

# Funding BioImaging

## BioImagingUK Strategy Meeting

2<sup>nd</sup>/3<sup>rd</sup> July 2012

# Left to cover:

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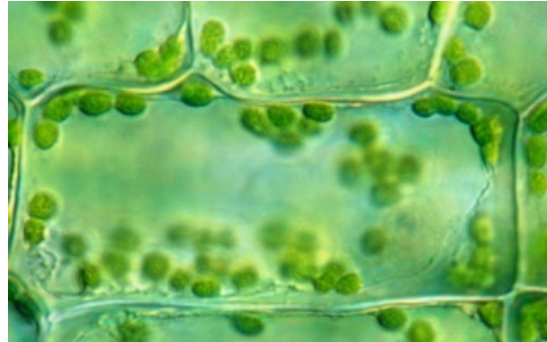
- Overview from BBSRC
- Overview from MRC
- Aims of MRC / BBSRC / EPSRC Optical Microscopy Initiative



## Three major research priorities



**Food Security**



**Bioenergy and Industrial  
Biotechnology**



**Basic bioscience  
underpinning health**

## Three crucial underpinning themes



**KE, innovation and skills**



**Exploiting new ways of  
working**



**Partnerships**

- Responsive Mode:
  - Strategic priorities
  - Higher impacts
  - Basic, strategic and applied research
  - Interdisciplinary science
  - Grants of all sizes – up to £2M over 5 years
  - Strategic Longer Larger Grants (sLoLa) – above £2M over 5 years
- Managed Mode Calls:
  - Tools and Resources Development Fund - £120k, 6-18 months
  - Bioinformatics and Biological Resource Fund – up to £2M over 5 years
  - Joint Next Generation Optical Microscopy Call (MRC lead) - £1-2M over 5 years

- Small or short-duration, pump priming research technology / methods driven projects including:
  - Early-stage pilot investigations
  - Rapid exploitation of the latest cutting edge technology
  - Improvement of existing technologies through novel modifications
- Bringing together communities for collaborative purposes (e.g. data sharing)
- Fast-track, light touch assessment process
- Encourages researchers to tackle technological bottlenecks
- Facilitates generation of novel, technology oriented applications to responsive mode and initiatives.

- Professor Paul French, Imperial College London  
Multidimensional fluorescence imaging for microscopy, endoscopy and tomography.
- Dr Marisa Marten-Fernandez, STFC  
OCTOPUS imaging cluster - multidimensional single molecule microscopy, confocal microscopy (FLIM, FRET, and multiphoton), and optical profilometry.
- Professor Jason Swedlow, University of Dundee  
Open Microscopy Environment - aims to develop data specifications, file format translators and data management software for imaging applications.
- Professor Michael White, University of Manchester  
Multi-parameter cell imaging to investigate the dynamics of NF-kappaB signalling. Since moving to Manchester, Professor White has established the Systems Microscopy Centre.

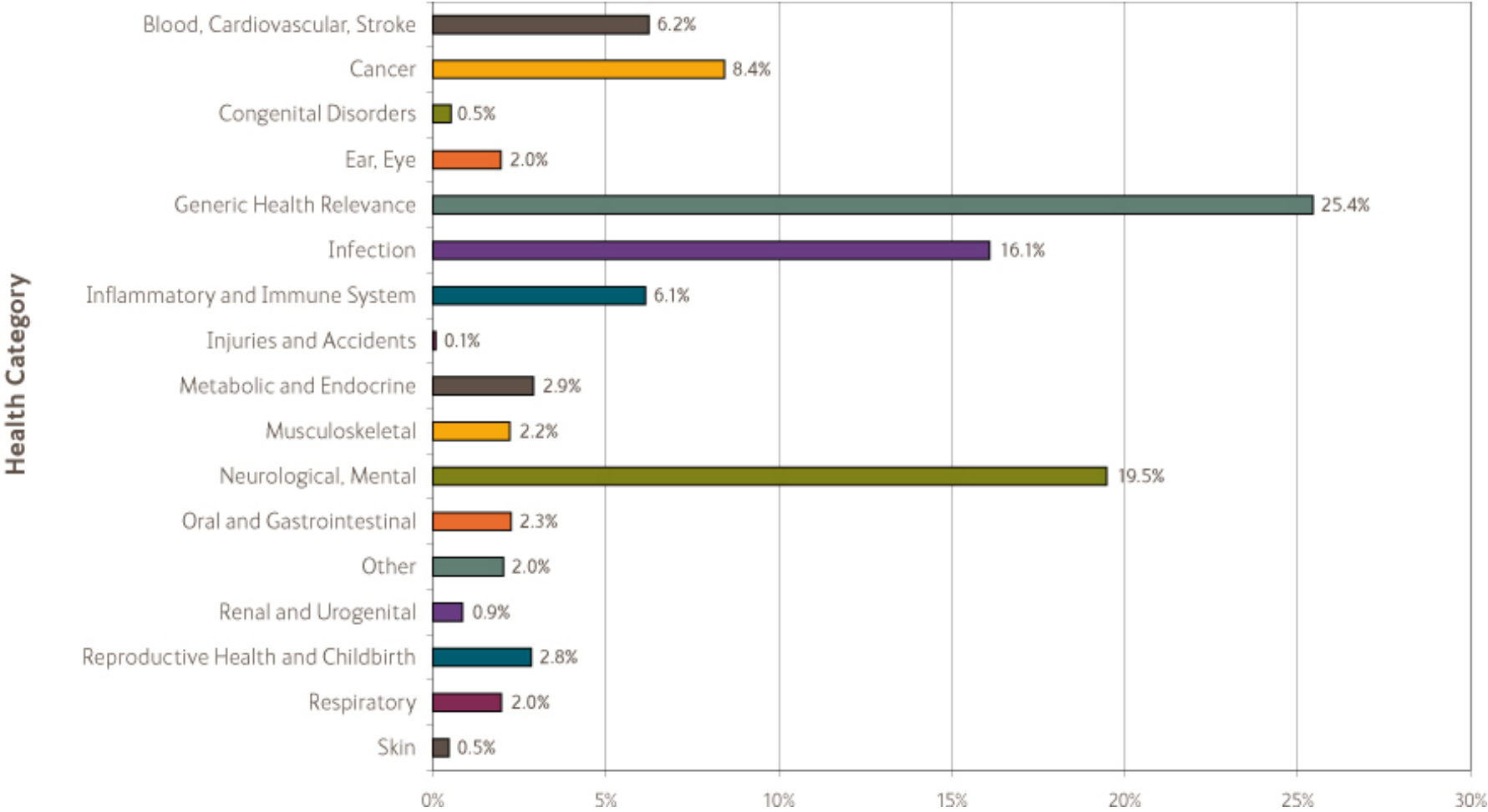


## MRC Strategic Plan 2009-2014

During 2009-2014 the MRC aims to support medical research which increases the pace of the transition to better health. We will achieve this through:

- Strategic Aim One: **Picking research that delivers**
- Strategic Aim Two: **Research to people**
- Strategic Aim Three: **Going global**
- Strategic Aim Four: **Supporting scientists**

# MRC spend by health category, 2010/11





# MRC locations

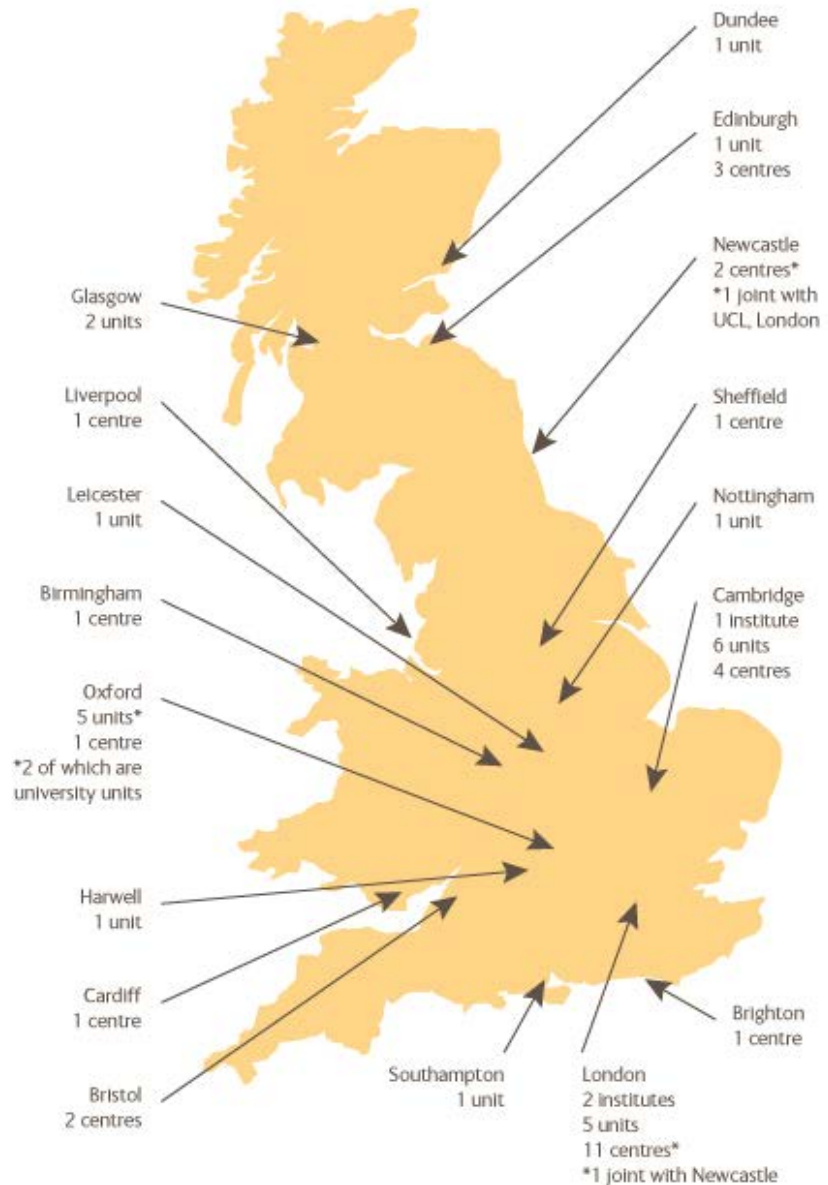
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## In the UK:

- 3 institutes } MRC core support
- 26 units } MRC core support
- 27 centres } 5-10yr grant in strategic area

## 2 units overseas:

- The Gambia
- Uganda



# Funding Mechanisms – “response mode”

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- “Standard” Grants
  - Research grants
  - Programme grants
  - New investigator research grants
- Awards to promote collaboration
  - Partnership grants
  - MRC Industry Collaboration Awards
- Capacity Building
  - MRC Clinical, Non-Clinical & Strategic Skill Fellowships
  - PhD Studentships
- Strategic Programmes
  - Developmental pathway funding scheme / Developmental clinical studies (preclinical/early clinical)
  - Methodology research programme
  - Experimental Medicine Challenge Grants

# Funding Mechanisms – responding to UK needs

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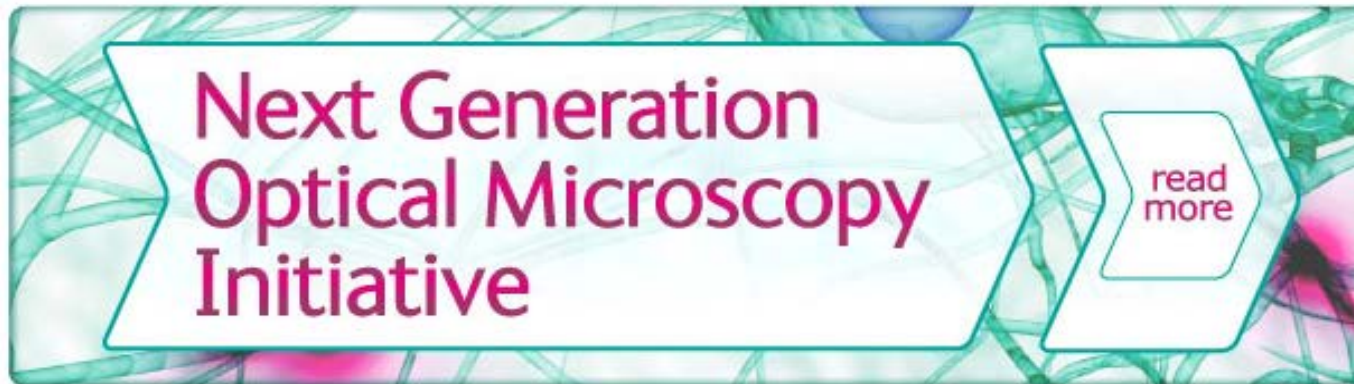
- **Highlight Notices**
  - alert researchers to areas of biomedical science that are currently a high priority for the MRC.
- **Strategic Skill Priorities**
  - *Biomedical Imaging*: Research skills training where a major component of the work involves the methodological and technological development and validation of advanced imaging techniques. Applied to a variety of fields, including (but not limited to) whole human, whole animal or advanced cellular and sub-cellular imaging techniques.
- **Call for proposals**
  - MRC / BBSRC / EPSRC Next Generation Optical Microscopy Initiative
  - And many more:  
<http://www.mrc.ac.uk/Fundingopportunities/Calls/index.htm>



## Identified Challenges:

- Capacity
  - MRC PET specialist postdoctoral training programmes
  - NB: possible new call ~ September 2012 deadline
- Navigating Regulatory Issues
  - MHRA and MRC PET expert panel on regulatory affairs
- Working with industry
  - Imanova Limited - centre of excellence in imaging sciences





- Help UK research community:
  - Capitalise on latest technologies
  - Develop & refine existing microscopes, probes, software
  - Establish sustainable platforms
- Pump-priming investment of up to £18 million
  - £10m capital
  - £8m resource (including £2m BBSRC and £1m EPSRC)
- Support for ~10 strategic and innovative partnerships
- Deadline: 12<sup>th</sup> July 2012
- Panel: mid-Nov 2012



[http://www.mrc.ac.uk/Fundingopportunities/Calls/optical\\_imaging/MRC008648](http://www.mrc.ac.uk/Fundingopportunities/Calls/optical_imaging/MRC008648)

Thank You!