

Critical challenges for research and researchers in the 21st century

The 21st century presents researchers with interwoven challenges that strike the heart of scientific integrity and progress. The evolution of research methods and statistics has brought both opportunities and pitfalls, with concerns about HARKing and p-hacking threatening the validity of our findings. In addition, the reproducibility crisis looms large, prompting a push towards open science practices. Researchers embarked on making their work transparent and replicable often face systemic barriers. This is further complicated by incentive systems in academia, which tend to prioritize novelty and quantity over rigor and reproducibility. With trust in science declining, the public turned to alternative epistemologies such that other coordinates might inform their decisions and actions. While challenging, communication with the public has become all the more crucial. Researchers must navigate a complex media landscape, making their work accessible to non-experts and combating misinformation. At the same time, researchers face pressures from economic, political, and cultural interests, potentially compromising the integrity and direction of their work. Perhaps most concerning, the dominance of a handful of large publishing companies resulted in significant funds being diverted from active research towards publishing fees and subscriptions.

Addressing all these challenges requires a concerted effort from individual researchers, institutions, and policymakers to promote transparency, reform incentive structures, and protect the independence and credibility of scientific research. In this lecture series, some prominent perspectives are gathered that analyze the situation and, more importantly, recommend potential interventions.

Dates, Places, and Topics

31 MARCH 2025 | 15:00-18:00
PER21, Room E120

Aaron Peikert (MPIB Berlin): Prediction is all You Need to Demand Open and Transparent Science

Ralph Hertwig (MPIB Berlin): Online Misinformation and a Toolbox of Interventions

Mélanie Levy (UniNe): On the Weight of Regulating Scientific Research

9 MAY 2025 | 13:30-17:30 |
PER21, Room A120

Jürgen Renn (MPIGeA Jena): The Evolution of Knowledge as a Challenge to the Organization of Research

Giorgio Zanarone (UniL): Incentive Systems and How they Influence Research Careers

Thomas Leibundgut (swissuniversities): The Academic Publishing Oligopoly: Causes Effects, and Alternatives

Malte Elson (UniBe): Discussion

