Dr. Jennifer E. C. Scully

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Employment/Experience

2017-present Scientist (Level III) in Small Bodies Group, JPL (2017-2020: Level II)

- Scientific research projects about Ceres, Europa, Vesta, Uranian moons, the Moon, Mercury and Mars via geologic mapping using ArcGIS software, geomorphologic analysis of impact craters and mass wasting deposits, and analysis of structural features (e.g., fractures/faults) and laboratory experiments
- Science and mission formulation, especially planning landing and/or sampling site reconnaissance and selection for future missions to ocean/icy worlds and small bodies such as Ceres and Europa
- Lead Science Mentor at NASA's Planetary Science Summer School, held at JPL

2015-2017 Caltech Postdoctoral Scholar at JPL (advisor: Dr. Carol Raymond)

- Scientific research funded by the Dawn mission: structural analysis of fractures, geomorphologic analysis of craters and mass wasting deposits, and quadrangle-based geologic mapping using ArcGIS software, as one of the Dawn team's lead geologic mappers
- New Frontiers and Discovery class mission formulation/proposal preparation for the CONDOR comet surface sample return mission and the CODEX Ceres lander
- Comparative studies of icy satellites and dwarf planets, including Ceres

2010-2015 Graduate Student Researcher & Teaching Assistant, Dept. of Earth, Planetary & Space Sciences, UCLA (advisors: Prof. C. Russell and Prof. A. Yin)

- Scientific research funded by the Dawn mission: geologic mapping and analysis of the implications of fractures/faults, curvilinear gullies, lobate deposits and pitted terrain on Vesta's geologic evolution and hydration
- Field work experience in desert environments in California:
 - Led a project that used field work and remote sensing data to distinguish generations of lava flows with different morphologies and compositions in the Cima and Pisgah volcanic fields (SW California)
 - Co-led a project about a long-runout landslide in Eureka Valley (CA, NW of Death Valley), which we used as an analog to investigate hypotheses for the emplacement of long-runout landslides on Mars (Watkins, Scully, et al., in preparation)

Mission Science Team Participation

2025-present	Participating Scientist, Lucy mission to the L4 Trojan asteroids
2020-present	Project Science Professional Affiliate & Reconnaissance Focus Group
-	Facilitator, Europa Clipper mission
2010-2019	Collaborator/Associate, Dawn mission to Vesta and Ceres

Mission Concepts Participation

2024-present	Team Member, CLARITI (Caltech-JPL Lunar Autonomous Reconnaissance
-	Investigation and Technology Infusion) (for Caltech's Brinson Exploration Hub)
2023-present	Formulation Project Scientist, Ceres Sample Return concept (for New Frontiers)
2023-present	Co-Investigator, Comet Surface Sample Return concept (for New Frontiers)
2023-present	Team Member, European Service Module extended mission opportunity, JPL
2022-2023	Team Member, Uranus Flagship geology of large moons science formulation
	team, JPL
2020-2023	Project Science Staff, Europa Lander mission concept, JPL
2019-2020	Co-Investigator, Decadal Survey Mission Concept Study – Ceres: Exploration of
	Ceres' Habitability (formulated for New Frontiers)
2019	Deputy Formulation Project Scientist, Proteus mission about the origins of
	Earth's water (proposed to Discovery)
2016-2018	Co-Investigator , CODEX mission to land on Ceres (formulated for Discovery)
2016-2017	Co-Investigator, CONDOR comet surface sample return mission (proposed to
	New Frontiers)

Education

2015	Ph.D. in Geology from the Dept. of Earth, Planetary, and Space Sciences, UCLA
	• GPA of 3.97
	• Ph.D. thesis entitled: Curvilinear gullies, lobate deposits and fractures, and their implication for the geologic evolution and hydration of Vesta
2010	B. A. in Science (Geology) from Trinity College Dublin, the University of Dublin, Ireland: received First Class Honors and placed first in class
	• Field work experience in desert and temperate environments in Ireland, Scotland and Spain. Spent 3 months continuously in the field, mapping 19 km ² of the remote Ardnamurchan peninsula in Scotland for undergraduate mapping thesis.
	• Experience sampling and analyzing coal deposits from Hook Head Lighthouse, Co. Wexford, Ireland to determine their provenance from potential coal fields in Ireland and Wales, for undergraduate laboratory studies thesis.

Peer-Reviewed Publications (total h-index of 32, based on Google Scholar)

- Scully, J. E. C., et al. (TBD) Leveraging Ceres to Gain Insights into Candidate Ocean Worlds Orbiting Uranus. In preparation for The Planetary Science Journal.
- **Scully, J. E. C.**, et al. (TBD) Potential landing sites: a comprehensive reconnaissance assessment of the Europa Clipper trajectory. The Planetary Science Journal, in revision.
- **Scully, J. E. C.**, et al. (TBD) Small in Number but Mighty in Significance: Impact Craters as Windows into Europa's Subsurface. Journal of Geophysical Research: Planets, in revision.
- Phillips, C. B., **Scully, J. E. C.**, et al. (TBD) A Reconnaissance Strategy for Landing on Europa, based on Europa Clipper Data. The Planetary Science Journal, in revision.
- Seltzer, C., et al. (incl. **Scully, J. E. C.**) (2025) THUNDER: A Titan orbiter mission concept for the New Frontiers program designed at the JPL Planetary Science Summer School. The Planetary Science Journal, accepted.
- Castillo-Rogez, J. C., et al. (incl. **Scully, J. E. C.**) (2025) Informing Planetary Protection Policies for the Future Exploration of Ceres: State of Understanding after the Dawn Mission. Astrobiology,

25, 82-95.

- Pamerleau, I. F., Sori, M. M. & **Scully, J. E. C.** (2024) An ancient and impure frozen ocean on Ceres implied by its ice-rich crust. Nature Astronomy, 8, 1373-1379.
- Poston, M. J., Baker, S. R., **Scully, J. E. C.**, et al. (2024) Experimental Examination of Brine and Water Lifetimes after Impact on Airless Worlds. The Planetary Science Journal, 5, 233.
- O'Brien, P., **Scully, J. E. C.**, et al. (2024) Enhancement of the Cerean Exosphere by Sublimation from Complex Craters. The Planetary Science Journal, 5, 199.
- McKeown, L. E., et al. (incl. Scully, J. E. C.) (2024) A Lab-scale Investigation of the Mars Kieffer Model. The Planetary Science Journal, 5, 195.
- Hanley, K. G., et al. (incl. **Scully, J. E. C.**) (2024) The Vulcan Mission to Io: Lessons Learned during the 2022 Planetary Science Summer School. The Planetary Science Journal, 5, 164.
- Pappalardo, R. T., et al. (incl. Scully, J. E. C.) (2024) Science Overview of the Europa Clipper Mission. Space Science Reviews, 220, 40.
- Daubar, I. J., et al. (incl. **Scully, J. E. C.**) (2024) Planned Geological Investigations of the Europa Clipper Mission. Space Science Reviews, 220, 18.
- Vance, S. D., et al. (incl. Scully, J. E. C.) (2023) Investigating Europa's Habitability with the Europa Clipper. Space Science Reviews, 219, 81.
- Seaton, K. M., et al. (incl. **Scully, J. E. C.**) (2023) Astrobiology eXploration at Enceladus (AXE): A New Frontiers Mission Concept Study. The Planetary Science Journal, 4, 116.
- McKeown, L. E., et al. (incl. Scully, J. E. C.) (2023) Martian Araneiforms: A Review. Journal of Geophysical Research: Planets, 128(4), doi: 10.1029/2022JE007684.
- Longobardo, A., et al. (incl. **Scully, J. E. C.**) (2022) Spectral Analysis of Ceres' Main Linear Features. Minerals, 12(8), 1013.
- King, S. D., et al. (incl. **Scully, J. E. C.**) (2022) Ceres' Broad-Scale Surface Geomorphology Largely Due To Asymmetric Internal Convection. AGU Advances, 3(3), e2021AV000571.
- Nordheim, T. A., et al. (incl. **Scully, J. E. C.**) (2022) The Radiation Environment of Ceres and Implications for Surface Sampling. Astrobiology, 22, 5, 1-11.
- Hughson, K. H. G., et al. (incl. Scully, J. E. C.) (2022) Comparative morphometric analysis suggests ice-cored pingo-shaped landforms on the dwarf planet Ceres. Geology, 50(4), 522-527.
- Castillo-Rogez, J., et al. (incl. Scully, J. E. C.) (2022) Science Drivers for the Future Exploration of Ceres: From Solar System Evolution to Ocean World Science. The Planetary Science Journal, 3, 64.
- Castillo-Rogez, J., et al. (incl. **Scully, J. E. C.**) (2022) Concepts for the Future Exploration of Dwarf Planet Ceres' Habitability. The Planetary Science Journal, 3, 41.
- Hand, K. P., et al. (incl. **Scully, J. E. C.**) (2022) Science Goals and Mission Architecture of the Europa Lander Mission Concept. The Planetary Science Journal, 3, 22.
- Landis, M. E., et al. (incl. Scully, J. E. C.) (2022) The case for a Themis asteroid family spacecraft mission. Planetary and Space Science, 212, 105413.
- Spiers, E. M., et al. (incl. Scully, J. E. C.) (2021) Tiger: Concept Study for a New Frontiers Enceladus Habitability Mission. The Planetary Science Journal, 2, 195.
- Titus, T. N., et al. (incl. Scully, J. E. C.) (2021) A roadmap for planetary caves science and exploration. Nature Astronomy, 5, 524-525.
- Scully, J. E. C., et al. (2021) The In-Situ Exploration of a Relict Ocean World: An Assessment of Potential Landing and Sampling Sites for a Future Mission to the Surface of Ceres. Planetary Science Journal, 2(3), 94.
- Schenk, P., et al. (incl. Scully, J. E. C.) (2021) Compositional control on impact crater formation on mid-sized planetary bodies: Dawn at Ceres and Vesta, Cassini at Saturn. Icarus, 359, 114343.
- Raymond, C. A., et al. (incl. Scully, J. E. C.) (2020) Impact-driven mobilization of deep crustal

brines on dwarf planet Ceres. Nature Astronomy, 4, 741-747.

- Park, R. S., et al. (incl. **Scully, J. E. C.**) (2020) Evidence of non-uniform crust of Ceres from Dawn's high-resolution gravity data. Nature Astronomy, 4, 748-755.
- Schmidt, B. E., et al. (incl. Scully, J. E. C.) (2020) Post-impact cryo-hydrologic formation of small mounds and hills in Ceres's Occator crater. Nature Geoscience, 13, 605-610.
- Schenk, P., et al. (incl. **Scully, J. E. C.**) (2020) Impact heat driven volatile redistribution at Occator crater on Ceres as a comparative planetary process. Nature Communications, 11, 3679.
- Scully, J. E. C., et al. (2020) The varied sources of faculae-forming brines in Ceres' Occator crater emplaced via hydrothermal brine effusion. Nature Communications, 11, 3680.
- Krohn, K., et al. (incl. Scully, J. E. C.) (2020) Fracture geometry and statistics of Ceres' floor fractures. Planetary and Space Science, 187, 104955.
- Castillo-Rogez, J. C., et al. (incl. Scully, J. E. C.) (2020) Ceres: Astrobiological Target and Possible Ocean World. Astrobiology, 20(2), 269-291.
- Chilton, H. T., et al. (incl. **Scully, J. E. C.**) (2019) Landslides on Ceres: Inferences into ice content and layering in the upper crust. JGR: Planets, 124(6), 1512-1524.
- Sizemore, H. G., et al. (incl. Scully, J. E. C.) (2019) A global inventory of ice-related Cerean features: implications for the evolution and state of the cryosphere. JGR: Planets, 124(7), 1650-1689.
- Duarte, K. D., et al. (incl. Scully, J. E. C.) (2019) Landslides on Ceres: Diversity and Geologic Context. JGR: Planets, 124, 3329-3343.
- Buczkowski, D. L., et al. (incl. Scully, J. E. C.) (2019) Floor-fractured Craters on Ceres and Implications for Interior Processes. JGR: Planets, 123, 3188-3204.
- Scully, J. E. C., et al. (2019a) Introduction to the Special Issue: The formation and evolution of Ceres' Occator crater. Icarus, 320, 1-6.
- Scully, J. E. C., et al. (2019b) Ceres' Occator crater and its faculae explored through geologic mapping. Icarus, 320, 7-23.
- Nathues, A., et al. (incl. Scully, J. E. C.) (2019) Occator crater in color at highest resolution. Icarus, 320, 24-38.
- Ruesch, O., et al. (incl. Scully, J. E. C.) (2019) Bright carbonate surfaces on Ceres as remnants of salt-rich water fountains. Icarus, 320, 39-48.
- Buczkowski, D. L., et al. (incl. Scully, J. E. C.) (2019) Tectonic analysis of fracturing associated with Occator crater. Icarus, 320, 49-59.
- Bowling, T. J., et al. (incl. Scully, J. E. C.) (2019) Post-impact thermal structure and cooling timescales of Occator crater on asteroid 1 Ceres. Icarus, 320, 110-118.
- Quick, L. C., et al. (incl. Scully, J. E. C.) (2019) A possible brine reservoir beneath Occator: thermal/compositional evolution & formation of Cerealia Dome & Vinalia Faculae. Icarus, 320, 119-135.
- Schenk, P., et al. (incl. Scully, J. E. C.) (2019) The central pit and dome at Cerealia Facula and floor deposits in Occator crater, Ceres: morphology and formation. Icarus, 320, 159-187.
- Scully, J. E. C., et al. (2019c) Synthesis of the Special Issue: The formation and evolution of Ceres' Occator crater. Icarus, 320, 213-225.
- Stephan, K., et al. (incl. Scully, J. E. C.) (2019) Ceres' impact craters relationships between surface composition and geology. Icarus, 318, 56-74.
- Combe, J.-P., et al. (incl. **Scully, J. E. C.**) (2019) The surface composition of Ceres' Ezinu quadrangle analyzed by the Dawn mission. Icarus, 318, 124-146.
- Ermakov, A. I., et al. (incl. Scully, J. E. C.) (2019) Surface roughness and gravitational slope distributions of Vesta and Ceres. Journal of Geophysical Research: Planets, 124(1), 14-30.
- Williams, D. A., et al. (incl. Scully, J. E. C.) (2018) Introduction: The geological mapping of Ceres.

Icarus, 316, 1-13.

- Ruesch, O., et al. (incl. **Scully, J. E. C.**) (2018) Geology of Ceres' north pole quadrangle with Dawn FC imaging data. Icarus, 316, 14-27.
- Pasckert, J. H., et al. (incl. **Scully, J. E. C.**) (2018) Geologic mapping of the Ac-2 Coniraya quadrangle of Ceres from Dawn: Implications for a heterogeneously composed crust. Icarus, 316, 28-45.
- Scully, J. E. C., et al. (2018) Ceres' Ezinu quadrangle: a heavily cratered region with evidence for localized subsurface water ice and the context of Occator crater. Icarus, 316, 46-62.
- Hughson, K. G. H., et al. (incl. **Scully, J. E. C.**) (2018) The Ac-5 (Fejokoo) quadrangle of Ceres: Geomorphological evidence for ground ice mediated surface processes. Icarus, 316, 63-83.
- Krohn, K., et al. (incl. **Scully, J. E. C.**) (2018) Unique geomorphology and structural geology of Haulani crater of Ceres, revealed by mapping of quadrangle Ac-6 Haulani. Icarus, 316, 84-98.
- Williams, D. A., et al. (incl. Scully, J. E. C.) (2018) The Geology of the Kerwan quadrangle of dwarf planet Ceres: Investigating Ceres' oldest impact basin. Icarus, 316, 99-113.
- Frigeri, A., et al. (incl. **Scully, J. E. C.**) (2018) The geology of the Nawish quadrangle of Ceres: the rim of an ancient basin. Icarus, 316, 114-127.
- Buczkowski, D. L., et al. (incl. Scully, J. E. C.) (2018) Geology of Ceres' Occator quadrangle: Floorfractured craters and other geomorphic evidence of cryomagmatism. Icarus, 316, 128-139.
- Schulzeck, F., et al. (incl. **Scully, J. E. C.**) (2018) Geologic mapping of the Ac-11 Sintana quadrangle: Assessing diverse crater morphologies. Icarus, 316, 154-166.
- Scully, J. E. C., et al. (2017) Evidence for the interior evolution of Ceres from geologic analysis of fractures. Geophysical Research Letters, 44, 9564–9572.
- Schmidt, B. E., et al. (incl. **Scully, J. E. C.**) (2017) Geomorphological evidence for ground ice from mass wasting on dwarf planet Ceres. Nature Geoscience, 10, 338-343.
- Buczkowski, D. L., et al. (incl. **Scully, J. E. C.**) (2016) The geomorphology of Ceres. Science, 353 (6303), aaf4332-1-8.
- Marchi, S., et al. (incl. Scully, J. E. C.) (2016) The missing large impact craters on Ceres. Nature Communications, 7, 12257.
- Scully, J. E. C., et al. (2015) Geomorphological evidence for transient water flow on Vesta. Earth and Planetary Science Letters, 411, 151-163.
- McCord, T. B. & Scully, J. E. C. (2015) The composition of Vesta from the Dawn mission. Icarus, 259, 1-9.
- Longobardo, A., et al. (incl. **Scully, J. E. C.**) (2015) Mineralogical and spectral analysis of Vesta's Gegania and Lucaria quadrangles and analysis of their key features. Icarus, 259, 72-90.
- Zambon, F., et al. (incl. **Scully, J. E. C.**) (2015) Spectral analysis of the quadrangles Av-13 and Av-14 on Vesta. Icarus, 259, 181-193.
- Blewett, D. T., et al. (incl. **Scully, J. E. C.**) (2014) Vesta's North Pole Quadrangle Av-1 (Albana): Geologic Map and the Nature of the South Polar Basin Antipodes. Icarus, 244, 13-22.
- **Scully, J. E. C.**, et al. (2014) Geomorphology and structural geology of Saturnalia Fossae and adjacent structures in the northern hemisphere of Vesta. Icarus, 244, 23-40.
- Ruesch, O., et al. (incl. **Scully, J. E. C.**) (2014) Geologic map of the northern hemisphere of Vesta based on Dawn Framing Camera (FC) images. Icarus, 244, 41-59.
- Schäfer, M., et al. (incl. **Scully, J. E. C.**) (2014) Imprint of the Rheasilvia impact on Vesta Geologic mapping of quadrangles Gegania and Lucaria. Icarus, 244, 60-73.
- Williams, D. A., et al. (incl. **Scully, J. E. C.**) (2014) The geology of the Marcia of asteroid Vesta: Assessing the effects of large, young craters. Icarus, 244, 74-88.
- Buczkowski, D. L., et al. (incl. **Scully, J. E. C.**) (2014) The unique geomorphology and physical properties of the Vestalia Terra plateau. Icarus, 244, 89-103.

- Krohn, K., et al. (incl. Scully, J. E. C.) (2014) Mass movement on Vesta at steep scarps and crater rims. Icarus, 244, 120-132.
- Williams, D. A., et al. (incl. Scully, J. E. C.) (2014) Lobate and flow-like features on asteroid Vesta. Planetary and Space Science, 103, 24-35.
- Alibay, F., et al. (incl. **Scully, J. E. C.**) (2014) Design of a low cost mission to the Neptunian system. IEEE Aerospace Conference Proceedings.
- Reddy, V., et al. (incl. Scully, J. E. C.) (2013) Comparing Dawn, Hubble Space Telescope, and ground based interpretations of (4) Vesta. Icarus, 226, 1103.
- Denevi, B. W., et al. (incl. Scully, J. E. C.) (2012) Pitted Terrain on Vesta and implications for the presence of volatiles. Science, 338, 246.
- Buczkowski, D. L., et al. (incl. Scully, J. E. C.) (2012) Large-scale troughs on Vesta: A signature of planetary tectonics. Geophysical Research Letters, 39, L18205.
- Reddy, V., et al. (incl. **Scully, J. E. C.**) (2012) Delivery of dark material to Vesta: Carbonaceous chondritic impacts. Icarus, 221, 544.
- Russell, C. T., et al. (incl. Scully, J. E. C.) (2012) Dawn at Vesta: Testing the protoplanetary paradigm. Science, 336, 684.

Book Chapters

Williams, D. A., Nathues, A. & **Scully, J. E. C.** (2022) Geomorphology of Ceres. In: Insights from the Dawn Mission for the Origin of the Solar System. Cambridge University Press.

Research Grants: Funded by NASA ROSES and JPL Internal Funds

2025-2030	Principal Investigator of 'An Assessment of Whether Subsurface Volatiles are Present on the Trojans via Geologic Mapping of all Lucy I 4 Targets' a data analysis
	and science-team-participation project funded by NASA ROSES' Lucy in the L4
	Trojans Participating Scientist Program
2025-2027	Task Lead of "Targeted Studies in Lunar Volcanism and Petrology', a data analysis and development of future tools project funded by JPL's Strategic Initiatives
2022-2025	Co-I of 'Chill Hills: Exploring Ceres' Hydrology and Geology Through
	Pingo-like Morphologies', a data analysis and modeling project funded by NASA
	ROSES's DDAP (Discovery Data Analysis Program) (PI: Dr. Kynan Hughson,
	University of New Brunswick, Canada)
2022-2025	Co-I of 'Geophysical and geological tests of Ceres' crustal composition', a data
	analysis and modeling project funded by NASA ROSES's DDAP PI: Dr. Michael
	Sori, Purdue University)
2021-2024	Co-I of 'Araneiforms on Mars: a window into the role of carbon dioxide
	sublimation on landscape modification', a geomorphic analysis and laboratory
	experiments project funded by NASA ROSES Mars Data Analysis Program
	(MDAP) (PI: Dr. Serina Diniega, JPL)
2021-2024	Co-I of 'Impact-triggered Volatile Loss on Ceres', a data analysis and
	modeling project funded by NASA ROSES's DDAP (PI: Dr. Margaret Landis,
	LASP/University of Colorado Boulder)
2020-2024	Principal Investigator of 'Detailed Geologic Mapping of Pwyll and Manannán
	Impact Craters: Indicators of Europa's Ice Shell Thickness', a data analysis
	project funded by NASA ROSES' Early Career Fellowship (ECF) Start-Up

	Program for Named Fellows
2020-2023	Co-I of 'Mapping Mercury's lithospheric thickness', a data analysis and modeling
	project funded by NASA ROSES' DDAP (PI: Dr. Ryan Park, JPL)
2020-2023	Co-I of 'The Global Geologic Map of Ceres from Dawn', a data analysis
	project funded by NASA ROSES' Planetary Data Archiving, Restoration, and Tools
	(PDART) program (PI: Scott Mest, PSI)
2020-2023	Co-I of 'High-Resolution Geologic Mapping of Urvara Crater, Ceres', a data analysis
	project funded by NASA ROSES' DDAP (PI: Dr. Hanna Sizemore, PSI)
2017-2024	Principal Investigator of 'Volatiles on Vesta and Ceres', a data analysis and
	laboratory experiments project funded by NASA ROSES' DDAP

Awards

2024	Blue Ribbon Award for presentation at JPL Research Poster Day: "Leveraging
2023	IDI I any Allen Armend for Excellence for "externation contributions to Devre
2023	JPL Lew Allen Award for Excellence for outstanding contributions to Dawn,
	Europa Clipper's Reconnaissance Focus Group activities, and dedication to
2023	Actorneid 22027 nemod (Longiformally)
2023	IDI Verseen Amerikaan fan Wersen tien te D8 Amerikaan en teel
2022	Discipline Program Manager, and initial development of a new proposal tracking system"
2022	Selected as a Steering Committee Member , Geologic Mapping Subcommittee (GEMS) of the Mapping and Planetary Spatial Infrastructure Team (MAPSIT), because of expertise in planetary geologic mapping of small bodies and ocean worlds
2022	Europa Lander Individual Award for "leadership on Europa landing site reconnaissance"
2021	NASA Group Achievement Award as a part of the Planetary Science Summer
	School team
2020	NASA Honor Award Early Career Public Achievement Medal for "early career
	achievement in scientific research significantly advancing the understanding of the geological history and volatile content of Ceres and Vesta"
2019	JPL Voyager Award for lead guest editor role, Icarus Special Issue (volume
0040	
2019	Bodies Assessment Group)
2019	Participation selected, PI Launchpad, NASA Science Mission Directorate
2017	Selected as an Early Career Fellow in the NASA ROSES program
2014	Early career travel grant to attend the 12 th meeting of the Small Bodies Assessment Group meeting
2013 & 2014	Sullwold Scholarship for excellence in research EPSS LICLA (consecutive years)
2013 & 2019	NASA Group Achievement Award as a part of the Dawn Science Team
2013	Paulev Fellowship EPSS UCLA
2013	Participation selected, NASA's Planetary Science Summer School IPL
2012	1 st prize talk 5 th LA Basin Earth and Planetary Science Student Symposium
	- Price states, e in Dusin Latin and Fancary Science States Symposium

White Papers Submitted to the Planetary Science & Astrobiology Decadal Survey 2023-2032

- Castillo-Rogez, J. C., et al. (incl. **Scully, J. E. C.**) (2020a) Science Motivations for the Future Exploration of Ceres. https://tinyurl.com/y3bjp6jt
- Castillo-Rogez, J. C., et al. (incl. **Scully, J. E. C.**) (2020b) Habitability of Small Bodies: State of Knowledge and Motivations for Exploration in the Next Decade. https://tinyurl.com/yy6z255b
- Hand, K. P., et al. (incl. **Scully, J. E. C.**) (2020a) Science of the Europa Lander Mission Concept. https://tinyurl.com/yxzpr2cs
- Hand, K. P., et al. (incl. **Scully, J. E. C.**) (2020b) On the Past, Present, and Future Role of Biology in NASA's Exploration of our Solar System. https://tinyurl.com/y5gj4lfw
- Hendrix, A. R., et al. (incl. **Scully, J. E. C.**) (2020) Ocean Worlds: A Roadmap for Science and Exploration. https://tinyurl.com/yxvkqx6t
- Landis, M. E., et al. (incl. **Scully, J. E. C.**) (2020) Why We Should Study the Themis Asteroid Family in the 2023-2032 Decade. https://tinyurl.com/y4xs84oc
- Phillips, C. B., et al. (incl. **Scully, J. E. C.**) (2020) An Exploration Strategy for Europa. https://tinyurl.com/y3rmlsml
- Raymond, C. A., et al. (incl. **Scully, J. E. C.**) (2020) What are the main geological processes that determined the evolution and current state of small bodies and are they similar to those on larger bodies? https://tinyurl.com/y3tl6sts
- Walker, C. C., et al. (incl. **Scully, J. E. C.**) (2020) The Importance of Further Studies and Missions to Understand Cryovolcanism. https://tinyurl.com/y4kfmsda

Mission Concept Study Submitted to the Planetary Science & Astrobiology Decadal Survey 2023-2032

Castillo-Rogez, J. C., et al. (incl. **Scully, J. E. C.**) (2020) Mission Concept Study: Ceres: Exploration of Ceres' Habitability. https://science.nasa.gov/solar-system/documents

Professional Service

Member , LEAG (Lunar Exploration Analysis Group) Science Goals Document update activity
Steering Committee Member, Geologic Mapping Subcommittee (GEMS) of the
Mapping and Planetary Spatial Infrastructure Team (MAPSIT), member with
expertise in planetary geologic mapping of small bodies and ocean worlds
Steering Committee member, NOW (Network for Ocean Worlds)
Discipline Program Manager for planetary science research proposals, JPL
Lead Science Mentor, NASA's Planetary Science Summer School, JPL
Internal reviewer of JPL proposals to be submitted to NASA ROSES, NASA
mission opportunities, and JPL internal funding opportunities such as R&TD
(Research and Technology Development) and PDRDF (President's and Director's
Research and Development Fund)
Organizer and chair of Geological Society of America meeting (GSA), American
Geophysical Union Fall meeting (AGU) and Asia Oceania Geosciences Society
meeting (AOGS) sessions about Ceres/Vesta, small bodies and ocean worlds
Panelist, NASA Review Panels

2015-present	Peer reviewer for journals: 'Science', 'Nature Communications', 'EPSL', 'JGR –
	Planets' and 'Icarus'
2015-present	Chair of Lunar and Planetary Science Conference (LPSC) and Division of
	Planetary Sciences annual meeting (DPS) sessions about small bodies science
2023	Member, LPSC Program Committee
2019-2022	Steering Committee Member, Small Bodies Assessment Group (SBAG) Steering
	Committee
2021	Participant, invitation-only workshop, 'Non-Nuclear Exploration of the Solar
	System', W. M. Keck Institute for Space Studies
2020	Peer reviewer of Cambridge University Press book chapter: 'Geomorphology of
	Vesta' from 'Vesta and Ceres: Insights into the Dawn of the Solar System'
2019-2020	Co-Investigator of the Ceres Planetary Mission Concept Study: 'Assessing Dwarf
	Planet Ceres Past and Present Habitability Potential'
2016-2019	Lead guest editor, Icarus Special Issue: 'The formation and evolution of Ceres'
	Occator crater' (volume 320)
2016-2018	Team member, Roadmaps to Ocean Worlds (ROW)
2015-2020	Co-organizer of bi-monthly 'Icy Worlds Collaboration & Exchange (ICE)' JPL
	seminar
2016	Co-organizer, Caltech Postdoc Association networking events
2015	Co-guest editor , Icarus Special Issue: 'Vesta's surface composition' (vol. 259)
2015	Executive secretary. NASA Review Panel
2012-2014	Co-President and Board Member , UCLA 'Earth, Planetary and Space Science
	Student Organization'
	oradini o Samparon

Mentoring

2022-present	Postdoc co-mentor, mentoring JPL Postdoc Rutu Parekh along with Bob
	Pappalardo on project about mass wasting on Europa and other icy worlds
2021-present	Europa Clipper 'Here To Observe' program mentor, mentored three
	undergraduate students, each for one year
2020-2024	Dissertation committee member, mentoring University of North Dakota PhD
	student Caleb Strom on project investigating Ahuna-Mons-like features on Ceres
2018-2020	Summer intern mentor, mentored undergraduate student Samantha Baker over
	three consecutive summers at JPL on projects about Ceres landing site selection and
	laboratory analysis of Ceres/Vesta analog materials at low pressure

Public Outreach and Diversity, Equity and Inclusion Activities

2023 2022 & 2024	Volunteer docent , Europa Clipper outreach day to Puerto Rican students Volunteer docent , Exploring Your Universe event, UCLA
2022	Invited speaker for Badwater Basin guided walk, Death Valley Dark Skies
	Festival
2019-present	Founder and Past-President, 'Foreign national Advocacy Network' Employee
-	Resource Group, JPL
2019-present	Co-Organizer, 'Women in Planetary Science' group at JPL
2019-present	Member, 'Inclusion, Diversity, Equity, and Accessibility (IDEA)' Working
-	Group for NASA's Planetary Science Division Assessment/Analysis Groups

2019 & 2023	Volunteer docent, Explore JPL event
2017-present	Letter writer, science engagement activity with elementary school students
2021-2022	Presenter/abstract author, 'Foreign Nationals Employed and Studying in Planetary
	Research in the United States, and Recommendations for Supporting this Group',
	presented at Lunar and Planetary Science Conference, abstract #1493 and Advancing
	IDEA in Planetary Science Conference, abstract #2008
2020	Facilitator, 'Listening Sessions' at JPL
2018 & 2024	Congressional visits about planetary science
2018	Guest speaker, 'The Summer Science Program', University of Colorado, Boulder,
	talk entitled: 'The Exploration of Occator Crater on Ceres by NASA's Dawn'
2015-2017	Volunteer docent, JPL's Open House
2011-2014	Exhibit creator & volunteer, UCLA's 'Exploring Your Universe' open house
2011-2012	Author and editor, Dawn 'Image of the Day' outreach posts on dawn.jpl.nasa.gov

Invited Conference Talks and Seminars

Scully, J. E. C., et al. (2024) Speaker for Class of 2024 Commencement Address. UCLA
Department of Earth, Planetary, and Space Sciences, Los Angeles.
Scully, J. E. C., et al. (2023) Brine-Related Activity on Ceres and Europa, and Plans for Potential
Exploration of these Ocean Worlds. UCLA Planetary Science Seminar, Los Angeles.
Scully, J. E. C., et al. (2022) The Europa Lander Mission Concept: Overview and Reconnaissance
Strategy. University of Alaska Anchorage Seminar, virtual.
Scully, J. E. C., et al. (2021) There and Back Again: A Geologist's Tale of Planetary Exploration.
Irish Geological Association Monthly Lecture, virtual.
Scully, J. E. C., et al. (2020) Ceres, Brines and Insights about Europa and Ocean Worlds. Europa
Clipper Lecture Series, virtual.
Scully, J. E. C., et al. (2018) The formation and evolution of Ceres' Occator crater and its
bright faculae. Lunar and Planetary Laboratory Colloquium, Tucson.
Scully, J. E. C., et al. (2018) The formation and evolution of Ceres' Occator crater.
Colloquium at Southwest Research Institute, Boulder.
Scully, J. E. C., et al. (2018) The formation and evolution of Ceres' Occator crater and its
faculae. COSPAR 42 nd Assembly.
Scully, J. E. C., et al. (2017) The formation and evolution of the bright faculae in Occator crater on
Ceres. Asia Oceania Geosciences Society (AOGS) Special Session.
Scully, J. E. C., et al. (2017) Past and ongoing activity in Ceres? Geologic evidence: Occator crater.
Workshop on Ceres Exploration, Applied Physics Laboratory.
Scully, J. E. C., et al. (2016) The surface and interior evolution of Ceres revealed by analysis of
fractures and secondary crater chains using Dawn data. American Geophysical Union (AGU).
Scully, J. E. C., et al. (2014) Geomorphological Evidence for Transient Water Flow and Sub-
Surface Ice on Vesta. Planetary Science Seminar, JPL.

Additional Information

JPL webpage	http://science.jpl.nasa.gov/people/Scully/
LinkedIn	https://www.linkedin.com/in/jenniferscully1
Google Scholar	https://scholar.google.com/citations?user=eu3CbV0AAAAJ&hl=en