



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Horizon Europe Insight Day

Wednesday 13 March 2024
11.30 – 16.30

Welcome Address

Professor Adam Tickell

Vice-Chancellor and Principal of the University of Birmingham



Keynote

Adam Jackson – Director International Research and Innovation, Department for Science, Innovation and Technology



Session 1: What does Association mean for the UK private and university sector?

Chair: Robin Mason - Vice Chancellor (International), University of Birmingham

Eugenia Migliori - Head of Technology and Innovation, CBI

Stephanie Smith – Deputy Director of Policy, Russell Group

Prof Sudhesh Kumar - President, Association for Innovation, Research and Technology Organisations

Adam Jackson - Director International Research and Innovation, Department for Science, Innovation and Technology





Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Robin Mason

Vice Chancellor (International), University of Birmingham



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Eugenia Migliori

Head of Technology and Innovation, CBI



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Stephanie Smith

Deputy Director of Policy, Russell Group

Horizon Europe: a platform for UK R&I

Global collaboration, prestigious grants, deeper networks

- Horizon Europe provides unrivalled access to ready-made routes making it easier to work with multiple countries
- ERC grants bring enormous prestige, based on peer review across the EU and eligible associated countries
- most of the UK's largest-scale research partners are in the rest of Europe, and many of our other partners are signing up to Horizon



Horizon association: an opportunity to seize

Universities want and need to make the most of Horizon

- Your university may be organising workshops and events (like this one!)
- Universities are providing targeted support to upskill potential applicants
- Many universities are providing drop-in sessions – UCL has an open session for UCL colleagues and external collaborators every Friday:
<https://www.ucl.ac.uk/research-innovation-services/award-services/european-research-innovation-office>

Early progress, but more to do

Participation seems to be recovering

- UK-based researchers' application rates have gone up a lot for the 2024 calls compared to last year
- ERC applications have returned to 2022 levels, which is a big jump
- The best way to show the UK should join in FP10 – the successor to Horizon Europe – is to prove association is a success now



Innovate
UK



UNIVERSITY OF
BIRMINGHAM

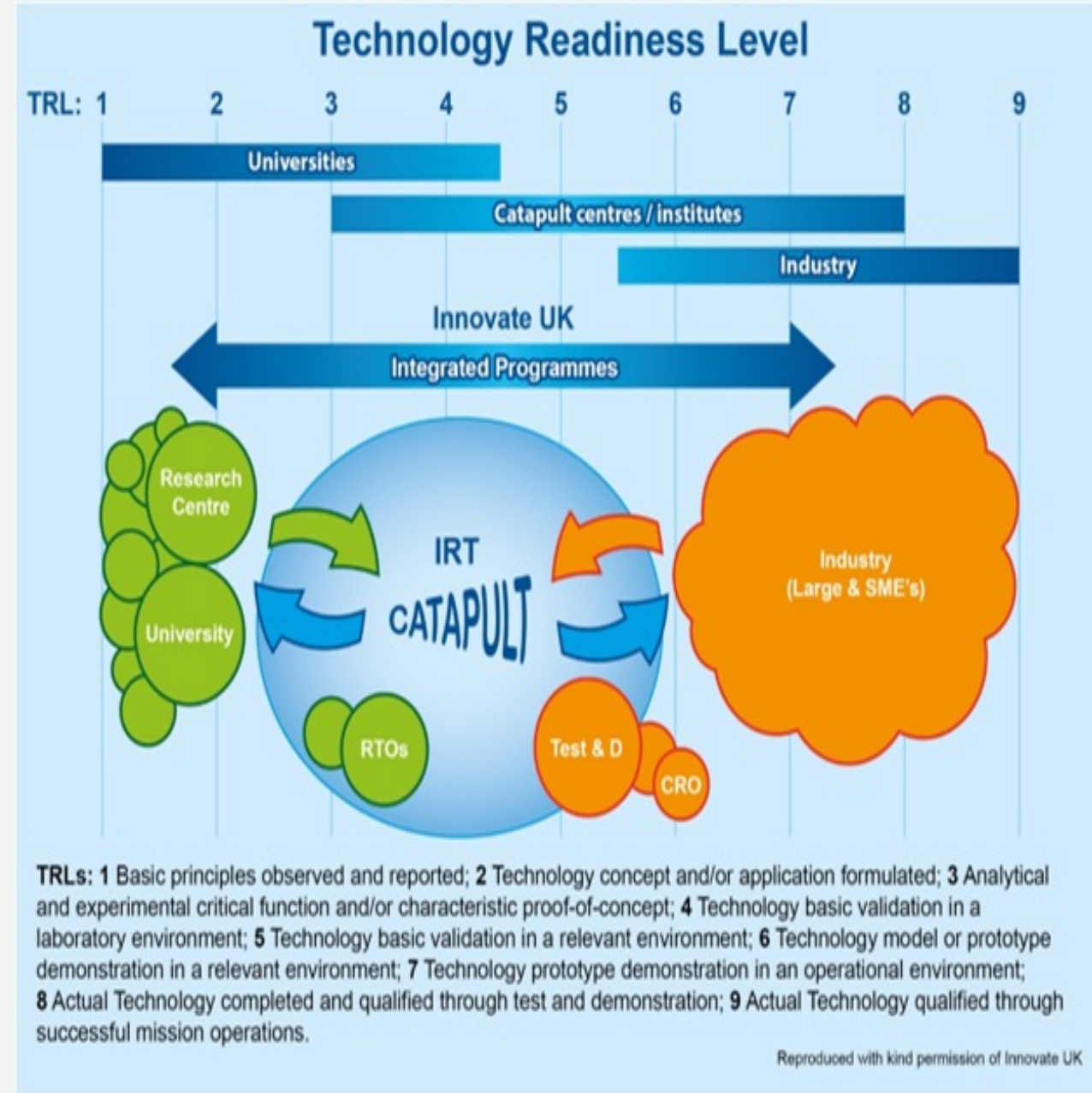


Department for
Science, Innovation
& Technology

Professor Sudhesh Kumar

President, Association for Innovation, Research and
Technology Organisations

What is the Innovation Research and Technology Sector?



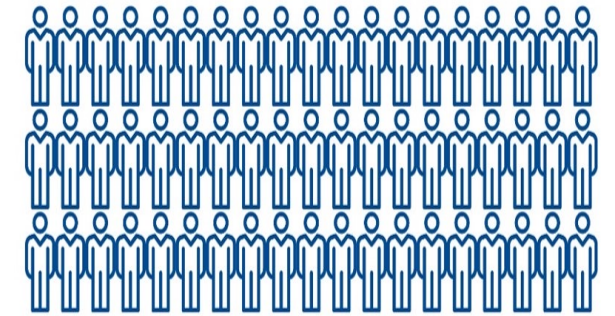
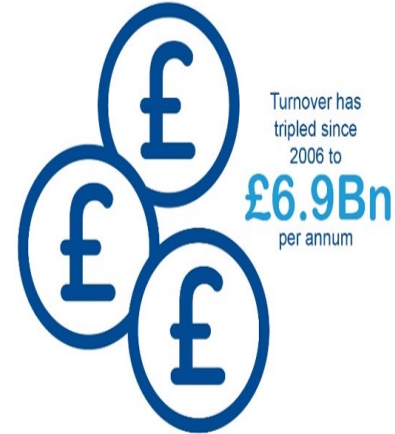
AIRO

Expertise in:

- Applied research
- Translational research
- Innovation
- Technology
- Demonstration/test -beds
- Commercialisation
- Scale up
- Testing and accreditation
- Regulation
- Compliance
- Asset management
- Business support



Contribution to our Sector



>57,000 highly skilled people employed: equals total academic staff of Russell Group universities, (significantly more than Germany's Fraunhofers)



Activities generate contributions of:
>£32Bn to UK GDP (>2.3% of the total)
>£13Bn to UK tax revenue



Productivity is **45%** higher than the national average



Consumes just **0.3%** of Government spend

From Raspberries to Robots
























































New raspberry varieties developed grown commercially from 2018 for UK supermarkets



Advancing robotic arc welding for manufacturing plants

Our membership: Innovation, Research & Technology sector organisations span the UK

 Advanced Forming Research Centre	 Advanced Manufacturing Research Centre (AMRC) with Boeing	 Agri-EPI Centre	 Earlham Institute	 Energy Systems Catapult	 FloWave Ocean Energy Research Facility	 National Nuclear Laboratory	 National Physical Laboratory	 Northern Automotive Alliance
 AgriMetrics	 AVE	 BHR Group	 Fraunhofer UK Research	 Glass Futures	 High Value Manufacturing Catapult	 Nuclear AMRC	 Offshore Renewable Energy Catapult	 OGTC
 BRE Group	 BGS	 BSRIA	 HORIBA MIRA	 HR Wallingford	 IBM	 QinetiQ	 Satellite Applications Catapult	 SATRA Technology
 Campden BRI	 Cell and Gene Therapy Catapult	 CIEL	 KTN	 LGC	 Lucideon	 Science and Technology Facilities Council	 Smith Institute	 Thatcham Research
 City, University of London	 Compound Semiconductor Applications Catapult	 Connected Places Catapult	 Manufacturing Technology Centre	 Medicines Discovery Catapult	 Met Office	 The European Marine Energy Centre	 The Scotch Whisky Research Institute	 TWI
 CPI	 DG Cities	 Digital Catapult	 National Composites Centre	 NICA	 NIAB	 UKAEA	 WGM HVM Catapult	

Growth powered by innovation

- **Achieve immediate short-term growth** through targeted R&D by maintaining current funding for public funding of research, development and innovation.
- **Ensure long-term investment in R&D** grows: By 2030 > 3% for GERD (% GDP), in the top quartile of OECD nations.
- **Prioritise ‘closer-to-market innovation’** infrastructure (e.g., demonstrators) for key sectors and industries, to help reduce the cost and time to translate technologies to market.
- **Build on world-leading RDI infrastructure:** Invest in the innovation ecosystem support recapitalisation of non-profit distributing IRT organisations
- **Instil confidence** for industry in the UK’s resilience and consistency to boost private R&D investment e.g., bolstering commitments on Net Zero
- **Prioritise people and skills:** Develop a comprehensive ‘workforce plan’ for RDI in the UK, encompassing education and skills, and involving the key players from industry, the IRT sector, and academia.





21GRD04 isoMET

Improving atmospheric observations to verify greenhouse gas emissions to inform climate change mitigation policy
12 partners, including NPL (and several universities) (funded from the EMPIR programme and from the Horizon)



IWM PRAISE

Development and adoption of integrated weed management approaches.
37 partners including NIAB



PROTEUS

EU Hydralab+ project to improve design of scour protection around offshore wind turbine monopiles and future-proof them against the impacts of climate change.
7 partners including HR Wallingford



LEE-BED

Developing a nanomaterial and composite test bed for the development and production of lightweight embedded electronics (LEE) in manufacturing.
17 partners including CPI/HVM Catapult



CHEQUERS

Portable, multiband MIR-sensor platform for safety and security (Hand-held hazardous scanner for rapid stand-off detection of explosive, toxic or otherwise hazardous materials)
6 partners including Fraunhofer Centre for Applied Photonics CAP, UK



Opportunities to work together

- Supporting the case for ‘**growth powered by innovation**’ and implementation of Innovation Strategy
- Fostering best practice in, and thought leadership for, innovation
- Striving to inform and shape an optimised policy climate for innovation by gathering evidence of ‘what works’
- Serving the UK government by acting as convenor and driver for advancing key national missions e.g., on the innovation aspects of Net Zero
- **Boosting UK participation in Horizon Europe**



AIRTO Team



Andrew Jamieson
AIRTO Chair;
CEO, Offshore Renewable
Energy Catapult



Sudhesh Kumar OBE
President



Dr Jane Gate
Executive Director



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

CONTACT US: enquiries@airto.co.uk

Session 1: What does Association mean for the UK private and university sector?

Chair: Robin Mason - Vice Chancellor (International), University of Birmingham

Eugenia Migliori - Head of Technology and Innovation, CBI

Stephanie Smith – Deputy Director of Policy, Russell Group

Prof Sudhesh Kumar - President Elect, Association for Innovation, Research and Technology Organisations

Adam Jackson - Director International Research and Innovation, Department for Science, Innovation and Technology



Session 2: Experiences of Participating in Horizon Europe [Part One]

Chair: Professor Robin Mason – Vice Chancellor (International), University of Birmingham

Tiffany Jedrecka - Senior R&D Scientist to R&D Lead, Naturemetrics

Professor Alicia El Haj - Interdisciplinary Chair of Cell Engineering, Director of the Institute of Translational Medicine, School of Chemical Engineering, University of Birmingham





Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Robin Mason

Vice Chancellor (International), University of Birmingham



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Dr Tiffany Jedrecka

Senior R&D Scientist to R&D Lead, Naturemetrics

Our involvement in the Horizon Europe program



BCOMING's main objective will be to reduce the risk of infectious disease emergence in three biodiversity hotspots by developing a standardised data collection and analysis framework to support the co-construction, with all stakeholders, of innovative biodiversity conservation strategies and zoonotic disease surveillance systems.

<https://bcoming.eu/>



The BioMonitor4CAP project will develop, evaluate and test affordable and reliable systems for monitoring biodiversity ... it will combine classical biodiversity indicator systems with new technological approaches, including acoustic, optical and molecular systems.

<https://biomonitor4cap.eu/>



Benefits of participating

- Ambitious scope of projects with large budgets
- Capacity building within NatureMetrics
- Building collaborations with leading academics from world-leading institutes
- Access to other scientific data and expertise that would otherwise be challenging or expensive to access
- Increased visibility in new markets
- Can contribute to shaping EU policies, leading to positive changes on a large scale



Challenges we've faced

- The varying emphasis on long-term fundamental research versus short-term practical application between academia and business.
- Managing projects where we are dependent on other partners to deliver
- Ensuring diverse voices are represented
- Administrative burden of projects



My advice to applicants

- Don't be deterred as an SME – flexibility and agile working can happen within grants
- Be honest about what your capacity is, and what you are prepared to commit to
- Consider IP from day one
- A balanced proposal is key - try and get some experienced applicants on board
- Strong proposals take a long time to write!
- An experienced project manager will make your life a lot easier





Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Alicia El Haj

Interdisciplinary Chair of Cell Engineering, Director of the Institute of Translational Medicine, School of Chemical Engineering, University of Birmingham

Funding through the Framework Programmes

- Motivation
- Benefits
- Challenges
- Best Practices
- Evaluations

1997 - 2000	£82,759	EU Biomed 2, with 5 European PIs for research in neuroengineering in spinal repair (NESTING)
1996 - 1998	£428, 571	EU Biomed 2, with 6 European PIs (Project coordinator '97- '98) for research in Bioartificial organs
EU V FRAMEWORK		
2001 - 2004	£165,145	European Partnership for Autologous Chondrocyte Implantation (EUROCELL), with 8 PIs with Prof James Richardson (Keele)
2000 - 2002	£254,706 of €2,104,999 total	Biomedical interactions in tissue engineering and tissue engineering in surgical repair (BITES). 9 PIs - Project Co-ordinator
EU VI FRAMEWORK		
2007 - 2010	£650,000	NEST project – MYJOINT. Lead by Keele Germany and Keele UK with 6 partners
2005 - 2007	€346,436	ALEA JACTA EST Marie Curie Multicentre Training Grant
2003 - 2004	£376,000	EXPERTISSUES, Network of Excellence. Total budget €7 million. Lead WP8/ Member Steering Committee
EU VII FRAMEWORK		
2013 - 2017	£450,000	Magnetic Fun – Marie Curie Training Award - 6 partners - MICA Biosystems
2011 - 2015	£460,000	BIODESIGN – Co-ordinated by Upsalla University with 15 partners
2009 - 2011	£385,000	HYANJI IRSES People Network. EU Partnership with China; a collaborative programme, co-ordinated by Keele, Pisa, Chengdu and Shanghai, China
EU FRAMEWORK 2020		
2015 - 2020	£760,000	MAGNEURON - OPEN FET programme, with 6 partners
2021-2025	£220000	SHIFT – IRSES MRSCA Network with Portugal, Trento, S Korea, Australia, Malaysia, Vietnam and Mongolia

Challenges



January 2016
- January 2020



RUHR
UNIVERSITÄT
BOCHUM

RUB



UNIVERSITY OF
BIRMINGHAM



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



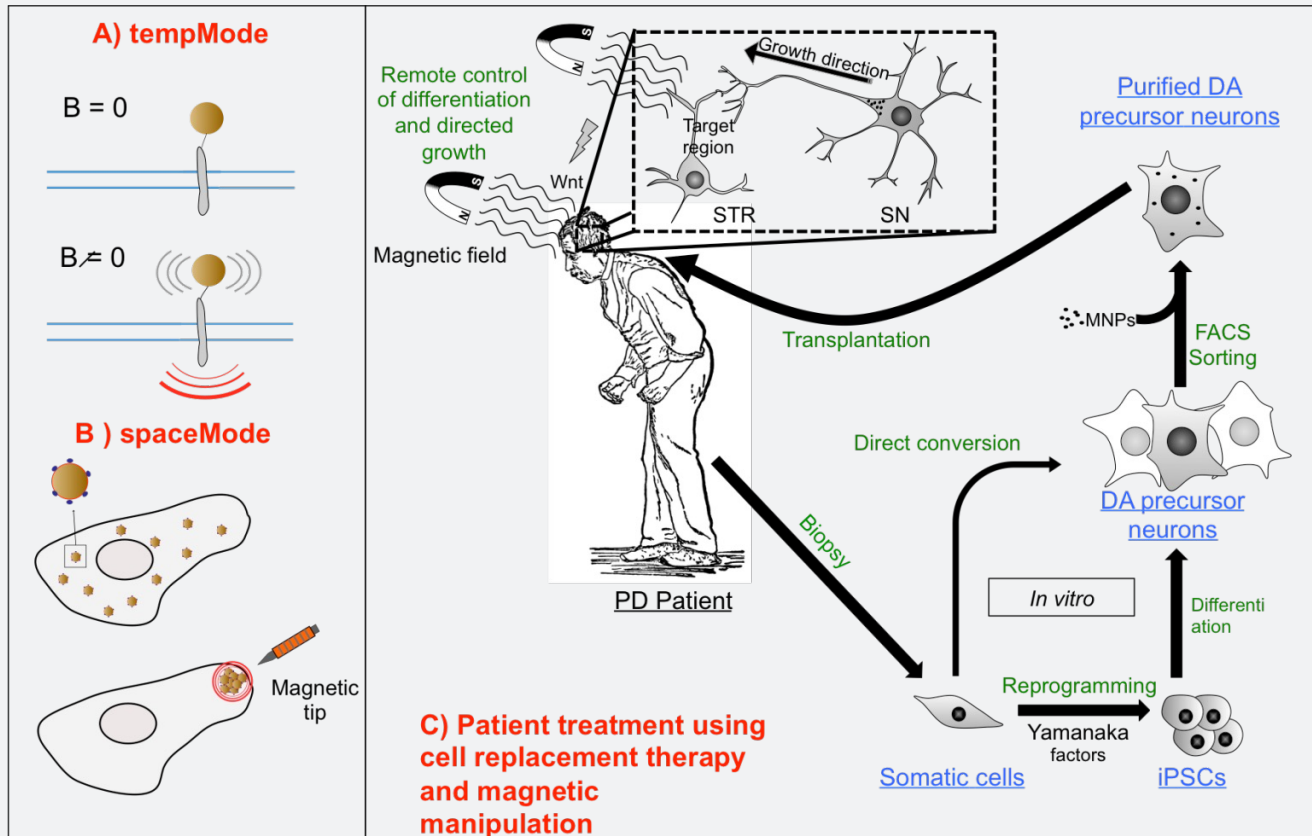
Department for
Science, Innovation
& Technology

‘Hijacking cell signalling pathways with magnetic nanoactuators for remote-controlled stem cell therapies of neurodegenerative disorders’

Challenges

19	10	ESR		UNITN	IT	EU/AC	yes	CHULALONGKORN UNIVERSITY	TH	TC	yes	WP4	32	3		
20	11	ESR		UNITN	IT	EU/AC	yes	UNSYD	AU	TC	yes	WP4	36	3		
21	12	ER	Rui Reis	UMINHO	PT	EU/AC	yes	CBNU	KR	TC	yes	WP2	12	18	1	1.00
22	12	ER	Rui Reis	UMINHO	PT	EU/AC	yes	UNSYD	AU	TC	yes	WP2	30	30	1	0,33 (10 days)
23	12	ER	Rui Reis	UMINHO	PT	EU/AC	yes	CHULALONGKORN UNIVERSITY	TH	TC	yes	WP2	36	37	1	
24	13	ER	Nuno Neves	UMINHO	PT	EU/AC	yes	CBNU	KR	TC	yes	WP2	12	18	1	
25	13	ER	Nuno Neves	UMINHO	PT	EU/AC	yes	UNIVERSITI KEBANGSAAN MALAYSIA	MY	TC	yes	WP2	30	37	1	
26	13	ER	Nuno Neves	UMINHO	PT	EU/AC	yes	CHULALONGKORN UNIVERSITY	TH	TC	yes	WP1	24	25	1	
27	14	ER	Natalia Alves	UMINHO	PT	EU/AC	yes	CHULALONGKORN UNIVERSITY	TH	TC	yes	WP1	40	35	1	
28	15	ER	Tiago Silva	UMINHO	PT	EU/AC	yes	CHULALONGKORN UNIVERSITY	TH	TC	yes	WP1	18	20	1	
29	15	ER	Tiago Silva	UMINHO	PT	EU/AC	yes	MUST UKM	MN	TC	yes	WP3	24	30	1	
30	16	ER	Rogério Pirraco	UMINHO	PT	EU/AC	yes	UNSYD	AU	TC	yes	WP4	30	30	1	
31	16	ER	Rogério Pirraco	UMINHO	PT	EU/AC	yes	UNIVERSITI KEBANGSAAN MALAYSIA	MY	TC	yes	WP4	40	41	1	
32	17	ESR		UMINHO	PT	EU/AC	yes	CHULALONGKORN UNIVERSITY	TH	TC	yes	WP1	10	20	6	
33	18	ESR		UMINHO	PT	EU/AC	yes	UNSYD	AU	TC	yes	WP2	20	30	6	
34	19	ESR		UMINHO	PT	EU/AC	yes	CBNU	KR	TC	yes	WP2	30	20	6	
35	20	ESR		UMINHO	PT	EU/AC	yes	UNIVERSITI KEBANGSAAN MALAYSIA	MY	TC	yes	WP2	40	41	6	

EVALUATIONS – Project meetings



INNOVATIVE SCIENCE



EXPERTISSUES

Network of Excellence –
15 partners – longlasting collaborations

Magneuron project selected by the EC as flagship in its “Success Story” initiative



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Networking Break

Keynote

Ruta Zarnauskaite - Head of Unit, Horizon Europe Association





Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Robin Mason

Vice Chancellor (International), University of Birmingham



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

James Reynolds

School of Psychology, Aston University, ERC Grant Starter
Holder (Maximising public support for health policies)

My ERC Starter Grant

- How do we get effective health policies implemented?
- One key factor: Public support or Opposition
- 4 years working as a postdoc
- My ERC Starter Grant: Maximising public support for health policies

WP1

- Improve Methodology

WP2

- Investigate interventions for increasing support

WP3

- Identify characteristics of popular policies

WP4

- Develop guidelines
- Develop theory

Progress and outcomes so far

Year 1 of 5

- Created a team: 2 postdocs, 1 PhD student + recruiting 1 more
- Created a collaboration with the WHO
- Started multiple major research projects
- Started planning the next one



Advice

- Start early
- Go big
- Get feedback
- Demonstrate you can do it
- Defend your position

Session 2: Experiences of Participating in Horizon Europe [Part Two]

Chair: Professor Robin Mason – Vice Chancellor (International), University of Birmingham

Dr James Reynolds - School of Psychology, Aston University, ERC Grant Starter Holder
(Maximising public support for health policies)



Session 3: How to Get Help to Participate in Horizon Europe

Chair: Cathy Alexander - Deputy Director (International Research & Innovation), Department for Science, Innovation and Technology

Ewa Bloch - Head of Europe and European Programmes, Innovate UK

Minna Jalili – Research and Innovation attaché, European Commission

Pierre Purseigle - Reader in Modern European History, Department of History, Warwick University





Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Cathy Alexander

Deputy Director (International Research & Innovation),
Department for Science, Innovation and Technology



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



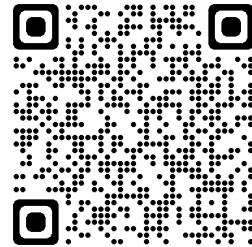
Department for
Science, Innovation
& Technology

Ewa Bloch

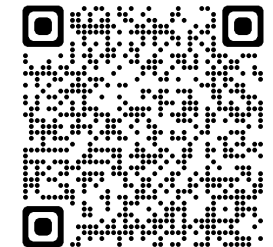
Head of Europe and European Programmes, Innovate UK

Horizon Europe – Call to action

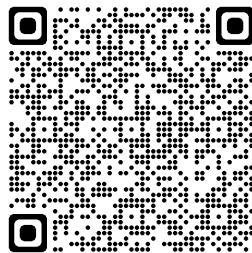
Visit the UK Horizon Europe hub



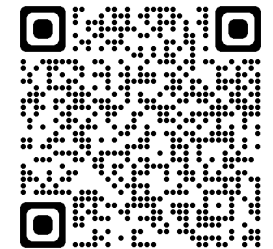
Horizon Europe Pump Priming Programme



Find your NCP



Sign up for UK NCP newsletters





Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Minna Jalili

European External Action Service

EU resources and support

1. Horizon Europe portal

2. European Institute of Innovation and Technology (EIT)

3. Information days and trainings

4. Annual Research & Innovation days



Horizon Europe portal

- New look and feel of the portal from **Monday 18 March**
- FAQs
- Partner search function
- Work Programmes



European Institute of Innovation and Technology

- UK hub launched on 12 March
- <https://eit.europa.eu/>



Information days and trainings

Next information days:

- 22 April on WIDERA Work Programme 2023-2025
- 25-26 April on EU missions
- https://research-and-innovation.ec.europa.eu/events/horizon-europe-info-days_en

Next (indicative) Horizon Europe implementation days:

- September, October, November 2024
- 2023 recordings available here:
<https://horizoneuropencppportal.eu/news/horizon-implementation-days>



Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Pierre Purseigle

Reader in Modern European History, Department of History,
Warwick University

Becoming an evaluator

Experience

- Evaluating since 2017 – Marie Skłodowska-Curie Actions
 - Involved in EU programmes since 2010 (FP7 Infrastructure; MSCA Supervisor & Fellow)
 - COST Actions evaluator
- National experience: UKRI (AHRC/ESRC); Wellcome Trust; Carnegie Trust
- International: Belgium, Canada, France, Portugal, Slovenia, Switzerland

Rationale

- Professional service – peer review
- State-of-the-art and cutting-edge research within and across disciplines
- Best way to learn about the programmes and to prepare funding applications
- It pays!



Evaluating proposals

Process

- Training and documentation (evaluation criteria and process)
 - Prepare for off-line work and long hours
- Administrative sections (Participants & Infrastructures)
- Case for support
 - Read with evaluation criteria in mind
- Prepare for discussion with evaluators, vice-chair, project officer, etc.

Strengths

- Clarity and precision
- Systematic and exhaustive approach to criteria
- Feasibility (and honesty)

Challenges & lessons learned

Challenges

- Time pressure
 - Workload and hard deadlines
- Collaborative and iterative process
 - Interdisciplinarity
 - Compound criticism
 - Consensus report

Advice to my past – and present! – evaluator self

- Do it as soon as you can– great experience and learning opportunity
- Demand compensation from UK funders
- Engage with REA and the Commission



Tips and hints for applicants

Preparation

- Look beyond national borders and scientific boundaries
- Keep an eye on opportunities and plan ahead (months and years)
- Read the documentation in full
- Seek and follow advice (colleagues, research support services)

Writing

- Give yourself weeks if not months
- Do not neglect ANY criterion – everything matters!
- Use peer review
- Proofread and edit

Session 3: How to Get Help to Participate in Horizon Europe

Chair: Cathy Alexander - Deputy Director (International Research & Innovation), Department for Science, Innovation and Technology

Ewa Bloch - Head of Europe and European Programmes, Innovate UK

Minna Jalili - European Commission

Pierre Purseigle - Reader in Modern European History, Department of History, Warwick University



Closing Remarks

Cathy Alexander - Deputy Director (International Research & Innovation), Department for Science, Innovation and Technology





Innovate
UK



UNIVERSITY OF
BIRMINGHAM



Department for
Science, Innovation
& Technology

Networking Reception