

Diabetes-related foot ulcer prevention:
Educational intervention to develop footwear fit self-
assessment skills

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FOOT ULCERS: A GLOBAL PROBLEM

- 589 million adults estimated to be living with diabetes globally [1]

[1] IDF Diabetes Atlas 11th Edition (2025) <https://diabetesatlas.org/>

- 19-34% of people with diabetes will have a foot ulcer within their lifetime [2]

[2] Armstrong DG et al., Diabetic foot ulcers and their recurrence. *New Eng. J. Med.* 2017; 376:2367-2375. DOI: 10.1056/NEJMra16154

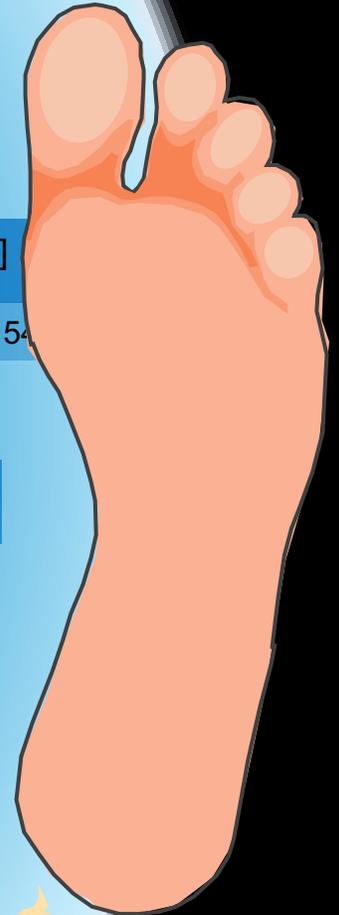
- A history of ulceration doubles the risk of lower extremity amputation [3]

[3] Lin C et al., Risk Factors for Lower Extremity Amputation in Patients With Diabetic Foot Ulcers: A Meta-Analysis, 2020; *PLoS One* 15(9):e0239236. <https://doi.org/10.1371/journal.pone.0239236>.

- In those who ulcerate, 5-year mortality is around 30%–50% [4-6]

[4] Armstrong DG et al., Five Year Mortality and Direct Costs of Care for People With Diabetic Foot Complications Are Comparable to Cancer 2020; *JFAR* 13(1):16. <https://doi.org/10.1186/s13047-020-00383-2>.

[5] Chen L et al., <https://doi.org/10.1111/dom.14840>; [6] Jupiter DC et al., <https://doi.org/10.1111/iwj.12404>





- People with DFU are five times more likely to be wearing incorrectly fitting footwear

(OR 5.1 95%CI: 1.2–21.9, $p = 0.02$)

($n = 410$, both with or without diabetes)

Nixon BP et al., Do US veterans wear appropriately size shoes? JAPMA. 2006; 96(4):290-292. doi:10.7547/0960290

- Wearing incorrectly-sized footwear increases foot ulcer risk by up to ten times

(OR 1.7, $p=0.001$ to OR 10.4, $p<0.001$) (based on 4 studies, GRADE: Low to Moderate)

Jones P et al., Science or tradition? Strength of evidence for footwear fit guidelines from peer-reviewed studies... [forthcoming 2026]

Jones P, Armstrong DG et al., Footwear fit as a causal factor in diabetes-related foot ulceration: A systematic review. Diabetic Medicine 2024; 41(10):e15407. <https://doi.org/10.1111/dme.15407>

Changing high streets, changing online shopping habits...

 gondola

magazine

**L'enseigne de chaussures Sacha
ferme de nombreux magasins
physiques**



LesEchos

**Les magasins de chaussures San
Marina tirent le rideau**

LE PROGRÈS

Rhône

**P « C'est dur pour tout le monde, mais... » : les
magasins de chaussures entre fermetures et
résistance**

50 magasins de chaussures ont disparu en cinq ans dans le Rhône selon l'Insee. Alors qu'une histoire s'achève sur la région, avec la liquidation de Clergerie qui se joue à Romans-sur-Isère, les regards se tournent vers ce secteur qui souffre. Mais résiste, aussi, parmi les indépendants.

Can we teach footwear fit self-assessment skills to people with diabetes?

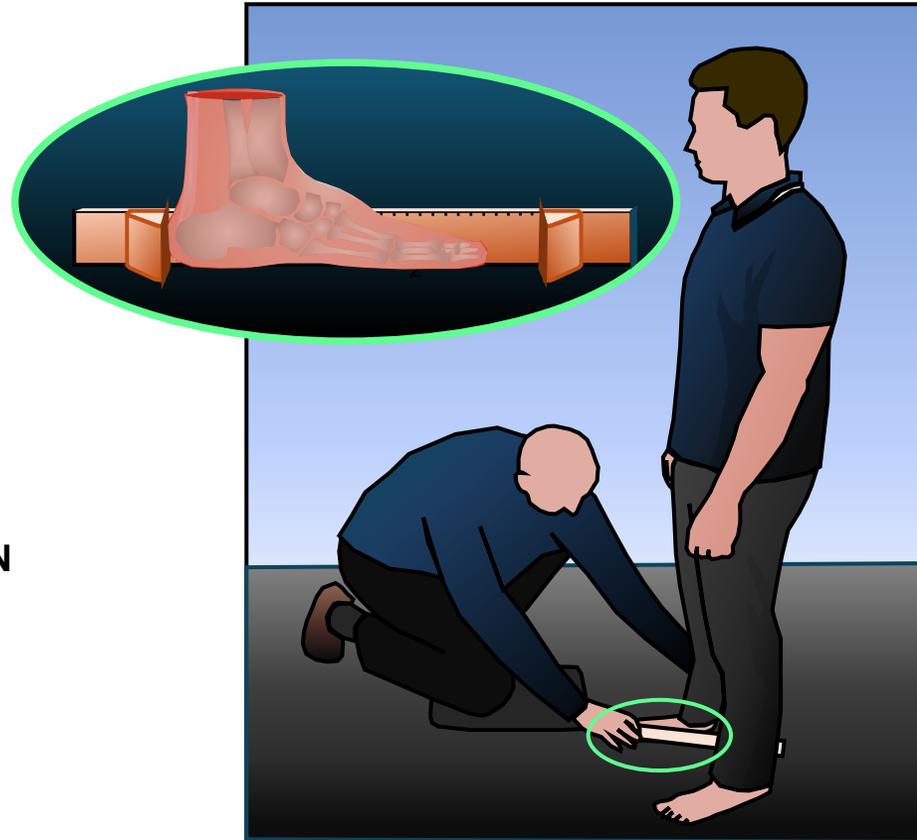
**WE ALREADY PROVIDE
EDUCATION ON...**



**DAILY FOOT
CHECKS**

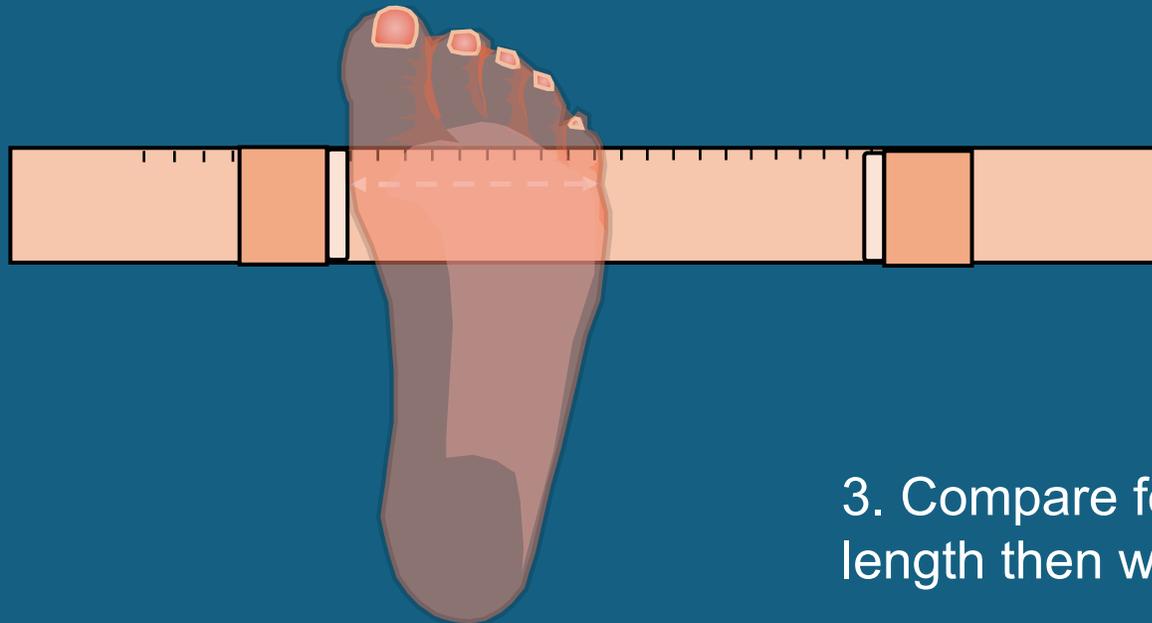
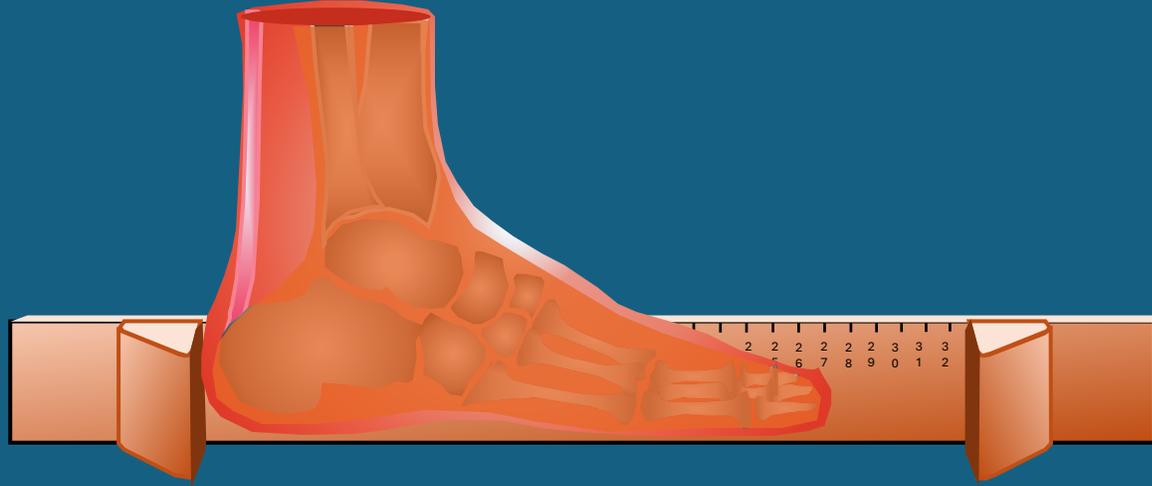


**FOOT
MOISTURISATION**

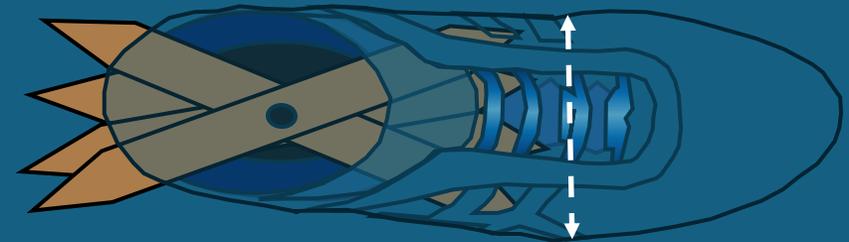
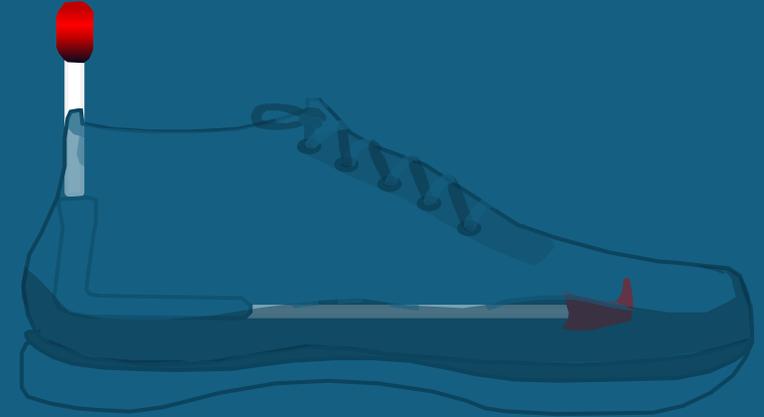


FOOTWEAR BUDDY HELPING TO MEASURE THE FEET OF A PERSON WITH DIABETES

1. Measure the foot



2. Measure the footwear



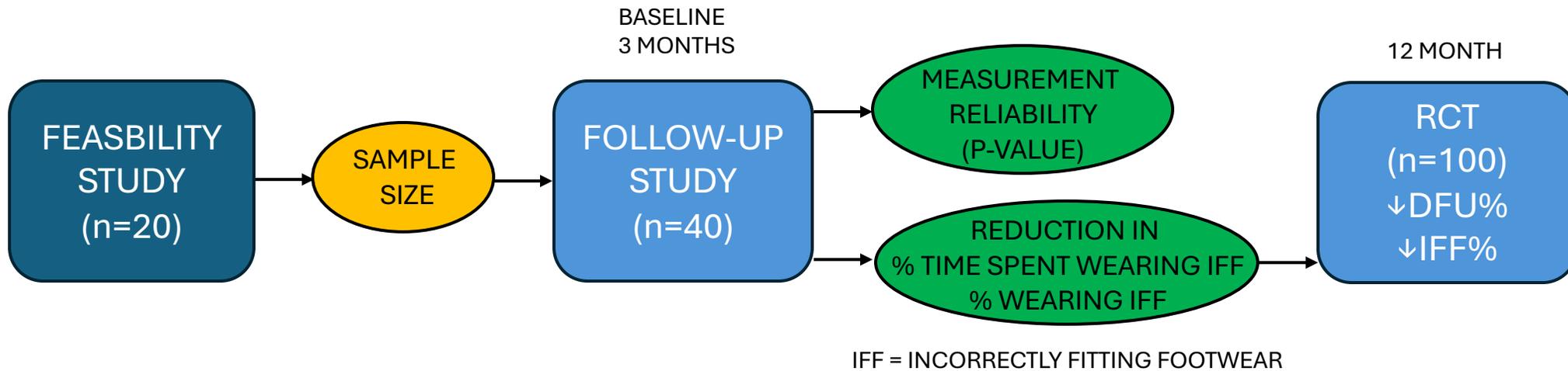
3. Compare foot and footwear length then width

Footwear fit self-assessment study results (n=20)

- Mean absolute difference (MAD) between study participants' and researchers' foot length and width measurements: 3–5 mm after average 6.5 ± 1.6 minutes of training.
- Repeated measurement Intraclass Correlation Coefficient (ICC) ranged from moderate to excellent (0.71–1.00) with excellent ease of use (7.8/10) for foot length/width and footwear length measurements
- However, footwear width MAD was much larger (9-11 mm, 0.96 ICC), based on just 11.5 ± 11.6 min of training indicating longer period of training necessary

Jones P et al., Effectiveness of diabetes footwear fit assessment by people with diabetes and their family or partners: A reliability study. Diabetic Medicine 2025; 42(8):e70065.

<https://doi.org/10.1111/dme.70065>



Next step: Cohort study n=40

20 people with diabetes +

20 partners/family members with/without diabetes



Chair Management in Innovative Health – EDHEC

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TOMORROW**

Ranked programmes among the best in the world

TOP 10

Business School in Europe

Financial Times, 2025

4th

Master in Management worldwide

Financial Times 2024

6th

Master in Finance

Worldwide
Financial Times, 2024

4th

GMBA on ESG criteria

Worldwide
Financial Times, 2024

2nd

BBA in France

Challenges 2026

Management in Innovative Health Chair (MIH)



The Management in Innovative Health Chair (MIH) is a multidisciplinary research and teaching chair hosted by EDHEC, dedicated to understanding and accelerating innovation in healthcare systems.

The Chair focuses on:

- Digital health and AI-driven transformation of care pathways
- Patient empowerment, behavioral change, and trust in innovation
- Value-based healthcare, outcomes, and real-world evidence
- Innovation ecosystems, public-private partnerships, regulation, ethics and AI compliance

The **MIH Chair operates at the intersection** of management sciences, health economics, marketing, data science, and public policy, with strong engagement from hospitals, pharma, medtech, startups, and regulators.

The **MIH Chair is particularly experienced in bridging technical innovation with real-world adoption**, a critical success factor in many EU-funded projects. **Contribution to 3 Consortia for European Grant Applications**

Expertise Relevant for European Projects

Behavioral & Societal Dimensions

- Design and evaluation of behavioral interventions (prevention, adherence, digital usage)
- Analysis of trust, acceptance, risk perception, and ethical concerns related to AI and digital health
- Patient, citizen, and professional engagement

Innovation, Adoption & Impact

- Market access, diffusion of innovation, and scale-up strategies
- Business models for digital health, AI, and medical technologies,
- Socio-economic impact assessment and exploitation pathways

Data, AI & Governance

- Human-centric and trustworthy AI adoption frameworks
- Use of real-world data (RWD) and real-world evidence (RWE) from a managerial and behavioral perspective
- Governance, transparency, and alignment with EU regulations (AI Act, data governance, ethics)

Communication, Dissemination

- Design of high-impact dissemination and communication strategies
- Stakeholder mapping and multi-actor engagement
- Development of training, capacity-building, and upskilling programs (professionals, managers, students)

What EDHEC Brings to a Consortium

EDHEC is a strong complementary partner, especially when projects require:

- Non-clinical but essential expertise on adoption, behavior, trust, and value
- Translation of technological innovation into societal, organizational, and economic impact
- Structuring exploitation, dissemination, and sustainability beyond the project lifecycle

Chair is committed **to supporting impact-driven European research**, contributing robust scientific expertise while ensuring that innovation effectively reaches patients, professionals, and society.



What EDHEC Brings to a Consortium



Loick Menvielle – PhD
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Vision and Values within the Chair:

"While ethical concerns arise, it is critical to center the conversation on how these technologies are adopted and made use of by primary stakeholders, particularly patients, whose experiences and outcomes stand to be most impacted."

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UNIVERSITY OF
BIRMINGHAM



Cluster 1 Health



Hydrogel-based diagnostic tool

Ruchi Gupta

University of Birmingham

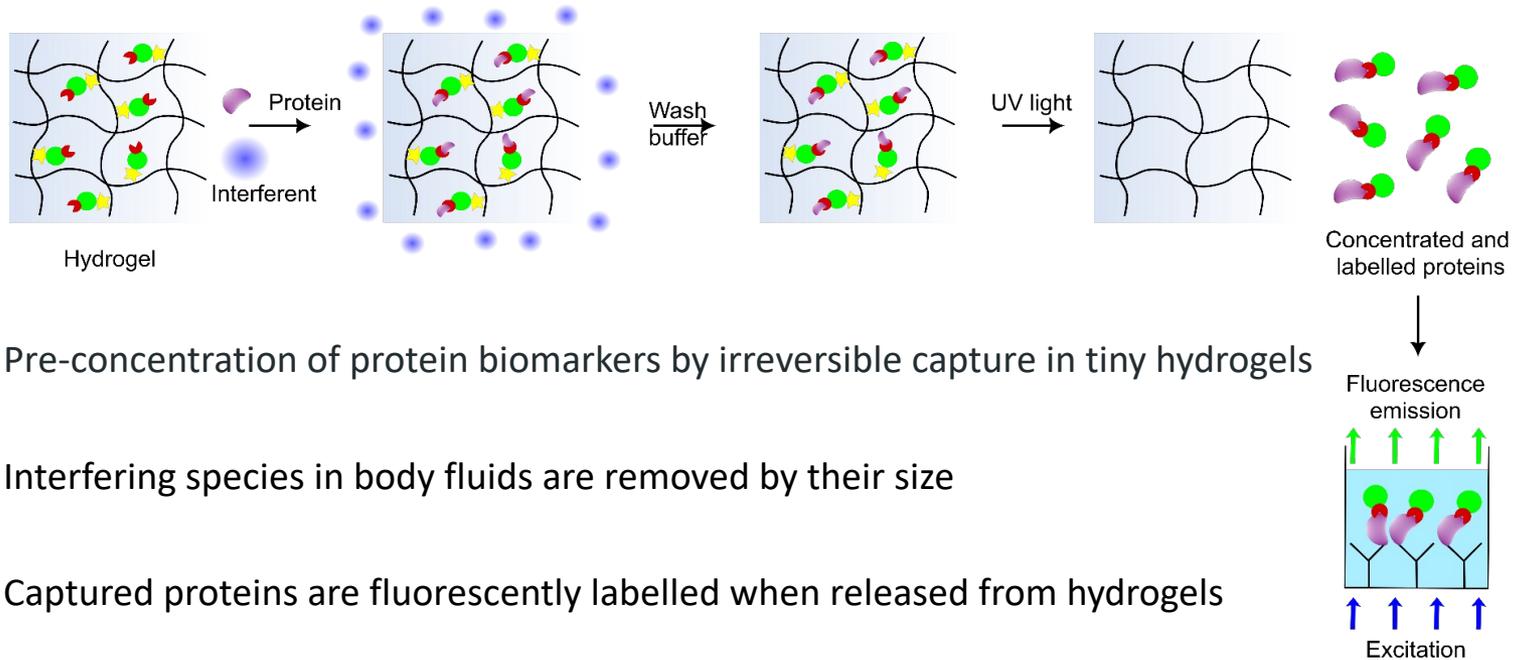
United Kingdom

r.gupta.3@bham.ac.uk

<https://research.birmingham.ac.uk/en/persons/ruchi-gupta/>

Hydrogel-based diagnostic tool

- Measure low concentrations of protein biomarkers in body fluids (blood, saliva, urine, etc) easily and rapidly in primary care settings



- Pre-concentration of protein biomarkers by irreversible capture in tiny hydrogels
- Interfering species in body fluids are removed by their size
- Captured proteins are fluorescently labelled when released from hydrogels
- Released proteins bind to antibody array and quantified by fluorescence
- References:
 - [Sensors and Actuators B, 2025, 444, 138404](#)
 - [Analyst, 2023, 148, 4127](#)

Topic of interest - 1

- HORIZON-HLTH-2026-01-DISEASE-03: Advancing research on prevention, diagnosis and management of post-infection long-term conditions
- Research areas:
 - Identification of risk factors associated with the development of post-infection
 - Identify biomarkers of post-infection conditions
 - Clinically validated approaches for detection, disease progression and/or treatment optimisation
 - Development of approaches to enhance patient recovery
 - Enable post-infection management in primary care
- My expertise: Materials, methods and devices for measurement of biomarkers in body fluids
- Ongoing projects:
 - Development of hydrogel lollipops for measurement of salivary protein biomarkers, funded by Cancer Research UK
 - Sampling and detection device for early and rapid detection of avian flu, funded by Biotechnology and Biological Sciences Research Council
 - Detection tools to tackle new and emerging infectious diseases, funded by University of Birmingham



THE CLINICAL-STAGE ANTI-INFECTIVES SPECIALIST

JAN 2026



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**Business Development &
Marketing Manager**

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www.infextx.com



THE PANDEMIC THREAT

The anti-microbial resistance (AMR) pandemic

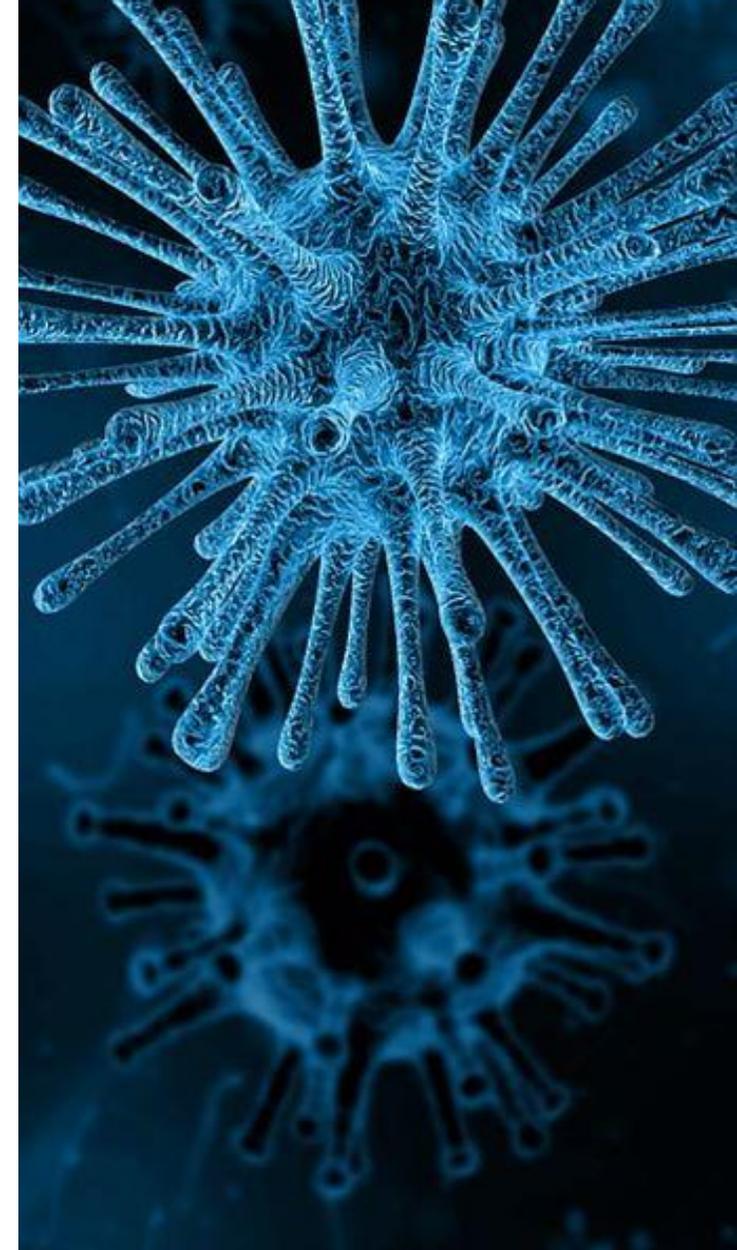
- Drug-resistant bacteria infect over 50m people worldwide killing over 700,000 people each year, including 80,000 in the USA and Europe
- This will rise to 10 million deaths by 2050, wiping \$100 trillion from global growth
- Pathogen evolution is a growing pandemic risk

Pandemic viruses

- So far, COVID-19 has infected 33m people and killed 1.0m worldwide
- The IMF estimates that the coronavirus pandemic will cost the world economy \$9 trillion by the end of 2021

Infix Therapeutics

- Acquiring, developing and licensing innovative drugs to treat critically-important infectious diseases
- Restoring the activity of failing drugs due to antimicrobial resistance





INFEX THERAPEUTICS HEADLINES



Dedicated to the development and licensing of anti-infective drugs to meet critical unmet patient needs and reduce healthcare burden



Exciting and diverse pipeline of innovative therapeutics to prevent and treat WHO critical-priority bacterial pathogens and viruses of pandemic potential



RESP-X first-in-class anti-virulence antibody with blockbuster potential in phase 2 clinical trials to treat non-CF bronchiectasis



MET-X antibiotic resistance bypass drug targeting WHO critical-priority drug-resistant infections



COV-X pan-coronavirus drug to treat MERS, SARS and all COVID-19 variants with significant non-dilutive funding



Experienced management team with a proven track record and commercial strategy





WORLD-CLASS DEVELOPMENT

In-house

One of world's largest dedicated infection drug development groups

- Anti-bacterials targeting WHO critical pathogens
- Novel anti-virals against under-explored targets

Experienced infectious disease executives and management

World class scientific advisory board

Experienced microbiology, medicinal chemistry, pre-clinical and clinical development teams – 80 % PhD level

Microbiology capacity up to 15 FTEs, medicinal chemistry capacity up to 30 FTEs

Portfolio of projects from early hits to clinical

- In-house developed programmes
- Partner with SMEs to share developmental risks and provide capacity and expertise

On-site

Located at Alderley Park, AstraZeneca's former research HQ - 1.5m sq.ft lab space

Dedicated microbiology and medicinal chemistry labs

Support from on-site pre-clinical and clinical services including modelling, analytical, toxicology, genotox, DM/PK/PD/ADME and *in vivo* testing, supply chain management, formulation, regulatory support and intellectual property

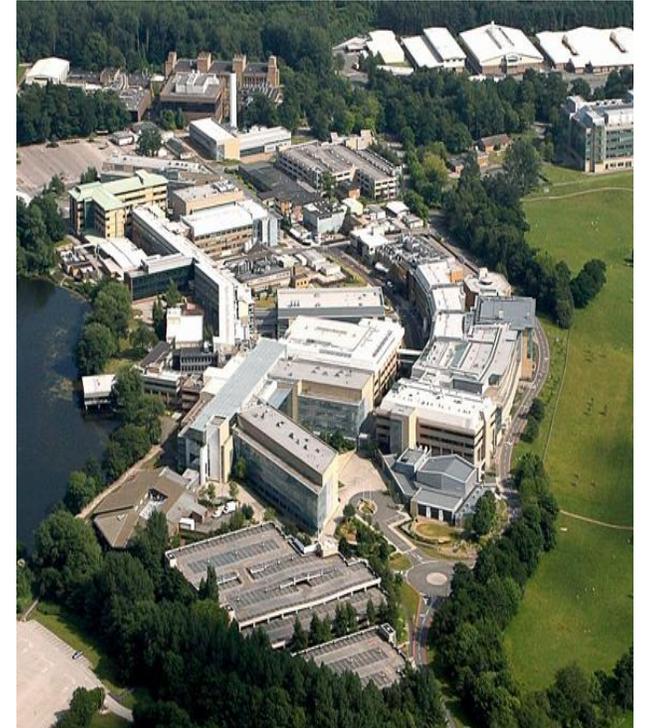
IICON

IICON Infection Innovation Consortium with Unilever, Evotec, University of Liverpool, Liverpool School of Tropical Medicine and the Liverpool Royal Hospital

World-class platforms for pre-clinical and clinical development of new therapeutics

Phase 1 clinical trial unit specialising in infection and respiratory disease

Supported by £19m of non-dilutive grant funding from the UK Government





INFECTION INNOVATION CONSORTIUM (iiCON)

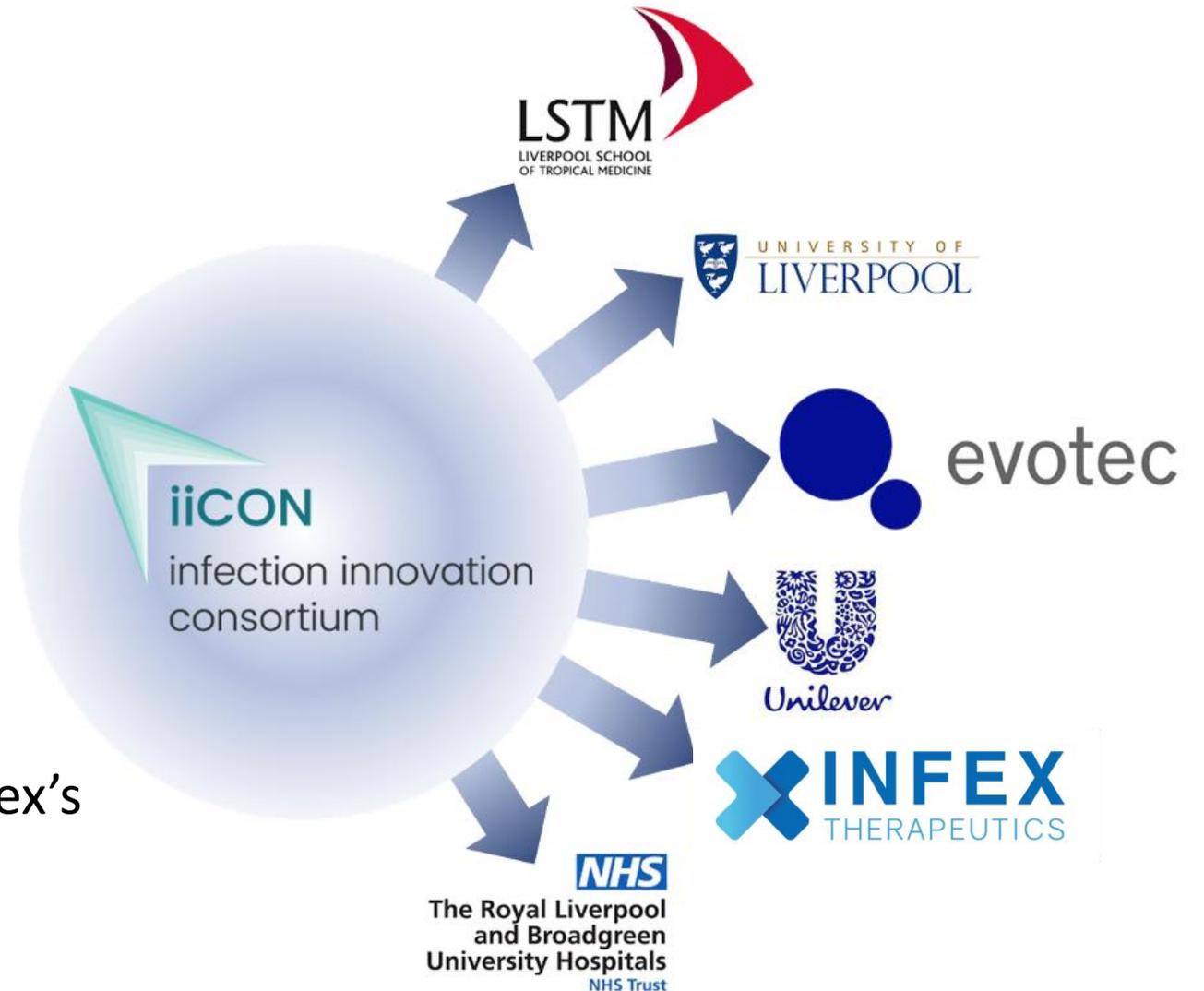


UK Research
and Innovation

£19m

Collaborators and
core partners
c. £200m

Includes £4.0m UKRI support for Infex's
RESP-X and MET-X projects





INFEX THERAPEUTICS

ROBUST PIPELINE OF DIFFERENTIATED NOVEL DRUG PROGRAMMES TARGETING MULTIPLE INDICATIONS SUPPORTED BY SIGNIFICANT NON-DILUTIVE FUNDING

Programme	Indication	Preclinical development			Clinical development		
		Hit to lead	Lead optimisation	PC safety	Phase 1	Phase 2a	Phase 2b
RESP-X	Chronic <i>Pa</i> infections in NCFB	iiCON					
MET-X	Metallo-β-lactamase superbug infections	iiCON					
COV-X	Coronavirus infections	iiCON	Innovate UK				
VAP-X	Acute <i>P. aeruginosa</i> infection	CARB-X	Initial contribution complete; option for further involved at preclinical candidate nomination				
GON-X	AMR <i>Neisseria gonorrhoea</i>	CARB-X	Initial contribution complete; option for further involved at preclinical candidate nomination				
BamA inhibitor	Multidrug-resistant infections		PACE	Pathways to Antimicrobial Clinical Efficacy	CARB-X		
Other programs	MDR infections	Other programs identified for development; pending other funding opportunities					

Partner	Potential partners
SHIONOGI	Major Pharma
MEDIVIR	VENUS® Enjoy Innovations
	GARDP Global Antibiotic Research & Development Partnership
	BARD
	advanceid
agile Coronavirus Drug Testing Initiative	PERSISTENCE.BIO
MICROBIOTIX	
MICROBIOTIX	
JUSTUS-LIEBIG-UNIVERSITAT GIESSEN	





RESP-X:

A novel Phase 2 clinical anti-virulence antibody with blockbuster potential as a long-term preventative treatment for Non-Cystic Fibrosis Bronchiectasis (NCFB) patients chronically colonised with *Pseudomonas aeruginosa* with expansion options into other chronic and acute respiratory diseases

MET-X:

A best-in-class broad spectrum metallo-beta-lactamase (MBL) inhibitor to restore the effectiveness of antibiotics in patients suffering serious drug-resistant infections

COV-X

A first-in-class oral pan-coronavirus antiviral PL_{PRO} inhibitor for acute disease, Long Covid and future pandemic preparedness



INFEX THERAPEUTICS SUMMARY

Significant market opportunity



World class capability



Robust business model



Partnerships



Track record



Significant support from stakeholders





INFEX THERAPEUTICS BOARD

Jon Moulton



Non-Executive Chairman

Seasoned institutional and personal investor in numerous biotech and pharma companies

40+ years' experience

Dr Peter Jackson



Chief Executive Officer

Experienced and respected life sciences leader

25 years in the sector

Founded seven successful biotech companies, inc. AIM listed Redx Pharma and Bivictrix Therapeutics

Expert global advisor on government AMR policies

Dawn Watson



Chief Financial Officer

Seasoned CFO, with over 30 years' experience

15 years in life sciences

8 years at Ernst & Young

Prof Colm Leonard



Chief Clinical Officer

Over 20 years experience as a practicing respiratory clinician

Fourteen years as expert clinical advisor to NICE

Clinical lead for the UK's new antibiotic reimbursement model

Chair of Infex's Clinical Development Committee

Dr Derek Lindsay



Chief Operating Officer

Over 30 years' experience in R&D

Co-founder and COO of Redx Pharma

Led operational teams developing multiple preclinical assets into clinical trials

Dr Chris Doherty



Non-Executive Director (Independent)

Experienced biotech non-exec

26 years R&D experience within big pharma, inc GSK, Roche and AstraZeneca

Graduate pharmacist with a PhD in pharmaceutical technology and an MBA





Carl Curran
Business
Development &
Marketing Manager

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Liverpool School of Tropical Medicine (LSTM)

Charles McLoughlin

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Cluster 1 Health Calls 2026-2027

Topics of Interest:

- **HORIZON-HLTH2027-01-DISEASE05: Development of novel broad spectrum small molecule antiviral therapeutics for pathogens with epidemic potential.**
- **HORIZON-HLTH2027-01-DISEASE06: Development of monoclonal antibodies to prevent and treat infections from Flaviviridae.**
- **HORIZON-HLTH2027-01-DISEASE07: Development of monoclonal antibodies to prevent and treat infections from Filo-Phenui-, Picorna- and Toga Viridae**
- **Objectives:** We are seeking partnership to **co-develop novel antiviral therapeutics** and **monoclonal antibodies** targeting **pathogens with epidemic potential**, aligned with Horizon Europe disease calls. By combining complementary expertise, the objective is to **accelerate translation** from discovery to deployment and deliver accessible global health solutions where disease burden is highest.
- **Expertise:** LSTM is a **globally recognised leader in infectious disease and global health research**, with a strong track record of translating discovery science into real-world impact. Its research portfolio directly aligns with Horizon Europe calls targeting **epidemic-prone pathogens**, including **antiviral therapeutics and monoclonal antibody** development across Flaviviridae, Filoviridae, Phenuiviridae, Picornaviridae, and Togaviridae. LSTM brings proven expertise in end-to-end translation, having supported the **development and international registration of drugs, diagnostics, vaccines, and vector control products**. The institution offers a mature translational environment, underpinned by long-standing partnerships with pharmaceutical companies, SMEs, agrochemical developers, and governmental and non-governmental agencies. LSTM also provides strong consortium leadership capacity through its **Enterprise and Innovation** function, with experience **securing significant translational funding** and coordinating large, multidisciplinary, international collaborations. Together, these strengths position LSTM as a high-value partner to drive scientific excellence, translational readiness, and real-world impact across global health-focused Horizon Europe consortia.
- **Existing Partnerships:** LSTM works through a broad and established network of regional, national, and international partners, including universities, research institutions, governments, policy makers, non-governmental organisations, civic bodies, and global life sciences and industrial partners. This cross-sector approach enables LSTM to translate research into real-world health impact.