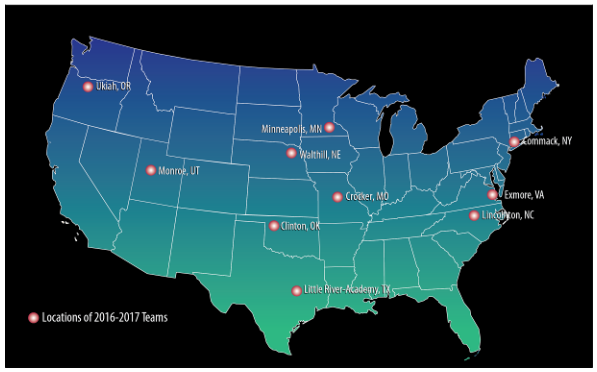
You Too Can Advise High School Researchers! A. J. Shaner[1], G. Y. Kramer[1], A. L. Nahm[2], M. Bakerman[3], S. Buxner[3], A. Hackler[1], and D. A. Kring[1], [1]USRA-Lunar and Planetary Institute (3600 Bay Area Boulevard, Houston, TX 77058, shaner@lpi.usra.edu), [2]DLR, Berlin, Germany, [3]Planetary Science Instiute, Tucson, AZ.

Introduction: The Exploration of the Moon and Asteroids by Secondary Students (ExMASS) program provides an opportunity for high school students to participate in authentic, student-centered research. The ExMASS program is an effort managed by the Center for Lunar Science and Exploration (CLSE). Led by the Lunar and Planetary Institute and Johnson Space Center, CLSE is one of nine teams comprising NASA's Solar System Exploration Research Virtual Institute (SSERVI). Over the course of one academic year, up to 10 teams of U.S. high school students conduct their own scientific investigations of Earth's Moon or asteroids with guidance from a scientist advisor.



Because the research is student-driven, it is not necessarily original research although it is new to the students. However, one team's research has been published in a professional journal [1]. At the end of the school year, teams submit an abstract and research poster which are scored by a panel of judges. The top four scoring teams gather virtually to give short presentations to the judges. After presentations and discussion, the judges choose one team to present in person at the Exploration Science Forum (ESF) at NASA Ames. The posters of all finalist schools are displayed at the ESF.

A student from Upper Darby High School (Pennsylvania) presents at the 2016 ESF.

This poster will present information/data that may be useful for practicing scientists looking for an opportunity to participate in an established education program that engages them on a deeper level with precollege students.

Teacher vs Scientist Advisor Role: The teachers and advisors participating in ExMASS are the program's strongest, and most important, assets. The ability of these two roles to work in concert, and individually, is paramount to the success of the ExMASS program.

What is the role of the teacher? What is the role of the advisor? How do the teacher and advisor work together to ensure a great experience for students? These are important questions as the roles may not be well understood, particularly when both positions have limited experience mentoring/advising students in research. Both teachers and advisors have important solitary, and collaborative, roles. This poster will discuss the individual roles of the teacher and the advisor, as well as where these roles intersect.

What are advisors saying? At the end of each ExMASS program year, advisors are asked to complete an exit survey that gathers their feedback regarding their experience as an advisor. Survey items include asking why they chose to advise high school students, what advice they would provide for future advisors and how many hours per week they spent advising their team. The results of this survey will be discussed in the poster.

An item is being added to the 2016-17 advisor exit survey that will gather advisors' perspectives on how much ownership students take in their teams' research projects.

How do I become an advisor? Contact Andy Shaner at the Lunar and Planetary Institute: shaner@lpi.usra.edu or 281-486-2163

References: [1] Kickapoo Lunar Research Team and G. Kramer (2014) *Icarus, 228*, 141-148.

Additional Information: For more information on the ExMASS program, please visit https://goo.gl/RGWTXD. If you have questions or would like additional information regarding the possibility of advising a high school team for the ExMASS program, please contact Andy Shaner at 281-486-2163 or shaner@lpi.usra.edu.