

What is.....ESFRI, EuroBioimaging, and BioimagingUK?

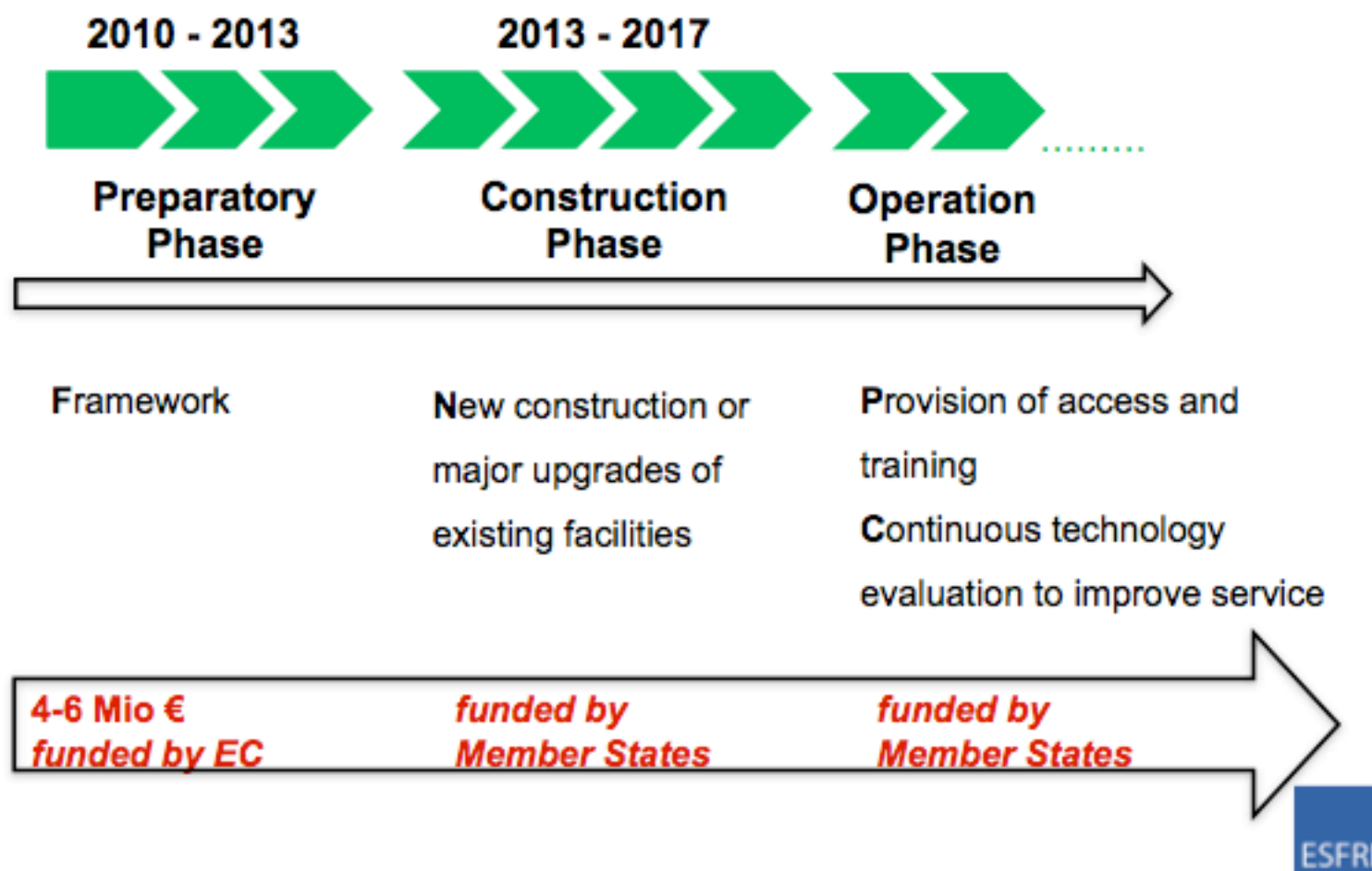
Jemima Burden, Raffaella Carzaniga, Jeremy Skepper, Paul Verkade.

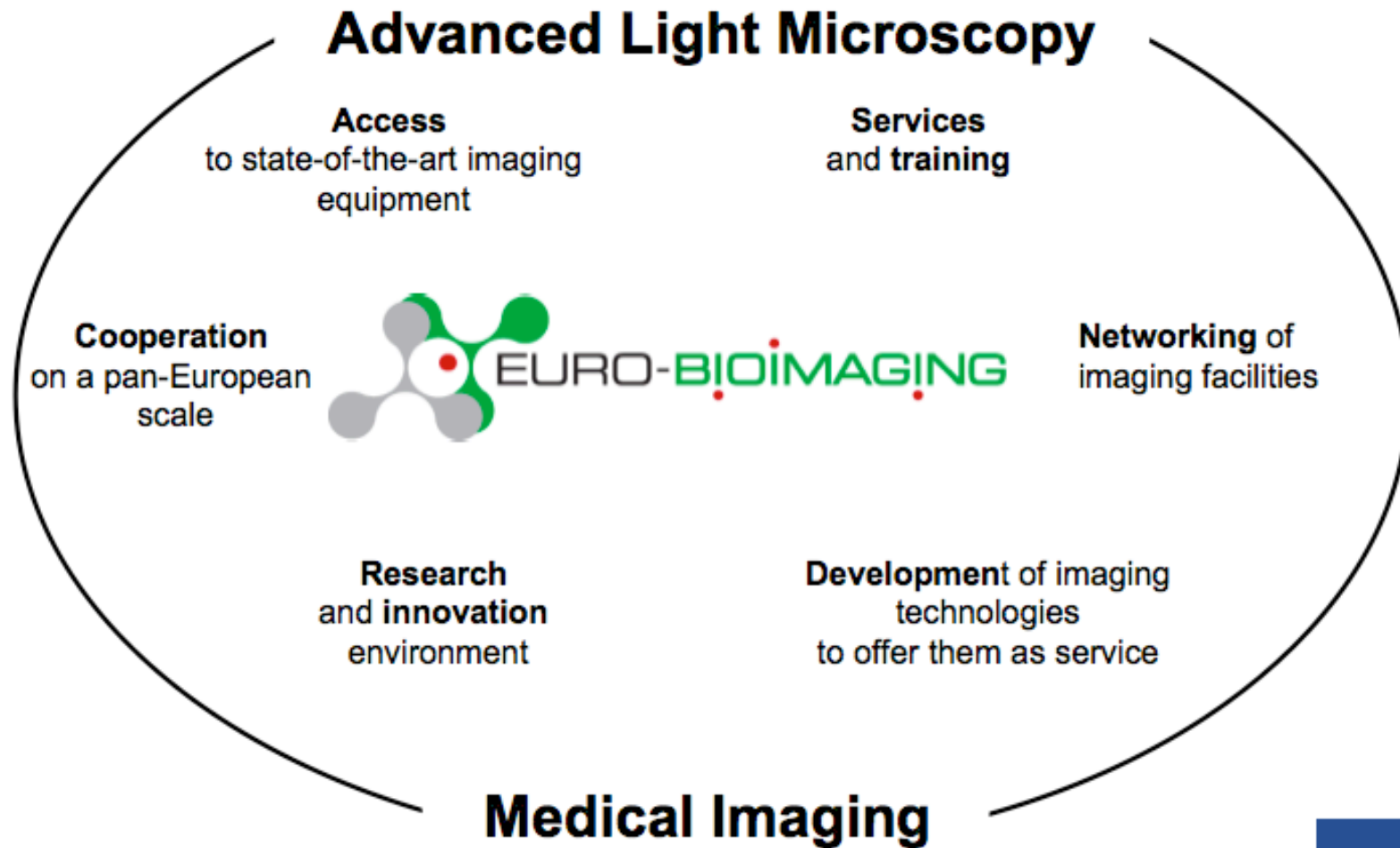


ESFRI : European Forum on Research Infrastructures

European Roadmap for pan-European research infrastructures

1. ELIXIR - Upgrade of European Bioinformatics Infrastructure
2. INSTRUCT - Integrated Structural Biology Infrastructure
3. Infrafrontier – phenotyping and archiving of model mammalian genomes
4. BBMRI - European Biobanking and Biomolecular Resources
5. Euro-Bioimaging – Biomedical Imaging
6. EMBRC – European Marine Biology Resource Centre
7. EU-OPENSOURCE – screening platforms for chemical biology
8. EATRIS – advanced translational research in medicine
9. ECRIN - Infrastructures for Clinical Trials and Biotherapy
10. European High Security BSL4 Laboratories





BioImagingUK is the response to EuroBioImaging

BioMedical Imaging

BiolmagingUK

INSTRUCT

Euro-Biolmaging

Electron microscopy:
SEM, TEM, CLEM, cryo-EM, FIB/SEM, microanalysis, high res...

Light microscopy:
OPT, SPIM, to super resolution microscopy...

X-ray, PET...

Whole Organisms

Tissue biopsies

Cells

Intracellular
ultrastructure

Structure of
Protein
Complexes

BioMaterials

Structure of
Single protein/
virus

Sample size



Technology Strategy Board
Driving Innovation



Advanced Light Microscopy



Access
to state-of-the-art imaging
equipment

Services
and **training**

Cooperation
on a pan-European
scale

Networking of
imaging facilities

BioimagingUK?

Research
and **innovation**
environment

Development of innovative
imaging technologies
and **precommercial access**



Engineering and Physical Sciences
Research Council

Medical Imaging



BioImagingUK: Aims

1. Define, build and use tools to enable shared access to the general and specialised expertise based in life sciences imaging laboratories and facilities throughout the UK.
2. Engage our departments, universities, and funding bodies to develop career models for the personnel that develop, maintain, and enable advanced imaging technology for the life sciences.
3. Work to define new training programmes, to provide the foundation for the next advances in life sciences imaging within the UK.
4. Together, based on these premises, define short and long-term strategy statements to our research funding bodies, in order to help articulate funding requirements and priorities.

Actions for BioImagingUK: from November 2009 meeting

	Working Group	Topics	Members	Pages & Resources
Imaging Infrastructure	<i>Showcase & Access for existing commercial methodologies</i>	Defining criteria, policies, etc. for access to facilities with advanced, turnkey imaging technology already available in UK	???	
	<i>Access to precommercial imaging technology</i>	Defining policies, licensing, and funding models for making alphas and beta level technology available community for testing and development	Brad Amos...	Brad Amos Letter to Nature
	<i>Software tools & Data Management</i>	Defining strategy for delivering software tools for data management, data archiving, and data analysis	Jason Swedlow, Paul Thomas, Daniel Zicha and...	OME
	<i>Careers</i>	Defining policies and funding models to enable long-term career development and security for personnel dedicated to development and access of the latest imaging technology	???	
	<i>Sustainability</i>	Defining strategies and funding models for maintaining imaging infrastructure and facilities in the UK	Martin Spitaler, Paul French, Lucy Collinson, ...	
	<i>Connectivity</i>	What are the most valuable synergies between biological microscopy, research in vivo imaging, and medical imaging?	???	
	<i>Access Policies for Visitors, Animals, Patients</i>	How will access to UK imaging facilities and infrastructure be made available and harmonised?	???	
Scientific Themes	<i>Higher optical spatial resolution</i>	Tools for single molecule imaging and superresolution microscopy	Ann Wheeler, Gail McConnell, Dave Clarke, Ian Dobbie, Mark Neil, John Girken, Andrew Carter	
	<i>Electron imaging</i>	Tools for microscopy, tomography, correlative imaging	Jemima Burden, Raffaella Carzaniga, Jeremy Skepper ...	
	<i>Higher speed/content/throughput functional imaging</i>	Tools for screening by imaging	Paul French, Alessandro Esposito, Nick Barry ...	
	<i>More physiological (in vivo) imaging</i>	Tools for in vivo research imaging	John Girkin, Theresa Ward, Kurt Anderson, Chris Dunsby, Ana Maria Calcagno Pizarelli ...	
	<i>Probes & Biosensors</i>	Tools for new labelling technologies, multi-modality imaging, label free...	Alessandro Esposito, Gail McConnell, ...	

http://www.bioimaginguk.org/index.php/BioImagingUK_Working_Groups

Conclusions:

- BioImaging UK is our national response to EuroBioImaging
- Assess the real present and future imaging needs of the Biomedical research community for all technical disciplines
- National funding bodies are encouraging a “community voice”.
- Engage EM community - you guys!

Do you want to get involved?

Useful web links:

- www.eurobioimaging.eu/
- www.bioimaginguk.org/index.php/BioImagingUK/
- Contact us...

Thanks!