ENGINEERING AND PHYSICAL SCIENCES RESEARCH COUNCIL

Programme Grants

Susan Peacock, ICT Portfolio Manager

EPSRC

Pioneering research and skills

What is a Programme Grant?

- Programme grants are a flexible mechanism to provide funding to world-leading research groups to address significant major research challenges. They are intended to support a suite of related research activities focussing on one strategic research theme.
- A Programme grant gives leading researchers the stability of long-term funding allowing them the flexibility to be creative, innovative and to address some key challenges.
- They can be awarded for up to six years duration

Application Process

- Programme Grants are assessed in a different way to standard grants, undergoing pre-outline, outline and full proposal stages

- Potential applicants must discuss their interest and suitability in applying for a Programme Grant with EPSRC. At the pre-outline stage EPSRC will discuss with applicants how the proposed research relates to EPSRC's portfolio and future strategy. Some applicants will not be invited to progress to the next stage.

Outline Assessment Process

- The decision on whether to invite applicants to submit a full proposal is made within EPSRC at internal batch meetings, and based on the fit of the proposal to the spirit of the Programme Grant scheme. The internal panel bases their assessment on the information supplied by the applicant against the criteria above, together with the applicants' track record of being awarded significant research funding through EPSRC's competitive peer review process.
- Applicants are informed of whether they are invited to submit a full proposal shortly after the meeting at which their outline proposal was considered.
- Batch meetings are held every two months.

Full Proposal

Case for Support should include:

- Track record and International benchmarking
- Background
- Vision and Ambition
- Research Objectives
- Research Programme and Methodology
- Added Value
- National Importance
- Relevance to Academic Beneficiaries
- Advocacy for Engineering and the Physical Sciences
- Technical support annexe

Also:

- Management and Strategy
- Justification of Resources
- Work Plan
- Equipment
- Pathways to Impact

EPSRC
Pioneering research and skills

Full Proposal Assessment Criteria

- Quality of Research
- National Importance
- Added Value
- Overall Vision and Ambition
- Leadership Quality
- Management Strategy
- Impact
- Advocacy for Engineering and the Physical Sciences

EPSRC
Pioneering research and skills

Full Proposal Assessment Process

- Invited full proposals are assessed by expert peer reviewers, including at least one nominated by the applicant and one international reviewer. Proposals that do not receive sufficiently strong support from reviewers will be rejected without being put to a prioritisation panel. Those with sufficiently favourable reviewers' comments will be assessed via a panel meeting, at which applicants will be interviewed.
- Applicants will be notified of which interview panel the proposal will be assigned to and will be able to respond to the reviewers' reports in the normal way prior to the panel. Applicants will have a maximum of two pages of A4 for this response.
- Currently there are four interview panels covering the EPSRC remit - Engineering, ICT, Mathematical Sciences and Physical Sciences. Panels are expected to meet twice per year subject to demand. Programme Grant contacts will be able to advise you of specific dates.

Creativity @ Home

- Creativity@home is aimed specifically at leading researchers in receipt of critical mass funding - such as programme grants. The facilitators focus on the process enabling researchers to think freely and explore new and exciting research directions.

Objectives include:

- Learning a range of creative problem solving tools and techniques & how this might aid creativity in research.
- Exploring the future research vision and cross-disciplinary opportunities in the group using these tools.
- Engaging postdoctoral and postgraduate researchers in blue skies idea generation.
- Developing a cohort of trained people that have learnt creative problem solving techniques so that the approaches become embedded in the group, department, Institution.

EPSRC
Pioneering research and skills

Role of Advisory and Monitoring Group (AMG)

Chair: Peter Blood (Cardiff)

- Consists of an EPSRC representative, industry representatives and expert academic mentors

The AMG will:

- Offer impartial and ‘longer term’ advice consistent with the remit of the Programme Grant scheme
- Offer a combination of strategic support and advice on maximising impact, help assess risk and monitor the progress of the project against its rolling milestones
- Advise EPSRC on the programme’s overall standing and status
- Provide a reference channel for the flexible deployment of resources
- Help provide specific technical and facilities support
- Support the training aspects of the programme

Ultra-parallel visible light communications

Martin Dawson

£4.6M over 4 years

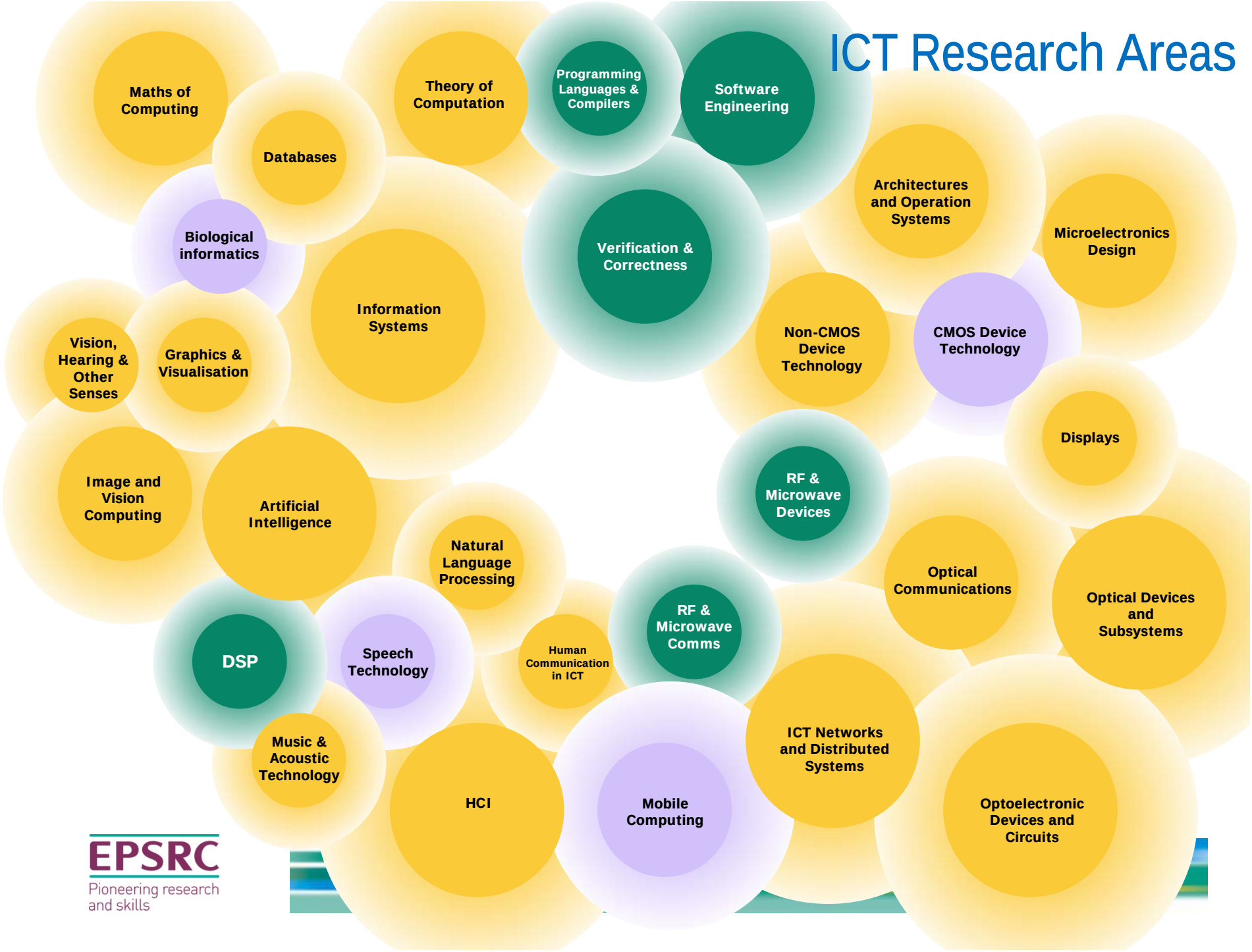
Co-Investigators: Dr Stephane Calvez (Strathclyde), Dr Ian Michael Watson (Strathclyde), Professor Ifor Samuel (St Andrews), Dr Graham Turnbull (St Andrews), Professor Ian Hugh White (Cambridge), Professor Richard Penty (Cambridge), Professor Harald Haas (Edinburgh), Dr Robert Henderson (Edinburgh), Professor Dominic O'Brien (Oxford)

Project Partners: Avago Technologies, BAE Systems, Bell Labs Ireland, Compound Semiconductor Tech Global Ltd, EV Group Inc, Micro Ressit Technology GmbH, NEC Telecom MODUS Ltd, Osram Opto Semiconductors GmbH, STMicroelectronics (R&D) Ltd, Thorn Lighting Ltd

http://gow.epsrc.ac.uk/NGBOViewGrant.aspx?GrantRef=EP/K00042X/1

EPSRC
Pioneering research and skills

ICT Research Areas



EPSRC
Pioneering research and skills

Optoelectronic Devices and Circuits

EPSRC Strategy – Maintain

- This is a large, internationally leading community of very high quality in the UK, with a number of large grants currently being funded by EPSRC

- Investment in this area has been maintained relative to others in the portfolio, but has been refocused to contribute to the Photonics for Future Systems cross-ICT priority by prioritising proposals which align to this strategy and de-prioritising those that do not

Optical Communications

EPSRC Strategy – Maintain

- Research needed in order to prevent a future "capacity crunch"
- Of relevance to many of the current challenges within ICT and beyond, aligning strongly with both the Towards an Intelligent Information Infrastructure and Photonics for Future Systems cross-ICT priorities
- Capability in this area will be refocused by prioritising proposals which align to Photonics for Future Systems and de-prioritising those that do not

The cross-ICT priorities

- Towards an intelligent information infrastructure
- Many-core architectures and concurrency in distributed and embedded systems
- Photonics for Future Systems
- New and emerging areas
- Working Together

EPSRC
Pioneering research and skills

Photonics for Future Systems

- In order for photonics research to gain maximum impact it is expected that researchers will be able to articulate the overall system they intend their device to contribute to and that the requirements of such a system have been considered.

- Requires greater connectivity of the community both within photonics and with other areas of ICT and beyond. In particular the community should consider its future relationships with researchers in the areas of electronics, communications and software.

Towards an Intelligent Information Infrastructure (TI3)

- A future information infrastructure needs to intelligently manage massive amounts of data, ensure efficient communications and exploit the content and information that will be available.

- There are key opportunities for pioneering research challenges that could resolve the **telecoms bottleneck** and address the **deluge of data** and deliver **understanding from information** that would have high impact for individuals and future society.

- This priority has the potential to build new research that could address the treatment of large data-sets, performance of digital services and exploring emerging technologies for low power, high speed, high density, low cost memory and storage solutions.

Thank you for listening!

Dr Susan Peacock
Portfolio Manager
Tel: 01793 444578
E-mail: susan.peacock@epsrc.ac.uk

EPSRC
Pioneering research and skills