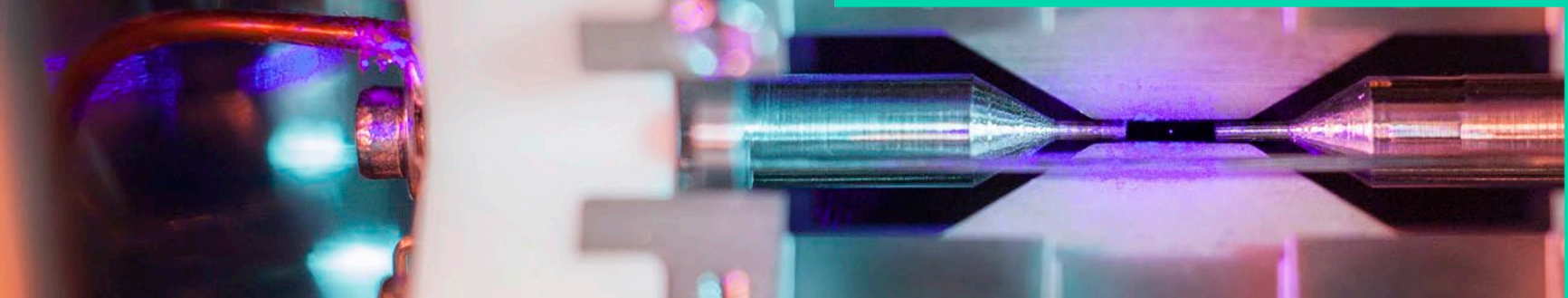
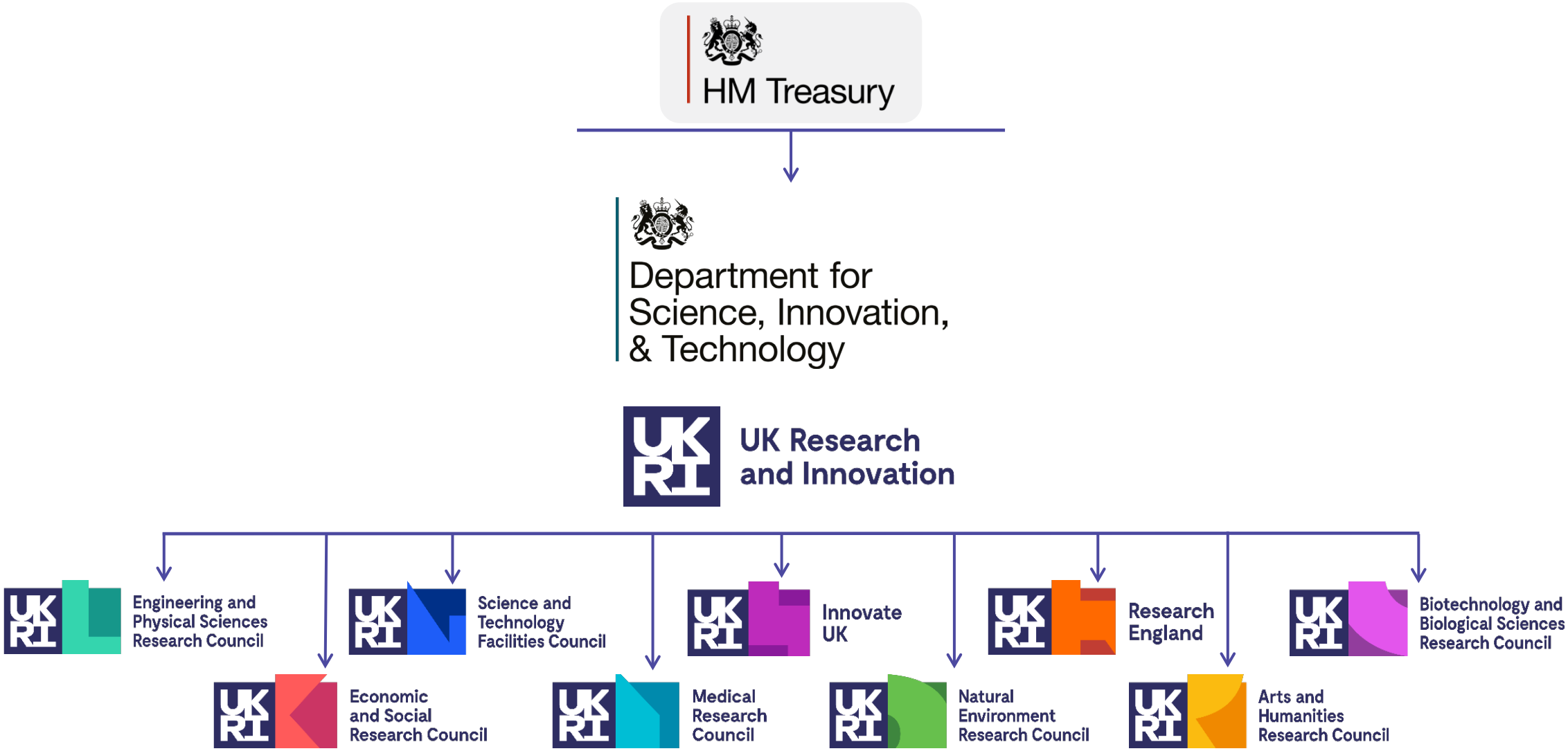
UKRI Engineering and Physical Sciences Research Council

Welcome



UK Research and Innovation



ICT Team Members

Structure of the Team as of January 2024

Glenn Goodall
Head of Theme

Laura McDonnell
Senior PM

Sonia Raikova
Senior PM

Shiny Mathew*
Senior PM

Joanna Watt*
Senior PM

Ben Scott
PM (Communications)

Vacancy*
PM (Photonics)

Maryam Crabbe-Mann
PM (Electronics & Devices)

Izzy Dorman
PM (Audio, Visual and Senses)

Vacancy*
PM (Fundamentals of Computing)

Daniela Tresoldi
PM (Human Interactivity)

Grace Jefferies
DSM

Ann Stevens
DST

Vacancy*
DST

Kieran Moulton
PSM

* = Changes since Jan 2024

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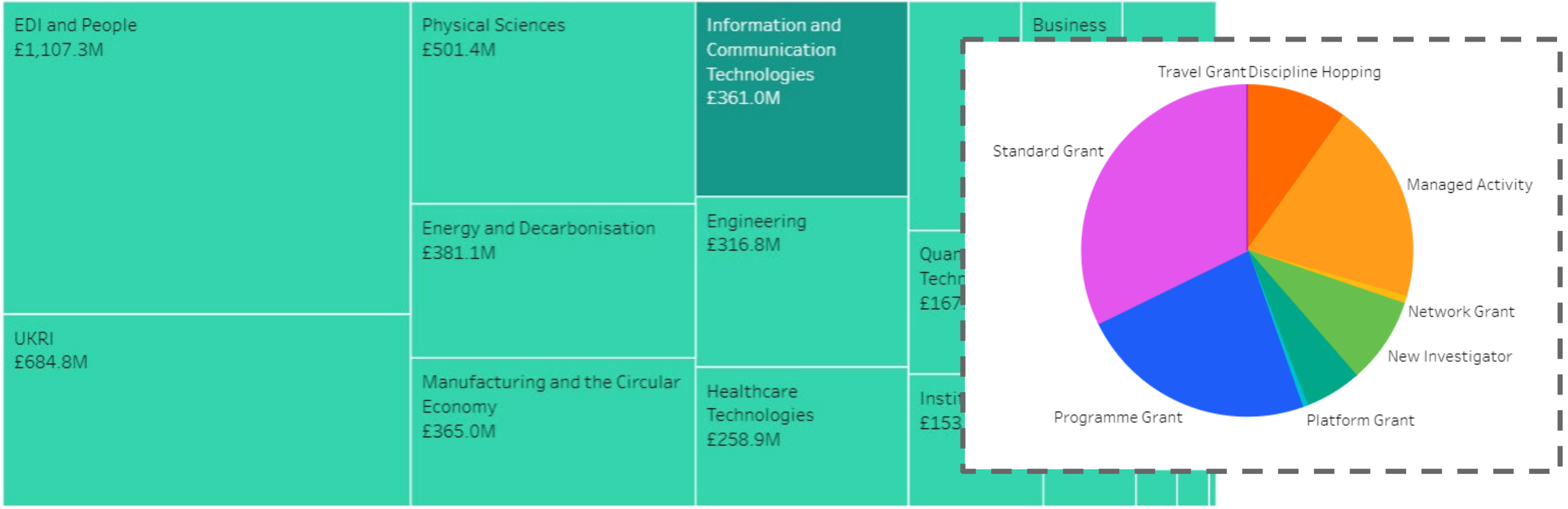
AI & Robotics Team:

Brian Jones
PM (AI)

Mark Raynor
PM (Bioinformatics)

ICT Theme at EPSRC



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ICT is the fourth largest research portfolio in EPSRC, with…

- **£361 million** in committed funds
- **493** live grants

EPSRC - We invest in:

People	Places	Ideas	Innovation	Impacts
Investing in people, skills and teams Embedding equality, diversity and inclusivity	Local, national and international partnerships, nurturing excellent research and strengthening clusters across UK nations and regions World-leading capital and digital infrastructure	Investing in 3 discovery research priorities: • Physical and Mathematical Sciences Powerhouse • Frontiers in Engineering and Technology • Digital Futures	Co-working with business Connecting research and innovation Accelerating translation, commercialisation and knowledge exchange	Mission-inspired research with four priorities: • Engineering Net Zero • AI, Digitalisation and Data: Driving Value and Security • Transforming Health and Healthcare • Quantum Technologies.

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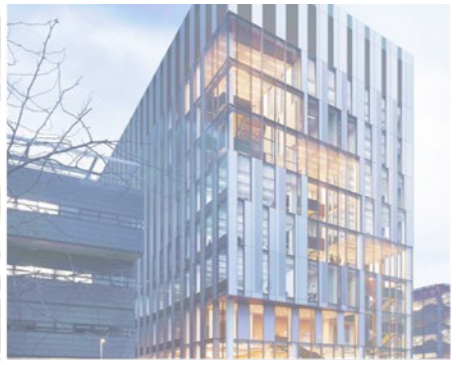
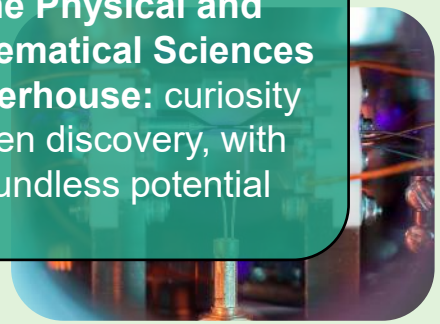


EPSRC's 8 Strategic Priorities

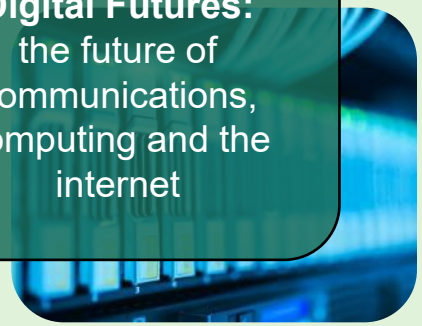
Discovery-led Research

The Physical and Mathematical Sciences Powerhouse: curiosity driven discovery, with boundless potential



Frontiers in Engineering and Technology: unleashing our productivity potential

Digital Futures: the future of communications, computing and the internet

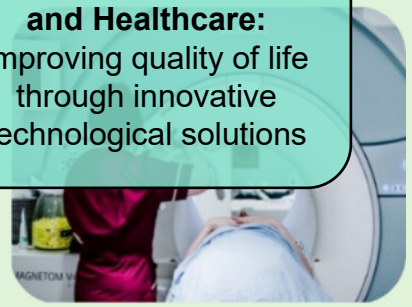


Mission-Inspired Research

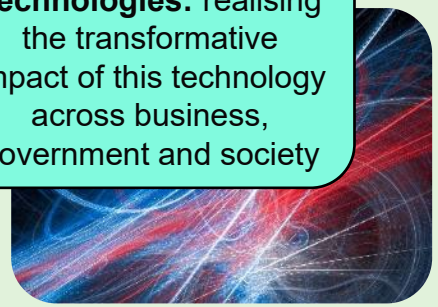
Engineering Net Zero: decarbonising our economy and society, creating an alternative energy future & developing truly circular economies

AI, Digitalisation and Data – Driving Value and Security: powering transformative change and the next industrial revolution

Transforming Health and Healthcare: improving quality of life through innovative technological solutions



Quantum Technologies: realising the transformative impact of this technology across business, government and society



International | **Talent and Skills** | **Place** | **World Class Infrastructure** | **Impact** | **Business Engagement**

An Effective Ecosystem for Engineering and Physical Sciences

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EPSRC strategic delivery plan 2022 to 2025

Digital Futures Priority

Ambition:

Investing in **future communication systems** (including satellite, wired and wireless connectivity), **semiconductor technology** and **photonics technologies**.

In particular, we will establish a **hub-based research and innovation ecosystem** for industrial-academic advances and business creation…

This will also interact with our existing quantum technologies and manufacturing hubs, recognising the convergence of research fields in delivering future technologies.

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EPSRC Funding Delivery

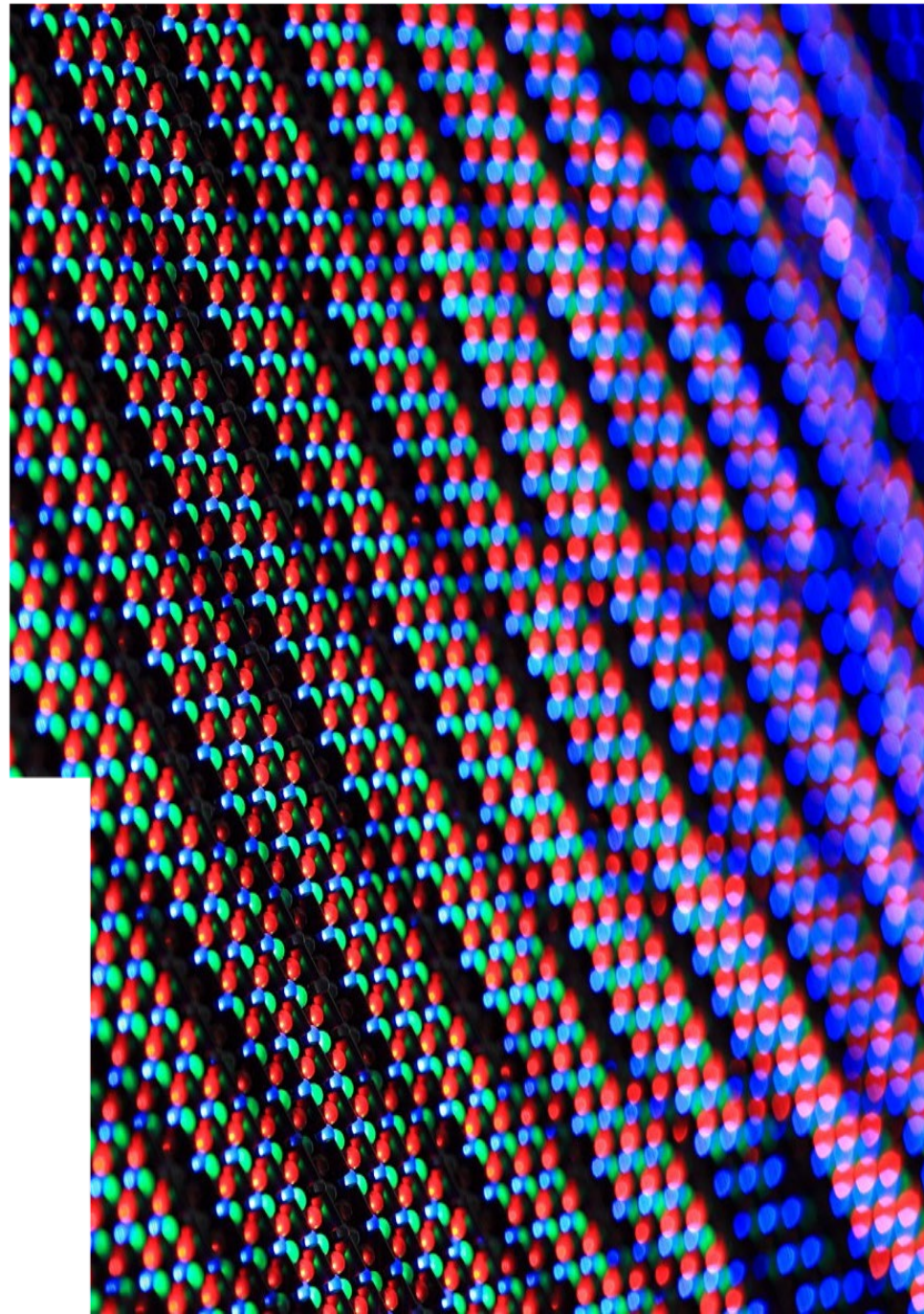
General Opportunities Overview

Routes to funding:

- Standard Mode
- New Investigator Awards (NIA)
- Programme Grants
- Prosperity Partnerships
- Open Fellowships
- Network Grants
- UKRI Schemes (multidisciplinary, FLF, etc.)

Talent and skills funding:

- CDT
- DTP
- iCASE



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Open Fellowships and Open (Plus) Fellowships

EPSRC Open fellowship

Apply for a fellowship focusing on any topic in the EPSRC portfolio.

You must have either:

- a PhD
- at least four years' experience in a relevant field by the start of your fellowship

Any career stage

- No rules on years of post-doctoral experience or need to hold academic position
- No prior EPSRC funding requirement

Encourage applications from candidates:

- following non-standard career path
- moving back into research after career break or other breaks

Open fellowship

Supports academics establish or further develop themselves as leaders of the future

Open Fellowships	Research grants
Personal award	For Principle investigator with option for one or more Co-investigators
Can be applied for without holding an academic position	Investigators must be academic employees (lecturer or equivalent) of an eligible organisation
Institutions are required to offer a **high level of support** to fellows	Institutions **may or may** not offer additional support
Allows for **personal development** to expand current role and responsibilities and **enhance leadership**	Normally focussed on research deliverables
Fellows are expected to act as ambassadors and advocates of their research area	
Flexibility to undertake **training**	
Flexibility to allocate time to **drive research culture change** in non-technical areas	
Flexibility for fellow to **transfer** award to another institution	Grant is bound to the recipient institution
Significant time commitment required (50%+)	Grant contributed to the investigators' salaries but it's not usually 100%
Can **reduce other responsibilities** for the fellow within their host institution (e.g. teaching and administration)	Investigators named on research grants usually have other administrative loads within their institutions

Open fellowship

No need to be in receipt of EPSRC funding, but you need to:

- *Demonstrate* you have acquired **skills and expertise** for delivering the research
- *Identified* areas for **continued professional development** to expand or enhance your career
- *Committed* to implementing good practice in creating an **inclusive** research environment
- *Advocate* for EPSRC and will **influence** policy makers and other stakeholders on the importance of your research area

Open fellowship: Plus Component

Add the **Plus** component, if you want to:

- spend 20-50% of time to create **positive change** in the research community. Examples include but not limited to:
  - Equality, Diversity and Inclusion
  - Responsible Research and Innovation
  - Public Engagement
  - Policy

- champion an area or topic aligned to EPSRC aspirations to deliver improvements in **research culture**

Open Plus fellowship

Resource Package	Open Plus
Duration	**Up to 5 years**
Salary	50- 100% fte
Travel & Subsistence	Yes
Additional research staff	Yes
Visiting Researchers	Yes
Equipment	Yes – in line with current EPSRC guidelines for equipment
Consumables	Yes
Access to facilities	Yes
Identified training and development needs	Yes
Time and resources to address community issues	Yes (only with Plus component)

We will award 80% of the full economic costs of the project, funding for equipment varies based on value, details can be found here: https://epsrc.ukri.org/research/facilities/equipment/process/

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New Investigator Awards

New Investigator Award

To support **early career academics,** begin to establish their research group

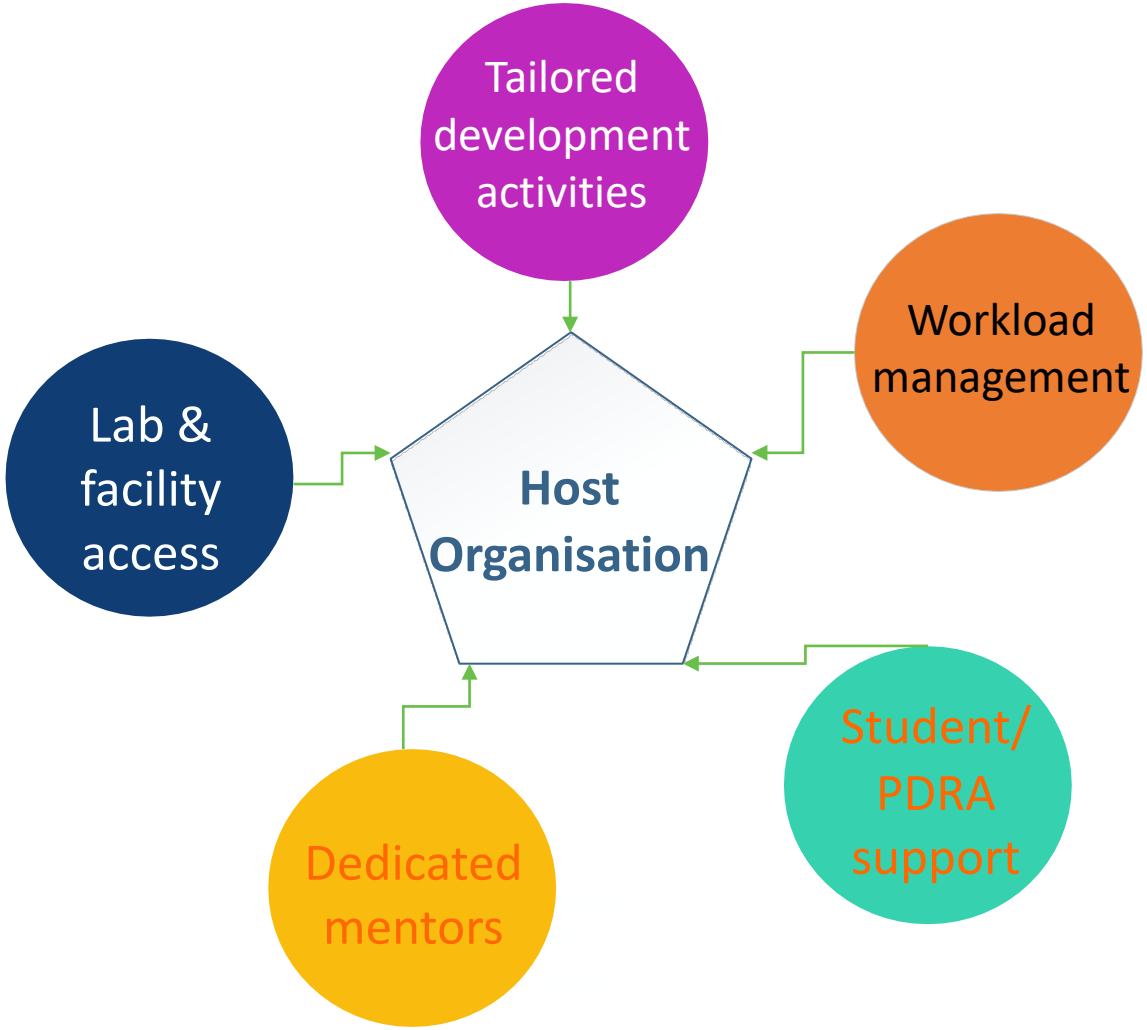
To establish an individual's **research independence**, specifically for those who have not received a significant grant

In addition to a program of high-quality research, host institutes are expected provide resource to **support career progression**

New Investigator Award

Eligibility	– Not previously led an academic research group – Not been recipient of a significant grant – Applying to EPSRC as PI for the first time – see website for exemptions – Projects should be self-contained and comprise a single research vision
Flexibility	– Been Co-I previously, please contact us to discuss eligibility – Previously in industry and transitioning to academia – No closing date – No funding or duration caps

“Good support” from the host



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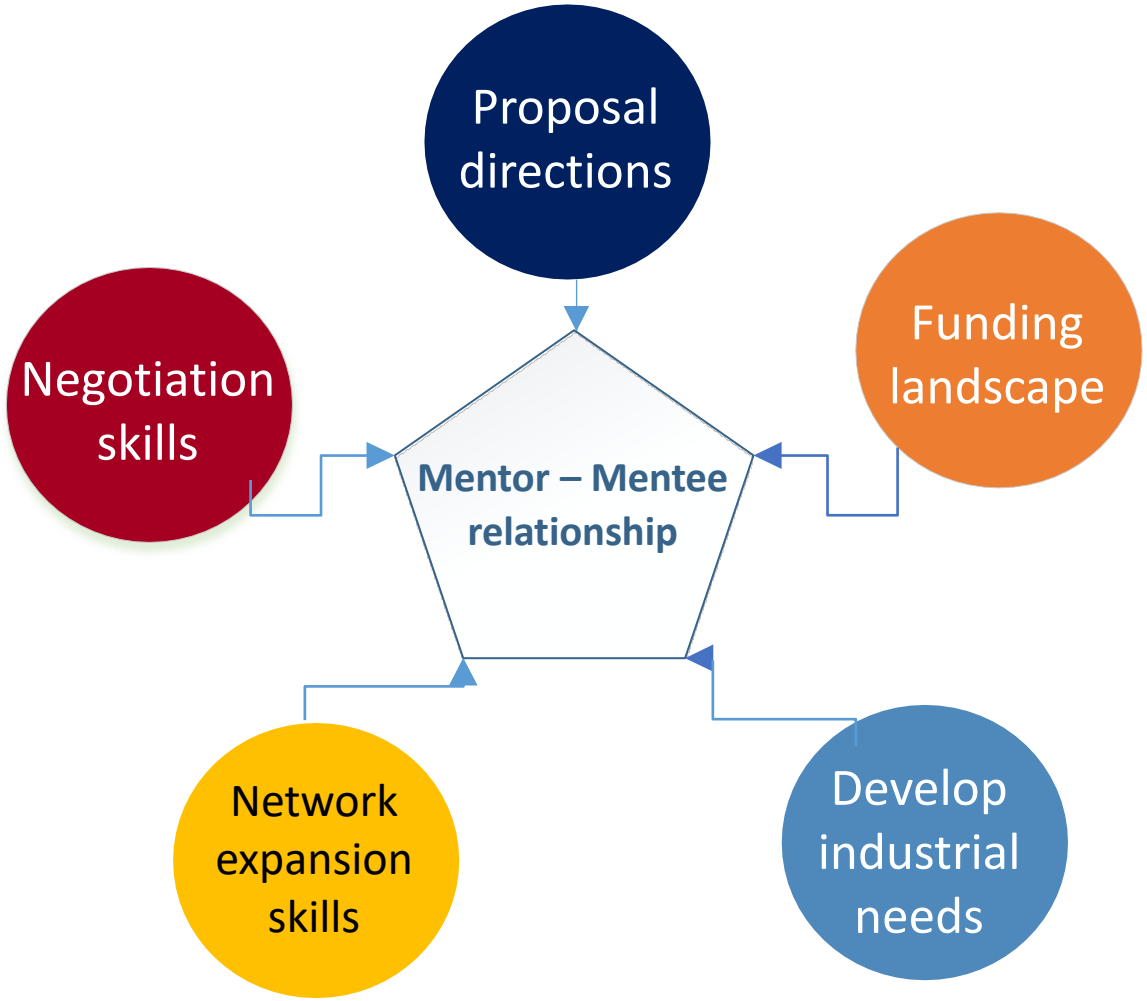
“Good support” in terms of Mentoring



“Good support” in terms of Training

- Thinking about future of career goals
- What courses are available
- Any identified training needs and broader skills outside academia such as engaging with industry, public sector
- Identify what new skills can be acquired or developed from training or volunteering or shadowing
- Request host for any particular or specific requests

“Good support” in terms of Workload

- Reduction in teaching/administrative load
- Host Organisation should explain in the covering letter how the individual will be supported in terms of appropriate workload.

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Standard Grants

Standard Grants

- Supports a wide range of research programmes

- Key features:
  - No closing date
  - No fixed value
  - No fixed length
  - No constraint on the field of research, permitted it is within EPSRC remit

Standard Grants

Activities funded via this route:

- feasibility studies
- instrument development
- project-specific equipment
- collaborative projects that cross different disciplines
- High-risk or high-return research proposals, embracing new concepts or techniques, are particularly encouraged. Risk management is important.
- Justify all resources requested

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Network Grants

Network Grants

- Network grants aim to develop new interdisciplinary research communities and topics by supporting interaction between researchers and relevant science, technology and industrial groups.

- This could be by either bringing the community together to look at scientific approaches or different communities together. Examples being:

    - transfer of experimental techniques, models and scientific insights
    - promotion of mobility between academe, universities and industry

- Key features:
    - No closing date
    - No fixed value
    - A duration of up to three years
    - No constraint on the field of research, permitted it is within EPSRC remit

Network Grants

- They should:
  - be a new collaboration/addressing a new strategic challenge
  - aim to form a new interdisciplinary/intradisciplinary research community and identify new interdisciplinary research topics
  - involve a group with a range of expertise and experience
  - be based in the UK but may include collaboration with overseas partners
  - demonstrate the added value our funding would bring

- What we will fund: Network grants do not fund research. Activities supported include:
  - salary costs for time spent on setting up and managing the network
  - travel and subsistence, including for members to meet to exchange ideas and expertise and to visit each other's laboratories. Industrial collaborators should meet their own costs where possible
  - workshops
  - administrative support to help coordinate the network
  - communication costs and costs for additional equipment such as personal computers and web servers

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Internationall Opportunities

Lead Agency Agreements:

- We currently have 5 agreements in place with the following countries:
    - Fonds National de la Recherche (FNR) in **Luxembourg**
    - Sao Paulo Research Foundation (FAPESP) in **Brazil**
    - National Science Foundation (NSF) in the **US**
    - Science Foundation Ireland (SFI)
    - The International Institute of Advanced Systems Analysis (IIASA)
- Lead agency agreements provide a framework
    - Application goes to one organisation
    - They manage the review process
    - Both agencies accept the outcome of the review process
    - Costs of the successful applications are funded by their respective countries.
- Money follows cooperation agreement with the Research Council Norway

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Questions?

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Thank you

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