Cross-Disciplinarity and Co-Creation in ICT
Research Call 4 May 2017

Samantha Francis, Head of ICT
Sarah Newman, Electronics Portfolio Manager, ICT Theme
Agenda for Today

10:30  EPSRC ICT Strategies and Details of this Call

11:30 Refreshments

12:00 Prof Yang Hao of Queen Mary, University of London & Prof Awais Rashid of Lancaster University on Co-Creation and Cross-Disciplinarity in their research

13:00 Buffet lunch

14:00 Close
# The ICT Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha Francis</td>
<td>Head of ICT</td>
</tr>
<tr>
<td>Nigel Birch</td>
<td>DSP; Music &amp; Acoustics</td>
</tr>
<tr>
<td>Zoe Brown</td>
<td>Graphics, Image &amp; Vision, Speech, Biological Informatics</td>
</tr>
<tr>
<td>Ellie Gilvin</td>
<td>HCI, Human Communication in ICT, Impact in the ICT Theme</td>
</tr>
<tr>
<td>Nelly Wung</td>
<td>AI, NLP</td>
</tr>
<tr>
<td>Renee van de Locht</td>
<td>Cybersecurity</td>
</tr>
<tr>
<td>Adam Luqmani</td>
<td>Fundamentals of Computing</td>
</tr>
<tr>
<td><strong>Sarah Newman</strong></td>
<td><strong>Electronics</strong></td>
</tr>
<tr>
<td>Matthew Scott</td>
<td>Communications</td>
</tr>
<tr>
<td>Laura Cadman</td>
<td>Photonics</td>
</tr>
<tr>
<td><strong>Michael Barclay</strong></td>
<td><strong>Software engineering, Data science</strong></td>
</tr>
</tbody>
</table>

firstname.lastname@epsrc.ac.uk
Other EPSRC Staff present here today

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracy Keys</td>
<td>Digital Economy Portfolio Manager</td>
</tr>
<tr>
<td>Ellen McKelvey</td>
<td>Events Coordinator</td>
</tr>
</tbody>
</table>

And we are also pleased to welcome:

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bernd Stahl</td>
<td>ORBIT and de Montfort University</td>
</tr>
<tr>
<td>Martin de Heaver</td>
<td>ORBIT and de Montfort University</td>
</tr>
</tbody>
</table>
Aims of this event

To communicate the **aims of this call** and what we mean by **co-creation** to investigators interested in this call

To explain **how outline proposals will be assessed**

To communicate the **timescale for the call** and what applicants need to do in order to apply

To answer investigators’ **questions**

These slides, a meeting report and FAQs will be posted on the EPSRC website as soon as possible following this event.
The Wider Context
Current ICT portfolio

- Biological informatics
- Image & vision computing
- Graphics and visualisation
- AI technologies
- DSP
- TCS
- Programming languages & compilers
- Verification and correctness
- Architectures & operating systems
- Databases
- Information systems
- Software engineering
- Microelect. design
- Microelect. Device technology
- RF & MW devices
- Optical comms
- Displays
- Human comm. in ICT
- PUC
- RF & MW comms
- Optoelect. devices & circuits
- Optical devices and subsystems
- Biological informatics
- Vision, hearing & other senses
- Music & acoustic technology
- Speech technology
- HCI
- ICT networks and distributed systems
- NLP
- NLP
CONNECTED NATION – Surviving and Thriving in a Digital World

C1: Enable a competitive, data-driven economy
C2: Achieve Transformational development and use of the Internet of Things
C3: Deliver intelligent technologies and systems
C4: Ensure a safe and trusted cyber society
C5: Design for an inclusive, innovative and confident digital society

For example:

- Algorithms, Mathematical Modelling and Statistics to provide insights into complex data and systems
- Communications Technologies and Systems to gather, process and transmit data
- Autonomous Systems and Control, Informatics and Computation to design, build and optimise smart intelligent solutions
- User-centric Interactivity, Design and Decision Making to create an intelligent and inclusive digital environment for people
- Data and Computational Infrastructures to enable an agile digital economy
Cross-ICT Priorities 2017-2020

- Safe and Secure ICT
- Future Intelligent Technologies
- Data Enabled Decision Making

Cross-Disciplinarity and Co-Creation

- People at the Heart of ICT
- New and Emerging Areas
Cross-Disciplinarity and Co-Creation

This cross-ICT priority aims to encourage investigators to form novel collaborations with researchers working in different disciplines and with users of research.

This builds on the previous Working Together Cross-ICT Priority.

Co-creation is the joint creation of a research project by collaborators.

This priority aims to help ensure that the problems being tackled and the opportunities being explored within the EPSRC ICT portfolio, are well-framed and clearly understood.

It is hoped that this will lead to:

- Innovative approaches that could not be devised by researchers working in one discipline alone.
- Active partnerships in which, for example, methodologies from one discipline can be applied in another.
EPSRC Call: Cross-Disciplinarity and Co-Creation in ICT Research

We have decided to release this call to initiate a change as part of the launch of our priority.

Call Aims

- To fund outstanding ICT research demonstrating Cross-Disciplinarity and Co-Creation
- To encourage and enable investigators to work effectively across disciplines
- To identify and promote investigators to advocate this style of research and lead their communities in cross-disciplinary research.
This call seeks to encourage **active and novel collaboration** between researchers working in ICT and different disciplines and/or with users of research.

- Within the ICT community
- With researchers from across the EPSRC portfolio
- With researchers funded by other research councils
- With users of research

**Co-creation** is the joint creation of a research project by collaborators. We seek to fund research that has the potential to encourage significant Cross-Disciplinarity and Co-Creation research amongst members of the ICT research communities.

As part of this award, successful applicants should play a role in championing this approach.
Stages of the call and Requirements for the Outline Stage
Some FAQs

What size proposals are you expecting to fund?
- £5M available and we expect to fund 6-10 programmes of research
- There is no strict maximum or minimum, it is up to applicants to decide and justify their requirements.

How long does the proposed project have to be?
- No strict minimum or maximum, again, it is up to applicants to justify their proposal.

Are we allowed to request equipment?
- No, equipment is not available through this call.
Peer Review Processes for this Call

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outline call opens</td>
<td>3 May 2017</td>
</tr>
<tr>
<td>Outline call closes</td>
<td>14 June 2017</td>
</tr>
<tr>
<td>Outline Panel</td>
<td>31 July and 1 August 2017</td>
</tr>
<tr>
<td>Full call closes</td>
<td>27 September 2017</td>
</tr>
<tr>
<td>Panel</td>
<td>6 February 2018</td>
</tr>
</tbody>
</table>

- Outline proposals not meeting the **eligibility** criteria will be rejected prior to the outline panel.
- If the panel recommends it, **brief feedback** will be given to unsuccessful applicants following the outline panel.
- Submissions to the outline call will not count towards the Repeatedly Unsuccessful Applicants Policy.
Eligibility Check (prior to the Outline Panel)

- The Primary Investigator should be a member of the ICT research community.
- The proposed research programme must include ICT research.
- The proposed research must demonstrate evidence of cross-disciplinarity and co-creation.
- Any single investigator may only appear on one proposal, either as investigator or co-investigator.
- A host organisation statement should be included that demonstrates institutional support for cross-disciplinarity and co-creation (more on this in a later slide).
## Peer Review Processes for this Call

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outline call opens</td>
<td>3 May 2017</td>
</tr>
<tr>
<td>Outline call closes</td>
<td>14 June 2017</td>
</tr>
<tr>
<td><strong>Outline Panel</strong></td>
<td>31 July and 1 August 2017</td>
</tr>
<tr>
<td>Full call closes</td>
<td>27 September 2017</td>
</tr>
<tr>
<td>Panel</td>
<td>6 February 2018</td>
</tr>
</tbody>
</table>
Assessment Criteria for Outline Stage

part 1

Demonstration of Cross-Disciplinarity and Co-Creation

- Novel collaboration of researchers working in different disciplines
- Evidence that the project has been co-created by the collaborators (evidence of learning from each other, a proposal that no one partner could have devised alone, a proposal where methodology of one discipline has been imaginatively applied to meet the needs of another)

Evidence of Added Value from this Collaboration

- What aspects of the proposed research would not be possible without Cross-Disciplinarity and Co-Creation?
- Are there any new areas that could arise from the proposed research?
Assessment Criteria for Outline Stage
part 2

- **Suitability of the Applicant Team to Deliver the Research**
  - Relevant partners have been assembled
  - The applicant team is sufficient to deliver the proposed research (have all the relevant collaborators been included?)

- **Potential to Influence the ICT Community**
  - Should be sufficiently within the remit of ICT research that the proposed research could have the potential to influence the behaviour of ICT researchers.
  - Credible plans outlined to influence relevant communities
Institutional Support for Cross-Disciplinarity and Co-Creation

Explain how the institution will ensure this approach to research is encouraged and supported during and beyond the length of the grant and catalyse a long-term culture change

What could this look like?

Supportive climate for investigators to encourage collaboration between disciplines

- Extra support (short term interns, time for secondments, students...)
- Space for work, shared space to work with investigators from other departments
- Access to professional services, facilities, equipment
- Partnership with other institutions
Guidance on Writing an Application

Documents Required

- Two-page outline Case for Support
- Justification of Resources
- Host Organisation Statements

Remember

- If you submit any more, the outline panel won’t see it.
- The deadline for submission is 4 pm on 14 June 2017!

Advice

- Take advice from this afternoon’s speakers!
- Aim to communicate your idea clearly to reviewers from a range of disciplines.
- Articulate explicitly where the novelty in your proposed research lies.
Other things to consider when writing your proposal…
Equality, Diversity and Inclusion

Are more diverse teams more creative?
Enhancing equality, diversity and inclusion

The long-term strength of the UK research base depends on harnessing all the available talent. As an investor in research, we are committed to attracting the best researchers into research and innovation careers.

Working through RCUK we will deliver the [RCUK E, D & I Action Plan](#) which has the objectives of:

- Leading by example
- Challenging bias and ensuring fair and inclusive funding processes
- Leading and supporting change in our research community.

Long term aspirations and culture change campaign
Aims to identify and describe the nature of barriers and challenges and the key features of the environment and culture of ICT

Present evidence that can be used by the community and/or EPSRC

Supported by EPSRC, BCS, NMI and UKCRC; Contractors: Employment Research Institute, Napier University

This study is now underway and the results will be published later this year.
Responsible Innovation in ICT
ORBIT stands for the Observatory for Responsible Research and Innovation in ICT.

Responsible Research and Innovation (RRI) aims to ensure the sustainability, acceptability and desirability of research processes and outputs. The ORBIT project is funded by the UK Engineering and Physical Sciences Research Council. Its purpose is to provide services to promote RRI across the UK ICT research community. It aims to move beyond ICT and the UK and will provide RRI services and knowledge to all interested parties.

Prof Bernd Stahl of de Montfort University is representing this organisation today
Cross-ICT Priorities 2017-2020

Safe and Secure ICT

Future Intelligent Technologies

Data Enabled Decision Making

Cross-Disciplinarity and Co-Creation

People at the Heart of ICT

New and Emerging Areas
Successful applications will be invited to submit a full proposal by 27 September 2017.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outline call opens</td>
<td>3 May 2017</td>
</tr>
<tr>
<td>Outline call closes</td>
<td>14 June 2017</td>
</tr>
<tr>
<td>Outline Panel</td>
<td>31 July and 1 August 2017</td>
</tr>
<tr>
<td>Full call closes</td>
<td>27 September 2017</td>
</tr>
<tr>
<td>Panel</td>
<td>6 February 2018</td>
</tr>
</tbody>
</table>
Call-Specific Assessment Criteria for Full Proposal Stage

- Fit to the Scope of the Call
  - Demonstration of Cross-Disciplinarity and Co-Creation
  - Evidence of Added Value from this Collaboration

- Within the Pathways to Impact statement, we are additionally seeking:
  - Commitment of applicant team to champion cross-disciplinarity and co-creation within their communities, as well as to share and develop good practice.

- Within resources and management, we are additionally seeking:
  - Demonstration of institutional support to deliver the programme of research, catalyse long term culture change and build relevant skills capacity.
Any Questions?
Thanks!