(Last updated on 10/23/2023)

Seulgi Moon

ADDRESS

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EMPLOYMENT

2022 – present **University of California, Los Angeles** CA, USA
Associate Professor, Dept. of Earth, Planetary, and Space Sciences

2015 – 2022 **University of California, Los Angeles** CA, USA
Assistant Professor, Dept. of Earth, Planetary, and Space Sciences
(1 year leave of absence during 2019)

2013 – 2015 **Massachusetts Institute of Technology** MA, USA
Postdoctoral Associate, Dept. of Earth, Atmospheric, Planetary and Sciences

DEGREES

2007 –2013 **Stanford University** CA, USA
Ph.D. Geological and Environmental Sciences.
Advisor: George Hilley & Page Chamberlain

2005 –2007 **Seoul National University** Seoul, Korea
M.S. Earth System Science.
Advisor: Youngsook Huh

2001–2005 **Seoul National University** Seoul, Korea
B.S., Earth System Science, *summa cum laude.*

RESEARCH INTERESTS

- Tectonic geomorphology, critical zone sciences, Quaternary geochronology
- Assessing tectonic, climatic, and bedrock controls on surface processes (e.g., bedrock weathering and erosion) and landscape evolution
- Examining the controls of tectonic and topographic interactions, such as topographic stress and tectonic damages, on surface processes
- Quantifying rates and distribution of erosion processes using novel geochronological techniques (e.g., cosmogenic and luminescence dating) and geochemical analysis
- Studying the surface and subsurface processes of other planetary bodies such as Moon, Mars, and Titan

AWARDS AND ACHIEVEMENTS

AGU Robert Sharp Lecture, 2022
AGU Luna B. Leopold Early Career Award, 2022
Sloan Research Fellow, 2022
NSF Faculty Early Career Development Program (CAREER) Award, 2019

UCLA Faculty Career Development Award, 2018
Postdoctoral Scholars Mentoring Awards Nominee, University of California, Los Angeles, 2018
Top Cited Article 2018-2019, recognized as a top 20 cited paper in Journal of Geophysical Research: Earth Surface (Flinchum et al., 2018)
Top Downloaded Article 2017-2018, recognized as a top 20 most read paper in Journal of Geophysical Research: Earth Surface (Moon et al., 2017)
Alexander von Humboldt Research Fellowship for postdoctoral researchers, 2013 (*declined*)
Gabilan Stanford Graduate Fellowship, Stanford University, 2008-2011
High Academic Achievement Award, Seoul National University, 2003-2004

PUBLICATIONS

Citation metrics available from Google Scholar (https://goo.gl/RRLCtA)
h-index 17, total citations ~ 1718 (as of 10/23/2023)
*Student/postdoc/visiting scholar advisees from me, †Student author

Published papers

40. M. O. Argueta*, **S. Moon**, K. Blisniuk, N. D. Brown, L. B. Corbett, P. R. Bierman, and S. R.H. Zimmerman (2023), Examining the influence of disequilibrium landscape on millennial-scale erosion rates in the San Bernardino Mountains, California, *GSA Bulletin,* https://doi.org/10.1130/B36734.1

39. K. Youssef[#], K. Shao*[#], **S. Moon,** and L-S. Bouchard (2023), Landslide susceptibility modeling by interpretable neural network. *Communications Earth & Environment,* 4(1) p.162. https://doi.org/10.1038/s43247-023-00806-5 ([#]equal contribution)

38. R. A. Lewis-Merrill*, **S. Moon**, J. L. Mitchell, J. M. Lora (2022), Assessing environmental factors of alluvial fan formation on Titan. *The Planetary Science Journal,* 3(9), p. 223. https://doi.org/10.3847/PSJ/ac8d09

37. E. S. Yi†, K. J. Kim, C. Wöhler, A. A. Berezhnoy, Y. H. Kim, and **S**. **Moon** (2022), Petrological and Mineralogical Characteristics of Exposed Materials on the Floors of the Lavoisier and Surrounding Craters. *Remote Sensing*, 14(17), 4313. https://doi.org/10.3390/rs14174313

36. N. Nizam†[#], C. Divola†[#], M. Day, A. Yin, and **S. Moon** (2022), Development of Chaos Terrain as Subaqueous Slide Blocks in Galilaei Crater, Mars. *Remote Sensing*, 14(9), p.1998. https://doi.org/10.3390/rs14091998 ([#]equal contribution)

35. G. Li*, **S. Moon**, and J. Higa* (2022), Residence Time of Over-Steepened Rock Masses in an Active Mountain Range, *Geophysical Research Letters,* 49, e2021GL097319. http://dx.doi.org/10.1029/2021GL097319

34. J. T. Higa*[#], N. D. Brown*[#], **S. Moon,** J. M. Stock, L. Sabbeth†, S. E.K. Bennett, A. Martín-Barajas, M. O. Argueta* (2022), Microcontinent breakup and links to possible plate boundary reorganization in the northern Gulf of California, México. *Tectonics*, 41, e2021TC006933. https://doi.org/10.1029/2021TC006933 ([#]equal contribution)

33. Z. S. Brecheisen†, D. D. Richter, **S. Moon**, and P. N. Halpin (2022), Quantitative analysis of hillshed geomorphology and critical zone function: Raising the hillshed to watershed status. *GSA Bulletin.* 134 (7-8), 2007–2021. https://doi.org/10.1130/B35724.1

32. I. Pierce, S. G. Wesnousky, S. Saha*, **S. Moon** (2022), Testing the Synchronicity of Splay-Fault Ruptures in Carson Valley, Nevada, United States. *Bulletin of the Seismological Society of America*, 112(2), 704-713. https://doi.org/10.1785/0120210161

31. W. Wang, A. Nyblade, G. Mount, **S. Moon**, P. Chen, N. Accardo, X. Gu, B. Forsythe, S. L. Brantley (2021), 3D seismic anatomy of a watershed reveals climate-topography coupling that drives water flowpaths and bedrock weathering. *Journal of Geophysical Research: Earth Surface*, 126, p. e2021JF006281. https://doi.org/10.1029/2021JF006281

30. B.J. Eppinger†, J.L. Hayes, B.J. Carr, **S. Moon**, C. Cosans†, W.S. Holbrook, C.J. Harman, S.M. Putnam, Z. T. Plante* (2021), Quantifying Depth-Dependent Seismic Anisotropy in the Critical Zone Enhanced by the Weathering of a Piedmont Schist. *Journal of Geophysical Research: Earth Surface*, 126, e2021JF006289. https://doi.org/10.1029/2021JF006289

29. B. M Goehring, N. Brown*, S. **Moon,** and K. Blisniuk (2021), The transport history of alluvial fan sediment inferred from multiple geochronometers. *Journal of Geophysical Research: Earth Surface*, 126, e2021JF006096. https://doi.org/10.1029/2021JF006096

28. L. Ma†, D. Oakley, A. Nyblade, **S. Moon**, N. Accardo, W. Wang, X. Gu, K. Brubaker, G. J. Mount, B. Forsythe, B. J. Carr, S. L. Brantley (2021), Seismic imaging of a shale landscape under compression shows limited influence of topography-induced fracturing, *Geophysical Research Letters*. 48, e2021GL093372. https://doi.org/10.1029/2021GL093372

27. S. Saha*, **S. Moon**, N. D. Brown*, E. J. Rhodes, S. F. McGill, B. A. Castillo†, K. M. Scharer, D. McPhillips, and D. Yule (2021), Holocene depositional history inferred from single-grain luminescence ages in southern California, North America*, Geophysical Research Letters*. 48, e2021GL092774. https://doi.org/10.1029/2021GL092774

26. B. A., Castillo†, S. F. McGill, K. M. Scharer, D. Yule, D. McPhillips, J. McNeil, S. Saha*, N. D. Brown*, and **S. Moon** (2021), Prehistoric earthquakes on the Banning strand of the San Andreas fault, North Palm Springs, California. *Geosphere*. https://doi.org/10.1130/GES02237.1

25. G. K. Li* and **S. Moon** (2021), Topographic stress control on bedrock landslide size, *Nature Geoscience,* https://doi.org/10.1038/s41561-021-00739-8

24. A. Yin, **S. Moon**, and M. Day (2021), Landform evolution of Oudemans crater and its bounding plateau plains on Mars: Geomorphological constraints on the Tharsis ice-cap hypothesis. *Icarus*, 114332.

23. **S. Moon**, D. A. Paige, M. A. Siegler, and P. S. Russell, (2021), Geomorphic evidence for the presence of ice deposits in the permanently shadowed regions of Scott-E crater on the moon, *Geophysical Research Letters*, 48, e2020GL090780.

22. H. Kirkpatrick*, **S. Moon**, A. Yin, M. Harrison (2021), Impact of fault damage on eastern Tibet topography, *Geology,* 49(1), pp.30-34.

21. **S. Moon**, J. T. Perron, S. J. Martel, B. W. Goodfellow, D. Mas Ivars, A. Hall, J. Heyman, R. Munier, J.-O. Näslund, A. Simeonov, and A. P. Stroeven (2020), Present-day stress field influences bedrock fracture openness deep into the subsurface, *Geophysical Research Letters* 47, e2020GL090581.

20. M. A. Hall, K. Ebert, B. W. Goodfellow, C. Hättestrand, J. Heyman, M. Krabbendam, **S. Moon**, and A. P. Stroeven (2019), Past and future impact of glacial erosion in Forsmark and Uppland. TR-19-07, Swedish Nuclear Fuel and Waste Management Co, Stockholm, Sweden

19. N. D. Brown* and **S. Moon** (2019), Revisiting erosion rate estimates from luminescence profiles in exposed bedrock surfaces using stochastic erosion simulations, *Earth and Planetary Science Letters,* 528, 115842

18. J. Lin*., **S. Moon**, A. Yong, L. Meng, and P. Davis (2019), Length-scale-dependent relationships between Vs30 and topographic slopes in southern California, *Bulletin of the Seismological Society of America*, 109(6), pp.2614-2625, doi:10.1785/0120190076.

17. X. Zhang*, Z. Xu, W. Liu, **S. Moon**, T. Zhao, H. Jiang, J. Zhang, Y. Wu, X. Zhou, L. (2019), Geochemical and Sr isotopic characteristics of the Yalong River basin, eastern Tibetan Plateau: implications for chemical weathering and controlling factors, *Geochemistry, Geophysics, Geosystems*, 20(3), pp.1221-1239.

16. **S. Moon**, D.J. Merritts, N.P., Snyder, P. Bierman, A., Sanquini, J.C. Fosdick, and G.E. Hilley (2018), Erosion of coastal drainages in the Mendocino Triple Junction region (MTJ), northern California, *Earth and Planetary Science Letters*, 502, pp.156-165.

15. B. A. Flinchum, W. S. Holbrook, D. Rempe, **S. Moon**, C. S. Riebe, B. Carr, J. L. Hayes, J. St. Clair, and M. P. Peters (2018), Critical zone structure under a granite ridge inferred from drilling and three-dimensional seismic refraction data, *Journal of Geophysical Research: Earth Surface,* 123, pp. 1317–1343. **(One of top 20 cited article 2018-2019 of JGR-ES)**

14. S.P Faulk*, J.L. Mitchell, **S. Moon**, J.M Lora (2017), Regional patterns of extreme precipitation on Titan consistent with observed alluvial fan distribution, *Nature Geoscience,* 10, pp.827-831.

13. D.E. Ibarra, **S. Moon**, J.K. Caves, C.P. Chamberlain, K. Maher (2017), Concentration–discharge patterns of weathering products from global rivers. *Acta Geochimica*, 36, pp. 405-409.

12. **S. Moon**, J. T. Perron, S. Martel, W. S. Holbrook, J. St. Clair (2017), A model of three-dimensional topographic stresses with implications for bedrock fractures, surface processes and landscape evolution, *Journal of Geophysical Research: Earth Surface*, 122, pp. 823-846. **(One of top 20 most read article 2017-2018 of JGR-ES)**

11. D. E. Ibarra, J. K. Caves, **S. Moon**, D. L. Thomas, J. Hartmann, C. P. Chamberlain, et al., (2016), Differential weathering of basaltic and granitic catchments from concentration–discharge relationships, *Geochimica et Cosmochimica Acta*, 190, pp. 265-293.

10. B. W. Goodfellow, G. E. Hilley, S. M. Webb, L. Sklar, **S. Moon**, and C. A. Olson (2016), The chemical, mechanical, and hydrological evolution of weathering granitoid, *Journal of Geophysical Research: Earth Surface,* 121, pp. 1410–1435.

9. J. St. Clair[#], **S. Moon**[#], W. S. Holbrook, J. T. Perron, C. S. Riebe, S. J. Martel, et al. (2015), Geophysical imaging reveals topographic stress control of bedrock weathering, *Science,* 350, pp. 534-538. ([#]equal contribution)

8. **S. Moon**, E. Shelef, and G. E. Hilley (2015), Recent topographic evolution and erosion of the deglaciated Washington Cascades inferred from a stochastic landscape evolution model, *Journal of Geophysical Research: Earth Surface*, 120, pp. 856-876.

7. **S. Moon**, C. P. Chamberlain, and G. E. Hilley (2014), New estimates of silicate weathering rates and their uncertainties in global rivers, *Geochimica et Cosmochimica Acta*, 134, pp. 257-274.

6. **S. Moon**, C. Page Chamberlain, K. Blisniuk, N. Levine, D. H. Rood, and G. E. Hilley (2011), Climatic control of denudation in the deglaciated landscape of the Washington Cascades, *Nature Geoscience,* 4, pp. 469-473.

5. G. E. Hilley, C. P. Chamberlain, **S. Moon**, S. Porder, and S. D. Willett (2010), Competition between erosion and reaction kinetics in controlling silicate-weathering rates, *Earth and Planetary Science Letters*, 293, pp. 191-199.

4. **S. Moon**, Y. Huh, and A. Zaitsev (2009), Hydrochemistry of the Amur River: Weathering in a Northern Temperate Basin, *Aquatic Geochemistry*, 15, pp. 497-527.

3. J. B. Borges, Y. Huh, S. **Moon**, and H. Noh (2008), Provenance and weathering control on river bed sediments of the eastern Tibetan Plateau and the Russian Far East, *Chemical Geology,* 254, pp. 52-72.

2. J. Yoon, Y. Huh, I. Lee, S. **Moon**, H. Noh, and J. Qin (2008), Weathering Processes in the Min Jiang: Major Elements, $^{87}Sr/^{86}Sr$, $\delta^{34}S_{SO4}$, and $\delta^{18}O_{SO4}$, *Aquatic Geochemistry*, 14, pp. 147-170.

1. **S. Moon**, Y. Huh, J. Qin, and N. van Pho (2007), Chemical weathering in the Hong (Red) River basin: Rates of silicate weathering and their controlling factors, *Geochimica et Cosmochimica Acta,* 71, pp. 1411-1430.

Papers in review/ revision/ preparation

1. N. D. Brown, M.O. Argueta*, **S. Moon**, E.J. Rhodes, M. Oskin, A. Morelan, Luminescence thermochronology reveals Late Pleistocene slip history of the San Gorgonio (*in revision)*

2. Z. T. Plante*, **S. Moon**, J. C. Fosdick, N. Brown, and G.E. Hilley, Could atmospheric dust deposition be an important contributor to Earth's riverine silicate weathering discharge? (*in review at GBC*)

3. K. Shao*, **S. Moon**, G. K. Li, P. J. Haproff, A. Yin, L. B. Corbett, P. R. Bierman, M. O. Argueta, and A. J. Hidy, Climate-driven erosion varies with lithology across the Himalaya (*in review*)

4. A. B. Neely*, **S. Moon**, R. A. DiBiase, L. Sklar and M. O. Argueta, The grain size of sediments delivered to steep debris-flow prone channels prior-to and following wildfire. *Earth Surface Processes and Landforms* (*in review*).

Theses and other publications

2. Moon, S. (2013), Classical views in geomorphology imaged and reconciled using cosmogenic isotopes, topographic analysis, and numerical modeling. PhD thesis, Stanford University

1. Moon, S. (2007), Chemical weathering in the Hong (Red) and Amur River basins, MS thesis, Seoul National University

INVITED TALKS

2023 Princeton University (*upcoming*)
Palos Verdes Gem and Mineral Society (*upcoming*)

Rice University
CLaSH Modeling Expo
2022 AGU Robert Sharp Lecture
University of California, Los Angeles, Chair's Council
University of Wisconsin, Madison
Progressive Rock Failure Penrose Conference
University of Wyoming, Geophysical Society seminar
University of California, San Diego
2021 Seoul National University, JeonJaeGyu workshop
California Institute of Technology, Division of Geological and Planetary Sciences
Landscape Lives, EGU (https://youtu.be/jTwgI_gbT-c)
NASA JPL Planetary Science Seminar
Geological Society of Washington (GSW)
2020 AGU Fall meeting (2 *invited*)
California State University, Fullerton
San Jose State University
2019 UCLA, Earth, Planetary, and Space Science
California Institute of Technology
GSA Fall meeting (1 *invited*)
2018 Swedish Nuclear Fuel and Waste Management Company, Sweden
UCLA Physical Sciences Faculty Lunch Seminar
2017 Pomona College
Stanford University
University of California, Santa Barbara
Swedish Nuclear Fuel and Waste Management Company, Sweden
GSA Fall meeting (2 *invited*)
2016 University of Wyoming
China Academy of Sciences Institute of Geology and Geophysics
University of California, San Diego
University of Oregon, Eugene
University of Washington, Seattle
Goldschmidt Conference (*keynote*)
AGU Fall meeting, Earth & Planetary Surface Processes focus group (*invited*)
2015 University of Pittsburgh
University of California at Los Angeles
ETH Zurich, Swiss
Seoul National University, Korea
Yonsei University, Korea
University of Utah
University of Southern California
California Institute of Technology, Geoclub
AGU Fall meeting, Earth & Planetary Surface Processes focus group (2 *invited*)
2014 University of California at Berkeley
University of Massachusetts at Amherst
University of Michigan at Ann Arbor
2013 Seoul National University, Korea
Korea Basic Science Institute, Korea

UCLA SERVICES

Participation

Heartsaver First Aid CPR - AED course, 09/2023
EPSS Unlearning Racism in Geoscience (URGE), 04/2021 – present
EH&S Epinephrine Auto-Injector Training course, 07/26/2021

EH&S Off-Road Driving Safety online and offline course, 04/17/2021
UCLA DataX Initiative white paper, 07/2020
UCLA Council of Advisors mentoring program (mentee), 07/2020
CEILS Summer Workshop Series: Teaching Equitably Online, 07/2020
EPSS Planetary Science graduate program discussion, 2018-present
Preparing for Academic Personnel Review Luncheon, 5/17/2016
Insight into Philanthropy workshop, 03/29/2016
NSF Day (NSF funded one-day workshop for proposal writing), 01/22/2016
CEILS 2nd Annual Faculty Workshop on Best Practices in Teaching, 9/27/2015

Committees
EPSS Legislative Assembly representative, 09/2021 – present
EPSS area counselor for the Geology program, 09/2021 – present
EPSS faculty committee on curriculum, 01/2021 – present
EPSS faculty committee on website, 07/2016 – 12/2018
EPSS faculty committee on departmental clean lab facility, 07/2016 – present
EPSS faculty committee on faculty search, 11/2016 – present
EPSS faculty committee on merit review, 07/2017 – present
Division of Physical Sciences ad-hoc reviewer for graduate student fellowship, 09/2017

Academics
Ph.D. committee: Sean Faulk, Michael Lawson, Chris McGuire, Margaret Deng, Abijah Simon, Erin Leonard, Haotian Xu, Lior Rubanenko, Kynan Hughson, Raquel Nuno, Ellen Alexander, Heather Kirkpatrick, Kevin Shao, Justin Higa, Taylor Dorn, Tyler Powell, HanZhang Chen, Boontigan Kuhasubpasin, Tyler Horvath, Elisha Jhoti
M.S. thesis committee: Margaret Deng, Jessica Lin, Zachary Plante, Yingchi Wang

Outreach
EPSS Teaching community engaging and Diversity courses (EPS165, EPS13)
EPSS Geomorphology education short video clips for K-6-9 students, 2021-2022
EPSS Explore Your Universe, 2020, 2022
EPSS joint event with Saturday Science Academy, run by Charles Drew University, 03/25/2023
EPSS communication event "Total Solar Eclipse Trip 2017", 05/2015 – 08/2017
EPSS high school and college student visits, 2015 – present

TEACHING

EPSS 13: Natural Disasters (Diversity requirement)
- Spring 19, enrollment 67; average evaluation 7.58/9 (instructor) 7.06/9 (course)
- Spring 23, enrollment 234; average evaluation 7.93/9 (instructor) 7.51/9 (course)

EPSS 61: Geologic Maps
- Fall 16, enrollment 39; average evaluation 8.56/9 (instructor) 8.25/9 (course
- Fall 17, enrollment 29; average evaluation 7.17/9 (instructor) 6.58/9 (course)

EPSS 165: Tectonic Geomorphology
- Spring 16, enrollment 9
- Spring 17, enrollment 12; average evaluation 8.25/9 (instructor) 8/9 (course)
- Spring 18, enrollment 11; average evaluation 6.5/9 (instructor) 5.5/9 (course)
- Winter 21, enrollment 13; average evaluation 8.5/9 (instructor) 8.5/9 (course)
- Winter 22, enrollment 7; average evaluation 8.17/9 (instructor) 7.17/9 (course)
- Fall 22, enrollment 7; average evaluation 7.17/9 (instructor) 7/9 (course)

EPSS 200D: Planetary Surfaces
- Winter 23, enrollment 13; average evaluation 7.7/9 (instructor) 7/9 (course)

EPSS 298: Special Topics in EPSS: Historic Papers in Geomorphology
- Fall 16, enrollment 6

Spring 19, enrollment 5; average evaluation 8/9 (instructor) 8/9 (course)
EPSS 298: Special Topics in EPSS: Topographic Analysis
Spring 21, enrollment 8, average evaluation 8.75/9 (instructor) 8.75/9 (course)
EPSS 199, 595: Direct Research

STUDENT SUPERVISED

UCLA Graduate students

Marina Argueta	2019-	
Boontigan Kuhasubpasin	2019-	(primary co-adviser: Carolina Lithgow-Bertelloni)
HanZhang Chen	2020-	
Josh Lee	2022-	

Graduate students

Riccardo Busti	2022 -	(U. Trento, Italy, primary adviser: Giuseppe Formetta)

Undergraduate students

Sophia White	2023-
Mengmeng Zhang	2023-
Duyen Le	2023-

UCLA Geomorphology Group Alumni
Postdoc

Nathan Brown	*Postdoc,* 2017-2019, - an assistant faculty at the University of Texas at Arlington
Gen Li	*Postdoc,* 2018-2019 - an assistant faculty at the University of California, Santa Barbara
Sourav Saha	*Postdoc,* 2018-2021 - postdoc scientist at Kentucky Geological Survey
Al Neely	*Postdoc,* 2021-2022 -postdoc at University of Tubingen

Graduate students

Kevin Shao	Ph.D., 2023
Justin Higa	Ph.D., 2023 – Postdoc at University of Hawaii
Zachary Plante	M.S. 2022
Jessica Lin	M.S. 2019, Employee at Geologist, CH2M and Jacobs
Sean Faulk	Ph.D. 2018 (Advisor, Jonathan Mitchell),
Chris McGuire	Ph.D. 2018 (Advisor, Abby Kavner)

Visiting Graduate Students
Xuan Zhang (Ph.D. at Institute of Geology and Geophysics, Chinese Academy of Sciences; 2016-2017)

Undergraduate students
Raul Carrillo, Solishia Andico, Eduardo Hernandez, Jessica Lin, Emil Chang, Emmons McKinney, Carolyn Stephens, Marina Argueta, Shawn Lu, Robert Ly, Ryan Missel, Norma Contreras, Amanda Hunt, Christina Kitamikado, Rebecca Lewis, Maya Gross, Terry Lee, Josh Lee, Sophia White, Mengmeng Zhang, Duyen Le, and more

Advisee Honors and Awards
Jessica Lin, awardee of National Center for Airborne Laser Mapping (NCALM) Seed Proposal, 2017
Kevin Shao, Geological Society of America Student Research Grant, 2019
Justin Higa, honorable mention to NSF Graduate Research Fellowship Program, 2019
Justin Higa, awardee of National Center for Airborne Laser Mapping (NCALM) Seed Proposal, 2021

Justin Higa, Geological Society of America Student Research Grant, 2021
Marina Argueta, Geological Society of America Student Research Grant, 2022
Justin Higa, NSF Postdoctoral Research Fellowship, 2023
Josh Lee, Geological Society of America Student AGeS3-Grad Geochronology award, 2023

EXTERNAL SERVICE

Associate Editor of Journal of Geophysical Research: Earth Surface, 2023 – present
AGU Earth and Planetary Surface Processes Section Award Committee, 2023

Reviewer
Journal reviews: Nature Geoscience, Nature Communications, PNAS, Geology, Journal of Geophysical Research: Earth Surface, Earth and Planetary Science Letters, Geochimica et Cosmochimica Acta, Hydrologic Processes, Earth Surface Processes and Landform, Geochemistry, Geophysics, Geosystems, Geophysical Research Letters, American Journal of Sciences, Tectonics, and more

Proposal reviews and review panel: Army Research Office, NSF Geomorphology and Land-use Dynamics program, NSF Tectonics, NSF PREEVENTS, NSF FRES, Swiss-NSF, ACS Petroleum Research Fund. Panelist for 3+ NSF programs

Members of American Geophysical Union, Geological Society of America, European Association of Geochemistry, Southern California Earthquake Center, European Geosciences Union

Committee and Advisory Board
Steering Committee for "Center Catalyst: Center for Land-Surface Hazards (CLaSH)", 2022-2023
International Advisory Board for "Progressive Rock Failure Penrose Conference, 2022"
Organizing committee for Annual SoCal Geomorphology Symposium, 2018 – present

Education/Outreach
Serve as a judge for Annual Los Angeles Basin Earth and Planetary Sciences Student Research Symposium, AGU Outstanding Student Paper Awards

FUNDING

Current
USC SCEC 2021: Constraining a long history of paleolake and paleoearthquake activity at Coachella, CA ($37,024; 02/01/22-01/31/23), lead PI: Seulgi Moon (with M. Argueta, S, Saha, N. Brown, K. Scharer, T. Rockwell)

Sloan Research Fellowship: Stress, Weathering, and Landscape Evolution ($ 75,000; 09/2022 – 09/2024) PI Moon

NSF- Geomorphology and Land-use Dynamics and Hydrology: CAREER: Understanding the Effects of Bedrock Fractures and Weathering on Shallow and Deep-seated Landslides ($ 537,659; 01/2020 – 12/2024), PI Moon

NSF Critical-Zone Collaborative Network: Collaborative Research: Network Cluster: Bedrock controls on the deep critical zone, landscapes, and ecosystems ($ 349,971; 10/20-09/2025), PI Moon, with Steve Holbrook and Cliff Riebe as lead-PIs.

NSF-Tectonics: Collaborative Research: Structural Constraints on Microcontinent Formation, Gulf of California ($ 329,083; 09/2017 – 08/2023), PI Moon, with Joann Stock at Caltech as lead-PI.

UCLA Luminescence and cosmogenic preparation lab external services (09/2015- present), PI Moon

Past

Swedish Nuclear Fuel and Waste Management Company (SKB): Examination of Geologic and Topographic Stress Controls on Bedrock Fracturing at Forsmark, Sweden ($161,344; 11/2018-12/2022), PI Moon

USC SCEC 2021: Constraining a long-term paleolake and paleoseismic history using deep boreholes at the ancient Lake Cahuilla, Coachella, California ($40,000; 02/01/21-01/31/22), lead PI: Seulgi Moon (with postdoc Saha, Katherine Scharer, Thomas Rockwell)

USC SCEC 2020: Constraining a long history of paleolake and paleoseismicity at Coachella, CA using deep borehole samples ($35,000; 02/01/20-01/31/22), lead PI: Seulgi Moon (with postdoc Saha, Katherine Scharer, Thomas Rockwell)

USGS Earthquake Hazard Program: Influence of Sediment Dynamics and Alluvial Fan Formation on Paleoseismic Studies in Southern California, North America ($65,690; 3/2020 - 3/2021, single PI: Seulgi Moon (with postdoc Saha)

USGS Earthquake Hazard Program: Collaborative Research: Earthquake Recurrence on the Banning Strand of the San Andreas Fault ($44,377; 6/2018 - 6/2020), PI: Seulgi Moon, with Sally McGill at CSUSB as lead-PI.

NASA-Cassini Data Analysis: Understanding the Controlling Factors of Titan's Climate, Weather and Methane Hydrology in Space and Time ($ 388,666; 06/2016 – 07/2020), co-PI Moon with J. Mitchell as lead PI.

UCLA Faculty Career Development Award: Investigation of along-strike variations in millennial-scale erosion rates in the Himalaya: High erosion rates in the eastern Himalaya? ($14,942; 08/18-07/19), single PI

USC SCEC 2017: Characterizing seismic site conditions in southern California based on topographically induced stress and bedrock fractures ($ 24,000; 05/2017 – 04/2018), lead PI Moon with L. Meng, P. Davis as co-PIs.

USC SCEC 2017: Understanding strain accumulation and transfer between the SSAF, San Gorgonio Pass and the ECSZ Part I. Re-evaluating fault geometry, fault activity and slip rate on the Mission Creek-Mill faults from the Coachella Valley through the San Gorgonio Pass ($50,000; $5,930 for UCLA-PI Moon; 05/17-04/18) with Kim Blisniuk as lead PI.

USC SCEC 2016: Characterizing seismic site conditions in southern California based on topographically induced stress and bedrock fractures ($ 30,000; 02/2016 – 01/2017), lead PI Moon with L. Meng as co-PI.

Prime Lab Seed Grant, "Quantifying lithologic and tectonic controls on ^{10}Be-derived erosion rates in the eastern margin of Tibet" ($10,200; 06/23/2017) (PI Moon, with graduate student Heather Kirkpatrick)

UCLA Faculty Research Grant/Trans-disciplinary Seed Grant: The impact of future climate change on landslide hazards in the Washington Cascades, USA ($5979; 07/2016-06/2017), single PI Moon

UCLA Faculty Research Grant/Trans-disciplinary Seed Grant: Examination of topographic stress controls on seismic site conditions and earthquake-induced hazards ($7760; 07/2017-06/2018), single PI Moon

UCLA Office of Instructional Development Instructional Improvement Project, EPSS Geomagnetic Drone Enhanced Survey Instrument (GEODESI) ($6,000; 07/2016-06/2017) co-PI Moon with lead PI Angelopoulos

UCLA Office of Instructional Development mini grant for EPS 165 ($580; 07/2015-06/2016)

UCLA Council on Research Travel grant ($1,350; 07/2015-06/2016).

National Center for Airborne Laser Mapping (NCALM) Seed Grant (2011)

Geological Society of America, Graduate Student Research Grant (2011)

Stanford University, McGee Research Grant (2011)