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PGD Chair Debra Hurwitz Needham *This letter has been written in Debra’s capacity as GSA PGD Chair and reflects her personal views.

Message from the Chair

Greetings fellow planetary geologists,

Well we’re still in the midst of this historic pandemic, but as more of us and our neighbors get vaccines, some of us are tip-toeing back to some semblance of normalcy. Although we continue to closely monitor variants and infection rates, many labs are reopening for analyses, travel is inching back up for collaborations and field work, and offices are starting to crack their doors
open again to at least a small fraction of their workforce. Unfortunately some of us are now beginning to face surges in infection rates, so we’re not out of the woods yet, so please everyone stay safe, take care of each other, and take care of yourselves! We’ll see what the fall brings, but even the simple act of eating at a restaurant again, albeit with that mask at hand, is a testament to the medical professionals and scientists who have made such strong progress possible.

Now that the virtual Lunar and Planetary Science Conference (LPSC) is in the rear view mirror (see the recap below), we are eagerly looking forward to the GSA Annual Meeting in Portland, OR (10–13 October, 2021). The abstract deadline is upon us (July 20!), and we have a great line up of 17 planetary sessions covering a wide range of geologic processes across a variety of planetary bodies. Given the on-going challenge of the pandemic, GSA is planning a dual in-person and virtual meeting this year. Although speakers are encouraged to attend in person, when circumstances inhibit travel, GSA is planning to accommodate pre-recorded presentations during all sessions. Those participants that pre-record talks will be able to join question and answer sessions during their designated session. A small number of high-profile sessions may be available online for registered remote participants; we will send out a community announcement once those assignments are finalized with the official program.

The G.K. Gilbert Award Session this year will honor Dr. Janice Bishop, who was recently named the winner of the 2021 G.K. Gilbert Award for her outstanding contributions to the field of planetary geology. The Gilbert session is titled The ABCs of Mineralogy, Spectroscopy, and Geochemistry on Planetary Surfaces: Analogs, Bouncing light, and Crystal structures, with talks focusing on planetary mineralogy and the geochemical environment in which those minerals formed, field studies of analog sites, and laboratory spectroscopy studies and related experiments supporting identification of planetary minerals and rocks across the Solar System. We look forward to celebrating Dr. Bishop’s achievements in Portland this fall. Congratulations, Janice!

Other topical sessions range in subjects from exploring small rocky and icy bodies to investigating impact and tectonic processes across the Solar System. Given recent mission activities and announcements, we will look forward to hearing the first science highlights from Perseverance operations, as well as delve into the latest advances in Venus science. We also have several sessions planned honoring the careers of planetary scientists, including Walter Alvarez’s 80th birthday, Andrew Knoll’s career, and in remembrance of Josh Bandfield. I encourage you to browse the menu of planetary sessions below, submit abstracts to those relevant to you, and attend as many as you can to support the exciting research our planetary community has produced this year!

Furthermore, when you register for GSA Connects 2021, please also note the amazing field trips and short courses on offer. Take advantage of Portland’s proximity to some incredible geology, with many field trips that can be applicable to planetary processes such as tours of regional flood basalts, silicic lava domes, river gorges, and tectonic features (to name only a few!). For short courses, a quick “planetary” search will point you to two short course opportunities, one virtual on Planetary Image Analysis with ArcGIS led by Zoe Learner Ponterio, and one in-person course on Talking Science: A Communicating Science Workshop led by Steven Jaret.

We hope to see you at the PGD booth in the Exhibit Hall of the Annual Meeting for the famous meteorite raffle and the latest in space-related merchandise – remember all proceeds go toward our PGD student travel grants! It’s been an honor serving as your Division Chair, and the PGD officers look forward to seeing you in Portland!

Debra Hurwitz Needham
2021 Chair, Planetary Geology Division of GSA
**PGD 2021 Button Design Winner**

Congrats to **Jordan Bretzfelder** from UCLA on her winning 2021 design!

**Artwork description:** This design commemorates the landing of the Mars 2020 Perseverance Rover in Jezero crater, and the extraordinary circumstances in which we find ourselves. While we wish we could be together in person, this year we will all be interacting with each other the same way our spacecraft communicate with us: remotely, via computers. We are lucky to still be able to share our science, and even luckier to have a chance to learn more about ancient lakes on Mars!

**About the artist:** Jordan Bretzfelder is a second-year PhD student at UCLA. She studies the Moon, Earth and Mars, with interests in remote sensing, VNIR spectroscopy and aeolian geology.

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**2021 Dwornik Awards**

We are really proud of all our Dwornik participants and all the hard work they do. We were presented with many terrific presentations and posters this year, and want to celebrate all of our student participants, along with our winners here:

**Best Graduate Oral Presentation:** **Samuel Cartwright**, University of Nevada Reno, “Identification of Spectral End Members in the Martian South Polar Residual Cap.”

**Honorable Mention—Grad Oral:** **Brynna Downey**, University of California Santa Cruz, “Early Dynamical Evolution of the Moon with a Subsurface Magma Ocean.”

**Graduate Poster:** **Chase Chivers**, Georgia Institute of Technology, “Thermal and Chemical Evolution of Small, Shallow Water Bodies on Europa.”

**Honorable Mention—Grad Poster:** **Rebecca Hahn**, North Carolina State University, “A New Study of Shield Fields and Their Spatial Relationships on Venus.”

**Undergraduate Oral:** **Lisette Melendez**, University of South Florida, “Quantifying the Environmental Response to Deglaciation in Martian Craters During the Late Amazonian.”

**Honorable Mention—Undergrad Oral:** **Claire Blaske**, Arizona State University, “Energetic Requirements for Dynamos in the Metallic Cores of Super-Earth and Super-Venus Exoplanets.”

**Undergraduate Poster:** **Ari Essunfeld**, Yale University, “Attribute Recognition for Grouping Elevated-Manganese ChemCam Targets by Visual Characteristics.”

**Honorable Mention—Undergrad Poster:** **Kierra Wilk**, Rensselaer Polytechnic Institute, “Characterizing Unusual Deposits at Ius Chasma, Mars.”
Upcoming 2021 Annual Meeting

GSA 2021
ANNUAL MEETING
10–13 October | Portland, Oregon, USA

Mark your calendars for the upcoming 2021 GSA Annual Meeting from October 10–13 in Portland, Oregon. Registration is open now!

Abstract deadline: July 20 (now passed)
Early Registration Deadline: September 7
Cancellation Deadline: October 1

More information about the meeting can be found at:

https://community.geosociety.org/gsa2021/home

GSA is preparing Connects 2021 in Portland, Oregon, as an in-person event experience so that all individuals onsite – attendees, speakers, staff, vendors, and venue personnel – remain safe and comfortable.

The full meeting in Portland will include more than 200 technical sessions, Pardee Keynote Symposia, the Presidential Address & Awards Ceremony, field trips, short courses, special lectures, exhibits, networking, mentoring, and more. In-person meeting registration also includes access to all live-streamed and recorded content.

All speakers are highly encouraged to be present in Portland, and all posters will be in-person only. While speakers are encouraged to attend in person, when circumstances inhibit travel to Portland, GSA plans to support an option to submit pre-recorded talks to play during each session. Participants who submit pre-recorded talks will be able to call into the designated session during question and answer periods. A small number of high-profile sessions will be streamed online, with final designations for these fully hybrid sessions set to be finalized with the final conference agenda in August.

For those who are not able to travel and attend in person, there will also be a condensed meeting package available for a special registration price. This package is not available to people who are presenting an abstract in-person during the meeting.

The online-only registration package includes live-stream access to all Pardee Keynote Symposia, Noontime Lectures, the Halbouty Distinguished Lecture, and the GSA Presidential Address, along with 80+ selected topical sessions. During the live hybrid sessions, you will be able to ask questions and chat with other online attendees.

The organizers also continue to monitor the COVID-19 pandemic and are in constant communication with partners at the Oregon Convention Center, Travel Portland, hotels within our block, GSA Councilors, and the Portland local organizing committee, and are reviewing updated CDC guidelines. Measures are being taken to ensure optimal health and sanitary conditions in all environments where in-person interactions take place. More information can be found here:


STUDENTS! Don’t forget to apply for travel grants to offset costs of attending GSA! Deadline to apply is August 20th 2021. More information can be found at:

https://community.geosociety.org/pgd/awards/travel-grants

The Planetary Geology Division Business Meeting and Award Ceremony
We will again be hosting our annual business meeting in person at GSA Connects. We are aiming for our get-together to occur on the same day as our special G. K. Gilbert Award session to honor our 2021 Gilbert awardee Dr. Janice Bishop!

While the meeting will be hosted in person within a socially-distanced room, a live stream will also be available for our remote attendees to view the awards ceremony.

We have also distributed a survey to gauge your plans for attending GSA. For those who are interested, the PGD board plans to help facilitate in-person events, including a post-business meeting dinner to celebrate Janice’s achievements. This is not expected to be a ticketed or pre-paid event, but more an organized dinner for those of you who are present and interested.

Additional details about the business meeting and ancillary events will be posted on our website in mid-August, and we will also be sure to notify members when we have additional details at:

https://community.geosociety.org/pgd/home

Also, don’t forget to stop by the PGD booth at GSA to socialize and check out merchandise!

PGD Sponsored Sessions at the 2021 GSA Connects Meeting:

GSA Mineralogy, Geochemistry, Petrology, and Volcanology Division; GSA Planetary Geology Division; GSA Geochronology Division; Geochemical Society
Open-system magma processes rule! We seek contributions that provide insight into the how, when, and where of these processes, as well as why the spatio-temporal records of open-system processes are distinct among magmatic systems.

GSA Planetary Geology Division
We welcome abstracts that investigate the methodology of planetary and terrestrial landform analysis or that explore these methodologies as a means of achieving insight into the evolution of those landforms.

GSA Planetary Geology Division
This session solicits talks that describe the use of thermal infrared remote sensing observations to study the mineralogy, thermophysics, and atmospheric properties of solar system bodies. In memory of Joshua L. Bandfield.

T113. Friends of Hoth: Episode V-Small, Icy and Ocean Worlds. Erin Leonard, Emily Martin, and Alex Patthoff
GSA Planetary Geology Division
We seek abstracts relating to surface, structural, and tectonic processes; interior and thermal evolution; and planetary analogs as they pertain to icy satellites in the outer solar system. This includes experimental, observational, and theoretical approaches

T114. From the Guajira Jungle to Apennines Tectonics and from the Sardinia/Corsica Yoyo to the Dino-Killer Asteroid: Honoring the Career of Walter Alvarez on the Occasion of His 80th Birthday. Christian Koeberl, and Philippe Claeys
GSA Planetary Geology Division; GSA Structural Geology and Tectonics Division; GSA History and Philosophy of Geology Division; GSA Geophysics and Geodynamics Division
This session covers the career and scientific accomplishments of Walter Alvarez by welcoming presentations related to the many topics he covered in the last 60 years, from tectonics to the K-T impact event.
T115. Geomorphology and Landscape Evolution of Mars. Sharon Wilson Purdy, Marisa Palucis and Elena Favaro
GSA Planetary Geology Division; GSA Quaternary Geology and Geomorphology Division; GSA Karst Division
This session focuses on fluvial, lacustrine, aeolian, and crater degradation processes to investigate the geomorphology, geology, and climate history of Mars. We welcome abstracts using orbital and rover data as well as Earth analogues.

GSA Planetary Geology Division; GSA Continental Scientific Drilling Division; GSA Geophysics and Geodynamics Division; GSA Mineralogy, Geochemistry, Petrology, and Volcanology Division; GSA Quaternary Geology and Geomorphology Division; GSA Structural Geology and Tectonics Division
Impact cratering is an important geological process throughout the solar system. The session, remembering Nadine Barlow and H. Jay Melosh, seeks contributions on all aspects of impact cratering on Earth and the Solar System.

T117. Perseverance at Jezero Crater—Characterizing an Ancient Crater Lake Basin on Mars. Kathryn Stack, Briony Horgan, and Patrick Russell
GSA Planetary Geology Division
This session will cover scientific results from the first eight months of NASA’s Mars 2020 Perseverance rover operations and exploration in Jezero crater on Mars.

GSA Planetary Geology Division; Paleontological Society; GSA Marine and Coastal Geoscience Division
Cretaceous–Paleogene boundary records within and outside the Chicxulub impact crater reveal new insights into mass extinction mechanisms. We welcome contributions varying from K-Pg proxy records to modeling and settings ranging from crater to distal sites.

T120. The G.K. Gilbert Award Session. Debra Needham, Emily Martin, and Nicholas Lang
GSA Planetary Geology Division
This session is in honor of our 2021 Gilbert awardee Dr. Janice Bishop, and is focused on mineralogy, spectroscopy, and geochemistry of planetary bodies throughout the solar system, including lab and analog studies, to celebrate and highlight the broad impact of Dr. Bishop’s research.

2021 Awards

2021 GSA Fellows
Janice Bishop (SETI Institute): Elected into GSA fellowship as the 2021 G. K. Gilbert Awardee.

2021 Pellas-Ryder Award
The Pellas-Ryder award is given to the Planetary Science Best Student Paper published during the preceding year. The award is jointly given by the Meteoritical Society and the Planetary Geology Division of the Geological Society of America and includes a $500 award from the Meteoritical Society and a plaque awarded by the PGD.

This year’s Pellas-Ryder award was awarded to Jan Hellmann, currently at the Institut für Planetologie, University of Münster, Germany. Their paper was titled “Origin of volatile element depletion among carbonaceous chondrites” and was published in Earth and Planetary Sciences Letters in 2020.

Congratulations to Dr. Hellmann for this exciting work!

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**Call for Applications & Nominations**

**Ronald Greeley Award for Distinguished Service:** The PGD is now accepting nominations for the 2022 Ronald Greeley Award for Distinguished Service, and all members are encouraged to submit nominations. This award was established in 2011 as the PGD Distinguished Service Award, and in 2012 the PGD membership voted to change the name to commemorate Ronald Greeley and his contributions to the Planetary Geology Division.

This award may be given to those members of the PGD, or those outside of the Division and GSA, who have rendered exceptional service to the PGD over a multi-year period. The award is not open to currently serving Division officers, but may be awarded to past officers who have provided exceptional service to the PGD after their term on the Management Board has ended. *Nominations for the award, which should include a description of what the nominee has given to the PGD community, may be sent to Nick Lang (nlang@mercyhurst.edu) prior to August 31, 2021.* Approval of the award will be by majority vote of the Management Board. The award consists of a certificate signed by the Chair, and will be presented at the Division's Virtual Business Meeting at the Annual Meeting.

**Eugene M. Shoemaker Award:** Dr. Carolyn Shoemaker established the Eugene M. Shoemaker Memorial Fund for Crater Studies in memory of her husband in 1998. She established this endowment so that students will have an opportunity to pursue studies of impact craters, which were the focus of her husband’s graduate studies and a large part of his professional career. Friends, scientific colleagues, and companies have contributed to the fund (and continue to do so) to ensure its success.

The Shoemaker Impact Cratering Award is for undergraduate or graduate students, of any nationality, working in any country, in the disciplines of geology, geophysics, geochemistry, astronomy, or biology. The award, which will include $3000, is to be applied for the study of impact craters, either on Earth or on the other solid bodies in the solar system. Areas of study may include but shall not necessarily be limited to impact cratering processes; the bodies (asteroidal or cometary) that make the impacts; or the geological, chemical, or biological results of impact cratering.

*The electronic application form is open now, and must include a CV, research proposal, timeline and budget, and two letters of recommendation.* Applications are due to Dr. David Kring (kring@lpi.usra.edu) by August 27, 2021. For more details and to access the online application forms, go to:

http://www.lpi.usra.edu/science/kring/Awards/Shoemaker_Award/

Questions regarding this award should be directed to Dr. David Kring, (kring@lpi.usra.edu). The Planetary Geology Division officers strongly encourage all of our Division members to actively recruit promising students to apply for this prestigious award.

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**Selected Upcoming Meetings & Workshops**

For a detailed list of upcoming meetings and workshops, please see the Lunar and Planetary Science meetings calendar here:

https://www.hou.usra.edu/meetings/calendar/

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**Community Resources**

GSA Geoscience Job board: https://www.geosociety.org/GSA/Education_Careers/Job_Board/GSA/GSAToday/Job_Board.aspx
Women in Planetary Science Blog:  
https://womeninplanetaryscience.wordpress.com/jobs/

AGU’s Planetary Science Section:  
https://connect.agu.org/planetarysciences/home

American Astronomical Society Division for Planetary Sciences:  
https://dps.aas.org/jobs

Higher Ed Jobs:  
https://www.higheredjobs.com/

Discussion of work-force preparation:  
https://serc.carleton.edu/geoneeds/professions.html

The Professor is in:  
http://theprofessorisin.com/

URGE (Unlearning Racism in Geosciences):  
https://urgeoscience.org/resources/

SERC on Diversity:  
https://serc.carleton.edu/advancegeo/resources/what_diversity.html
We need your help!
This would be a great time to contribute to the Dwornik, Shoemaker, G. K. Gilbert or student travel grant funds! Unlike many other charitable donations, your donation to these funds will produce positive results you can see for yourself as you encourage and support planetary scientists, both current and future. Donations can either be made online (https://gsa-foundation.org/) or by mail. If by mail, please include a check or money order, made payable to Planetary Geology Division, GSA.

YES I have enclosed a check as a donation to:

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WHEN MAKING A DONATION, PLEASE INCLUDE THIS DONATION FORM AND PAYMENT CHECK IN AN ENVELOPE AND MAIL THEM TO:

The Geological Society of America
P.O. Box 9140
Boulder, CO 80301-9140.

Need more information about PGD? Check out our website:
https://community.geosociety.org/pgd/home
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