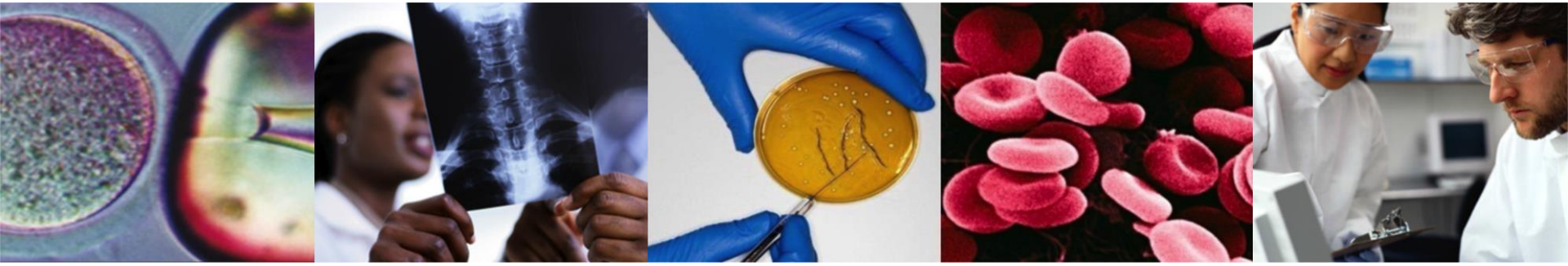


Support for AI and clinicians

Julia Dickinson

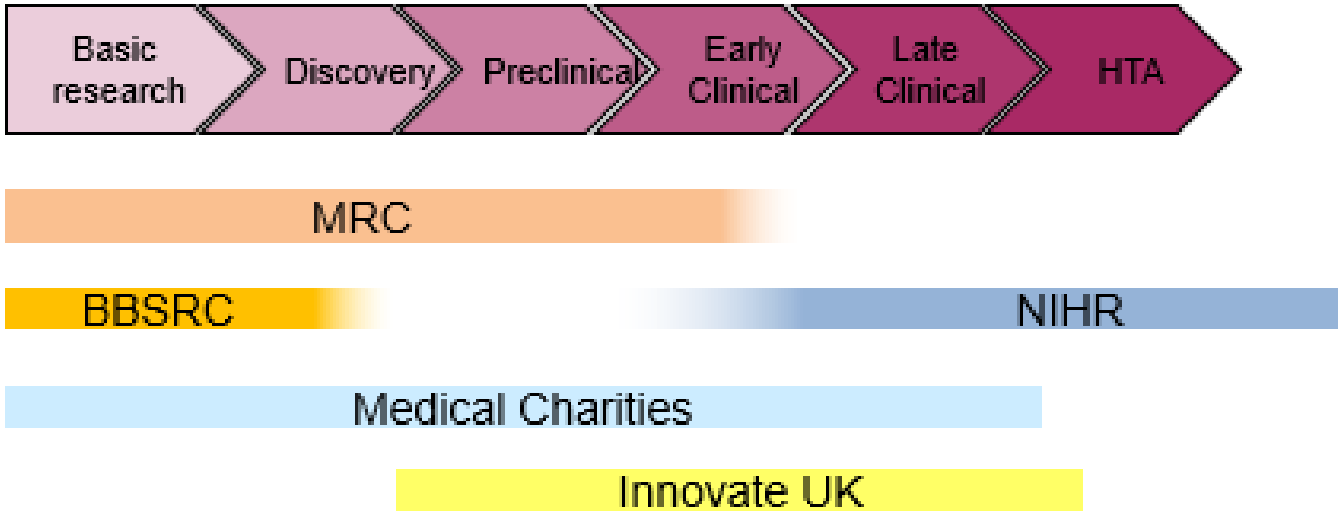
Programme Manager for Clinical Careers Strategy

Artificial Intelligence and Machine Learning in Clinical Imaging Research: Progress and Promise

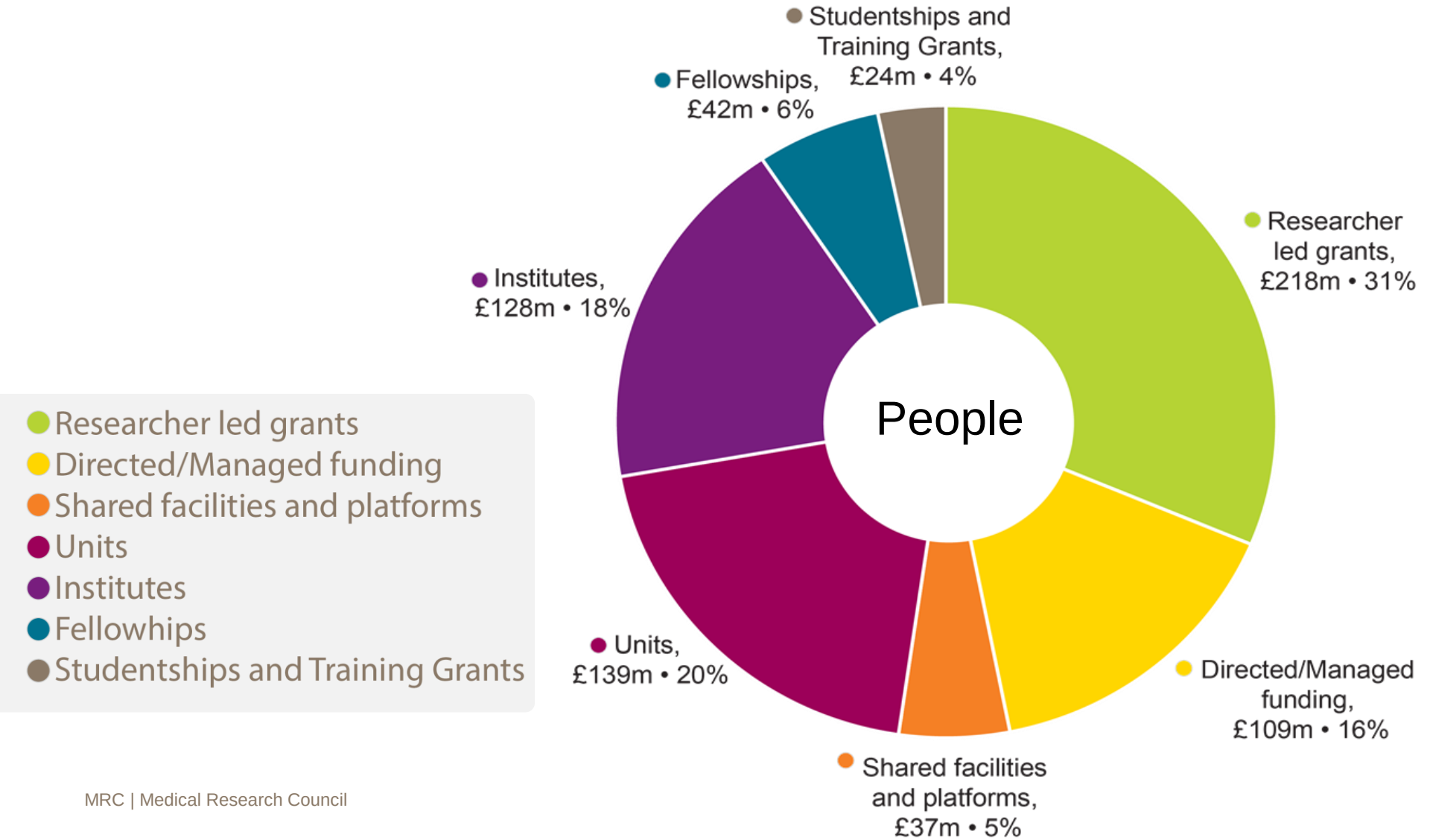
6 November 2018

MRC Mission and remit

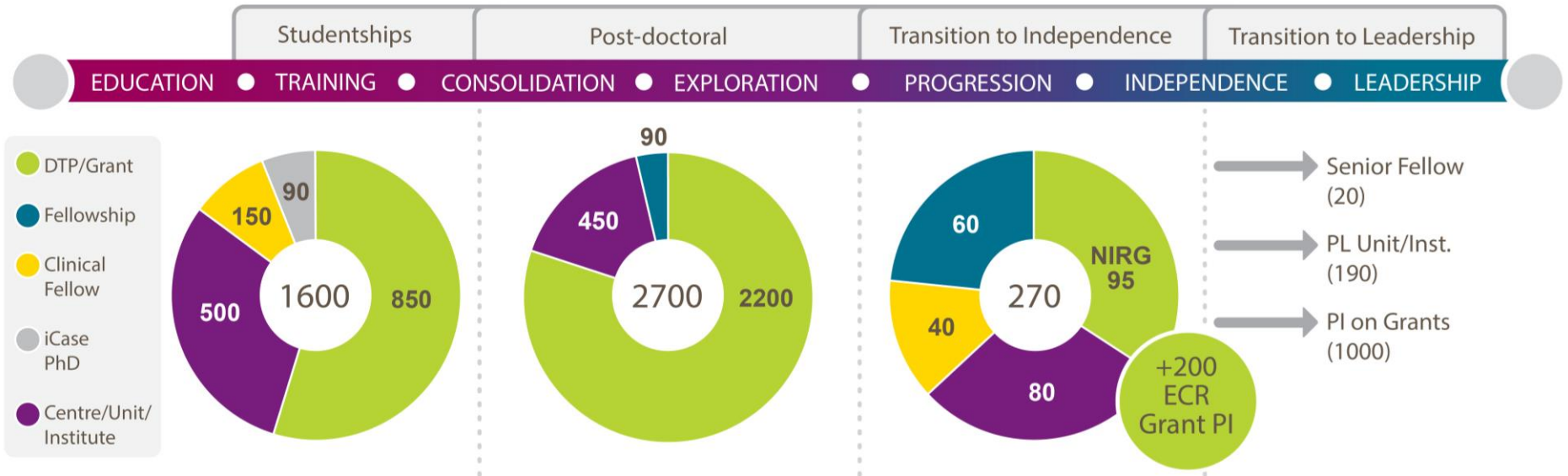
- Encourage and support high-quality research with the aim of improving human health.
- Produce skilled researchers.
- Advance and disseminate knowledge and technology to improve the quality of life and economic competitiveness in the UK and worldwide.
- Promote dialogue with the public about medical research.



2017/18 MRC Research Programme Expenditure

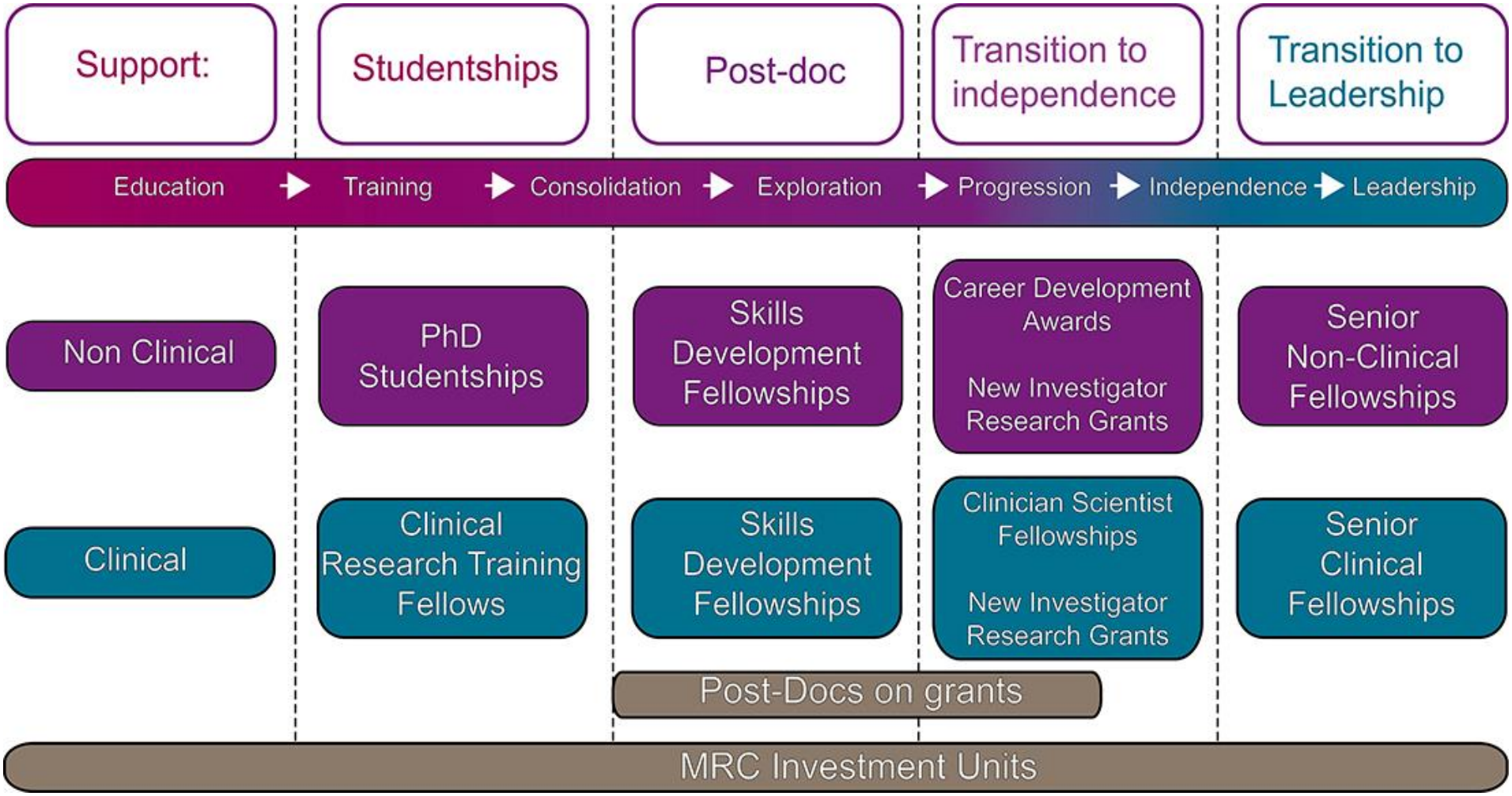


MRC Supporting Key Career Stages



- **Variety of routes** – Grant/Fellowship/Large Investments
- **Flexible** support focussed at key career **transition** points

Supporting Key Career Stages



MRC strategic investments relevant to AI

- 6 unit programmes across 4 MRC Units
- Health Data Research UK
  - NPIF Fellowships relevant to AI
  - Will implement the ISCF UKRI-funded Digital Innovation Hubs
- 6 Major industry partnerships, applying AI in:
  - biomarker discovery
  - identifying strata of patients, disease endotypes and mechanisms, and drug endotypes from multi-modal data sets
  - computer-assisted diagnosis
  - omic-phenotype relationship discovery
  - integrating large datasets

AI & training: Current activities

35 new MRC studentships in data sciences AI in 2018

- £3.1m of National Productivity Investment Fund support

UKRI Applications & Implications of Artificial Intelligence CDTs

- 10-20 new CDTs, ~£100m, up to 950 new students over 5 years
- MRC additional support for clinicians in up to 3 CDTs

UKRI Future Leaders Fellowships

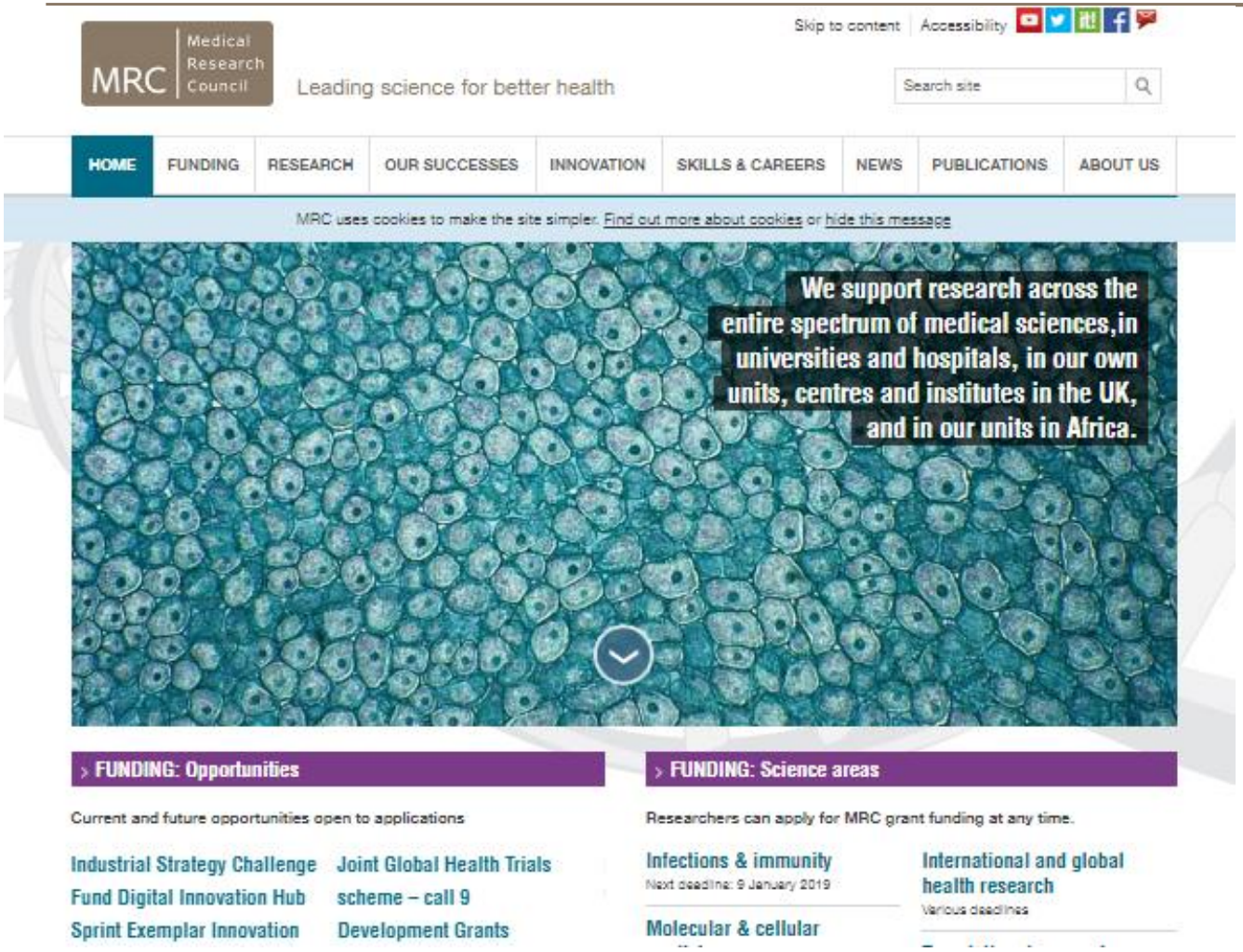
- Rounds 1 and 2 in progress, first awards early 2019
- Apx 550 new research leaders

HDR-UK

- NIHR incubator in Health Data Science

AI & training: Future strategy

- Recognised skills priority:
  - *Quantitative skills (mathematics, statistics, computation, data analytics and informatics, machine learning and Artificial Intelligence, developing digital and technology excellence,) as applied to a variety of data sources (from 'omics' to health records)*
- Targeting support at critical career stages
- Addressing known and new career barriers
- Working in partnership



www.mrc.ukri.org

Julia.Dickinson@mrc.ukri.org