

Reviewing Interdisciplinary Research

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Funding agencies, foundations, and other scientific institutions have insufficient funds to support all worthwhile scientific research projects. Peer and panel review systems are thus often used to make the difficult decisions about which proposed projects are worthy of support. The core idea of “peer review” for grant proposals is much the same as for manuscript review: these decisions should be informed by the people who best know the relevant research problems, theories, and methods. For this reason, however, interdisciplinary research proposals pose a special problem for peer review: scientists' training and research is typically organised along disciplinary lines, and so the relevant methods or theories for interdisciplinary work typically do not fit neatly within the domain of any standard discipline or scientist. Put more colloquially, there are often few or no competent peers to assess interdisciplinary research project proposals.

In my talk present some preliminary findings from a survey study of the peer review process I am currently involved in carrying out, while also situating our findings against a broader sociological and philosophical background. The problems faced here by practicing scientists engaged in peer review of interdisciplinary projects are characteristically philosophical, especially epistemological, problems. They concern problems of identifying relevant expertise, recognizing assumptions outside of one's areas of expertise, developing conceptual models of other disciplines, and establishing procedures for resolving disagreements among experts. Reviewing interdisciplinary research brings to the fore most prominently the difficulties of expert disagreement in cases where each of a number of experts has partial and not fully overlapping expert status with regard to assessing a project. This talk will foster greater appreciation of the interplay of philosophical and pragmatic challenges involved in interdisciplinary research, and hopefully prepare people to better engage in interdisciplinary research themselves.