

Report to Consortium on Law Values, Health, Environment and Life Sciences

By the

Center for Science, Technology and Public Policy

Results of Grant Funding

With the resources provided by the Consortium's grant, the Center for Science, Technology and Public Policy conducted a mini-course for University of Minnesota faculty members. Five faculty members were regular participants with one other faculty member participating only occasionally. We also had a post-doctoral fellow and a staff member attend regularly. The participants came from the Medical School, Neuroscience, Molecular Biology, and the Institute on the Environment. Assistant Prof. Elizabeth Wilson and Senior Fellow Steve Kelley led the programs along with guest experts. A summary of the program follows.

Public Engagement for Scientists and Engineers

Session 1

Trip to the Capitol – Implementing Science Policy

- Attend Committee Meetings
- Attend House and Senate Floor Meetings
- Address by Legislators and Staff

Participants were invited on March 6th, 2008 to experience first-hand the excitement and energy of a day at the State Capitol. They were taken into the House and Senate chambers while they were in session, given a tour of the media complex and were able to sit in on several committee meetings. Furthermore, the group was addressed by a senator, representative and several members of their support staff, to enable them to hear about some of the finer points of the legislative process and allow them to ask specific questions. Dr. Peter Agre, Nobel Laureate, also spoke to the group about the responsibility of communicating science and science policy to the public.

Session 2

Framing and Re-framing Science

- Discussing the Ethics of Communication
- Presenting Science in a Meaningful Public Frame
- Presenting Your Work to Non-scientists

During this session, participants were coached on how to present their work to others outside their field. This included how to speak to a legislative committee or to a Rotary Club meeting and a focus on keeping information accessible and presented in terms people understand to ensure that the message is not lost. The framing session was designed to provide a theoretical way of thinking about communications with the public. We also discussed the ethics of public communication, relying on the policies of several professional associations as examples.

Session 3

Educating and Persuading the Public through Writing

- Anatomy of an Op-Ed
 - Critique of an Op-Ed
 - Advice from an Op-Ed Writer and Science Journalists
- Demonstration of a Science Journalist Interview

The session focused on the practice of communicating with the public in writing. Two science writers, Jessica Marshall and Sharon Schmickle, described the challenges journalists and scientists alike face in communicating complex topics to the public. They emphasized the importance of telling a story that engages the reader. Eric Ringham, the Op-Ed editor for the Star Tribune, led an exercise on how to write strong editorial

content. He specifically highlighted what constitutes a good op-ed piece and how to convey their work to a general audience? The participants were asked to write an Op-Ed of their own on a subject of their choice and their efforts were critiqued by the guest speakers. One of the science journalists also conducted an interview with a participant as an exercise.

Session 4

Utilizing the Broadcast Media through Interviews

- Presentation by Broadcast Media Representative
- Presentation by a Scientist – Effective Interviewing
- Controversial Subjects and Politics in Research
- Mock Interview & Critique by TV/Radio Professional

For this session, Don Shelby of WCCO-TV and Mike Mulcahy of Minnesota Public Radio joined our participants to advise them on the art of the interview. Shelby and Mulcahy were given brief bios of the participants. Using this material, they conducted TV and radio “interviews” regarding the participants’ research. While the interviews were conducted, the participants were given advice and pointers on how to best present themselves and their work to the public. They were also advised on best practices when discussing a controversial subject.

Session 5

Honing Your Professional Presentations

- Balancing Information and Engaging with PowerPoint
- Extended Professional Talk and Critique

Steve Barberio, a speaking coach for legislators and business executives, discussed techniques for effective presentations. The participants were asked to create a brief presentation to an organization such as the Rotary Club. They were presented to the group and critiqued on their performance, content and speaking skills. Barberio discussed variation in both voice and physical style.

Session 6

Synthesis: Engaging Policymakers

- Advice from Senators
- Mock Hearing and Critique

Based on their first session at the Capitol, the participants were asked to present the policy implications of their work in front of a legislative “committee” made up of several state senators and representatives who volunteered their time. The participants testified on the subject or project of their choice to the fictitious “Joint Committee on Science and Technology”. The committee, composed of seasoned legislators, gave their feedback on the testimony and advised the participants on best practices when presenting to a legislative committee.

Summary:

The overall feedback that we received from the participants was positive with emphasis placed on the hands-on, participatory aspect of the series. The exercises where the participants were able to take part in interviews or testimony and the trip to the Capitol were especially popular.

There were readings and some brief writing assignments that were given each week that related to the different subjects. The participants found these to be helpful and in context when they had the time. However, most of the faculty members did not have the time to read everything or complete the Op-Ed pieces because their schedules did not permit this. A general consensus is that future versions remain focused on the hands-on, participatory skill sessions.

In written and oral feedback, the participants felt that this course was professionally valuable. One faculty member noted that after the public speaking session, he had been more aware of how he was using his position on the stage and his voice at an academic presentation. The lesson was not limited to engagement with the public. The feedback confirmed there is definitely a need for courses like this for tenured faculty, researchers and students alike.

CSTPP is interested in presenting the course again for faculty members. We intend to seek support from the VP for Public Engagement and others. We also want to explore creating a 1 ½ credit course here at the Humphrey that would be geared towards graduate students in science, medicine and engineering. We would offer the courses in parallel, targeted to different audiences.