Research Challenges- An RC overview

July 17
Dr Annette Bramley, Head of Healthcare Technologies, EPSRC
Overview

- AMR initiative
- UK Landscape
- What’s next?
- Impact and translation toolkit - a useful tool for everyone!
Steering Committee

- Herman Goossens (Chair) – University of Antwerp, Belgium
- Alastair Macdonald – Glasgow School of Art
- Duncan Maskell – University of Cambridge, UK
- Rachel McKendry – University College London, UK
- David Payne – GlaxoSmithKline
- Sharon Peacock – University of Cambridge/Bloomsbury Institute, UK
- Richard Smith - London School of Hygiene and Tropical Medicine, UK
- Jared Silverman – VL32
- Elizabeth Wellington – Warwick University, UK
Antimicrobial Resistance Funders Forum – a cross-funder, multidisciplinary thematic approach

Understanding resistant bacteria  £10M

Accelerating therapeutics and diagnostics development  £12M

Understanding real world interactions  £10M

Behaviour within and beyond the healthcare setting  £13M
AMRFF- aims

- Strategic overview of the UK AMR research base
- Common vision for the future of AMR research and implementation
- Add value to existing programmes of work
- Coordinate funding and delivery programmes
- Proactive communication with all stakeholders
Funding model

Innovation Grants/pump priming:
- High risk, novel and transformative
- £250k, 12-24 months

Collaborative Grant:
- Innovative, multidisciplinary
- £3m, 4-5 years

Additional activity:
- Bridging the gap (EPSRC)
- AMR champion
- Standard grants (responsive, fellowships etc)

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Health Protection Research Units

- £15M (6 projects)
- £2M (6 projects)
Strategic funding

Phase 1

- £46m commitment supporting multidisciplinary research from bench to bed side
- One Health approach, links with industry and policy makers, flexible funding model
- “AMR and behaviour change” with DH and VMD/DEFRA

Phase 2

- Challenge-led approaches
UK AMR Landscape 2017

- Therapeutics-Underpinning: 79 (24%)
- Therapeutics-Alternatives: 31 (10%)
- Therapeutics-Optimisation: 62 (19%)
- Therapeutics-Lead-to-Trial: 19 (6%)
- Therapeutics-Multiple Components: 28 (9%)
- Diagnostics: 32 (10%)
- Surveillance: 12 (4%)
- Transmission: 29 (9%)
- Environment: 15 (5%)
- Interventions: 13 (4%)

Total no. Projects Live 1st Jan 2017: 320
UK AMR Landscape 2017

Total £ Committed
Live 1st Jan 2017

£331m

- Therapeutics-Underpinning: £62m (19%)
- Therapeutics-Alternatives: £25m (7%)
- Therapeutics-Optimisation: £61m (18%)
- Therapeutics-Lead-to-Trial: £34m (10%)
- Diagnostics: £63m (19%)
- Transmission: £12m (4%)
- Surveillance: £9m (3%)
- Interventions: £9m (3%)
- Environment: £4m (1%)
- Therapeutics-Multiple Components: £53m (16%)
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- Therapeutica
UK AMR Landscape 2017

Est. Spend 2016/17

£86M

- Therapeutics-Underpinning £15m (17%)
- Therapeutics-Alternatives £7m (9%)
- Therapeutics-Optimisation £16m (18%)
- Therapeutics-Lead-to-Trial £11m (12%)
- Diagnostics £15m (18%)
- Therapeutics-Multiple Components £13m (15%)
- Environment £1m (2%)
- Transmission £4m (5%)
- Surveillance £2m (2%)
- Interventions £2m (2%)
### Antimicrobial Resistance – EPS for a multidisciplinary challenge

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<tr>
<th>Area</th>
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<tbody>
<tr>
<td>Novel diagnostics</td>
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<td>Improved drug delivery strategies</td>
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<tr>
<td>Novel synthesis, manufacture and scale-up</td>
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<td>Smart surfaces and wound dressings</td>
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<td>Minimally invasive therapies</td>
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<td>Surveillance and data analytics</td>
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<td>Water treatment technologies</td>
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<td>Tools for understanding bacteriology</td>
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Antimicrobial Resistance – a challenge-led approach

- New approaches
- Ambition
- Holistic
- Training
- Impact
- Common goals
- Team
- Language
Impact and Translation toolkit

- Draw attention to some of the issues associated with impact in health and why they’re important.
- Suggest things you may wish to consider when preparing your proposal - pathway to impact.
- Highlight resources you can ask for as part of your (EPSRC) application.
- Direct you to where you can find more information.
Impact and translation toolkit

**Toolkit Topics**

- **Stakeholder engagement**
  - Understanding what the people that matter think of your technology and how to incorporate that into your research.
  - Stakeholder engagement.
  - Healthcare Professionals
  - Business and industry
  - Charities
  - Patients and public

- **Research Integrity**
  - Understanding the legal, ethical and social challenges that face your technology.
  - Responsible Research & Innovation
  - Ethics
  - Value