



Biotechnology and
Biological Sciences
Research Council

BBSRC 2025 Community Webinar

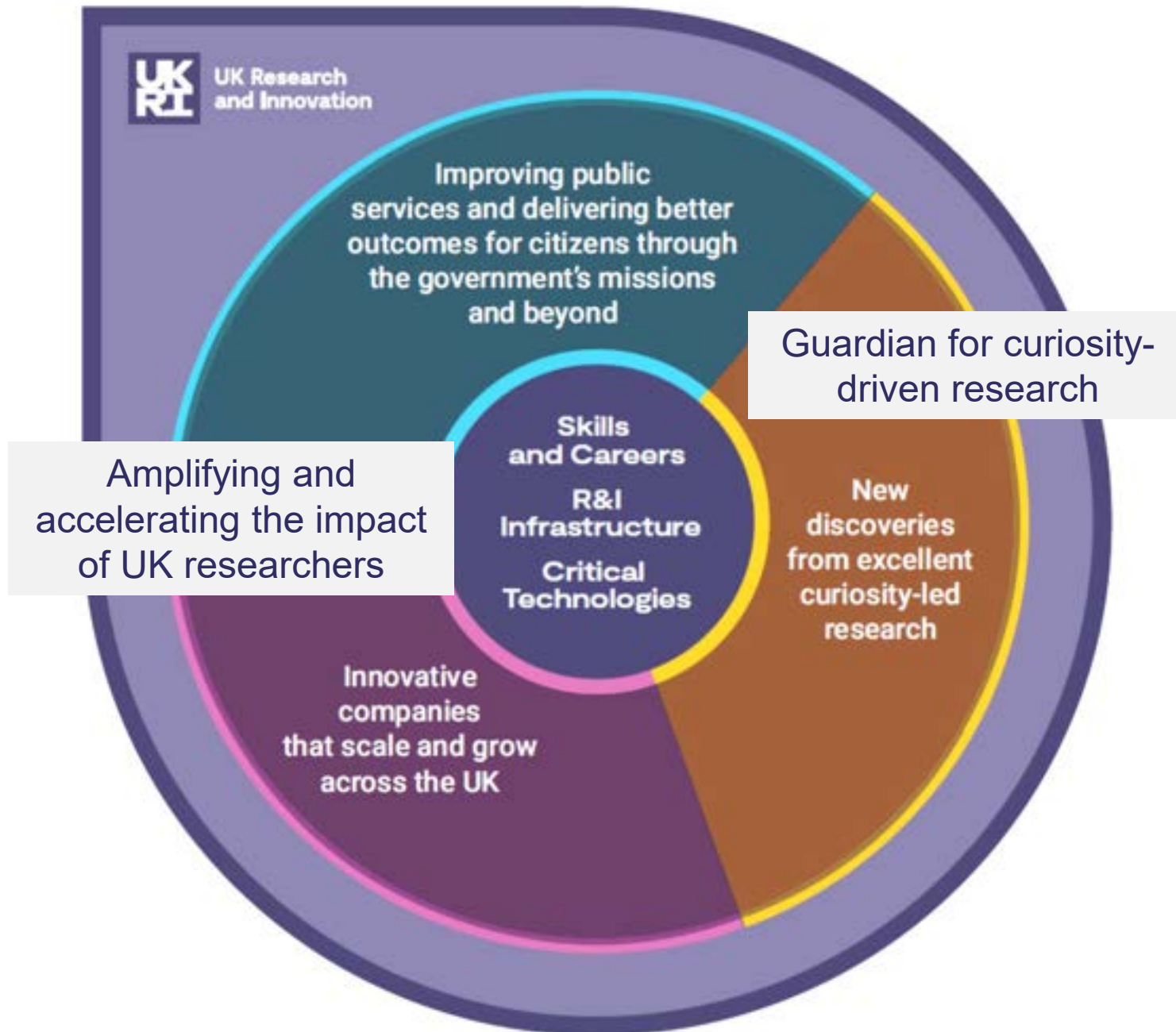
Professor Anne Ferguson-Smith
Executive Chair, BBSRC, UK Research and Innovation



**UK Research
and Innovation**



New CEO
Professor Sir Ian Chapman



Arts and
Humanities
Research Council



Biotechnology and
Biological Sciences
Research Council



Economic
and Social
Research Council



Engineering and
Physical Sciences
Research Council



Innovate
UK



Medical
Research
Council



Natural
Environment
Research Council



Research
England



Science and
Technology
Facilities Council

How we are funded



Spending Review

Phase 1 (2025/26)

UKRI allocation **£8.8bn**
BBSRC core budget allocation **£326m***
and additional **~£300m**

Phase 2 (2026/27-2029/30)

Departmental budgets set by HMT
Working closely with DSIT to confirm UKRI's settlement



Allocations Explorer – UKRI website

*Excludes UKRI Collective Talent and World Class Labs allocations, which are reported separately as combined UKRI totals. Also excludes allocations from UKRI collective funds such as the UKRI Infrastructure Fund, International Science Partnerships Fund or Technology Missions Fund.

Aligned with government ambitions



Industrial Strategy – 8 sector plans

**Advanced
Manufacturing**



**Clean Energy
Industries**



**Digital and
Technologies**



Life Sciences



**Creative
Industries**



Defence



**Financial
Services**

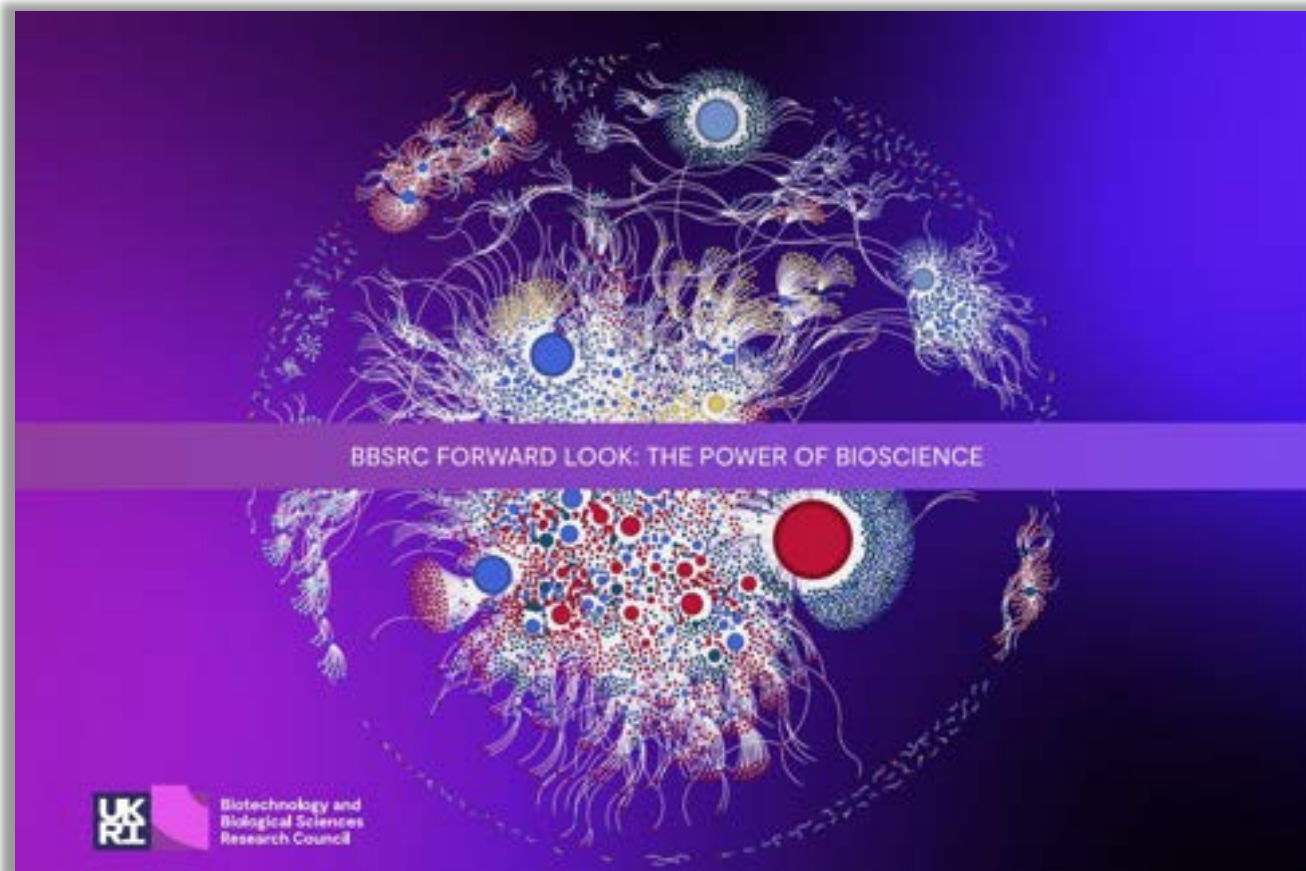


**Professional
and Business
Services**



BBSRC – our vision

To harness the power of bioscience to deliver a **healthy, sustainable** and **resilient future**

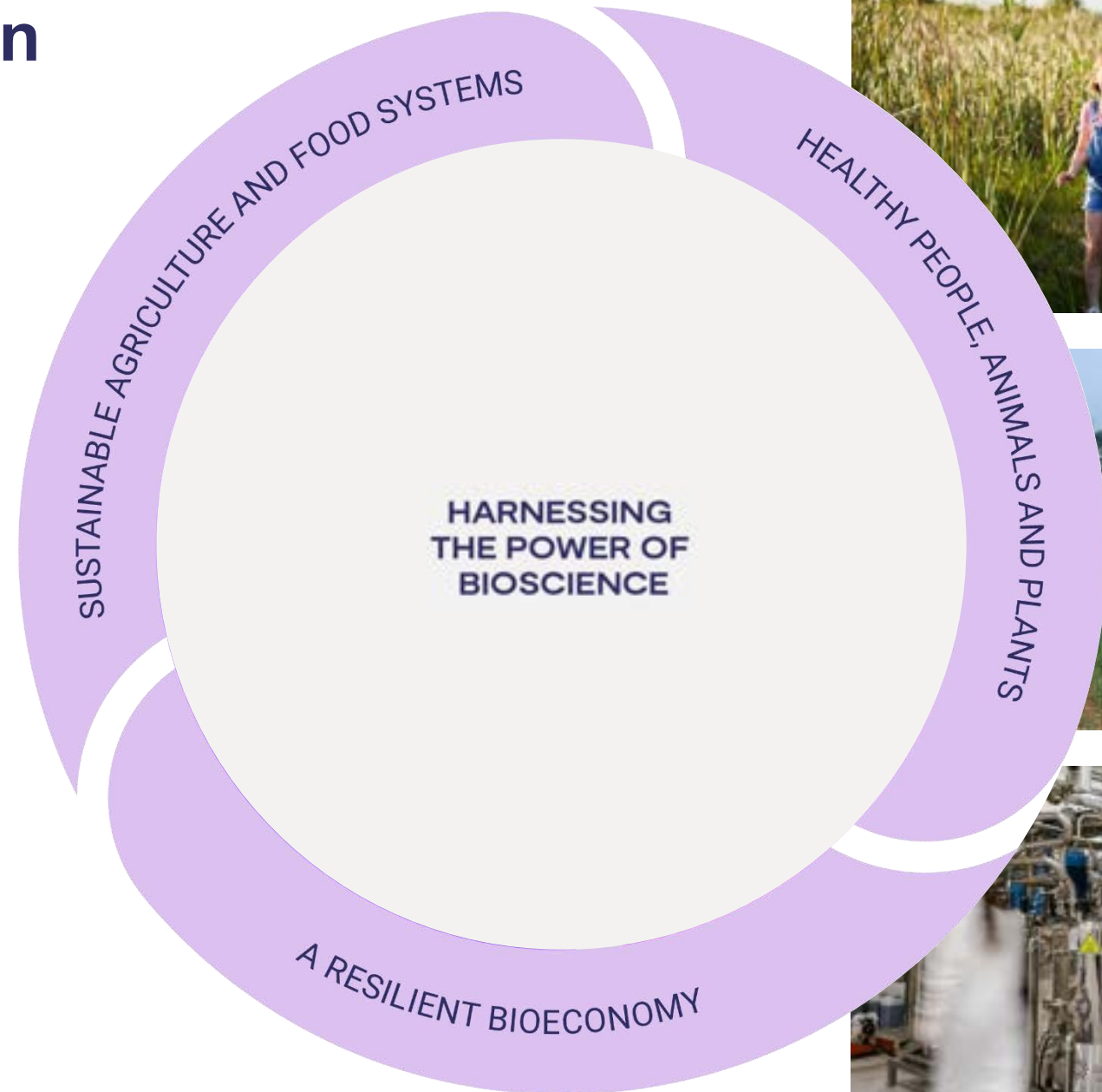


Published July 2025: <https://www.ukri.org/news/bbsrc-launches-refreshed-forward-look/>

BBSRC – our ambition

To address key global challenges where bioscience can offer solutions

To maximise the impact of bioscience to revolutionise industries and grow our economy



BBSRC – our ambition

Catalysing discovery

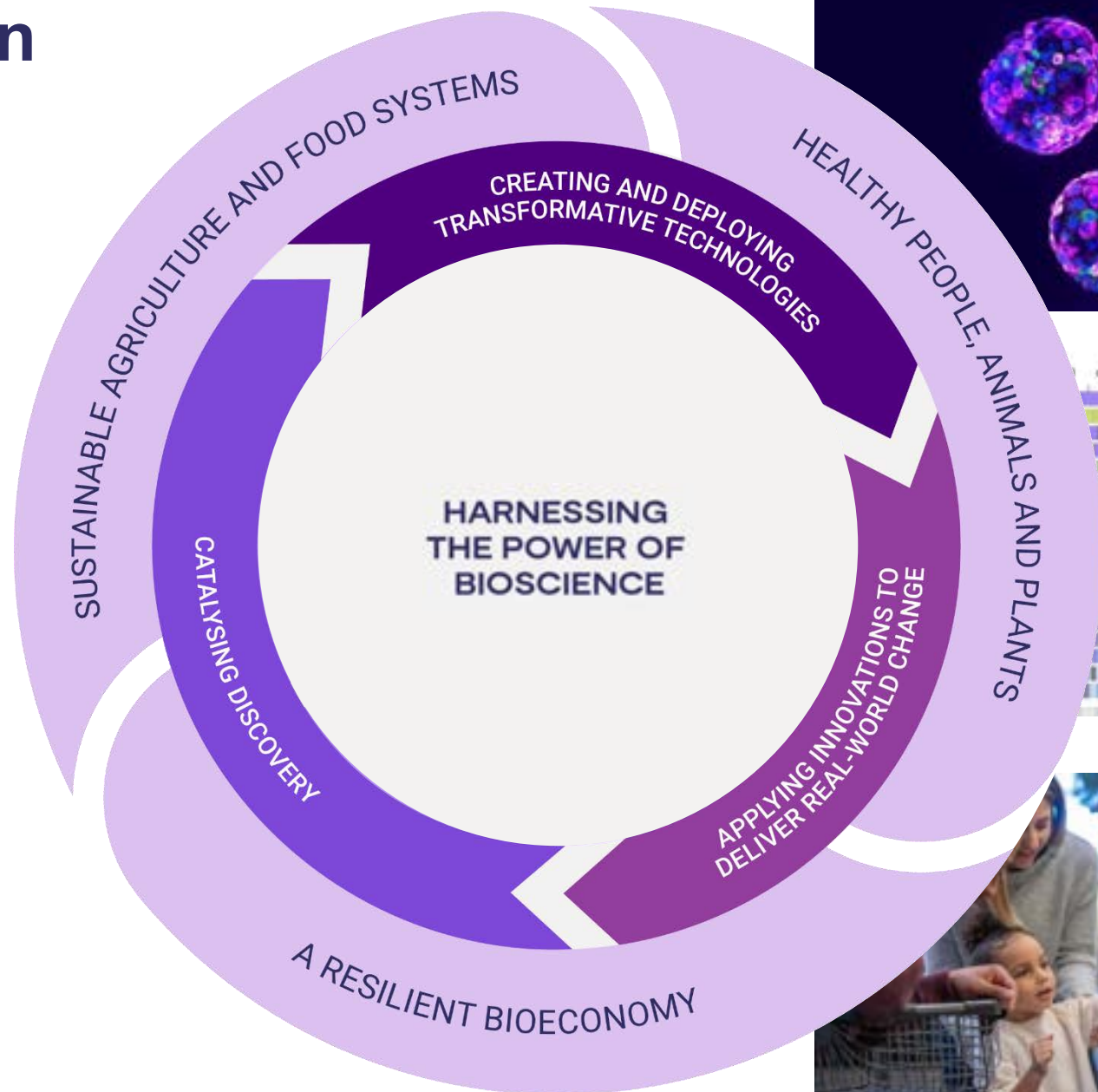
Delivering conceptual advances and fundamental understanding of biological systems

Applying innovations to deliver real-world change

Capturing and targeting outcomes

Creating and deploying transformative technologies

A toolkit to unlock advancement



Catalysing discovery

Prioritising high-quality **curiosity-driven research** that drives progress through new knowledge and understanding of biological concepts.

Maintaining UK research base **capacity, capability and agility** in key bioscience areas

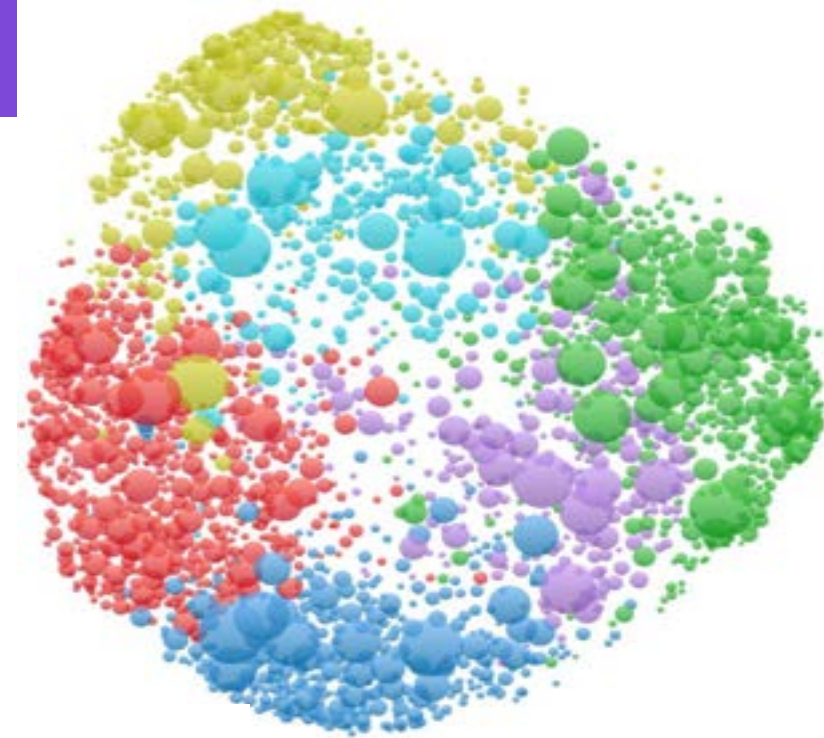
Providing evidence-base - digital age – **data generation and usage**

Responsive Mode - £145m+ annual investment (1/3 of BBSRC core research spend)

Strategic Longer and Larger (sLoLa) projects - supporting teams to tackle significant fundamental questions in bioscience.

Pioneer Awards – pilot supported 62 early-stage ‘high-risk, high reward’ projects – planning for a second call underway

Collaborative research networks – connecting researchers and other stakeholders to address shared research agendas.



- Neuroscience
- Health & Ageing
- Plant/Crop Science
- Immunology
- Protein Sciences
(i.e. structural biology,
enzymology, alternative proteins)
- Cell Sciences
(i.e., cell cycle, cell signalling, cell
migration, developmental biology)

Applying innovations to deliver real-world change

Addressing global challenges: climate change, resource depletion, biodiversity loss, food and nutrition security and infectious disease.

Creating the industries of the future

Developing biosolutions that will:

- Establish resilient, sustainable and biodiverse agriculture and food systems
- Reduce the burden of diet-related ill-health to individuals, the NHS and the economy
- Enhance UK biosecurity and protect citizens and livelihoods from impacts of infectious disease
- Decarbonise major industrial sectors, replacing fossil-fuel based processes with renewable bio-based alternatives for clean growth, net zero and emissions reduction



Creating and deploying transformative technologies

Driving the acceleration of scientific progress and innovation, delivering lasting societal and economic impact through:

- Ensuring the responsible creation and deployment of tools to enable biosolutions to real-world challenges
- Supporting the convergence of bioscience with data accumulation, engineering and AI to transform research practices
- Future proofing our research and innovation ecosystem and opening new opportunities for economic growth.

The Genetic Technology (Precision Breeding) Regulations 2025



AI for bioscience – working across UKRI on a refreshed UKRI AI strategy



Creating and deploying transformative technologies

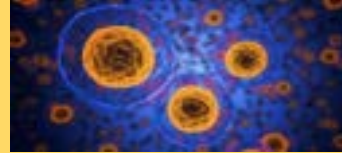
National Engineering Biology Programme

Application-inspired themes & challenges

Food Systems



Biomedicine



Clean Growth



Environmental Solutions



Discovery-inspired themes & challenges

Bioinspired Design

Building on the fundamental potential of biology

Bioengineered Cells & Systems

Constructing and/or modifying form and function of cells and systems.

Novel Materials

Novel & enhanced chemistry, materials, products and production processes

Cross-cutting research and technologies

*Areas requiring transformative underpinning research and technology development to unlock the full impact of Engineering Biology
For example; AI, rational design, sensors, scalability and scale-up, metrology and standardisation*

Underpinning enablers

*Required to create an entrepreneurial environment, conducive to realising the potential of Engineering Biology
For example; connectivity, talent and skills, knowledge exchange and commercialisation, infrastructure, flexible regulatory landscape*

BBSRC – our commitments

People

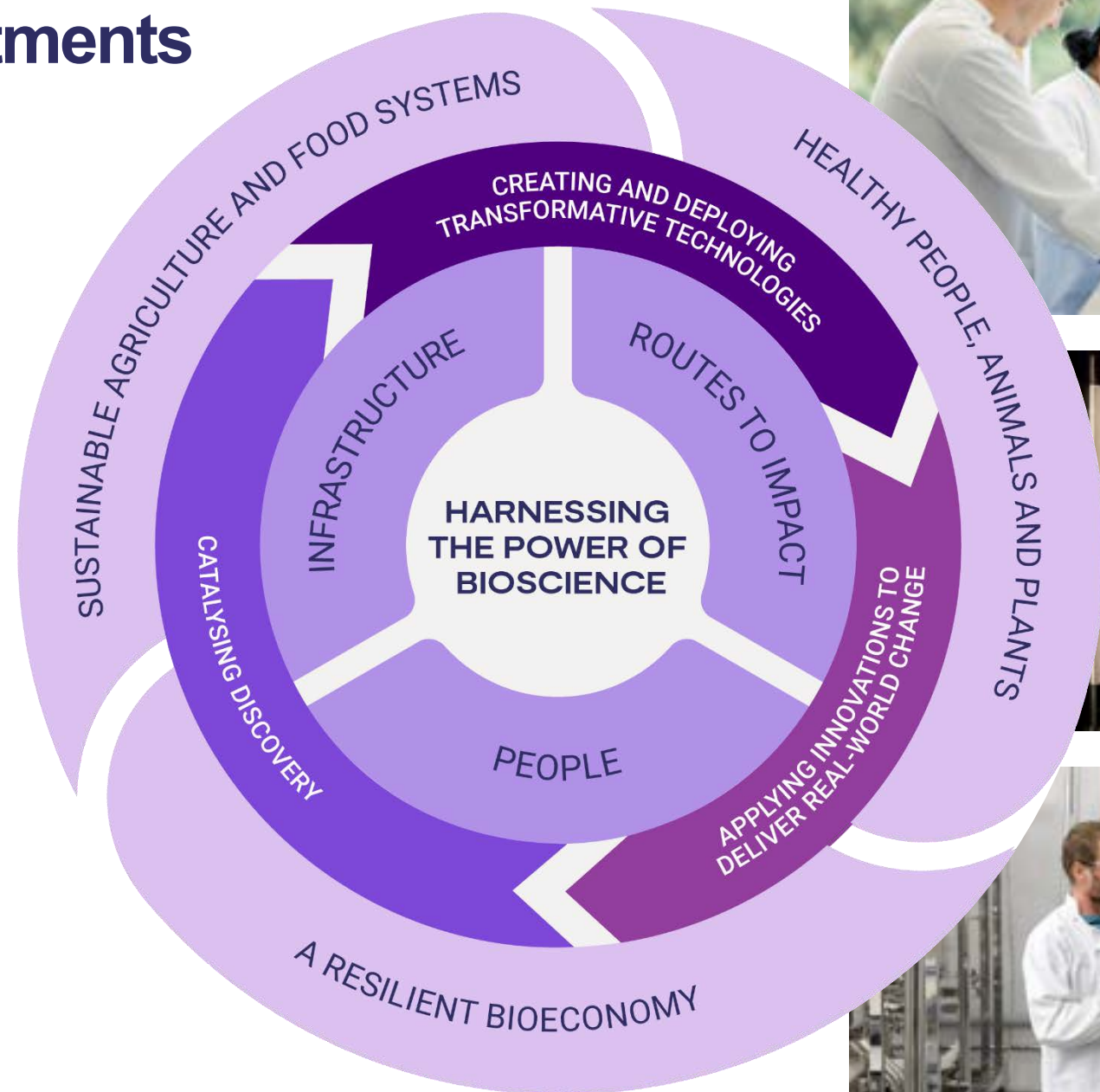
A skilled, diverse and resilient workforce

Infrastructure

Accessible, sustainable and integrated national capabilities and infrastructures

Routes to Impact

Accelerating the translation of bioscience research and innovation



People

Developing, retaining and mobilising the diverse skills needed in the modern and future bioscience workforce

- Training, upskilling and reskilling
- Creating more diverse and porous career pathways

Doctoral Training – Doctoral Landscape Awards, Industrial Doctoral Landscape Awards*, Doctoral Focal Awards* (EngBio, AI and data in the biosciences)

BBSRC Fellowships, UKRI Future Leaders Fellowships at key career transition stages (strategic review of BBSRC Fellowships in progress)

Mobility & porosity e.g. Flexible Talent Mobility Accounts, increased opportunities for Research Technical Professionals, Professional Internships for PhD students

Skills sharing – networks to support ECRs (e.g., NOBLE)

Championing Research Culture e.g. Connecting Culture Fund, enhancing EDI in BBSRC-funded networks



* Outcomes to be announced shortly

Infrastructure

Shaping a world-class bioscience ecosystem that is fit for the future: individual laboratories, distributed infrastructures, nationally significant capabilities.

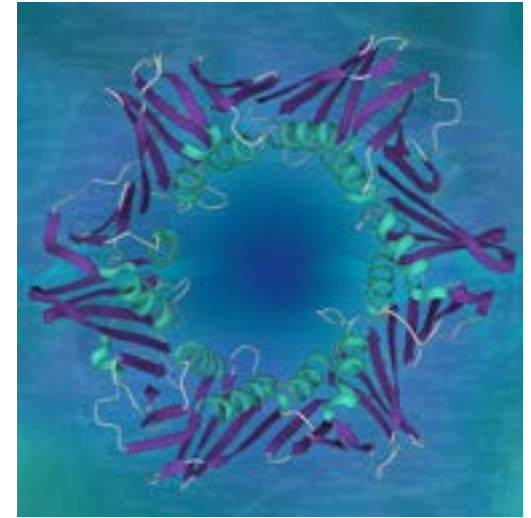
National Engineering Biology Programme – leading work across UKRI and with government, delivering major investments inc. national hubs

AI in the biosciences – enhancing connectivity and collaboration across disciplines, sectors and countries.

Research infrastructures and resources – adoption of new technologies and ways of working e.g.

- National data infrastructures – BioFAIR, EMBL-EBI
- Support for essential research equipment and biological resources (ALERT)
- UK nodes of international infrastructures e.g. ELIXIR, EuroBioImaging

Transformative Research Technologies Programme - development of cutting-edge research technologies



Routes to impact

Fostering connections and enabling partnerships – discovery to application and adoption

Enabling end to end connectivity across the ecosystem

Co-creating strategies and solutions with national and global partners

Enabling trusted and high-quality research

Business and academia partnerships and collaborative R&D e.g.
prosperity partnerships across bioscience and biotech sectors and industries.

Support for bioscience translation, venture and enterprise e.g. BBSRC
Follow-on-Fund, Impact Acceleration Accounts and ICURe.

Growing bioinnovation clusters across the UK – through our Research and
Innovation Campuses and beyond.

Local Innovation Partnerships Fund – unlocking regional economic growth



Belfast/Derry-Londonderry
Cardiff Capital Region
Glasgow City Region
Greater Manchester
West Midlands
South Yorkshire
West Yorkshire
Liverpool City Region
North East
Greater London

PARTNERSHIPS WITH OTHERS

HARNESSING THE POWER OF BIOSCIENCE

INFRASTRUCTURE

ROUTES TO IMPACT

PEOPLE

APPLYING INNOVATIONS TO DELIVER RESILIENT WORLD CHANGE

HEALTHY PEOPLE, ANIMALS AND PLANTS

A RESILIENT BIOECONOMY

CATALYSING DISCOVERY

CREATING AND DEPLOYING TRANSFORMATIVE TECHNOLOGIES

SUSTAINABLE AGRICULTURE AND FOOD SYSTEMS



Current priorities

- Spending Review allocations relating to biosciences
- Institutes and national capabilities review
- Fostering end to end connectivity within theme-orientated priority areas
- Developing and continuing to invest in our skills base and new talent
- Internal projects – e.g. Response mode review, strategic review of fellowships

Continuing to:

- Ensure highest **quality** research
- **Co-create** with & enable our national bioscience ecosystem
- Incentivise and motivate **connectivity** and added value



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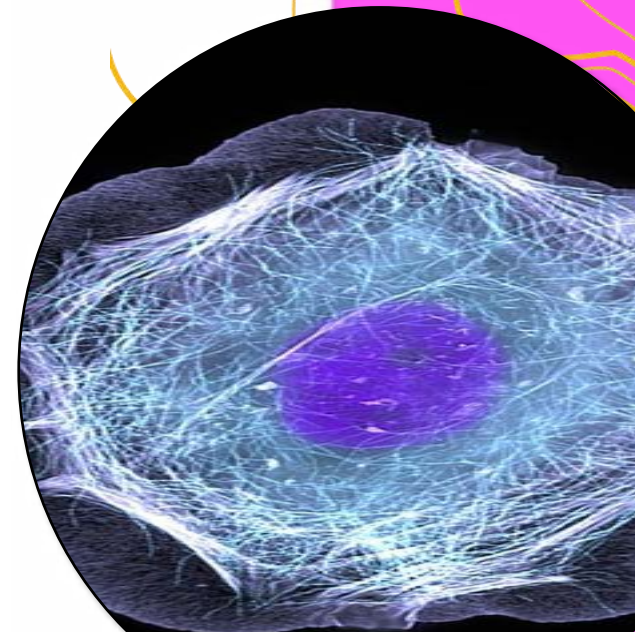


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BBSRC Responsive Mode:

Evaluation and reform update

Dr Jef Grainger



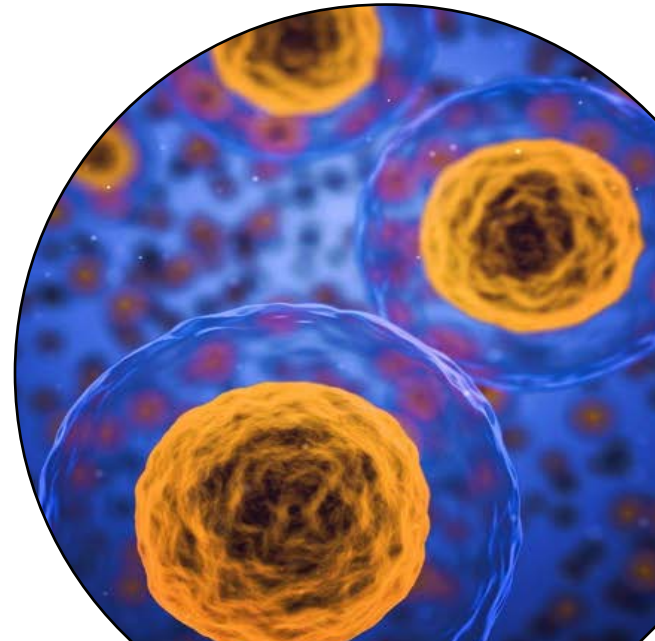
Context recap

- BBSRC's Responsive Mode (RM) Committee model is now 15+ years old – many operational developments/refinements since, but overarching framework hasn't changed much
- it is our biggest core funding commitment and has been protected in lean times – but the budget has not grown significantly in recent years
- since implementation of the current model, we have not systematically reviewed the scheme.



Drivers

- The RM system is under considerable pressure – mostly felt by the research community
- although many success stories, a perception we could be doing better at soliciting, identifying and supporting the most transformative research ideas, importing best practice
- UKRI-led ‘Simpler, Better Funding’ programme - harmonisation of schemes and operational frameworks; and nomenclature -
‘applicant-led’ and ‘targeted’ modes
- **Need to review and evolve our flagship scheme.**



RM evaluation is underway

Multi-part retrospective analysis:

- in-house grants data analysis – drawing on both funded and unfunded portfolio
- external community consultation to test views and perceptions
- external data analysis; bibliometrics and metadata
- final synthesis and independent review guided by expert steering panel

Aiming to draw on interim and final outputs in a dynamic way.



Data analysis underway - inputs

Responsive mode grant applications and funded portfolio 2008-2023

18,955

Number of
responsive mode
applications

£9.0bn

Total value of
responsive mode
applications (applied for
amount).

4573

Number of
responsive mode
grants awarded

£2.1bn

Total value of
responsive mode
awards

403

Responsive mode
grants awarded to
Strategic Institutes

£193.4m

Total value of
responsive mode grants
awarded to Strategic
Institutes

Since the formation of the current Committees, BBSRC has processed 18,955 responsive mode applications between 2008 and 2023, totalling £9 billion in requested funds.

4,573 grants awarded, totalling £2.1 billion – an overall success rate of 24%.

Of these 4,573 responsive mode grants, 9% (403 grants) were awarded to Institutes strategically funded by BBSRC, totalling £193m.

Data analysis underway - outputs

RM publication analysis: summary



Balance of outputs is under review, e.g. :

- institutions and geography
- science areas funded, including emerging topics, vs other support
- citations benchmarking; areas of particular strength, gaps, USPs
- collaborations, spinouts, influence on policy and practice.

Community consultation – next week

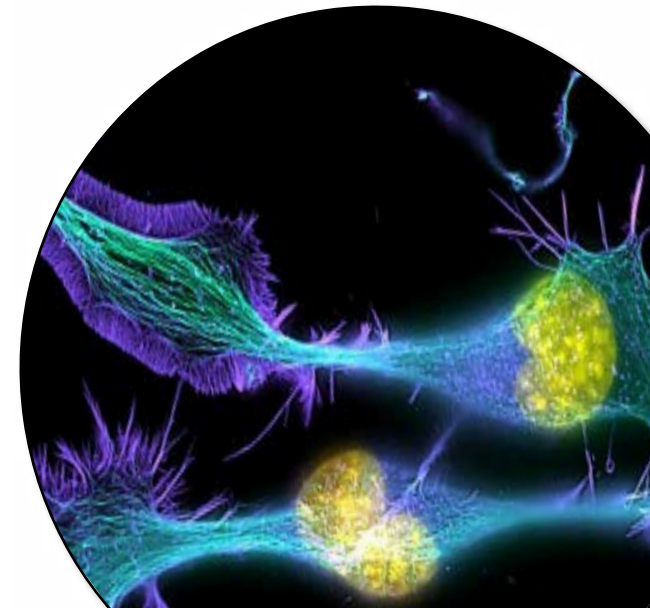
Community surveys expected to launch on 15 Oct, for one month, led by an external agency (Pye Tait).

3 linked surveys for:

- current/previous RM grant holders
- RM applicants who have not yet been awarded a grant
- wider bioscience community - open but aimed at academic community who have not applied for BBSRC RM funding

Follow up 1:1 interviews and/or round-table discussions – pool solicited via survey

Will allow us to drill deeper into interesting themes.



Change is afoot

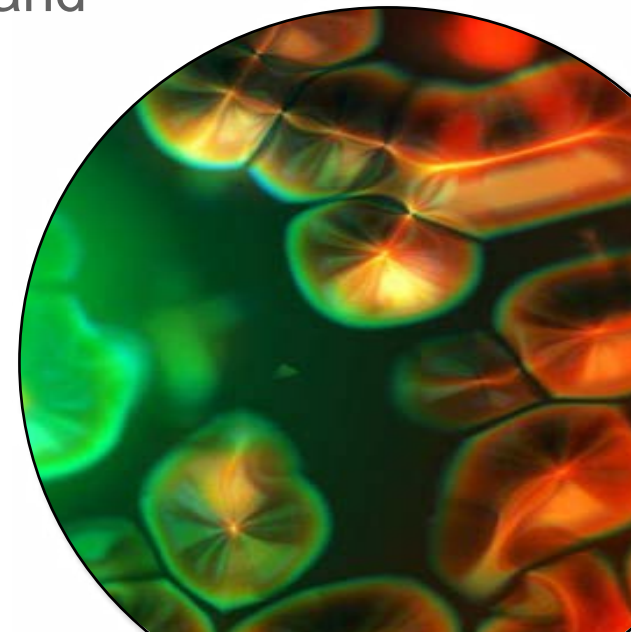
In parallel with the evaluation, we are looking at options address **known challenges** (informed by emerging findings):

- a pronounced, sustained increase in demand – grant numbers and cost (consistent with other parts of UKRI and other funders), impacting success rates
- poor engagement with peer review, especially written reviews, which is causing problems (quantity, quality, efficiency)
- it takes a long time to fail!
- lack of an active approach to portfolio stewardship, developing balanced outcomes - and a clear view of what these should be
- UKRI guidance/frameworks driving change.



What to expect

- We will be piloting approaches to address urgent challenges and UKRI harmonisation drivers
- it is likely we will evolve Research Committee structures and operations more broadly, potentially on a slower track
- we will be informed by the RM evaluation community survey inputs, in particular, as quickly as possible
- we will work with current Committee Chairing and membership pools
- we will be dynamic. If things don't work well, we will try something different
- we will try to communicate incoming change clearly and quickly.



What to expect (2)

Pace is needed – systematic consultation on future steps is likely unrealistic but we are listening. E.g.:

- you have told us that transparency and right to reply are principles of the current peer review model you value
- you *haven't* told us not to try new things, not to be bold
- an offer: you can tell me what you think:
jef.grainger@bbsrc.ukri.org

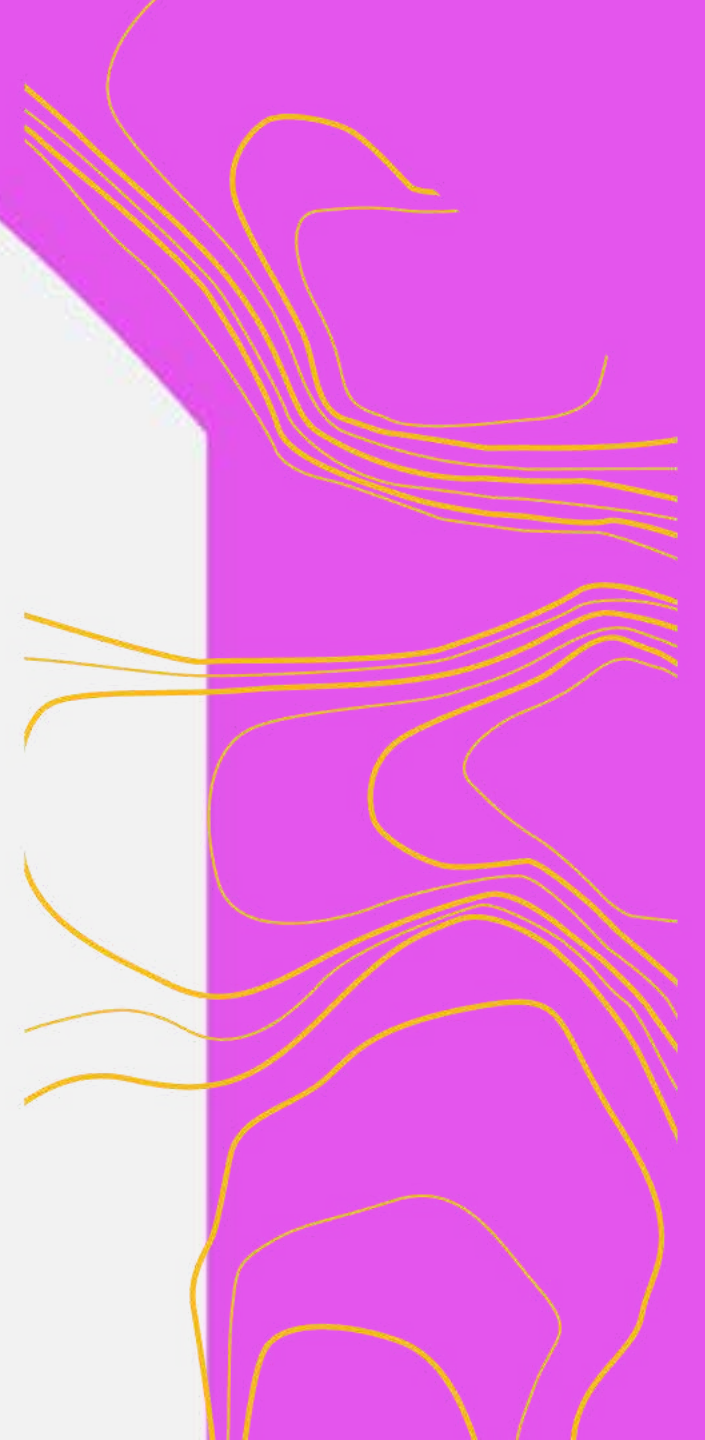
Timeframe for initial change
= 6-12 months / 2-3 rounds.





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BBSRC Fellowships



Agenda

1 Overview of BBSRC Fellowships

2 Managing Demand in 2025

3 Strategic Review

4 Audience Participation



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BBSRC Fellowships

Intended to support early career researchers to take the first steps to carving out an independent research career.

Awards provide 3 years of funding for researchers to conduct their own research within a host laboratory.

Broad eligibility: no requirement for number of years' experience, no requirement for PhD

BBSRC invest around £9M annually into this scheme, typically supporting around 15 fellows per year

BBSRC pair the fellow with an experienced mentor

We expect evidence of strong support from the host institution (training, mentorship, career development)



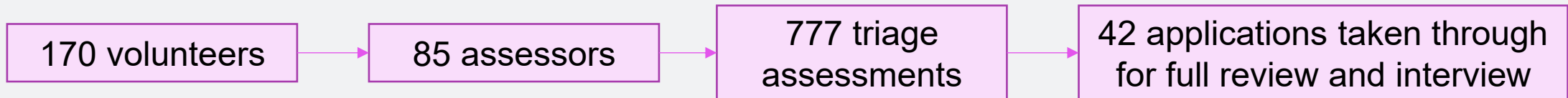
Managing Demand

The volume of applications this year necessitated a change in our usual way of working:

Year:	2022	2023	2024	2025
Applications:	116	137	179	277

This meant delays to our usual timeline. **Thank you** to all our applicants and the staff that support them for their patience and understanding.

We implemented a triage peer review process, initially assessing just the Vision and Approach



Thank you to our community of reviewers, this could not have been achieved without your support

We are reviewing how we manage demand in 2026, learning from this process and considering community feedback.

Strategic Review of BBSRC Fellowships

- Objectives
- Scope
- Evidence and Data
- Consultation



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Objective and Methods

Aim: Optimise our support for future bioscience R&I leaders.

1. By gathering evidence to understand the strengths and weaknesses of our current offer:

- Demonstrate impact, e.g. R&I, career progression, collaboration, societal and economic benefit
- What are the unique contributions of BBSRC fellowships?

2. By considering BBSRC's fellowships offerings in the context of the broader bioscience R&I sector, including:

- Leadership development needs across career types and stages
- Existing provision of development from other funders



What's in Scope?

1. How to position our fellowships

- Career type and stage
- Sector transition and collaboration
- Diversity
- Building capacity in strategically targeted disciplines



What's in Scope?

2. Professional Development

- Training provided by hosts and/or BBSRC
- Mentoring
- Networking opportunities



What's in Scope?

3. Award Structure, T's & C's

- Ensuring fellows' independence is supported consistently
- Duration, value, eligible costs
- Eligibility
- Changes in assessment methods



Why now?

- Increased application numbers to fellowships
- Financial pressure within the academic sector
- Last fellowships review conducted in 2020
- Ongoing work in Collective Talent Funding

Fellow Satisfaction and Feedback

“How satisfied are you with your BBSRC Fellowship experience overall?”



Add charts on specific skills?

Areas for improvement for the BBSRC Fellowships scheme:

1. Longer awards or opportunities for follow-on funding
2. Setting clearer expectations of host organisation's support

Mentoring

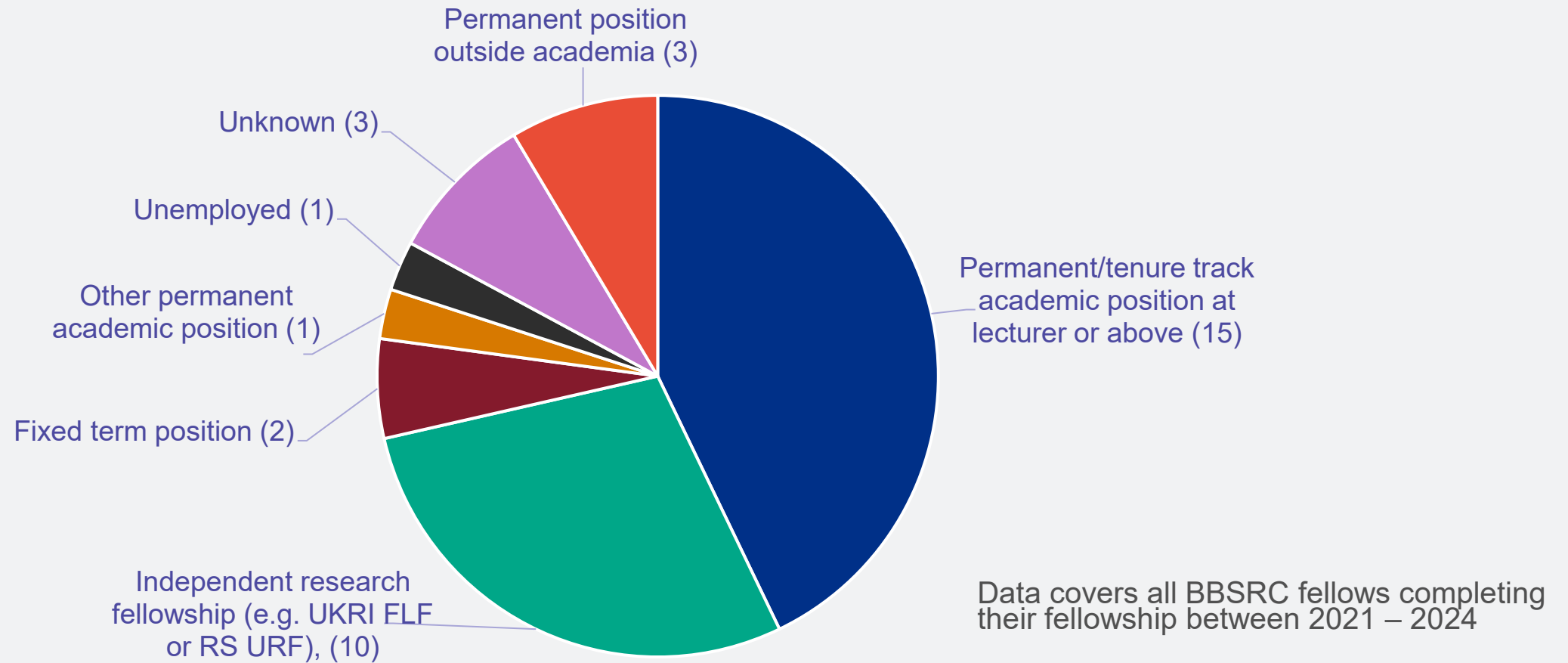
“How useful was the BBSRC mentoring relationship during your fellowship?”



“The support, mentorship and training I have received, and the networks I have created have enabled me to become a better scientist.....I will be forever indebted to the BBSRC for the opportunity they have given me.”

“I received excellent mentoring by the BBSRC, I was cared for (by BBSRC) very carefully which helped develop my skills and my confidence”

Employment post-fellowship



Bioscientists in the UKRI FLF scheme

FLF Round	Awards made	
	with BBSRC as lead council	with BBSRC as secondary council
1	5	3
2	8	8
3	14	7
4	10	4
5	13	30
6	7	13
7	6	10
8	6	0

Around 10% of UKRI FLF awards are primarily within BBSRC remit.
A further 10% have BBSRC as a secondary council

Fellows' conference 2025

Interactive session asking:

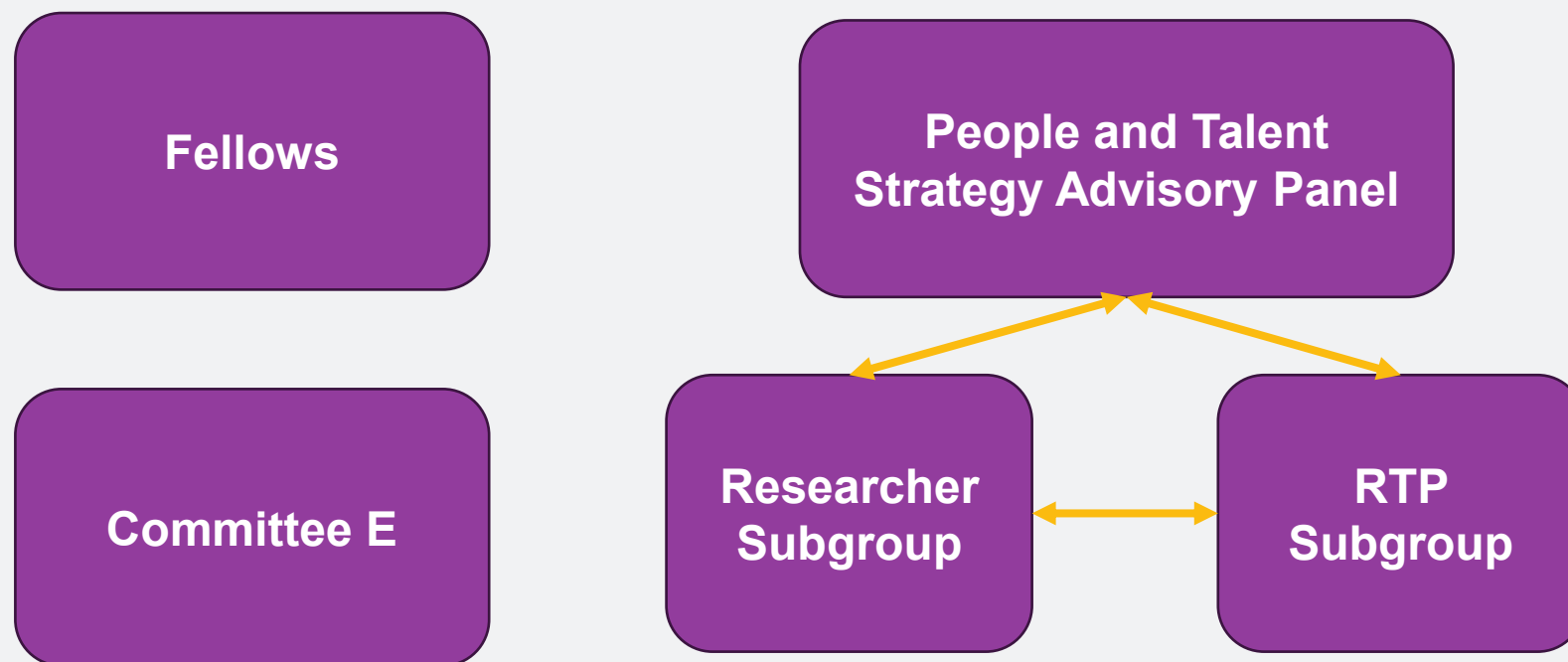
1. What skills and experience might a future BBSRC Fellow want to attain?
2. What are the current barriers to achieving this?
3. How can BBSRC mitigate these barriers?

Key themes emerged, including:

- The inconsistency of support for fellows' independence across different host institutions
- Desire for longer funding or follow on funding
- Eligibility to apply for and hold other funding while on a fellowship
- Guidance on negotiating support package and developing negotiation skills



Working with our community





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Questions for the audience

[menti.com](https://www.menti.com)

Code: 8552 4684

Menti Question: What should the ultimate goal of the fellowship be?

2 votes each

Options:

- Permanent **employment** of fellows **within academia**
- Permanent **employment** of fellows **across varied roles** in the biosciences sector
- Producing **excellent research**
- Developing the **best research leaders**
- **Non-research contributions** (for example public engagement, impacting policy, improving research culture)
- Driving **cross-sector collaboration**
- Delivering **return on investment**

Menti Question: Where should BBSRC's fellowships provision be focussed?

2 votes each

Options:

- Supporting individuals in **academia to** transition into, or collaborate with, **businesses**
- Supporting individuals in **industry to** transition into, or collaborate with, **academia**
- Supporting the development of **technical talent** (into traditional academic pathways or emerging technical pathways)
- Supporting consolidation of research skills for individuals at a **very early career stage** (straight after PhD, or equivalent)
- Supporting exploration and progression of thought leadership (typically for individuals at an **early postdoctoral stage, or equivalent**)
- Supporting individuals in **establishing independence and leading** their first research groups (akin to UKRI FLFs)

Menti Question: How would you change BBSRC fellowships?

2 votes each

Options:

- Provide **longer** baseline **awards**
- Provide dedicated **follow-on funding** to those most in need and showing best promise
- Enable fellows to **hold concurrent awards**
- Encourage greater **variety of applicants** across the bioscience sector (e.g. RTPs, industrialists)
- Have UKRI-BBSRC provide further specific **professional development** opportunities in addition to host institutions
- Set further and/or clearer **expectations for host support**
- Provide more **networking** opportunities
- Target strategically important **scientific disciplines**

Menti: end open-response question

What are the most important themes for BBSRC to focus on when reviewing their fellowships?

May not be able to read all out but reassure individuals that this is an opportunity for further thoughts from them to be captured and read at a later date.