



COMMUNICATING SCIENCE TO CONGRESS

RATIONALE

This study is being conducted to understand the factors that affect how scientific information is used in the personal offices of members of Congress. A report by the National Academy of Sciences (NAS) in 2017 pointed to the importance of research that addresses “how scientific information is accessed, encountered, understood, shared, or discussed by policymakers in formal policy processes.”

APPROACH

The work is informed by a theoretical model that takes a systems approach in identifying potential gaps between scientists and decision-makers in defining usable information. The model highlights three main drivers of knowledge use: *fit*, or how users perceive knowledge would meet their needs; *interplay*, or how new knowledge intersects with existing decision routines (negatively and positively), and *interaction*, or how co-production between scientists and decision-makers increases knowledge use.

The team will first interview approximately 16 science, energy, and environment staffers from the U.S. House of Representatives and Senate to map opportunities and barriers in the fit of scientific information in policy contexts; the interplay of new knowledge with behavior, past experience, and culture; and the nature of the interaction between scientists and policymakers. These three dimensions incorporate variables ranging from information quality (timely, accurate, salient) to policymaker individual and organizational characteristics, and the relationship quality between scientists and policymakers (duration, one-way vs. two-way communication).

Based on the data gleaned from the interviews, the team will design and implement a survey of House and Senate legislative assistants to model the conditions under which science information is more likely to be used in ways that inform policy alternatives, or lend credibility to established policies.

TEAM

Karen Akerlof, Ph.D., is leading the project while serving as a visiting scholar with AAAS starting in September 2017. She is on leave from research faculty at George Mason University. **Maria Carmen Lemos, Ph.D.**, conducts social studies of science as a professor in University of Michigan’s School for Environment and Sustainability, and has developed the model of opportunities and barriers for the usability of science by decision-makers that will be adapted for the study. **Emily Therese Cloyd, M.P.S.**, is providing expertise in the use of science for decision-making and in building scientists’ communication skills as Project Director of Public Engagement. Associate Director of Government Relations **Erin Heath, M.Sc.**, works with



scientists and engineers to engage with policy makers by helping them understand the legislative process. Her background in science policy and Congress informs both the public policy dimension of the project.

CONTACT

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