CURRICULUM VITAE

EVA ENKELMANN

Professor
Department of Earth, Energy, and Environment
E-mail: eva.enkelmann@ucalgary.ca
Website: http://enkelmann.org

EDUCATION

2012 **Habilitation, Geology** , Eberhard Karls Universität Tübingen, Germany
Thesis: „Using geo- and thermochronometric methods to investigate tectonic and surface processes“.

2005 **Ph.D., Geology**, TU Bergakademie Freiberg, Germany
Thesis: “Fission-track dating: Calibration of the method and its application in the tectonics of eastern Tibet”. Supervisors: Lothar Ratschbacher & Raymond Jonckheere

2001 **Diploma, Geology**, TU Bergakademie Freiberg and Max-Planck-Institut für Kernphysik, Forschungsstelle Archäometrie, Heidelberg, Germany
Thesis: “The Tan-Lu Fault Zone at the eastern edge of the Dabie Shan (eastern China): A view from fission-track thermochronology”. Supervisors: Lothar Ratschbacher & Guenter Wagner

EMPLOYMENT

Since 7/2025	Professor Department of Earth, Energy and Environment, University of Calgary, Canada
7/2020 – 6/2025	Associate Professor Department of Geoscience (now EEE), University of Calgary, Canada
9/2017–6/2020	Assistant Professor (tenure track) Department of Geoscience, University of Calgary, Canada
8/2016 – 8/2017	Associate Professor, Department of Geology, University of Cincinnati, USA
1/2013 – 7/2016	Assistant Professor (tenure track) Department of Geology, University of Cincinnati, USA
10/2009 – 10/2012	Research Scientist and Lecturer (3-year term) University of Tübingen, Germany
10/2005 – 9/2009	Research Scientist at the Geochronology Lab at Lehigh University, Bethlehem, PA, USA. Supervisor: Peter Zeitler
2/2002 – 6/2005	German Research Foundation and DAAD Research Associate, Institut für Geologie, TU Bergakademie Freiberg, Germany. Supervisor: Lothar Ratschbacher
8/2001 – 12/2001	Research Associate at the Max-Planck-Institut für Kernphysik, Forschungsstelle Archäometrie, Heidelberg, Germany. Supervisor: Günter Wagner.

AWARDS & HONORS

2026 David Elliott Best Paper Award, Canadian Tectonics Group of the Geological Association Canada
2023 Outstanding Achievement Award of the Faculty of Science, University of Calgary
2022 Fellow of the Geological Society of America
2018 Exceptional Reviewer for GSA Journal *Lithosphere*
2017 Rising Star Award of the College of Arts & Sciences, University of Cincinnati
2001 Bernhard-von-Cotta Prize for the Best Diploma Thesis of the TU Bergakademie Freiberg

RESEARCH

I am interested in understanding the interaction between tectonics and climate-driven surface processes. I am using geo-and thermochronometric methods to quantify the timing, amount, and rate of rock cooling and exhumation. I apply these methods to the scale of entire orogens (100s of km) and individual faults (<10 km), and link orogenic processes to adjacent sedimentary basins using innovative methods of multi-analyses conducted on individual detrital mineral grains. My research has been highly collaborative. I work with experts in the field of sedimentology, geophysics, geomorphology, petrology and nuclear physics. In addition to geological applications, I have a strong interest in advancing thermochronometric methods including fission-track analysis and (U-Th)/He dating.

RESEARCH FUNDING

Note: amounts refer to funding portion to me.

Funding since employment at the University of Calgary (all CA$)

2026–2028	$ 40,000	NSERC-Alliance Alberta Innovates Advance Program (sole PI) *Developing in-situ multi-analysis dating techniques to answer new geological questions*
2024–2029	$ 283,000	NSERC - Discovery Grant (sole PI) *Developing in-situ multi-analysis dating techniques to answer new geological questions*
2024–2026	$ 145,000	American Chemical Society–PRF New Directions (sole PI) *Extracting thermal history information from dispersed apatite (U-Th-Sm)/He data*
2020–2027	$ 199,600	NWT Geologic Survey (sole PI) *Liard Basin thermal history for geothermal energy potential*
2023–2024	$ 14,180	Departmental overhead funds to promote Collaborative Research *Grant writer for CFI-Innovation Fund proposal*
2022–2025	$ 103,800	NSERC Alliance Grant (Co-PI, total 6 PI, $ 2,700,000) *Porphyry fertility and vectoring at the belt to deposit scale in BC.*
2022–2025	$ 150,000	Natural Resources Canada – GeoNorth *Faults, fluids and landscape evolution in the Northern Cordillera*
2022–2024	$ 10,000	International Research Partnership Workshop Grant UofC
2022–2024	$ 50,000	Eyes High Postdoctoral fellowship matching funds of UofC Support of PDF Birk Haertel
2021–2022	$ 20,080	Natural Resources Canada contract *Dating fault activity in SE Yukon*
2021-2022	$ 14,350	Natural Resources Canada contract *Thermochronology studies in the Liard Basin*
2020-2021	$ 23,700	Yukon Geological Survey contract *Exhumation in SE Yukon*
2018–2019	$ 47,000	Natural Resources Canada contract *Richardson Mountains expedition and thermochronology studies*
2018–2019	$ 12,000	Natural Resources Canada contract *Arctic Salt dome uplift Geo-and Thermochronology*
2018–2024	$ 180,000	NSERC - Discovery Grant (sole PI) *Quantifying the inboard transfer of deformation in the Northern Canadian Cordillera*

2018–2024	$ 96,000	NSERC - Northern Region Supplement (sole PI) *Quantifying the inboard transfer of deformation in the Northern Canadian Cordillera*
2017–2019	$ 321,000	University of Calgary – Startup Funds

External funding received during employment at the University of Cincinnati (all US$)

2015–2017	$ 110,000	American Chemical Society–PRF New Directions (sole PI) *Triggering a tectonic-climate feedback: The sedimentary record of tectonic-surface processes interactions in the St. Elias Range, AK*
2014 – 2016	$ 100,057	National Science Foundation (NSF) Ocean Drilling Program (lead PI, total 6 PI's and $400,000) *Expedition 341 Oriented Research - Linking Sediment Provenance and Strata Formation to Tectonic-Climate Interactions along the southern Alaska Margin.*
2014 – 2017	$ 190,000	NSF – Tectonics Program (co-PI, total 2 PI's, $500,000) *Investigating the sedimentary record of differing modes of flat-slab subduction.*
2014	$ 20,000	National Geographic Society – Explorer Fund (sole PI) *Mackenzie Mountains Expedition*
2013–2016	$ 258,800	University of Cincinnati – Startup Funds

Grants during employment at the University of Tübingen 2009–2012 (all EURO)

2013–2014	€ 67,600 +1 yr graduate student stipend	DFG German Research Foundation (lead PI, total 2 PI's) *Quantifying deformation and erosion at the Yakutat plate corner (SE Alaska) with integrated thermochronology and modeling*
2011–2013	€ 196,142 +2 yrs graduate student stipend	DFG German Research Foundation (lead PI, total 2 PI's) *Quantifying deformation and erosion at the Yakutat plate corner (SE Alaska) with integrated thermochronology and modeling*

PUBLICATIONS

PEER-REVIEW JOURNALS (n=98) H-index = 38 (Google Scholar 10/2026); Total citations = 5210

* supervised student, ** supervised postdoc

1. *Pinto, T.F., **Enkelmann, E.,** Stephan, T., Beranek, L., Padgett, J., Terlaky, V., Qadri, T., 2026. Long-term effect of inherited basement structures on the basin evolution of northwestern Canada. *GSA Bulletin Link*
2. *MacLeod, D., **Enkelmann, E.,** Pattison, D., Maitra, A. 2026. Eocene to Miocene reactivation of the Purcell Trench fault and the Gallagher fault zone, southeastern British Columbia. *Tectonophysics,* 941, 231416. Link
3. *Padgett, J., **Enkelmann, E.,** Schoenbohm, L., 2026. Geomorphic Evidence of a Potentially Active Fault in the Northeastern Canadian Cordillera. *Geomorphology* 514, 110549 Link
4. **Maitra, A., Härtel, B., **Enkelmann, E.,** MacLeod, D., 2026. Implications of uranium and thorium zoning for zircon laser-ablation (U-Th)/He age interpretation. *Chemical Geology* 123694 Link
5. **Härtel, B., **Enkelmann, E.,** Maitra, A., 2026. Technical Note: Disentangling pre- and post-depositional thermal histories in partially reset samples. *Geochronology* 8, 475–494. Link

6. Massari, F., Fellin, M. G., Stefani, C., **Enkelmann, E**., Dieni, I., & Sanchetti, S., 2026. Exhumed eo-Alpine high-pressure rocks fed Campanian turbidites in eastern Sardinia. *Geochemistry, Geophysics, Geosystems*, 27, e2025GC012662. Link
7. **Härtel, B., **Enkelmann, E.,** Whelan, E. 2026. Combined Zircon U/Pb-(U-Th)/He-Raman Dating. *Chemical Geology 713, 123435.* Link
8. *Haag, M.B., Jess, S., Schoenbohm, L., **Enkelmann, E,** Pinto, T.F., 2026. Long-lived topography along rifted margins: Insights from Aparados de Serra Escarpment, Southeast Brazil. *Tectonophysics 925, 231100.* Link
9. *MacLeod, D., Pattison, D., **Enkelmann, E.,** Kehler, C. 2025. Cretaceous to Miocene exhumation of the Purcell Mountains, southeastern British Columbia. Canadian Journal of Earth Science. https://doi.org/10.1139/cjes-2025-0053 Link
10. Jess, S., Schoenbohm, L., **Enkelmann, E.** 2025. Novel apatite provenance analysis reveals erosion of moraines as primary sediment source during glacial retreat. *Earth and Planetary Science Letters 668, 119560.* Link
11. *Johns-Buss, E.G., Beranek, L.P., **Enkelmann, E.** 2025. Tracing polyphase fault reactivation and lithospheric evolution through Wilson cycles: Thermochronological insights from the Newfoundland Appalachians. *Tectonics 44, e2024TC008646.* Link
12. **Stefan, T. and **Enkelmann, E.,** 2025. All Aligned on the Western Front? Analyzing the Stress Field in the Northern Cordillera of North America. *Tectonics 44,* e2025TC009014. Link
13. *Padgett, J., **Enkelmann, E.,** Kellett, D., Moynihan, D., Stephan, T. 2025. Cenozoic fault reactivation in the Upper Hyland River Valley, Yukon: A thermochronological perspective. *Canadian Journal of Earth Sciences 62, 1002-1022.* Link
14. Gosselin, J.M., Biegel, K.M., Dettmer, J., Gilbert, H., Colpron, M., **Enkelmann, E.** 2025. Crustal stress near the Yakutat microplate collision from probabilistic earthquake focal mechanisms. *Canadian Journal of Earth Sciences. 62, 4,* 807-820*. 1-14. doi.org/10.1139/cjes-2024-0095* Link
15. **Härtel, B., Vermeesch, P., **Enkelmann, E.,** Glorie, S. 2024. Ghost components in detrital thermochronology. *Chemical Geology 122406.* Link
16. *Khodaparast, S., Madanipour, S., **Enkelmann, E.,** Hessami, K., Nozaem, R. 2024. Time constraints on the late Cenozoic fault evolution along the northern margin of the Iranian Plateau. *Tectonics*, *43*, e2023TC008034 Link
17. **Härtel, B., & **Enkelmann, E.,** 2024. The daughter-parent plot: a tool for analyzing thermochronological data. *Geochronology 6,* 429–448. Link
18. Biegel, K.M., Gosselin, J.M., Dettmer, J., Colpron, M., **Enkelmann, E.,** Caine, J.S., 2024. Earthquake relocations delineate discrete fault network and deformation corridor throughout Southeast Alaska and Southwest Yukon. *Tectonics 43,* e2023TC008140*.* Link
19. **Härtel, B., **Enkelmann, E.,** Jonckheere, R., Ludwig, T., Krause, J., Ratschbacher, L., 2024. In search of lost time: Raman thermochronology of FC1 zircon. *Contributions to Mineralogy and Petrology,* 179, 2. Link
20. **Stephan, T., **Enkelmann, E.** Kroner, U., 2023. Analyzing the horizontal orientation of the crustal stress adjacent to plate boundaries. *Scientific Reports,* 13, 15590*.* Link
21. **Härtel, B., Matthews, W., **Enkelmann, E.** 2023. Duluth complex FC1 apatite and zircon: reference materials for (U-Th)/He dating? *Geostandards and Geoanalytical Research, 47,3, 669–681.* Link

22. *Damant, K.A., **Enkelmann, E.,** Jess, S. 2023. Prolonged Post-Orogenic Extension in the Southeastern Canadian Cordillera: Miocene Reactivation of the Columbia River Fault. *Tectonophysics* 229763. Link
23. **Jess, S.A., **Enkelmann, E.,** Matthews, W. 2023. The effect of sediment transport in glaciated catchments on multimineral detrital geochronology: deciphering contrasting zircon and apatite U-Pb dates. *JGR-Earth Surface* 128, e2022JF006738. Link
24. *Johns-Buss, E.G., Beranek, L.P., **Enkelmann, E.,** Jess, S., Matthews, W., 2023. Exhumation history and Early Cretaceous paleogeography of the Newfoundland margin revealed by detrital zircon U-Pb and fission-track studies of syn-rift Hibernia Formation strata. *Marine and Petroleum Geology 148, 106055.* Link
25. **Jess, S.A., **Enkelmann, E.,** Matthews, W. 2022. Why are the Appalachians high? New insights from detrital apatite laser ablation (U-Th)/He dating. *Earth and Planetary Science Letters, 597, 117794.* Link
26. Min, M., Ratschbacher, L., Franz, L., Hacker, B. R., **Enkelmann, E.,** Eko Yoan Toreno, Jonckheere, R., Härtel, B., Schurr, B., Tichomirowa, M., Pfänder, J.A., 2022. The evolution of the Eastern Himalayan syntaxis revealed by India (Tethyan Himalaya Series) in central Myanmar. *Geophysical Research Letters* 49, e2022GL099140. Link
27. Flowers, R., Ketcham, R., **Enkelmann, E**., Gautheron, C., Reiners, P., Metcalf, J., Danisik, M., Stockli, D., and Brown, R., 2022. (U-Th)/He chronology: Part 2. Considerations for evaluating, integrating and interpreting conventional individual aliquot data. *GSA Bulletin.* 135 (1-2): 137–161. ***Invited*** Link
28. Flowers, R., Zeitler, P.K., Danisik, M., Reiners, P., Gautheron, C., Ketcham, R., Metcalf, J., Stockli, D., **Enkelmann, E**., and Brown, R., 2022. (U-Th)/He chronology: Part 1. Data, uncertainty, and reporting. *GSA Bulletin* 135 (1-2): 104–136. ***Invited*** Link
29. **Jess, S., **Enkelmann, E.,** Grasby, S., Fraser, K., 2021. Determining the longevity of hydrothermal systems using thermochronology and thermal modelling. *JGR–Earth Surface* 126, e2021JF006286. Link
30. *Fraser, K., **Enkelmann, E.,** Jess, S., Gilbert, H., Grieco**,** R., 2021. Resolving the Cenozoic History of rock Exhumation along the central Rocky Mountain Trench using apatite low-temperature thermochronology. *Tectonics*, 40, e2021TC006847. Link
31. *Arkle, J., Weber, J., **Enkelmann, E.,** Owen, L., Govers, R., Jess, S., Denison, C., O'Sullivan, P., Donelick, R., 2021. Exhumation of the Costal Metamorphic Belt above the Subduction-to-Transform Transition, in the Southeast Caribbean Plate Corner. *Tectonics*, 40, e2020TC006414. Link
32. **Enkelmann, Eva**, and Jonckheere, Raymond, 2021. Fission Track Dating. In: Alderton, David; Elias, Scott A. (eds.) Encyclopedia of Geology, 2nd edition. vol. 6, pp. 116-131. United Kingdom: Academic Press. ***Invited Book Chapter*** Link
33. **Enkelmann, Eva,** and Falkowski, Sarah, 2021. Deformation between the highly oblique Yakutat–North American plate boundary and the Eastern Denali Fault: *Geosphere,* v. 17, 6, 2123–2143. Link
34. *McKay, R., **Enkelmann, E.**, Hadlari, T., Matthews, W., Mouthereau, F. 2021. Cenozoic exhumation history of the eastern margin of the northern Canadian Cordillera. *Tectonics*, 40, e2020TC006582. Link
35. *Choi, M., Eaton, D., **Enkelmann, E.,** 2021. Is the eastern Denali Fault active? *Geology*, v. 49, p. 662–666. Link
36. *Khodaparast, S., Madanipour, S., **Enkelmann, E.**, Nozaem, R., Hessami, K., 2020. Fault inversion in central Iran: evidence of post Pliocene intracontinental left lateral kinematics at the northern Iranian Plateau margin. *Journal of Geodynamics*. 140, 101784. Link

37. Jess, S., Koehn, D., Fox, M., **Enkelmann, E.,** Sachau, T., Aanyu, K., 2020. Paleogene Initiation of the Western Branch of the East African Rift: the uplift history of the Rwenzori Mountains, Western Uganda. *Earth and Planetary Science Letters* 552, 116593. Link
38. *Pickering, J., Matthews, W., **Enkelmann, E.,** Guest, B., Sykes, C., Koblinger, B., 2020. Laser Ablation U-Th-Sm/He dating of apatite. *Chemical Geology* 548, 119683. Link
39. Abdulhameed, S., Ratschbacher, L., Jonckheere, R., Gągała, Ł., **Enkelmann**, **E**., Käßner, A., Kars, M., Szulc, A., Kufner, S.-K., Schurr, B., Ringenbach, J.-C., Nakapelyukh, M., and Khan, J. 2020. Tajik Basin and Southwestern Tian Shan, Northwestern India-Asia Collision Zone: 2. Timing of Basin Inversion, Tian Shan Mountain Building, and Relation to Pamir-Plateau Collapse and Deep India-Asia Indentation. *Tectonics,* 39, e2019TC005873. Link
40. *Bootes, N., **Enkelmann, E.,** Lease, R., 2019. Late Miocene to Pleistocene source to sink record of exhumation and sediment routing in the Gulf of Alaska from detrital zircon fission-track and U-Pb double dating. *Tectonics* 38, 2703–2726. Link
41. **Enkelmann, E.,** Finzel, E., Arkle, J. 2019. Deformation at the eastern margin of the Northern Canadian Cordillera: potentially related to opening of the North Atlantic. *Terra Nova 31, 3, 1-8.* Link
42. *Schartman, A., **Enkelmann, E.,** Garver, J.I., Davidson, C. 2019. Uplift and Exhumation of the Russell Fiord and Boundary blocks along the northern Fairweather Transform Fault, Alaska. *Lithosphere,* 11 (2), 232–251. Link
43. **Enkelmann, E.,** *Sanchez Lohff, S.K., Finzel, F.S. 2019. Detrital Zircon double-dating of forearc basin strata reveals magmatic, exhumational, and thermal History of Sediment Source Areas. *GSA Bulletin,* v.131, no. 7/8, p. 1364–1384. Link
44. Reid, M.R., Finzel, E.S., **Enkelmann, E.,** McClelland, W.C. 2018. Detrital zircon provenance of Upper Jurassic-Upper Cretaceous forearc basin strata on the Insular terrane, south-central Alaska. *in* Ingersoll, R.V., Lawton, T.F., and Graham, S.A., eds., Tectonics, Sedimentary Basins, and Provenance: A Celebration of William R. Dickinson's Career: Geological Society of America Special Paper 540, 571–590. Link
45. *Madanipour, S., Yassaghi, A., Ehlers, T.A., **Enkelmann, E.,** 2018. Tectonostratigraphy, Structural Geometry and Kinematics of the NW Iranian Plateau Margin: Insights from the Talesh Mountains, Iran. *American Journal of Science* 318, 208-245. Link
46. *Madanipour, S., Ehlers, T.A., Yassaghi, A., **Enkelmann, E.,** 2017. Accelerated middle Miocene exhumation of the Talesh Mountains constrained by U-Th/He thermochronometry: evidence for the Arabia–Eurasia collision in the NW-Iranian Plateau. *Tectonics 36,* 1538-1561. Link
47. Yang, Z., Shen, C., Ratschbacher, L., **Enkelmann, E.**, Jonckheere. R., Wauschkuhn, B., Dong, Y. 2017. Sichuan Basin and Beyond: Eastward foreland growth of the Tibetan Plateau from an integration of Late Cretaceous- Cenozoic fission-track and (U-Th)/He ages of the eastern Tibetan Plateau, Qinling, and Daba Shan. *JGR-Solid Earth* 122*,* 4712–4740. Link
48. Zeitler, P.K., **Enkelmann, E.,** Thomas, J., Watson, B., Ancuta, L.D., Idleman, B.D. 2017. Solubility and trapping of helium in apatite. *Geochemica et Cosmochemica Acta* 209, 1-8. Link
49. Finzel, Emily, and **Enkelmann, Eva,** 2017. Miocene-Recent sediment flux in the south-central Alaskan forearc basin governed by flat-slab subduction. *Geochem. Geophys. Geosyst.*, 18, 1739–1760. Link
50. *Dunn, C.A., **Enkelmann, E.,** Ridgway, K.D., Allen, W.K., 2017. Source to sink evaluation of sediment routing in the Gulf of Alaska and Southeast Alaska: a thermochronometric perspective. *JGR-Earth Surface*, 122, 711-734. Link

51. Rutte, D., Ratschbacher, L. Khan, J., Stübner, K. Hacker, B. R., Stearns, M.A., **Enkelmann, E.,** Jonckheere, R., Pfänder, J. A, Sperner, B., Tichomirowa, M. 2017. Building the Pamir-Tibet Plateau—Crustal stacking, extensional collapse, and lateral extrusion in the Central Pamir: 2. Timing and Rates. *Tectonics*, 36, 3, 385-419. Link
52. **Enkelmann, E.,** Piestrzeniewicz, A., Falkowski, S., Stübner, K., Ehlers, T.A., 2017. Thermochronology in southeast Alaska and southwest Yukon: Implications for North American Plate Response to Terrane Accretion. *Earth and Planetary Science Letters, 457, 348–358*. Link
53. Käßner, A., Ratschabcher, L., Jonckheere, J., **Enkelmann, E.,** Khan, J., Sonntag, B.-L., Gloaguen, R., Gadoev, M., Oimahmadov, I., 2016. Cenozoic intra-continental deformation and exhumation at the northwestern tip of the India-Asia collision-southwestern Tian Shan, Tajikistan and Kyrgyzstan. *Tectonics, 35, 9, 2171-2194.* Link
54. Finzel, E., **Enkelmann, E.,** Falkowski, S., Hedeen, T., 2016. Long-term forearc basin evolution in response to changing subduction styles in southern Alaska. *Tectonics,* 35, 7, 1735-1759. Link
55. Lease, R.O., Ehlers, T.A., **Enkelmann, E.,** 2016. Large along strike variations in the onset of Subandean deformation: Implications for Central Andes orogenic growth. *Earth and Planetary Science Letters, 451, 62–76.* Link
56. *Falkowski, S. and **Enkelmann, E.** 2016. Upper crustal cooling of the Wrangellia Composite Terrane in the northern St. Elias Mountains, western Canada. *Lithosphere, 8, 359–378.* Link
57. Georgieva, V., Melnick, D., Schildgen, T.F., Ehlers, E., Lagabrielle, Y., **Enkelmann, E.,** Manfred, S.R. 2016. Tectonic control on rock uplift and topography above oceanic-1 ridge collision – Southern Patagonian Andes (47°S), Chile. *Tectonics, 35, 1317–1341.* Link
58. *Falkowski, S., **Enkelmann, E.** Drost, K., Pfänder, J.A., Stübner, K., Ehlers, T.A. 2016. Cooling history of the St. Elias syntaxis, southeast Alaska, revealed by geo- and thermochronology of cobble-size glacial detritus. *Tectonics, 35, 447-468.* Link
59. **Enkelmann, E.** and Garver, J.I., 2016. Low-temperature thermochronology applied to ancient settings. *Journal of Geodynamics 93, 17–30.* ***Invited Review Article****.* Link
60. Gulick, S.P.S., Jaeger, J.M., Mix, A.C., Asahi, H., Bahlburg, H., Belanger, C., Berbel, C.B.B., Childress, L., Cowan, E., Drab, L., Forwick, M., Fukumura, A., Ge, S., Gupta, S., Kioka, A., Konno, S., LeVay, L., März, C., Matsuzaki, K., McClymont, E., Moy, C., Müller, J., Nakamura, A., Ojima, T., Ribeiro, F.R., Ridgway, K., Romero, O., Slagle, A., Stoner, J., St-Onge, G., Suto, I., Walczak, M.D., Worthington, L., Bailey, I., **Enkelmann, E.,** Reece, R., Schwarz, J.M., 2015. Mid-Pleistocene climate transition drives net mass loss from rapidly uplifting St. Elias Mountains, Alaska. PNAS, 112, 49, 15042-15047. Link
61. **Enkelmann, E.,** Koons, P.O., Pavlis, T.L., Hallet, B., Barker, A., Elliott, J., Garver, J.I., Gulick, S.P.S., Headley, R.M., Pavlis, G.L., Ridgway, K.D., Ruppert, N., van Avendonk, H., 2015. Cooperation of tectonic and surface processes produces Earth's highest coastal mountains. *Geophysical Research Letters*, *42*, 14, 5838-5846. Link
62. **Enkelmann, E.,** and Ehlers, T.A., 2015. Evaluation of detrital thermochronology for quantification of glacial catchment denudation and sediment mixing. *Chemical Geology, 411, 299-309.* Link
63. Ehlers, T.A., *Szameitat, A., **Enkelmann, E.,** Yanites, B.J., Woodsworth, G.J. 2015. Identifying Spatial Variations in Glacial Erosion with Detrital Thermochronology, Coast Mountains British Columbia. Journal of Geophysical Research – Earth Surface, 120, 1023–1039. Link
64. **Enkelmann, E.,** Ehlers, T.A., *Merli, G. Methner, K., 2015. Thermal and exhumation history of the Eocene Chumstick Basin, Washington State, USA. *Tectonics,* 34, 951–969. Link
65. Barlow, N.L.M., and Koehler, R.D., comp. (**E. Enkelmann** chapter author), 2015, Seismic and non-seismic influences on coastal change in Alaska--Fieldtrip guide and conference abstracts, 5th

International Conference of IGCP 588: *Alaska Division of Geological & Geophysical Surveys Guidebook* 12, 165 p. ***Invited contribution*** Link

66. Deng, B., Liu, S., **Enkelmann, E.,** Li, Z., Ehlers, T.A., Jansa, L. 2015. Late Miocene accelerated exhumation of the Daliang Mountains, southeastern margin of the Tibetan Plateau. Int. Journal of Earth Science (Geol. Rundschau), 104, 1061-1081. Link
67. **Enkelmann, E.,** Valla, P.G., Champagnac, J.-D., 2015. Low-temperature thermochronology of the Yakutat Plate corner, St. Elias Range (Alaska): bridging short-term and long-term deformation. *Quaternary Science Review,* 113, 23–38. Link
68. Pavlis, T.L., **Enkelmann, E.,** Gulick, S.P.S., Pavlis, G.L. 2014. Introduction: Neogene tectonics and climate-tectonic interactions in the southern Alaskan orogeny themed issue. *Geosphere* 10, no. 3., 1-4. Link
69. *Falkowski, S., **Enkelmann, E.,** Ehlers, T.A. 2014. Constraining the area of rapid and deep-seated exhumation at the Yakutat plate corner, southeast Alaska. *Tectonics 33, 597–616.* Link
70. **Enkelmann, E.,** Ridgway, K.D., Carignano, C., Linnemann, U. 2014. A thermochronometric view into an ancient landscape: tectonic setting, development, and inversion of the Paleozoic Paganzo basin, Argentina. *Lithosphere, 6, 93–107.* Link
71. Zeitler, P.K., Meltzer, A.S., Brown, L., Kidd, W.S.F., Lim, C., **Enkelmann, E.,** 2014. Tectonics and topographic evolution of Namche Barwa and the easternmost Lhasa Block, in Nie, J., Hoke, G.D., and Horton, B., eds., Towards an improved understanding of uplift mechanisms and the elevation history of the Tibetan Plateau. Geological Society of America Special Paper 507, p. 23–58. Link
72. McKeon, R.E., Zeitler, P.K., Pazzaglia, F.J., Idleman, B.D., **Enkelmann, E.** 2014. Decay of an old orogen: Interferences about Appalachian Landscape evolution from low-temperature thermochronology. *GSA Bulletin, v. 126, no. 1-2, p. 31-46.* Link
73. *Madanipour, S., Ehlers, T.A., Yassaghi, A., Rezaeian, M., **Enkelmann, E.,** Bahroudi, A., 2013. Synchronous deformation on orogenic plateau margins: Insights from the Arabia–Aurasia Collision. *Tectonophysics, 608, 440–451.* Link
74. *Grabowski, D., **Enkelmann, E.,** Ehlers, T.A. 2013. Spatial extend of rapid denudation in the glaciated St. Elias syntaxis region, SE Alaska. *JGR-Earth Surface, 118, 1-18.* Link
75. Eichelberger, N., McQuarrie, N., Ehlers, T.A., **Enkelmann. E.**, Barnes, J.B., Lease, R.O. 2013. New constraints on the chronology, magnitude, and distribution of deformation within the central Andean orocline. *Tectonics, 32, 1432–1453.* Link
76. Richardson, T., Ridgway, K. D., Gilbert, H., Martino, R., **Enkelmann, E.**, Alvarado, P. 2013. Neogene and Quaternary tectonics of the Eastern Sierras Pampeanas, Argentina: Active intraplate deformation inboard of flat-slab subduction. *Tectonics, 32, 1-17.* Link
77. Yang, Z., Ratschbacher, L., Jonckheere, R., **Enkelmann, E.,** Dong, Y., Shen, C., Wiesinger, M., Zhang, Q. 2013. Late-stage foreland growth of China's largest orogens (Qinling, Tibet): Evidence from the Hannan–Micang crystalline massifs and the northern Sichuan Basin, central China. *Lithosphere* 5, 420-437. Link
78. Headley, R.M., **Enkelmann, E.,** Hallet, B. 2013. Examination of the interplay between glacial processes and exhumation in the Saint Elias Range, Alaska. *Geosphere 9, 2, 229-241.* Link
79. Cao, K., Bernet, M., Wang, G., van der Beek, P., Wang, A., Zhang, K., **Enkelmann, E.** 2013. Focused Pliocene–Quaternary exhumation of the Eastern Pamir domes, western China. *Earth and Planetary Science Letter 363, 16-26.* Link
80. **Enkelmann, E**., Ehlers, T.A., Buck, G., Schatz, A.-K. 2012. Advantages and challenges of automated apatite fission track counting. *Chemical Geology, 322-323, 278-289.* Link

81. **Enkelmann, E.,** Ehlers, T.A., Zeitler, P.K., Hallet, B. 2011. Denudation of the Namche Barwa Antiform, Eastern Himalaya. *Earth and Planetary Science Letter, 307, 323-333.* Link
82. Finzel, E.S., Trop, J.M., Ridgway, K.D., **Enkelmann, E.** 2011. Upper-plate proxies for initiation of flat-slab subduction in southern Alaska. *Earth and Planetary Science Letters, 303, 348-360*. Link
83. **Enkelmann, E.,** Zeitler, P.K., Garver, J.I., Pavlis, T.L., Hooks, B.P. 2010. The thermochronological record of tectonic and surface process interaction at the Yakutat–North American collision zone in southeast Alaska. *American Journal of Science* 310, 231-260. Link
84. **Enkelmann, E.,** Zeitler, P.K., Pavlis, T.L, Garver, J.I., Ridgway, K.D. 2009. Intense localized rock uplift and erosion in the St Elias orogen of Alaska. *Nature Geoscience* 2, 5, 360-363. Link
85. McAleer, R.J., Spotila, J.A., **Enkelmann, E**., Berger, A.L. 2009. Exhumation along the Fairweather Fault, Southeast Alaska, based on Low-Temperature Thermochronometry. *Tectonics* 28, TC1007. Link
86. **Enkelmann, E.,** Garver, J.I., Pavlis, T.L. 2008. Rapid exhumation of ice-covered rocks of the Chugach–St. Elias orogen, SE-Alaska. *Geology* 36, 915-918. Link
87. Berger, A.J., Spotila, J.A., Chapman, J., Pavlis, T.L., **Enkelmann, E.**, Ruppert, N.A., Buscher, J.T. 2008. Architecture, kinematics, and exhumation of a convergent orogenic wedge: A thermochronological investigation of tectonic-climatic interactions within the central St. Elias orogen, Alaska. *Earth and Planetary Science Letters*, 270, 13-24. Link
88. **Enkelmann, E.,** Weislogel, A., Ratschbacher, L., Eide, E., Renno, A., Wooden, J., 2007. How was the Triassic Songpan–Ganzi basin filled? A provenance study. *Tectonics* 26, TC4007. Link
89. Jonckheere, R., **Enkelmann,** E., Min, M., Trautmann, C., Ratschbacher, L., 2007. Confined fission tracks in ion-irradiated and step-etched prismatic sections of Durango apatite. *Chemical Geology* 242, 202-217. Link
90. Min, M., **Enkelmann, E.,** Jonckheere, R., Trautmann, C., Ratschbacher, L., 2007. Measurements of fossil confined fission tracks in ion-irradiated geological samples with low track densities. *Nuclear Instruments and Methods B* 259, 943-950. Link
91. Ratschbacher, L., Franz, L., **Enkelmann, E.**, Jonckheere, R., Poerschke, A., Hacker, B.R., Dong S., Zhang, Y., 2006. The Sino-Korean-Yangtze suture, the Huwan detachment, and the Paleozoic-Tertiary exhumation of (ultra)high-pressure rocks along the Tongbai-Xinxian-Dabie Mountains Series/Source: Ultrahigh-pressure metamorphism; deep continental subduction. In Hacker, B.R., McClelland, W.C., Liou, J.G., (eds); *Special Paper - Geological Society of America* 403, 45-75. Link
92. **Enkelmann, E.,** Ratschbacher, L., Jonckheere, R., Nestler, R., Fleischer, M., Gloaguen, R., Hacker, B.R., Yue Qiao Zhang., Yin-Sheng Ma, 2006. Cenozoic exhumation and deformation of northeastern Tibet and the Qinling: Is Tibetan lower crustal flow diverging around the Sichuan Basin? *GSA Bulletin* 118, 651–671. Link
93. **Enkelmann, E.,** Jonckheere, R., Wauschkuhn, B., 2005. Independent fission-track ages (ζ-ages) of accepted and proposed apatite age standards and a comparison of ϕ-, Z-, ζ- and ζ_0-ages: implications for method calibration. *Chemical Geology* 222, 232-248. Link
94. Jonckheere, R., **Enkelmann, E.,** Stübner, K., 2005. Observations on the geometries of etched fission and alpha-recoil tracks with reference to models of track revelation in minerals. *Radiation Measurements* 39, 577-583. Link
95. **Enkelmann, E.,** Jonckheere, R., Ratschbacher, L., 2005. Absolute measurement of uranium concentration on thick samples using fission-track detectors. *Nuclear Instruments and Methods B.* 229, 489-498. Link

96. **Enkelmann, E.,** Jonckheere, R., Ratschbacher, L., 2005. The effects of radiation damage accumulation and annealing for fission-track dating of titanite. *Nuclear Instruments and Methods B*. 227, 581-590. Link
97. **Enkelmann, E.**, Jonckheere, R., 2003. Correction factors for systematic errors related to the track counts in fission-track dating with the external detector method. *Radiation Measurements* 36, 351-356. Link
98. Grimmer J.C., Jonckheere, R., **Enkelmann, E**., Ratschbacher, L., Hacker, B.R., Blythe, A., Wagner, G.A., Liu, S., Dong, S., 2002. Cretaceous–Cenozoic history of the southern Tan-Lu fault zone: Apatite fission-track and structural constraints from the Dabie Shan. *Tectonophysics* 359, 225-253. Link

BOOKS

Enkelmann, Eva. 2023. Rocky Voices: The Memories of Minerals that Formed the Rocky Mountains. FriesenPress. pp. 126. Young adult non-fiction book. ISBN-10: 1039161545, ISBN-13: 978-1039161542

REPORTS (n=3)

1. *Pinto, T.F, **Enkelmann, E.,** Terlaky, V. 2023. T. Office of the Regulator of Oil and Gas Operations OROGO 2023-03-17 - Report - Final - SR-2021-002 - Laboratory Analytical Results.pdf https://diims.gov.nt.ca/gnwt/llisapi.dll/link/180298818
2. **Enkelmann, E.,** *Pinto, T.F., Matthews, W., Terlaky, V. 2023. Preliminary data for thermal evolution of Phanerozoic sediments of southwestern Northwest Territories. Northwest Territories Geological Survey, NWT Open Report 2022-001, 35 pages and digital data. https://doi.org/10.46887/2022-001
3. *Damant, K.A. and **Enkelmann, E.** 2022. Upper-crustal cooling history of the Intermontane Belt in southern British Columbia (parts of NTS 082E,092I, P, 093A, B, C); in Geoscience BC Summary of Activities 2021: Minerals, Geoscience BC, Report 2022-01, p. 11–20.

INVITED PRESENTATIONS

Oct 2026	Lehigh University Department Seminar: “Old Tricks and New Methods for Dating Sediment” Bethlehem, PA, USA, in person.
Apr 2025	Geokolloquium, TU Bergakademie Freiberg Colloquium “Crustal Deformation in the Canadian Cordillera”. Germany, in person.
Oct 2023	Eberhard Karls University Tübingen, Geo und Umweltzentrum. “Terrane Accretion and Far-Field Deformation in the Canadian Cordillera” Germany, in person.
Mar 2023	University of British Columbia, Department of Earth, Oceans and Atmospheric Science, Seminar “Using Low-Temperature Thermochornology to study rock exhumation”. Vancouver, BC, in person.
Mar 2023	TRIUMF Canada’s particle accelerator center. Seminar “Fission-Track Dating Enhancements with ISAC Stable Beams” Vancouver, BC, in person.
Aug 2022	Keynote Lecture: “New developments and challenges in low-temperature detrital thermochronology” at the International Conference of Geoanalysis, 7–12 August, 2022, Germany.
Apr 2022	Seminar talk for Tectonophysics Group, “Cenozoic Deformation in the Southeastern Canadian Cordillera” TU Bergakademie Freiberg, Germany, in person

Feb 2022 Canadian Society of Petroleum Geoscientist– Structural Division seminar: "New insights in the late Cenozoic exhumation history of the southeastern Canadian Cordillera", virtual

Nov 2021 Seminar talk for Adjunct Professor application: "Low-Temperature Thermochronology: Methods and Applications" at Memorial University, virtual

Apr 2021 Departmental Seminar "STEEP project synthesis presentation" with T. Pavlis, G. Pavlis, K. Ridgway & E. Enkelmann, at University of Wisconsin, virtual

Apr 2021 Alaska EarthScope and Beyond Seminar "STEEP project synthesis presentation" with T. Pavlis, G. Pavlis, K. Ridgway & E. Enkelmann, virtual

Oct 2020 Department Seminar: "Building Canada's highest peaks: Tectonics and Climate Interaction in the Yakutat – North American collision zone" at Trinity University, Dublin, Ireland, virtual

Jun 2020 US & Canada collaboration on Northern Cordillera Research: "Overview of exhumation studies in the Northern Cordillera" Online workshop 2.–3. June 2020, virtual

All presentations were in person prior to March 2020.

Feb 2020 Texas A&M University, Department Seminar: "Building Canada's highest peaks: Tectonics and Climate Interaction in the Yakutat – North American collision zone"

Aug 2019 GSA Penrose Conference, CLAST2019 „Tectonics and Surface Process Interaction at the Yakutat-North American collision zone", Juneau, Alaska 4–10 August,

Nov 2018 Dalhousie University, Invited presentation on "Career paths" to the Association of Women Geoscientists (AWG) chapter Dalhousie

Nov 2018 Dalhousie University, Department Seminar: "Building Canada's highest peaks: Tectonics and Climate Interaction in the St. Elias Mountains"

Sep 2018 "Revealing rock exhumation pattern and temporal changes in glaciated mountains" 16th International Conference on Thermochronology. Germany, 16–21 Sep

Apr 2018 TU Bergakademie Freiberg, Seminar, "Upper plate response to varying subduction styles recorded in the forearc Cook Inlet Basin, south central Alaska", Germany

Dec 2017 American Geophysical Union "Cenozoic deformation from the Yakutat–North American collision to the eastern margin of the Northern Canadian Cordillera", Annual Fall Meeting, New Orleans

Nov 2017 McConnell Club talk (NRCan Geological Survey Canada) "Building Canada's highest Mountains: Yakutat – North American collision"

Oct 2017 Pardee Keynote Symposium P4. Speed Dating!: Advice on Sampling and Applications Through the Lens of the Geochronologist. "SpeedDating!: Fission-track dating". Invited presentation to the Annual GSA Meeting, Seattle.

Aug 2017 Research talk "Spatial pattern of Cenozoic exhumation at the western margin of the Northern Canadian Cordillera", CCArray workshop, Victoria, B.C.

Jul 2017 TU Bergakademie Freiberg, Seminar "Source to sink record of exhumation in the St. Elias orogen", Germany

Apr 2017 Martin Luther Universitaet Halle, Research talk "Tectonic – Climate Interaction at the Yakutat–North American Collision zone", Germany

Feb 2017 University of Calgary, Research talk, "Building Canada's highest Mountains: Yakutat - North American collision"

Nov 2016 Syracuse University, Colloquium talk, "Exhumation processes at the Yakutat – North American collision zone (southeast Alaska)"

Jul 2016 TU Bergakademie Freiberg, Seminar "Exhumation in the St. Elias Mountains", Germany

Feb 2016	University of Frankfurt, Research talk, “Investigating the interplay between Tectonics and Atmospheric Processes”, Germany
Feb 2016	Faculty Club of the University of Cincinnati “Building the Earth’s highest coastal mountain range – the St. Elias Mountains in Southeast Alaska”, USA
Nov 2015	University of Wisconsin, Milwaukee, Colloquium talk, “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska”, USA
Nov 2015	Miami University, colloquium talk, “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska”, USA
Oct 2015	Appalachian State University, Colloquium talk, “Tectonics and Surface Process Interaction in Southeast Alaska“, USA
Sep 2015	Purdue University, Workshop (1 day) “Thermochronology Methods and Applications”, USA
Jul 2015	University of Manchester, Colloquium talk “Detrital Thermochronology in Glaciated Regions”, UK
Feb 2015	University of Iowa, Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner”, USA
May 2014	IGCP-588 conference and fieldtrip in Alaska, Field guide “The Geology and surface processes in the St. Elias Mountains“, USA
Nov 2013	University of Indiana, Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner, SE Alaska“, USA
Nov 2013	West Virginia University, Colloquium talk “Mountain Building and Erosion in the St. Elias Mountains (southeast Alaska)”, USA
Oct 2013	Ball State University, Colloquium talk “Tectonics and Surface Process Interaction at the Yakutat Plate Corner”, USA
Sep 2013	Plenary Lecture, “Spatial and temporal variation in rock exhumation in the St. Elias Mountains: Insights from multiple thermochronometer techniques“ GV-DMG annual meeting, Tuebingen, Germany
Dec 2012	Invited Talk “Spatial Variations in Deformation and Exhumation at the Yakutat Plate corner” AGU Fall meeting, San Francisco, USA
Mar 2012	University of Cincinnati, Research Talk “Using thermochronology to study rock exhumation processes in the St. Elias Range, Alaska”, USA
Feb 2011	University of Alaska, Fairbanks, Chapman Lecture Series, “Tectonic and surface process interaction at the Yakutat – North American collision zone in southeast Alaska”, USA
Feb 2011	University of Alaska, Fairbanks, Chapman Lecture Series, “Using thermochronology to study temporal and spatial variations of rock exhumation”, USA
Feb 2011	University of Alaska, Fairbanks, Geology Department Seminar, “Tectonics and surface process interaction in the St. Elias Range”, USA
Oct 2009	GSA annual meeting, Portland, USA
Feb 2009	University of Maine, Seminar talk, USA
Jan 2009	University of Washington, Seattle, Earth and Space Science Dept. Seminar, USA
Jan 2009	Purdue University, Earth Science Dept. Seminar, USA
Dec 2008	AGU Fall meeting, San Francisco
Nov 2008	University of Tübingen Interview talk W3 Professorship in Geology and Tectonic.
Sep 2007	International workshop on “Low-temperature thermochronology and its application: world-wide transfer of knowledge and inter-laboratory calibration”, Pisa, Italy.

Sep 2007	International Summer School "Isotope Geochemistry and Geochronology of Tectonic Processes", invited talk, Marmaris, Turkey.
Feb 2007	Lehigh University, Earth and Environmental Science Dept. Seminar talk, USA
Feb 2005	Geological Society of Myanmar, Rangoon, Myanmar
Feb 2005	Graduate School of Geoscience, University of Mandalay, Myanmar
Oct 2003	Ion-Accelerator-Facility, user committee meeting, Hahn-Meitner Institute Berlin, Germany

TEACHING & SUPERVISION

I have taught undergraduate and graduate courses at four different universities (Lehigh University, University of Tübingen, University of Cincinnati, and University of Calgary) and in three different countries (USA, Germany, and Canada). Since my graduate studies and building my first thermochronology lab in 2020, I have trained and supervised countless students and researchers conducting laboratory analyses, data processing and helping them with the interpretation for their research projects.

TEACHING EXPERIENCE

University of Calgary, Canada	**Term**
ERTH 340 Rock Deformation and Structure (including field trip)	Fall 2025, 2026
GLGY 555 Global Tectonics, upper-level undergraduate	Fall 2022, 2024
GLGY 445 Structural Geology; undergraduate core course	Winter 2018–2025
GLGY 435 Advanced Field Methods (12-day field school)	Spring 2023, 2024
GLGY 699.61 Radiometric Dating; graduate course	Winter 2019
GLGY 707 Geology & Geophysics of Western Canada; graduate course, including 3-day fieldtrip	Fall 2023, 2021, 2019, 2018
GLGY 615 Advanced Laboratory Methods; graduate course, co-teaching with R. Nair and C. Antao	Fall 2018–2021
University of Cincinnati, USA	
GEOL 2009 Structural Geology; undergraduate core course; including 3-day field trip to Southern Appalachians	Spring 2013–2017
GEOL 1099 Foundation of the Geoscience; including several fieldtrips	Spring 2016, 2017
GEOL 6042 Tectonics & Regional Geology, upper-level undergraduate + graduate students	Fall 2016
GEOL 1022 Geology in your Shopping Cart; undergraduate non-major	Spring 2015
GEOL 6043 Thermochronometric Methods; upper-level undergraduate + graduate students; including a 3-day fieldtrip	Fall 2014, 2015
University of Tübingen, Germany	
Geodynamics II: Regional Geology; undergraduate course	Winter 2010, 2011

Geodynamics of Endogen & Exogen Processes; graduate course	Winter 2010, 2011
Field Camp and mapping in Elba, Italy (3 weeks)	Winter 2010, 2011
Maps & Profile, undergraduate core course	Summer 2010

Lehigh University, USA

EE 027 Natural Disasters; undergraduate non-major course	Fall 2008

RESEARCH SUPERVISION

Post-Doctoral Fellows (n=4)

Akeek Maitra, PhD	2023 – 2026
Birk Haertel, PhD	2022 – ongoing
Tobias Stephan, PhD	2020–2022
Scott Jess, PhD	2019–2021

Graduate Students (n=25)

Hanna Tiitto, PhD	2026–	*Cenozoic Deformation of southeastern Canadian Cordillera*
Clara Danhof, MSc	2026–	*Quantifying rock exhumation of the Pitman Fault zone in the Golden Triangle*
Lila Ryter, MSc *(Memorial University)*	2026– (co-superv.)	*Rifted margin development in Iberia.*
Emily Johns-Buss, PhD *(Memorial University)*	2022– (co-superv.)	*Timing and rates of Mesozoic rift-related exhumation in the Newfoundland and west Iberian (Portugal) magma-poor rift margins using low-temperature thermochronometry.*
Joel Padgett, PhD	2021–	*Cretaceous-to-Present Uplift and Exhumation in the Northern Canadian Cordillera*
Tais Fontes Pinto, PhD	2021–	*Phanerozoic thermal history of northern Western Canada Sedimentary Basin*
	graduated	
Muhammad Rafeeza, MSc	2026	*Laser based (U-Th)/He and U-Pb analyses on detrital apatite from the Alberta foreland*
Baiansuluu Terbishalieva, MSc	2025	*Investigating the Mesozoic and Cenozoic thermal history of the Intermontane Belt*
Kade Damant, MSc	2022	*Prolonged Post-Orogenic Extension in the Southeastern Canadian Cordillera: Miocene Reactivation of the Columbia River Fault*
Cecilia D'Mello, PhD	withdrew	
Emily Johns-Buss, MSc	2021 (co-superv.)	*Detrital Zircon double dating Jeanne D'Arc Basin, Newfoundland*
Sedighe Khodaparast, PhD	2020 (co-superv.)	*Spatial and temporal evolution of the Kushk-e-Nosrat strike slip fault zone in western Central Iran.*
Kelley Fraser, MSc	2020	*Exhumation history of the central Rocky Mountain Trench*

		using low-temperature thermochronology
Ryan McKay, MSc	2020	*Cenozoic exhumation history of the northern Richardson Mountains: Results from apatite and zircon (U-Th-Sm)/He analysis*
Minhee Choi, MSc	2019 (co-superv.)	*Source Parameters and Tectonic Setting of the May 1, 2017 St. Elias Earthquake Sequence near the Southern Terminus of the Eastern Denali Fault, Northwestern Canada*
Julia Pickering, MSc	2018 (co-superv)	*A measurement method for U-Th-Sm/He dating of apatite by laser ablation*
Jeannet Arkle, PhD	2019 (co-superv.)	*Orogenesis and landscape evolution above the subduction-transform transition at the southeast Caribbean plate corner, Trinidad & Tobago*
Nathaniel Bootes, MSc	2018	*Late Cenozoic Offshore Record of Exhumation and Sediment Routing in Southeast Alaska from Detrital Zircon U/Pb and FT double-dating*
Sonia Sanchez-Lohff, MSc	2018	*Upper plate response to varying subduction styles in the forearc Cook Inlet basin, south-central Alaska*
Sarah Falkowski, PhD	2016	*Cenozoic evolution of the Yakutat–North American collision zone, southeast Alaska*
Catherine Dunn, MSc	2016	*The offshore sedimentary record of rock exhumation in the St. Elias Mountains, Alaska*
Adam Piestrezeniewicz, MSc	2015	*Characterizing variations in exhumation at the Yakutat-North America collision zone using multi-method thermochronology*
Saeed Madanipour, PhD	2015 (co-superv.)	*Tectonic evolution of the northern Iranian Plateau – Arabia-Eurasia collision zone*
David Grabowski, MSc	2012	*Evaluation of the spatial extend of rapid exhumation in the St. Elias syntaxis region, SE Alaska*
Gabriel Merli, MSc	2011 (co-superv.)	*Exhumation history of the middle Eocene Chumstick Basin, Washington State, USA*
Annika Szameitat, MSc	2010 (co-superv.)	*Spatial variation of glacial erosion evaluated from detrital thermochronology*

Undergraduate Thesis & Summer Research Projects (n=24)

University of Calgary, Canada	
Helena Guest	NSERC USRA summer 2026
Maya Lecuyer	Thesis 2026
Tegan Potvin	NSERC USRA (Indigenous Scholar) summer 2025, Thesis
Aaron Rowsell	NSERC USRA summer 2024
Elisha Whelan	NSERC USRA summer 2023, Thesis
Scott Tiede	NSERC USRA summer 2022
Alyson MacDougall	Thesis
Andreas Abersold	Thesis
Molly Csak	PURE summer 2020, Thesis
Kade Damant	PURE summer 2019, Thesis
Ryan Grieco	NSERC USRA summer 2018, Thesis
Chujing Zhang	

University of Cincinnati, USA
Anna Schartman, Shawn McAleer, Shannon Neale, Victoria Thomas, Emily Chigolle, Bridget Taylor, Geoffrey Jackson
University of Tübingen, Germany
Matthias Loose, Christof Balles, Kilian Mueller, Gerald Buck, Philipp Widmann

Graduate Student Awards & Recognitions under my supervision (UofC only)

C. Danhof	Amherst College Fellowship for Graduate studies (2026)
	NSERC–Canada Graduate Research Scholarship-Master (CGRSM, 2026–27)
B. Terbishalieva	Carl O. Nickle Graduate Scholarship, September 2025
	Alberta Graduate Excellence Scholarship (2025)
	2nd place best poster presentation at the CTW 2024
T. Fontes Pinto	Doctoral Completion Scholarship (2026)
	Canadian Tectonic Group travel award 2026
	GAC-MAC Student travel grant 2026
	Roy Oliver Lindseth Graduate Scholarship in Diversity (2025, 2026)
	MITACS Global Link Research Award (2025)
	Geoscience BC Graduate Scholarship (2024)
	Danielle Kondla Memorial Graduate Scholarship (2024)
	Alberta Graduate Excellence Scholarship (2022)
	Dr. Alfred A. Levinson Memorial Graduate Scholarship (2022)
J. Padgett	Dr. Alfred A. Levinson Memorial Graduate Scholarship (2024, 2025)
	Faculty of Graduate Studies Doctoral Scholarship (2024–2025, 2025–2026)
	1st place best poster presentation at the CTW 2024
	Geoff Bradshaw Graduate Award (2023)
	2nd place best poster pitch at Thermo2023
	Grant Mossop Graduate Scholarship in Geology (2022)
	Alberta Graduate Excellence Scholarship (2021, 2022)
Kade Damant	2023 Best MSc Thesis award by the Canadian Tectonics Group
	NSERC Master Graduate Scholarship (2020)
	Geoscience BC Graduate Scholarship (2021)
K. Fraser	Alberta Graduate Excellence Scholarship (2019)
R. McKay	2021 Best MSc Thesis award by the Canadian Tectonics Group

Graduate Student Supervisory Committee (since 2020)

Abigail Boyd, PhD	Univ. of Tennessee, Knoxville	2026 – ongoing
Olivia Wachob, PhD	University of Texas at Austin	2026 – ongoing
Richard Hilbert, PhD	University of Calgary	2024 – ongoing
Doug MacLeod, PhD	University of Calgary	2020 – 2025
Shay Ridl, PhD	University of Iowa	2022 – 2025
Paola Alvarez Zapata, MSc	University of British Columbia	2024 – 2026
Qiao Xin, PhD	University of Victoria	2022 – 2026
Abigail Boyd, MSc	University of Oklahoma	2024 – 2025

SERVICE

I aim to serve the various communities that I am part of. That includes the students and my colleagues at UofC, the international and national scientific community, the governance of the various academic institutions I worked for, and the public in my local community. I aim to find the time to continue my professional development to enhance my technical and non-technical skills and effectiveness in conducting my work as a researcher, teacher, and colleague.

PROFESSIONAL & SCHOLASTIC SERVICE

- Member of the *International Standing Committee on Thermochronology* (2023–2031)
- Associate Editor of *Tectonics* (AGU Journal) 2017– 2025
- Associate Editor of *the Canadian Journal of Earth Sciences* 2025– 2028
- Editorial Board Member of *Lithosphere* (GSA Journal) 2015–2017
- Guest Editor: 2011–2013 Special Volume in *Geosphere*: "Neogene tectonics and climate-tectonic interactions in the southern Alaskan orogen" edited by T. Pavlis, E. Enkelmann, S. Gulick, G. Pavlis.
- Adjudication for the *Canadian Tectonics Group* – David Elliott award for best paper in Tectonics (2022)
- Adjudication for the *Canadian Tectonics Group* – Best PhD Thesis (2022)
- External Reviewer for hiring, tenure and promotion: University of Bremen, Freie University Berlin, Queens University, University of Idaho, Texas A&M

Reviewer and panelist for funding agencies

- US National Science Foundation (NSF) programs: *Tectonics* (panelist), *Geomorphology, GeoPRISM*, *EarthScope, Sedimentary Geology & Paleobiology, Low-Temperature Geochemistry & Geobiology, P4Climate*
- American Chemical Society – Petroleum Research Fund programs: *Early Career, New Directions*
- German Research Foundation (DFG): programs *General Earth Sciences*, *SPP* (panelist)
- Canadian National Science and Engineering Research Council (NSERC) programs: *Discovery Grants, Alliance Grants*
- National Geographics: *Explorer grants*
- Alexander von Humboldt Foundation: *Postdoctoral Scholarships*
- The Leverhulme Trust: *Research Grants*
- Czech Research Foundation: *Research Grants*

Reviewer for journals

Tectonics, Geology, Tectonophysics, Basin Research, EPSL, GSA Bulletin, Int. J. Earth Sciences., Lithosphere, Geomorphology, Geosphere, Chemical Geology, G-cube, Journal Quaternary Science Reviews, Terra Nova, Science, Nature Geoscience, Economic Geology

Memberships

Geological Society of America (GSA), Fellow since 2022

American Geophysical Union (AGU)/European Geophysical Union (EGU)

Geological Association of Canada (GAC)

International Association of Geoanalysts (IAG)

Conferences

- Session convener *GAC-MAC Annual Meeting 2027* (Whitehorse), title: *Restless North: Multidisciplinary Perspectives on the Cenozoic to Recent Tectonics of the Arctic and Northern Cordillera*; by (alphabetic order): Eva Enkelmann, Theron Finley, John Gosse, Jeremy Gosselin, Nicolas Harrichhausen, Dawn Kellett, Edwin Nissen, Tobias Stephan
- Session convener *GAC-MAC Annual Meeting 2026* (St. Johns), title: *Timing is everything: tracking deep-mantle to Earth-surface processes with geo- and thermochronology; b*y Luke Beranek, Emily Johns-Buss, Eva Enkelmann.
- Lead Organizer of the *20th International Conference on Thermochronology*, Banff, Sep 2027 (expected ca. 200-250 international participants)
- Lead Organizer and Host of the annual *Cordilleran Tectonics Workshop* (1-3 March 2024) held at University of Calgary (68 international participants)
- Scientific Committee of the *19th International Conference on Thermochronology*, Kazanawa, Japan Sep 2025
- Scientific Committee of the *18th International Conference on Thermochronology*, Riva del Garda, Italy 3–9. Sep 2023
- Scientific Committee of the *17th International Conference on Thermochronology*, Santa Fe, USA, Sep 2021
- Session convener at the *GeoConvention 2020* (Calgary), title: *Lithospheric deformation: from terrane accretion to continental collision.* By Eva Enkelmann, Hersh Gilbert, William Matthews, Lydia DiCaprio.
- Session convener *GAC-MAC Annual Meeting 2019* (Quebec City), title: *Quantifying Timing and Rates of Geologic Processes* by Eva Enkelmann and William Matthews.
- Session convener *GSA-Cordilleran Section* Annual Meeting 2015 (Anchorage), title: *Tectonic-surface process interactions during terrane accretion and mountain building along the Cordillera;* by Richard Lease and Eva Enkelmann
- Session convener *GSA-NE Section* Annual Meeting 2014 (Lancaster), title: *Echoes of Exhumation: Comparing Exhumation Processes of the Ancient Appalachians to Those of Currently Active Orogens;* by Craig Dietsch and Eva Enkelmann
- Session convener *AGU Fall Meeting* 2013 (San Francisco) title: *Glacier Processes on the Scales of Mountains and Orogens;* by Rachel Headley and Eva Enkelmann

Organizing and teaching of short courses

- *GAC-MAC Annual Meeting* 2021 (London, ON): 1-day short course: *Rates and Dates: Dating methods and applications* by Eva Enkelmann and William Matthews
- *GAC-MAC Annual Meeting* 2021 (London, ON): 1-day short course: *Quantifying sediment provenance and basin thermal histories* by Eva Enkelmann and William Matthews
- *GeoConvention Annual Meeting 2020* (Calgary): 1-day short course: *Rates and Dates: Dating methods and applications* by Eva Enkelmann and William Matthews
- *GeoConvention Annual Meeting* 2020 (Calgary): 1-day short course: *Quantifying sediment provenance and basin thermal histories* by Eva Enkelmann and William Matthews
- *GAC-MAC Annual Meeting* 2019 (Quebec City) Short Course Title: *Rates and Dates: Geo- and Thermochronology methods and applications* by Eva Enkelmann and William Matthews.
- *University of Alaska*, Anchorage, August 2015 1-day short course: *Detrital Applications of Geochronology and Thermochronology* by Eva Enkelmann and Emily Finzel

SERVICES TO THE UNIVERSITY, FACULTY & DEPARTMENT (since employment at UofC)

- Departmental Space & Infrastructure Committee (2023– ongoing), co-chair since 2024
- Departmental Research & Innovation Committee (2020–2025)
- Department of Geoscience New Curriculum Committee (2021–2023)
- University of Calgary, Faculty of Graduate Studies; Geoscience members of the FGS Scholarship Adjudication Committee 2018–2019 and 2019–2020
- Faculty of Science International Committee (2021–2023)
- Department of Geoscience Safety Committee (2018–2020)
- Elected Representative of the Department of Earth, Energy, and Environment in the Science Faculty Assessment Committee of the University of Calgary (2023)
- Hiring committee for the Transdisciplinary hire on "Critical Minerals" between the Earth, Energy, and Environmental Department and the School of Public Policy (Nov 2023–May 2024)
- Search Committee of Chemistry Department Head (Fall 2023)
- University open house Faculty of Science volunteer 2022
- Faculty of Science, peer-review for NSERC-DG 2024

SCIENCE OUTREACH & COMMUNICATION (since employment at UofC)

- *Earth Science for Society* volunteer at Department booth 2018, 2022, 2023, 2024
- Initiator, co-organizer, and volunteer of Earth Themed weekend at *TELUS Spark Science Center* in Calgary (4–5 Nov, 2023) – this event attracted >2500 people and is planned to run again
- Radio CBC interviews 2023 to promote Earth Themed weekend (Nov 2023) and new geoscience book (April 2023)

Presentations about Alberta's Earth History

- *Seminar of the Alpine Club Canada – Rocky Mountain Section,* Jan 2026 (50 people)
- *Fireside chat of the Elbow River Watershed*, Jan 2026 (30 people, age 15–70)
- *Lifelong Learning Lecture Series of the Canmore Seniors Association* – Geology of the Rocky Mountains and Canmore area. Oct 2025 (120 people, age 55+)
- *Ghost Watershed Alliance Society* – Full day geology guide, June 2024 (18 people, age 10–70)
- *Banff Via Ferrata at Mount Norquay* – Half-day training in the field, June 2024 (24 people, certified guides)
- *Earth Science for Society,* 2 presentations, March 2024 (ca. 150 people, mostly families)
- *Friends of Fish Creek Provincial Park* Speaker series, March 2024 (40 people, mostly age 40+)
- *Bow River Basin Council Quaternary Education and Networking Forum*, March, 2024 (ca. 40 people, professionals)
- *Kamloops Exploration Group,* Jan, 2024 (33 people, adults)
- *Telus Spark,* 2 presentations, 4–5 Nov. 2023 (ca. 150 people, mostly families)
- *Calgary Rock and Lapidary Club,* Nov. 2023 (ca. 35 people, mostly age 40+)
- *Interpretive Guide Association of Canada* – Professional development session, June 2023 and Feb 2024 (55 people, certified guides)