Dr Helen Hunt - Portfolio Manager

Nanoscience through Engineering to Application

Toward Next Generation Healthcare

Business Innovation, EPSRC

Medical Engineering, Research Base
### The New EPSRC Organisational Structure

#### Business Innovation
- Energy
- Digital Economy
- Nanoscience through Engineering to Application
- Towards Next Generation Healthcare
- User led Knowledge and Skills
- User led Research

#### Research Base
- Mathematical Sciences
- Process, Environment & Sustainability
- Materials, Mechanical & Medical Engineering
- Cross-Disciplinary Interfaces
- Public Engagement
- Physical Sciences
- Research Infrastructure & International
- Information & Communications Technology
THE WHOLE EPSRC PICTURE

Living with environmental change (£9M)
Global threats to security (£6M)
Ageing: life-long health and wellbeing (£11M)

Values are commitment 2008-11
Towards Next Generation Healthcare

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www.epsrg.ac.uk
EPSRC is working in partnership, to support strategically important healthcare and ageing research for the benefit of UK citizens, where:

- engineering, physical sciences and mathematical sciences can make a meaningful contribution

- we can accelerate exploitation of research outputs for health and socioeconomic benefit
Healthcare Challenges

- UK Healthcare Model – “get sick, get well” – not sustainable

- Ageing population and demographic change (~1/4 of the population over 65 by 2050)
Towards Next Generation Healthcare

What is it?
Working in partnership to support a multidisciplinary approach to healthcare and ageing research for the benefit of UK citizens.

e.g. research contributing to predictive, pre-emptive and personalised healthcare

How?
EPSRC can facilitate the exploitation of research outputs for health and socioeconomic benefit.
## Towards Next Generation Healthcare Overview

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Technology Strategy Board: Assisted Living Innovation Platform

› Address specific societal challenges to deliver innovative new products and services.

› Advance technology needed to enable people who suffer from chronic long term health conditions to live independently.

› First call focus: “delivering innovation in assisted living - user perspectives”
Recent Funding Opportunities

**Nanotechnology Grand Challenges in Healthcare: A Cross Research Council Programme led by EPSRC**

- Nanotechnologies for the targeted delivery of therapeutic agents,
- Nanotechnologies for diagnostics.
- Closing date 5th August 2008.

**Lifelong Health and Wellbeing: A Cross Research Council Programme led by MRC**

**New Dynamics of Ageing: A Cross Research Council Programme led by ESRC**

- Closing date 26th June 2008
Research Relevant to Healthcare Sector

- Medical Modelling: 11%
- Biological and Medicinal Chemistry: 11%
- Biomaterials and Tissue Engineering: 21%
- Medical Instrumentation and Devices: 26%
- Medical Informatics: 14%
- Healthcare Design, Manufacturing and Infrastructure: 17%

£372 M over 782 grants
Spectrum of EPSRC Funding

› Multidisciplinary Assessment of Technology Centre for Healthcare (MATCH) IMRC, Brunel.

› Portfolio Partnership: Tissue Regeneration and Replacement, Leeds.

› Regenerative Medicine, Loughborough.

› Fast Field-Cycling Magnetic Resonance Imaging, Aberdeen.

› Strategic promotion of ageing research capacity (SPARC), Reading.

› EQUAL (Extending Quality of Life) Initiative Consortia