

## Medical Research Council (MRC) funding schemes and mechanisms

Following a meeting between senior MRC staff and CTRad's senior leaders in November 2014, the following notes have been generated to help researchers understand more about MRC funding schemes and mechanisms relevant to the radiotherapy research community.

### Funding schemes

*Developmental Pathway Funding Scheme (DPFS)* – funds pre-clinical studies and early phase trials.

<http://www.mrc.ac.uk/funding/browse/developmental-pathway-funding-scheme/>

- DPFS considers proposals seeking to develop and test new agents, devices and diagnostics. “Repurposing” clinical studies – using existing therapies for new disease indications are also considered. DPFS considers individual projects and does not support programmatic studies.
- Hypotheses for enhanced efficacy should ideally be supported by mechanistic data.
- Radiotherapy-drug combinations would be potentially fundable if the combination were novel.
- The remit of DPFS spans both pre-clinical and early phase clinical studies; however, a project would not typically span the entire path within a single application. DPFS Programme Managers are happy to advise on breadth and scope of an application.
- DPFS projects are required to contain between 2 and 4 ‘Milestones’ i.e. projects are broken down into sections, each with clearly defined progression criteria that must be met if the project is to be allowed to progress to the next stage.

*Molecular and Cellular Medicine Board (MCMB)*

<http://www.mrc.ac.uk/funding/science-areas/molecular-cellular/>

- Supports ‘basic’ science projects relevant to radiotherapy and radiobiology e.g. elucidation of mechanisms.
- Interdisciplinary studies are welcomed.
- Early, exploratory studies in humans are in remit where the aim is to understand disease mechanisms – studies focused on efficacy are considered by DPFS.
- MCMB currently has a highlight notice in Radiation oncology and biology <http://www.mrc.ac.uk/funding/how-we-fund-research/highlight-notice/radiation-oncology-biology/> with the aim of encouraging a wider range of applications particularly in areas related to:
  - o Improving the therapeutic effects of radiation in the treatment of cancer
  - o Approaches to improve long term health and minimise morbidity after radiation exposure
  - o Understanding the fundamental processes associated with radiation injury and the pathways involved in radiation carcinogenesis
  - o Developing novel approaches in radioprotection and treatment of radiation toxicity

*Confidence in Concept scheme*

<http://www.mrc.ac.uk/funding/browse/confidence-in-concept-scheme/>

- Confidence in Concept is intended to accelerate the transition from discovery research to translational development projects by supporting preliminary work or feasibility studies to establish the viability of an approach.
- Supported projects should aim to generate sufficient preliminary data to establish the viability of an approach – enabling them to then seek more substantive funding (e.g. from DPFS).
- The scheme operates annually. MRC awards funding to institutions who are then responsible for allocating funding to internal projects. Individuals cannot apply directly to MRC for funding.

**Key point:** Potential applicants are encouraged to send in a 2-page summary to MRC Programme Managers well in advance of deadlines to facilitate discussion of the most appropriate funding scheme.

### General discussion points

#### Normal tissue effects of RT

- Mechanistic applications would be considered by MCMB. Work to develop or validate diagnostic assays would be in remit for DPFS. Biomarker studies are sometimes included within applications seeking to demonstrate safety or efficacy of an agent or combination; however, this work cannot be too substantial (i.e. the application cannot be programmatic in nature). Validated, approved assays, preferably the gold standard, would generally be the preferred method for evaluating safety or efficacy of a novel therapeutic.

#### Intellectual Property (IP)

- MRC's requirements around academic-industry collaborations are outlined on the MICA section of their website: <http://www.mrc.ac.uk/innovation/mrc-industry-collaboration-agreement-mica/>.
- MRC can support projects where no IP is generated – for example if a commercially developed agent is off patent.

#### MRC and NHS employees

- MRC will fund research time for NHS employees (e.g. physicists, radiographers).
- NHS staff can also be PIs on MRC studies.

*Last updated 11 June 2015*