

**SURVEYING MENTAL HEALTH WITHIN PLANETARY SCIENCE.** D. Trang<sup>1</sup>, C. E. Swafford<sup>2</sup>, J. Tang<sup>2</sup>, S. D. Vance<sup>3</sup>, S. Herman<sup>2</sup>, J. Davidson<sup>4</sup>, J. Filiberto<sup>5</sup>, A. E. Hofmann<sup>3</sup>, M. Milazzo<sup>6</sup>, L. R. Ostrach<sup>7</sup>, and C. R. Richey<sup>3</sup>, <sup>1</sup>Hawai'i Institute of Geophysics and Planetology, University of Hawai'i at Mānoa, Honolulu, HI (dtrang@higp.hawaii.edu), <sup>2</sup>Department of Psychology, University of Hawai'i at Hilo, Hilo, HI, <sup>3</sup>Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, <sup>4</sup>Center for Meteorite Studies, School of Earth and Space Exploration, Arizona State University, Tempe, AZ, <sup>5</sup>Astromaterials Research and Exploration Science (ARES) Division, X13, NASA Johnson Space Center, Houston, TX, <sup>6</sup>Other Orb LLC, Flagstaff, AZ, <sup>7</sup>USGS, Astrogeology Science Center, Flagstaff, AZ.

**Introduction:** Mental health is a rising concern among several science communities [e.g., 1] and this issue has recently been recognized within the planetary science community [2]. Some recognized issues include a mental health crisis in graduate education [1], which has been emphasized by the COVID-19 pandemic [3]. These concerns include both anxiety and depression. Recently, a 2023 Planetary Science Decadal White Paper raised concerns about mental well-being within the academic environment [2]. The main finding within [2] is that NASA should invest in understanding the scope and impact of mental health problems within the planetary science community and how to address these issues.

**Survey:** The purpose of our study is to broadly examine mental health within the planetary science community instead of focusing on any particular mental health issue. The three main constructs that we investigate are depression, anxiety, and well-being. To measure these constructs, we plan to use the Depression Anxiety Stress Scales (DASS). The DASS scale consists of three instruments and focuses on low mood, motivation, and self-esteem [4]. The survey is a 42-item questionnaire using a 4-point scale with high internal consistency (i.e., Cronbach's  $\alpha$  of 0.84–0.97) [5–9]. The scale has been shown to be stable over time and have construct and convergent validity [5–6,10]. In addition to the scales, we will include items such as current job position and type of institution of workplace.

We plan to prepare the survey and have it ready by late summer to fall 2022. It is our hope that we will be able to perform a longitudinal study with an annual survey to examine the mental health status of the planetary science community. With this data, we can provide a clearer picture of goals and directions in improving mental health within the field.

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