

TREX PUBLIC ENGAGEMENT AND ONLINE EFFORTS TO SUPPORT COMMUNITIES VIRTUALLY.

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Introduction: The Toolbox for Research and Exploration (TREX) is a node of NASA's Solar System Exploration Research Virtual Institute (SSERVI). TREX aims to develop tools and research methods for exploration of airless bodies, like the moon and asteroids, that are coated in fine-grained dust in order to prepare for human missions. Laboratory spectral measurements and experiments accompany studies of existing datasets to understand surface characteristics and to investigate potential resources on airless bodies. The TREX team is made up of multidisciplinary scientists from 12 institutions.

Public Engagement: The TREX Public Engagement team is composed of 11 TREX scientists along with additional scientists and education and communication specialists. The overall Public Engagement effort has strong emphasis of leadership and meaningful engagement by subject matter experts. The TREX Public Engagement website (<https://trex.psi.edu/>) shares scientific discoveries and multimedia resources. Other engagement includes social and new media through Twitter, blogs, and videos. Scientists have given public presentations at museums, conferences, schools, and public events including celebrations of the Apollo 50th anniversary and International Observe the Moon Night.

Upcoming Programs: Each team member will engage in public talks and public events in upcoming years utilizing specifically designed meteorite kits to highlight Lunar, Martian, and small body samples as well as other engagement activities including comet and crater making. Additionally, members engaging in field work will work with local schools and community organizations to share discoveries, discuss local geology, and talk about possible relevant careers.

In Spring 2021, the TREX Public Engagement effort will include a *Science Communicators Workshop for Disabled Writers* – a 7-week online workshop for self-identified disabled writers to support their interest in space science and create a collaborative network of writers and scientists who will produce content for the TREX website and other media outlets.

Additionally, the *TREX Artist in Residency Program* will engage both team scientists and artists in collaborations and science inspired artwork that will be displayed in public spaces and scientific meetings.



Online Efforts to Support Communities: The rapid spread of COVID 19 resulted in not only the closure of schools and museums but also delayed planned public engagement events associated with cancelled programming and field work. In an effort to support educational communities, the TREX Public Engagement Team is working with its partners to provide online programming including talks and training for schools and museums. This work will continue through the summer and adapt as more requests are made from across the country to support public engagement.

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