

# Professional Development for Planetary Scientists

Planetary scientists can face challenges in effectively interacting with audiences, and some early career scientists need preparation in presenting their science at conferences. Students considering a career in planetary science need preparation in these, as well as professionalism, ethics in planetary science, applying for graduate school, and other topics. To help address these needs, the Lunar and Planetary Institute (LPI) has conducted seminars onsite, online, and during professional planetary science conferences.

[www.lpi.usra.edu/education/scientist-engagement](http://www.lpi.usra.edu/education/scientist-engagement)

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## Sharing Planetary Science Seminars

After a 2 hour workshop in September 2017, LPI's education and public engagement team conducted bi-monthly seminars, which began in February 2018. Seminars included current education research, and incorporated participants' own knowledge and experiences, through guided activities and facilitated discussions

Participants attended in-person or online.

### 2018 Topics

- Addressing Controversial Topics
- Sharing Science with the News Media
- Common Planetary Misconceptions
- Making Planetary Science Relevant
- Getting the Audience's Attention
- Understanding Audience Goals



An anonymous evaluation survey was conducted after each session. All responses (100%) indicated that at least one aspect of the seminars was valuable. The most useful aspects of the seminars ranged from the information presented, to discussions of the concepts, to discussing or practicing solutions to issues. Additional comments included requests for the information to be available online, and additional time for the topics.

## Intern Seminars

In July-August 2018, LPI held five seminars for its summer interns. LPI scientists presented information and gave examples from their own careers, while the E/PE team facilitated conversations, presented education research, and conducted activities to enable the interns to consider practical applications of the information.

### 2018 Topics

- Professional Behavior
- Ethics in Science
- Presenting Your Research
- Marginalized Communities
- Applying to Graduate School



Evaluation surveys were collected after each session, and a summative survey was completed by a majority (9) of the interns who attended the sessions. All (100%) indicated that the seminars were enjoyable, interesting, and useful, and recommended that they be continued in the future. Interns suggested adding additional topics in the future, such as writing papers and abstracts, assertiveness training, and providing an overview of planetary science topics. Multiple interns indicated that having professional scientists share advice, opinions, and experiences was the most valuable aspect of the seminars.

## Early Career Presenters Review

For many years, LPI's has partnered with education specialists from Planetary Science Institute to conduct presenters review sessions at LPSC and at the Division for Planetary Science conference for students and early career scientists. Participants practice delivering poster, e-poster and oral presentations and receive feedback from mid-career and senior scientists..



Anonymous surveys are conducted with both participants and those providing feedback. Results reveal that both those presenting and those giving feedback find the events worthwhile. Feedback is also helping make changes for future conferences including splitting sessions across the week to ensure more participants can get the most out of the event.

## The Future

LPI will continue to conduct professional development for planetary scientists, with input from the community. These sessions will likely expand in topics beyond those conducted so far, to assist the planetary science community in reaching and serving audiences traditionally underrepresented in STEM.

LPI staff conducted a workshop at SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) in fall 2018, sharing best practices in applying for internships. Recently, LPI held a well-attended staff workshop on Unconscious Bias. All attendees who filled out the evaluation indicated that they found the workshop useful.

To provide suggestions on ways that LPI can help scientists with education and public engagement, contact Christine Shupla at [shupla@lpi.usra.edu](mailto:shupla@lpi.usra.edu).