### Innovation and Collaboration Funding Information webinar

Monday 7<sup>th</sup> July 2025



UK Human Functional Genomics Initiative

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#### **UK Functional Genomics Initiative**



- New initiative dedicated to characterising the functional consequences of disease-associated genetic variation.
- Launched September 2024 for an initial 4-year period.
- £28.5m investment from the MRC and BBSRC, alongside support from Astra Zeneca for the Functional Genomics Screening Lab.
- An open, collaborative network spanning academia, industry and other nonacademic partners.
- Aims to accelerate the translation of functional genomic research into tangible benefits for health and well-being.
- Plans for expansion (new clusters, disease areas, training).

#### **UK Functional Genomics Initiative - structure**



**Coordination hub** and **data coordination centre** based at the University of Exeter (Jonathan Mill).

**Molecular mechanisms cluster** led by Edinburgh (Kenny Baillie) will use human tissue, genetics and artificial intelligence to explain the molecular mechanisms of a broad range of diseases.

**Functional genomics of post-translationally modified proteins cluster** led by Imperial (Matt Child) will define the biological consequence of genetic variants associated with rare diseases which alter amino acids and protein function.

**Musculoskeletal disease cluster** led by Oxford (Dom Furniss) aims to use functional genomics to generate novel therapeutic targets.

**Human brain development cluster** led by Kings College London (Oscar Marin & Deepak Srivastava) will use brain organoid models to explore genetic variants associated with neurodevelopmental disorders.

**Functional genomics screening lab** at the Milner Institute in Cambridge will use complex human in vitro models for arrayed CRISPR screening and high-content functional readouts to better understand model biology and enable target identification.



### **Current partners**







**Biotechnology and Biological Sciences Research Council** 

### Find out more





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E-mail: fgx@exeter.ac.uk Website: www.ukfunctionalgenomics.com

### What will the initiative do?



- Catalyse discoveries into the mechanistic underpinnings of health and disease
- Identify causal variants and modelling their impact in disease-relevant cell-types across key stages of development.
- Characterise the mechanisms by which genetic variation impacts on phenotype
  - Cell types
  - Developmental stages
  - Physiological systems
- Leverage technological advances in genomics
  - Sequencing (including developments in long-read sequencing)
  - Epigenomics
  - Transcriptional variation
  - Single cell and spatial methods
- Leverage advances in functional genomic screening
  - Disease-relevant models
  - Multimodal readouts
- Leverage the UKs world-leading genetically-informative cohorts
- Juggle expertise and capacity in data science and AI

# Innovation & collaboration funds



Research Council

- Ambition to foster collaboration and innovation across existing centres and partners, and expand the initiative to include additional members
- Our aim is to make the initiative an open community for anyone in the UK working in human functional genomics.
- Open to all UK-based scientists with an academic affiliation who have signed-up to be FGx associateresearchers
- Projects must be aligned to the goals of the initiative and be in remit of MRC
- Applicants are encouraged to highlight synergies with clusters or the data coordination centre, although this is not a pre-requisite for funding
- Technology priming projects that support the initiative, functional genomics screening lab or a specific research cluster are welcome
- Projects that offer to bring in specific knowledge or contributions to the initiative are encouraged

#### Medical Research Council Honoration and Collaboration Funding



- Open to academics in the UK we would particularly welcome applications from early career researchers
- The projects should build and strengthen collaborations across the Initiative / UK through feasibility, pilot or initial studies to provide preliminary experiments to explore ideas and generate initial data which could support the development of competitive collaborative grant proposals for longer term projects.
- Areas of potential interest include (but are not limited to): generation of novel functional genomic annotations in disease-relevant cell types, development of novel methods, functional perturbation of disease systems, development of models for functional genomics, data science and computational approaches for functional genomics
- Opportunity to develop emerging opportunities
- Standard award leve = £15,000 to £50,000 (up to £100,000 by exception)
- Funded projects will be expected to sign-up to data-sharing standards established by the Data Coordination Centre (including open sharing of protocols, experimental meta-data, raw data and code) and awardees will be expected to present their results at the FGx Scientific Symposium.



Research Council

# **Industry Partnership Awards**



- Awarded to the academic institution for the development of important links between business and the initiative to extend knowledge exchange with business and promoting translation of research.
- Expectation that matched funding (cash/in-kind) will be provided by industry collaborators.
- The projects should build and strengthen collaborations between the Initiative and businesses through feasibility, pilot or initial studies to provide preliminary experiments to explore ideas and generate initial data which could support the development of competitive collaborative grant proposals for longer term projects.
- Awards value from £15,000 to £100,000 with expectation of equal (or greater) match
- Applicants expected to adhere to the standard MRC Industry Collaboration Framework
- Awardees will be expected to sign-up to FGx data-sharing standards and present work at the annual scientific meeting.

# **Conditions of funding**



This grant may be used to support the following:

- Direct Project Costs: 100% directly incurred and directly allocated project costs can be claimed, including staff time, travel and subsistence on the individual feasibility or pilot projects.
- Costs of networking activities, including travel and subsistence.

#### This grant may not be used to support:

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- Duplication of other sources of funding that would be more appropriate for the activity to be funded.
- Indirect or estates costs at the research organisation.
- Any costs relating to Intellectual Property protection including but not limited to registering, maintaining, or supporting patents or property rights.
- Equipment with a value of £10,000 or more.
- Undergraduate or postgraduate activities or training, or core PhD training including tuition or bench fees.
- Contributions to existing knowledge transfer partnerships.



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# **Application process**



Applications will be collected through a form hosted on the FGx initiative website and emailed to <u>fgxfunding@exeter.ac.uk</u> There will be an option to attach additional information (e.g. images relating to scientific proposal, budget details, letters of support/collaboration) in an appropriate file format. Applications can be submitted from Wednesday 9<sup>th</sup> July until midnight on Monday 29<sup>th</sup> September 2025.

#### **Review Process**

The <u>UKRI principles of assessment and decision making</u> will be used when reviewing and later deciding on the funding outcomes for each application. The key principles are: expert assessment, transparency, impartiality, appropriateness, confidentiality, integrity and ethics, equality, diversity and inclusion, separation of duties.





**Outcome of Review Meeting** 

All applications will be informed of the panel decision. Applicants can ask for any comments or feedback recorded as part of the review process. The agenda and comments section of the review forms will be retained under current MRC guidelines for documentation retention. Successful projects will be expected to complete a project agreement and set a start date within three months of the award.

#### **Project Duration**

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Projects will generally be 1 year.

During the project successful applicants will be expected to provide a short quarterly update on progress. Submission of this report will be required for funding for each quarter to be invoiced. Any unspent funds at the end of the project will be returned to the initiative.

At the end of the project a final project report is required, and awardees will be asked to present an overview of their project at the next FGx Scientific Symposium.



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9<sup>th</sup> July 2025 Grant

Grant call opens

29<sup>th</sup> September 2025 Application deadline (midnight)

Mid October 2025 Review Panel meets

1<sup>st</sup> November 2025 Funding decisions announced

1<sup>st</sup> January 2026 Earliest project start date

# Other ways to get involved

- Sign-up to become an associate member of the initiative
- Seminars, training events, annual symposium
- Collaborate with the clusters and the FGSL
- Collaborate with the Functional Genomics Data Coordination Centre; data standards and curation, workflows, training, hackathons
- Join the ECR network
- Talk to us about new ideas for clusters





Register for our mailing list:



Contact us by e-mail: <u>fgx@exeter.ac.uk</u>







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