JENNIFER J. KASBOHM

CURRICULUM VITAE, 1 OF 6

Jennifer J. Kasbohm, Ph.D.

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EDUCATION

2013–2020 **Princeton University** (Princeton, NJ)

Ph.D. in Geosciences, June 2020.

NSF Graduate Fellow, Princeton University Centennial Fellowship.

Dissertation: "Calibrating Archean and Miocene large igneous province emplacement and geologic timescales with high-precision U-Pb zircon geochronology"

Adviser: Professor Blair Schoene

2009–2013 Yale University (New Haven, CT)

Bachelor of Science in Geology & Geophysics and Humanities with Distinction in both majors, May 2013.

Magna Cum Laude, Phi Beta Kappa.

Geology & Geophysics Senior Thesis: "A Paleomagnetic Reanalysis of the Auborus Formation, Namibia."

Adviser: Professor David Evans

APPOINTMENTS

2020-2023 National Science Foundation Earth Sciences Postdoctoral Fellow

Yale University (New Haven, CT) Department of Earth & Planetary Sciences.

Research Mentor: Professor Pincelli Hull. Award abstract

PEER-REVIEWED PUBLICATIONS

- Kasbohm, J., Schoene B., Montanari, A., Coccioni, R. (2021). High-precision U-Pb zircon geochronology of the Miocene Bisciaro Formation, Contessa Valley, Italy: A case study for requisite radiometric calibration of bio- and magnetostratigraphy. *Palaegeography, Palaeoclimatology, Palaeoecology* 576, 1-11. doi.org/10.1016/j.palaeo.2021.110487
- **Kasbohm, J.**, Schoene B., Burgess, S. (2021). Radiometric constraints on the timing, tempo, and effects of large igneous province emplacement. In *Large Igneous Provinces: A Driver of Global Environmental and Biotic Changes*. AGU Geophysical Monograph 255, review invited by editor Richard Ernst. doi.org/10.1002/9781119507444.ch2
- Kasbohm, J., Schoene B. (2018). Rapid eruption of the Columbia River flood basalt and correlation with the mid-Miocene climate optimum. *Science Advances* 4, eaat8223. doi.org/10.1126/sciadv.aat8223 <u>Princeton University press release</u> covered by Science Daily, Phys.org, Technology.org, and others | AGI <u>Earth magazine article</u> IAVCEI <u>Large Igneous Province of the Month</u>, October 2018
- Blättler, C.L., Kump, L.R., Fischer, W.W., Paris, G., **Kasbohm, J.J.**, & Higgins, J.A. (2017). Constraints on ocean carbonate chemistry and pCO₂ in the Archaean and Palaeoproterozoic. *Nature Geoscience* **10**, 41-45. doi.org/10.1038/ngeo2844

 Field photo featured in the issue's Table of Contents
- Kasbohm, J., Evans, D.A., Panzik, J.E., Hofmann, M., & Linnemann, U. (2016). Palaeomagnetic and geochronological data from Late Mesoproterozoic redbed sedimentary rocks on the western margin of Kalahari craton. Geological Society, London, Special Publications, 424, SP424-4. doi.org/10.1144/SP424.4
- Panzik, J.E., Evans, D.A.D., **Kasbohm, J.J.**, Hanson, R., Gose, W., & Desormeau, J. (2016). Using palaeomagnetism to determine late Mesoproterozoic palaeogeographic history and tectonic relations of the Sinclair terrane, Namaqua orogen, Namibia. Geological Society, London, Special Publications, 424, SP424-10. doi.org/10.1144/SP424.10

MANUSCRIPTS IN ADVANCED PREPARATION (AVAILABLE UPON REQUEST) (* UNDERGRADUATE CO-AUTHOR)

Kasbohm, J., Schoene B., Mark, D., Murray, J.*, Szymanowski, D., Reidel, S., Barford, D., Barry, T. (in prep). Eruption history of the Columbia River Basalt Group constrained by high-precision U-Pb and ⁴⁰Ar/³⁹Ar geochronology. (to be submitted to *EPSL*)

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Kasbohm, J., Schoene B., Maclennan, S., Evans, D.A.D., Weiss, B.P. (in prep). Paleogeography and high-precision geochronology of the Fortescue Group, Pilbara, Western Australia. (to be submitted to *Precambrian Research*)

AWARDS		
Fellowships:		
2020–2023	National Science Foundation Earth Sciences Postdoctoral Fellowship, \$261,000. Awarded by NSF for two years of postdoctoral stipend and partial research budget for project "Calibrating timescales and measuring pCO2 to test the role of volcanic forcing in the Miocene Climate Optimum."	
2013–2018	National Science Foundation Graduate Research Fellowship, \$120,000. Awarded by NSF for three years of graduate stipend and partial tuition coverage.	
2018	Geoscience Student Research Fellowship, \$4000. Awarded by Princeton Dept. of Geosciences for dissertation field research in Italy.	
2013–2017	Centennial Fellowship, \$16,000. Awarded by Princeton University Graduate School to outstanding applicants.	
2016	Walbridge Fund Graduate Award, \$10,000. Awarded by Princeton Environmental Institute to support proposed investigation of "Testing Climate Sensitivity to Atmospheric Carbon Dioxide: A Case Study from the Miocene."	
2012	Alan S. Tetelman 1958 Fellowship for International Research in the Sciences, \$3000. Awarded by Yale College Science & Engineering Research for Geology & Geophysics Senior Thesis field research in Namibia.	
2012	Karen Von Damm '77 Undergraduate Research Fellowship in Geology & Geophysics, \$2500. Awarded by Yale University Dept. of Geology & Geophysics for Senior Thesis research in Namibia.	
2012	Jeffrey Lewis Summer Research and Travel Fellowship, \$4000. Awarded by Yale College Center for International and Professional Experience to fully fund summer Humanities Senior Essay research on portrayals of medieval pilgrims along <i>el Camino de Santiago</i> in Spain.	
Honors:		
2020	Geosciences Service and Outreach Award for Graduate Students, \$400. Awarded inaugural prize by Princeton Dept. of Geosciences Diversity Committee for my "deep commitment to improving the scientific community" through exceptional service and advocacy. <i>Award citation</i>	
2020	AGU Outstanding Student Paper Award, \$250. Awarded by AGU to promote, recognize, and reward quality student research and communication in the geophysical sciences, for 2019 poster presentation.	
2013	William R. Belknap Prize, \$500. Awarded by Yale University Dept. of Geology & Geophysics "to a senior for excellence in geological studies."	
2009–2012	Thomas J. Watson Memorial Scholarship, \$8000. Awarded by IBM to outstanding children of employees.	
2012	Samuel Lewis Penfield Prize, \$1000. Awarded by Yale University Department of Geology & Geophysics "for proficiency in Mineralogy."	
2012	American Institute of Professional Geologists National Scholarship, \$1000. Awarded to assist with college education costs and promote student participation in AIPG.	
Invited Talks		

INVITED TALKS

11/04/2020	Yale University, Department of Earth & Planetary Sciences, Postdoc Seminar
12/06/2019	Princeton University, Department of Geosciences, Solid Earth Brown Bag Seminar

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- 10/28/2019 Boise State University, Department of Geoscience, Department Seminar
- 03/01/2019 City College of New York, Department of Earth & Atmospheric Sciences, Seminar
- 02/06/2019 Lamont Doherty Earth Observatory (Columbia University), Geochemistry Seminar
- 04/06/2018 Yale University, Department of Geology & Geophysics, Special Seminar

PUBLISHED AND PRESENTED ABSTRACTS (TALKS) (* INVITED)

- **Kasbohm, J.**, Schoene, B., Montanari, A., Coccioni, R., Hull, P. (2021). Revising age models for Miocene deep-sea sediments with U-Pb zircon geochronology. *Geological Society of America Annual Meeting Abstracts and Programs*.
- **Kasbohm, J.**, Schoene, B., Hull, P. (2021).* Assessing the connection between Columbia River basalt volcanism and the Miocene Climate Optimum with zircon geochronology. *Northeast Geobiology Symposium*.
- **Kasbohm, J.**, Schoene B., Montanari, A., Coccioni, R. (2020). Assessing the Suitability of a Burdigalian GSSP in the Miocene Bisciaro Formation, Contessa Valley, Italy with U-Pb Zircon Geochronology. *Geological Society of America Annual Meeting Abstracts and Programs*.
- **Kasbohm, J.**, Schoene, B. (2020).* Assessing Eruptive Tempo of the Columbia River Basalt Group and Recalibrating Miocene Climate Records with Zircon Geochronology. *American Geophysical Union Fall Meeting Abstracts*.
- **Kasbohm, J.**, Schoene B., (2018). U-Pb Zircon Ages Correlate the Columbia River Flood Basalt with the Mid-Miocene Climate Optimum. *Goldschmidt Abstracts*.
- **Kasbohm, J.**, Schoene, B., (2017). Assessing Causes and Consequences of Columbia River Basalt Volcanism with Zircon Geochronology. *American Geophysical Union Fall Meeting Abstracts*.
- **Kasbohm, J.**, Schoene, B., (2016). U-Pb Zircon Geochronology of the Columbia River Basalt. *American Geophysical Union Fall Meeting Abstracts*.

PUBLISHED AND PRESENTED ABSTRACTS (POSTERS)

- **Kasbohm, J.**, Long, M., Westacott, S., Millikin, A.E.G. (2021). URGE-ing IDEAs forward in Yale EPS. Geological Society of America Annual Meeting Abstracts and Programs & American Geophysical Union Fall Meeting Abstracts.
- **Kasbohm, J.**, Schoene, B., Hull, P. (2020). Assessing the Timescale of the Miocene Climate Optimum with U-Pb Zircon Geochronology. *American Geophysical Union Fall Meeting Abstracts*.
- **Kasbohm, J.**, Schoene, B. (2019). Assessing Eruptive Tempo of the Columbia River Basalt Group and Recalibrating Miocene Climate Records with Zircon Geochronology. *American Geophysical Union Fall Meeting Abstracts*.

 * Outstanding Student Paper Award
- **Kasbohm, J.**, Schoene, B. (2019). Calibrating the Miocene Geomagnetic Polarity Timescale with Zircon Geochronology. *Gordon Research Conference on Geochronology*.
- **Kasbohm, J.,** Schoene, B. (2018). Assessing Correlation of Columbia River Flood Basalt Volcanism with the Mid-Miocene Climate Optimum through Zircon Geochronology. *American Geophysical Union Fall Meeting Abstracts*.
- **Kasbohm, J.**, Maloof, A., Schoene, B., Weiss, B. (2015). Constraining Rates of Neoarchean Plate Motion through Magnetostratigraphy and High-Precision Geochronology of the Fortescue Group, Pilbara, Western Australia. *American Geophysical Union Fall Meeting Abstracts*.
- **Kasbohm, J.**, Maloof, A., Schoene, B. (2015). Volcanostratigraphy and Paleogeography of the Archean Fortescue Group, Pilbara, Western Australia. *Northeastern Geobiology Conference*.
- **Kasbohm, J.J.**, Panzik, J.E., Evans, D.A.D. (2012). A paleomagnetic reanalysis of the Auborus Formation, Namibia. Geological Society of America Annual Meeting Abstracts and Programs 44(7):598.
- Panzik, J.E., **Kasbohm, J.J.**, Evans, D.A.D., Hanson, R.E., Gose, W.A. (2012). Using palaeomagnetism to determine palaeogeographic history and tectonic relations of the Sinclair terrane, Namibia. *Geological Society of America Annual Meeting Abstracts and Programs* 44(7):598.

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SESSIONS CONVENED

2021 **GSA Annual Meeting**, Portland, OR.

"Assessing Causes, Consequences, and Time Scales of Miocene Climate and Environmental Change".

Co-Convener: Alexander Lowe

FIELD EXPERIENCE

2018–2019	Italy , 3 weeks. Miocene geochronology PhD Thesis research; Agouron Institute mercury sampling.
2015–2016	Northwest USA, 6 weeks. Columbia River Basalt Group PhD Thesis research.
2015	California, 1 week. Structural Geology class trip.
2013-2014	Australia, 14 weeks. Fortescue Group PhD Thesis research.
2014	Bahamas, 1 week. Sedimentology class trip.
2011–2012	Namibia, 8 weeks. Geology & Geophysics Senior Thesis research.
2012	Peru, 4 weeks. Spanish translator and field assistant on seismology data collection trip.
2012	Arizona, 1 week. Whole Lava Love volcanic mapping field course.
2012	Dominica & Martinique, 1 week. Natural Disasters class trip.
2012	Spain, 4 weeks. Humanities Senior Essay research.
2011	South Africa & Namibia, 3 weeks. Regional Perspectives on Global Geoscience class trip.
2011	Rome, 5 weeks. Humanities Senior Essay research.
2010	Sicily, 2 weeks. Global Tectonics class trip.

ENVIRONMENTAL COLLABORATIONS

2021-present Yale Carbon Containment Lab, Postdoctoral Affiliate.

Consulting for Yale School of the Environment lab pursuing geologic carbon containment in the Columbia River Basalt Group. Advising on the regional geology, volcanology, and carbon storage potential of the CRBG. Assisting in planning a field trip for lab members and stakeholders.

TEACHING EXPERIENCE

Spring 2017 **GEO103: Natural Disasters**, Assistant in Instruction.

Led two lab sections (for 12 and 15 students) and graded midterms for 80 student course for non-science majors, the Department of Geosciences' second-largest class.

Received excellent evaluations, such as: "Jenn was a great instructor and since our lab was before the lecture, she did a great job of teaching us the material we would learn during the week."

Fall 2016 **GEO102: Climate: Past, Present, and Future**, Assistant in Instruction.

Led lab section for 15 students and assisted in grading problem sets and exams for 230 student course for non-science majors, the Department of Geosciences' largest class.

Received excellent evaluations, such as: "Jenn was an incredibly helpful AI. She was effective in encouraging thought among the students during the lab, while also offering help and assistance when asked. She never allowed a student question or concern to go unanswered, and she was very responsive to students' needs."

UNDERGRADUATE MENTORSHIP

Liam O'Connor, Princeton Class of 2020, lab work at Princeton; now a PhD student at the University of
Arizona Department of Geosciences
Kyle Duffey, Princeton Class of 2019, Fieldwork in Columbia River Basalt Group, lab work at Princeton
Samuel Bartusek, Princeton Class of 2020, Fieldwork in Columbia River Basalt Group, lab work at Princeton;
now a PhD student at Lamont Doherty Earth Observatory (Columbia University)
Joshua Murray, Princeton Class of 2018, Fieldwork in Columbia River Basalt Group, lab work at Princeton;
now a PhD candidate at MIT Department of Earth, Atmospheric and Planetary Sciences
Eric Bolton, Princeton Class of 2017, Fieldwork in Pilbara, Western Australia
Alison Campion, Princeton Class of 2016, Fieldwork in Pilbara, Western Australia

LEADERSHIP & SERVICE

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2020-2021 Inclusion, Diversity, Equity and Anti-Racism (IDEA) Committee, Postdoctoral Representative.

> Selected by Department Chair to serve on committee meeting weekly to diversify the department and the geosciences as whole, improve the experiences and retention of department members from underrepresented backgrounds, and to coordinate inclusive departmental activities (climate surveys, workshops and community outreach). Founded and implemented a bimonthly departmental reading group in Fall 2020 to educate,

discuss, and take actions to address a variety of equity issues in the department.

2021 Unlearning Racism in the Geosciences (URGE), Pod Leader.

> Coordinated implementation of NSF-funded anti-racism education and advocacy program in the Earth & Planetary Sciences Department at Yale. Organized biweekly meetings and completion of policy deliverables. Worked with department leadership to implement positive policy changes promoting racial equity in EPS.

Department of Geosciences Diversity Committee, Graduate Student Liaison. 2019–2020

> Advocated for improving the experiences of current and future Geosciences graduate students, addressing issues surrounding recruitment, advising, gender, and discrimination to promote a more diverse and inclusive department. Proposed concrete solutions to Chair, Director of Graduate Studies, and Diversity Committee. Assisted in development of a Fieldwork Code of Conduct.

Princeton Women in Geosciences, Leadership Team. 2016-2019

> Assisted in planning activities for the Department of Geosciences: mentorship program and social events for the women of the department; early career dinner discussions with visiting colloquium speakers for all grad students and postdocs; workshops on work-life balance and implicit bias for the entire department.

2016-2019 Forbes College, Princeton University, Resident Graduate Student.

> Mentored 30 first-year students per year through their freshman year at Princeton, providing study breaks and advice. Assisted in planning and executing college-wide events such as theme dinners, movie nights, and study breaks to encourage community building.

Princeton Environmental Institute Summer Internship Program, Research Mentor. 2013-2019

Supervised an undergraduate Geosciences major for 8-week internships each summer, teaching field and laboratory skills, explaining scientific concepts, and discussing research and career paths in Geosciences.

GeoGrad 2017 Alumni Field Trip, Student Representative. 2017

> Chosen by the Department of Geosciences to attend and assist with weeklong field trip through Washington, Idaho, and Montana for Geosciences Graduate Alumni. Presented my ongoing research in the area, shared experiences as current graduate student in the department, and suggested ways alumni donations could benefit graduate students.

2012 Yale College Admissions, STEM Likely Recruiter.

> Undergraduate liaison between admitted students interested in Geology & Geophysics and the admissions department. Answered questions about Yale and encouraged students to study science at the university

2009-2011 Demos, Volunteer.

Conducted weekly science experiments and lessons in elementary school classrooms in New Haven.

PEER REVIEWER

- Nature Geoscience - Geology Paleoceanography and Paleoclimatology

- Earth-Science Reviews - Precambrian Research

2021 Yale Scientific Teaching Course, Poorvu Center for Teaching and Learning.

> Selected to participate in semester-long seminar on the theory and practice of scientific teaching, including active learning, effective assessment, and inclusive teaching.

2021 EarthRates '20-'21 All Hands Meeting, Virtual.

Participant in NSF RCN-sponsored brainstorming sessions to implement a geochronology-focused research coordination network, improve communication and collaboration between geochronology and other disciplines, and broaden participation in geochronology by promoting justice, diversity, equity, and inclusion.

2020 **Preparing for an Academic Career**, Earth Educator Rendezvous.

Participant in workshop exploring different academic career paths in the geosciences.

2019 Agouron Institute Advanced Geobiology Field School, Italy.

One of 12 early career scientists selected to participate in a research and field-based learning trip through Abruzzo and the Umbria-Marche regions. Measured stratigraphic sections and collected carbonate samples for mercury analysis across the Miocene Climate Optimum.

Whole Lava Love, Arizona.

Participant in weeklong field course identifying and mapping volcanic units in the Tank and Superstition Mountains.

SKILLS

- **Methodology**: Paleomagnetic analysis using super-conducting magnetometer, Thermal Ionization Mass Spectrometry of U-Pb in zircon using chemical abrasion and isotope dilution, mineral separation, δ^{13} C and δ^{18} O stable isotope analysis.
- Additional Language Proficiency: Advanced Spanish
- Taekwondo: Third Degree Black Belt (2009), Second Degree Black Belt (2005), First Degree Black Belt (2003), Yale Club Team Captain (2010-2012)

MEMBERSHIPS

2020– National Association of Geoscience Teachers

2015– American Geophysical Union

2013– Phi Beta Kappa

2012– Geological Society of America