

LUNGRADCON: THE LUNAR GRADUATE STUDENT CONFERENCE. A. Dove¹, A. Poppe², A. Fagan³, C. Neish⁴, H. Fuqua², G. Kramer⁵, J. Szalay¹, M. Horányi¹, ¹CCLDAS, LASP, University of Colorado, Boulder, CO, ²Space Sciences Lab, University of California at Berkeley, Berkeley, CA, ³The Johns Hopkins University Applied Physics Laboratory, Laurel, MD, ⁴Civil Engineering and Geological Sciences, University of Notre Dame, Notre Dame, IN, ⁵Lunar and Planetary Institute, Houston, TX (corresponding author: adrienne.dove@colorado.edu)

Introduction: The Lunar Graduate Student Conference (LunGradCon) was initiated by graduate student and faculty members of the Colorado Center for Lunar Dust and Atmospheric Studies (CCLDAS) with the purpose of enhancing the professional development of graduate students and early postdoctoral researchers by providing an opportunity to present and discuss scientific research in an environment of their peers. LunGradCon was modeled after the highly successful Astrobiology Graduate Student Conference (AbGradCon), and is funded through the NASA Lunar Science Institute (NLSI). For the first two years, LunGradCon has been held as a one-day conference in conjunction with the NASA Lunar Science Institute's (NLSI) Lunar Science Forum at the NASA Ames Research Center. Activities include an invited overview talk on each of the NASA Lunar Science Institute's three main research areas (OF the Moon, ON the Moon, and FROM the Moon), submitted oral presentations from graduate students and postdoctoral researchers, and networking opportunities with established member of the lunar science community and the NLSI.

Background: Lunar science is undergoing a resurgence, with renewed interest in human return to the lunar surface, and multiple ongoing robotic planetary science missions to explore the Moon. With this renewal has come the realization that there is a generation gap: most members of the field were scientists during the last big lunar science push, during the Apollo days. The "next generation" of lunar scientists is therefore being established, and growing rapidly.

Additionally, lunar science is an inherently broad field. Future science and exploration will be driven by multi-disciplinary pursuits, so it behooves the next generation of scientists to be well versed in a variety of lunar science topics. For these reasons, LunGradCon was established to facilitate networking and career development amongst the "next generation" of lunar scientists. By making connections now, both scientifically and socially, we can ensure that the future of lunar science bridges the wide range of the discipline.

AbGradCon started as a small, graduate student-led conference, and has grown to become a multiday, multinational meeting. Because the number of students studying lunar science is smaller than the expansive field of astrobiology, this conference is not expected to become as large, but it should grow to be able to adapt to the thriving field of lunar science. Leadership of the conference changes hands each year, with 1-2 people continuing between years to provide continuity. Only graduate students and early (1st-2nd year) postdoctoral students attend and organize the conference.

Conferences: Thus far, LunGradCon has been held twice (summer 2010 and 2011), each time preceding the Lunar Science Forum and the Next Generation Lunar Scientist and Engineers (NGLSE) workshops [1]. Official attendance was 21 and 26 participants in the first and second years, respectively, and about 15 speakers gave original research presentations each year. Overwhelmingly positive feedback was received from all participants.



Figure 1. Attendees of LunGradCon 2010



Figure 2. Attendees of LunGradCon 2011

Format. Because of the emphasis on gaining a broad understanding of lunar science, overview talks were given at the beginning of each session. Presented by graduate students, these talks covered the broad areas defined by the NLSI: science OF, ON, and FROM the Moon. Attendees commented that these presentations were highly valuable for providing a framework that made the subsequent talks more accessible.



Figure 3. Andrew Poppe presents an overview talk at LunGradCon 2011.

Discussion sessions were also a key aspect of the conference format. Because LunGradCon is intended to be a setting in which participants feel comfortable openly discussing and presenting ideas, the discussion sessions provided a fertile ground for discussion of everything from connections between various participants' research results to exciting new lunar science missions. This is one area that has been cited for improvement, however, as in a few instances, discussions were somewhat forced. In future conferences, the chair will have suggested topics and ideas to more easily elicit discussions.

Additionally, anonymous evaluations are completed by every member of the conference and given to each presenter. This allows for a venue of constructive criticism and positive reinforcements, giving the presenters an opportunity to improve on their presentation and public speaking skills in a safe and comfortable environment.

Future directions: The NASA Lunar Science Institute will continue funding LunGradCon for at least two more years. We will improve the format of the conference based on feedback received in past years. LunGradCon 2012 is already in the planning stages, and will likely be in a 1.5-day format, with additional activities, including an invited speaker and a tour of NASA Ames Research Center, to be added to the schedule.



Figure 4. Discussion continues in the hall during the Lunar Science Forum.

References: [1] Bleacher, L. *et al.*, (2011) *LPSC XLII*, Abstract #1408. [2]