From CUR's President

In November I had the pleasure of meeting with the staff of CUR's National Office at its headquarters in Washington, D.C. With the able assistance of CUR's government-affairs firm, Washington Partners, Executive Officer Beth Ambros, and Jenn Chow, CUR's membership coordinator and a former intern in the U.S.

House of Representatives, I was able to meet with selected Congressional staffers to discuss the importance of undergraduate research in U.S. efforts to bolster training in STEM fields. We also discussed the readiness of CUR to help members of Congress make informed decisions about science and research policy.

These meetings were quite cordial and generally well-received. It seems clear that there are areas of congruent interests between CUR and members from both sides of the aisle about the value and national importance of STEM research in general and the value of undergraduate research in STEM research in particular. Also evident during these conversations was the reality that the current culture in both the House and Senate has resulted in a highly politicized process for evaluating and formulating science policy. Rush Holt, CEO of the American Association for the Advancement of Science, an Honorary CUR Fellow, and a former eight-term New Jersey Democratic Congressman, recently observed that "an awful lot that goes on in Capitol Hill right now is [driven by] ideology and often in an evidence-free way."

With Holt's retirement from Congress in 2015, there is only one doctorate-holding physical scientist left in the 114th Congress. In these circumstances, scientific interests appear to lack sufficient numbers to sustain and encourage a more informed discussion of important issues, including but not limited to climate science, vaccine safety and efficacy, or the value of social science research. In addition, it doesn't help that Congress and the general public that elects its members do not always clearly understand the difference between science (the discovery of the basic principles of nature) and technology (useful things derived from scientific discovery).

How do we in the undergraduate research community combat this suboptimal narrative? One way is to provide useful data that can be incorporated into information-based decision-making. Another way is to become directly involved in reaching out to, developing personal relationships with, and communicating with governmental entities at the local, state, or national level. An additional, powerful way to reach out to non-scientist policymakers is to use personal narratives that help connect research to real-life problems. In this issue of the *CUR Quarterly*, several examples of undergraduate research that can be used to influence STEM policy are described that

embody one or more of these approaches.

Patrick Killion and Ian Page (University of Maryland) and Kyle Kopko and his undergraduate students (Elizabethtown College) describe how research data has the potential to influence policymaking. At the University of Maryland, the First-Year Innovation and Experience Program provides a mechanism for students to be involved in sustainability analytics early in their undergraduate experience. Kopko and his colleagues describe a quantitative analysis of research grants in the social sciences, including a comparative study of the outcomes of political science research compared to awards in other areas of the social sciences.

Susan Gilbertz (Montana State University) describes an effort to engage students directly in policymaking regarding water resources at the state-agency level. In this project students were able to develop personal relationships with stakeholders and earn trust as moderators and discussants during deliberations of a citizen advisory council. Diane Munroe (Middlebury College) describes community-connected capstone projects in environmental studies. Teams of students were assigned to projects drawn from community needs, partnering with state agencies or non-profit entities to provide sound data for policymaking. Meghan Maclean and co-authors (The School for Field Studies) report on a project in which students surveyed residents of the Turks and Caicos Islands regarding their seafood consumption. This data was used to evaluate the sustainability of conch harvesting for the islands' Department of Environment and Maritime Affairs.

All of these contributions describe potential models in which students can assist policymaking bodies by providing critical data for information-driven decision making. They also offer students the opportunity to interact directly with policymakers and stakeholders. Students learn in these projects that good science does not always equate to good policymaking, but students' narratives of their research experience also suggest that these types of projects are intensely motivating despite apparent failures in desired policy outcomes.

Perhaps the projects described in this issue of the *CUR Quarterly* will provide valuable ideas for policy-related research that could be adapted in your program or at your institution.

Roger S. Rowlett

CUR President

*Gordon & Dorothy Kline Professor of Chemistry
Colgate University*

doi: 10.18833/curq/36/3/7