

## Data for Metascience Successful Projects

### Large Language Models supporting grant peer review

Mike Thelwall, Francesco Osborne, Gloria Iyawa, and Petr Knoth

This project explores how Large Language Models can be used to streamline the grant peer review process while maintaining quality, looking at AI desk rejection, AI as a reviewer, and AI as a meta-reviewer. The goal is to provide policy recommendations for AI-assisted review.

### What is unique about responsive mode funding?

Christopher Daley and Rosa Filgueira

This project investigates and maps the unique aspects of responsive mode grants (sometimes known as curiosity-led or applicant-led research) compared to other modes, analyzing their size, outputs, diversity, and impacts. The project aims to provide insights into the impact of responsive mode funding to improve future funding strategies and policy decisions.

### Consistency in grant peer review: Variation, determinants, and consequences

Robert de Vries, Aderinkola Alabi, Gary Chapman, Margherita Negri, and Jackie Thompson

This project maps patterns in peer review consistency across different disciplines, schemes, and time periods, as well as determining what factors influence this consistency and how it affects funding decisions. The goal is to provide visualizations, evidence, and policy recommendations to inform reviewer guidance and optimise reviewer recruitment.

### Shaping research ecosystems: UKRI funding and the UK research base in a global context

George Richardson and Rhodri I. Leng

This project examines the distribution and concentration of UKRI funding across research areas, assessing its impact on the UK's research competitiveness and adaptability. It aims to align funding with national and global trends to navigate the balance between building expertise and ensuring flexibility. The findings will guide UKRI in strategic investment decisions, enhancing capacity and responsiveness to future challenges in the research landscape.

### Tracking stars and unicorns: The trajectory of funded and unfunded people and ideas

Rosa Filgueira, Angelo Salatino, Alex Marcoci, Gemma Derrick, Hongyu Zhou, Sarah Callaghan

This project develops a career trajectory-based infrastructure using UKRI data to map both funded and unfunded projects. The goal is to estimate the return on funding individuals through fellowships or teams at the early career stage and to develop innovative ideas. This will help understanding of how funding affects researchers' careers and the development of innovative ideas.