# UKRI AI CENTRE FOR DOCTORAL TRAINING IN BIOMEDICAL INNOVATION (AI4BI)

## Transforming healthcare through responsible AI innovation

THE UNIVERSITY of EDINBURGH

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UK Research and Innovation

AI4Bi UKRI AI Centre for Doctoral Training in Biomedical Innovation

# AI Centre for Doctoral Training in Biomedical Innovation (AI4BI)

## Transforming healthcare through responsible AI innovation

AI has immense potential to tackle major challenges faced in healthcare and improve patient outcomes.

The coming decade will determine whether biomedical AI delivers on its promise, for patients and healthcare systems world-wide.

The greatest challenge to realising this potential is translation of AI research into real-world use.

Our AI Centre for Doctoral Training in Biomedical Innovation (AI4BI CDT) is addressing this challenge by training interdisciplinary researchers to have the technical skills, biomedical domain knowledge and experience developing and implementing innovative AI approaches in real-world applications.

**Our graduates are becoming future leaders who can bridge research, regulation, and industry advancements shaping how AI transforms healthcare delivery and innovation.**

**Through co-created research and collaboration, your organisation can work directly with doctoral researchers trained across AI, biomedical science, and ethics, who are equipped to deploy AI responsibly in practice.**

## Why partner with the AI4BI CDT

Becoming an industry partner with the AI4BI CDT offers a low-risk, high-reward pathway to explore uncertain but potentially transformative AI innovations.

Every partnership is underpinned by clear agreements covering confidentiality, data sharing, and intellectual property, ensuring a secure, trusted framework for collaboration.

As a partner, you will be able to:

- **Turn scientific discovery into future competitive advantage** through cutting-edge research at a world-leading university
- **Address real healthcare challenges** through collaborative, industry-relevant PhD research
- **Co-develop AI solutions** that advance diagnostics, drug discovery and clinical decision making
- **Grow the next generation of Biomedical AI leaders** with world-class interdisciplinary training

## Delivering impact with our partners

Our CDT builds on the success of our Biomedical AI predecessor, with sustained UKRI investment exceeding £20million through to 2032.

### Scale and reach

- 120+ doctoral researchers trained
- 150+ academic supervisors across informatics, medicine and engineering
- 30+ industry and NHS collaborations already in place

### Research excellence

- 100+ peer-reviewed publications, including Nature and Bioinformatics outputs
- Recognised breakthroughs across diagnostics, data analytics and healthcare delivery

### Translation and collaboration

- Embedded partnerships across pharma, diagnostics, medtech, and NHS organisations
- Industry-informed projects ensuring real-world relevance and faster innovation cycles

### Innovation spanning the life sciences sector

AI4BI partners include organisations from pharma, diagnostics, medtech and public health sectors, co-developing AI tools for clinical decision support, digital pathology and early disease detection.


## How it works

Students and University supervisors co-develop research with industry partners to ensure it meets real-world needs and maximises translation into practice.

Industry partners play an active role throughout. Partners are involved from project design through to results translation, helping shape objectives, reviewing progress and identifying opportunities for real-world testing or implementation.

Each project includes a three month placement that may be taken with the partner organisation, focused on a topic of intrest to the partner while offering students valuable real-world experience.

## Partner pathways and commitment

Whether you want to test an idea, pilot a project, or build a long-term R&D capability, our partnership tiers offer a flexible path to match your commitment and ambition:

| Tier | Investment | Benefits |
|---|---|---|
| **Silver** | Benefit-in-kind contribution eg data, mentoring or short placement | Co-create academic research; access talent pipeline; visibility at CDT events |
| **Gold** | 50% funded studentship ~£65k over 4 years | Prioritised project recruitment; enhanced collaboration; IP negotiation options |
| **Platinum** | Fully funded studentship ~£130k over 4 years | Full co-creation and IP rights on agreed terms; maximum brand and recruitment exposure |

Partnerships can start small and scale over time, from initial project discussions to multi-year collaborations.

There are several ways to work with the AI4BI CDT:

- **Propose** a project aligned with your R&D priorities
- **Co-fund** a studentship to explore new AI applications
- **Host** a placement to embed cutting-edge expertise in your team
- **Join** our cross-sector forum to shape future research themes

We'll help you identify the right engagement model to match your needs, from exploratory collaboration to long-term strategic partnership.

## Why the University of Edinburgh?

The University of Edinburgh has shaped medicine and science and now cutting-edge AI, for over 300 years. Over its history, more than 20 Nobel Prize laureates have been affiliated with the University as alumni, faculty, or researchers, including 2024 Physics laureate Geoffrey Hinton, recognised for pioneering work in AI. Edinburgh's tradition of discovery continues to define how healthcare evolves today.

That heritage is matched by world-leading modern capability. The University ranks among the top global institutions for medical and informatics research, consistently leading the UK in post-graduate training and research excellence. Our CDT is based in the School of informatics and spans the breadth of the College of Medicine and Vetenary Medicine and the College of Science and Engineering, combining deep biomedical, clinical and computational expertise under one integrated program.

Our close collaborations with NHS Scotland, Public Health Scotland, and the Scottish Government enable projects to move rapidly from concept to real-world application.

Partners therefore gain access not only to historic prestige, but to modern AI and health-data capabilities, a proven track record in translational research, and a trusted route for bringing innovation into real-world healthcare settings.

**Let's shape the future of Biomedical AI together**

Join a growing network of partners shaping how AI transforms healthcare from discovery to real-world impact.

**EIL.AC/AI4BIOMED**

**Professor Ian Simpson,**
Director, UKRI AI CDT in Biomedical Innovation

Professor of Biomedical Informatics and leading figure in biomedical AI — integrating computational science and medicine to advance understanding and treatment of complex diseases.

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**Dr Vicky Jane Young,**
Business Development Executive

Healthcare and life sciences leader with nearly two decades of experience spanning the pharmaceutical industry, startups and academia — shaping the future of AI in healthcare.

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**We are Edinburgh Innovations, the University of Edinburgh's commercialisation service. We bring University of Edinburgh research to industry, working to identify ideas with value, and facilitating the process of bringing them to life in real-world applications.**

**WE MAKE IDEAS WORK FOR A BETTER WORLD.**

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