

Divya M. Persaud
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Education

University College London, United Kingdom 2017 – 2021 (expected)
Ph.D., Space & Climate Physics (Planetary & Imaging Groups)

University of Rochester, Rochester, NY 2012 – 2017
B.A., High Honors in Research, Geology/Music Composition, GPA 3.33

Selected Publications and Presentations

Brydon, G., **Persaud, D. M.**, Jones, G., Planetary topography measurement by descent stereophotogrammetry, *in review (PSS)*.

Xiong, S., Tao, Y., **Persaud, D. M.**, Campbell, J. D., Putri, A.D.R., Muller, J.-P., 2020, Subsurface reflections detected by SHARAD data revealing buried channels and islands over the Elysium Planitia, *Earth and Space Science*. doi: 10.1029/2019EA000968

Persaud, D. M., et al., Multi-Resolution, Nested Orbital 3D Images of Gale Crater for Fused MSL Rover-Orbital Image Simulations. European Planetary Science Congress, Geneva, Switzerland, 16-20 September 2019. Abstract #1540. Oral presentation.

Persaud, D. M., et al., 2016. HOMER: a smallsat ground penetrating radar sounding fleet to map planetary surfaces at high resolution. *Lunar Planet. Sci. XLVII*, 3051 (abstract).

D. M. Persaud, C. B. Phillips, Methods of Estimating Initial Crater Depths on Icy Satellites, Abstract 17043, 2014 Fall Meeting, AGU, San Francisco, CA, 15-19 Dec. Oral presentation.

Research

Postdoctoral Scholar, NASA Jet Propulsion Laboratory Feb. 2021 –
Science support for Europa Lander; affiliate on Europa Clipper.

Ph.D. Student, Mullard Space Science Laboratory, University College London 2017 – present
Processing and applying 3D orbital imagery to geological analysis of Gale crater, Mars.

JPL Summr Internship Program, NASA Jet Propulsion Laboratory 2016
Stereo topography, relaxation of impact craters on Saturnian moons using Cassini ISS DEMs; catalog of crater measurements and relaxation percentages for four moons.

Undergraduate Research, University of Rochester 2015 – 16

- Identified rare chromite species in the Allende meteorite using SEM/XR spectroscopy.
- Honors thesis: Science mission design for HOMER with 2015 NASA Academy team.

NASA Ames Academy for Space Exploration, NASA Ames Research Center 2015
Team instrument design for a smallsat GPR/SAR fleet to characterize lava tube systems on Mars (“HOMER”); Geology lead, project manager weeks 8-10.

NSF Research Experience for Undergraduates in Astrobiology, SETI Institute 2014
Investigating initial crater depths of Saturn’s moons using Cassini ISS DEMs.

NSF Research Experience for Undergraduates in Physics, University of Rochester 2013

Magnetic tests on Darwin impact glass samples to determine whether and constrain how a magnetic field was generated by the Darwin impact.

Research Assistantship, University of Rochester 2012 – 13
Documentation and preparation of Fukang pallasite meteorite samples; initial magnetic tests to characterize magnetization.

High School Internship, NASA Goddard Space Flight Center 2011, 2012
Adapted a method of passive radiometry (MOLA) for the Mercury Laser Altimeter to generate a reflectance map of Mercury at 1064 nm.

Training and Field Experience

PanCam team member, ExoFIT ExoMars field trials 1 & 2, Harwell, UK Feb. 2019, Oct. 2018
GeoPlaNet thematic school: Fluid-Rock Interactions, University of Nantes, Fr. Nov. 2018
SPICE Training, ESAC, Madrid, Spain June 2018
Intro. to Flying a Drone for Research, UCL, Maidstone, Kent, UK May 2018
Comparative planetology & radio astronomy field class, Lassen, CA July 2014

Awards

Elizabeth Puchnarewicz Award for Outstanding Contribution to Public Outreach, UCL 2018
Dean's Scholarship, University of Rochester 2012 – 16

Grants

"Space Science in Context" Workshop, Researcher-led Initiative Award, UCL 2020
Europlanets Travel Grant, European Planetary Science Congress 2019
MSSL Travel Grant, European Geophysical Union, European Planet. Sci. Congress 2018,19
Outreach Development Grant, Spacelink Learning Foundation 2019

Selected Speaking, Engagement, and Organizing

Recent invited speaking:
Women in Space Seminar Series (virtual) Oct. 2020
Centre for Outer Space Studies Launch (virtual) Oct. 2020
TIGER in STEMM Webinar Series in Physics (virtual) Sept. 2020
Lunchtime Q&A, The Geological Society (virtual) June 2020
Organizer, Space Science in Context Conference (virtual) May 2020
Asst. Educational Outreach Consultant, Spacelink Learning Foundation 2018 – 2019
Organizer, "Mission to Mars" Sutton Scholars Discovery Day, UCL 2019, 2018
Co-convenor, Building Habitable Worlds IV, UK Centre for Astrobiology Aug. 2018

Professional Membership

Board member, JustSpace Alliance 2021 – present
IAS Centre for Outer Space Studies 2020 – present
Institute of Physics 2019 – present
European Geosciences Union 2018 – present
UCL/Birkbeck Centre for Planetary Sciences 2018 – present
UK Planetary Forum 2017 – present
Sigma Gamma Epsilon Geology Honors Society, Zeta Phi Chapter 2016 – present
American Geophysical Union 2014 – present