



March 2022

Dear Friends,

Thank you for your generous response and support on Sun Devil Giving Day 2022. Your gift will make it possible for the School of Earth and Space Exploration to support our most deserving students, and to advance our research and education mission. Your generosity will change lives and ensure a brighter future for our students and our community.

Speaking of, we are pleased to announce in this newsletter our school's 2022 scholarship awardees for the Vivian Ford Graduate Fellowship and Summer Exploration Graduate Fellowship. These scholarships are examples of how your donations on Sun Devil Giving Day, and throughout the year, directly impact our students.

On the horizon, our graduate students will host the Earth and Space Open House on Saturday, April 9. We are excited to welcome back science enthusiasts of all ages to this

in-person event on campus. And our Virtual Night Sky series continues every other Wednesday, where you can learn about the stars and planets you can see from your own backyard.

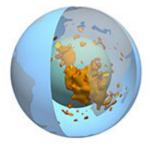
I hope you enjoy this newsletter featuring our research news, announcements, and events. For more information, we have included links to social media at the end of this newsletter.

Be well and keep safe,

Muradhur

Meenakshi (Mini) Wadhwa

In the News



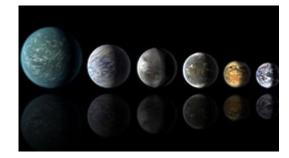
Study of 2 blobs in Earth's mantle shows unexpected differences in height, density

Researchers Qian Yuan and Mingming Li used geodynamic modeling and analyses of published seismic studies to investigate the

Large Low-Shear-Velocity Provinces (blob-like structures roughly on opposites sides of the planet within Earth's mantle). Through their research, they were able to determine the maximum heights that the blobs reach and how the volume and density of the blobs, as well as the surrounding viscosity in the mantle, might control their height. <u>Read more</u>

New astrobiology research predicts life 'as we don't know it'

The search for alien life has been restricted to using life on Earth as the reference, essentially looking for "life as we know it"



beyond Earth. For astrobiologists looking for life on other planets, there are simply no tools for predicting the features of "life as we don't know it." A team of scientists (including lead author/SESE Alum Dylan Gagler, with SESE's Sara Walker, Hyunju Kim, Bradley Karas, John Malloy and Veronica Mierzejewski) has tackled this restriction by identifying universal patterns in the chemistry of life that do not appear to depend on specific molecules. These findings provide a new opportunity for predicting features of alien life with different biochemistry to Earth life. <u>Read more</u>

Announcements



2022 Summer Exploration Graduate Fellowship awardees

Congratulations to the recipients of SESE's Summer Exploration Graduate (SEG) Fellowship for 2022: Srinidhi Ravi, Rachel Bruyere, Jacqueline Giblin, Jayanth Serla and Stephanie Sparks. The SEG Fellowship Program encourages and supports summer exploration activities by graduate students in all of the research areas within the School of Earth and Space Exploration. The SEG Fellowship Program seeks creative and innovative ideas from graduate students to augment, improve or complement their ongoing research efforts via a new exploration-based activity.

2022 Vivian Ford Graduate Fellowship awardees

Congratulations Mansi Padave and Mara Karageozian, recipients of a 2022 Vivian Ford Graduate Fellowship! The Vivian Forde Graduate Fellowship is a merit-based award



that provides summer salary and research expenses for School of Earth and Space Exploration graduate students who are engaged in Space and Exploration Sciences.



Selected to join AGU's 2022 Voices for Science Program

Congratulations graduate student Jessie Bersson, selected to join the American Geophysical Union (AGU) 2022/2023 #VoicesforScience Program! The 12-month

program will provide specialized training to hone her science communication and policy skills, working directly with AGU staff to conduct regular outreach activities with a variety of audiences in the local community.

Lab of the Month

In the Hydrothermal Organic Geochemistry (HOG) Lab, Professor Everett Shock is one of the researchers who studies underwater environments dealing with hydrothermal ecosystems and how geochemical interactions on Earth can be applied to new



environments, including other planets. While temperature, data and samples are collected at the site location, the HOG lab allows researchers to recreate temperatures and pressures of unique biomes. Watch this video to take a lab tour.

Events



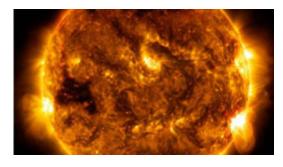
Virtual Night Sky

Join the ASU Marston Exploration Theater presenters on **Wednesday**, **April 6 and 20 at 7 p.m.** for a live planetarium presentation. Learn about the planets and stars visible in the night sky from your own backyard and the latest events in space exploration!

Register in advance for these FREE Zoom webinars <u>April 6</u> and <u>April 20</u>.

Earth and Space Open House

ASU's School of Earth and Space Exploration is opening its doors to the public to showcase the efforts of the SESE clubs and personnel, and engage with the public in lectures, displays, and telescope use.



This semester's open house theme is "A Day in the Sun" and will focus on solar activities. This FREE in-person event is **Saturday, April 9 from 11 a.m.–1 p.m.** located outside ISTB4 on the ASU Tempe campus.



Space2inspire: The New Space Age

Join the 2022 Beyond Annual Lecture with Dr. Sian Proctor on **Thursday, April 14 at 7 p.m.** where she will share her experience as a member of the SpaceX Inspiration4

mission and what she's learned from this new orbital perspective. This lecture is FREE, open to the public and offered virtual and in-person. Space is limited and <u>registration is required</u>.

Alumni Announcements

Alumni: Keep it current!

Join us on <u>LinkedIn</u> and <u>update your contact information</u> so you can receive the latest School and university news, exclusive career and professional development opportunities, unique ASU experiences, invitations to special events and much more!





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