

Lauren M. Simkins
Assistant Professor
Department of Environmental Sciences
University of Virginia
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Research expertise

Glacial geology, glaciology, geomorphology, marine geology, sedimentology, geochronology

Education

University of California Santa Barbara 2010-2014

Doctor of Philosophy in Geological Sciences (PhD advisers: Alexander Simms and Regina Dewitt)

NSF Louis Stokes Alliance for Minority Participation Bridge to Doctorate Fellow

Oklahoma State University 2005-2009

Bachelor of Science in Geology

NSF Louis Stokes Alliance for Minority Participation Scholar

Professional appointments

Assistant Professor 2018- present

Department of Environmental Sciences, University of Virginia

Postdoctoral Research Associate 2014-2018

Department of Earth Science, Rice University

Research appointments

Graduate Research Assistant 2010-2014

Department of Geological Sciences, University of California Santa Barbara

Graduate Research Assistant 2010

Department of Physics, Oklahoma State University

Undergraduate Research Assistant 2008-2010

Boone Pickens School of Geology, Oklahoma State University

Teaching (Instructor of Record)

University of Virginia

Upcoming Spring 2021

- **Polar Environments**, EVSC 2850 (formerly EVSC 2559), ~75 students, targeted for non-majors, co-taught with S. Doney
- **Undergraduate Seminar**, EVSC 4002, 30-40 students
- **Supervised Research**, EVSC 4995, 2 students
- **Senior Thesis Research**, EVSC 4999, 2 students
- **Research problems**, EVSC 9995, 4 students
- **Non-Topical Research, Doctoral**, EVSC 9999, 2 students

Fall 2020

- **Glaciers and Ice Sheets**, EVSC 4559/7559, 21 undergraduates/3 graduates, targeted for undergraduate majors and graduate students seeking to fulfill the geoscience area requirement
- **Fundamentals of Geology**, EVSC 2800, 78 students, required for majors
- **Fundamentals of Geology Laboratory**, EVSC 2801, 5 sections, 59 students, supervised 5 graduate teaching assistants, required for majors
- **Undergraduate Seminar**, EVSC 4002, 30 students
- **Supervised Research**, EVSC 4995, 3 students
- **Research problems**, EVSC 9995, 3 students
- **Non-Topical Research, Doctoral**, EVSC 9999, 2 students

Spring 2020

- **Polar Environments**, EVSC 2559, 29 students, targeted for non-majors, co-taught with S. Doney
- **Supervised Research**, EVSC 4995, 3 students
- **Research problems**, EVSC 9995, 4 students
- **Non-Topical Research, Doctoral**, EVSC 9999, 2 students

Fall 2019

- **Glaciers and Ice Sheets**, EVSC 4559/7559, 21 undergraduates/9 graduates, targeted for undergraduate majors and graduate students seeking to fulfill the geoscience area requirement
- **Fundamentals of Geology**, EVSC 2800, 78 students, required for majors
- **Fundamentals of Geology Laboratory**, EVSC 2801, 5 sections, 61 students, supervised 5 graduate teaching assistants, required for majors
- **Supervised Research**, EVSC 4995, 2 students
- **Non-topical Research, Masters Prep**, EVSC 8999, 1 students
- **Non-Topical Research, Doctoral**, EVSC 9999, 3 students

Spring 2019

- **Polar Environments**, EVSC 2559, 34 students, targeted for non-majors, co-taught with S. Doney
- **Supervised Research**, EVSC 4995, 3 students

Fall 2018

- **Beaches Coasts and Rivers**, EVSC 2900, 31 students, targeted for non-majors, co-taught with P. Wiberg

Rice University

Spring 2016, Spring 2018

- **The Cryosphere**, ESCI 503, ~10 students, targeted for majors and graduate students

Research mentorship

University of Virginia

Current: Cesar Garcia (PhD, primary adviser), Allison Lepp (PhD, primary adviser), Marion McKenzie (PhD, primary adviser), Santiago Munevar (PhD, primary adviser), Morgan Shelby (MS, committee member), Emilia Torrellas (MS, committee member) Delaney Buskard (BS, senior thesis adviser), Jacob Slawson (BS, Distinguish Majors Program thesis adviser), Medha Prakash (undeclared, research adviser)

Former: Hannah Leigh (BS, research adviser), Mackenzie Carter (BS, research adviser), Sarah Lang (BS, research adviser), Catherine Leigh (BS, research adviser), Sean Penaparanda (BS, research adviser), Alan Zhai (BS, research adviser)

Rice University

Former: Christine Kendrick (HS, research adviser), Bethany Fowler (BS, research adviser), Adlai Fonesca (Visiting MS student, research adviser), Kelsey Crocker (BS, research adviser), Brian Demet (MS, as informal mentor), Anna Ruth Halberstadt (MS, as informal mentor), Lindsay Prothro (PhD, as informal mentor)

University of California Santa Barbara

Former: Angela Roman (Santa Barbara City College, research adviser), Adrian Gallardo (Santa Barbara City College, research adviser), Gustavo Muro (Ventura City College, research adviser), Eugene Wang (Santa Barbara City College, research adviser), Richard Mata (Mount San Antonio College, research adviser), Francisco Contreras (Oxnard City College, research adviser), Anna Lovelace (Oxnard City College, research adviser), Masoud Razavi (Oxnard City College, research adviser), Stacia Ott (Oxnard City College, research adviser)

Grants & proposals

Submitted

Saturday Series: merging hands-on environmental sciences and art for K-6 children in the Charlottesville and Albemarle County areas, [Prana Fund](#), [Charlottesville Area Community Foundation](#) (\$7,000), submitted by Kate Kogge (Science Lead and Teacher, Murray Community School) and Lauren Simkins.

Awarded, ongoing

WAIS Workshops 2020 and 2021: A transdisciplinary forum to accelerate NASA-funded research of marine-based ice sheet systems, [NASA Cryosphere Program](#) (\$125,000), PI: Matthew Siegfried (Colorado School of Mines), Co-Is: Lauren Simkins, Joseph MacGregor, Brook Medley, Indrani Das, Knut Christianson.

WAIS Workshops 2019–2021: A transdisciplinary forum for studies of the West Antarctic Ice Sheet by the next generation of polar scientists, [NSF Division of Polar Programs](#) (\$125,000), PI: Matthew Siegfried (Colorado School of Mines), Co-Is: Lauren Simkins, Joseph MacGregor, Brook Medley, Indrani Das, Knut Christianson.

NSFPLR-NERC: Thwaites Glacier Offshore Research (THOR), [NSF Division of Polar Programs: Antarctic Glaciology](#), \$242,494, 4/2018-3/2023, Subaward to Lauren Simkins (Co-I, as part of international project).

NSF Collaborative Research: Topographic controls on Antarctic Ice Sheet grounding line behavior - integrating models and observations, [NSF Division of Polar Programs: Antarctic Glaciology & Earth Sciences](#), \$300,433, 9/2018-8/2021, PI: Lauren Simkins.

Paleo-coastal response to higher-than-present sea level, [The University of Virginia Committee on Sustainability](#), \$8,000, 1/2019-present, PI: Lauren Simkins.

Solid Earth-Ice Sheet Interactions, [The H.G. Goodell Endowment](#), University of Virginia, \$11,000, 3/2020-present, PI: Lauren Simkins.

Awarded, concluded

CMP1602P: Retreat dynamics of marine-based ice sheets, [International Union for Quaternary Research \(INQUA\)](#), \$9,000, 6/2016-6/2019, Co-Is: Lilja Bjarnadottir, Sarah Greenwood, Lauren Simkins, Monica Winsborrow.

Educational Materials for EVSC 2801, [The H.G. Goodell Endowment](#), University of Virginia, \$1,000, 11/2019-1/2020, PI: Lauren Simkins.

Washington State Field Trip for Undergraduate Majors, [The H.G. Goodell Endowment](#), University of Virginia, \$4,800, 11/2018-8/2019, PI: Lauren Simkins.

Professional awards

Mead Honored Faculty, University of Virginia

2020-2021

Nominated and awarded for outstanding educational engagement with students in and outside of class, after just two years as faculty at UVA [[MeadEndowment.org](#)]

Invited seminars

University of Texas Institute for Geophysics (upcoming April 2021), International Glaciological Society Virtual Seminar (upcoming April 2021), WHOI Department of Marine Chemistry and Geochemistry (Dec 2020), Georgia Southern University (Sept 2020), Old Dominion University (Sept 2020), Georgia Tech (Feb 2020), University of Delaware (2019), College of William and Mary (2018), University of Illinois, Chicago (2018), University of Virginia (2018), Scripps Institution of Oceanography (2017), University of Houston (2017), Ohio State University (2017), Houston Museum of Natural Science (2016), Oklahoma State University (2016), Louis Stokes Midwest Center of Excellence Voices of Success Panelist (2016), Occidental College (2016), California State University Fullerton (2014)

Publications

Robel, A., Pegler, S., Catania, G., Felikson, D., [Simkins, L.M.](#) Illusory stability of marine-terminating glaciers at bedrock highs. *Nature Geoscience*, in review.

(equal author contributions) Greenwood, S.L., [Simkins, L.M.](#), Winsborrow, M.C.M., Bjarnadóttir, L.R. Exceptions to bed-controlled ice sheet flow and retreat from glaciated continental margins worldwide. *Sciences Advances*, in-press.

Hogan, K., Larter, R., Graham, A., Arthern, R., Kirkham, J.D., Minzoni, R.T., Jordan, T., Clark, R., Fitzgerald, V., Anderson, J.B., Hillenbrand, C.D., Nitsche, F.O., [Simkins, L.M.](#), Smith, J.A., Gohl, K., Arndt, J.E., Hong, J., Wellner, J., 2020. Revealing the former bed of Thwaites Glacier using sea-floor bathymetry. *The Cryosphere*, 14, 2883–2908. [[link](#)]

Majewski, W., Prothro, L.O., [Simkins, L.M.](#), Demianiuk, E.J., Anderson, J.B., 2020. Foraminiferal patterns in deglacial sediment in the western Ross Sea, Antarctica: life near paleo-grounding lines. *Paleoceanography and Paleoclimatology*, 35(5), e2019PA003716. [[link](#)]

Prothro, L.O., Majewski, W., Yokoyama, Y., [Simkins, L.M.](#), Anderson, J.B., Yamane, M., Miyairi, Y. and Ohkouchi, N., 2020. Timing and pathways of East Antarctic Ice Sheet retreat. *Quaternary Science Reviews*, 230, 106166. [[link](#)]

Demet, B.P., Nittrouer, J.A., Anderson, J.B., [Simkins, L.M.](#), 2019. Sedimentary processes at ice sheet grounding-zone wedges: examples from Antarctica and Washington state. *Earth Surface Processes and Landforms*, 44(6), 1209–1220. [[link](#)]

Anderson, J.B., [Simkins, L.M.](#), Bart, P.J., De Santis, L., Halberstadt, A.R.W., Olivo, E. and Greenwood, S.L., 2019. Seismic and geomorphic records of Antarctic Ice Sheet evolution in the Ross Sea and controlling factors in its behaviour. *Geological Society of London, Special Publications*, 475, SP475-5. [[link](#)]

King, B.L., Simms, A., [Simkins, L.M.](#), 2019. The Stratigraphic Architecture of Small Incised Valleys Along an Active Margin: Examples from the Oceanside Littoral Cell of the Southern California Coast. *Journal of Sedimentary Research*, 17(1), 78–86. [[link](#)]

Halberstadt, A.R., [Simkins, L.M.](#), Anderson, J.B., Prothro, L.O., Bart, P.J., 2018. Characteristics of the deforming bed: Till properties on the deglaciated Antarctic continental shelf. *Journal of Glaciology*, 1-14. [[link](#)]

Simms, A., Whitehouse, P., [Simkins, L.M.](#), Nield, G., DeWitt, R., Bentley, M., 2018. Late Holocene relative sea levels near Palmer Station, northern Antarctic Peninsula, strongly controlled by late Holocene ice-mass changes. *Quaternary Science Reviews*, 199, 49-59. [[link](#)]

[Simkins, L.M.](#), Greenwood S.L., Anderson, J.B., 2018. Diagnosing ice sheet grounding line stability from landform morphology. *The Cryosphere*, 12, 2707-2726. [[link](#)]

Greenwood, S.L., [Simkins, L.M.](#), Halberstadt, A.R.W., Prothro, L.O., Anderson, J.B., 2018. Holocene reconfiguration and readvance of the East Antarctic Ice Sheet. *Nature Communications*, 9, 3176. [[link](#)]

Prothro, L.O., [Simkins, L.M.](#), Majewski, W., Anderson, J.B., 2017. Glacial retreat patterns and processes determined from integrated sedimentology and geomorphology records. *Marine Geology*, 395, 104-119. [[link](#)]

[Simkins, L.M.](#), Anderson, J.B., Greenwood, S.L., Gonnermann, H., Prothro, L.O., Halberstadt, A.R.W., Stearns, L.A., Pollard, D., DeConto, R.M., 2017. Anatomy of a meltwater drainage system beneath the ancestral East Antarctic Ice Sheet. *Nature Geoscience*, 10, 691-697. [[link](#)]

[Simkins, L.M.](#), Anderson, J.B., Demet, B.P., 2017. Grounding line processes of the southern Cordilleran Ice Sheet in the Puget Lowland. *Geological Society of America Field Guide* 49, 53-65. [[link](#)]

- Simkins, L.M., Anderson, J.B., Greenwood, S.L., 2016. Glacial landform assemblage reveals complex retreat of grounded ice in the Ross Sea, Antarctica. *in* Dowdeswell, J. A., Canals, M., Jakobsson, M., Todd, B. J., Dowdeswell, E. K. & Hogan, K. A. (eds). Atlas of Submarine Glacial Landforms: Modern, Quaternary and Ancient. Geological Society of London, Memoirs, 46, 353-356. [[link](#)]
- Simkins, L.M., DeWitt, R., Simms, A.R., Briggs, S., Shapiro, R., 2016. Investigation of optically stimulated luminescence behavior of crystalline rock surfaces: A look forward. *Quaternary Geochronology*, 36, 161-173. [[link](#)]
- Halberstadt, A.R.W., Simkins, L.M., Greenwood, S.L., Anderson, J.B., 2016. Paleo-ice sheet behaviour: retreat scenarios and changing controls in the Ross Sea, Antarctica. *The Cryosphere*, 10, 1003-1020. [[link](#)]
- Yokoyama, Y., Anderson, J.B., Yamane, M., Simkins, L.M., Miyairi, Y., Yamazaki, T., Koizumi, M., Suga, H., Kusahara, K., Hasumi, H., Southon, J.R., Ohkouchi, N., 2016. Widespread collapse of the Ross Ice Shelf during the late Holocene. *Proceedings of the Academy of National Sciences*, 113(9), 2354-2359. [[link](#)]
- Simkins, L.M., Simms, A., Regina DeWitt, 2015. Assessing the link between coastal morphology, wave energy, and sea ice throughout the Holocene from Antarctic raised beaches. *Journal of Quaternary Science*, 30, 335-348. [[link](#)]
- Simkins, L.M., DeWitt, R., Simms, A., 2013. Methods to reduce sample carrier contamination for luminescence measurements. *Ancient TL* 31 (1), 19-27. [[link](#)]
- Simkins, L.M., Simms, A., Cruse, A., Troiani, T., Atekwana, E., Puckette, J., Yokoyama, Y., 2012. Correlation of early and mid-Holocene events using magnetic susceptibility in estuarine cores from the Gulf of Mexico. *Palaeogeography, Palaeoclimatology, and Palaeoecology*, 346-347, 95-107. [[link](#)]
- Simms, A., Ivins, E., DeWitt, R., Kouremenos, P., Simkins, L.M., 2012. Timing of the Little Ice Age in the Antarctic Peninsula from optically stimulated luminescence of cobble surfaces within raised beaches. *Quaternary Science Reviews*, 47, 41-55. [[link](#)]
- Simms, A., Aryal, N., Miller, L., Yokoyama, Y., 2010. The Incised Valley of Baffin Bay, Texas: A Tale of Two Climates. *Sedimentology* 57, 642-669. [[link](#)]

Conference presentations (2018-2020; underline denotes student mentees)

- (*upcoming talk*) Simkins, L.M., Greenwood, S.L., Munevar Garcia, S., Prothro, L.O., Anderson, J.B., submitted. A gaining and losing meltwater corridor in the subglacial environment. Session Coo1: Advances in Glacier Hydrology, American Geophysical Union 2020 (virtual).
- (*upcoming poster*) Munevar Garcia, S., Simkins, L.M., Falcini, F. A.M., Stearns, L.A., Rezvanbehbahani, S. Bed roughness impact on streaming ice-flow persistence. Session Co34: Sub-Ice-Sheet and Sub-Ice-Shelf Environments: Bridging the Gap Between Modern Observations and Geologic Records, American Geophysical Union 2020 (virtual).
- (*upcoming poster*) Lepp, A., Simkins, L.M., Minzoni, R., Wellner, J., Clark, R., Fitzgerald, V., Lehrmann, A., Hillenbrand, C.-D., Smith, J., Anderson, J., Larter, R., Graham, A., Hogan, K., Nitsche, F. Persistent Meltwater Discharge from Thwaites Glacier Recorded in Offshore Sediments. Session Co34: Sub-Ice-Sheet and Sub-Ice-Shelf Environments: Bridging the Gap Between Modern Observations and Geologic Records, American Geophysical Union 2020 (virtual).
- (*upcoming poster*) McKenzie, M., Slawson, L., Simkins, L.M., Variability in subglacial bedforms at assemblage and regional scales across the deglaciated Puget Lowland, Washington state. Session Co34: Sub-Ice-Sheet and Sub-Ice-Shelf Environments: Bridging the Gap Between Modern Observations and Geologic Records, American Geophysical Union 2020 (virtual).
- (*upcoming talk*) Robel, A., Pegler, S., Catania, G., Felikson, D., Simkins, L.M., submitted. Illusory stability of marine-terminating glaciers at bedrock highs. Session Co10: Controls on Marine-Terminating Glacier, Ice Stream, and Ice Shelf Dynamics in Observations and Models, American Geophysical Union 2020 (virtual).
- (*upcoming talk*) Simms, A., Zurbuchen, J., Gernant, C., Theilen, B., DeWitt, R., Garcia, C., and Simkins, L.M., How sensitive are Antarctic Holocene relative sea-level records to late-Holocene glacial fluctuations? Session Goo4: Linking Cryosphere and the Solid Earth: From Sea Level Changes and Geodetic Timeseries to Earth Rheology, American Geophysical Union 2020 (virtual).
- (*upcoming talk*) Wellner, J.S., Larter, R.Graham, A., Hillenbrand, C.-D., Hogan, K., Minzoni, R., Nitsche, F., Smith, J., Anderson, J., Simkins, L.M., Clark, R., Fitzgerald, V., Hopkins, R., Lehrmann, A., Lepp, A., Marschalek, J., Mawbey, E.,

Kirkham, J., [Munevar, S.](#), Taylor, L., Initial Geologic Results from Thwaites Glacier Offshore Research (THOR) 2019 and 2020 Field Seasons. Geological Society of America Annual Meeting 2020 (virtual).

(*invited talk*) [Simkins, L.M.](#), Greenwood, S.L., Winsborrow, M.C.M., Bjarnadóttir, L.R., 2020. Exceptions to bed-controlled ice sheet flow and retreat from continental margins worldwide. Session T138: Sea Level and Ice-Sheet Changes, Glacial Isostatic Adjustment, and Landscape Evolution, Geological Society of America Annual Meeting 2020 (virtual).

(*talk*) [Munevar Garcia, S.](#), [Simkins, L.M.](#), Falcini, F. A.M., Stearns, L.A., Rezvanbehbahani, S., 2020. Bed roughness impact on streaming ice-flow persistence. American Geophysical Union 2020. WAIS Workshop 2020 (virtual).

(*talk*) [Lepp, A.](#), [Simkins, L.M.](#), Minzoni, R., Wellner, J., Clark, R., Fitzgerald, V., Lehrmann, A., Hillenbrand, C.-D., Smith, J., Anderson, J., Larter, R., Graham, A., Hogan, K., Nitsche, F., 2020. Persistent Meltwater Discharge from Thwaites Glacier Recorded in Offshore Sediments. WAIS Workshop 2020 (virtual).

(*talk*) [Simkins, L.M.](#), 2020. Glacial landforms as archives of grounding line processes and retreat. WAIS Workshop 2020 (virtual).

(*talk*) Majewski, W., Bart, P., Prothro, L.O., [Simkins, L.M.](#), Anderson, J.B. Sub-fossil foraminifera in the Ross Sea, Antarctica: Life near grounding lines. International Polar Symposium 2020 (virtual).

Majewski, W., Bart, P., Prothro, L.O., [Simkins, L.M.](#), Anderson, J.B., 2020. Foraminifera in deglacial sediments: Where can we find in situ calcareous microfossils to date Grounding Zone Wedges? Scientific Committee on Antarctic Research 2020, Hobart, Tasmania (virtual).

(*talk*) Larter, R., Graham, A., Hogan, K., Minzoni, M., Wåhlin, A., Queste, B., Mazur, A., Boehme, L., Kirkham, V., Fitzgerald, R., Clark, R., Welzenbach, L., Wellner, J., Smith, J., [Simkins, L.M.](#), Pettit, E., Nitsche, F., Hillenbrand, C.D., Heywood, K., Anderson, J., and NBP1902 scientific party, 2020, Initial results from International Thwaites Glacier Collaboration cruise, European Geophysical Union (virtual).

(*poster*) Hogan, K., Larter, R., Graham, A., Arthern, R., Kirkham, J.D., Minzoni, R.T., Jordan, T., Clark, R., Fitzgerald, V., Anderson, J.B., Hillenbrand, C.D., Nitsche, F.O, [Simkins, L.M.](#), Smith, J.A, Gohl, K., Arndt, J.E., Hong, J., Wellner, J., 2020, Lessons learnt from the former bed of Thwaites Glacier: a new multibeam-bathymetric dataset, European Geophysical Union (virtual).

(*talk*) Greenwood, S.L., [Simkins, L.M.](#), Winsborrow, M.C.M., Bjarnadóttir, L.R., 2019. Bed controls on the retreat dynamics of marine-based ice sheets. Nordic Geology Winter Meeting, Oslo, Norway.

(*poster*) [Lepp, A.](#), [Simkins, L.M.](#), Minzoni, R., Larter, R., Graham, A., Hogan, K., Wellner, J., Hillenbrand, C.D., Smith, J., Anderson, J., Nitsche, F., NBP1902 Science Party, 2019. Thwaites Glacier's recent meltwater history recorded in ice shelf proximal sediment cores. WAIS Workshop, Julian, CA.

(*poster*) [Simkins, L.M.](#), 2019. Sinuous grounding lines often point to large retreat events to come. WAIS Workshop, Julian, CA.

(*talk*) Prothro, L.O., Anderson, J.B., Yokoyama, Y., Majewski, W., [Simkins, L.M.](#), 2019. The association of subglacial meltwater with grounding-line retreat. WAIS Workshop, Julian, CA.

(*talk*) Larter, R., Graham, A., Hogan, K., Minzoni, M., Wåhlin, A., Queste, B., Mazur, A., Boehme, L., Kirkham, V., Fitzgerald, R., Clark, R., Welzenbach, L., Wellner, J., Smith, J., [Simkins, L.M.](#), Pettit, E., Nitsche, F., Hillenbrand, C.D., Heywood, K., Anderson, J., and NBP1902 scientific party, 2019. Influence of bathymetry on Thwaites Glacier ice shelf thinning, calving and grounding line retreat from new high-resolution data. FRISP 2019: Forum for Research into Ice Shelf Processes, Oxford, England.

(*talk*) [Simkins, L.M.](#), Bjarnadóttir, L.R., Greenwood, S.L., Winsborrow, M.C.M., 2019. Retreat dynamics of marine-based ice sheets: perspectives from diverse high-latitude continental margins. International Union for Quaternary Research, Dublin, Ireland.

(*talk*) Simms, A., Whitehouse, P., Zurbuchen, J., [Simkins, L.M.](#), Nield, G., DeWitt, R., Bentley, M., 2019. Late Holocene increases in the rate of sea-level fall across the Antarctic Peninsula point to a weak Earth rheology. International Union for Quaternary Research, Dublin, Ireland.

(*talk*) Larter, R., Graham, A., Hogan, K., Minzoni, M., Wåhlin, A., Queste, B., Mazur, G., Boehme, L., Kirkham, V., Fitzgerald, V., Clark, R., Welzenbach, L., Wellner, J., Smith, J., [Simkins, L.M.](#), Pettit, E., Nitsche, F., Hillenbrand, C.D., Heywood, K., Anderson, J., and NBP1902 scientific party, 2019. Insights into controls on Thwaites Glacier retreat

from new high-resolution bathymetry and related data. International Symposium on Antarctic Earth Sciences, Songdo Convensia, Incheon, Republic of Korea.

(talk) Simkins, L.M., Bjarnadóttir, L.R., Greenwood, S.L. and Winsborrow, M.C.M., 2018, December. Retreat dynamics of marine-based ice sheets: perspectives from diverse high-latitude continental margins. American Geophysical Union 2018

(talk) Prothro, L.O., Majewski, W., Yokoyama, Y., Simkins, L.M., Anderson, J.B., Yamane, M. and Ohkouchi, N., 2018. Duration of the maximum extent of the East Antarctic Ice Sheet grounding line in the Ross Sea, Antarctica, and subsequent complex retreat. American Geophysical Union 2018.

(talk) Hogan, K., Larter, R.D., Nitsche, F.O., Graham, A.G., Wellner, J., Simkins, L.M., Gohl, K., Arndt, J.E., Hillenbrand, C.D., Smith, J.A. and Minzoni, R., 2018. What we know about the bed in front of Thwaites Glacier: existing marine geophysical datasets. The WAIS Workshop 2018.

Published datasets

Hogan, K. A., Larter, R. D., Graham, A. G. C., Nitsche, F. O., Kirkham, J. D., Totten Minzoni, R., Clark, R., Fitzgerald, V., Anderson, J. B., Hillenbrand, C.-D., Simkins, L.M., Smith, J. A., Gohl, K., Arndt, J. E., Hong, J., Heywood, K. J., Abrahamsen, E. P., Thompson, A., Dunbar, R., & Wellner, J. S. (2020). A multibeam-bathymetric compilation for the southern Amundsen Sea shelf, 1999-2019 (Version 1.0) [Data set]. UK Polar Data Centre, Natural Environment Research Council, UK Research & Innovation. ([link](#))

Service at the University of Virginia

Departmental

Graduate Admissions Committee (2019-present)

H.G. Goodell Endowment Committee (2019-present)

Environmental Science Organization (ESO) Faculty Sponsor (2019-present)

Undergraduate Seminar (EVSC 4002) Co-chair (2020-present)

College & Graduate School of Arts and Sciences

LSAMP Summer Program Panelist (2019, 2020)

LSAMP Bridge to Doctorate Mentor (2019-present)

College Science Scholars Seminars (4/2019, 2/2020, 4/2020)

Undergraduate Academic Adviser (6/2019-present)

26 students in 2019-2020 academic year

34 students (+ 6 drop-ins) in 2020-2021 academic year

University

LSAMP VA-NC Alliance Governing Board, through the Office for Diversity, Equity, and Inclusion (2020-present)

Meeting with Racial Equity Task Force for Indigenous Studies @ UVA (7/2020)

Indigenous Studies @ UVA Workgroup Member (3/2020-present)

Undergraduate Research Symposium, Judge (4/2019)

Mentor, Mentoring Institute, UVA Diversity Programs (2019 cohort, 2020 cohort)

Other

UVA-PVCC Geoscience Instruction Collaboration (2020-present)

Referee for student internship/job and graduate school applications for 13 students since 2019

Research community service

Editorial Service: Geological Society of London Books Editorial Committee (2018-present)

Journal Referee: Journal of Quaternary Research, Geology, GSA Today, Physical Geography, Sedimentary Geology, The Cryosphere, Quaternary Science Reviews, Science Advances, Journal of Geophysical Research: Earth Surface, Geophysical Research Letters

Proposal Referee: NSF Geomorphology and Land-use Dynamics Program, NSF Polar Programs: Antarctic Earth Sciences, NSF Polar Programs: Antarctic Glaciology

Review Panel NSF Polar Programs (2019, 2020)

Conference Organization: [WAIS Workshop](#) Organizing Committee (2019-present), [AGU 2018 Grant Review](#) for Global Environmental Change student travel, [GSA 2017 Session](#) ‘Glacier and Ice Sheet Grounding Lines,’ [GSA 2017 Field Trip Leader](#) ‘Grounding line processes of the southern Cordilleran Ice Sheet: Whidbey Island, Puget Lowlands,’ [AGU 2016 Session](#) ‘Geophysical and Geological Records of Glaciated Margins’

Public engagement & education

Educational Products: Glaciers: an introduction to Earth’s icy regions [a lesson plan for upper elementary students, [link](#)]

Climate Feedback Review for Media Outlets: The Guardian, The Wall Street Journal, The New York Times, USA Today [[link](#)]

Mass Media Commentary: [Nature](#), [Popular Science](#)

Speaker, Nis’to Tribal Youth Organization: Summer 2020 Program, Lake Traverse Reservation of the Sisseton-Wahpeton Oyate Tribe (NE South Dakota)

Co-leader, Saturday Series Workshops @ Community Middle, free monthly science + art workshops for upper elementary school students in the Charlottesville-Albemarle area [[link](#); currently on-hold due to pandemic]

Host, Math4Science Program @ UVA, class trip for alternative high school students from Brooklyn to learn about math-science integration, research activities, and university life [[link](#)]

Field research campaigns

Puget Lowland, Washington state, 2 weeks in 2020

Puget Lowland, Washington state, 1 week in 2016

Puget Lowland, Washington state, 1 week in 2015

Ross Sea, Antarctica, 8 weeks in 2015

Antarctic Peninsula, Antarctica, 6 weeks in 2010