What I am going to talk about

- Why we are here
- Introduction to EPSRC and the ICT team
- Funding situation
- Next EPSRC Delivery Plan
- Strategy and priorities for ICT research and research training
- Next steps and further engagement by the ICT Theme
Why are we all here?

Aims

- To share current EPSRC strategy and ICT Theme plans; to include information about the upcoming refresh of Balancing Capability
- To discuss the University’s relevant research strategies – how do current strategies and future University plans relate to EPSRC strategy?
- To hold portfolio level discussions between Portfolio Managers and researchers
- To allow engagement between University staff and Portfolio Managers
EPSRC is the main UK government agency for funding research and training in engineering and the physical sciences, investing more than £850 million a year.

With a mission to promote and support, by any means, high quality basic, strategic and applied research and related postgraduate training in engineering and the physical sciences.

And advance knowledge and technology, and provide trained scientists and engineers, which meet the needs of users and beneficiaries, to the benefit of the UK.
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<td>Helen Money-Kyrle</td>
<td>Year in Industry</td>
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firstname.lastname@epsrc.ac.uk
One vision......

Our vision is for the UK to be the best place in the world to research, discover and innovate

Two goals.....

RESEARCH and DISCOVER

RESEARCH and INNOVATE

Three strategies.....

Balancing capability

Building leadership

Accelerating impact
Funding situation

- Science budget announced November 2015 - flat with inflation
- Allocation to EPSRC
- Extras
- Funding doesn’t stop
Science for a successful nation
The case we have made to Government

Productive nation
The future competitiveness of the UK economy requires the successful development of world leading products, processes and technology based on the discovery and innovation in the engineering, ICT, mathematical and physical sciences.

Healthy nation
A healthier society will be more productive and resilient, and better able to manage the impacts of an ageing population. Innovative technologies, will enable transformative improvements in the prevention, diagnosis and treatment of illness. This research will deliver higher quality care and better patient outcomes, will reduce the cost of healthcare and will drive UK growth.

Connected nation
The UK’s success will be driven by whole new industries and services, as yet unimagined, as well as new, more cost effective ways of delivering existing services through the development of transformational technologies to connect people, things and data together, in safe, smart, secure, trustworthy, productive and efficient ways. This will drive growth across all regions and sectors of the UK. This will rely on discovery and innovation in mathematics, computing, engineering and physical sciences and is essential to deliver a knowledge economy.

Resilient nation
Safeguarding our way of life requires an ability to anticipate, adapt and respond to changes, natural or man-made, short or long-term, local or global. UK prosperity depends on the smooth and sustainable functioning of complex infrastructures: roads and railways; communications networks; water, energy and waste utilities. Engineering, mathematics, ICT and physical sciences can lead the new thinking and innovation needed to build a truly resilient nation for the future.
Next EPSRC Delivery Plan

- Starts 1 April 2016
- Shaped around the arguments we have made for funding
- This will be published at the end of March…
ICT Theme overview

- Includes UK research into computer science, user-interface technologies, communications, electronics and photonics—around the common thread of:
  - New ways to transmit, present, manage, analyse, process, generate or understand information

- Focus is on ensuring there is a strong UK capability

- Covers a broad and diverse range of areas, communities and disciplines

- Large domain with active interfaces with all other Themes

- Interrelationships between research areas, within and beyond ICT are important

- Has a technological context and the connection to practice is important
We are in the middle of work on refreshing our

- Positions on individual research areas
- Cross research area priorities
Reminder: current positions and priorities

- Which remain in place until we refresh them….

- …and are working
ICT Cross ICT priorities

- Towards an intelligent information infrastructure (TI3)
- Many-core architectures and concurrency in distributed and embedded systems (MACDES)
- Photonics for future systems (PfFS)
- New and emerging areas (N&E)
- Working together (WT)
Refresh of positions and priorities-why?

- Finite resources
- Need to address strategic priorities
- Ensure they are a useful way of managing the portfolio-understandable and meaningful
- Allow new areas to emerge
- Achieve appropriate balances between
  - Priorities
  - Flavours of research
  - Themes
  - Mechanisms
  - Research areas
Lots of thinking has already been done
We have shared some thinking and gathered feedback on it
Cross Theme discussions
We have engaged through workshops, meetings, and visits…
…and continue to do so
Engagement

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**EPSRC**
- Call for evidence on our Delivery Plan
- Engagement on Balancing Capability

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**ICT Theme**
- ICT Theme Delivery Planning workshops
- Meeting with REF panellists
- UKCRC
- Portfolio Manager visits, attendance at steering committees
- Engagement with users
- Discussions with ICT Strategic Advisory Team
Refresh of positions and priorities - what?

- Still work to be done, but thinking is well developed
- Haven’t reached conclusions-so input is welcome
- Announcement of conclusions in December 2016
- Planning sessions, workshops and visits to assist communication and implementation of these
Thank You
Overview

- Impact and National Importance: What are they?
- The bigger picture: National Importance & Impact in context
- What do they mean for me when writing a grant?
  - Q&A/Impact Exercise
Impact & National Importance

What are they and what’s the difference?

### National Importance
- Why should the UK fund your research over another proposal?
- What is the potential held within the research program proposed?
- How could the UK benefit from the research being funded?

### (Pathways to) Impact
- What are you, as the research team, going to do to increase the impact of the research proposed?
- How will the appropriate people know of your work?
- How will you enable the work to pass along the innovation chain?
The **National Importance** of a Research Area takes into account:

- How the Research Area contributes to, or helps maintain the health of other research disciplines, contributes to addressing key UK societal challenges, contributes to current or future UK economic success, for example, through increased productivity, connectedness, resilience and health.
- Enables future development of key emerging industry(s);
- The extent to which the Research Area has the potential to meet national strategic needs by establishing or maintaining a unique world leading research activity (including areas of niche capability);
- How the Research Area fits with and complements other UK research funded in the area or related areas in EPSRC’s portfolio.
National Importance in Peer Review

National Importance is a secondary criterion in the peer review process (after research quality) – used to distinguish between proposals.

Make sure you include a national importance statement in the case for support. Can include reference to:

- EPSRC research area/theme strategies
- Government reports
- Industrial reports
- Why is your research important in these contexts.

Some examples of good National Importance statements on our website:

[www.epsrc.ac.uk/funding/howtoapply/preparing/includingnationalimportance/](http://www.epsrc.ac.uk/funding/howtoapply/preparing/includingnationalimportance/)
Work we are doing around National Importance:

- EPSRC are looking into National Importance as one criterion to help shape future research area strategies.
- Part of the call for evidence for Balancing Capability.
- Evidence to date includes: industrial sector reports, research roadmap articles, policy papers.....

Q: To what further evidence should we refer?

→ Answers on a postcard: Call for Evidence (formally opening Monday 11th April – info available now)

https://www.epsrc.ac.uk/newsevents/news/bcevidencecall/
National Importance

Work we are doing around National Importance:

- EPSRC are looking into National Importance as one criterion to help shape future research area strategies.

For further information, see the EPSRC website or contact the call for evidence team.

https://www.epsrc.ac.uk/newsevents/news/bcevidencecall/

Guidance Documentation

EPSRC Balancing Capability Call for Evidence 2016

This document provides advanced information on our Balancing Capability ‘Call for Evidence’ that is due to go live in April 2016. It contains information on why we are doing this, our timescales, what we are looking for and how your returns will be used. Please note that further guidance on how to submit your evidence will be issued in due course. In the meantime, the template provided should be used to prepare your returns.

Enquiries should be directed to evidencecall2016@epsrc.ac.uk

Documentation correct as of 22 March 2016.

Contents

- Call for Evidence: Context ......................................................... 2
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- What will the evidence be used for? ......................................................... 3
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LEAD RESEARCH AREA

- Title:
- Author:
- Link:
- Year:
- Evidence type:

Contributors: (limit of 500 characters)

Quality (limit of 500 characters)

Key points:

National Importance (limit of 500 characters)

Key points:

Capacity (limit of 500 characters)

Key points:

Further Information (limit of 500 characters)

Additional notes:

Other relevant research areas
- Algebra
- EOS
Outcomes framework: Examples of relevant ICT research priorities under each ‘Nation’, or areas in which ICT research contribution is key.

**Productive Nation**
- Innovative & efficient production processes
- Manufacturing informatics & digital business innovation
- Sustainable Industrial Systems
- Next generation disruptive technologies

**Healthy Nation**
- Development of digital healthcare technologies
- Novel Treatment & Therapeutic Technologies
- Enhanced Prediction & Diagnosis at Point of Care
- Technology for a Healthy Life

**Resilient Nation**
- Data science-enabled infrastructure solutions
- Energy efficiency and optimised power networks
- Systems approaches to national infrastructure
- Intelligent solutions to global security threats

**Connected Nation**
- Technology for IoT development & use
- Data-driven economy
- Safe & trusted cyber society
- Intelligent technologies & systems
- IT as a Utility – Design for a future digital society
Impact

Society
- International development
- Health
- Quality of life

Knowledge
- Scientific advances
- Techniques

Economy
- Wealth creation
- Inward investment
- New companies
- Products & procedures

People
- Skills
- People pipeline

Your research

EPSRC
Investing in research for
discovery and innovation
Impact

When writing a grant consider:

- What are you, as the research team, going to do to increase the impact of the research proposed?
- How will the appropriate people know of your work?
- How will you enable the work to pass along the innovation chain?

Bear in mind that we expect to see different impact from different research. There is no “magic formula” for impact - Reviewers will expect to see the most appropriate approach for the project, and for the sector.
Pathways to Impact in Peer Review

- Harmonised policy across all research councils
- Now require a clearly thought through and acceptable Pathways to Impact as a condition of funding
- An acceptable Pathways to Impact should:
  - Be project specific and not generalised;
  - Be flexible and focus on potential outcomes.
- Policy has been in effect at panels since 1 April 2015

http://www.epsrc.ac.uk/newsevents/news/impactrevisedguidance/
Impact Acceleration Accounts

Accessible funding for tailored impact activities

- Account-based funding given to universities on the basis of a peer-reviewed business case. Based on algorithmic funding, covering 95% of our portfolio.

- Allows institutions the **flexibility** to operate tailored schemes that facilitate increased likelihood of impact from research.

- Can be used for example for:
  - Secondments
  - Proof of Concept
  - Follow-On Funding

- Glasgow contacts: Simon Earp [simon.earp@glasgow.ac.uk](mailto:simon.earp@glasgow.ac.uk); Steve Beaumont [Steve.Beaumont@glasgow.ac.uk](mailto:Steve.Beaumont@glasgow.ac.uk)
Different Impact from Different Research

- Policy & Standard Setting
- Public Engagement
- Ethical & Cultural Issues
- IP Development & Spin-Outs
- Consultancy Services
- Technology Demonstrators
- Science Advocacy
- Web Presence
- Economic & Societal Issues
- Academic Outputs
- User Engagement
- Trained People
What are the areas you would like to focus on for your research?

What are the barriers you face in addressing these, and how can these be overcome? (Pathways to Impact) – What resources do you need to do so?
Please remember...

- ... to think about impact right from the start – consider what you might need (resources) before you write your proposal
- ... to request resources for pathways to impact
- ... to keep us informed of success stories. We like to know what made it work!
Fellowships and Funding Opportunities for ECRs
What do I want to do with my grant?

- Predominantly research
- Develop as a future leader

Are you applying to EPSRC for the first time?
- Yes
- No

What is the main aim of the proposal?
- Research
- Other

What career stage are you at?
- Postdoctoral
- Early
- Established

Is the focus networking or overseas travel?
- Networking
- Travel

What are you looking to achieve?
- Stimulate future research
- Create an interdisciplinary community

First Grant

Standard Grant

Workshop Grant

Overseas Travel Grant

Network Grant
The Peer Review Process

Proposal → Portfolio Manager → Reviewers: One from Proposer Two from College → EPSRC College

PI Response → Supportive → Budget from Council → Theme Lead

Unsupportive → EPSRC College

Peer Review Panel → Rank Order

Fund → Not Fund → Theme Lead

Rejection
Interdisciplinary Proposals

- No double jeopardy – one proposal, one panel
- Cross-Theme funding
- Cross-Council funding
- Joint reviewer selection
- EPSRC remit query service
  
  [http://www.epsrc.ac.uk/funding/howtoapply/basics/remit/remitqueries/](http://www.epsrc.ac.uk/funding/howtoapply/basics/remit/remitqueries/)
Keep your Je-S personal profile up to date!

Peer Review College:
- Currently composed of >4000 experts across the fields of engineering and physical sciences.
- Committed to undertake a number of reviews per year.
- May be approached to be part of a review panel.
EPSRC currently renewing membership of Peer Review College (via Associate College)

Call closes 10th May

Application via online survey

Successful applicants will receive online training

https://www.epsrc.ac.uk/files/funding/calls/2016/epsrcassociateprc/
Associate College members must be able to commit to:
- Reviewing up to 8 proposals in a year
- Complete the reviewer training
- Create an expertise profile

“Graduation” to full College Member status will depend on:
- Satisfying requirements of Associate College membership
- Production of usable reviews.
Equality & Diversity

- Through this exercise, we have particular aspirations to:
  - Increase the international, business, charities and government representation on the College
  - Improve the diversity of the College, addressing underrepresented groups.

- We will use increasing diversity in our selection criteria.

- This will be used alongside quality criteria and a needs-based analysis across portfolio.
### Key dates

<table>
<thead>
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<th>Date</th>
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<tbody>
<tr>
<td>Deadline for Expressions of interest</td>
<td>10 May 2016 (16:00)</td>
</tr>
<tr>
<td>Completion of College Refresh Process</td>
<td>August 2016</td>
</tr>
<tr>
<td>Decision on Associate College Membership</td>
<td>August 2016</td>
</tr>
<tr>
<td>Start of Associate College Membership</td>
<td>September 2016</td>
</tr>
</tbody>
</table>

### Contacts

- Janet Edwards – Portfolio Manager, Peer Review  
  (Janet.edwards@epsrc.ac.uk - 01793 444323)
- Alison Griffiths – Portfolio Manager, Peer Review  
  (Alison.Griffiths@epsrc.ac.uk - 01793 444432)

[https://www.epsrc.ac.uk/files/funding/calls/2016/epsrcassociateprc/](https://www.epsrc.ac.uk/files/funding/calls/2016/epsrcassociateprc/)
## ECR ICT Theme Contacts

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<tr>
<td>Lisa Coles</td>
<td>First Grants</td>
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<tr>
<td>Zoe Brown and Adam Luqmani</td>
<td>Fellowships</td>
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</tbody>
</table>

**Email:** FirstName.LastName@epsrc.ac.uk

http://www.epsrc.ac.uk/research/ourportfolio/themes/ict/contacts/
Standard Research Grants

- Can apply anytime, for any amount of resource, for any duration
- ICT Theme holds approximately seven prioritisation panels a year
- Assessment criteria:
  - Quality
  - Importance
  - Impact
  - Applicant’s ability
  - Resources and management
First Grant Scheme

- First application to EPSRC (not including fellowships)
- Within 36 months of first academic post
- Within 10 years of completing your PhD
- Capped at £125k at full economic cost
- Limited duration of up to two years
- First Grants are only compared to other first grant applications at panel meetings
- Contact us if you’re unsure whether you’re eligible to apply!
Fellowships

- No eligibility requirement based on years of experience – **person specification** instead, **3 career stages**
- Up to **5 years** duration, **50-100% FTE**
- Only open in **priority areas**
- No closing dates but **two rounds per year**
- Proposals should be submitted a **minimum of four months** before the prioritisation panel (January and July)
- No outline stage – full proposal submitted
Fellowships – Person Specification

- Research excellence
- Setting the research agenda
- Strategic vision
- Profile and influence
- Inspirational team leader
- Communication and engagement skills

Prioritisation panel (for interview) focusses on **research quality**
Interview panel focuses on **person specification**

Talk to colleagues about how they see you meeting these!
Fellowships in the ICT Theme

Minimum requirement - contributing to “Working Together” priority

Encouraged to contribute against other cross-ICT priorities

Open to all ICT areas at Early and Established stages except

- Speech Technology - Early career only
- CMOS Device Technology - Established career only and must be catalysing refocus into other areas

ICT Contacts: zoe.brown@epsrc.ac.uk and adam.luqmani@epsrc.ac.uk
Fellowships: what to consider before applying

Who/which fields am I working with?

- Working Together can be within the ICT disciplines (even the same field), the key is…

- How/why is this different to what I/the community do already?

Who will I influence during my fellowship and how will a fellowship (rather than a standard research grant) help me to achieve this?

Who will/should influence me?

Why is a fellowship the best route?
Group Discussions – Suggested Questions

- **Fellowships**
  - How do I fit a research leadership-focussed scheme?
  - How can I demonstrate evidence of the assessment criteria: Setting the research agenda, Strategic vision, Profile & Influence, engagement skills, and Inspirational team leadership.
  - How does my research fit with the “Working Together” priority? How do I broaden the scope if necessary?

- **First Grants**
  - Is this really the right scheme for my grant? How can I tell?
  - As a reviewer, what would I expect to see in this scheme?
  - What support do I need from my university?

- **Peer Review**
  - What would I look for in a PI response?
  - The importance of a good PI response – what are the dos and don’ts?
  - Applying for the Associate College – discussion.
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