

Åsa K. Rennermalm

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Education

- 2008 Ph.D. in Civil and Environmental Engineering, Princeton University.
2001 M.Sc. in Geography, University of Copenhagen, Copenhagen, Denmark.
1997 B.Sc. in Geography, University of Copenhagen, Copenhagen, Denmark.

Academic Appointments

- 2024–present Professor, Department of Geography, Rutgers University.
2015–2024 Associate Professor, Department of Geography, Rutgers University.
2009–2015 Assistant Professor, Department of Geography, Rutgers University.
2007–2009 Postdoctoral Scholar, Department of Geography, University of California Los Angeles.

Professional Leadership and Service

- 2013–present Undergraduate Program Director, Geography.
2025–present President, Cryosphere Section; Vice Chair, AGU Council; Member, AGU Board of Directors, American Geophysical Union (AGU).
2023–2024 President-elect, Cryosphere Section, AGU.
2023–2024 Board of Directors, CUAHSI.

Honors and Awards

- 2024–2026 Fulbright Arctic Initiative Scholar, included three-months exchange at the Greenland Climate Research Center in Nuuk.
2022 Most Valuable Professor: Rutgers Volleyball Team.
2019 Kavli Fellow (selected to participate in the Kavli Frontiers of Science symposium organized by the U.S. National Academy of Sciences).
2019 Excellence in Teaching & Mentoring Award (Faculty) from the Rutgers School of Graduate Studies.
2018 First-Year Interest Group Seminars (FIGS) Mentors Award.

Publications

Supervised graduate students, postdoctoral scholars, and research associates are in bold and indicated by asterisk.

- 48 Cooper, M. G., Smith, L. C., Rennermalm, Å. K., Ryan, J. C., Pitcher, L. H., Liston, G. E., Miège, C., Fettweis, X., Noël, B., and van As, D.: Greenland ice sheet runoff reduced by meltwater refreezing in bare ice. *Nat. Comm.*, 16(1), 8273. *Nature Communications*, 2025, doi:10.1038/s41467-025-62281-0
- 47 Ryan, J. C., Cooper, M. G., Cooley, S. W., Rennermalm, Å. K., & Smith, L. C.: Meltwater ponding has an underestimated radiative effect on the surface of the Greenland Ice Sheet. *Nat. Comm.*, 16(1), 8274. *Nature Communications*, 2025, doi:10.1038/s41467-025-62503-5
- 46 Covi, F., Hock, R., Rennermalm, Å., Fettweis, X., and Noël, B.: Spatiotemporal variability of air temperature biases in regional climate models over the Greenland ice sheet. *J. Glaciol.*, 71, e64. *Journal of Glaciology*, 2025, doi:10.1017/jog.2025.38
- 45 Vandecrux, B., Fausto, R. S., Box, J. E., Covi, F., Hock, R., Rennermalm, Å. K., Heilig, A., Abermann, J., As, D., Bjerre, E., Fettweis, X., Smeets, P. C. J. P., Munneke, P. K., Broeke, M. R., Brils, M., Langen, P. L., Mottram, R., Ahlstrøm, A. P.: Recent warming trends of the Greenland ice sheet documented by historical firn and ice temperature observations and machine learning. *The Cryosphere*, 18(2), 609–631. *The Cryosphere*, 2024, doi:10.5194/tc-18-609-2024
- 44 *Mattingly, K. S., Turton, J. V., Wille, J. D., Noël, B., Fettweis, X., Rennermalm, Å. K., and Mote, T. L.: Increasing extreme melt in northeast Greenland linked to foehn winds and atmospheric rivers. *Nat. Commun.*, 14, 1743. *Nature Communications*, 2023, doi:10.1038/s41467-023-37434-8
- 43 *Leidman, S. Z., Rennermalm, Å. K., *Muthyala, R., Skiles, S. M., and Getraer, A.: Intra-seasonal variability in supraglacial stream sediment on the Greenland Ice Sheet. *Front. Earth Sci.*, 11, 969629. *Frontiers in Earth Science*, 2023, doi:10.3389/feart.2023.969629
- 42 *Xiao, J., Rennermalm, Å. K., Covi, F., Hock, R., *Leidman, S. Z., *Miège, C., MacFerrin, M. J., and Samimi, S.: Local-scale spatial variability in firn properties in Southwest Greenland. *Front. Earth Sci.*, 10, 938246. *Frontiers in Earth Science*, 2022, doi:10.3389/feart.2022.938246
- 41 *Muthyala, R., Rennermalm, Å. K., *Leidman, S. Z., Cooper, M. G., Cooley, S. W., Smith, L. C., and van As, D.: Supraglacial streamflow and meteorological drivers from southwest Greenland. *The Cryosphere*, 16, 2245–2263. *The Cryosphere*, 2022, doi:10.5194/tc-16-2245-2022
- 40 Cooper, M. G., Smith, L. C., Rennermalm, Å. K., Tedesco, M., Muthyala, R., *Leidman, S. Z., *Moustafa, S. E., and Fayne, J. V.: Spectral attenuation coefficients from measurements of light transmission in bare ice on the Greenland Ice Sheet. *The Cryosphere*, 15, 1931–1953. *The Cryosphere*, 2021, doi:10.5194/tc-15-1931-2021
- 39 *Leidman, S. Z., Rennermalm, Å. K., Lathrop, R. G., and Cooper, M. G.: Terrain-Based Shadow Correction Method for Assessing Supraglacial Features on the Greenland Ice Sheet. *Front. Remote Sens.*, 2, 690474. *Frontiers in Remote Sensing*, 2021, doi:10.3389/frsen.2021.690474
- 38 *Leidman, S. Z., Rennermalm, Å. K., *Muthyala, R., Guo, Q., and Overeem, I.: The Presence and Widespread Distribution of Dark Sediment in Greenland Ice Sheet Supraglacial Streams Implies Substantial Impact of Microbial Communities on Sediment Deposition and Albedo. *Geophys. Res. Lett.*, 48, e2020GL088444. *Geophysical Research Letters*, 2021, doi:10.1029/2020GL088444

- 37 Pain, A. J., Martin, J. B., Martin, E. E., Rennermalm, Å. K., and Rahman, S.: Heterogeneous CO₂ and CH₄ content of glacial meltwater from the Greenland Ice Sheet and implications for subglacial carbon processes. *The Cryosphere*, 15, 1627–1644. *The Cryosphere*, 2021, doi:10.5194/tc-15-1627-2021
- 36 Rennermalm, Å. K., Hock, R., Covi, F., *Xiao, J., Corti, G., Kingslake, J., *Leidman, S. Z., *Miège, C., Macferrin, M., Machguth, H., Osterberg, E., Kameda, T., and McConnell, J. R.: Shallow firn cores 1989–2019 in southwest Greenland’s percolation zone reveal decreasing density and ice layer thickness after 2012. *J. Glaciol.*, 1–12. *Journal of Glaciology*, 2021, doi:10.1017/jog.2021.102
- 35 Smith, L. C., Andrews, L. C., Pitcher, L. H., Overstreet, B. T., Rennermalm, Å. K., Cooper, M. G., Cooley, S. W., Ryan, J. C., Miège, C., Kershner, C., and Simpson, C. E.: Supraglacial River Forcing of Subglacial Water Storage and Diurnal Ice Sheet Motion. *Geophys. Res. Lett.*, 48. *Geophysical Research Letters*, 2021, doi:10.1029/2020GL091418
- 34 *Leidman, S. Z., Rennermalm, Å. K., Broccoli, A. J., van As, D., van den Broeke, M. R., Steffen, K., and Hubbard, A.: Methods for Predicting the Likelihood of Safe Fieldwork Conditions in Harsh Environments. *Front. Earth Sci.*, 8, 260. *Frontiers in Earth Science*, 2020, doi:10.3389/feart.2020.00260
- 33 Castelao, R. M., Luo, H., Oliver, H., Rennermalm, Å. K., Tedesco, M., Bracco, A., Yager, P. L., Mote, T. L., and Medeiros, P. M.: Controls on the Transport of Meltwater From the Southern Greenland Ice Sheet in the Labrador Sea. *J. Geophys. Res. Oceans*, 124, 3551–3560. *Journal of Geophysical Research: Oceans*, 2019, doi:10.1029/2019JC015159
- 32 Deuerling, K. M., Martin, J. B., Martin, E. E., Abermann, J., Myreng, S. M., Petersen, D., and Rennermalm, Å. K.: Chemical weathering across the western foreland of the Greenland Ice Sheet. *Geochim. Cosmochim. Acta*, 245, 426–440. *Geochimica et Cosmochimica Acta*, 2019, doi:10.1016/j.gca.2018.11.025
- 31 *Berdahl, M., Rennermalm, Å., *Hamann, A., *Mioduszewski, J., Hameed, S., Tedesco, M., Stroeve, J., Mote, T., Koyama, T., and McConnell, J. R.: Southeast Greenland Winter Precipitation Strongly Linked to the Icelandic Low Position. *J. Climate*, 31, 4483–4500. *Journal of Climate*, 2018, doi:10.1175/JCLI-D-17-0622.1
- 30 Cooper, M. G., Smith, L. C., Rennermalm, Å. K., Miège, C., Pitcher, L. H., Ryan, J. C., Yang, K., and Cooley, S. W.: Meltwater storage in low-density near-surface bare ice in the Greenland ice sheet ablation zone. *The Cryosphere*, 12, 955–970. *The Cryosphere*, 2018, doi:10.5194/tc-12-955-2018
- 29 Oliver, H., Luo, H., Castelao, R. M., van Dijken, G. L., Mattingly, K. S., Rosen, J. J., Mote, T. L., Arrigo, K. R., Rennermalm, Å. K., Tedesco, M., and Yager, P. L.: Exploring the Potential Impact of Greenland Meltwater on Stratification, Photosynthetically Active Radiation, and Primary Production in the Labrador Sea. *JGR Oceans*, 123, 2570–2591. *Journal of Geophysical Research: Oceans*, 2018, doi:10.1002/2018JC013802
- 28 Arrigo, K. R., van Dijken, G. L., Castelao, R. M., Luo, H., Rennermalm, Å. K., Tedesco, M., Mote, T. L., Oliver, H., and Yager, P. L.: Melting glaciers stimulate large summer phytoplankton blooms in southwest Greenland waters. *Geophys. Res. Lett.*, 44, 6278–6285. *Geophysical Research Letters*, 2017, doi:10.1002/2017GL073583
- 27 *Moustafa, S. E., Rennermalm, Å. K., Román, M. O., Wang, Z., Schaaf, C. B., Smith, L. C., Koenig, L. S., and Erb, A.: Evaluation of satellite remote sensing albedo retrievals over the ablation area of the southwestern Greenland ice sheet. *Remote Sens. Environ.*, 198, 115–125. *Remote Sensing of Environment*, 2017, doi:10.1016/j.rse.2017.05.030

- 26 Ryan, J. C., Hubbard, A., Box, J. E., Brough, S., Cameron, K., Cook, J. M., Cooper, M., Doyle, S. H., Edwards, A., Holt, T., Irvine-Fynn, T., Jones, C., Pitcher, L. H., Rennermalm, Å. K., Smith, L. C., Stibal, M., and Snooke, N.: Derivation of High Spatial Resolution Albedo from UAV Digital Imagery: Application over the Greenland Ice Sheet. *Front. Earth Sci.*, 5, 40. *Frontiers in Earth Science*, 2017, doi:10.3389/feart.2017.00040
- 25 Smith, L. C., Yang, K., Pitcher, L. H., Overstreet, B. T., Chu, V. W., Rennermalm, Å. K., Ryan, J. C., Cooper, M. G., Gleason, C. J., Tedesco, M., Jeyaratnam, J., van As, D., van den Broeke, M. R., van de Berg, W. J., Noël, B., Langen, P. L., Cullather, R. I., Zhao, B., Willis, M. J., Hubbard, A., Box, J. E., Jenner, B. A., and Behar, A. E.: Direct measurements of meltwater runoff on the Greenland ice sheet surface. *Proc. Natl. Acad. Sci. USA*, 114, E10622–E10631. *Proceedings of the National Academy of Sciences*, 2017, doi:10.1073/pnas.1707743114
- 24 Stroeve, J. C., *Mioduszewski, J. R., Rennermalm, Å. K., Boisvert, L. N., Tedesco, M., and Robinson, D.: Investigating the local-scale influence of sea ice on Greenland surface melt. *The Cryosphere*, 11, 2363–2381. *The Cryosphere*, 2017, doi:10.5194/tc-11-2363-2017
- 23 Gleason, C. J., Smith, L. C., Chu, V. W., Legleiter, C. J., Pitcher, L. H., Overstreet, B. T., Rennermalm, Å. K., Forster, R. R., and Yang, K.: Characterizing supraglacial meltwater channel hydraulics on the Greenland Ice Sheet from in situ observations: Characterizing Supraglacial Channel Hydraulics in the Field. *Earth Surf. Process. Landforms*, 41, 2111–2122. *Earth Surface Processes and Landforms*, 2016, doi:10.1002/esp.3977
- 22 Luo, H., Castelao, R. M., Rennermalm, Å. K., Tedesco, M., Bracco, A., Yager, P. L., and Mote, T. L.: Oceanic transport of surface meltwater from the southern Greenland ice sheet. *Nature Geosci.*, 9, 528–532. *Nature Geoscience*, 2016, doi:10.1038/ngeo2708
- 21 *Mioduszewski, J. R., Rennermalm, Å. K., *Hammann, A., Tedesco, M., Noble, E. U., Stroeve, J. C., and Mote, T. L.: Atmospheric drivers of Greenland surface melt revealed by self-organizing maps. *J. Geophys. Res. Atmos.*, 121, 5095–5114. *Journal of Geophysical Research: Atmospheres*, 2016, doi:10.1002/2015JD024550
- 20 Yang, K., Smith, L. C., Chu, V. W., Pitcher, L. H., Gleason, C. J., Rennermalm, Å. K., and Li, M.: Fluvial morphometry of supraglacial river networks on the southwest Greenland Ice Sheet. *GIScience & Remote Sensing*, 53, 459–482. *GIScience & Remote Sensing*, 2016, doi:10.1080/15481603.2016.1162345
- 19 *Mioduszewski, J. R., Rennermalm, Å. K., Robinson, D. A., and Wang, L.: Controls on Spatial and Temporal Variability in Northern Hemisphere Terrestrial Snow Melt Timing, 1979–2012. *J. Climate*, 28, 2136–2153. *Journal of Climate*, 2015, doi:10.1175/JCLI-D-14-00558.1
- 18 *Moustafa, S. E., Rennermalm, Å. K., Smith, L. C., Miller, M. A., *Mioduszewski, J. R., Koenig, L. S., Hom, M. G., and Shuman, C. A.: Multi-modal albedo distributions in the ablation area of the southwestern Greenland Ice Sheet. *The Cryosphere*, 9, 905–923. *The Cryosphere*, 2015, doi:10.5194/tc-9-905-2015
- 17 Smith, L. C., Chu, V. W., Yang, K., Gleason, C. J., Pitcher, L. H., Rennermalm, Å. K., Legleiter, C. J., Behar, A. E., Overstreet, B. T., *Moustafa, S. E., Tedesco, M., Forster, R. R., LeWinter, A. L., Finnegan, D. C., Sheng, Y., and Balog, J.: Efficient meltwater drainage through supraglacial streams and rivers on the southwest Greenland ice sheet. *Proc. Natl. Acad. Sci. U.S.A.*, 112, 1001–1006. *Proceedings of the National Academy of Sciences*, 2015, doi:10.1073/pnas.1413024112

- 16 *Mioduszewski, J. R., Rennermalm, Å. K., Robinson, D. A., and Mote, T. L.: Attribution of snowmelt onset in Northern Canada. *J. Geophys. Res. Atmos.*, 119, 9638–9653. *Journal of Geophysical Research: Atmospheres*, 2014, doi:10.1002/2013JD021024
- 15 Tedesco, M., Box, J. E., Cappelen, J., Fettweis, X., Jensen, T. S., Mote, T., Rennermalm, Å. K., Smith, L. C., van de Wal, R. S. W., and Wahr, J.: The Arctic: Greenland Ice Sheet in “State of the Climate 2013.” *Bull. Am. Meteorol. Soc.*, 95, S136–S137. *Bulletin of the American Meteorological Society*, 2014, doi:10.1175/2014BAMSStateoftheClimate.1
- 14 Rennermalm, Å. K., *Moustafa, S. E., *Mioduszewski, J., Chu, V. W., Forster, R. R., Hagedorn, B., Harper, J. T., Mote, T. L., Robinson, D. A., Shuman, C. A., Smith, L. C., and Tedesco, M.: Understanding Greenland ice sheet hydrology using an integrated multi-scale approach. *Environ. Res. Lett.*, 8, 015017. *Environmental Research Letters*, 2013, doi:10.1088/1748-9326/8/1/015017
- 13 Rennermalm, Å. K., Smith, L. C., Chu, V. W., Box, J. E., Forster, R. R., Van den Broeke, M. R., Van As, D., and *Moustafa, S. E.: Evidence of meltwater retention within the Greenland ice sheet. *The Cryosphere*, 7, 1433–1445. *The Cryosphere*, 2013, doi:10.5194/tc-7-1433-2013
- 12 Chu, V. W., Smith, L. C., Rennermalm, Å. K., Forster, R. R., and Box, J. E.: Hydrologic controls on coastal suspended sediment plumes around the Greenland Ice Sheet. *The Cryosphere*, 6, 1–19. *The Cryosphere*, 2012, doi:10.5194/tc-6-1-2012
- 11 Rennermalm, Å. K., Bring, A., and Mote, T. L.: Spatial and Scale-Dependent Controls on North American Pan-Arctic Minimum River Discharge. *Geogr. Anal.*, 44, 202–218. *Geographical Analysis*, 2012, doi:10.1111/j.1538-4632.2012.00849.x
- 10 Rennermalm, Å. K., Smith, L. C., Chu, V. W., Forster, R. R., Box, J. E., and Hagedorn, B.: Proglacial river stage, discharge, and temperature datasets from the Akuliarusiaruup Kuua River northern tributary, Southwest Greenland, 2008–2011. *Earth Syst. Sci. Data*, 4, 1–12. *Earth System Science Data*, 2012, doi:10.5194/essd-4-1-2012
- 9 Rennermalm, Å. K., Nordbotten, J. M., and Wood, E. F.: Hydrologic variability and its influence on long-term peat dynamics. *Water Resour. Res.*, 46. *Water Resources Research*, 2010, doi:10.1029/2009WR008242
- 8 Rennermalm, Å. K., Wood, E. F., and Troy, T. J.: Observed changes in pan-arctic cold-season minimum monthly river discharge. *Clim. Dyn.*, 35, 923–939. *Climate Dynamics*, 2010, doi:10.1007/s00382-009-0730-5
- 7 Chu, V. W., Smith, L. C., Rennermalm, Å. K., Forster, R. R., Box, J. E., and Reeh, N.: Sediment plume response to surface melting and supraglacial lake drainages on the Greenland ice sheet. *J. Glaciol.*, 55, 1072–1082. *Journal of Glaciology*, 2009, doi:10.3189/002214309790794904
- 6 Rennermalm, Å. K., Smith, L. C., Stroeve, J. C., and Chu, V. W.: Does sea ice influence Greenland ice sheet surface-melt? *Environ. Res. Lett.*, 4, 024011. *Environmental Research Letters*, 2009, doi:10.1088/1748-9326/4/2/024011
- 5 Grøndahl, L., Friberg, T., Christensen, T. R., Ekberg, A., Elberling, B., Illeris, L., Nordstrøm, C., Rennermalm, Å., Sigsgaard, C., and Søgaard, H.: Spatial and Inter-Annual Variability of Trace Gas Fluxes in a Heterogeneous High-Arctic Landscape, in: *Advances in Ecological Research*, vol. 40, Academic Press, 473–498. *Advances in Ecological Research*, 2008, doi:10.1016/S0065-2504(07)00020-7

- 4 Rennermalm, Å. K., Wood, E. F., Weaver, A. J., Eby, M., and Déry, S. J.: Relative sensitivity of the Atlantic meridional overturning circulation to river discharge into Hudson Bay and the Arctic Ocean: AMOC Sensitivity to Arctic Runoff. *J. Geophys. Res.*, 112. *Journal of Geophysical Research*, 2007, doi:10.1029/2006JG000330
- 3 Rennermalm, Å. K., Wood, E. F., Déry, S. J., Weaver, A. J., and Eby, M.: Sensitivity of the thermohaline circulation to Arctic Ocean runoff. *Geophys. Res. Lett.*, 33, L12703. *Geophysical Research Letters*, 2006, doi:10.1029/2006GL026124
- 2 Déry, S. J., Stieglitz, M., Rennermalm, Å. K., and Wood, E. F.: The Water Budget of the Kuparuk River Basin, Alaska. *J. Hydrometeorol.*, 6, 633–655. *Journal of Hydrometeorology*, 2005, doi:10.1175/JHM434.1
- 1 Rennermalm, Å. K., Soegaard, H., and Nordstroem, C.: Interannual Variability in Carbon Dioxide Exchange from a High Arctic Fen Estimated by Measurements and Modeling. *Arct. Antarct. Alp. Res.*, 37, 545–556. *Arctic, Antarctic, and Alpine Research*, 2005, doi:10.1657/1523-0430(2005)037[0545:IVICDE]2.0.CO;2

Articles in Non-refereed or General Journals

- 2 Holzer, M. and Rennermalm, Å. K.: Arctic Happenings – Global Impacts of the Melting Greenland Ice Sheet and Melting Sea Ice. *The Earth Scientist*, 12–17, 2019.
- 1 Rennermalm, Å. K., *Mioduszewski, J., and *Moustafa, S.: Breaking the ice: Theorizing the mechanisms of Arctic thaw. *Eos Transactions AGU*, 2012, doi:10.1029/2012EO420006

Datasets in Research Data Repositories

- 19 *Leidman, S. and Rennermalm, A.: GPS and Water Depth Measurements of the Thalweg of a Supraglacial Stream in Southwest Greenland, 2019. Arctic Data Center, 2024, doi:10.18739/A22R3NZ8S
- 18 Vandecrux, B., Amory, C., Ahlstrøm, A. P., ..., Rennermalm, Å. K., et al.: The SUMup collaborative database: Surface mass balance, subsurface temperature and density measurements from the Greenland and Antarctic ice sheets (2024 release). Arctic Data Center, 2024, doi:10.18739/A2M61BR5M
- 17 *Leidman, S., Rennermalm, A., and Skiles, M.: Reflectance measurements from within and around a supraglacial stream in Southwest Greenland (67.15N, 50.00W) collected in August 2019. Arctic Data Center, 2023, doi:10.18739/A29G5GF85
- 16 *Leidman, S., Rennermalm, Å., Skiles, S. M., and *Muthyala, R.: Water Stage and Discharge of a Supraglacial Stream in Southwest Greenland (67.15N, 50.00W), July–August 2019. Arctic Data Center, 2023, doi:10.18739/A2D795C35
- 15 Covi, F., Hock, R., Rennermalm, A., *Leidman, S., Miege, C., Kingslake, J., Xiao, J., MacFerrin, M., and Tedesco, M.: Meteorological and firn temperature data from three weather stations in the percolation zone of southwest Greenland, 2017–2019. Arctic Data Center, 2022, doi:10.18739/A2BN9X444
- 14 *Xiao, J., Covi, F., Rennermalm, Å. K., and Hock, R.: Resampled density in 48 shallow firn cores from Southwest Greenland, 2012–2019. Arctic Data Center, 2022, doi:10.18739/A2CZ3263B

- 13 *Muthyala, R., Rennermalm, Å. K., *Leidman, S., Cooper, M., Cooley, S., and Smith, L.: 62 days of supraglacial streamflow from June–August 2016 over southwest Greenland. Arctic Data Center, 2022, doi:10.18739/A2XW47X5F
- 12 Cooper, M. G., Smith, L. C., Rennermalm, Å. K., Tedesco, M., *Muthyala, R., *Leidman, S. Z., *Moustafa, S. E., and Fayne, J. V.: Optical attenuation coefficients of glacier ice from 350–700 nm and raw irradiance values from 350–900 nm. PANGAEA, 2021, doi:10.1594/PANGAEA.930278
- 11 Rennermalm, Å. K., Hock, R., Covi, F., *Xiao, J., Corti, G., *Leidman, S., *Miege, C., Kingslake, J., MacFerrin, M., and Tedesco, M.: Density and ice layer stratigraphy in 24 shallow firn cores from Southwest Greenland, 2017–2019. Arctic Data Center, 2021, doi:10.18739/A2VH5CK05
- 10 Rennermalm, Å. K., Osterberg, E., Hock, R., *Xiao, J., Covi, F., *Leidman, S., MacFerrin, M., *Muthyala, R., and Tedesco, M.: Age-depth data and chemistry from a shallow firn core collected in Southwest Greenland, 2018. Arctic Data Center, 2021, doi:10.18739/A2086365J
- 9 Fettweis, X. and Rennermalm, Å. K.: Model simulations from Modèle Atmosphérique Regionale (MAR) over Greenland, 1948–2016. Arctic Data Center, 2020, doi:10.18739/A2H12V80V
- 8 *Hammann, A. and Rennermalm, Å. K.: Bias-corrected precipitation estimates for seven locations on Greenland’s east and south coasts, 1958–2013. Arctic Data Center, 2020, doi:10.18739/A2ZC7RV13
- 7 Holzer, M., Rennermalm, Å. K., Sinclair, P., and Fettweis, X.: Educational Module: Arctic Happenings – Global Impacts of the Melting Greenland Ice Sheet and Melting Sea Ice, 1961–2015. Arctic Data Center, 2020, doi:10.18739/A2TM7216N
- 6 *Leidman, S., Rennermalm, Å. K., *Muthyala, R., Overeem, I., Guo, Q., and Chu, V.: UAV imagery, DEM, and classification raster of a supraglacial stream in southwest Greenland (67.153N, –50.000W), 2017. Arctic Data Center, 2020, doi:10.18739/A2WH2DG0D
- 5 Cooper, M. G., Smith, L. C., Rennermalm, Å. K., Pitcher, L., Ryan, J. C., Yang, K., and Cooley, S. W.: Direct measurements of ice density at 1 m depth in the Greenland Ice Sheet ablation zone, July 2016. PANGAEA, 2018, doi:10.1594/PANGAEA.886748
- 4 Rennermalm, A. K., Smith, L. C., *Hammann, A. C., Leidman, S. Z., Cooper, M. G., Cooley, S. W., and Pitcher, L.: River discharge at station AK-004-001, 2008–2016, version 3.0. PANGAEA, 2017, doi:10.1594/PANGAEA.876357
- 3 *Moustafa, S. E., Rennermalm, Å. K., *Mioduszewski, J. R., and Smith, L. C.: Spectral and broadband albedo transects in the lower ablation zone, Southwest Greenland, June 2013. PANGAEA, 2016, doi:10.1594/PANGAEA.867917
- 2 Rennermalm, Å. K., Smith, L. C., Chu, V. W., *Moustafa, S. E., Pitcher, L., and Gleason, C.: Proglacial river dataset from the Akuliarusiarsuup Kuua River northern tributary, Southwest Greenland, 2008–2013, Version 2.0. PANGAEA, 2014, doi:10.1594/PANGAEA.838812
- 1 Rennermalm, Å. K., Smith, L. C., Chu, V. W., Forster, R. R., Box, J. E., and Hagedorn, B.: Proglacial river dataset from the Akuliarusiarsuup Kuua River northern tributary, Southwest Greenland, 2008–2010, version 1.0. PANGAEA, 2012, doi:10.1594/PANGAEA.762818

Research Fieldwork

- Hydrometeorological and glaciological studies, Kangerlussuaq and Camp Raven/Dye-2 area, Southwest Greenland, 2008–2013, 2015–2019, 2023–2025 (cancelled due to COVID in 2020–2022).
- Micrometeorological studies. Toolik Lake Research Station, Alaska, 2003.

- Micrometeorological studies. Zackenberg Ecological Research Station, Greenland, 1998, 1999.

Public Engagements and Media

- 2026 *The Atlantic*, “The Blind Spot at the Top of the World,” interview by Brett Simpson, February 13, 2026. [The Atlantic, Feb 2026](#).
- 2026 High North News, “U.S. Researcher Warns Europe: ‘You Are Only an Election Away’,” interview by Trine Jonassen, February 10, 2026. [High North News, Feb 2026](#).
- 2026 *El Periódico de la Energía*, “El Dorado Ártico,” interview, January 12, 2026. [El Periódico de la Energía, Jan 2026](#).
- 2025 *Sierra Magazine*, “The End of an Era for Arctic Research,” interview, October 2025. [Sierra Magazine, Oct 2025](#).
- 2025 *Nature*, “Sexual harassment is rife at US Antarctic research bases,” interview, August 2025. [Nature, Aug 2025](#).
- 2025 *TIME*, “Why Climate Change is Making Greenland Desirable to Trump,” interview, March 2025. [TIME, Mar 2025](#).
- 2025 *Trouw*, interview (Dutch), February 2025. [Trouw, Feb 2025](#).
- 2025 National Sawdust, *Meltdown* music theater premiere, scientific advisor, February 2025. [Meltdown, Feb 2025](#).
- 2024 *Nature Water*, “Unearthing the frozen frontiers,” interview, July 2024. [Nature Water, Jul 2024](#).
- 2021 Field of Vision, *Utugaq* (film by Iva Radivojevic), featured scientist, 2021. [Utugaq film, 2021](#).
- 2021 Science Friday, “Greenland’s Microbial Melt-Down,” interview, January 2021. [Science Friday, Jan 2021](#).
- 2020 PBS NOVA Polar Lab, “Meet the Experts,” feature, February 2020. [PBS NOVA, Feb 2020](#).
- 2019 *NRC Handelsblad*, “Glijden Op Het Smeltende Ijs van Groenland,” interview, October 2019. [NRC Handelsblad, Oct 2019](#).
- 2018 News 12 New Jersey, interview, November 2018. [News 12 NJ, Nov 2018](#).
- 2018 *National Geographic*, “Greenland’s ice sheets hold clues to global sea-level rise,” interview, October 2018. [National Geographic, Oct 2018](#).
- 2018 *Mission: Water Magazine*, “On Ice,” feature, 2018.
- 2017 Rutgers Today, interview, October 2017.
- 2017 Phys.org, interview, December 2017. [Phys.org, Dec 2017](#).
- 2016 U.S. State Department Blog, feature, February 2016. [State Dept Blog, Feb 2016](#).
- 2015 *The New York Times*, “Greenland is Melting Away,” interview, October 2015.
- 2014 Daily Targum, interview, November 2014.
- 2014 90.3 The Core (Rutgers Radio), radio interview, January 2014.
- 2014 WHYY The Pulse, “Documenting Climate Change through Art,” radio interview, March 2014. [WHYY The Pulse, Mar 2014](#).
- 2014 World Policy Blog, interview, September 2014.
- 2013 Rutgers Program in Digital Filmmaking, *North Pole Now* (student film), 2013.

- 2012 Kalaallit Nunaata Radioa (Greenlandic Broadcasting Corporation), radio interview, July 2012.
- 2012 International Business Times, interview, August 2012.
- 2012 China Central Television America, interview, December 2012.
- 2011 New York Times and Scientific American, “Probing a Glacier as It Thaws,” interview, August 2011.
- 2011 Associated Press (syndicated nationally), “On Endless Ice, Searching for Clues to Our Future,” interview, August 2011.

Scholarly Activity

Invited Addresses

- 2026 Arctic Frontiers, “The State of the Arctic,” Panelist, Tromsø, Norway.
- 2024 College of Staten Island, CUNY, GIS Day, “Mapping the Meltdown: Insights from Greenland’s Ice Sheet,” Staten Island, NY.
- 2024 Bard College, Deans Lecture, “Witnessing Climate Change: Why Greenland Ice Sheet Matters for All of Us,” Queens, NY.
- 2023 College of Staten Island, CUNY, GIS Day, “Meltdown in the Arctic: Why Greenland Ice Sheet Matters for All of Us,” Staten Island, NY.
- 2022 University of Delaware, Sustainability Development Goals Seminar Series, “Witnessing Climate Change: What I Have Learned from My Expeditions to the Greenland Ice Sheet,” Newark, DE.
- 2022 Montclair State University Sustainability Seminar Series, “Witnessing Climate Change,” Montclair, NJ.
- 2021 National Snow and Ice Data Center Cryosphere Seminar, “Decreasing Density and Ice Layer Volume in Near-Surface Firn in Southwest Greenland’s Percolation Zone, 2012–2019,” Boulder, CO.
- 2020 NASA GISS, “Spatial and Temporal Patterns in Ice Layers in Firn in Southwest Greenland’s Percolation Zone, 1989–2017,” Virtual.
- 2020 University of Colorado, Boulder, INSTAAR, “Following the Water on the Greenland Ice Sheet: Re-Freezing in Firn, Supraglacial Streams and River,” Boulder, CO.
- 2020 Princeton University, Plasma Physics Laboratory, “Witnessing Climate Change: What I Have Learned from My Expeditions to the Greenland Ice Sheet,” Science on Saturday series, Princeton, NJ.
- 2019 University of Delaware, Department of Geography, “Meltdown in the Arctic: A Perspective from the Greenland Ice Sheet,” Newark, DE.
- 2019 AGU Fall Meeting, “Spatial and Temporal Trends in Ice Lenses in Southwest Greenland, 1989–2017,” San Francisco, CA.
- 2019 UCLA, Department of Geography, “Meltdown in the Arctic,” Los Angeles, CA.
- 2018 Lehigh University, Department of Earth and Environmental Sciences, “Greenland Ice Sheet Melting: What Happens with All the Water?,” Bethlehem, PA.
- 2017 University of Florida, Department of Geological Sciences, “Greenland Ice Sheet Melting Away,” Gainesville, FL.
- 2017 University of Connecticut, Department of Geography, Storrs, CT.

- 2016 Clark University, Department of Geography, Worcester, MA.
- 2016 Temple University, Department of Earth and Environment, Philadelphia, PA.
- 2016 AGU Fall Meeting, “Understanding Greenland Ice Sheet Runoff Losses,” San Francisco, CA.
- 2015 AGU Fall Meeting, “What Terrestrial Glacial Meltwater Streams Reveal about Greenland Ice Sheet Hydrology,” San Francisco, CA.
- 2015 University of Massachusetts Amherst, Department of Geoscience, Amherst, MA.
- 2015 Geophysical Fluid Dynamics Laboratory, NOAA, Princeton, NJ.
- 2014 Montclair State University, Department of Earth and Environmental Studies, Montclair, NJ.
- 2014 Stony Brook University, Institute for Terrestrial and Planetary Atmospheres, Stony Brook, NY.
- 2014 The City College of New York, Department of Earth and Atmospheric Sciences, New York, NY.
- 2014 University of Georgia, Department of Geography, Athens, GA.
- 2013 CUNY, Earth and Environmental Sciences GEOS Seminar Series, New York, NY.
- 2013 Columbia University, White Arctic, Blue Arctic Workshop, New York, NY.
- 2013 Princeton University, Department of Geoscience, Princeton, NJ.
- 2013 Syracuse University, Department of Geography Colloquium, Syracuse, NY.
- 2013 University of Northern British Columbia, Natural Resources and Environment Studies Research Colloquium, Prince George, Canada.
- 2012 AGU Fall Meeting, “Evidence of Meltwater Retention within the Greenland Ice Sheet,” San Francisco, CA.
- 2012 University of Colorado, INSTAAR, Boulder, CO.
- 2012 University of Kansas, Center for Remote Sensing of Ice Sheets, Kansas City, KS.
- 2010 Institute of Global Environment and Society, Center of Ocean-Land-Atmosphere Studies, Calverton, MD.
- 2008 AGU Fall Meeting, “The Influence of Hydrologic Variability on Peatland Dynamics,” San Francisco, CA.

Lectures and Paper Presentations at Conferences and Symposia

- 2025 Arctic Circle, “Arctic Critical Minerals and Energy Transition: Rock Solid or Icy Prospects?,” Panelist, Reykjavik.
- 2025 Greenland Science Week, “The Ice Sheet and Climate Change: What I Have Learned Through Fieldwork Near Kangerlussuaq,” Sisimiut, Greenland.
- 2024 AGU Annual Meeting, “Meltdown: A Music-Theater Exploration of Climate Change and Women in Science,” Washington, D.C.
- 2024 AGU Annual Meeting, “Mapping Greenland’s Hidden Ice Slabs: The Influence of Surface Slope,” Washington, D.C.
- 2023 AGU Fall Meeting, “Greenland Ice Sheet Meltwater Export from a Small Land Terminating Glacier,” San Francisco, CA.
- 2023 AAG Annual Meeting, “Greenland Ice Sheet Meltwater Export from a Small Land Terminating Glacier,” Denver, CO.

- 2022 AGU Fall Meeting, “Designing a Physical Geography Field Course to Improve Accessibility and Inclusion for All Students,” Chicago, IL.
- 2020 AAG Annual Meeting, “Spatial and Temporal Trends in Ice Layers in Firn in Southwest Greenland’s Percolation Zone, 1989–2017,” Virtual.
- 2019 AGU Fall Meeting, “Spatial and Temporal Trends in Ice Lenses in Southwest Greenland, 1989–2017,” San Francisco, CA.
- 2019 Israel Academy of Sciences and Humanities / U.S. National Academy of Sciences, Fourth Israeli-American Kavli Frontiers of Science Symposium, Jerusalem, Israel.
- 2019 AAG Annual Meeting, “Increased Meltwater Refreezing in Southwest Greenland Ice Sheet Firn between 1989 and 2017,” Washington, D.C.
- 2019 NASA GSFC, Program for Arctic Regional Climate Assessment, Greenbelt, MD.
- 2018 AAG Middle States Annual Meeting, Montclair, NJ.
- 2017 AGU Fall Meeting, “Spatiotemporal Variability of Meltwater Refreezing in Southwest Greenland Ice Sheet Firn,” New Orleans, LA.
- 2017 AAG Annual Meeting, “Greenland Freshwater Export to Surrounding Oceans,” Boston, MA.
- 2016 NASA GSFC, Program for Arctic Regional Climate Assessment, Greenbelt, MD.
- 2015 International Glaciological Society, International Symposium on the Hydrology of Glaciers and Ice Sheets, Hofn, Iceland.
- 2015 AAG Annual Meeting, Chicago, IL.
- 2014 AGU Fall Meeting, “Polar Perspectives on Art and Science,” San Francisco, CA.
- 2014 AAG Annual Meeting, Tampa, FL.
- 2014 NASA GSFC, Program for Arctic Regional Climate Assessment, Greenbelt, MD.
- 2013 AAG Annual Meeting, Los Angeles, CA.
- 2013 NASA GSFC, Program for Arctic Regional Climate Assessment, Greenbelt, MD.
- 2013 NASA GSFC, Surface Mass Balance and Snow on Sea Ice Working Group, Greenbelt, MD.
- 2012 AAG Annual Meeting, New York, NY.
- 2012 NASA GSFC, Program for Arctic Regional Climate Assessment, Greenbelt, MD.
- 2012 Rutgers Geography Sixth MaGrann Symposium, New Brunswick, NJ.
- 2011 American Meteorological Society, 11th Conference on Polar Meteorology and Oceanography, Boston, MA.
- 2010 AAG Annual Meeting, Washington, D.C.
- 2010 University of Washington, Steve Burgess Retirement Symposium, Seattle, WA.
- 2009 AGU Fall Meeting, San Francisco, CA.
- 2009 AAG Annual Meeting, Las Vegas, NV.
- 2008 AGU Fall Meeting, San Francisco, CA.
- 2008 European Geoscience Union, General Assembly, Vienna, Austria.
- 2008 Max-Planck Institute for Biogeochemistry, NEESPI Workshop, Jena, Germany.

- 2007 AGU Fall Meeting, San Francisco, CA.
- 2007 International Arctic Research Center, Eurasian Hydroclimatology Workshop, Fairbanks, AK.
- 2006 AGU Fall Meeting, San Francisco, CA.

Poster Presentations (First Author Only)

- 2025 Greenland Science Week, “Hidden Ice Slabs in Southwest Greenland,” Nuuk, Greenland.
- 2018 AGU Fall Meeting, “Meltwater Refreezing in Southwest Greenland Ice Sheet Firn: Spatial Variability and Temporal Change Between 1989 and 2017,” Washington, D.C.
- 2018 Lamont Doherty Earth Observatory, Workshop on Antarctic Surface Hydrology and Future Ice Shelf Stability, Palisades, NY.
- 2017 Geological Survey of Denmark and Greenland, Workshop on Modeling Meltwater in Snow and Firn, Copenhagen, Denmark.
- 2015 Ilulissat Climate Days, Greenland Ice Sheet Meltwater Export and River Discharge, Ilulissat, Greenland.
- 2014 AGU Fall Meeting, San Francisco, CA.
- 2013 AGU Fall Meeting, San Francisco, CA.
- 2012 AGU Fall Meeting, San Francisco, CA.
- 2010 AGU Fall Meeting, San Francisco, CA.
- 2007 Arctic Research Consortium of the U.S., Annual Meeting, Washington, D.C.
- 2006 Freshwater Initiative, All-hands meeting, Estes Park, CO.
- 2005 AGU Fall Meeting, San Francisco, CA.
- 2000 European Geophysical Society, General Assembly, Nice, France.

Other Presentations

- 2023 Rutgers Honors College, “Witnessing Climate Change: What I Have Learned from My Expeditions to the Greenland Ice Sheet,” Panelist, New Brunswick, NJ.
- 2022 Rutgers Mason Gross School of the Arts, Visiting Filmmaker series: *Utuaq*, Panelist, New Brunswick, NJ.
- 2022 Rutgers, Tea & Teachings with Jenevieve DeLosSantos, Guest speaker, Virtual.
- 2022 Rutgers Scarlet Speaker, Presenter, Virtual.
- 2021 Rutgers Active Learning Symposium, Panelist, Virtual.
- 2019 Rutgers Geological Museum Open House, “Meltdown in the Arctic: A Perspective from the Greenland Ice Sheet,” New Brunswick, NJ.
- 2016 Association of Polar Early Career Scientists, Early Career lunchtime panel at AGU Fall Meeting, San Francisco, CA.
- 2016 Foreningen Norden, Seminar series, “Is the Greenland Ice Sheet Melting Away?,” Invited Speaker, Stockholm, Sweden.

- 2016 Chatham High School, Physical Geography Class, Guest Lecture, Chatham, NJ.
2016 University of Pennsylvania Law School, American Constitution Society and the Environmental Law Project, “Too Little Too Late,” Panelist, Philadelphia, PA.
2015 Chatham High School, Physical Geography Class, Guest Lecture, Chatham, NJ.
2014 Zimmerli Art Museum, Chatham High School Physical Geography Class Visit, “Glacial Perspectives,” New Brunswick, NJ.
2013 Zimmerli Art Museum, Teacher Workshop: Arctic Visions Melting Visions, Lecture, New Brunswick, NJ.
2013 Chatham High School, Physical Geography Class, Guest Lecture, Chatham, NJ.
2013 Syracuse University, Geography of the Anthropocene, Guest lecture, Syracuse, NY.
2013 Barents Spektakel, Visionary Arctic Seminar, “Arctic Meltdown,” Kirkenes, Norway.
2010 Rutgers, Earth and Planetary Sciences Colloquium, Piscataway, NJ.
2010 Princeton University, Graduate Engineering Council, Energy and Environment, Panelist, Princeton, NJ.
2009 Rutgers New Faculty Seminar Series, “Greenland: Meltdown in the North,” Piscataway, NJ.

Organizing and Chairing Activities

- 2025 AGU Annual Meeting, “The Cryosphere Is for All: Overcoming Barriers to Participation in the Cryospheric Sciences,” Moderator, New Orleans, LA.
2025 AGU Annual Meeting, “Societal Impact of Earth and Space Sciences,” Moderator, New Orleans, LA.
2025 AGU Annual Meeting, “The End of the Golden Era of Polar and Cryosphere Science in the United States?,” Session organizer and chair, New Orleans, LA.
2025 AGU Annual Meeting, Nye Lecture, Session organizer and chair, New Orleans, LA.
2024 AGU Annual Meeting, Nye Lecture, Session organizer and chair, Washington, D.C.
2024 Sixth Israeli-American Kavli Frontiers of Science Symposium, Organizing committee, Jerusalem, Israel.
2023 AGU Annual Meeting, Nye Lecture, Session organizer and chair, San Francisco, CA.
2023 AAG Annual Meeting, “Cryospheric Changes,” Session organizer and chair, Denver, CO.
2022 AGU Fall Meeting, “Advances in Glacier and Ice Sheet Hydrology,” Session organizer and chair, Chicago, IL.
2022 Arctic Research Consortium of the United States, Annual meeting, Organizing committee, Virtual.
2022 Fifth Israeli-American Kavli Frontiers of Science Symposium, Organizing committee, San Diego, CA.
2020 AAG Annual Meeting, “Advances in Cryosphere Research,” Session organizer and chair, Virtual.

- 2018 Greenland Ice Sheet–Ocean Interactions Research Network, Workshop on Greenland Freshwater Fluxes, Washington, D.C.
- 2018 Lamont-Doherty Earth Observatory, Workshop on Antarctic Surface Hydrology and Ice Shelf Stability, New York, NY.
- 2017 Geophysical Information for Teachers (GIFT) Workshop, AGU Fall Meeting, New Orleans, LA.
- 2017 Geological Survey of Denmark and Greenland, Workshop on Modeling Meltwater in Snow and Firn, Copenhagen, Denmark.
- 2016 Lamont-Doherty Earth Observatory, Greenland Surface Mass Balance Workshop, Organizing committee, New York, NY.
- 2015 AAG Annual Meeting, R.S. Tarr Student Illustrated Paper Competition, Session organizer and chair, Chicago, IL.
- 2015 New Generation Polar Researchers Leadership Symposium, Mentor, Catalina Island, CA.
- 2015 Rutgers Symposium, “Climate Change in Polar Regions,” Steering committee and panel moderator, New Brunswick, NJ.
- 2014 Rutgers Workshop, “High-Performance and Distributed Computing for Polar Sciences,” Steering committee and organizer, New Brunswick, NJ.
- 2014 AGU Fall Meeting, “Glacier, Ice Cap, and Ice Sheet Hydrology,” Session organizer and chair, San Francisco, CA.
- 2014 AAG Annual Meeting, R.S. Tarr Student Illustrated Paper Competition, Session organizer and chair, Tampa, FL.
- 2013 AAG Annual Meeting, “Arctic Hydrology in a Changing Climate,” Session organizer and chair, Los Angeles, CA.
- 2012 AGU Fall Meeting, “Glacier, Ice Cap, and Ice Sheet Hydrology,” Session organizer and chair, San Francisco, CA.
- 2012 Rutgers Geography Sixth MaGrann Symposium, “Breaking the Ice: Theorizing the Mechanisms of Arctic Thaw,” Organizer, New Brunswick, NJ.
- 2010 AAG Annual Meeting, “Land, Ocean, and Atmosphere in a Changing Arctic,” Session organizer and chair, Washington, D.C.

Externally Funded Research Grants

- 2019–2022 (\$127,207) NASA: “Representing Surface Meltwater Runoff in Greenland Ice Sheet Models.” Laurence C. Smith, Åsa K. Rennermalm. Role: Co-Principal Investigator.
- 2016–2019 (\$391,939) NSF Award #1604058: “Collaborative Research: Refreezing in the Firn of the Greenland Ice Sheet: Spatiotemporal Variability and Implications for Ice Sheet Mass Balance.” Åsa K. Rennermalm, Regine Hock, Marco Tedesco. Role: Principal Investigator.
- 2014–2017 (\$124,510) NASA: “Drainage Efficiency of the Greenland Ice Sheet’s Supraglacial River Network.” Laurence C. Smith, Åsa K. Rennermalm. Role: Co-Principal Investigator.

- 2013–2016 (\$295,659) NSF Award #PLR-1304805: “Collaborative Research: Assessing the Impact of Arctic Sea Ice Variability on the Greenland Ice Sheet Surface Mass and Energy Balance.” Julianne C. Stroeve, Mark C. Serreze, Åsa K. Rennermalm, Marco Tedesco. Role: Principal Investigator.
- 2013–2016 (\$134,087) NASA Award #NNX14AD98G: “From the Ice Sheet to the Sea: An Interdisciplinary Study of the Impact of Extreme Melt on Ocean Stratification and Productivity near West Greenland.” Thomas Mote, Kevin Arrigo, Renato Castelao, Åsa K. Rennermalm, Marco Tedesco, Patricia Yager. Role: Co-Principal Investigator.
- 2012–2015 (\$90,000) NASA Earth and Space Science Fellowship #NNX12AN98H: “Assessing Greenland Ice Sheet Meltwater Losses Through Braided Rivers.” Student fellowship to Samiah E. Moustafa. Role: Principal Investigator.
- 2011–2014 (\$189,809) NASA Award #NNX11AQ38: “Towards Hydrologic Understanding of the Greenland Ice Sheet.” Laurence C. Smith, Åsa K. Rennermalm, Yongwei Sheng. Role: Co-Principal Investigator.

Externally Funded Co-Curricular Programming Grants

- 2013 (\$1,600) Consortium of Universities for the Advancement of Hydrologic Science, Inc. (CUAHSI): “Let Us Talk About Water.” A. K. Rennermalm, T. Birkenholz. Role: Principal Investigator.
- 2011 (\$2,000) Arctic Research Consortium of the United States: “Arctic Visiting Speaker Series.” A. K. Rennermalm, M. Holzer. Role: Principal Investigator.

Internally Funded Research Grants

- 2026–2027 (\$70,000) School of Arts and Sciences Research in Academic Themes: “AI–Geoscience Collaborations for a Changing Arctic.” Åsa Rennermalm, Ruixiang Tang, Yongfeng Zhang. Role: Principal Investigator.
- 2025–2026 (\$9,000) MaGrann Fund, Department of Geography: “Fostering Interdisciplinary Connections Between Physical and Human Geography: Climate Change and Arctic Resource Dynamics.” Åsa Rennermalm, Andrea Marston. Role: Principal Investigator.
- 2025–2026 (\$15,000) Rutgers Climate and Energy Institute: “AI Detection of Meltwater on the Greenland Ice Sheet.” Åsa K. Rennermalm, Ruixiang Tang, Yongfeng Zhang.
- 2025–2026 (\$3,000) MaGrann Fund, Department of Geography: “Mapping of Greenland Ice Sheet Surface Streams.” Åsa Rennermalm. Role: Principal Investigator.
- 2020–2021 (\$14,988) Global Environmental Change Grants: “Towards Understanding Greenland Ice Sheet Melting by Mapping Boundary Layer Properties with UAV.” Åsa K. Rennermalm, Kyle Mattingly, Mark Miller. Role: Principal Investigator.
- 2012 (\$18,520) Faculty Research Grant Program: “Towards Understanding Greenland Ice Sheet’s Riverine Runoff.” Åsa K. Rennermalm. Role: Principal Investigator.

Internally Funded Curricular Programming Grants

- 2015–2016 (\$1,000) Global Initiatives: Global Urbanism!, “Support for Geography Seminar Series: Focus on Global Urbanism.” Åsa K. Rennermalm. Role: Principal Investigator.
- 2013–2014 (\$2,500) Global Initiatives: Global Health, “Support for Polar Perspectives on Science and Art.” Åsa K. Rennermalm, Hal Salzman, Donna Gustafsson. Role: Principal Investigator.
- 2011–2012 (\$600) Global Initiatives: Technologies Across Borders, “Support for two seminar speakers.” Åsa K. Rennermalm. Role: Principal Investigator.
- 2010–2011 (\$750) Global Initiatives: Ecologies in the Balance?, “Support for three seminar speakers.” Åsa K. Rennermalm. Role: Principal Investigator.

Students and Postdoctoral Mentorship

Doctoral Dissertation Advisor

- 2022–present Md Arafat Hassan, Greenland Ice Sheet Surface Rivers.
- 2018–2025 Jing Xiao, Understanding Increasing Meltwater Refreezing in Southwest Greenland Ice Sheet Firn.
- 2017–2024 Sasha Leidman, Predicting the Impact of the Supraglacial Streamflow–Albedo Feedback on Greenland Runoff.
- 2016–2023 Rohi Muthyala, Modeling of the Greenland Ice Sheet Supraglacial River.
- 2016–2023 Isatis Cintrón, Light Absorbing Particles and Trace Elements in Southwest Greenland Snow. Co-advisor.
- 2011–2017 Samiah E. Moustafa, Assessing Greenland Ice Sheet Meltwater Losses at the Pixel, Catchment, and Continental Scale.
- 2009–2015 John R. Mioduszewski, Characterization and Attribution of Spring Snow Melt over Northern Hemisphere Lands. Co-advisor.

Master Students

- 2025–present Bignan Liu, Greenland Ice Sheet Atmospheric Rivers and Cloud Formation. Master Thesis Advisor.
- 2023–2024 Journey Berry, 4+1 Master program in Geology.

Postdoctoral Associates

- 2019–2021 Kyle Mattingly.
- 2018–2019 Clement Mieke.

Aresty Undergraduate Research Assistants

- 2015 Yunpeng Lyu, Analysis of Northeast Greenland Near-surface Conditions. Poster presented at AAG Annual Meeting.
- 2015 Vincent Quinton, Greenland Ice Sheet Meltwater Export Characteristics. Poster presented at AAG Annual Meeting. Won the Cryosphere Section's best student presentation award.
- 2014 Derek Baquero, Precipitation Analysis in Relation to Greenland's Melting Ice Sheet and a Changing Global Climate.
- 2012 Carolina Guzman, Surface Climate along a Greenland Transect.
- 2011 Aimee Blenner, Using Remote Sensing to Analyze Greenland's Braided Rivers.

Undergraduate Independent Studies Supervised

- 2023 Journey Berry, Historical Evolution and Possible Triggers for the Retreat of Bear Glacier Lagoon, Alaska.
- 2023 Astrid Carter, Mapping Supraglacial Streams on the Greenland Ice Sheet.
- 2021 Miguel Romero, Greenland Ice Sheet Melting.
- 2018 Kierin Rogers, The Cryosphere and Greenland.
- 2016 Jared Schenkel, The Cryosphere and Greenland.
- 2014 Derek Baquero, The Cryosphere and Greenland.
- 2013 Andrew Fried, Elizabeth Miller, and Britta Rotermund, Land Surface Hydrology.
- 2013 Daniel Williams, Greenland Ice Sheet Surface Climate.
- 2011 Zachary Vajda, Greenland Ice Sheet Discharge.

Undergraduate Internships Supervised

- 2025 Sararose Salluce, Raptors Trust.
- 2025 Chandler Potter, Montgomery Township.
- 2023 Hannah Wetter, The Environmental Protection Agency.
- 2022 Noam Ahron, Public Services Enterprise Group.
- 2022 Tara Duffy, Parks and Recreation Department, East Brunswick Township.
- 2022 Evalina Macejka, United States Coast Guard Academy.
- 2018 Sean Halpin, American Geographical Society.
- 2017 Anthony Adams, Raritan Headwaters Association.
- 2017 Stephen Zuckerman, Middlesex County Department of Planning.
- 2017 David Le, Middlesex County Office of Planning.
- 2017 MacKenzie Heffernan, Pretty Girls Sweat.
- 2017 Brian McCrystal, Whittemore Community, Culture, and Conservation.
- 2016 Jessica Willoughby, Clearwater Marine Aquarium.
- 2016 Ryan Buttone, Middlesex County.
- 2016 Samuel Ferrara, Burlington County.
- 2015 Erin Nigro, Burlington County.

2015	Joshua Rozenberg, Mahwah Environmental Volunteers Organization.
2014	Stephen Gryszel, Metropolitan Transport Authority.
2014	David Ferraro, Union County.
2014	Raymond Soto, Burlington County.
2013	Jamie Donatiello, Vertices.
2013	Justin Lilly, Lansdale Borough.
2011	Monica Napolitano, New Jersey Department of Environmental Protection.

Teaching Activities

Large Enrollment Courses

Earth Systems (200–300 students per offering), taught regularly since 2010.

Upper-Level Courses

Advanced Geographic Information Systems
Advanced Physical Geography: Polar Environments
Advanced Physical Geography: Surface Water
Field Methods
Geographical Hydrology
Geographical Research Methods
Global Climate Systems
Spatial Data Analysis, taught regularly since 2010

Graduate Seminars

Glaciers and Climate Change
The World in 2050

Instructional Development

2018–2025	Learning Assistant Program. Mentored two to three undergraduate learning assistants annually in the Earth Systems course.
2021	Rutgers Active Learning Symposium, Panelist.

Service

Professional Service

2023–2024	American Association of Geographers, Justice, Equity, Diversity, and Inclusion subcommittee on focused listening, member.
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2022–2024	AGU Cryosphere Section’s Fellows Nomination Committee, Chair since 2023.
2022–2023	Arctic Research Consortium of the United States (ARCUS), Membership & Development Committee, member.
2020–2024	Israeli-American Kavli Frontiers of Science Symposium, Organizing committee, member.
2011–2024	Consortium of Universities for the Advancement of Hydrologic Sciences, Inc., Representative for Rutgers University.
2021	NSF: “Crevasse Risk Management and Safety Workshop,” June, Virtual, participant.
2013–2016	AAG Cryosphere Specialty Group, Board member.

Selected University Service

2024–2025	Faculty Search Committee “State Climatologist,” member.
2024–2025	Faculty Search Committee “Data Science/AI of Extreme Events,” member.
2023–2024	Chancellor-Provost Challenge, Cyberinfrastructure for AI for Science & Engineering, team member.
2023–2024	Facilitating recruitment and retention of BIPOC students in Geoscience, Sloan funded initiative, participant.
2021–2024	School of Arts and Sciences Office of Undergraduate Education, Advisory committee for program assessments.
2018–2024	Signature Course Steering Committee, member (multiple terms).
2023	Discovery Advantage Focus Group, member.
2022	Promotion Committee, Office of Undergraduate Education.
2021	Rutgers Unlearning Racism in Geosciences Pod, member.
2018–present	Advancement and Promotion Committee, School of Arts and Sciences (multiple terms).
2019	Rutgers Polar Day, Organizer.
2018–2019	Henry Rutgers Chair Search Committee, member.
2017–2018	EOAS Strategic Planning for Polar Science theme, Co-chair.
2016–2018	Atmospheric sciences graduate program admissions committee, member.
2016–2017	School of Arts and Sciences Nominations Committee, member.
2015	Global Advisory Board, Douglas Residential College, member.
2013	Polar Perspectives on Science and Art, Zimmerli Museum, Organizing committee.
2013	Rutgers Climate Institute, “Bridging the Climate Divide,” Panelist.
2013	Rutgers Climate Institute, Climate Change Education Workshop, Planning committee.
2013	Students for Environmental Awareness and Rutgers Geology Club, Earth Day Film Festival, Panelist.
2011	Institute for Women and Art, “Global Warming: Women in Science and Art Discuss Climate Issues and Activism,” Panelist.

Selected Department Service

2026	Applying Climate Science: A Symposium Honoring David A. Robinson’s Scholarship and Service, Organizer.
2024–2025	Faculty Search Committee “Remote Sensing and Biodiversity,” member.
2021–2022	Physical Geography Justice, Equity, Diversity and Inclusion Study Group.
2011–2023	Graduate program admission committee member (multiple terms).
2010–2019	Department seminar series coordinator.

Panel and Proposal Review

National Aeronautics and Space Administration (Early Career Investigator Program); National Science Foundation, Office of Polar Programs (multiple panel and ad hoc reviews); Natural Sciences and Engineering Research Council of Canada; Natural Environment Research Council (UK); Swiss National Science Foundation; Netherlands Organisation for Scientific Research (NWO), Polar Programme.

Manuscript Review

Reviewer for 25+ journals including *Nature*, *Nature Climate Change*, *Nature Communications*, *Science Advances*, *Journal of Climate*, *Journal of Glaciology*, *Water Resources Research*, and *The Cryosphere*.

Languages

Swedish (native); English (fluent); Danish (professional working proficiency); French (approximate B1 proficiency).