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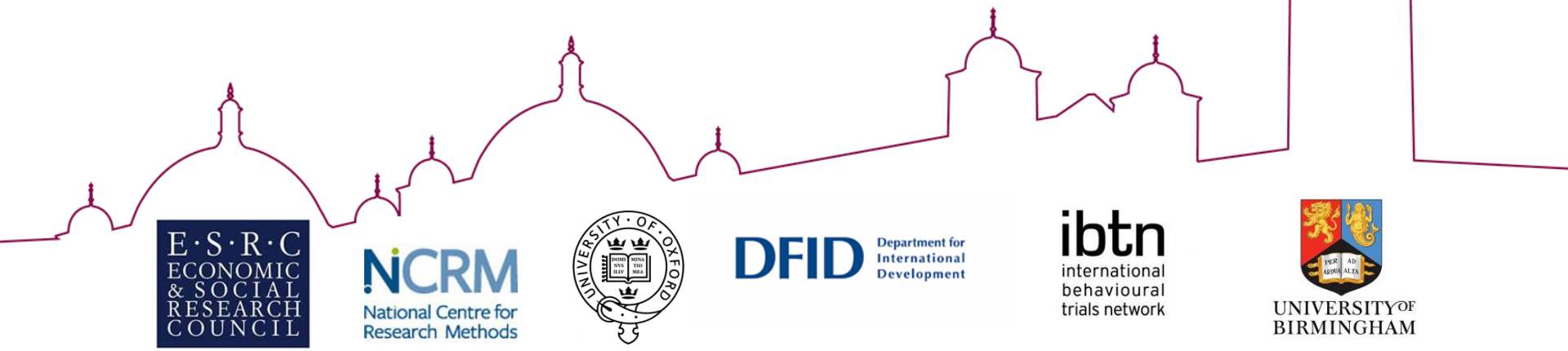

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

NCRM National Centre for Research Methods

UNIVERSITY OF OXFORD

DFID Department for International Development

ibtn international behavioural trials network

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Behavioural/Social Scientists live in exciting times

- **UK What Works Network**
  - Create, share, and use high-quality evidence on policy programs and practices which combined receive public spending of more than £200 billion
  - Public health, social care, education, crime reduction, and economic growth
- **US Social and Behavioral Science Team**
  - Assists federal agencies in applying behavioural science insights to policies and operations
  - Improve public welfare, programme outcomes, and cost effectiveness

Obama's Executive Order September 2015

ibtn
international
behavioural
trials network

The White House
Office of the Press Secretary

For Immediate Release September 15, 2015

Executive Order -- Using Behavioral Science Insights to Better Serve the American People

EXECUTIVE ORDER

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USING BEHAVIORAL SCIENCE INSIGHTS TO

BETTER SERVE THE AMERICAN PEOPLE

A growing body of evidence demonstrates that behavioral science insights -- research findings from fields such as behavioral economics and psychology about how people make decisions and act on them -- can be used to design government policies to better serve the American people.

https://www.whitehouse.gov/the-press-office/2015/09/15/executive-order-using-behavioral-science-insights-better-serve-american

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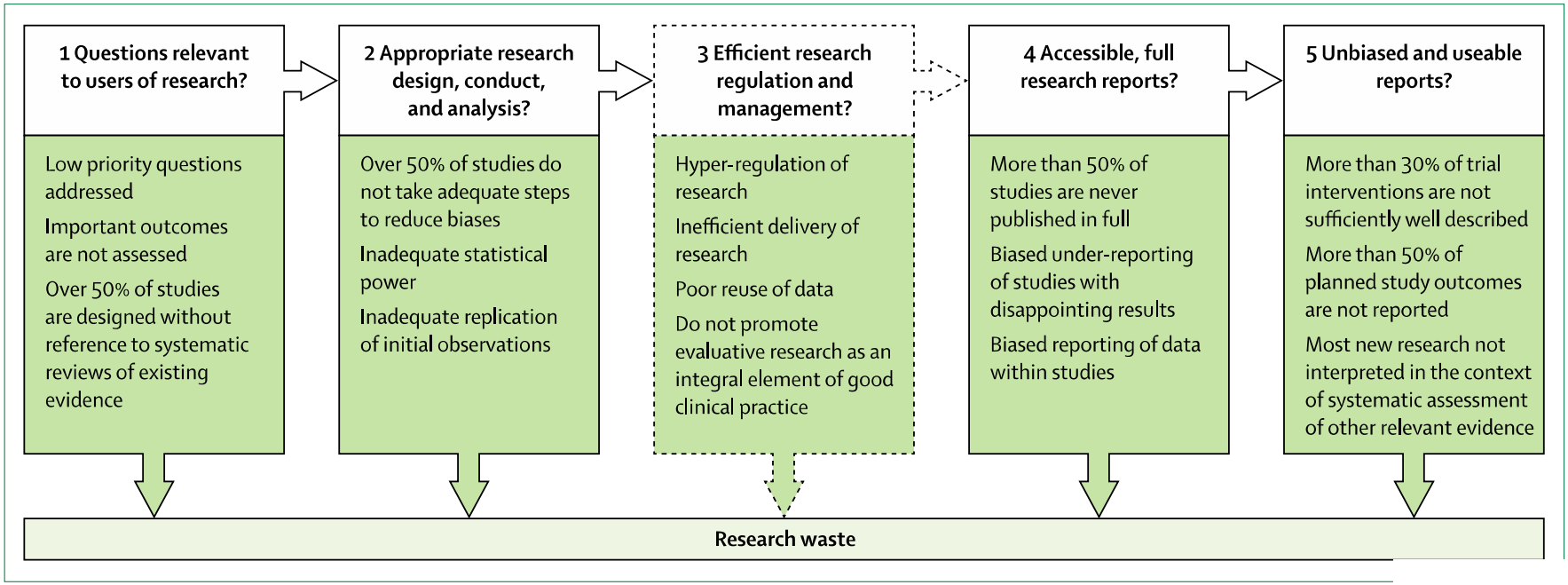
Most published research may be false

- **We have problems reproducing psychological science (Open Science Collaboration, 2015)**
  - Replications of 100 experimental and correlational studies
  - 97% of original studies vs 36% of replications had significant results
  - Mean effect size was half the magnitude of the mean effect size of the original effects
  - "There is still more work to do to verify whether we know what we think we know"

85% of biomedical research funding ($210Billion) is being avoidably wasted

Several stages of research production may lead to waste (Moher 2015)



How to make more published research true

- **Some research practices that may help increase the proportion of true research findings (Ioannidis 2014):**
  - Large-scale collaborative research
  - Adoption of replication culture and reproducibility practices
  - Registration (studies, protocols, analysis codes, datasets, raw data)
  - Sharing (data, protocols, materials, software, and other tools)
  - Containment of conflicted sponsors and authors
  - More appropriate statistical methods
  - Standardization of definitions and analyses
  - More stringent thresholds for claiming discoveries or "successes"
  - Improvement of study design standards
  - Improvements in peer review, reporting, and dissemination of research
  - Better training of scientific workforce in methods and statistical literacy

This session

- **Establishing a Research Agenda for Behavioural Trials: Results from the IBTN Prioritisation Project**
  - **Prof Molly Byrne**
- **The Painful Truth about Behavioral Intervention Outcomes**
  Evidence Requirements for Public Policy
  - **Prof Karina Davidson**

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