

## Methods Speaker Series

### Improving science through meta-research

Wednesday, October 11, 2023 16:00-17:00 PDT

From Mars rovers to vaccines, the fruits of the scientific endeavour are all around us. However, research is performed by fallible humans in an ecosystem that often allocates funding, awards, and publication prestige based on the aesthetics of research findings above the accuracy of research methods, creating opportunities for bias to pollute the scientific literature. In the shadow of scientific success lies a proliferation of exaggerated and spurious research findings that leads to waste, misinformation, and ineffective or even harmful interventions in applied settings. Dr. Tom Hardwicke will present a series of studies that illustrate how meta-research ('research-on-research') can improve science by identifying problems and testing solutions. The scientific ecosystem is perpetually evolving; the discipline of meta-research presents an opportunity to use empirical evidence to guide its development and maximize its potential.



**Dr. Tom Hardwicke**

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