Big Names or Big Ideas: Do Peer Review Committees Select the Best Science Proposals?

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With an introduction given by James Rebitzer, Chair, Markets, Public Policy and Law

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Refreshments to follow

Abstract: This research examines the success of peer-review panels in predicting the future quality of proposed research. We construct new data to track publication, citation, and patenting outcomes associated with more than 130,000 research project (R01) grants funded by the U.S. National Institutes of Health from 1980 to 2008. We find that better peer-review scores are consistently associated with better research outcomes and that this relationship persists even when we include detailed controls for an investigator's publication history, grant history, institutional affiliations, career stage, and degree types. A one-standard deviation worse peer-review score among awarded grants is associated with 15% fewer citations, 7% fewer publications, 19% fewer high-impact publications, and 14% fewer follow-on patents.

Biography: Leila Agha was selected as an Institute Junior Faculty Fellow in fall 2015. She is an assistant professor in the Markets, Public Policy, and Law Department at Boston University Questrom School of Business. She received her Ph.D. in economics from the Massachusetts Institute of Technology in 2011. She is also a faculty research fellow at the National Bureau of Economic Research. Her research focuses on technology and innovation in healthcare, and applying economic frameworks to understand expert decision-making. Recent research topics have included the impact of health information technology adoption on costs and quality of care, the ability of peer review committees to identify and reward high-impact science, and the over-use and misapplication of medical technology.