Christy B. Till

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RESEARCH INTERESTS

Magma Genesis; Volcano Science; Experimental Petrology; Subduction Zones; Mantle Melting; Diffusion Chronometry; Magmatism on Exoplanets

EDUCATION

2011 Ph.D. in Geochemistry/Geology (Advisor: T.L. Grove)
Massachusetts Institute of Technology

2005 M.S. in Geological Sciences (Advisors: P. Gans & F. Spera)
University of California, Santa Barbara

2004 B.S.in Geological Sciences (Highest Honors)
University of California, Santa Barbara

PROFESSIONAL EXPERIENCE

2020-present *Associate Professor*, School of Earth & Space Exploration
Arizona State University

2020-2021
2025-present *Associate Director for Inclusive Community*
Arizona State University
- Leadership position to facilitate and incentivize equity & inclusion work across the School of Earth & Space Exploration
- Chair of JEDI Task Force & led JEDI Strategic Plan development.

2014-2020 *Assistant Professor*, School of Earth & Space Exploration
Arizona State University

2012-2013 *Mendenhall Postdoctoral Scholar*, Volcano Science Center
US Geological Survey

2012-2013 *Visiting Scholar*, Dept. of Geological & Environmental Sciences
Stanford University

2011 *Postdoctoral Associate*, Dept. of Earth, Atmospheric and Planetary Sciences
Massachusetts Institute of Technology

2006 *Post-MS Research Assistant*, Dept. of Geological Sciences
UC Santa Barbara

2005 *Forest Geologist*, Los Padres National Forest
US Forest Service

AWARDS, HONORS & FELLOWSHIPS

2024	Daly Lecture, American Geophysical Union Volcanology, Petrology & Geochemistry Section
2021-2023	AGU LANDInG Fellow (*AGU's DEI Leadership Academy)*
2020	Meierjurgen Faculty Fellowship, University of Oregon (*declined due to COVID-19*)
2019	Early Career Award, Geological Society of America, Mineralogy, Geochemistry, Volcanology & Petrology Division
2019-2020	Secretary (*elected*), American Geophysical Union (AGU), Volcanology, Geochemistry & Petrology Section
2017	ASU School of Earth & Space Exploration Best Graduate Professor
2017	NSF Faculty Early Career (CAREER) grant recipient
2016	Kavli Frontiers of Science Fellow, National Academy of Sciences
2014	AGU Trailblazer Award (*1st early career elected to AGU leadership 2008-2014*)
2012-2013	USGS Mendenhall Postdoctoral Fellowship
2010	AGU Outstanding Student Paper Award, Volcanology, Geochemistry, Petrology
2007-2010	NSF Graduate Research Fellowship
2007	AGU Outstanding Student Paper Award, Study of the Earth's Deep Interior
2006-2007	MIT Presidential Fellowship
2005	UCSB G.K. Gilbert Award (*best graduate student talk*)
2005	UCSB Teaching Assistant of the Year
2004	UCSB Outstanding Senior in Geological Sciences
2002-2003	UCSB Vice Chancellor of Research Undergraduate Research Grant
2003	UCSB Faculty Women's Scholarship
2002	UCSB Robert M. Norris Prize in Field Geology

PUBLICATIONS

***Till Google Scholar citations: 2489, h-index:* 22** *(as of Jan. 15, 2025)*

Key to Citation Formatting:
Student, A. = Till Primary Graduate Advisee
Student, A. = Till Primary Undergraduate Advisee
****Student, A.*** = Graduate Student Project Advised by Till
‡Postdoc, A. = Till Postdoctoral Advisee

A Note on Publication Order Norms: First author conducted the majority of the work, with subsequent authors listed in order of relative contribution from most to least. For papers where a student is the first author, the primary advisor is traditionally second.

PAPERS IN PRESS/REVIEW/PREPRINT

45) **Till, C.B.**, ***‡Goltz, A.E.***, ***‡deGraffenried, R.***, *in prep.,* Life in the Fast Lane: Observations from a Compilation of Magma Flux, Ascent & Decompression Rates. *Volcanica.*

44) ****Ravi, S.***, **Till, C.B.**, Robinson, M., *in review*, On the Origin of Silicic Magmas on the Moon. *Planetary Science Journal*.

43) ***‡Goltz, A.E.***, **Till, C.B.**, Kent, A.J., *in review*, Steady, as she goes: Steady-state subduction parameters account for high magmatic fluxes during continental flare-ups. *Nature Communications.*

42) *****Jacobs, S.,**Karageozian, M.***, **Till C.B.**, Unterborn, C., Hull, S., and Panero, W., *in review*, Modeled Crystallization of Exoplanet Bulk Silicate Mantles: Implications for Magma Ocean Solidification and Early Crust Formation & Observability. *JGR Planets.*

41) **Till, C.B.**, Blatter, D.L., Folguera, A., LaFemina, P., Maryliyani, G.I., Ruch, J., *in press*, Tectonic Controls on the Distribution and Characteristic of Volcanoes, *in Encyclopedia of Volcanoes (3rd Edition)*.

40) **Till, C.B**., *in press*, Magmatic Trees: A Method to Compare Processes Between Igneous Systems. *Volcanica*.

PEER-REVIEWED PUBLICATIONS

39) ***‡Wieser, P.E.***, Kent, A. J., **Till, C. B.**, Abers, G., 2023, Geophysical and Geochemical Constraints on Magma Storage Depths along the Cascade Arc: Knowns and Unknowns. *Geochemistry, Geophysics, Geosystems. Available on a preprint server here*.

38) Kent, A.J., **Till, C.B.**, Cooper, K.M., 2023, Start me up: The relationship between volcanic eruption characteristics and eruption initiation mechanisms, *Volcanica*. v. 6(2), p. 161-172.

37) Zapata, S., Jaramillo-Rios, J.S., Botello, G.E., Siachoque, A., Calderon-Día, Cardona, A., **Till. C.B.**, Valencia, V., 2023, Miocene Paleogeography of NW Colombia: A review of the sedimentary and magmatic evolution of the Amagá Basin a century after Grosse's work, *Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales*. v. 47. Available here.

36) ***‡Wieser, P.E.***, Kent, A. J., **Till, C. B.**, 2023, Barometers behaving badly II: A critical evaluation of Cpx-only and Cpx-Liq thermobarometry in variably-hydrous arc magmas, *Journal of Petrology.* v. 64(8), egad050.

35***) ‡Wieser, P.E.***, Kent, A. J., **Till, C. B**., Donovan, J., Neave, D. A., Blatter, D. L., & Krawczynski, M. J., 2023, Barometers Behaving Badly I: Assessing the Influence of Analytical and Experimental Uncertainty on Clinopyroxene Thermobarometry Calculations at Crustal Conditions, *Journal of Petrology*, v. 64(2), egac126.

34) ***‡Wieser***, P., Petrelli, M., Lubbers, J., Wieser, E., Ozaydin, S., Kent, A. and **Till, C.**, 2022, Thermobar: An open-source Python3 tool for thermobarometry and hygrometry, *Volcanica*, v. 5(2), p. 349–384. doi: 10.30909/vol.05.02.349384.

33) ***Brugman, K.K.,*** **Till, C.B.**, Bose, M., 2022, Common assumptions and methods yield overestimated diffusive timescales, as exemplified in a Yellowstone post-caldera lava, *Contributions to Mineralogy & Petrology*, v. 177(6), 63.

32) ***Phillips, M***. **Till, C. B.**, 2022, Crustal Storage and Magmatic Ascent Rates of the Mt. Shasta Primitive Magnesian Andesite, *Contributions to Mineralogy & Petrology*, v. 177(1), p. 1-27.

31) ***Brugman, K.K., Phillips, M.,*** **Till, C.B.**, 2021, Experimental Determination of Mantle Solidi and Melt Compositions for Two Likely Rocky Exoplanet Compositions, *JGR-Planets*, v. 126 (7), e2020JE006731.

30) ***Shamloo, H.***, **Till**, **C.B.**, Hervig, R., 2021, Multi-Mode Magnesium Diffusion in Sanidine: Application for Geospeedometry in Magmatic Systems, *Geochemica et Cosmochemica Acta*, v. 298, p.55-69.

29) ***Guild, M.***, **Till, C.B.**, Mizukami, T., Wallis, S., 2020, Petrogenesis of the Higashi-Akaishi Ultramafic Body: Implications for lower crustal foundering and mantle wedge processes, *Journal of Petrology*, v. 61(9), p. 1-25.

28) ‡***Iacovino, K.***, ***Guild, M.***, **Till, C.B**., 2020, Aqueous fluids are effective oxidizing agents of the mantle in subduction zones, *Contributions to Mineralogy & Petrology*, v. 175, no. 4, p. 1-21.

27) Grove, T.L., **Till, C.B.**, 2019, H_2O-rich mantle melting near the slab-wedge interface, *Contributions to Mineralogy & Petrology*, v. 174, no. 10 p. 80-102.

26) **Till, C.B.**, Vazquez, J.A., Stelten, M., ***Shamloo, H***., ***Shaffer, J.***, 2019, Co-existing Discrete Bodies of Rhyolite and Punctuated Volcanism Characterize Yellowstone's Post-Lava Creek Tuff Caldera Evolution, *Geochemistry, Geophysics, Geosystems*, v. 20(8), p. 3861-3881.

25) ***Brugman, K.***, **Till, C.B.**, 2019, A Low-Aluminum Clinopyroxene-Liquid Geothermometer for High-Silica Magmatic Systems, *American Mineralogist*, v. 104(7), p. 996-1004.

24) ***Shamloo, H.***, **Till**, **C.B.**, 2019, Decadal Transition from Quiescence to Supereruption; Petrologic Investigation of the Lava Creek Tuff, Yellowstone Caldera, WY, *Contributions to Mineralogy & Petrology*, v.174(32).

23) **Till, C.B.**, Kent, A., Abers, G., Janiszewski, H., Gaherty, J., Pitcher, B., 2019, The Causes of Spatiotemoporal Variations in Erupted Fluxes and Compositions Along a Volcanic Arc, *Nature Communications*, v. 10 (1350), p. 1-12 (Open Access).

22) Edwards M.A., M.G. Jackson, A.R.C. Kylander-Clark, J. Harvey, G.A. Hagen-Peter, G.G.E. Seward, **C.B. Till**, J.V. Adams, J.M. Cottle, B.R. Hacker, F.J. Spera, 2019, Beyond EM2: extreme enriched and heterogeneous $^{87}Sr/^{86}Sr$ ratios recorded in magmatic plagioclase from the Samoan hotspot, *Earth & Planetary Science Letters*, v. 511, p. 190-201.

21) ‡***Iacovino, K***., **Till, C.B.**, 2019, DensityX: A program for calculating the densities of hydrous magmatic liquids from 427-1627°C and up to 30 kbar, *Volcanica*, v. 2 (1), p. 1-10.

20) Cooper, K.M., **Till, C.B.**, Kent, A.J.R., Costa, F., Rubin, A.E., Gravley, D., Deering, C., Cole, J., Bose, M., 2017, Response to "Cold Storage in a Heat Wave?", *Science*, v. 358 (6370), p. 9145.

19) *****Rubin, A.E.***, Cooper, K.M., **Till, C.B.**, Kent, A.J.R., Costa, F., Gravley, D., Deering, C., Cole, J., Bose, M., 2017, Rapid cooling and cold storage in a silicic magma reservoir recorded in individual crystals, *Science*, v. 356 (6343), p. 1154-1156, doi:10.1126/science.aam8720.

18) **Till, C.B.**, 2017, A Review & Update of Mantle Thermobarometry for Primitive Arc Magmas (invited paper), *American Mineralogist*, v. 102, p. 931-947, dx.doi.org/10.2138/am-2017-5783.

17) **Till, C.B.**, Vazquez, J.A, Boyce, J.W., 2015, Months between rejuvenation and volcanic eruption at Yellowstone caldera, Wyoming, *Geology*, v.43(8), p. 695-698, doi:10.1130/G36862.1.

16) Grove, T.L., **Till, C.B.**, 2015, Melting of the Earth's Upper Mantle, *Encyclopedia of Volcanoes*, Second Edition, Haraldur Sigurdsson, editor, p. 35-47.

15) Grove, T.L., Holbig, E.S., Barr, J.A., **Till, C.B.**, Krawczynski, M.J., 2013, Melting of compositionally variable upper mantle in the garnet stability field: Distinguishing melts of lherzolite and pyroxenite source regions, *Contributions to Mineralogy & Petrology*, vol. 166(3), p.887-910, doi: 10.1007/s00410-013-0899-9.

14) **Till, C.B.,** Grove, T.L., Carlson, R.W., Donnelly-Nolan, J.M., Fouch, M.J., Wagner, L.S., Hart, W.K., 2013, Depths and Temperatures of Asthenopheric Melting and the Lithosphere-Asthenosphere Boundary in the southern Cascades Arc and Back-Arc, *Geochemistry, Geophysics, Geosystems*, doi:10.1002/ggge.20070.

13) **Till, C.B.**, Grove, T.L., Withers, T., 2012, *Reply to* 'Comment on "The beginnings of hydrous mantle wedge melting" by Till et al.,' by Stalder, *Contributions to Mineralogy & Petrology*, v. 164(6), p.1073-1076, doi: 10.1007/s00410-012-0796-z.

12) **Till, C.B.**, Grove, T.L., Withers, T., 2012, *Reply to* 'Comment on "The beginnings of hydrous mantle wedge melting" by Till et al.,' by Green, Rosethal and Kovacs, *Contributions to Mineralogy & Petrology*, v. 164(6), p.1083-1085, doi: 10.1007/s00410-012-0803-z.

11) **Till, C.B.**, Grove, T.L., and Krawczynski, M.J., 2012, A melting model for variably depleted and enriched lherzolite in the plagioclase and spinel stability fields, *Journal of Geophysical Research (Solid Earth)*, v. 117, no. B06206, doi: 10.1029/2011JB009044.

10) Long, M.D., **Till, C.B.**, Druken, K.A., Carlson, R.W., Wagner, L.S., Fouch, M.J., James, D.E., Grove, T.L., Schmerr, N., Kincaid, C., 2012, Mantle dynamics beneath the Pacific Northwest and the generation of voluminous back-arc volcanism, *Geochemistry, Geophysics, Geosystems*, v. 13(1) Q0AN01, doi: 10.1029/2012GC004189.

9) Grove, T.L., **Till, C.B**., Krawczynski, M.J., 2012, The Role of H_2O in Subduction Zone Magmatism, *Annual Review of Earth and Planetary Sciences*, v. 40, p. 413-439, doi:10.1146/annurev-earth-042711-105310.

8) **Till, C.B.**, Grove, T.L., Withers, T., 2012, The Beginnings of Hydrous Mantle Wedge Melting, *Contributions to Mineralogy & Petrology*, v. 163, p. 669-688, doi: 10.1007/s00410-011-0692-6.

7) **Till, C.B.**, Elkins-Tanton, L.T. and Fisher, K.M., 2010, Low Extent Melts at the Lithosphere-Asthenosphere Boundary, *Geochemistry, Geophysics, Geosystems*, v. 11 (10), doi:10.1029/2010GC003234.

6) Grove, T.L., **Till, C.B.**, Lev, E., Chatterjee, N. and Medard, E., 2010, *Reply to* Global Systematics of Arc Volcano Position, *Nature*, v. 468, p. E6-E8.

5) Grove, T.L., **Till, C.B.**, Lev, E., Chatterjee, N. and Medard, E., 2009, Kinematic variables and water transport control the formation and location of arc volcanoes; *Nature*, v. 459, p.694-697.

4) **Till, C.B.**, Gans, P.B., and Spera, F.J., 2009, Perils of petrotectonic modeling: A view from southern Sonora Mexico; *J. Volcanology & Geothermal Research*, v. 186, p.160-168.

3) Mariner, R.H., Minor, S.A., King, A.P., Boles, J.R., Kellog, K.S., Evans, W.C., Landis, G.A., Hunt, A.G. and **Till, C.B.**, 2008, A landslide in Tertiary marine shale with superheated fumaroles, Coast Ranges, California, *Geology*, v. 36(12), p.959-962.

2) Hirschmann, M.M., Ghiorso, M.S., Davis, F.A., Gordon, S.M., Mukherjee, S., Grove, T.L., Krawczyniski, M., Medard, E., and **Till, C.B.**, 2008, Library of Experimental Phase Relations

(LEPR): A database and web portal for experimental magamatic phase equilibria data, *Geochemistry, Geophysics, Geosystems*, v. 9, no. Q03011.

1) Spera, F.J., Bohrson, W.A., **Till, C.B.**, and Ghiorso, M.S., 2007, Partitioning of trace elements among coexisting crystals, melt and supercritical fluid during isobaric crystallization and melting; *American Mineralogist*, v. 92, p.1881-1898.

OTHER PUBLICATIONS (NON-PEER REVIEWED)

F) Kodaira, S., Seton, M., Sonter, L.J., **Till, C.B.**, Williams, H.M., 2021, Reflections on solid Earth research; *Nature Reviews Earth & Environment,* v. 2, p. 21–25. https://doi.org/10.1038/s43017-020-00127-7. *Invited perspective piece on the future of magma science. Authors each contributed perspectives on a different subject and are listed alphabetically.*

E) Cooper, K.M., Kent, A.J.R., **Till, C.B.**, Shea, T., Cottrell, L., Andrews, B., Wallace, P., 2019, White Paper on the Outcomes of the CONVERSE Petrology, Geochemistry, Experiments & Sampling Disciplinary Workshop. https://volcanoresponse.files.wordpress.com/2020/02/rock-workshop-report.pdf

D) **Till, C.B.**, Pritchard, M.E., Miller, C.A., ***Brugman, K.K.***, Ryan-Davis, J., 2018, Super-volcanic investigations, *Nature Geoscience (News & Views)*, v. 11, p. 227-229.

C) Anbar, A., **Till, C.B.**, Hannah, M., 2016, Upstairs, Downstairs: Building a Theory of Earth System Evolution, *Nature (Commentary)*, v. 539, p. 25-27, doi:10.1038/539025a.

B) **Till, C.B.**, 2015, Big Geochemistry, *Nature (News & Views)*, v. 532, p.292-294, doi:10.1038/523293a.

A) **Till, C.B.**, 2014, Big data and quantifying variability top scientific trends list, *Eos Trans.* AGU, v. 95 (50), p. 479, doi:10.1002/2014EO500008.

----------See p. 15 for complete list of conference abstracts ----------

FUNDED GRANTS

Total of ~$4M to Till since 2014 *(calculated as Grant Total x Till %)*

Title	Agency	Duration	Role/Collaborators	Status
[1] Quantifying Geochemical Exchange at the Slab-Wedge Interface with Experiments & Natural Samples	NSF-EAR Petrology & Geochemistry	36 months, 5/2015-4/2018	PI: **C. Till**	Concluded
[2] Facility Support: The Arizona State University SIMS Laboratories	NSF-EAR Instrument & Facilities	36 months, 1/2015-12/2017	PI: R. Hervig, Co-PI's: **C. Till** (25%), P. Williams, L. Williams	Concluded
[3] Exoplanetary Ecosystems: Exploring Life's Detectability on Chemically Diverse Exoplanets	NASA NExSS	60 months, 4/2015-3/2020	PI: S. Desch, and 27 Co-I's including **C. Till**	Concluded
[4] CAREER: Triggering Eruptions: Determination of	NSF- EAR CAREER	60 months,	PI: **C. Till**	Concluded

Pressure-Temperature-Composition-time (P-T-X-t) Histories for Magma Bodies Preceding Eruption		1/2017-12/2021 (+ 2 one year No Cost Extensions)		
[5] Experimental Investigation of Li-in-Zircon Diffusion Rates in Natural Silicic Magmatic Zircon	NSF EAR-Supplement to CAREER grant	12 months (1/2018 – 1/2019)	PI: **C. Till**	Concluded
[6] Community Facility Support: The Arizona State University SIMS Laboratories	NSF-EAR Instrument & Facilities	48 months (6/1/18-5/30/21)	PI: R. Hervig, Co-I's: **C. Till**, M. Bose, P. Williams, L. Williams	Concluded
[7] Community Network for Volcanic Eruption Response (CONVERSE)	NSF EAR Research Coordination Network	36 months (9/2018-8/2020)	PI: T. Fischer (UNM), Co-I's: 14 Co-I's including **C. Till**	Concluded
[8] Volcanism in the eastern Panama-Choco block (Columbia): Constraining tectonic environments and feedbacks during the mid-Miocene	Smithsonian Tropical Research Institute-ASU Collaborative Initiative	12 months (9/2018-9/2019)	PI: **C. Till** & C. Jaramillo	Concluded
[9] A Research Coordination Network for the SZ4D Initiative	NSF EAR Research Coordination Network	36 months (7/2018-6/2021)	PI: H. Tobin (UW), no Co-I's. Concluded. RCN was funded to organize the relevant communities to design & propose a new funding program at NSF for subduction zone science. I was one of 15 people on the steering committee. Concluded.	
[10] Collaborative Research: Consequences of flat slab subduction on the chemical, structural, and dynamic evolution of continental lithosphere	NSF EAR – Frontier Research in Earth Science (FRES)	48 months (1/2020-12/2023)	ASU PI: **C. Till,** PI's at other institutions: L. Wagner (Carnegie), T. Becker & B. Horton (UT Austin)	In Progress (in No Cost Extension)
[11] Collaborative Research: Synthesizing arc-scale geochemical, petrologic, and geophysical datasets to investigate causes of volcanic diversity in the Cascades Arc	NSF GeoPRISMS	36 months (7/2020 – 6/2023)	**PI: C. Till,** Co-I: A. Kent (OSU), G. Abers (Cornell)	Concluded
[12] INTERN [#4]: Investigating Magma Genesis and Pre-Eruptive Storage at Glacier Peak	NSF EAR-INTERN Supplement to CAREER grant	4 months (7/2023-10/2023)	PI: C. Till	Concluded
[13] Tracing Rocky Exoplanet Compositions	NASA Interdisciplinary Consortia for Astrobiology Research (ICAR)	60 months (9/2023- 8/2028)	PI: S. Desch + 9 Co-I's including **C. Till**	In Progress

GRANTS PRIOR TO ASU

2012-2013 USGS Mendenhall Postdoctoral Fellowship
2007-2010 National Science Foundation Graduate Research Fellowship
2002-2003 UC Santa Barbara Vice Chancellor of Research Undergraduate Research Gran

STUDENT & POSTDOCTORAL SUPERVISION

Postdoctoral Advisees

1. 2024-present — Dr. Elizabeth Grant
2. 2022 –2024 — Dr. Lydia Harmon
   now Assist. Prof., Occidental College
3. 2022 –2024 — Dr. Andrea Goltz
   now Carnegie Postdoc
4. 2022 –2023 — Dr. Rebecca deGraffenried, NSF Postdoctoral Fellow
   now Assist. Prof., Univ. of Missouri
5. 2021- 2023 — Dr. Daniel Portner, SESE Exploration Postdoc (co-advised)
   now Assist. Prof., New Mexico Tech
6. 2020- 2022 — Dr. Penny Wieser, Postdoctoral Scholar (co-advised)
   now Assist. Prof., U.C. Berkeley
7. 2016- 2018 — Dr. Kayla Iacovino, FESD Postdoctoral Fellow
   now Experimental Petrologist, NASA JSC experimental lab
8. 2014- 2016 — Dr. Sarah Cichy, SESE Exploration Postdoc (co-advised)
   now Research Scientist and IHPV Lab Manager at Universität Potsdam

ASU SESE Graduate Student Primary Advisees

1. 2024-present — Julia Clarke (PhD Student)
2. 2019-present — Felix Ishimwe (PhD Candidate)
   starting Summer 2025, Research Scientist, Freeport-McMoran
3. 2019-2024 — Jessie Bersson (PhD Candidate)
   now Smithsonian Peter Buck Postdoctoral Fellow
4. 2015- 2020 — Hannah I. Shamloo, PhD
   now Assistant Professor, Central Washington University
5. 2014- 2020 — Meghan R. Guild, PhD
   now Lead SIMS Technician, Beamline Semiconductors
6. 2014-2020 — Karalee K. Brugman, PhD
   now FORCE Research Scientist, Arizona State University
7. 2017-2019 — Mitchell Phillips, MS
   now Maps & Publications, USGS, Menlo Park CA

ASU SESE Second Project Advisees

In SESE, all PhD students are required to conduct two research projects prior to their PhD candidacy exam, one of which is required to be advised by a faculty who is not their primary research advisor. These research projects ultimately often constitute a chapter of the student's dissertation and/or a publication.

1. 2020 - present — Claire Richardson (PhD Candidate)
2. 2018 – 2024 — Mara Karageozian, *Graduated PhD, now Policy Advisor ASU DC Office*
3. 2018- 2023 — Srinidhi Ravi, *Graduated PhD, now Postdoc, Khalifa U.*
4. 2018 – 2022 — Samantha Jacobs, *Graduated PhD, now Research Scientist, NASA Houston*
5. 2017- 2020 — Hannah Bercovicci, *Graduated MS*
6. 2017- 2020 — Chadlin Ostrander, *Graduated PhD, now Postdoc, WHOI*
7. 2015- 2020 — Aleisha Johnson, *Graduated PhD, now Postdoc U. Arizona*

ASU Graduate Student Thesis Committee Membership (excluding Advisees)

1. Abhijeet Chakraborty (SESE, PhD candidate), *started Fall 2024 (transfer from UC Davis)*

2. Christian Koemer (SESE, PhD candidate), *started Fall 2024 (transfer from UC Davis)*
3. Prachi Kar (SESE, PhD student), *started Fall 2021*
4. Allyson Trussell (SESE, PhD student), *started Fall 2021*
5. Samuel Courville (SESE, PhD candidate), *started Fall 2020*
6. Kevin Trinh (SESE, PhD candidate), *started Fall 2020*
7. Kyle Mohr (SESE, PhD candidate), *started Fall 2017*
8. Tucker Ely (SESE, PhD), *Graduated Summer 2020, now Postdoc, CU Boulder*
9. Huawei Chen (SESE, PhD), *Graduated 2019, now Staff Scientist, China Univ. of Geosciences*
10. James Leong (SESE, PhD), *Graduated 2020, now Postdoc, Lamont-Doherty*
11. Soumya Ray (SESE, PhD), *Graduated 2021, now Postdoc, Univ Maryland*
12. Anna Brunner (SESE, MS), *Graduated 2019*
13. Shule Yu (SESE, PhD), *Graduated 2019, now Software Engineer, Tencent*
14. Alyssa Anderson (SESE, PhD), *Graduated 2019, now Postdoc, Princeton*
15. Hong Yu Lai (SESE, PhD), *Graduated 2019, now Data Scientist, Carvana*
16. Mary Schultz (SESE, PhD), *Graduated 2017, now Professor, San Jacinto College*
17. Margo Regier (SESE, MS), *Graduated 2016, now Program Officer, National Academy of Sciences*
18. Kera Tucker (SESE, MS), *Graduated 2015, now Systems Engineer, Lockheed Martin*
19. Chelsea Allison (SESE, PhD) *Graduated 2018, now Postdoc, Cornell University*
20. Danika Wellington (SESE, PhD), *Graduated 2018, now Scientist, USGS EROS Data Center*
21. Alexandra Reyes (SESE, MS), *Graduated 2018, now Sample Curator, NASA JSC*
22. Joey Romero (SESE, MS), *Graduated 2018, now Museum Facilitator, Museum of Sci. & Industry, Chicago*

ASU Undergraduate Research Advisees

1.	2024 – present	Caden Grenley - *SESE Geology major*
2.	2024	Alan Bartlett – *Barrett Honors College Senior Thesis*
3.	2023	Maegan Bouwens - *SESE Geology major*
4.	2018 –2020	Jax Webb - *SESE Geology major*
5.	2018- 2019	Emma Valdez – *School of Life Sciences major, SESE Geology minor*
6.	2017-2018	Andrés Aldana – *SESE Geology major*
7.	2016- 2018	Kelly Vote - *Recipient CLAS Research Scholarship Summer 2017,*
8.	2015- 2017	Mitchell Phillips - *Recipient CLAS Research Scholarship 2016- 2017, Now USGS, Menlo Park*
9.	2014- 2016	Eric Escoto - *Recipient 2016 CLAS Dean's Medal & 2015 R. Greeley Scholarship, Now ASU PhD Student & NSF Graduate Research Fellow*
10.	2014- 2016	Jamie Shaffer – *Received MS Student New Mexico State & now Hydrogeologist at Leonard Rice Engineers Inc.*
11.	2014- 2015	Katherine Sheppard -*Recipient CLAS Dean's Medal & ASU Outstanding Graduate & Barrett Honors Thesis, "Modeling Mantle Genesis of Basalts from Lassen Volcano", now Data Analyst at Raytheon, Tucson*

TEACHING HISTORY

Spring 2016 (in-person), Spring 2024 (online) Fall 2024 (online)	GLG 101: Introduction to Geology *Introductory general education class teaching basic principles of geology, geochemistry, and geophysics.* Enrollment: 220 (in person), 500-1000 (online)
Fall 2015, Spring 2017,	SES 494/598: Science Communication *Developed as part of NSF CAREER grant – Upper level ugrad & graduate*

Spring 2019, Spring 2020 Fall 2023	*course to develop and practice skills in effective oral and written science communication for both scientific and general audiences. Course includes significant writing & oral communication practice.* Av. Enrollment: 25
Spring 2015	GLG 494/598: Subduction Zones *Undergraduate & graduate course covering the physics and chemistry of geologic processes occurring in subduction zones from the subducting plate to the surface. Course work includes weekly reading of journal articles, presentations and final research projects.* Enrollment: 35
Fall 2014, 2015, 2016, 2017, 2018, 2019, 2025	GLG 424: Petrology *Undergraduate course (2-3 graduate students enrolled per year) course covering the origin of igneous and metamorphic rocks. Upper division core curriculum in the geosciences track within the BS in the School of Earth & Space Exploration. (co-taught in F '14 & F '15)* Av. Enrollment: 30
Fall 2020	GLG 494/598: Equity in the Academic Sciences *Each student enrolled conducted a semester-long research project on a topic of their choosing on how to make our academic scientific communities, systems, and structures more equitable and inclusive. During the class students built self-guided research skills & engaged with a variety of education, physical and social sciences literature on their topics. Students synthesized their research into the following series of White Papers that summarize their research and resulting recommendations.* Av. Enrollment: 7

Participated as Lecturer

Spring 2016, 2018	THP/HAD 494/598: Animating Scientific Research *One of five featured professors who worked with Herberger students to use art to animate our research. Included weekly engagement and mentoring of the students.* Enrollment: 25
Fall 2014	SES 494/598: Archean Geophysics *Graduate course in the history of the early Earth. I attended weekly and delivered lectures on the origin of the Earth's continental crust & upper mantle magma genesis.* Enrollment: 25
Fall 2015, 2015, 2017, 2018, 2019 2023, 2024	GLG 591: Faculty Research Seminar *Presented a lecture on research as part of an introductory graduate class.*
Jan. 2014, 2015,	ASU Workshop on Secondary Ion Mass Spectrometry

2016, 2017, 2019, 2020, 2024	*Week-long workshop held by the NSF-supported SIMS Facility at Arizona State University, which includes training on the Cameca 6f and NanoSIMS 50L and example applications.* Enrollment: 15

INVITED TALKS & COLLOQUIA

I. College/University/Scientific Agency Colloquia

1.	Oct 2023	Cal State Fullerton Geology Seminar
2.	March 2022	UC Santa Barbara Earth Science Seminar
3.	November 2021	Oregon State University, Earth Science Seminar
4.	March 2021	CalTech, GPS Division Seminar
5.	August 2020	Arizona State University, SESE Colloquium
6.	June 2020	American Museum of Natural History *(cancelled COVID-19)*
7.	April 2020	Bristol University, UK *(cancelled COVID-19)*
8.	November 2019	University of New Mexico, Earth Sciences Colloquium
9.	March 2019	University of Wisconsin, Weeks Lecture
10.	January 2019	Universidad Nacional de Colombia, Sede Medellín, EGEO Seminar
11.	October 2018	University of Nevada, Reno, Geological Sciences Colloquium
12.	September 2018	University of Tennessee, Dept. of Earth & Environmental Science Seminar
13.	May 2018	Stanford University, Dept. Geological & Enviro. Science Colloquium
14.	January 2018	Oregon State University, Geology Seminar
15.	May 2017	University of Wyoming, Geological Sciences Seminar
16.	April 2017	US Geological Survey, Denver CO
17.	April 2017	ASU, School of Earth & Space Exploration Colloquium
18.	November 2016	University of Washington, Earth & Space Sciences Seminar
19.	November 2016	University of Oregon, Dept. of Earth Sciences Seminar
20.	July 2016	Kanazawa University, Geosciences Seminar, Japan
21.	November 2015	New Mexico State, Geological Sciences Seminar
22.	November 2014	University of Arizona, Dept. of Geosciences Colloquium
23.	September 2013	Rice University, Dept. of Earth Science Seminar
24.	September 2013	US Geological Survey, Reston VA, Mendenhall Fellows Seminar
25.	April 2013	Lawrence Berkeley National Lab/UC Berkeley Geology Seminar
26.	March 2013	Stanford University, Dept. Geological & Enviro. Science Colloquium
27.	February 2013	UC Santa Cruz, Whole Earth Seminar
28.	February 2013	Arizona State University, School of Earth & Space Exploration Seminar
29.	February 2013	Washington State University, Earth & Planetary Sciences Seminar
30.	January 2013	UC Santa Barbara, Earth Sciences Seminar
31.	January 2013	Boise State University, Dept. Geosciences Seminar
32.	October 2012	UC Davis, Earth Sciences Seminar
33.	September 2012	UC Santa Cruz, Whole Earth Seminar
34.	May 2012	UC Los Angeles, Dept. Earth & Space Sciences Seminar
35.	April 2012	San Jose State University, Geology Seminar
36.	April 2012	Washington University, St. Louis, Dept. Earth & Planetary Sci. Seminar
37.	February 2012	Boise State University, Dept. Geosciences Seminar
38.	February 2012	US Geological Survey, Menlo Park, Volcano Science Center Seminar
39.	April 2011	US Geological Survey, Anchorage, AK

40. March 2011 Bryn Mawr College, Dept. Geological Sciences Seminar
41. October 2010 Middlebury College, Dept. Geology Seminar

II. Invited Talks at Scientific Conferences & Meetings

1. December 2024 Daly Lecture, American Geophysical Union Meeting, Washington DC
2. December 2022 American Geophysical Union Fall Meeting, Chicago IL
3. December 2019 American Geophysical Union Fall Meeting, Washington DC
4. September 2019 Geological Society of America Annual Meeting, Phoenix, AZ
5. June 2019 CIDER Summer Program on Volcanoes, Berkeley CA
6. June 2019 Gordon Conference: Solid Earth, Mt. Holyoke, MA
7. December 2018 American Geophysical Union Fall Meeting, Washington DC
8. August 2018 Goldschmidt Conference, Boston MA
9. January 2018 Keynote, Chapman Conference on Large Silicic Magmatic Systems, Chile
10. December 2018 Keynote, CIDER workshop @ AGU Fall Meeting, New Orleans, LA
11. August 2017 IAVCEI 2017, Portland OR (2 invited talks)
12. August 2017 IAVCEI 2017, Portland OR (2 invited talks)
13. October 2016 Subduction Zone Observatory Planning Meeting, Boise ID
14. July 2016 Goldschmidt Conference, Yohohama, Japan
15. December 2015 American Geophysical Union Fall Meeting, San Francisco, CA
16. October 2015 GeoPRISMS Experimental & Theoretical Institute on Subduction Zones
17. December 2014 American Geophysical Union Fall Meeting, San Francisco, CA
18. August 2014 Goldschmidt Meeting, Sacramento CA
19. December 2013 American Geophysical Union Fall Meeting
20. December 2012 American Geophysical Union Fall Meeting
21. October 2011 EarthScope Institute on Lithosphere-Asthenosphere Boundary
22. September 2008 Am. Geophysical Union Chapman Conf./5th Int'l Lherzolite Conf.

III. Other Invited Talks

1. October 2017 ASU KED Talk, ASU, Phoenix AZ
2. November 2016 ASU KED Research Academy Talk, Tempe AZ
3. Fall 2016 Desert Mountain Speaker Series, Scottsdale AZ
4. January 2016 SESE New Discoveries Public Lecture, Tempe AZ
5. January 2014 AGU Editor in Chiefs Meeting, Albuquerque NM
6. May 2012 Society of Scientific, Technical & Medical Publishers Annual Meeting

PROFESSIONAL SERVICE

I. Service to Arizona State University

2024-present SESE Heptennial Performance Review Committee
2023-present Chair, SESE Inclusive Community Committee
2020-2021 Associate Director for an Inclusive Community
2014-present ASU SIMS/NanoSIMS Facility Oversight Committee
2014-present ASU SMS-SESE High Pressure Experimental Facilities Oversight Committee
2014-2020 SESE Safety & Facilities Committee (2019-2020 Safety Subcomm. Chair)
2018-2020 SESE Awards Nominations Committee
Spring 2021 SESE Cluster Hire Recruitment Committee
Spring 2019 SESE Faculty Search Committee, SESE Director
Winter 2016 SESE Faculty Search Committee, Geophysics

Winter 2016	SESE Search Committee, SESE Exploration Postdoctoral Fellowship
Nov. 2016	KED Research Academy Talk "*Behind the Scenes of a Successful NSF Proposal*"
Aug. 2015	Presentation on SESE to ASU Undergraduate Recruiters
2015-2018	SESE Postdoc Development/Workshops for Success Organization Committee

II. Service to Professional Societies and Organizations

2024-present	Geochemical Society F.W. Clarke Award Committee
2023-present	National Volcano Early Warning Science Advisory Committee
2019-2022	Geochemical Society Program Committee
2018-2022	SZ4D Research Coordination Network, Steering Committee Member & 'Magmatic Drivers of Eruption' & 'Building Equity & Capacity in the Geosciences' Working Group Co-Chair (*to propose new NSF program focused on subduction zone hazard-related science*)
2018-2022	Co-I, Community Response to Volcanic Eruptions NSF Research Coordination Network (CONVERSE) (*to organize US academic response to volcanic eruptions in coordination with USGS*)
2019-2020	American Geophysical Union, Volcanology, Geochemistry and Petrology Secretary (*elected, in charge of organizing VGP contributions to Fall Meeting*)
2015-2018	American Geophysical Union Volcanology, Geochemistry and Petrology Medals Nomination Committee
2014	Chair, American Geophysical Union Scientific Trends Task Force
2013-2014	American Geophysical Union Board of Directors *(elected, 1st early career member to hold position in history of organization)*
2013-2014	Vice Chair of American Geophysical Union Council *(elected, 1st early career member to hold position in history of organization)*
2012-2014	AGU Council Leadership Team *(elected)*
2010-2014	American Geophysical Union Council *(elected, two successive terms)*
2010-2012	American Geophysical Union Rep to the American Geosciences Institute (AGI)
2008-2010	American Geophysical Union Comm. on Education & Human Resources
2008-2010	Primary Student Representative to the American Geophysical Union

III. Editorial Service

2023-present	Associate Editor, Contributions to Mineralogy & Petrology
2017-2020	Associate Editor, American Mineralogist
2014-2020	Editorial Board, Review Editor, Frontiers in Volcanology
2004-present	Manuscript reviewer for: Nature • Science • Geology • Earth and Planetary Science Letters • Scientific Reports• Journal of Petrology • Geochemistry Geophysics Geosystems • American Mineralogist • Contributions to Mineralogy and Petrology • Chemical Geology • Journal of Volcanology and Geochemical Research • Lithos • Frontiers in Volcanology

IV. Grant Proposal and Panel Service

2024	Panelist, NSF EAR Frontier Research in Earth Science Review Panel
2021	Panelist, NSF EAR Frontier Research in Earth Science Review Panel
2019	Panelist, NSF EAR Antarctic Earth Science Research Review Panel
2017	Panelist, NSF EAR Studies of the Earth's Deep Interior Review Panel
2016	Panelist, NSF EAR Petrology & Geochemistry Review Panel

2010 Panelist, NASA Solar System Workings Review Panel

2006-present Proposal reviewer for National Science Foundation (NSF) EAR-Petrology & Geochemistry • NSF EAR-CAREER • NSF EAR-EarthScope • NSF-EAR GeoPRISMS • NSF OCE-Marine Geology & Geophysics • NASA Solar Systems • NASA Emerging Worlds • NERC

V. Service Activities at Scientific Meetings

2012-present Outstanding Student Paper Judge, American Geophysical Union Fall Meeting

2024 Session Convener, American Geophysical Union Fall Meeting, Washington DC: *Upstairs, Downstairs Revisited: Progress and Prospects in Understanding the Consequences of Internal Planet Evolution for the Habitability of Planetary Surfaces*

2019 Scientific Session Organizer, Goldschmidt 2019, Barcelona

2019 Invited Participant, GeoPRISMS Experimental & Theoretical Institute on Synthesizing Research Outcomes, San Antonio, TX

2018 Scientific Session Organizer (3 sessions), Goldschmidt 2018, Boston

2018 Division Scientific Organizing Committee, Goldschmidt 2018, Boston

2017 Co-Organizer, Cooperative Institute for Dynamic Earth Research (CIDER) Summer Workshop on Subduction Zone Structure & Dynamics, UC Berkeley, CA

2016 Invited Participant & Speaker, Subduction Observatory Planning Mtg, Boise ID

2016 Science Organizing Committee, NSF/NASA Workshop Without Walls on Planetary Habitability, Tempe Arizona

2015 Session Convener (3 sessions), American Geophysical Union Fall Meeting, San Francisco CA: *1) Chemistry of the Earth's Mantle; 2) A Tangled Web? Generation and Transport of Fluids, Volatiles and Melts in Subduction Zones from Source to Surface; 3) Transport of Volatiles from Mantle to Surface: Insights on Diffusion, Exsolution and Migration of Fluids in Magmatic Environments from Natural Samples and Experiments.*

2015 Invited Participant, GeoPRISMS Experimental & Theoretical Institute on Subduction Zones, San Diego, CA

2015 Invited Participant, Diffusion Workshop, Bochum University, Germany

2014 Session Convener (2 sessions), American Geophysical Union Fall Meeting, San Francisco, CA: *1) Accelerated and Punctuated: Using Geochronology, Diffusion Modeling, and Numerical Models to Understand Magmatic Processes; 2) Upstairs Downstairs: Consequences of Internal Evolution for the Habitability of Planetary Surfaces.*

2014 Session Convener, Goldschmidt Conference, Sacramento, CA: *Geologic and Geochemical Processes at the Plate Interface*.

2013 Session Convener, American Geophysical Union Fall Meeting, San Francisco CA: *The Detection and Migration of Melt and Volatiles in the Earth's Interior.*

2011 Invited Participant & Speaker, NSF GeoPRISMS Experimental & Theoretical Institute on the Lithosphere-Asthenosphere Boundary, Portland OR

2011 GeoPRISMS Alaska Primary Site Planning Meeting, Portland OR

2010 MARGINS Successor Planning Workshop

2009 Session Convener, American Geophysical Union Fall Meeting, San Francisco CA: *Mantle Potential Temperature: A Very Hot Topic.*

2005 Session Chair, Geological Society of America Annual Meeting, Salt Lake City UT: *Tectonics*

VI. Service re: Inclusion of PEERs (persons excluded due to ethnicity or race) in STEM

2023-present Chair, SESE Inclusive Community Committee

2022-present **SEQEL Project PI** – *ASU project studying use of rubrics in graduate qualifying exams*

2014-present **Graduate & Postdoctoral Mentor** - *To date, I have mentored 22 persons with marginalized gender identities in STEM (woman and/or transgender) and 7 with marginalized racial or ethnic identities.*

2021-2023 **AGU LANDInG Fellow** - *DEI Leadership Academy (inaugural cohort), chosen as 1 of 12 from across AGU*

2014-2022 **Faculty Advisor -** *SESE Women in Planetary Sciences (WIPS) Chapter*

2020-2021 **PI JEDI Seed Grant** (ASU College of Liberal Arts & Sciences) - *to create in-house bystander intervention training*

2020-2021 **Associate Director for Inclusive Community** - *Leadership position in the School of Earth & Space Exploration at ASU to facilitate and incentivize justice & equity work across the school. Chairing JEDI Task Force & led SESE JEDI Strategic Plan development.*

2021 **Invited Panelist –** *ASU panel discussing the experience of women in academia & "Picture A Scientist" documentary*

2020 **Invited Panelist** – *ASU Faculty Women's Association "Success in the Early Years" panel featuring several outstanding, recently-tenured, female faculty members*

2019-2021 **Facilitator ADVANCEGeo Workshops** – *Led ~10 bystander intervention and/or code of conduct workshops for the ADVANCEGeo program*

2019 **ADVANCEGeo Train the Trainers Workshop** – *trained to facilitate workshops on preventing harassment & bullying behaviors in Academic STEM environments.*

2019 **Workshop Participant** - *ASU Bystander Intervention Training for Academic Environments Participant*

2018-2020 **SESE Awards Nominations Committee** – *Effort to nominate PEERs for awards*

2014-2020 **Sundial Summer Bridge Program Faculty Participant** - *Program to entrain and retain under-presented minorities in STEM majors at ASU*

2016-2018 **500 Women Scientists Pod Leader** – *advocacy group for women & PEERS in STEM*

2018 **Workshop Participant** - *ASU Faculty Women's Association Workshop on Inclusion*

2016 Course Designer - *Co-designed online class on implicit bias for ASU*

2016 **Invited Panelist** - *American Women in Science Jump Starting STEM Careers Panel*

VII. Service to the Public /Outreach

2020 **National Geographic "X-Ray Earth" Series** - featured scientist in the "*Volcano Apocalypse*" episode discussing our research at Yellowstone volcano. https://www.natgeotv.com/za/shows/natgeo/x-ray-earth

2018 **ASU KED Talk** – one of eight professors from ASU chosen to film a short TED-like talk on my research and path to being a professor. Available here: https://research.asu.edu/kedtalks

2014-2019 **Earth & Space Exploration (ESE) Day -** Open SESE labs to the general public on a weekend day. EPIC lab hosts a series of activities regarding studying the Earth's interior, including making your own rock in a

simplified version of our high-pressure apparatus, make your own lava lamp, trashcano, and exploring the mantle.

2014-2019 **ASU Night of the Open Door -** Open ASU to the general public on weekend evening. EPIC lab hosts a series of activities similar to ESE Day.

2016 **SESE New Discoveries Public Lecture** - "*When will the Yellowstone supervolcano erupt again?*" Evening public lecture to an audience of over two hundred.

2016 **Desert Mountain Speaker Series, AZ - "***When will the Yellowstone supervolcano erupt again?*" Evening public lecture to an audience of over two hundred.

2010 **MIT 150th Anniversary Open House** - created and led exhibit on geologic history of Massachusetts

VIII. Selected Press Coverage & Media

1. September 2024 ASU Now article on Daly Lecture
2. October 2023 Muse Science Magazine for Kids, interview on solar system volcanoes
3. March 2019 ASU Now article on Till et al., 2019
4. Dec. 2018 Scientific American article discussing our Yellowstone research
5. May 2018 Science News article featuring our Exoplanet research
6. Nov 2017 Appeared on AZ PBS "Horizon" to discuss Yellowstone Research
7. Oct 2017 Appeared on 12 News "Sunday Square Off" to discuss Yellowstone Research
8. Oct 2017 New York Times article on our research & associated coverage (Snopes, Time, USA Today, Newsweek, Fox News)
9. June 2017 Interviewed on Arizona's KJZZ 'The Show', *"What if Scientists Could Better Predict When A Volcano Might Erupt?"*
10. March 2017 Blog piece for AGU's Plainspoken Scientist
11. Dec. 2016 AGU EOS article on our work at Yellowstone
12. August, 2016 Featured in ASU Now video: "*ASU professors' words of wisdom"*
13. Jan., 2016 Interviewed on KTAR 92.3 News Radio, Phoenix AZ
14. Nov., 2015 Featured in ASU Connections Podcast
15. July, 2015 "*For smaller eruptions, Yellowstone can wake up quickly*" ArsTechnica.com
16. July, 2015 "*Geologists are setting a Stopwatch for a Yellowstone Eruption,*" Serious-Science.org article on Till et al., 2015
17. July, 2015 "*Creating a stopwatch for volcanic eruptions*", Phys.org article
18. July, 2015 "*Potential for future eruptions at Yellowstone volcano*", ScienceDaily.com
19. July, 2015 "*ASU professor strives to better understand the potential for future eruptions at Yellowstone volcano by studying those in the recent past"* AAAS Eurkalert.org
20. July, 2015 "*Recharging A magma chamber*" the-earth-story.
21. Spring, 2015 "*No Small Feat*" TechConnect Magazine, article on ASU NanoSIMS facility
22. April, 2015 "*UA, ASU teams to search for alien life*", interviewed in Arizona Daily article about NExSS grant

23. March, 2015 "*A (Brief) Tour of Exciting Topics in Experimental Petrology*," co-authored American Geophysical Union Volcanology Geochemistry and Petrology Education and Outreach Spotlight article

IX. Professional Society Membership (year joined in parentheses)

Geological Society of America (2003) • American Geophysical Union (2005) • Mineralogical Society of America (2006) • Earth Science Women's Network (2010) • National Association of Geoscience Teachers (2013) • Geochemical Society (2014)

CONFERENCE ABSTRACTS & PRESENTATIONS

Key to Citation Formatting:
Student, A. = Till Primary Graduate Advisee
Student, A. = Till Primary Undergraduate Advisee
‡Postdoc, A. = Till Postdoctoral Advisee
C. Till invitations shown in green and student/postdoc invited/award-winning presentations shown in orange.

113) ***Bartlett, A.***, **Till, C.B.**, Clarke, A., 2024, Diversity of Petrology & Eruption Initiation Mechanisms Between Mt. Shasta's Misery Hill & Hotlum Cone-Building Episodes, Geological Society of America Meeting, Anaheim, CA.

112) **Till, C.B.**, ***‡deGraffenried, R.***, ***‡Goltz. A***, 2023, Life in the Fast Lane: Observations from a Compilation of Magma Flux, Ascent & Decompression Rates, AGU Fall Meeting, San Francisco, CA.

111) **Till, C.B.**, 2023, Revisiting Graduate Qualifying Exams and Assessment with an Equity Lens, AGU Fall Meeting, San Francisco, CA.

110) Kent, A., ***‡Wieser, P.***, **Till, C.B.**, 2023, Data Gaps at High Threat Cascade Volcanoes, AGU Fall Meeting, San Francisco, CA.

109) ***Bersson, J.***, **Till, C.B.,** Andersen, N.L., Van Eaton, A.R., DeBari, S.M., 2023, Petrogenesis and pre-eruptive storage of young explosive Glacier Peak magmas, AGU Fall Meeting, San Francisco, CA.

108) ***‡deGraffenried, R.***, **Till, C.B.**, Wright, H.M.N., Clynne, MA, Kent, A., 2023, Integrated Views of Magma Ascent and Decompression from Coordinated Approaches: A Case Study from Mount St. Helens, WA., AGU Fall Meeting, San Francisco, CA.

107) ***‡Harmon, L.J.***, **Till, C.B.**, Cardona, A., Jaramillo, J.S., ***Ishimwe, F.***, ***‡Goltz, A.***, 2023, Using Regional Dome Fields as a Window into Slab Tear Processes in Central Colombia., AGU Fall Meeting, San Francisco, CA.

106) ***‡Wieser, P.***, Kent, A., Devitre, E., Gazel, E., **Till, C.B.**, Johnson, E.R., Wallace, P.J., 2023, Bubble Trouble: Raman Measurements of Cascade Melt Inclusion Vapour Bubbles Indicated Substantial Underestimation of Magma Storage Depths in Legacy Data, AGU Fall Meeting, San Francisco, CA.

105) **Till, C.B.**, Revisiting Graduate Qualifying Exams with an Equity Lens, 2023, ASU STEM Inclusion Summit, Phoenix AZ.

104) ***‡A.E. Goltz (Invited)*, C.B. Till**, 2023, I Shall be Released: Magma Flux, Evolution, and Ascent Rates at Continental Subduction Zones, Gordon Research Conference on Geochronology, Mt. Snow, VT.

103) **‡A.E. Goltz *(Invited)*, C.B. Till**, A.J.R. Kent, 2023, More Mantle, More Melt: Modeling the Mantle-derived Causes of Heterogeneity in Volumetric Magmatic Flux, IUGG, Berlin.

102) ***‡Wieser, P.E.***, Kent, A.J.R., Devitre, C., Gazel, E., **Till. C.B.**, Wallace, P., Johnson, E., Abers, G., 2023, Magma Storage depths along the Cascade Arc: Knowns and Unknowns. European Geophysical Union Meeting.

101) ***‡Wieser, P.E. (Invited)***, Kent, A.J.R., **Till, C.B**., Petrelli, M., Wieser, E., Lubbers, J., Neave, D., Ozaydin, S., Donovan, J., Blatter, D., Krawczynski, M., 2023, Open-source Python3 tools for Thermobarometry: Revealing the good, the bad and the ugly of determining PTX conditions in igneous systems. European Geophysical Union Meeting.

100) **Till, C.B.**, 2023, If I Could Turn Back Time: A New Method to Map the Evolutionary Pathways of Igneous Rocks, IAVCEI (oral presentation).

99) ***‡A.E. Goltz*, C.B. Till**, A.J.R. Kent, 2023, More Mantle, More Melt: Modeling the Mantle-derived Causes of Heterogeneity in Volumetric Magmatic Flux, IAVCEI, New Zealand.

98) ***Bersson, J.***, **Till, C.B.**, Debari, S., 2023, Petrogenesis of Dacite at Glacier Peak, a Very High Threat Volcano in the Cascades Volcanic Arc, IAVCEI, New Zealand.

97) ***Ishimwe, F.***, **Till, C.B.**, Cardona, A., 2023, The El Botón Arc: Early Nazca Subduction-Related Magmatism in Colombia, IAVCEI, New Zealand.

96) **Till, C.B. *(Invited)***, 2022, If I Could Turn Back Time: A New Method to Map the Evolutionary Pathways of Igneous Rocks, American Geophysical Union Meeting, Chicago.

95) ****Ravi., S.*, Till. C.B.**, Robinson, M.S., 2022, Lunar Silicic Magma Genesis: Insights from Rhyolite-MELTS Modeling. American Geophysical Union Meeting, Chicago.

94) ***‡Wieser, P.E.***, Kent, A.J.R., **Till. C.B.**, Donovan, J., Neave, D., Krawczynski, M., 2022, Barometers behaving badly: Assessing analytical & experimental error on clinopyroxene thermobarometry. Goldschmidt Conference, Hawaii.

93) Kent, A.J.R., ***‡Wieser, P.E.***, **Till. C.B.**, 2022, Geophysical and Geochemical Constraints on Magma Storage Depths along the Cascade Arc: Knowns and Unknowns. Goldschmidt Conference, Hawaii.

92) ***Bersson, J. J. (Invited)***, **Till, C. B**., Schlieder, T., & Cooper, K. M., 2022, Employing Crystal Zonation to Quantify Eruption Initiation Mechanisms. GSA Cordilleran Meeting, Las Vegas, NV.

91) Kent, A.J.R., **Till. C.B.**, Abers, G., ***‡Wieser, P.E.***, Pitcher, B., Janiszewski, H., Gaherty, J., 2021, Linking large geochemical & geophysical data sets to understand magmatic processes in Cascadia. American Geophysical Union Meeting, New Orleans.

90) Kent A.J.R., **Till, C.B.**, Cooper, K.M., 2020, What makes volcanoes erupt? American Geophysical Union Meeting, Online.

89) ***Ishimwe, F.***, **Till, C.B.**, Cardona, A., Jaramillo, J.S., 2020, Spatio-temporal Evolution of Arc Magmatism: A Case Study of Northwestern Colombia, American Geophysical Union Meeting, Online.

88) ***Bersson, J.***, **Till, C.B.**, Schlieder, T., Cooper, K.M., 2020, Resolving Recharge: quantifying the efficacy of mafic recharge as an eruption initiation mechanism, American Geophysical Union Meeting, Online.

87) ***Shamloo, H.I.*** ***(Invited)***, **Till, C.B.**, 2020, Supersized and Speedy: The Timing and Initiation of the Lava Creek Tuff Supereruption, Yellowstone Caldera, American Geophysical Union Meeting, Online.

86) Couperthwaite, F., Kent, A.J.R., Wallace, P.J., **Till, C.B.**, 2020, An initial evaluation of olivine diffusion timescales from monogenetic-style volcanoes in the Oregon High Cascades. American Geophysical Union Meeting Abstract, Online.

85) ****Ravi, S.***, **Till, C.B.**, Robinson, M.S., 2020, Lunar Silicic Magma Genesis: Insights from Petrological Modeling. Lunar & Planetary Science Conference, Houston, TX.

84) ***Brugman, K.K.***, ***Phillips, M.G.***, and **Till, C.B.**, 2020, Exoplanet Crust Compositions as Determined by Petrological Experiments. Exoplanets in Our Backyard, Houston, TX.

83) **Till. C.B.** ***(Invited)***, Vazquez, J.A., Shamloo, H., Stelten, M.S., 2019, Record of Magma Evolution & Eruption during Yellowstone's Last Caldera Cycle from Geospeedometry & Zircon Petrochronology, American Geophysical Union Meeting Abstract, San Francisco, CA.

82) ***Brugman, K.K.***, ***Phillips, M.G.***, **Till, C.B.**, 2019, Experimental Determination of Rocky Exoplanet Crust Compositions. American Geophysical Union Meeting Abstract P51G-3437, San Francisco, CA.

81) Cardona, A., Leon, S., **Till, C.B**., Jaramillio, J.S., 2019, The Colombian magmatic record of the Panama arc collision and subduction of the Nazca plate, American Geophysical Union Meeting Abstract Y31B-04, San Francisco, CA.

80) Cooper, K.M., Kent, A.J.R., **Till, C.B**., 2019, The spurious controversy about cold vs. warm magma storage and the influence of conceptual models. American Geophysical Union Meeting Abstract V43A-07, San Francisco, CA.

79) ***Guild, M.R.***, **Till, C.B.**, Hervig, R.L., 2019, Linking hydrous mineral chemistry to fluid speciation in the subduction channel. American Geophysical Union Meeting Abstract V53A-04, San Francisco, CA.

78) Kent A.J.R., **Till, C.B.**, Cooper, K.M., 2019, Petrological insights into the initiation of volcanic eruptions. American Geophysical Union Meeting Abstract V21A-04, San Francisco, CA.

77) ***Shamloo, H.***, **Till, C.B,** Kent, A.J.R., Cooper, K., 2019, Constraining first-order controls on volcanic repose time by examining cumulative distribution functions. American Geophysical Union Meeting Abstract V23G-0279, San Francisco, CA.

76) Wagner, L.S., Monslave, G., **Till, C.B.**, Cardona, A., Horton, B.K., Mora A., Parra, M., Becker, T.W., Faccenna, C., Jones, M., 2019, Consequences of Time-varying Subduction Geometry beneath Colombia, American Geophysical Union Meeting Abstract T13B-05, San Francisco, CA.

75) ***Phillips, M.***, **Till, C.B.**, 2019, Decompression Rates of Primitive Magnesian Andesite at Mt. Shasta, California. American Geophysical Union Meeting Abstract V51F-0123, San Francisco, CA.

74) **Till, C.B.** ***(Invited Lecture in Honor of Receiving the 2019 MGPV Division Early Career Award),*** 2019, Conceptual Models of Arc Magmatism: Looking to the Future. Geological Society of America Abstract 241-1, Phoenix, AZ.

73) ***Brugman, K.K.***, **Till, C.B.**, 2019, New Clinopyroxene-Liquid Geothermometer Indicates A Broad Crystallization Interval for Low-Al Clinopyroxene in High-Silicia Magmatic Systems, Geological Society of America Abstract 55-8, Phoenix, AZ.

72) ***Shamloo, H.,*** **Till, C.B.,** 2019, Mg Diffusion in Alkali Feldspar; Applications for Diffusion Chronometry in Magmatic Systems. Geological Society of America Abstract T35-338595, Phoenix, AZ.

71) ***Phillips, M.***, **Till, C.B.**, 2019, Decompression Rates via Geospeedometryof Primitive Magnesian Andesite at Mt. Shasta, California. Geological Society of America Meeting Abstract 184-4, Phoenix, AZ.

70) Kent A.J.R., **Till, C.B.**, Cooper, K.M., 2019, Petrological insights into the initiation of volcanic eruptions. Geological Society of America Meeting 184-3, Phoenix, AZ.

69) ***Guild, M.*****, Till, C. B.**, Mizukami, T., Wallis, S., 2019, Preservation of Foundered Lower Crustal Cumulates in the Higashi-Akaishi Ultramafic Body, Japan, Geological Society of America Meeting Abstract 241-3, Phoenix, AZ.

68) ***Brugman, K.K.*** **(*Invited Talk*)**, ***Phillips, M.G.*****, Till, C.B.,** 2019, Stars to Planets: Experimental Determination of Exoplanet Mantle Solidi and Crust Compositions. Presented at Goldschmidt, Barcelona, Spain.

67) **Till, C.B. (*Invited Keynote*),** 2019, Examining the Causes of Along Strike Geologic Heterogeneity in Volcanic Arcs, Interior of the Earth Gordon Conference, South Hadley MA.

66) **Till, C.B. (*Invited*)**, Vazquez, J.A., Stelten, M.S., 2018, Co-existing discrete bodies of Rhyolite and Punctuated Volcanism Characterize Yellowstone's Post Lava Creek Tuff Caldera Evolution, AGU Fall Meeting, Washington D.C..

65) ***Guild, M.*****, Till, C. B.**, Mizukami, T., Wallis, S., 2018, Petrogenesis of the Higashi-Akaishi Peridotite, American Geophysical Union Fall Meeting Abstract T21G-0301, Washington D.C.

64) ***Phillips, M.*** & **Till, C.B.**, 2018. Determining the crustal storage history of Mt. Shasta primitive magnesian andesite to assess magmatic ascent rates. American Geophysical Union Fall Meeting 2018 Abstract, Washington DC.

63) **Till, C.B. (*Invited Keynote*),** Kent, A., Abers, G., Janiszewski, H., Gaherty, J., Pitcher, B., 2018, Toward Assessing the Causes of Intra-Arc Diversity, Goldschmidt Conference, Boston.

62) ***‡Iacovino, K.*** **(*Invited Keynote*), Till, C.B.**, 2018 Can Slab Fluids Oxidize the Sub-Arc Mantle?, Goldschmidt Conference Boston.

61) Hartnett H, **Till C.B.**, Anbar A, Glaser D, ***Guild, M.***, ***‡Iacovino, K.***, Johnson A, Leong J & Ostrander C, 2018, Solid-Earth Processes are Key Drivers in the Evolution of Earth's Redox State and Set the Stage for the Great Oxidation Event, Goldschmidt Conference, Boston, MA.

60) Bose M., **Till C.B.,** Floss C., 2018, Early solar system chronometry using presolar grains, Goldschmidt Conference, Boston.

59) ***Shamloo, H.***, **Till, C.B.**, 2018, Mg Diffusion in Alkali Feldspar; Applications for Diffusion Chronometry in Magmatic Systems, Goldschmidt Conference Boston, MA.

58) Bose, M., **Till**, **C. B.,** and Floss, C., 2018, Chronometry Using Diffusion in Presolar Silicate Grains, Lunar & Planetary Science Conference, Woodlands, TX.

57) **Till, C.B. (*Invited Keynote*)**, 2018, A Petrologist's Eye View of Silicic Magmatic Systems, EOS AGU Chapman: Merging Geophysical, Petrochronologic, and Modeling Perspectives of Large Silicic Magma Systems Abstract P-28, Quinamávida, Maule Region, Chile.

56) ***Brugman, K.K.*****, Till, C.B.**, 2018. A Revised Low-Al Clinopyroxene-Liquid Geothermometer for High-Silica Igneous Systems. EOS AGU Chapman: Merging Geophysical, Petrochronologic, and Modeling Perspectives of Large Silicic Magma Systems Abstract P-28, Quinamávida, Maule Region, Chile.

55) ***‡Iacovino, K.*****, Till, C.B.**, 2017, Fluid-mediated redox transfer in subduction zones: Measuring the intrinsic fO_2 of slab fluids in the lab, AGU Fall Meeting, New Orleans, LA.

54) ***Brugman, K.K.*** **(*Invited*), C.B. Till**, 2017. Taking Yellowstone's Temperature: A New Clinopyroxene Geothermometer to Improve Timescales of Pre-Eruptive Events. EOS AGU Fall Meeting Abstract U13B-03, New Orleans, LA.

53) ***Brugman, K.K.***, **Till, C.B.**, 2017. A Revised Clinopyroxene-Liquid Geothermometer for Silicic Igneous Systems with Applications to Diffusion Chronometry of the Scaup Lake Rhyolite, Yellowstone Caldera, WY. EOS AGU Fall Meeting Abstract V11C-0365, New Orleans, LA.

52) ***Phillip, M*****, Till, C.B.,** 2017, Experimental Constraints on the Melting Behavior of an Mg-Rich Exoplanetary Mantle. AGU 2017. Abstract MR41C-0417, New Orleans, LA

51) ***Guild, M.*****, Till, C.B.,** 2017. Developing a Hygrometer for Water-Undersaturated Lherzolite Melts, EOS AGU Fall Meeting Abstract V11B-0346, New Orleans, LA.

50) **Till, C.B,** Kent, A., Abers, G.**,** 2017, Toward Assessing the Causes of Intra-Arc Diversity, A Cascades Perspective, AGU, New Orleans LA.

49) **Till, C.B. (*Invited*),** Kent, A., Abers, G.**,** 2017, Toward Assessing the Causes of Intra-Arc Diversity, A Cascades Perspective, CIDER Pre-AGU Workshop, New Orleans LA.

48) **Till, C. B. (*Invited*),** Kent, A., Abers, G.**,** 2017, An interdisciplinary synthesis of mantle conditions, crustal storage and seismic velocities in the Southern-Central Cascades Arc, IAVCEI, Portland OR.

47) **Till, C.B. (*Invited*),** 2017, An Integrated Approach for Identifying P-T-X-t Histories and Eruption Triggers for Silicic Magmas; An Example Examining the Scaup Lake Rhyolite Yellowstone Caldera, WY, IAVCEI, Portland OR.

46) ***K. Brugman***, **Till, C.B.**, 2017, Investigation of the Applicability of Clinopyroxene Geothermometers to Silicic Igneous Systems, IAVCEI, Portland OR.

45) ***H. Shamloo***, **Till, C.B.**, 2017, Petrologic Insights into the Triggering Mechanism for the Lava Creek Tuff Super-Eruption, Yellowstone Caldera, WY, IAVCEI 2017, Portland OR.

44) *****Perez, A.M.***, Desch, S.J., Schrader, D.L., **Till, C.B.**, 2017, Determining the Relative Timing of Formation of Chondrules vs. Planetary Embryos Through Experiments. First Billion Years Conference.

43) *****Perez, A.M.***, Desch, S.J., Schrader, D.L., **Till, C.B.**, 2017, Can Porphyritic Chondrules Form in Planetary Embryo Bow Shocks? Chondrules Conference, British Columbia.

42) ***Shaffer, J.***, **Till, C.B.**, 2016, New Temperature and H_2O estimates for Post Caldera Yellowstone Rhyolite Lavas from Feldspar Geothermometry and Rhyolite-MELTS Modeling EOS AGU Fall Meeting.

41) ***Shamloo, H.***, **Till, C.B.**, 2016, Petrologic Insights into the Triggering Mechanism for the Lava Creek Tuff Super-Eruption, Yellowstone Caldera, WY, EOS AGU Fall Meeting.

40) ***K. Brugman***, **Till, C.B.**, Bose, M. and Hervig, R., 2016, Clinopyroxene Diffusion Chronometry of the Scaup Lake Rhyolite, Yellowstone Caldera, WY, EOS AGU Fall Meeting (*****Recipient of AGU Outstanding Student Paper Award*****).

39) **C. Till**, J. Boyce, 2016, New Approaches for Identifying the P-T-X-t Histories and Eruption Triggers for Silicic Magmas; An Example Examining the Scaup Lake Rhyolite, Yellowstone Caldera, WY, EOS AGU Fall Meeting.

38) **Till, C.B. (*Invited*),** 2016, A joint petrologic-seismic-MT effort to map the distribution of fluids + melts in subduction zones in 3D, Subduction Zone Observatory Workshop, Boise ID.

37) **Till, C.B. (*Invited*),** 2016, A Review of Mantle Thermobarometry for Primitive Arc Magmas, Goldschmidt Conference, Yokohama, Japan, Abstract #3131.

36) ***Guild, M.***, **Till, C**., Hervig, R., Wallis, S., 2016, Depth of Chlorite Formation: Quantitative Determination Using Boron Isotopes, Goldschmidt Conference, Yokohama, Japan, Abstract #1004

35) **C. Till (*Invited*)**, J. Vazquez, J. Boyce, 2015, Setting a Stopwatch for Post-Caldera Effusive Rhyolite Eruptions at Yellowstone caldera, Wyoming, EOS AGU Fall Meeting Abstract V31G-03.

34) ***K. Brugman***, **C. Till**, M. Bose and R. Hervig, 2015, Development of Clinopyroxene as an Igneous Geospeedometer Using NanoSIMS, EOS AGU Fall Meeting Abstract V31B-3030.

33) ***Guild, M.***, **C. Till**, R. Hervig, S. Wallis, 2015, Boron Isotopic Compositions of High Pressure Hydrous Phases from the Slab-Mantle Wedge Interface, EOS AGU Fall Meeting Abstract V43A-3096.

32) ‡***Cichy, S.***, **C. Till**, K. Roggensack, R. Hervig, A. Clarke, 2015, Experimental Evidence for Fast Lithium Diffusion and Isotope Fractionation in Water-bearing Rhyolitic Melts at Magmatic Conditions, EOS AGU Fall Meeting Abstract V43C-3167.

31) **_A. Rubin_, K. Cooper, A. Kent, F. Costa Rodriguez, **C. Till**, 2015, Constraining timescales of pre-eruptive events within large silicic volcanic centers, EOS AGU Fall Meeting Abstract V23F-01.

30) M. Coombs, J. Vazquez, L. Hayden, A. Calvert, M. Lidzbarski, N. Anderson, **C. Till**, 2015, Rejuvenation of shallow-crustal silicic magma bodies at Augustine and Hayes volcanoes, Alaska, EOS AGU Fall Meeting AbstractV42B-01.

29) **Till, C.B. (*Invited*)**, 2015, Thermobarometric Constraints on Primitive Arc Magma Genesis: A Review, GeoPRISMS Theoretical & Experimental Institute on Subduction Zones, Redondo Beach, CA.

28) ***Tucker, K.*, Hervig, R., **Till, C.**, Wadhwa, M., 2105, D/H in nominally anhydrous phases in martian meteorites: implications for the martian mantle, Meteoritics & Planetary Science Vol. 50.

27) **Till, C.B. (*Invited*)**, ***Guild, M.R.***, Grove, T.L., Carlson, R.W., 2014, Evidence of Arc Magma Genesis in a Paleo-Mantle Wedge, the Higashi-akaishi Peridotite, Japan, EOS, AGU Fall Meeting Abstract V31G-07.

26) **Till, C.B.**, Boyce, J.W., 2014, Interrogating Commonly Applied Initial Condition Assumptions in Geospeedometry using NanoSIMS, EOS, AGU Fall Meeting Abstract V33A-4823.

25) Grove, T.L., **Till, C.B.**, 2014, Melting processes at the base of the mantle wedge: Melt compositions and melting reaction for the first melts of vapor-saturated lherzolite, EOS, AGU Fall Meeting Abstract DI21A-4257.

24) ***Rubin, A.E.*, Cooper, K.M., Kent, A.J.R., Costa Rodriguez, F., **Till, C.B.**, 2014, Using Li Diffusion to Track Thermal Histories within Single Zircon Crystals, EOS, AGU Fall Meeting Abstract V31F-02.

23) **Till, C.B. *(Invited)***, Grove, T.L., Carlson, R.W., Wallis, S.R., Mizukami, T., 2014, Insight into arc magma genesis from the Higashi-akaishi Peridotite, Japan, Goldschmidt Annual Conference, #4067.

22) **Till, C.B.,** Grove, T.L., Donnelly-Nolan, J,M., Carlson, R.W., 2013 *(Invited),* Depths and Temperatures of Mantle Melt Extraction in the Southern Cascadia Subduction Zone, EOS, AGU Fall Meeting Abstract S11C-07.

21) **Till, C.B.,** Vazquez, J.A., Boyce, J.W., Stelten, M., 2013, Probing the source and timing of rejuvenation and hybridization in post-caldera rhyolite magmas at Yellowstone Caldera, EOS, AGU Fall Meeting Abstract V53A-2763.

20) Grove, T.L., Holbig, E.S., Barr, J.A., **Till, C.B.,** Krawczynski, M.J., 2013, How to identify garnet lherzolite melts and distinguish them from pyroxenite melts, EOS, AGU Fall Meeting Abstract.

19) **Till, C.B.,** Matthews, N.E., Vazquez, J.A. (2013) Refining the Chronology of Intracaldera Magmatism Following the Formation of Yellowstone Caldera, GSA Abstracts with Programs, Vol. 45, No. 7, p. 895, Paper 405-8.

18) **Till, C.B.,** Grove T.L., 2012 *(Invited*), In Pursuit of Parental Arc Magmas: The effects of pressure on the composition of H_2O-saturated peridotite melts, EOS, AGU Fall Meeting.

17) **Till, C.B.,** Vazquez, J.A., Boyce, J.W., Hitzman, C., 2012, Quantifying the interval between rejuvenation and eruption of rhyolite at Yellowstone caldera using high-resolution NanoSIMS geospeedometry, EOS, AGU Fall Meeting.

16) **Till, C.B.,** Grove T.L., Krawczynski, M.J., 2011, A new melting model for variably metasomatized mantle and its implications for the generation of intraplate basalts in Oregon's High Lava Plains and the Modoc Plateau, CA, EOS, AGU Fall Meeting, Abstract T44D-06.

15) **Till, C.B.,** Grove, T.L., Carlson, R.W., Donnelly-Nolan, J,M., Fouch, M.J., Wagner, L.S., 2011, Shallow Anhydrous Asthenospheric Melting and the Location of the Lithosphere-Asthenosphere Boundary Below Southern Oregon and Northern California, Geological Society of America Abstracts with Programs, V. 43, No. 5, p. 90.

14) **Till, C.B.**, Grove, T.L., Carlson, R.W., Donnelly-Nolan, J.M., 2011 *(Invited)*, Shallow anhydrous asthenospheric melting and the location of the lithosphere-asthenosphere boundary below southern Oregon and northern California, EarthScope Institute on the Lithosphere-Asthenosphere Boundary, Portland, OR.

13) **Till, C.B.,** Grove, T.L., 2010, Experimental Insights into the Subduction Filter, EOS, AGU Fall Meeting, Abstract V12B-04.

12) **Till, C.B.,** Grove, T.L., Carlson, R.W., 2010, Message from the Moho: Petrologic Clues to the Origin of Quaternary Basaltic Lavas from Oregon's High Lava Plains, Geologic Society of America Abstracts, V. 42, No. 5, p. 343.

11) **Till, C.B.,** Carlson, R.W., Grove, T.L., Wallis, S.R., Mizukami, T., 2009, A Missing Link in Understanding Mantle Wedge Melting, Higashi-akaishi Peridotite, Japan, EOS, AGU Fall Meeting, Abstract V44A-03.

10) M.J. Krawczynski, **Till, C.B.**, Barr, J.A., Grove, T.L., 2009, How much of the range in mantle potential temperatures is natural?, EOS, AGU Fall Meeting, Abstract V23B-2058.

9) **Till, C.B.,** Grove, T.L., 2008, New Observations on the Melting Behavior of H_2O-Saturated Mantle: Applications to Subduction Zones, EOS, AGU Fall Meeting Abstract V24B-08.

8) Elkins-Tanton, L.T., **Till, C.B.**, Fisher, K.M., 2008, Melt Could Create a Sharp Lithosphere-Asthenosphere Boundary Below Eastern North America, EOS, AGU Fall Meeting Abstract U43B-0066.

7) **Till, C.B.**, Grove, T.L., Withers A.C., Hirschmann, M.M., 2008 *(Invited),* Unlocking the Secrets of the Mantle Wedge: H_2O-Saturated Peridotite Melting Behavior to 5 GPa, AGU Chapman Conference and Fifth International Orogenic Lherzolite Conference, Mt. Shasta City, CA.

6) **Till, C.B.**, Grove, T.L., Withers, A., Hirschmann, M.M., Médard, E., and Chatterjee, N., 2007, Extending the Wet Mantle Solidus: Implications for H2O Transport and Subduction Zone Melting Processes; EOS Transactions AGU Fall Meeting.

5) **Till, C.B.**, Gans, P.B., Spera, F.J., 2007, Wet Melting Prevails in Hot Subduction Zones; Evidence for the Oligo-Miocene Arc in southern Sonora, Mexico, State of the Arc Meeting, Termas de Puyehue, Chile.

4) De la Fuente, J., Chatoian, J., King, A.P., **Till, C.B.**, Miller, A.R., Taylor, R.G., 2005, Development of a landslide and debris flow hazard map for the Old and Grand Prix Fires: San Bernardino National Forests, GSA Abstracts with Programs, vol. 37, no. 7, p. 175.

3) **Till, C.B.**, Gans, P.B., and Spera F., 2005, From Subduction to Extension/Transtension: A Case Study in Transitional Geochemistry from Sonora, Mexico; GSA Abstracts with Programs, Vol. 37, No. 7, p. 19.

2) **Till, C.B.**, Gans, P.B., and Spera, F., 2005, The Tertiary Transition from "Subduction-Related" to "Rift- Related" Magmatism in Southern Sonora, Mexico: A Field, Petrologic, and Geochemical Study; GSA Abstracts with Programs, Vol. 34, No.4, p. 67.

1) MacMillan,I, Gans, P.B., and **Till, C.**, 2005, Tectonic Implications of the Volcanic and Structural History of the Sierra Santa Ursula, Sonora, Mexico; GSA Abstracts with Programs, Vol. 34, No. 4, p. 64.

OTHER EXPERIENCE

My first career was in ballet. I was employed full-time as a professional ballet dancer for five years in two world-renowned companies (Pennsylvania Ballet & Fort Worth Dallas Ballet, now Texas Ballet Theater) after studying ballet at the School of American Ballet at Lincoln Center in New York City and Ballet Workshop of New England. As a ballet dancer, I received several distinctions including an Honorable Mention in the Presidential Arts Competition and an invitation to participate in Exploring Ballet with Suzanne Farrell at the Kennedy Center in Washington D.C..