Ann Victoria Rowan

ORCID: <u>0000-0002-3715-5554</u> https://www.uib.no/en/persons/Ann.Rowan

EDUCATION

2012 PhD, Department of Earth Sciences, University of Manchester, UK

Supervisor: Dr. Simon Brocklehurst

2007 BSc (Hons, 1st Class) Environmental and Resource Geology, Department of Earth Sciences,

University of Manchester, UK

CURRENT POSITION

2022 – Associate Professor (tenured), Department of Earth Science, University of Bergen, Norway

PREVIOUS POSITIONS

2022	Senior Research Fellow (tenured), Department of Geography, University of Sheffield, UK
2014 - 2021	Research Fellow (tenured in 2015), Department of Geography, University of Sheffield, UK
2012 - 2014	Research Fellow, Department of Geography and Earth Science, Aberystwyth University, UK

FELLOWSHIPS AND AWARDS

I ELEC III	an on the fivilities
2022	Fondation Herbette Visiting Professorship, University of Lausanne, Switzerland (2 months)
2020-2022	Royal Society Dorothy Hodgkin Fellowship (5-year personal research fellowship)
2015-2020	University of Sheffield Vice Chancellor's Fellowship (4-year personal research fellowship)
2016	Geological Society of London, President's Award
2015	The Penck Lecture (keynote for the outstanding young scientist in the Geomorphology
	section), European Geosciences Union General Assembly, Austria
2014-2015	University of Sheffield Ice and Climate Research Fellowship (1-year postdoctoral research
	fellowship)
2014	British Society for Geomorphology Dick Chorley Award for Postgraduate Research
2012-2014	Climate Change Consortium of Wales Research Fellowship (3-year postdoctoral
	fellowship)
2007-2011	UK Natural Environment Research Council (NERC) PhD studentship (3.5-year doctoral
	research fellowship)
2007	Colin Hatfield award for best dissertation in BSc Geology, University of Manchester, UK

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2022 -	Main supervision of 1 PhD candidate (ongoing) and co-supervision of 1 PhD candidate
	(ongoing), Department of Earth Science, University of Bergen

- 2014 2022 Main supervision of 4 PhD candidates (1 ongoing), co-supervision of 5 PhD candidates (1 ongoing), main supervision of 4 postdoctoral researchers and 7 Masters students, Department of Geography, University of Sheffield
- 2012 2014 Main supervision of 1 PhD candidate and 3 Masters students, Department of Geography and Earth Science, Aberystwyth University

TEACHING ACTIVITIES

- 2022 Course leader for bachelor-level classes at University of Bergen: Field excursion in Quaternary Geology and Palaeoclimate (10 ECTS) and Introduction to Earth Science and Informatics (10 ECTS). Teacher for Glacial Geology and Geomorphology (10 ECTS).
- 2015 2021 Co-teaching as research staff in a range of classes in glaciology, palaeoglaciology and geomorphology including lectures, practical classes and field classes, University of Sheffield

ORGANISATION OF SCIENTIFIC MEETINGS

2021-2024	Lead/Co-convenor of session Dates, Rates and Bytes: Quantifying Geomorphological
	Processes and Landscape Dynamics, European Geosciences Union, Austria
2022	Organiser of Royal Society Research Fellows' Network annual meeting, London
2019	Organising Committee Chair for British Society for Geomorphology Annual Meeting,
	University of Sheffield
2019	Lead Convener of Holocene Glacier Change in High Mountain Asia, International

Quaternary (INQUA) congress, Ireland

2016 Co-convenor of session *Debris-Covered Glaciers*, European Geosciences Union, Austria

INSTITUTIONAL RESPONSIBILITIES

2022 - 2024	UiB lead for International Quaternary Webinars seminar series, Norway/USA
2020 - 2022	Co-Leader of Environmental Challenges Research Group, University of Sheffield
2019 - 2022	Member of the Equality, Diversity and Inclusion Committee, University of Sheffield
2018 - 2021	Coordinator of Physical Geography research seminar series, University of Sheffield
2016 - 2021	Thesis Mentor, University of Sheffield

REVIEWING ACTIVITIES

2023 - 2031	Member of the Swiss National Science Foundation Ambizione (MINT) Fellowship Panel
2023 - 2024	Member of the EarthArXiv Advisory Council
2020 - 2024	Member of UK Natural Environment Research Council (NERC) Peer Review College and
	UK Research and Innovation (UKRI) Future Leaders Fellowships Peer Review College
2019 - 2024	Associate Editor for Journal of Geophysical Research-Earth Surface, an American
	Geophysical Union publication
2022 - 2023	PhD evaluation committee member for 2 candidates at UiB
2018 - 2022	PhD evaluation committee member for 7 students in the UK (5 as external examiner)
2018	PhD committee member ("examinatrice"), Universite Grenoble Alpes, France

Peer-review for funding bodies: UK Natural Environment Research Council (NERC); UK Research and Innovation (UKRI); UK Royal Geographical Society; Swiss National Science Foundation (SNSF); Dutch Research Council (NWO); German Research Foundation (DFG); Austrian Science Fund (FWF), French Agence Nationale de la Recherche (ANR), US National Science Foundation (NSF).

Peer-review for journals including: Area, Cryosphere; Earth and Planetary Science Letters; Earth Surface Processes and Landforms; Geology; Nature; Nature Geoscience; Quaternary Science Reviews; Science.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2014 – European Geosciences Union
2012 – International Glaciological Society
2008 – British Society for Geomorphology
2008 – American Geophysical Union

CAREER BREAKS

12/2018 – 07/2019 Maternity leave, second child (8 months) 10/2016 – 05/2017 Maternity leave, first child (7 months)

TEN SELECTED PUBLICATIONS

Publications where the lead author was a graduate student under my supervision are marked with *.

- 1. Kirkbride, M.P., Sherriff, S.C., **Rowan, A.V.**, Egholm, D.L., Quincey, D.J., Miles, E., Hubbard, B. and Miles, K., 2023. Provenance and transport of supraglacial debris revealed by variations in debris geochemistry on Khumbu Glacier, Nepal Himalaya. *Earth Surface Processes and Landforms*. https://doi.org/10.1002/esp.5657
- *Hornsey, J., Rowan, A.V., Kirkbride, M.P., Livingstone, S.J., Fabel, D., Rodés, Á., Quincey, D.J., Hubbard, B., Jomelli, V. (2022) Be-10 dating of ice-marginal moraines in the Khumbu Valley, Nepal, Central Himalaya, reveals the response of monsoon-influenced glaciers to Holocene climate change. *Journal of Geophysical Research: Earth Surface 127:e2022JF006645* https://doi.org/10.1029/2022JF006645
 - This paper was selected as an Editor's Highlight and summarised in a short article in Eos, the science news magazine published by the American Geophysical Union.
- 3. **Rowan, A.V.**, Egholm, D.E., Clark, C.D. (2022) Forward modelling of the completeness and preservation of palaeoclimate signals recorded by ice-marginal moraines. *Earth Surface Processes and Landforms* **47**:2198–2208 https://doi.org/10.1002/esp.5371

- This paper is an invited research article in the special collection 'Geomorphology As A Tool For Understanding Glacier And Ice Sheet Behaviour' and part of the 'Women and Geomorphology Special Issue'
- 4. **Rowan, A.V.**, Nicholson, L.I., Quincey, D.J., Gibson, M.J., Irvine-Fynn, T.D.L., Watson, C.S., Wagnon, P., Rounce, D.R., Thompson, S.S., Porter, P.R., Glasser, N.G. (2021) Seasonally stable temperature gradients through supraglacial debris in the Everest region of Nepal, Central Himalaya. *Journal of Glaciology* **67**:170–181 https://doi.org/10.1017/jog.2020.100
- 5. *Bartlett, O., Ng, F.S.L., **Rowan, A.V.** (2020) Morphology and evolution of supraglacial hummocks on debris-covered Himalayan glaciers. *Earth Surface Processes and Landforms* **46**:525–539 https://doi.org/10.1002/esp.5043
- 6. *Miles, K., Hubbard, B., Quincey, D.J., Miles, E., Sherpa, T., **Rowan, A.V.**, Doyle, S. (2018) Polythermal structure of a Himalayan debris-covered glacier revealed by borehole thermometry *Scientific Reports* 8:16825 https://doi.org/10.1016/j.epsl.2019.02.020
 - This paper is one of 10 papers to date resulting from my three-year NERC project 'EverDrill'.
- 7. **Rowan, A.V.** (2017) The Little Ice Age in the Himalaya: a review of glacier advance driven by Northern Hemisphere temperature change. *The Holocene*, **27**:292–308 http://dx.doi.org/10.1177/0959683616658530
- 8. **Rowan, A.V.**, Egholm, D.L., Quincey, D.J., Glasser, N.F. (2015) Modelling the feedbacks between mass balance, ice flow and debris transport to predict the response to climate change of debriscovered glaciers in the Himalaya. *Earth and Planetary Science Letters*, **430**:427–438 http://dx.doi.org/10.1016/j.epsl.2015.09.004
- Rowan, A.V., Brocklehurst, S.H., Schultz, D.M., Plummer, M.A., Glasser, N.F. (2014) Late Quaternary glacier sensitivity to temperature and precipitation distribution in the Southern Alps of New Zealand. *Journal of Geophysical Research–Earth Surface*, 119:1064–1081 http://dx.doi.org/10.1002/2013JF003009
- 10. **Rowan, A.V.**, Plummer, M.A, Brocklehurst, S.H., Jones, M.A., Schultz, D.M. (2013) Drainage capture and discharge variations driven by glaciation in the Southern Alps, New Zealand. *Geology*, 41:199–20 http://dx.doi.org/10.1130/G33829.1

This paper was awarded the Chorley Medal for postgraduate research by the British Society for Geomorphology in 2014.

INVITED TALKS AND INTERVIEWS

Selected invited talks at international conferences and advanced schools (as presenting author):

- 2023 International Union of Geodesy and Geophysics General Assembly, Berlin, Germany, *Invited Speaker*
- 2022 European Geosciences Union General Assembly, Vienna, Austria, *Invited Speaker*
- 2022 European Geosciences Union Landscapes Live seminar (online)
- 2022 Institut des Dynamiques de la Surface Terrestre, Université de Lausanne, Switzerland
- 2021 Royal Society Meeting of Minds 'Sustainability' session (online, Invited Panellist
- 2020 European Geosciences Union General Assembly, Vienna, Austria, *Invited Speaker*
- 2019 American Geophysical Union Annual Meeting, San Francisco, Invited Speaker
- 2015 The Penck Lecture, European Geosciences Union General Assembly, Vienna, Keynote Speaker
- 2015 Department of Geosciences, Aarhus University, Denmark
- 2014 The Chorley Lecture, British Society for Geomorphology Annual Meeting, UK, Keynote Speaker
- 2014 Institute of Meteorology and Geophysics, Innsbruck University, Austria

Selected invited interviews and media engagement

- 2023 Filming for BBC-PBS documentary series on ice age climate (to broadcast in Spring 2025)
- 2023 Interviews with *The Economist* and *AGU Eos* about large historical Himalayan landslides.
- 2018 Royal Geographical Society podcast: "How do glacial surfaces evolve over time?".
- 2015 BBC Science and Environment news article about observations of glacier change in Nepal.
- 2014 BBC Radio 4 Inside Science interview about avalanche risk and climate change impacts in the Himalaya.