the influence of various inorganic and organic pollutants on chemistry, environmental ecotoxicology and microbiology in outdoor and indoor air, water, sediments, soil, and their impact on ecosystem and human health.

More information: <a href="https://structure.mug.edu.pl/259">https://structure.mug.edu.pl/259</a>

#### **Our scientific activity profile:**

☐ assessment of chemical, physical and microbial air quality (including in-door air), its impact on human health and connection with the occurrence of diseases;

☐ assessment of chemical, ecotoxicological and microbiological quality of water, sediments, soil and materials deposited in the environment;

☐ search for new indicators of environmental pollution affecting human health and their determination in bodily fluids (e.g. pesticides, plasticizers, PAH's, PFAS etc.);

decotoxicological research with application of microbiotests, search for connections with physicochemical analyzes;

☐ skin and membrane permeation studies of organic substances with an assessment of human exposure;

estimating the health risks resulting from exposure to pollutants.



#### **Eva Troppova**

#### **International Neurodegenerative Disorders Research Center**

#### **ABOUT**

INDRC is a private, non-profit research organization that acts as the umbrella organisation for Czech universities, RTOs and clinical centers, SMEs and NGOs, participating as affiliated or associated entities. INDRC is focused on treatment and prevention of Alzheimer's disease and other neurodegenerative disorders.

INDRC is a pioneering institute, and the first of its kind to combine biological sciences and medicine with big data and artificial intelligence approaches to study the function and information processing of human brain, with the goal of improving treatment and prevention of neurodegenerative disorders.

INDRC goal is to merge and advance the globally dispersed knowledge through fellowship programs of excellence, delivering outstanding independent research programs, building a world-class research community, and enabling technological and therapeutic innovations with genuine impact on society and humanity.

https://indrc.cz/

# Maria Tsoumakidou, **BSRC ALEXANDER FLEMING**

#### **ABOUT**

B.S.R.C. Fleming promotes cutting-edge research, aiming to understand molecular mechanisms of complex biological processes in health and disease. We are also committed to contribute to innovation in medicine, by developing novel therapeutic and diagnostic methods, focusing on immunity and inflammation, cancer, and neurodegenerative diseases.

#### **OPPORTUNITIES**

# **♦Project Cooperation**

In vivo and ex vivo modelling of mouse and human lung cancer immunity with focus on antigen presenting cells, fibroblasts and T cells.

Dr. Tsoumakidou is a board-certified respiratory specialist at Biomedical Sciences Research Centre Fleming. She is emerging as a leader in the field of stromal immunology for her late discovery of a novel subset of lung fibroblasts that present cancer antigens and provide survival signals to lymphocytes. Her group currently works to harness fibroblasts for immunotherapy. Her work on a rare subset of anti-tumor DCs identified a type of cell death that explains DC scarcity and tests novel strategies to increase DC longevity and

> anti-tumor immunity. She is also interested in ex-vivo modeling of human tumor responses for biomarker discovery and drug screening. She coordinates an international consortium of academic and industrial leaders that work to develop the first bronchoscopic biopsies on chip.



# Mehmet Turan, DeepMIA Lab. Bogazici University



Deep Learning and Medical Image Analysis Lab. is at Bogazici University Computer Engineering Department. DeepMIA Lab. is **conducting research in a variety of topics**, which are:

- Deep learning based tissue segmentation,
- · Classification and grading in various cancer types and non-malignant diseases,
- Survival prediction
- Response to immunotherapy, resistance and side effects,
- Synthetic image generation for histopathological staining and contrast-enhanced radiology images
- Detection of organ rejection after transplantation

The research focus is mainly but not limited to **computer vision and the team has substantial experience with both histopathology and radiology images.** The previous works have been published in several outstanding journals, namely the Nature, IEEE Transactions on Medical Imaging, Medical Imaging Analysis and so forth.

We also have a **pathologist in our team who has expertise and studies in all cancer types, especially urogenital system and skin cancers.** We also have sufficient experience in non-tumoral lesions such as dermatitis and medical kidney biopsies. We have a rich pathology archive containing cancer tissues belonging to different organs. In addition to expertise and experience, we can support any kind of material for your projects.



https://deepmia.bogazici.edu.tr/

#### **OPPORTUNITIES**

# **♦Project Cooperation**

Histological and genomics based multi-modal immunotherapy outcome predictive network

We will develop a research tool that uses patients' histological and radiological data, including whole slide images from biopsies or resections and PET /CT scans, along with patients' genomic data. It will also use patients' clinical data, including age, gender, immunotherapy drug, and dose as additional parameters. Our method will yield patients' response to a particular drug relative to the predicted drug resistance rate, likelihood of side effects, and patient survival to locoregional recurrence. Our method will also discover morphological and molecular biomarkers from patients' whole slide images. We hope that this new method will lead to better decision making among oncologists and increase patient survival for immunotherapy treatment.







# Rimantas Tuskevicius SatiMed; BioRemedium; Fitodenta

#### **ABOUT**

BioRemedium is a Pharmaceutical biotechnology company specializing in the research and application of biologically active substances in the development of innovative pharmaceutical products for tissue regeneration and the treatment of acute and chronic wounds.

SatiMed team of Researchers, Pharmacologists and Medical Doctors has built unique competence to retrieve and use the physiologic value of the natural remedies derived from the Hemp and oher plants.

Fitodenta team developing novel products for post-operative dental, oral cavity and face treatment. Fitodenta products aim to improve healing process and to reduce usage of conventional antibiotics and anti-inflammatory drugs for post-operative patients after odontological, perioral and facial cosmetic surgical interventions.

# Mari Tvaliashvili, Curatio International Foundation

#### **ABOUT**

Curatio International Foundation (CIF) is a not-for-profit, non-governmental organization with a mission to improve health through better functioning health systems. CIF's work is underpinned by three core values: Hearing Needs, Building on Local Strength; and Delivering Innovative Context-specific Solutions.

Our work is based on network of national and international professionals and researchers to bridge the gap between what is known about the problems at hand and what has to be done in order to solve them. Our work intends at improving functionality health care systems and adequacy of and health policies.



https://curatiofoundation.org/





#### **Ermo Täks**

# **Tallinn University of Technology**

#### **ABOUT**

Our mission is the **next generation of digital government technologies and digital government ecosystems**. We conduct research in large- and ultra-large-scale IT systems. Our research ranges from the architecture of e-government interoperability frameworks, over public service design, eIDAS implementation frameworks, eID user acceptance, implementation of e-court systems, blockchain-based e-governance, frameworks for collective intelligence, Big Data and IoT integration, web annotations and Open Linked Data (Web Weaving), to large-scale decision support systems (generalized association rule mining and probabilistic reasoning).



https://taltech.ee/en/is

# Zsófia Török, MindRove Kft.

#### **ABOUT**

MindRove **develops and commercializes wearable devices** for human-computer interfacing, brain-computer interfacing, neurofeedback, physical and mental health tracking, performance boosting and rehabilitation applications.



O https://mindrove.com/

#### **OPPORTUNITIES**

# **♦Project Cooperation**

MindRove is looking for partners for upcoming Horizon Europe projects. We have experience in the development and commercialization of wearable devices for human-computer interfacing, brain-computer interfacing, neurofeedback, physical and mental health tracking, performance boosting and rehabilitation applications. **Our expertise comprises software development, neurosciences and life sciences.** We would be eager to join or manage a partnership which can utilize these skills, for example (but not limited to) one that aims to develop telemedicine systems. Our strong collaboration with the Research Centre for Natural Sciences (Hungary) allows us to undertake management roles if needed.

# Type



# Maroš Varga, Nemocnica AGEL Košice-Šaca a.s.

#### **ABOUT**

The AGEL Košice-Šaca a.s. hospital, as part of the AGEL Group, has been working for a long time on research tasks in the field of respiratory burns, in the field of covering materials for burns, in the field of oncosurgery, gynecology, rheumatology and mammary gland cancers.

The hospital at the Clinic of Burns and Reconstructive Surgery has six years of experience in the application of stem cells for critical ischemic limbs in diabetics. The neurological department of the hospital diagnoses and monitors patients with degenerative brain diseases (Alzheimer's, dementia, etc.) in the outpatient part for a long time.



https://nemocnicakosicesaca.agel.sk

Andero Uusberg, Institute of Psychology, University of Tartu

#### **ABOUT**

University of Tartu is one of the leading centers of psychological research in New Europe.

I lead the Affect and Regulation research group where we investigate emotions and emotion regulation using a mixture of psychophysiological, experimental and survey methods. We are interested in becoming a partner focusing on how to foster healthy emotion regulation in changing and challenging work conditions and beyond.



https://psuhholoogia.ut.ee/en

#### **OPPORTUNITIES**

# **♦ Project Cooperation**

#### The role of self-regulation in striving under increasing work autonomy

We are interested in joining a consortium addressing the selected topic. We envision conceptualizing, measuring, and supporting the self-regulation behaviors that are needed to strive under increasing work autonomy. To leverage this strategic insight, we could work on some or all of the following tasks:

- 1. Conceptual framework of self-regulation of autonomous workers (SRAW).
  - 2. Self-report item pool for tailor-made questionnaires of SRAW.
    - 3. Map of interventions for facilitating SRAW.
      - 4. Empirical studies of SRAW in partnership with a large business campus.

# **Type**



# Milena Vasic,

#### Institute of Public Health of Serbia

#### **ABOUT**

Institute of Public Health of Serbia "Dr Milan Jovanović Batut" was established on the Republi level and represents an expert institution for Public Health, which provides advice, support and guidance for the Serbian government and all departments for public health and conducts independent researches on issues related to public health in Serbia.

The activity of the Institute is defined by the Health Care law which under public health considers realization of public interest by creating conditions for the preservation of public health through organized comprehensive social activity. Institutes main areas of activity are: analysis, planning and organization of health care, information with biostatistics, health promotion, control and disease prevention, hygiene and human ecology and microbiology.

# **Emin Uysal,** Pi Health Technologies

#### **ABOUT**

Pi Health Technologies started its activities in Ankara, Istanbul and London in 2021 with the support of TUBITAK, KOSGEB and Development Agency. It works with a team of 11 people, 6 of which are engineers, in the fields of Medical Device design, production and VR-AR. It also provides technical consultancy to various companies on electronics and software. Pi VR is the global brand of Pi Health Technologies.



O https://pihealthtech.com/

#### **OPPORTUNITIES**

# ◆ Project Cooperation

#### Pi vr capabilities and engineering services it can support

We provide virtual reality-based and interactive spine (SpineVRLab), cardiovascular surgery (cardio-surgery vrLab), 3D realistic model design, haptic device and VR interaction. In the long term, our aim is to measure the level of preparation for the operation by having surgeons conduct experiments before all surgical procedures in a virtual reality environment.

# **Type**



# Argiro Vatakis, Panteion University

#### **ABOUT**

In the Multisensory and Temporal Processing Laboratory (MultiTimeLab) at the Department of Psychology at Panteion University of Social and Political Sciences (PANTEION), we are interested in human multisensory and temporal processing in basic research, as well as more applied and clinical settings. Our basic research focuses mainly on the use of psychophysics, while for more applied settings virtual and augmented reality has been used.

Our group is interested in: Timing and time perception; Multisensory binding; Multisensory learning; Gesture and language; Psychocinematics; Object affordances.



https://argirovatakis.com/ArgiroVataki s/Welcome.html

# Lukáš Valihrach, Laboratory of Gene Expression, Institute of Biotechnology, Czech Academy of Sciences

#### **ABOUT**

The Laboratory of Gene Expression is the Czech's leading academic laboratory specialized in high-throughput gene expression profiling and single-cell analysis using RNA-Seq and RT-qPCR. The laboratory is active in the fields neurobiology and developmental biology, actively collaborating with national as well as international partners (SWE, NL, GER, POL, ISR and US). The laboratory is also involved in the development of methods and applications for nucleic acid analyses and standardization protocols for effective workflows.



https://www.labgenexp.eu/

#### **OPPORTUNITIES**

# **♦ Project Cooperation**

Transcriptomics analysis in CNS

We offer our expertise in various type of transcriptomic analysis, including single-cell and spatial transcriptomics. We have all the instrumentation, computational infrastructure and experience. We support projects oriented on central nervous system, with particular focus on glial cells. We are keen on quality control and efficient project management.

# **Type**



# Georgi Vasilev,

## **Bulgarian Addictions Institute**

#### **ABOUT**

Bulgarian Addictions Institute is a small, private institution with the following main fields of activity:

- Scientific projects in the field of addictions
- Educational and training activities in the field of addictions and psychological counseling and psychotherapy motivational interviewing
- •Development and implementation of preventive and therapeutic programs i
- Development of policy and programs related to the health and social harm reduction from the use of narcotic substances
- Development and implementation of effective policies and strategies in drug policy and public health
- Developing treatment and rehabilitation programs for addictions

# Viktors Veliks, University of Latvia

#### **ABOUT**

The University of Latvia consistently retains the position of the national, leading and most influential higher education institution in Latvia. UL is a modern centre of academic and professional studies, which, along with research in natural sciences, humanities, social sciences, technical sciences and medicine provides opportunities to acquire various types and levels of higher education to the residents of Latvia and other countries. Scientific activity at the University of Latvia takes place both in faculties and scientific institutes. The University of Latvia conducts research in more than 50 research areas.

Our team contains researcher from different scientific branches - Neuroscience, Sport science, Psychology, and Medicine. We have access to patients in the university hospitals and from rehabilitation centers in Latvia. We have strong collaboration with LSPA (Sport and pedagogical academia) in sport science and with RSU (Stradiņš university) in medicine. We have experience with electrophysiological measurements (eeg,ecg, miography), behaviour tracking (physical movement and specific sport parameters recording and analysis), various psychological procedures (questionnaires and experimental)



https://www.lu.lv/





# Panagiota Veloudi, Center of Excellence in Biobanking and Biomedical Research, Molecular Medicine Research Center, University of Cyprus

#### **ABOUT**

The scientific staff consists of researchers of a wide spectrum of specialties, including molecular and cell biologists, geneticists and bioinformaticians, in Cyprus and abroad, while a great number of clinicians are involved at various levels, including the recruiting of patients and healthy volunteers and the pursuing of the various projects. The biobanking activity is under strict quality management, aiming to secure data and samples of the highest and trustworthy quality for research. At the same time, all activities comply with the European General Data Protection Regulation, showing respect to ethical, legal and social issues emanating from these activities.

The Biobank hosts more than 5,000 samples of patients and healthy donors, associated with records and clinical data of variable completeness. Some records are available for general use by other researchers, following the data-access policy of the Center and upon the approval by the Academic Council. For other records, the Biobank is serving as a custodian to specific research projects, each one of which has its own provisions and limitations for use, per the approval of the Cyprus National Bioethics Committee. Therefore, samples and data of such collections are available through the Biobank Management in communication with the researchers in charge of such cohorts.



O https://biobank.cy/

# Susana Viegas, **NOVA National School of Public Health**

#### **ABOUT**

Over its more than 50 years of existence, NOVA National School of Public Health (NOVA NSPH) has played a leading role in the development of Public Health science.

We develop **national and international quality research**. The School leads and participates in competitive research projects, in a research culture guided by public health current and future challenges, focused on innovation and societal impact. The evidence production supports populations health and well-being and strengths health systems, with the priority being to translate evidence into adapted and replicable solutions in real contexts, from local to global.

At NOVA NSPH our mission is committed to serve the community, through institutional cooperation and intersectoral partnerships, in the reinforcement of skills and lifelong learning, as well as health interventions and policies design, implementation and evaluation.



https://www.ensp.unl.pt/home





Sinziana Vlad,
BioNano Tech Support,
"Petru Poni" Institute of Macromolecular Chemistry



The aim of the BioNanoTech project is to establish a support centre able to increase participation and to promote the European Cooperation in Horizon 2020/Europe projects for Romanian key actors in the field of material science: Eco-nano-technologies and advanced materials (including nanomaterials, nanomedicine, etc.). The BioNanoTech comes as direct response to the need to better collaboration between member states in the field of research, one of the targets of the Horizon Europe (HE) program. Cooperation is built on excellence, a solid collaboration network and on the ability of institutions to mould their profile based on the scientifical trends and opportunities offered. Using the experience of one of the best research institutes in Romania, "P. Poni" Institute of Macromolecular Chemistry, the BioNanoTech projects is offering support in identifying specific financing resources (HE and Structural Funds), proposal set up and collaboration & networking tools.



https://www.bionanotech.ro/

# Edita Voitechovic, Center for Physical Sciences and Technology

#### **ABOUT**

CENTER FOR PHYSICAL SCIENCES AND TECHNOLOGY (FTMC) is the largest scientific research institution carrying out a unique fundamental research and technological development works in scientific fields of laser technologies, optoelectronics, nuclear physics, organic chemistry, bio and nanotechnologies, electrochemical material science, functional materials, electronics, etc. in Lithuania. In the Center not only the innovative science but also high technologies expedient for business and society needs are developed.



https://www.ftmc.lt/



# Grzegorz Wieczorek, Molecure S. A.

#### **ABOUT**

Molecure (molecure.com) is a clinical stage biotechnology company that uses its world leading medicinal chemistry and biology capabilities to discover and develop first-in-class small molecule drug candidates that directly modulate underexplored protein targets and the function of RNA to treat multiple incurable diseases. Our business model is based on successfully building a pipeline of small molecule drug candidates both internally and via selective in-licensing deals. We then plan to partner with global pharmaceutical and biotechnology companies for further clinical development and/or commercialization. The preferred stage of development for out-licensing is clinical Proof of Concept.

The Cheminformatics Group at Molecure has a top-level background in structural biology and assessment of the dynamical behavior and electronic properties of biological targets (proteins, nucleic acids and their complexes), including structure-activity relationship of enzymes. To this end, we integrate multiscale (combined QM and MD) physics-based simulations and AI-based calculations that allow us to access different spatial and temporal scales of biological processes occurring in proteins and RNA.

The Chemistry Department at Molecure can support research partners with its broad expertise in medicinal chemistry, synthesis and scale-up of small molecules.



https://molecure.com/

# Ewa Wróblewska-Rećko, **Medical University of Bialystok**

#### **ABOUT**

The Medical University of Bialystok is a modern, rapidly growing public university, with a mission to provide the best possible education for professional, responsible, leading-edge medical staff; to carry out scientific research at the most advanced level worldwide; to implement innovative solutions in cooperation with medical service providers; and to respond to social needs.

The Medical University of Bialystok is a precursor and leader of pioneering work on artificial intelligence in medicine, and a contributor to large-scale research on genomics, proteomics, metabolomics, radiomics and bioinformatics.

The Medical University of Bialystok is open to cooperation with businesses in various industry sectors. A lot of inventions developed by MUB researchers are patent protected and have been commercialized. The latest of these include: a Medical Honey product based on propolis extract, delaying the development of brain glioblastoma; a preparation

licensed by MUB to strengthen bees from LOB; artificial saliva; work on extract from a Bialowieza Forest fungus that fights colon cancer.



https://www.umb.edu.pl/en/index. php



# Jan Zaucha, Medical University of Gdansk, **Department of Hematology and Transplantology**

#### **ABOUT**

IDepartment of Hematology and Transplantology is a research center of the Medica University of Gdańsk and a clinical center of the University Clinical Center. It consists 4 wards: general hematology ward, Intensive Hematology Care and Transplantology Ward and Daily Clinic. In addition, it contains Apheresis Unit - 3 (cell separators, and two extracorporeal separators). The outpatient section includes: ambulatory clinics for transplanted patients, general hematology and hemophilic patients. On top, it contains a clinical trial section within the structure of the hospital Clinical and Scientific Research Department. It is EBMT accredited transplant center and CAR-T cell-approved center by Novartis. The clinical trial section runs about 40 trials with more than 100 patients mainly for malignant indications such as acute myeloid leukemia, lymphomas and multiple myeloma.



O https://gumed.edu.pl/

# Yasemin Yuyucu Karabulut, **Mersin University**

#### **ABOUT**

As the leader of the team, I am a pathologist with experience in all types of cancer, dermatitis and medical renal biopsies. In our laboratory, we have a rich pathology archive containing cancer tissues belonging to different organs. In addition to expertise and experience, we can support any kind of material for your projects.

Mersin University Advanced Technology Education, Research and Application Center provides multi-disciplinary research, R&D, training and test / analysis services for regional, national and international development with its laboratories including advanced analysis devices.

#### **OPPORTUNITIES**

# ◆ Project Cooperation

Development of TAM Targeted aTIM3-siRNA or CpG-ODN Loaded Nanoparticles and Combination Therapy with PD-1 Immunotherapy against Renal Cell Carcinoma

The main aim of the proposal is the formulation of mannose-targeted hybrid nanoparticles loaded separately with aTIM3-siRNA or CpG-ODN, characterization based on physicochemistry features, and investigation their immunotherapy effect in vitro and in vivo. Mannose targeting ligands will mediate selective uptake by M2 type macrophages where located in the TME via receptor-mediated endocytosis followed by cytoplasmic release of the loaded different cargos, which will reeducate the TAMs and enhance the anti-tumor activity with immune modulation in the TME.

#### **Type**



# Izabela Zakowska, Center for Family Medicine and Local Communities, Medical University of Lodz



#### **ABOUT**

Centre conducts the following activities:

- 1) BIG DATA we have expert knowledge and 5 years' experience in BIG DATA Statistical Data Analysis, Data science, statistical methods, and Data Quality using patients' BIG DATA, and ML and AI algorithms. We successfully published several research papers in highly rated medical journals in cooperation with several partners from well recognized European universities.
- 2) Centre is actively involved in research, vocational training, postgraduate teaching, teaching teachers.
- 3) Participated in EU projects on infections, antibiotic use and antimicrobial resistance, patient safety, COPD.
- 4) Coordinates a research network of about 50 general practitioners.
- 5) Researchers at the Center have experience in controlled trials, qualitative and observational studies.



#### **OPPORTUNITIES**

# **♦Project Cooperation**

Big Data, Statistical Analysis, Artificial Inteligence (AI), Machine Learning (ML) in the service of medicine

BIG DATA of patients - we have expert knowledge and 5 years' experience in BIG DATA Statistical Data Analysis, Data science, statistical methods, and Data Quality using patients' BIG DATA, and ML and AI algorithms. We successfully published several research papers in highly rated medical journals in cooperation with several partners from well recognized European universities.

Latest BIG DATA publication: (2022) Community determinants of COPD exacerbations in elderly patients in Lodz province, Poland: a retrospective observational Big Data cohort study: <a href="https://bmjopen.bmj.com/content/12/10/e060247">https://bmjopen.bmj.com/content/12/10/e060247</a>

KEYWORDS: BIG DATA, family medicine, research, education, Primary Health Care Center, artificial intelligence (AI), machine learning (ML), BIG DATA, statistical analysis

COMPLETED PROJECTS: AIDA, TICD, ALIC4E, LINNEAUS EuroPC, Discovering knowledge from data on patients 65+ with exacerbations of chronic obstructive pulmonary disease (COPD) in the Lodz region.

Center is open to new partnerships. Center is actively involved in international and national projects. Potential partners are encouraged to contact us directly to explore the available options.

# **Type**



# Emel Çalışkan, Abdi İbrahim Pharmaceuticals

#### **ABOUT**

Abdi İbrahim develops drugs (90% chemical product (drug molecule), 10% food supplement) with added value in Turkey's first accredited pharmaceutical R&D Center.

The main functional areas of Abdi İbrahim R&D activities are as follows:

- ☐ Pharmaceutical Development
- Analytical Development
- □ Pre-formulation Studies
- ☐ Clinical Studies (mostly bioequivalence studies)
- ☐ Intellectual property work
- ☐ Development and License file writing
- ☐ Project Management & Collaboration management

Product developed countries/regions: Turkey, Europe, Canada, Brazil, Africa, Asia and Australia, USA



https://www.abdiibrahim.com.tr/

#### **OPPORTUNITIES**

# **♦Project Cooperation**

#### Seeking cancer and health research partners or coordinator for consortium

As Abdi Arge, our project continues with TÜBİTAK and the Ministry of Industry and Technology with the national investment fund program on biotechnology small molecules. Our collaborations with the University of Toronto and different CRO are ongoing.

The reason we want to participate in this program is to take part in calls for cancer mission and personalized medicines.

# **Type**



#### **ABOUT**

Our main goal is to create a comprehensive digital health ecosystem so that everyone can access healthcare services more efficiently and benefit equally. To make this vision real, TIGA has been developing products and solutions in the health IT sector, especially in the fields of drug traceability, healthcare interoperability, patient engagement, pharma management, population health management, and personalized healthcare.

TIGA has a wide range of product scales for ensuring patient safety, empowering healthcare authorities, and providing healthcare interoperability. Almost all of these products have been used in various national and international scale projects such as the Turkish National Healthcare System, the Qatar Health Information Exchange Hub, the Central E-Prescription System of Turkey, the Central E-Prescription System of Qatar, Turkish Pharmaceutical Track & Trace System, Saudi Drug Track and Trace System, Qatar Pharmaceutical Track & Trace System, and many more.

TIGA unites healthcare services with information technologies to empower patients. As the first company in the world to implement the end-to-end pharmaceutical track & trace system in 2011, and put into use the patient portal application which gives patients the control and management opportunity of health records in 2015, TIGA reached a significant milestone and achieved a crucial success.



https://www.tigahealth.com/

# Michał Żmijewski, **Medical University of Gdansk**

#### **ABOUT**

Medical University of Gdańsk is the leading medical university in Poland. Our institution is involved in teaching, providing healthcare to patients and in conducting research focused both on basic and applied studies.

My major point of interest is the skin endocrine system, with a stress on the role of vitamin D and its derivatives in prevention and treatment of various diseases, **including cancer.** From one side, I am involved in several studies investigating the effects of supplementation with vitamin D and its serum levels on occurrence and progression of multiple diseases. On the other hand, for many years I am studying vitamin D derivatives as potential anticancer agents in a monotherapy or in a combine therapy with classic and novel drugs. I am also interested in modulatory effects of vitamin D on anticancer immune responses and cancer microenvironment.



Q https://gumed.edu.pl/





# Neringa Šeperienė Albametrics

#### **ABOUT**

We develop hardware medical devices for cancer treatment quality control and patients health monitoring at home.

Albametrics is the SME having BrachyDOSE startup which is developing the technology to prevent most common cancer treatment errors in radiotherapy procedures. In our company we have hardware engineering and prototyping teams. We also hold experience of Horizon 2020 and EIT Health projects participation and consortium leading. We are wiling to join the consortium and bring the engineering, prototyping, 3D printing, project management skills.

As well we are seeking to form the consortium for errors prevention system in radiotherapy, BrachyDOSE, further development. At the moment we have prototype, pre-clinical testing partners in Lithuania and Estonia. Looking for software development, data transfer, health care systems specialist as well as clinical study and clinical trial partners.

#### **OPPORTUNITIES**

#### **♦Project Cooperation**

#### BrachyDOSE- cancer treatment quality control tool for radiotherapy procedures

We are developing system to prevent cancer treatment errors in radiotherapy procedures for prostate, cervical, breast and other localised cancer cases. We aim to recuse amount radiation treatment errors, save doctors time and expanses for healthcare systems. BrachyDOSE consists of hardware and software. The hardware are sectors to measure accurate radiation dose applied to patient at selected point and organ, and scanner to retrieve the data from sensor. Sensor is single used. It measures in-vivo during brachytherapy procedures. Software presents the measured dose values and compares it with planned treatment. Also gives the recommendations to doctor, shows possible errors and injuries. The system is under development now. We are looking for partners to do clinical testing in EU and bring solution to the market. Now we have a prototype and pre-clinical testing data. Also, we are willing to participate in projects regarding cancer treatment, patient data, decision support, dosimetry, radiotherapy and other.

# **Type**

