Mission & Scope

Advanced Light Microscopy

Access
to state-of-the-art imaging equipment

Services
and **training**

Cooperation
on a pan-European scale

Networking of imaging facilities

Research
and **innovation**
environment

Development of imaging technologies
to offer them as service

Medical Imaging

ESFRI

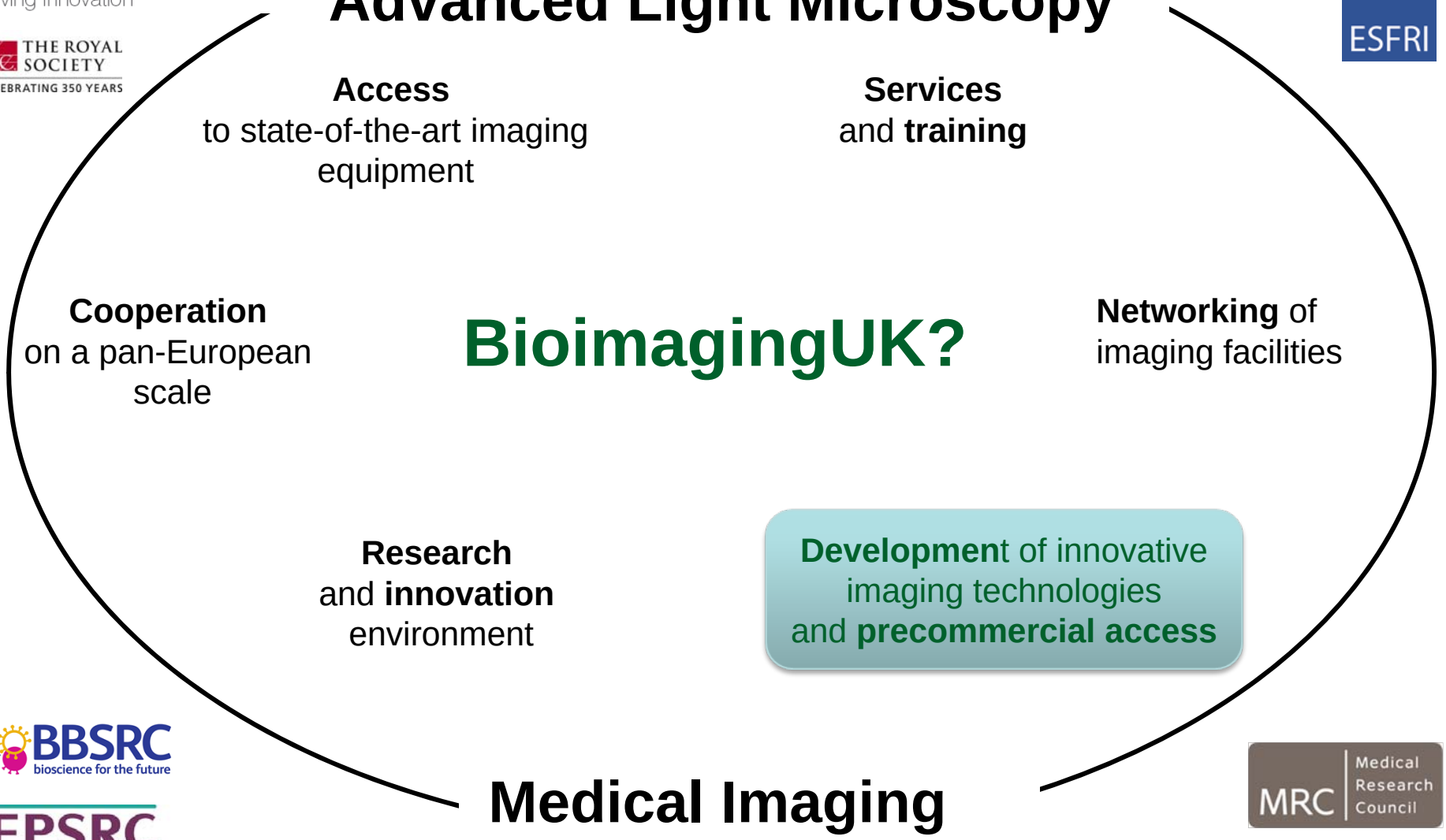
BioimagingUK

Mission & Scope

Technology Strategy Board
Driving Innovation

THE ROYAL SOCIETY
CELEBRATING 350 YEARS

ESFRI



BBSRC
bioscience for the future

EPSRC
Engineering and Physical Sciences Research Council

MRC Medical Research Council

wellcome trust

BioimagingUK

Mission & Scope

Aims of BioImagingUK?

ESFRI

- Enable training & service using state-of-the-art equipment
- Provide access to precommercial imaging technology
- Develop new imaging technology & capabilities
- Deploy imaging infrastructure in a coordinated manner
- Foster cooperation and networking

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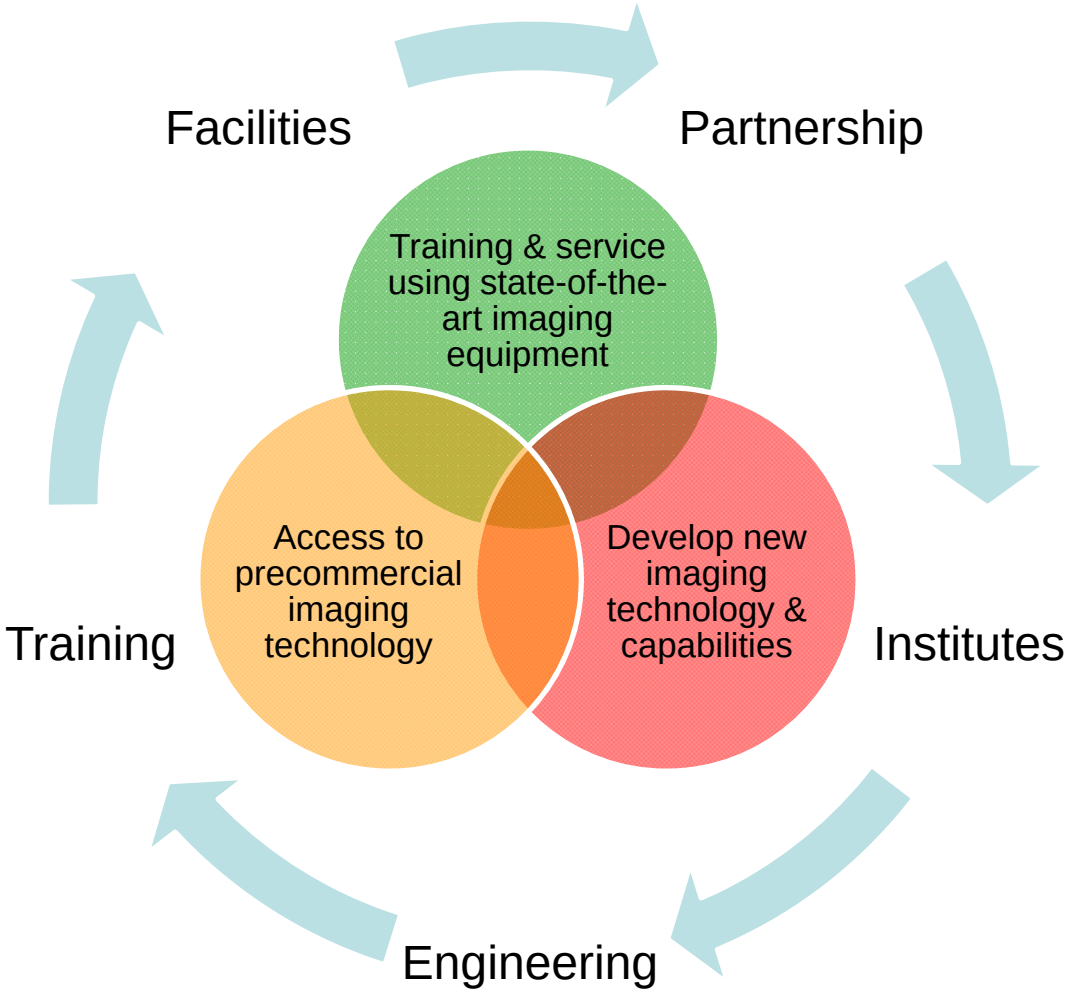
BioimagingUK

Mission & Scope

ESFRI



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BioimagingUK

Mission & Scope

ESFRI

- ***Frontiers of bioimaging***
  - higher spatial (super) resolution
  - higher speed/throughput (live) cell imaging
  - more physiological (→ *in vivo* molecular imaging)
  - more (correlated) readouts (multiplexing)
    - *morphology, spectroscopy, statistical, dynamics, ...*
  - more customised probes & labelling techniques
  - easier access to software tools
    - *data acquisition, analysis & management ...*

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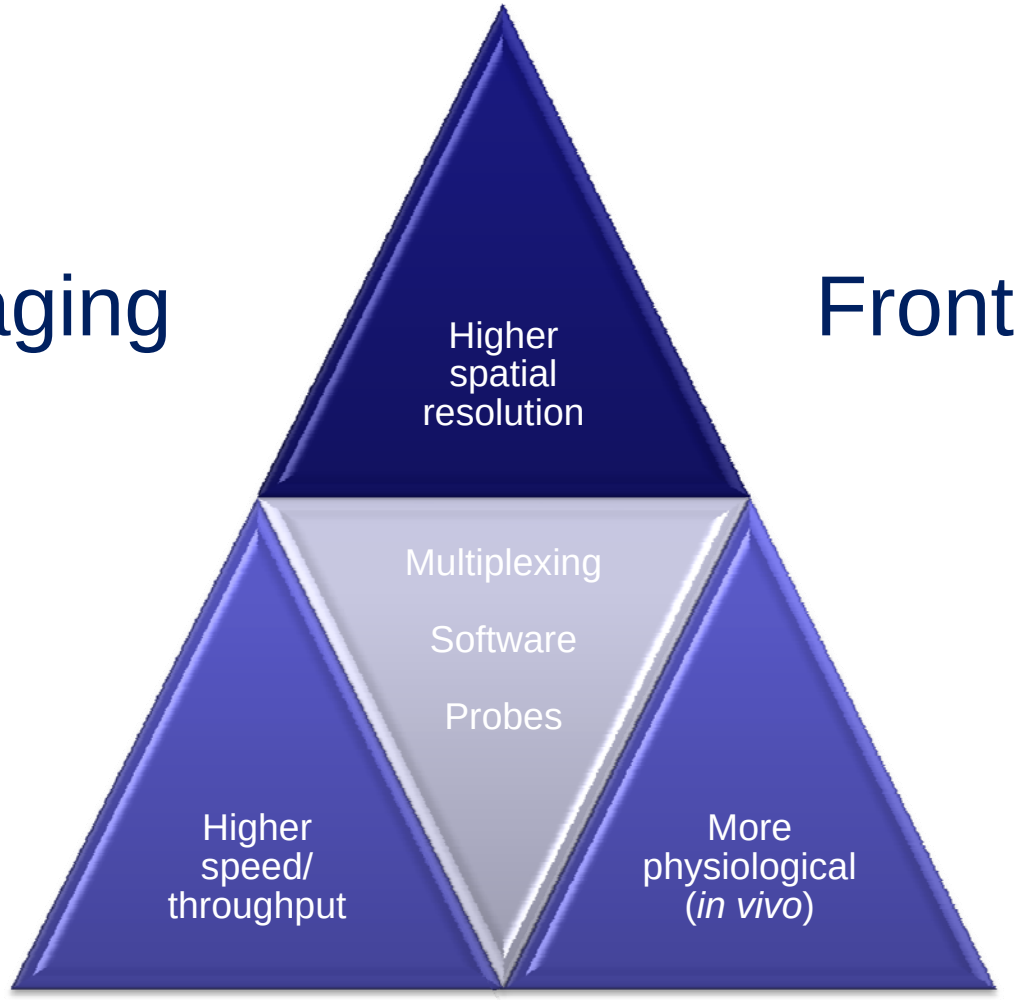
BioimagingUK

Mission & Scope

ESFRI

Bioimaging

Frontiers



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BioimagingUK

Working Groups

- Bioimaging infrastructure issues
  - Showcase of commercial methodologies
  - Access to precommercial imaging technology
  - Software tools & Data Management (data acquisition, analysis, archiving, sharing ...)
  - Careers (e.g. non-academic science roles, recognition, training,)
  - Sustainability (finance, management, leadership etc)
  - Connectivity (biological microscopy ↔ medical imaging etc)
  - Access Policies for Visitors, Animals, Patients

- Bioimaging scientific themes (for premier league capabilities)
  - Higher optical spatial resolution (single molecule imaging, super resolution ..)
  - Electron imaging (microscopy, tomography, correlative imaging ..)
  - Higher speed/content/throughput functional imaging
  - More physiological (*in vivo*) imaging
  - Probes & Biosensors (labelling technologies, multi-modality, label-free ...)

ESFRI

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