ON-MERRIT

Observing and Negating Matthew Effects in Responsible Research and Innovation Transition

AIMS

- **Open Science** and **Responsible Research and Innovation** aim to **bring equity and inclusivity to research**. Yet could policy interventions in these directions actually **worsen existing inequalities**?
- **ON-MERRIT** studies "**Matthew effects**" of cumulative advantage in Open Science and Responsible Research and Innovation **across research, industry and policy-making**, through **a mix of sociological, bibliometric and computational approaches**.
- Where such effects are discovered, we will make **policy-recommendations** to **mitigate or negate these effects**.
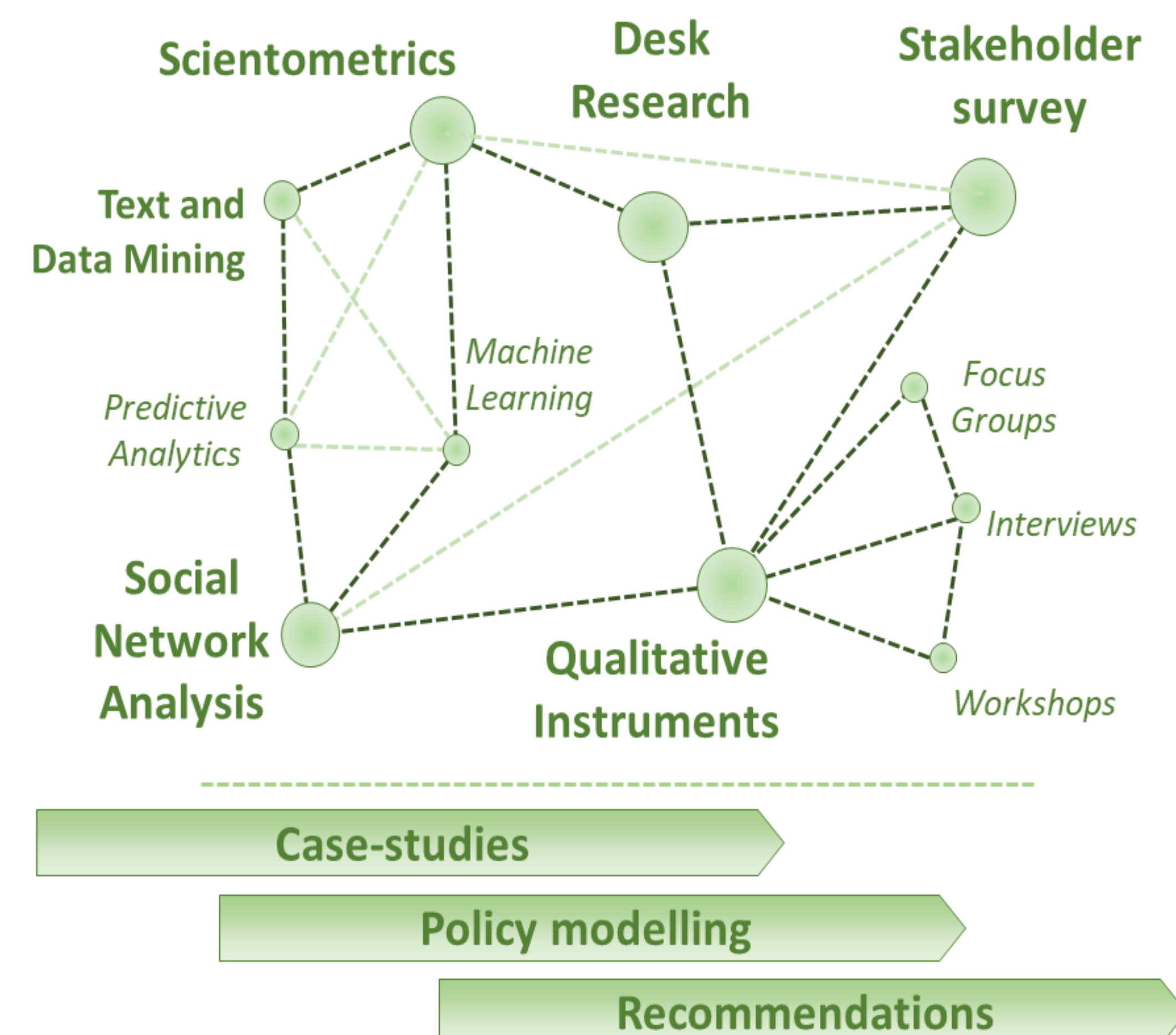
BACKGROUND: Responsible Research and Innovation

Responsible Research and Innovation (RRI) and **Open Science** (OS) hold the promise to make research more **inclusive**, **participatory**, **understandable**, **accessible**, and **re-usable**

The potential to realise this promise depends on the **absorptive capacity** of institutions/individuals and their ability to **capitalize on knowledge sources**

RRI's inclusive agenda is put at risk by conditions of cumulative (dis)advantage – the **Matthew Effect** (Merton 1968)

METHODS

- Scientometrics
- Desk Research
- Stakeholder survey
- Text and Data Mining
- Predictive Analytics
- Machine Learning
- Focus Groups
- Interviews
- Social Network Analysis
- Qualitative Instruments
- Workshops

Case-studies

Policy modelling

Recommendations

RESEARCH QUESTIONS

Research: Who is included and excluded with regard to a variety of RRI and Open Science elements? How does uptake of RRI and Open Science relate to training/support measures?

Industry: How do industry actors seek information and engage with RRI and Open Science resources? What are levels of use of Open Science outputs in industry as revealed by patent literature?

Policy Making and Civil Society: How are Open Science outputs used in policy-making? Which societal actors participate in RRI and Open Science policy-making?

Synthesis: How are current RRI and OS incentive structures constructed at the promotion/tenure stage? What models for incentives and indicators will lead to more equitable RRI and OS transition? What is the state of play regarding RRI and Open Science Matthew effects in gender issues and three scientific disciplines relevant to the UN's SDGs?
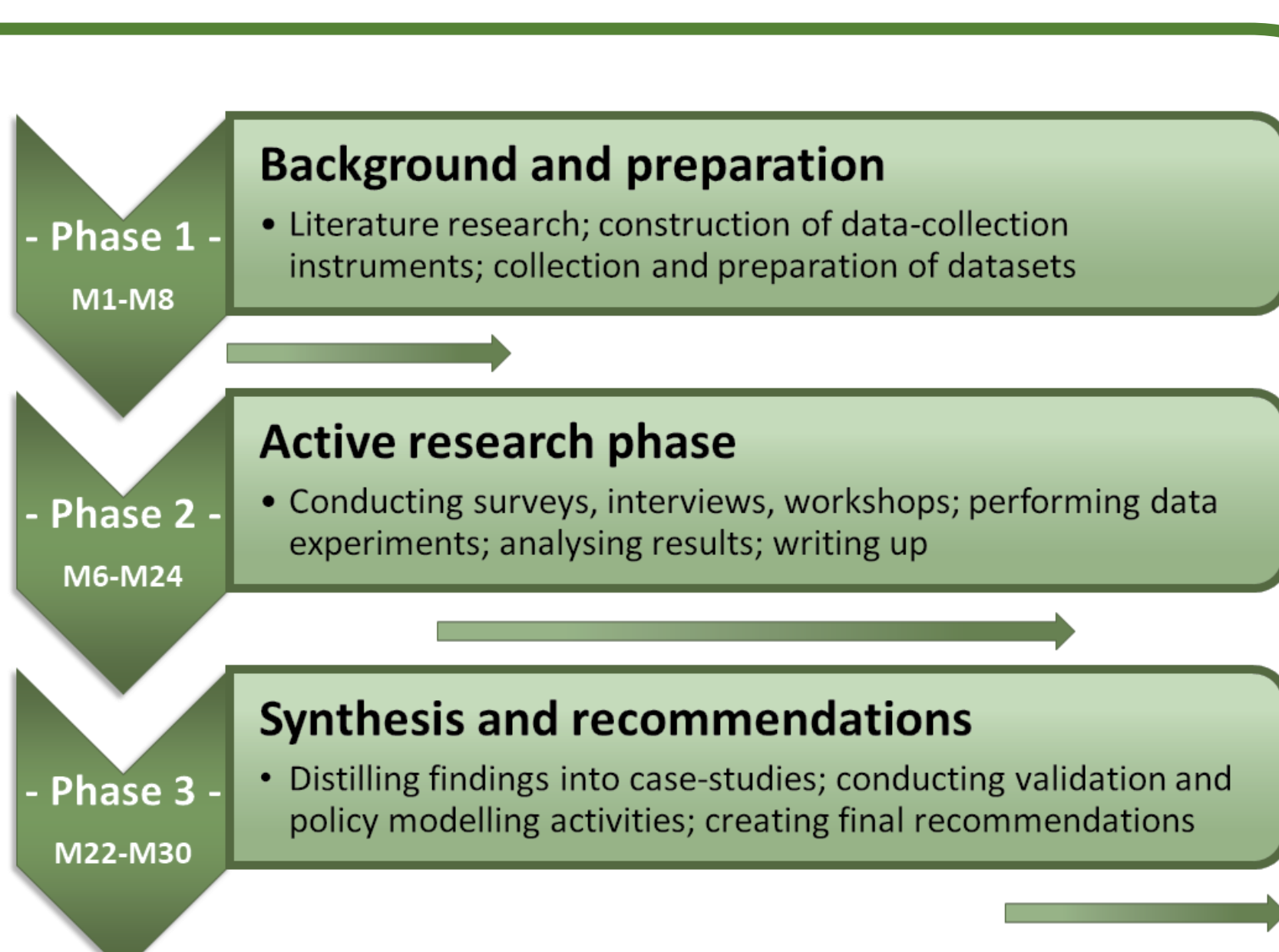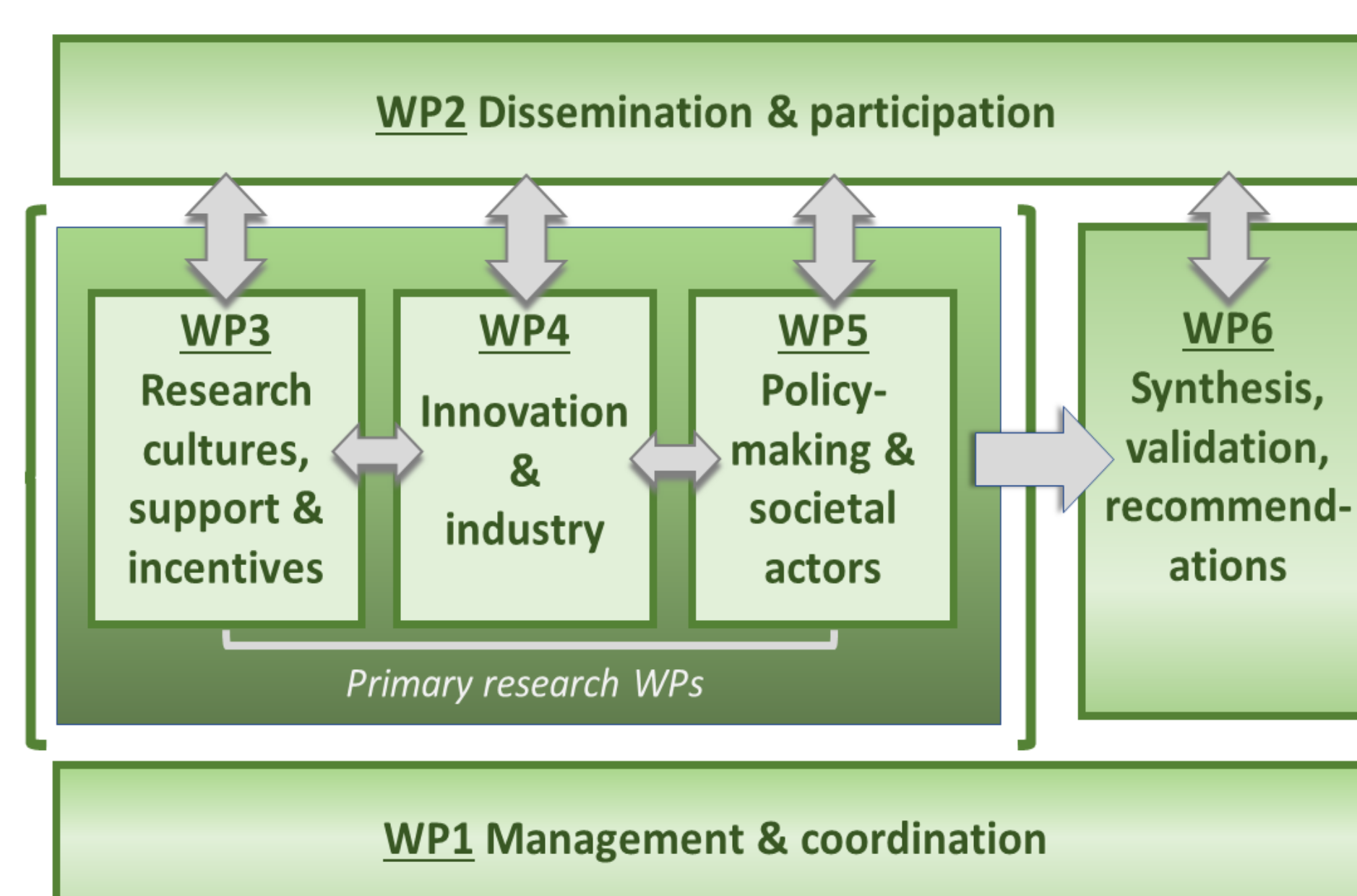
AT A GLANCE

Project Acronym:	ON-MERRIT-Observing and Negating Matthew Effects in Responsible Research and Innovation Transition
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Coordinator:	Tony Ross-Hellauer

RESEARCH PLAN

- Phase 1 -
M1-M8
Background and preparation
- Literature research; construction of data-collection instruments; collection and preparation of datasets

- Phase 2 -
M6-M24
Active research phase
- Conducting surveys, interviews, workshops; performing data experiments; analysing results; writing up

- Phase 3 -
M22-M30
Synthesis and recommendations
- Distilling findings into case-studies; conducting validation and policy modelling activities; creating final recommendations

WORK PACKAGE STRUCTURE

WP2 Dissemination & participation

WP3 Research cultures, support & incentives

WP4 Innovation & industry

WP5 Policy-making & societal actors

WP6 Synthesis, validation, recommend-ations

Primary research WPs

WP1 Management & coordination

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