Laura A. Stevens ⟨ *they/them* ⟩

Department of Earth Sciences, University of Oxford
South Parks Road, OX1 3AN, Oxford, UK

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ORCID iD: 0000-0003-0480-8018

EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, Mass. 2017
Woods Hole Oceanographic Institution (WHOI), Woods Hole, Mass.
Ph.D., Geophysics: *Influence of meltwater on Greenland Ice Sheet dynamics.*
Advisor: Sarah B. Das (WHOI)

Wellesley College, Wellesley, Mass. 2011
B.A., Geosciences; *Certificate*, Hooprolling.

EMPLOYMENT

Associate Professor of Climate and Earth Surface Processes, Earth Sciences, Oxford 2020–
March 2025: Reappointed through retirement in 2058 ("UK Tenure")
Supernumerary Fellow, University College, Oxford 2020–
Graduate Research Fellow, Geology & Geophysics, WHOI 2012–2017

RESEARCH AIM

To observe, and to understand, the physical processes modulating ice flow on Earth using geophysical, oceanographic, atmospheric, and geochemical observations; computational modeling; and statistical inquiry.

HONORS

- Radcliffe Fellow (Citation) 2025/26
- EGU Arne Richter Union Award (Citation) 2024
- Holiday Party Award: "Always in the Field", Earth Sciences, Oxford 2021
- Editor's Citation for Excellence in Refereeing, *Geophysical Research Letters* 2018
- United States Antarctic Service Medal 2016/17
- AGU Hydrology Section Horton Research Award 2015
- NSF Graduate Research Fellowship 2012
- WHOI Summer Student Fellowship 2011
- Phi Beta Kappa, *cum laude,* Honors in the major, and Sigma Xi, Wellesley 2011
- Margaret D. Thompson Award for Geosciences Scholarship, Wellesley 2011
- Sara F. Langer Memorial Award in Geology, Wellesley 2010
- American Mineralogist Undergraduate Award, Mineralogical Society of America 2009

PUBLICATIONS († = research advisee; ∗ = joint first authorship)

In review

[24] Rines, J.H., Lai, C.-Y., Abrahams, E., Shahin, M.G., Coffey, N.B., Lee, E., and **L.A. Stevens** (*In open review*). A benchmark deep learning dataset for the classification of supraglacial lake drainage mechanism across the central-west Greenland Ice Sheet. *Earth System Science Data Discussions.* doi:10.5194/essd-2026-406.

[23] †Knight, A.C.G., Stokes, C.R., **Stevens, L.A.**, Cosmidis, J., Wadham, J., Tipper, E.T., and R.G. Hilton (*In review*). Geospatial constraints on Quaternary rock carbon release during ice-sheet deglaciation. *Geological Society of London. Special Publication: Impacts on the Global Carbon Cycle: From Continental Weathering to Anthropogenic Impacts.*

[22] ∗Baumhoer, C.A., †∗Morgan, A.B., Hou, X., Fromentin, J.L., Hoeser, T., Dietzl, A.J., Markham, A., **Stevens, L.A.**, and C. Kuenzer (*In revision*). Shelf-Bench: A benchmark dataset for Antarctic ice shelf front and coastline delineation from multi-sensor radar satellite data. *Earth System Science Data Discussions.* doi:10.5194/essd-2025-758.

[21] †Zhang, H., **Stevens, L.A.**, Hewitt, I.J., and H. Stuart (*In revision*). A unified blister and subglacial hydrology framework for modelling supraglacial lake drainage events. *arXiv preprint // Journal of Geophysical Research: Earth Surface*. doi:10.48550/arXiv.2511.18018.

Published

[20] **Stevens, L.A.**, Nettles, M., Larochelle, S., Okal., M., †Falconer, E., †Turner, N., Rines, J., Lai, C.-Y., and G. Lu (2026). Ice-sheet hydro-fracture not advanced inland by low-elevation lake drainages in Kalaallit Nunaat. *Nature Communications.* 17:4598. doi:10.1038/s41467-026-73033-z.

[19] †Gjerde, G., Behn, M.D., **Stevens, L.A.**, Das, S.B., and I. Joughin (2025). Seasonal drainage-system evolution beneath the Greenland Ice Sheet inferred from transient speed-up events. *The Cryosphere,* 19:6149–6169. doi:10.5194/tc-19-6149-2025.

[18] †Zhang, H., Katz, R.F., and **L.A. Stevens** (2025). Viscoelastic mechanics of tidally induced lake drainage in the grounding zone. *The Cryosphere,* 19:2087–2103. doi:10.5194/tc-19-2087-2025.

[17] **Stevens, L.A.**, Das, S.B., Behn, M.D., McGuire, J.J., Lai, C.-Y., Joughin, I., Larochelle, S., and M. Nettles (2024). Elastic stress coupling between supraglacial lakes. *Journal of Geophysical Research: Earth Surface,* 129, e2023JF007481. doi:10.1029/2023JF007481.

[16] Banwell, A.F., Willis, I.C., **Stevens, L.A.**, Dell, R.L. and D. MacAyeal (2024). Observed meltwater-induced flexure and fracture at a doline on George VI Ice Shelf, Antarctica. *Journal of Glaciology.* 70(e47):1–14. doi:10.1017/jog.2024.31.

[15] **Stevens, L.A.**, Nettles, M., Davis, J.L., Creyts, T.C., Hewitt, I.J., and A. Stubblefield (2022). Tidewater-glacier response to supraglacial lake drainage. *Nature Communications,* 13:6065. doi: 10.1038/s41467-022-33763-2.

[14] †Zhang, H., Davis, T., Katz, R.F., **Stevens, L.A.,** and D. May (2022). Basal hydrofractures near sticky patches. *Journal of Glaciology,* 69(275):475-486. doi:10.1017/jog.2022.75.

[13] **Stevens, L.A.**, Nettles, M., Davis, J.L., Creyts, T.C., Ahlstrøm, A.P., and T.B. Larsen (2021). Helheim Glacier diurnal velocity fluctuations driven by surface melt forcing. *Journal of Glaciology,* 68(267):77-89. doi:10.1017/jog.2021.74. (+cover photo)

[12] Wearing, M.G., **Stevens, L.A.**, et al. (2021). Ice-shelf basal melt channels stabilized by secondary flow. *Geophysical Research Letters,* 48:1-11. doi: 10.1029/2021GL094872.

[11] Lai, C.-Y., **Stevens, L.A.**, Chase, D.L., Creyts, T.C., Behn, M.D., Das, S.B., and H.A. Stone (2021). Hydraulic transmissivity inferred from ice-sheet relaxation following Greenland supraglacial lake drainages. *Nature Communications,* 12:3955. doi: 10.1038/s41467-021-24186-6.

[10] MacAyeal, D.R., Sergienko, O.V., Banwell, A.F., Macdonald, G.J., Willis, I.C., and **L.A. Stevens** (2021). Treatment of ice-shelf evolution combining flow and flexure. *Journal of Glaciology,* 67(265):885-902. doi:10.1017/jog.2021.39.

[9] Banwell, A.F., Datta, R.T., Dell, R.L., Moussavi, M., Brucker, L., Picard, G., Shuman, C.A., and **L.A. Stevens** (2021). The 32-year record-high surface melt in 2019/2020 on north George VI Ice Shelf, Antarctic Peninsula. *The Cryosphere,* 15:909–925. doi:10.5194/tc-15-909-2021.

[8] Keisling, B.A., Bryant, R., Golden, N., **Stevens, L.A.**, and E. Alexander (2020). Does our Vision of Diversity Reduce Harm and Promote Justice? *Geological Society of America (GSA) Today,* 30:64–65. doi:10.1130/GSATG429GW.1.

[7] Wagner, T.J.W., Straneo, F., Richards, C.G., Slater, D., **Stevens, L.A.**, Das, S.B., Singh, H. (2019). Large spatial variations in the flux balance along the front of a Greenland tidewater glacier. *The Cryosphere,* 13:911–925. doi:10.5194/tc-13-911-2019.

[6] Chaput, J., Aster, R.C., McGrath, D., Baker, M.G., Anthony, R.E., Gerstoft, P., Bromirski, P., Nyblade, A., Stephen, R.A., Wiens, D., Das, S.B., and **L.A. Stevens** (2018). Near-surface environmentally forced changes in the Ross Ice Shelf observed with ambient seismic noise. *Geophysical Research Letters,* 45:181–187. doi:10.1029/2018GL079665.

[5] **Stevens, L.A.**, Hewitt, I., Das, S.B., Behn, M.D. (2018). Relationship between Greenland Ice Sheet surface speed and modeled effective pressure. *Journal of Geophysical Research: Earth Surface*, 123:2258–2278. doi:10.1029/2017JF004581.

[4] **Stevens, L.A.**, Behn, M.D., Das, S.B., Joughin, I., Noel, B. P. Y., van den Broeke, M., and T. Herring (2016). Greenland Ice Sheet flow response to runoff variability. *Geophysical Research Letters*, 43:11,295–11,303. doi:10.1002/2016GL070414. (+cover photo)

[3] **Stevens, L.A.**, Straneo, F., Das, S.B., Plueddemann, A.J., Kukulya, A.L., and M. Morlighem (2016). Linking glacially modified waters to catchment-scale subglacial discharge using autonomous underwater vehicle observations. *The Cryosphere*, 10:417–432. doi:10.5194/tc-10-417-2016.

[2] Carmichael, J.D., Joughin, I., Behn, M.D., Das, S.B., King, M.A., **Stevens, L.A.**, and D. Lizarralde (2015). Seismicity on the Western Greenland Ice Sheet: Surface Fracture in the Vicinity of Active Moulins. *Journal of Geophysical Research: Earth Surface*, 120:1082–1106. doi:10.1002/2014JF003398.

[1] **Stevens, L.A.**, Behn, M.D., McGuire, J.J., Das, S.B., Joughin, I., Herring, T., Shean, D.E., and M.A. King (2015). Greenland supraglacial lake drainages triggered by hydrologically induced basal slip. *Nature*, 522:73–76. doi:10.1038/nature14480.

Datasets, Repositories, Commentary, Theses, &c

[17] Rines, J.H., Lai, C.-Y., Abrahams, E., Shahin, M. G., Coffey, N.B., Lee, E., and **L.A. Stevens** (2026) Central West Greenland Supraglacial Lake Drainage Classification Dataset (2018-2019) [Data set]. Stanford Digital Repository. doi:10.25740/sf350xp4038.

[16] **Stevens, L.A.,** Nettles, M., Okal, M.H., Larochelle, S., Lu, G.J., and J.H. Rines (2026), 23 GNSS datasets associated with Hydrofracture at Greenland Lakes, 2022-2023: GNSS Data, The NSF GAGE Facility operated by EarthScope Consortium, GPS/GNSS Observations Dataset, doi:10.7283/HQ02-0044.

[15] **Stevens, L.A.** (2026). Ice-sheet hydro-fracture not advanced inland by low-elevation lake drainages in Kalaallit Nunaat (Version v1.0.0). *Zenodo repository.* doi:10.5281/zenodo.19387821.

[14] **Stevens, L.A.** (2026). Mechanistic Lake-Drainage Catalogue for 2023 (Version v1.0.0). *Zenodo repository.* doi:10.5281/zenodo.19387985.

[13] **Stevens, L.A.** (2026). Mechanistic Lake-Drainage Catalogue for 2022 (Version v1.0.0). *Zenodo repository.* doi:10.5281/zenodo.19387943.

[12] Banwell, A.F., Dell, R.L., Macayeal, D.R., **Stevens, L.A.,** and I.C. Willis (2026). Field data from George VI Ice Shelf; processed GNSS and AWS (2019-2022), U.S. Antarctic Program (USAP) Data Center.

[11] Banwell., A.F., Willis, I.C., **Stevens, L.A.,** Dell, R.L. and D.R. MacAyeal (2024). Dataset for: Banwell et al. 2024: Observed meltwater-induced flexure and fracture at a doline on George VI Ice Shelf, Antarctica, *Journal of Glaciology.* U.S. Antarctic Program (USAP) Data Center. doi:10.15784/601771.

[10] **Stevens, L.A.** and S. Larochelle (2024). Elastic stress coupling between supraglacial lakes (Version v1.2). *Zenodo repository.* doi:10.5281/zenodo.10650188.

[9] **Stevens, L.A.**, Nettles, M., Davis, J.L., Creyts, T.C., Hewitt, I.J., and A. Stubblefield (2022). Tidewater-glacier response to supraglacial lake drainage (Version v1.0). *Zenodo repository.* doi:10.5281/zenodo.7023662.

[8] **Stevens, L.A.** (2022). Cover photo: Working on a Harbortronics time-lapse camera system on George VI Ice Shelf, Antarctica, as part of the project Ice-shelf Instability Caused by Active Surface Meltwater Production, Movement, Ponding and Hydrofracture. *Journal of Glaciology*, 68(268):f1.

[7] **Stevens, L.A.**, Nettles, M., Davis, J.L., Creyts, T.C., Ahlstrøm, A.P., and T.B. Larsen (2021). Helheim Glacier diurnal velocity fluctuations driven by surface melt forcing (Version v1.0). *Zenodo repository.* doi:10.5281/zenodo.465644.

[6] **Stevens, L.A.**, Straneo, F., Das, S.B., Plueddemann, A.J., and A.L. Kukulya (2019), Water, Temperature, Salinity, and others collected from Autonomous Underwater Vehicle in Sarqardleq Fjord, West Greenland from 2012-07-18 to 2012-07-24 (NCEI Accession 0208235). *NOAA National Centers for Environmental Information.* https://accession.nodc.noaa.gov/0208235.

[5] MacFerrin, M. & co-signatories from the Next Generation Polar Leadership Symposium (2019), Next generation of polar researchers agree on three priorities. *Nature*, 570:36.

[4] **Stevens, L.A.**, Hewitt, I., Das, S.B., Behn, M.D. (2018). Relationship between Greenland Ice Sheet surface speed and modeled effective pressure (Version v1.0). *Zenodo repository.* doi:10.5281/zenodo.1299945.

[3] Das, S.B., Behn, M.D., Joughin, I., and **L.A. Stevens** (2018), 22 GPS/GNSS datasets associated with Greenland Fractures 2011-2014, UNAVCO, Inc., GPS/GNSS Observations Dataset. doi:10.7283/T55T3J80.

[2] **Stevens, L.A.** (2017), Influence of meltwater on Greenland Ice Sheet dynamics. PhD Thesis, MIT, Cambridge, Mass. uri:hdl.handle.net/1721.1/113800.

[1] **Stevens, L.A.** (2011), Quantifying the composition of a mixed carbonate-siliciclastic sand matrix: A comparative study between XRD, XRF, and point counting methodology. Undergraduate Thesis, Wellesley College, Wellesley, Mass.

GRANTS

Active

[10] **NERC NE/Y000838/1** (£811k) September 2024–August 2027
Solicitation: NERC Pushing the Frontiers
Accelerated carbon dioxide release from sedimentary rocks in a warming world
PI: Bob Hilton (U. of Oxford). Co-Is: Julie Cosmidis, Samar Khatiwala, and **L.A. Stevens** (U. of Oxford); Edward Tipper (U. of Cambridge). Project Partners: Jemma Wadham (U. of Tromsø) and Mark Garnett (NEIF Radiocarbon Facility).

[9] **EPSRC EP/Y030907/1** (£11.9M) April 2024–September 2032
Solicitation: UKRI Centre for Doctoral Training
UKRI AI Centre for Doctoral Training in AI for the Environment — Intelligent Earth
PI: Philip Stier (U. of Oxford). Co-Is/Management Team: Hannah Christensen, Andrew Markham, Stephen Roberts, Roberto Salguero-Gomez, **L.A. Stevens**, Louise Slater, and Yee Whye Teh (U. of Oxford).

[8] **Oxford University Press** (£38k) August 2021–September 2026
Solicitation: John Fell Oxford University Press Fund for Early Career Researchers
Radar and remotely sensed observations of ice-sheet deformation
PI: **L.A. Stevens**.

[7] **US NSF/GEO-UK, NERC NE/Y002369/1** (£300k) September 2023–August 2026
Solicitation: NSF Office of Polar Programs (Arctic Natural Sciences) and NERC
NSFGEO-NERC: Collaborative Research: Understanding surface-to-bed meltwater pathways across the Greenland Ice Sheet using machine-learning and physics-based models
NSF PI: Ching-Yao Lai (Stanford U.); NSF Co-I: Leigh Stearns (U. of Kansas).
NERC PI: **L.A. Stevens**; and NERC Co-I: Ian Hewitt (U. of Oxford).

Completed

[6] **Radcliffe Fellowship ($85k):** *Floods Splintering Earth's Ice Sheets* 2025–2026

[5] **NSF-ANS 20-03464** ($723k) 2020–2025
Greenland Ice Sheet dynamic response to inland expansion of a hydrologically-active ice-sheet bed

[4] **NSFGEO-NERC, NSF-OPP 18-41739** ($805k) 2019–2024
Ice-shelf instability caused by active surface meltwater production, movement, ponding, and hydro-fracture

[3] **Horton Research Grant,** AGU Hydrology Section ($10k) 2015–2017

[2] **NSF Graduate Research Fellowship Program (GRFP)** ($138k) 2012–2017

[1] **WHOI Summer Student Fellowship Program** ($6k) 2011

TEACHING

Department of Earth Sciences, University of Oxford
For the first years:
Modern Climate Processes — Cryosphere & Sea Level annually in Hilary Term, 2023–
Mathematics for Earth Scientists: Probability & Statistics annually in Hilary Term, 2023–
Co-taught with Profs. Paula Koelemeijer (Calculus) & Andrew Walker (Scientific Computing)
Field Methods in Geologic Mapping annually in assorted terms, 2021–
Localities: Somerset Coast, England; Isle of Skye, Scotland; Pembrokeshire, Wales.
For the second years:
Fundamentals of Climate Change annually in Hilary Term, 2024–
Co-taught with Profs. Helen Johnson & Rosalind Rickaby
For the third years:

Climate Dynamics (Ice Sheets & Glaciers) annually in Michaelmas Term, 2021–
For the fourth years/MEarthScis:
Topics in Oceanography & Climate annually in Michaelmas Term, 2022–
Co-taught over the years with Profs. Heather Bouman, Helen Johnson, & Rosalind Rickaby

ADVISING

Department of Earth Sciences, University of Oxford (Research Advising)
Postdoctoral Researchers
Hanwen Zhang, D.Phil.; funded by NE/Y002369/1 (co-advised w/Prof. Ian Hewitt) 2024–2026
Alasdair Knight, Ph.D.; funded by NE/Y000838/1 (2nd advisor; advised by Prof. Bob Hilton) 2024–
Victoria Dutch, Ph.D.; funded by NE/Y000838/1 (2nd advisor; advised by Prof. Bob Hilton) 2025–

DPhil Researchers
Hanwen Zhang; ERC DPhil studentship (co-advised w/Prof. Richard Katz) 2020–2024
- *Mechanics of fracture and flexure in Antarctic Ice Sheets and Ice Shelves*

Amy Morgan; Intelligent Earth CDT (co-advised w/Prof. Andrew Markham) 2024–
Emma Greenough; NERC DTP (2nd advisor; advised by Prof. Richard Walker) 2024–
Grace Gjerde; ILESLA DTP & Clarendon Scholar (primary advisor) 2025–

MEarthSci Researchers
Emily Falconer, M.Earth.Sci.: Awarded a First on Thesis 2023/24
Natalie Turner, M.Earth.Sci.: Awarded the MOAP Prize for Outstanding Thesis on Climate 2024/25

University College, University of Oxford (College Advising)
DPhil Researchers
Rebecca Colquhoun; NERC DTP (advised by Prof. Jessica Hawthorne) 2020–2025
Adam Lindholm; NERC DTP (advised by Dr. Roger Close) 2023–
Xiangying Ye (advised by Prof. Richard Palin) 2024–

DOCTORATE EXAMINATIONS

Thesis Jury for Dr. Anuar Togaibekov (ISTerre Grenoble, France) 2024
advised by Drs. Andrea Walpersdorf and Florent Gimbert
- *Multifunctional GNSS applications in glaciology from dense array monitoring*

Internal Examiner for Dr. Oliver Tooth (U. of Oxford, advised by Prof. Helen Johnson) 2024
- *Lagrangian Views of the Overturning Circulation in the subpolar North Atlantic Ocean*

External Examiner for Dr. Paul Halas (U. of Bergen, Norway, advised by Dr. Basile de Fleurian) 2023
- *Observations of Greenland Ice Velocities and Impact of Surface Melt*

Internal Examiner for Dr. Sam Cornish (U. of Oxford, advised by Prof. Helen Johnson) 2021
- *Understanding Freshwater Changes in the Arctic Ocean*

INVITED TALKS AT CONFERENCES

[7] **Stevens, L.A.** (2025), *Floods Splintering Earth's Ice Sheets.* Public Lecture, Radcliffe Institute for Advanced Study, Cambridge, Mass. December 3. (Recording)

[6] **Stevens, L.A.**, Banwell, A.F., Behn, M.D., Chase, D.L., Das, S.B., Dell, R., †Falconer, E., Joughin, I., Lai, C.-Y., Larochelle, S., Lu, G.J., McGuire, J.J., Nettles, M., Okal, M., Rines, J., and I.C. Willis (2024), *Supraglacial Lake Drainages: from process puzzle to subglacial diagnostic.* Arne Ritcher Award Lecture, 2024 EGU General Assembly, Vienna, Austria. EGU24-11275. April 14-19.

[5] **Stevens, L.A.** (2023), *Influence of Meltwater on Greenland Ice Sheet Dynamics: Interdisciplinary perspectives from a decade of teamwork.* Presented at the 2023 Schmidt Science Fellows Global Meeting, Oxford, UK. Oct. 24.

[4] **Stevens, L.A.**, Das, S.B., Behn, M.D., McGuire, J.J., Joughin, I., Nettles, M., and J. Kingslake (2021), *Stress coupling between Greenland supraglacial lakes during rapid drainage.* Presented at the 2021 International Union of Geodesy and Geophysics (IUGG) International Associations Cryospheric Sciences (IACS) Virtual Atmosphere-Cryosphere-Ocean Seminar Series (VACO-21), Worldwide. July 19–23.

[3] **Stevens, L.A.**, Behn, M.D., McGuire, J.J., Das, S.B., Joughin, I., Herring, T., Shean, D.E., and King, M.A. (2018), *Communicating the mechanics of Greenland Ice Sheet supraglacial lake drainages to diverse audiences.* Presented at the 2018 UNAVCO Science Workshop, Broomfield, CO. March 11–15.

[2] **Stevens, L.A.**, Hewitt, I., Das, S.B., and Behn, M.D. (2017), *Temporal variations in the relationship between surface speed and modeled effective pressure on the western margin of the Greenland Ice Sheet.* Presented at the 2017 Fall Meeting, AGU, New Orleans, LA. Dec 11–15.

[1] **Stevens, L.A.**, Straneo, F., Das, S.B., Plueddemann, A.J., and Kukulya, A.L. (2016), *Linking glacially modified waters to catchment-scale subglacial discharge using autonomous underwater vehicle observations.* Presented at Ocean Outlook 2015: Icy Oceans, Woods Hole, Mass. Apr. 7–8.

SERVICE (2020 onwards)

- Athena Swan Self-Assessment Team for Silver Application, Dept. Earth Sciences, Univ. Oxford 2026–
- REF Outputs Review Panel, Dept. Earth Sciences, Univ. Oxford 2025–
- Management Team/Co-I representing the Dept. Earth Sciences, Univ. Oxford 2023–
  Intelligent Earth: UKRI AI Centre for Doctoral Training in AI for the Environment
- EarthScope Consortium: Associate Member Representative for Univ. Oxford 2023–
- Faculty Advisor, *Lithoqueers* (LGBTQIA+ Affinity Group) 2021–
  Department of Earth Sciences, Univ. Oxford
  Advisees awarded "Best Team Effort" ED&I award across Uni Sciences Division (Citation) 2025
- Mental Health First Aider 2021–
  Department of Earth Sciences, Univ. Oxford
- Committee Member, EEDI Committee 2020–
  Department of Earth Sciences, Univ. Oxford
- Committee Member, Departmental Committee 2020–
  Department of Earth Sciences, Univ. Oxford
- Proposal Reviews [5] 2018–
  European Geosciences Union
  NSF Division of Earth Sciences, Postdoctoral Fellowship
  NSF Office of Polar Programs, Antarctic Glaciology
  Royal Society Te Apārangi, Te Pūtea Rangahau A Marsden
- Paper Reviews [36] 2016–
  AGU Advances, Annals of Glaciology, The Cryosphere, Earth and Planetary Res. Letts., Earth System Science Data, Geology, Geophysical Research Letters, J. of Geophysical Research: Earth Surface, J. of Geophysical Research: Oceans, J. of Glaciology, Nature, Nature Communications, Nature Geoscience, Proceedings of the National Academy of Sciences, Science Advances, and Scientific Reports.
- Deputy Director of Graduate Studies, Dept. Earth Sciences, Univ. Oxford 2022–2025
- Organizing Committee, IGS British Branch September Meeting 2025
- Co-organizer with Profs. Julie Cosmidis and Claire Nichols 2020–2023
  Earth Sciences Department Seminar, Univ. Oxford
- Associate Member Representative for Univ. Oxford 2020–2023
  UNAVCO, Inc.
- Admissions Interview Panel for "Physical Climate System" focus area 2022
  NERC DTP in Environmental Research, Univ. of Oxford
- Co-author with Drs. Chris Carr and Lauren Simkins 2021
  Name Change Policy for International Glaciological Society Journals
- Panelist, NERC DTP in Environmental Research, Univ. of Oxford 2021
  "LGBTQ+ Voices & Communities: Enabling Inclusivity in Environmental Research"
- Panelist, Earth Science Postdoctoral Scientists, Univ. of Oxford 2021
  "Applying to Institutional Postdoctoral Fellowships and Faculty Positions in the US"
- Host Researcher, Polar Horizons 2021 2021
  Diversity in Polar Science Initiative, British Antarctic Survey
- Session Co-convener, AGU Fall Meeting 2020 2020
  "Advances in Glacier Hydrology"; "Controls on Marine-Terminating Glacier, Ice Stream, and Ice Shelf Dynamics in Observations and Models"

TRAINING & CERTIFICATIONS

- Mental Health First Aider Certification, Mental Health First Aid England 2021–2027
  Initial Course (2021); Re-certification Course (2024)
- Fieldwork Safety Overseas Training, University of Oxford 2022
- Antarctic Pre-Deployment Training & First Aid Course, British Antarctic Survey 2021
- British Antarctic Survey Field Training Modules 1–4 2019, 2021
- Arctic Field Training, Polar Field Services 2016
- Wilderness First Aider Certification 2016–2018
  University of Colorado Emergency and Wilderness Medicine
- Expeditionary Mountaineering (35 days) 2012
  National Outdoor Leadership School (NOLS), Coyhaique, Chile

MEDIA COVERAGE

- Daniel, M. (2026) Nature: Lake hydro-fracture through Greenland Ice Sheet less widespread, new study finds. *Harvard Gazette.*
- Rex, C. (2025) Tough break-up: how ocean tides are fracturing Antarctica's ice shelves. *U. of Oxford Press Release.*
- Rex, C. (2024) Stress mapping reveals secrets of coupled supraglacial lake drainages by hydro-fracture. *U. of Oxford Press Release.*
- Rex, C. (2024) Ice shelves fracture under weight of meltwater lakes. *U. of Oxford Press Release.*
- Johnson, S. (2022) Clocking a speeding glacier reveals the fate of a disappearing lake. *EarthScope Consortium.*
- Hilton, S. (2022) Study reveals new insights into how fast-moving glaciers may contribute to sea level rise. *U. of Oxford Press Release.*
- Dewsbery, S. (2022) Expedition Data Recovery. *The Martlet, University College, U. of Oxford.*
- Kelly, M. (2021) Rise and fall of water blisters offers glimpse beneath Greenland's thick ice sheet. *Princeton University Press Release*.
- Makalintal, B. (2016) Glacier Pacer. *Wellesley Magazine*.
- Lippsett, L. (2015) Scientists Find Trigger That Cracks Lakes. *Oceanus*.
- Chu, J. (2015) A check on runaway lake drainage. *MIT News*.
- Mooney, C. (2015) Scientists finally have an explanation for why huge lakes atop Greenland are vanishing. *Washington Post*.
- Mok, H.-F. (2015) Wellesley in STEM: Interview with Laura Stevens, PhD Student at MIT and WHOI. *Wellesley Underground*.
- Taylor, A. and J. Raedle (2013) Greenland: A Global Warming Laboratory. *The Atlantic*.

FIELD EXPEDITIONS

Oxford & Tromsø: Proglacial valleys outside Longyearbyen, Svalbard 2025, 2026
Accelerated carbon dioxide release from sedimentary rocks in a warming world
Hydrologic, geologic, and geochemical sampling along proglacial rivers and valleys.

Columbia & Oxford: Supraglacial Lakes on the Greenland Ice Sheet 2022(x2), 2023, 2024
Greenland Ice Sheet dynamic response to inland expansion of a hydrologically active ice-sheet bed
GNSS, pRES, temperature, and pressure-sensor installation, maintenance, and removal.

Colorado, Chicago, Oxford, & Cambridge: George VI Ice Shelf, Antarctic Peninsula 2019, 2021
Ice-shelf instability caused by active surface meltwater production, movement, ponding, and hydro-fracture
Installation, maintenance, and recovery of GPS array, shallow firn cores, firn-column thermistors, Automatic Weather Stations (AWS), and pressure transducers.

Scripps Institution of Oceanography & WHOI: Ross Ice Shelf, Antarctica 2016
Dynamic Response of the Ross Ice Shelf to Wave-induced Vibrations
Recovery of GPS and broadband-seismic arrays.

WHOI: East African Rift, Botswana 2014
Incipient Continental Rifting in the Okavango Rift, Botswana
Deployed 800-km-long active seismology line with the SEISORZ team.

WHOI: Disko Island and the Greenland Ice Sheet 2014
Investigating the influence of sea-surface variability on ice sheet mass balance and outlet glacier behaviour using records from Disko Bugt, West Greenland
Shallow ice cores, snow-pit sampling, ice-penetrating radar.

WHOI: Supraglacial Lakes on the Greenland Ice Sheet 2013, 2014
Influence of hydrofracture and surface melt variability on Greenland Ice Sheet flow
GPS installation, maintenance, and removal; ground survey of hydro-fracture scarps.

WHOI: Saqardleq Fjord, Kalaallit Nunaat 2013
Seasonal fluxes across submarine ice sheet margins: A pilot study in West Greenland
Fjord hydrography survey via small boat and helicopter.

Sea Education Association: WHOI Jake Pierson Summer Cruise 2012
SSV Corwith Cramer, New England Continental Shelf, oceanographic deployments.