

Tomas N. Capaldi  
Assistant Professor in Sedimentary Geology  
Scripps Institution of Oceanography, University of California, San Diego  
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## EDUCATION

- 2019    **Ph.D. Geological Sciences**  
Department of Geological Sciences, The University of Texas at Austin
- 2014    **B.S. Geology/Engineering Geology**  
Department of Earth, Planetary, and Space Science, University of California, Los Angeles
- 2011    Geology Transfer Credentials  
Moorpark Community College

## PROFESSIONAL EXPERIENCE

- 2023 -            Assistant Professor- University of California, San Diego
- 2020 - 2023      Assistant Professor- University of Nevada- Las Vegas
- 2019              Postdoctoral Fellow- Utah State University
- 2016 - 2018      Associate Instructor- The University of Texas at Austin
- 2014 - 2019      Teaching and Research Assistant- The University of Texas at Austin
- 2012 - 2014      Luminescence Geochronology Laboratory Technician - UCLA

## PEER-REVIEWED PUBLICATIONS (underline = student advisee)

- [17] Starck, D., **Capaldi, T.N.**, Fuentes, F., Horton, B.K., 2024, Tectonic and climatic significance of Oligocene-Miocene eolian sandstones in the Andean foreland basin of Argentina. *Journal of South American Earth Sciences*, v. 134, 104758.
- [16] Plonka, Z.C., **Capaldi, T.N.**, Odlum, M.L., Ortiz, G., Mackaman-Lofland, C., Alvarado, P. 2023, Along strike tectonic evolution of the Neogene Bermejo foreland basin and eastern Precordillera thrust front, Argentina (30-32°s). *Journal of South American Earth Sciences*, v. 129, 104521.
- [15] Akciz, S.O., Grant Ludwig, L., Arrowsmith, R.J., **Capaldi, T.N.**, Rhodes, E.J., 2023, Channel incision ages to the rescue: An improved age for the penultimate earthquake that ruptured the Carrizo section of the south-central San Andreas Fault. *Bulletin of the Seismological Society of America*, v. 113(1), p.1-11
- [14] Horton, B.K., **Capaldi, T.N.**, Mackaman-Lofland, C., Perez, N.D., Bush, M.A., Fuentes, F., and Constenius, K.N., 2022, Broken foreland basins and the influence of subduction dynamics, tectonic inheritance, and mechanical triggers. *Earth Science Review*, v. 234, article 104193.
- [13] Mackaman-Lofland, C., Horton, B.K., Ketcham R.A., McQuarrie, N.M., Fosdick, J.C., Fuentes, F., Constenius, K.N., **Capaldi, T.N.**, Stockli, D.F., and Alvarado, P., 2022, Causes of variable shortening and tectonic subsidence during changes in subduction: insights from flexural thermokinematic modeling of the Neogene southern central Andes (28–30°S). *Tectonics*, v.41, e2022TC007334.
- [12] Garzanti, E., **Capaldi, T.**, Tripaldi, A., Zárate, M., Limonta, M., and Vezzoli, G. 2022, Andean retroarc-basin dune fields and Pampean San Sea (Argentina): Provenance and drainage changes driven by tectonics and climate. *Earth Science Review*, v. 231, article 104077.
- [11] **Capaldi, T.N.**, Odlum, M.L., Curry, M. and Stockli, D.F., 2022, Variable thermal histories across the Pyrenees orogen recorded in modern river sand detrital geo-/thermochronology and PECUBE thermokinematic modeling. *Basin Research*, v.34 (5), p. 1781-1806.

- [10] Horton, B.K., **Capaldi, T.N.**, and Perez, N.D., 2022, The role of flat slab subduction, ridge collision, and tectonic inheritance on Andean deformation. *Geology*, v.50(9), p. 1007-1012.
- [9] **Capaldi, T.N.**, Rittenour, T.M., and Nelson, M.S., 2022, Downstream change in quartz OSL sensitivity in modern river sand reflects sediment source variability: Case studies from Rocky Mountain and Andean rivers. *Quaternary Geochronology*, v.71, article 101317.
- [8] Garzanti, E., **Capaldi, T.**, Limonta, M., Sosa, N. and Vezzoli, G. 2021, Transcontinental retroarc sediment routing controlled by subduction geometry and climate change (Central and Southern Andes, Argentina). *Basin Research*, v.33(6), p. 3406-3437.
- [7] **Capaldi, T.N.**, McKenzie, N.R., Horton, B.K, Mackaman-Lofland, C., Colleps, C.L., and Stockli, D.F., 2021, The detrital zircon record of Phanerozoic magmatism in the southern central Andes. *Geosphere*, v.17(3), p. 876-897.
- [6] **Capaldi, T.N.**, Horton, B.K, McKenzie, N.R., Mackaman-Lofland, C., Stockli, D.F., Ortiz, G., and Alvarado, P., 2020, Neogene retroarc foreland basin evolution, sediment provenance, and magmatism in response to flat-slab subduction, western Argentina. *Tectonics*, v.39(7), e2019TC005958.
- [5] Mackaman-Lofland, C., Horton, B.K., Fuentes, F., Constenius, K.N., Ketcham R.A., **Capaldi, T.N.**, Stockli, D.F., Ammirati, J.B., Alvarado, P., and Orozco, P., 2020, Andean mountain building and foreland basin evolution during thin- and thick-skinned Neogene deformation (32–33°S). *Tectonics*, v.39(7), e2019TC005838.
- [4] **Capaldi, T.N.**, George, S.W.M, Hirtz, J.A., Horton, B.K, and Stockli, D.F., 2019, Fluvial and eolian sediment mixing during changing climate conditions recorded in Holocene Andean foreland deposits from Argentina (31-33° S). *Frontiers in Earth Science*, v. 7:298.
- [3] Sickmann, Z.T., Chheda, T., **Capaldi T.N.**, Thomson K.D., Paull, C.K., and Graham, S.A., 2019, Using Provenance Analysis in an Anthropocene natural laboratory. *Quaternary Science Review*, v.221, article 105890.
- [2] Odlum, M.L, Stockli, D.F., **Capaldi T.N.**, Thomson, K.D., Puigdefàbregas, C., Clark, J., and Fildani, A., 2019, Tectonic and sediment provenance evolution of the South Eastern Pyrenean foreland basins during rift margin inversion and orogenic uplift. *Tectonophysics*, v.765, p. 226-248.
- [1] **Capaldi, T.N.**, Horton, B.K, McKenzie, N.R., Stockli, D.F., and Odlum, M.L., 2017, Sediment provenance in contractional orogens: The detrital zircon record from modern rivers in the Andean fold-thrust belt and foreland basin system of western Argentina. *Earth and Planetary Sciences Letters*, v.479, p. 83-97.

### Publications in Progress

- Odlum, M.L., **Capaldi, T.N.**, Thomson, K.D., Stockli, D.F., *in review*, Tracking cycles of Phanerozoic opening and closing of ocean basins using detrital rutile and zircon geochronology and geochemistry. *Geology*
- Capaldi, T.N.**, Mackaman-Lofland, C. and Horton, B.K., *in prep.*, Cordilleran Cyclicity in the southern Central Andes during flat slab subduction.
- Pojar, I., **Capaldi, T.N.**, Olariu, C., Dragos, A.G., Melinte-Dobrinescu, M.C., Ducea, M., *in prep.*, Tracking Sediment Mixing along the Lower Danube, Romania using detrital zircon geochronology.

## RESEARCH GRANTS

- 2023-2026 NSF EAR Tectonics: Collaborative Research: Resolving thin-skinned and basement-involved deformation within a seismically active broken foreland region, San Juan, Argentina. (PI: \$366,190 to UCSD)
- 2023 UNLV Graduate College: Graduate Faculty Top Tier Doctoral Graduate Research Assistantship Grant. (PI: \$80,000)
- 2021-2022 UNLV Faculty Opportunity Awards: Resolving the Tectonic Evolution of the Antler Orogeny in Nevada and California using Multi-mineral Geochronology. (PI: \$19,459)
- In review NSF MRI: Acquisition of a state-of-the-art 193 nm laser ablation and time-of-flight mass spectrometer system for imaging and abundance measurements. (Co-PI)
- In review RDIA: Regional Scale understanding of Ordovician Water Aquifers in NW Arabian Plate as potential reservoirs for CO<sub>2</sub> sequestration. (Co-PI)
- In review NSF EAR Sedimentary Geology and Paleobiology: Eoscenery: Depicting Rocky Mountain landscape evolution and vegetation change through the warmest interval of the Cenozoic. (Co-PI)
- In prep NSF EAR Tectonics: Collaborative Research: Resolving the Tectonic Evolution of the Antler Orogeny in Nevada and California using Multi-mineral Geochronology and Geochemistry. (PI)
- In prep NSF EAR Geomorphology and Land Use Dynamics: Collaborative Research: Evaluating Quartz OSL Sensitivity as a tool for sediment provenance or transport in continental-scale fluvial and eolian systems. (PI)

### *Graduate Research Grants*

- 2019 NOR-R-AM travel grant AGU Chapman Conference (\$1,250)
- 2018 Jackson School of Geosciences Muehlberger Field Scholarship (\$1,380)  
IAS Postgraduate Research Grant (\$1,200)  
Jackson School of Geosciences Grant Matching Program (\$1,000)
- 2017 AAPG Grants-in-Aid Committee Named Grant (\$2,250)  
GSA Student Research Grant (\$1,325)  
Society for Sedimentary Geology Student Research Grant (\$1,200)  
Jackson School of Geosciences Grant Matching Program (\$1,000)
- 2015 Jackson School of Geosciences Muehlberger Field Scholarship (\$2,820)  
AAPG Grants-in-Aid Weimer Family Named Grant: (\$2,250)  
GSA Student Research Grant (\$1,250)  
Jackson School of Geosciences Grant Matching Program (\$1,000)

## HONORS AND AWARDS

- 2022 Exceptional Reviewer: Geological Society of America Bulletin
- 2019 Graduate Summer Fellowship: The University of Texas at Austin (\$9,000)  
Outstanding Teaching Assistant Award: Jackson School of Geosciences (\$750)  
Outstanding Poster Presentation: Jackson School of Geosciences (\$500)
- 2018 Muehlberger Graduate Fellowship in Tectonics and Structural Geology: The University of Texas at Austin (\$12,600)
- 2017 Presidential Scholarship Glenn & Martha Vargas Endowment: The University of Texas at Austin (\$3,500)  
Outstanding Poster Presentation: Jackson School of Geosciences (\$1,000)
- 2016 Honorable Mention Graduate Research Fellowship: National Science Foundation:

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- Outstanding Poster Presentation: Jackson School of Geosciences (\$500)  
2015 Outstanding Teaching Assistant Award: Jackson School of Geosciences (\$500)  
2014 Dean's Honors List: University of California, Los Angeles  
2013 Walter S. Harris Summer Field Award: University of California, Los Angeles (\$1,200)

### INVITED PRESENTATIONS

- 2023 GSA Connects Meeting; Pittsburg, PA  
University of California San Diego, Scripps Institution of Oceanography; La Jolla, CA  
University of Idaho; Dept. of Earth and Spatial Sciences; Moscow, ID  
Idaho State University; Geosciences Department; Pocatello, ID  
Colorado State University; Geosciences Department; Fort Collins, CO  
2021 University of California Los Angeles; Dept. of Earth, Planetary, and Space Sci.; Los Angeles, CA  
University of Southern California; Dept. of Earth Sciences; Tectonic Seminar; Los Angeles, CA  
2020 University of Nevada, Las Vegas; Department of Geoscience; Las Vegas, NV  
2019 Utah State University; Department of Geosciences; Logan, UT  
University of Nevada Reno; Nevada Bureau of Mines and Geology; Reno, NV  
University of Texas at Austin; Bureau of Economic Geology; Quantitative Clastic Lab; Austin, TX  
University of Texas at Austin; Department of Geological Sciences; Tectonics Seminar; Austin, TX  
2018 University of Nevada, Las Vegas; Department of Geoscience; Las Vegas, NV  
Texas State University; Department of Geography; San Marcos, TX  
University of Texas at Austin; Department of Geological Sciences; Tectonics Seminar; Austin, TX  
Hong Kong University; Department of Earth Sciences; Hong Kong, China  
2017 Coalition for National Science Funding Exhibition; Washington D.C.  
Universidad Nacional de San Juan; Geoscience Department; San Juan, Argentina  
Austin Geological Society; Austin, TX  
University of Texas at Austin; Department of Geological Sciences, Soft Rock seminar; Austin, TX  
2016 University of Texas at Austin; Department of Geological Sciences, Tectonics Seminar; Austin, TX

### TEACHING EXPERIENCE

#### **Instructor**

*Q1 = Overall, the instructor was a good teacher (Scale of 1.0 = lowest ranking, to 5.0 = highest ranking)*

#### *University of California, San Diego*

<u>Year</u>	<u>Term</u>	<u>Name (u = undergraduate; g = graduate)</u>	<u>Enrollment</u>	<u>Q1</u>
2024	spring	<sup>u</sup> Geomorphology		

#### *University of Nevada, Las Vegas*

<u>Year</u>	<u>Term</u>	<u>Name (u = undergraduate; g = graduate)</u>	<u>Enrollment</u>	<u>Q1</u>
2023	spring	<sup>u/g</sup> Summer Field Geology (3 weeks in field)	21	4.67
2022	fall	<sup>u</sup> Introductory Geology: Exploring Planet Earth	69	4.60
2022	spring	<sup>u</sup> Principles of Stratigraphy and Sedimentation	26	4.86
2022	spring	<sup>g</sup> Poster Presentations and Time Management	6	5.00
2021	fall	<sup>u</sup> Field Geology I (2 weeks in field)	18	4.93
2021	spring	<sup>u</sup> Principles of Stratigraphy and Sedimentation	32	4.48
2021	spring	<sup>g</sup> Poster Presentations and Time Management	5	5.00
2020	fall	<sup>u</sup> Field Geology I (2 weeks in field)	21	4.88

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**Associate Instructor**

*The University of Texas at Austin*

2016-2018 Summer Field Geology: parts A and B (6 weeks total)

**Teaching Assistant**

*The University of Texas at Austin*

2017 Structural Geology

2015, 16, 18 Intro to Field and Stratigraphic Methods

*University of California, Los Angeles*

2013 Intro to Computing for Earth and Space Scientists

**GRADUATE STUDENTS**

*University of California, San Diego*

2022-present Chloë Weeks-PhD

2022-present Ian Gillette-MS

*University of Nevada, Las Vegas*

2020-2022 James Duncan-MS Thesis: Antler foreland basin evolution recorded in detrital zircon U-Pb geochronology. Now at Nevada Gold, Production Geologist.

2020-2022 Zoey Plonka-MS Thesis: Along strike tectonic evolution of the Neogene Bermejo foreland basin and eastern Precordillera thrust front, Argentina (30-32°s). Now at Nevada Gold, Growth Geologist.

*Committee Member*

2022-present Meg Ferrell (PhD-UCSD)

2022-2023 Molly Pickerel (MS-UNLV)

**UNDERGRADUATE STUDENT RESEARCH ADVISOR**

Conner Callaway (UNLV: 2022-2023); Odinaka Okwueze (UNLV: 2021-2023); Alex Holmburg (UNLV: 2020); Clay Barlow (USU: 2019-2021); Jaime Hirtz (UT: 2018-2019)

**DEPARTMENT SERVICE**

2021- 2023 Graduate Admissions Committee member: UNLV Geoscience Department

2020- 2023 Scholarship Committee member: UNLV Geoscience Department

2022- 2023 Water-Earth Surface Hiring Committee member: UNLV Geoscience Department

2021- 2022 Paleobiology Hiring Committee member: UNLV Geoscience Department

2020- 2022 Faculty mentor AAPG student chapter: UNLV Geoscience Department

2020 Seminar Organizer: UNLV Geoscience Department

2019 Undergraduate Research Grant Program Reviewer: Utah State University

2019 Lithosphere Deep Earth Seminar Co-Organizer: Jackson School of Geosciences

2016-2017 President Graduate Student Executive Committee: Jackson School of Geosciences

**OUTREACH**

2023 Field Trip Co-leader: Field Geology Course in southern Nevada, Texas A&M University

2021- 2023 Senior Personnel: LEGENDS Program for Clark County Highschool teachers and students

2021- 2023 Organizer: Save Our Sands, AAPG UNLV chapter Community Service Annual event

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- 2021 Field Trip Leader: AAPG Club UNLV Chapter, Geomorphology and Sedimentology of the Kelso Dunes Mojave Desert CA
- 2017-2019 Co-founder & Editorial Board Member: [Science, Y'all!](#) student ran geoscience blog
- 2017-2018 Mentor: GeoForce Undergraduate. Jackson School of Geosciences
- 2016-2018 Mentor: Geoscience Undergraduate, Students Raising Students
- 2014 Volunteer: Exploring Your Universe, UCLA sponsored outreach event
- 2013 Volunteer: Earth Science Demonstrations, Pilgrim Elementary School, Los Angeles

### PROFESSIONAL SERVICE

- 2023-present Associate Editor: Terra Nova
- 2022-2024 Organizing Committee Member: SEPM International Sedimentary Geoscience Congress
- 2023 Session Convener: GSA Connects Meeting, The Andes from Top to Bottom
- 2022 Technical Program Co-Chair: GSA Cordilleran and Rocky Mountain Joint Section Meeting, Las Vegas
- 2022 Session Convener: GSA Cordilleran and Rocky Mountain Joint Section Meeting, Sediment Record of Cordilleran Orogenic Systems
- 2020 Session Convener: SEPM ISGC, Stratigraphic Records of Foreland Basin Systems (*cancelled due to COVID-19*)
- 2018 Session Convener: GSA annual meeting, Geodynamic, Orogenic, and Surface Processes of Flat-Slab Subduction
- 2017 Field Trip Guide Contributor: Propagation of Environmental Signals within Source-to-Sink Stratigraphy, SEPM Research Conference, Ainsa, Spain

*Journal Referee:* Basin Research; The Depositional Record; Earth and Planetary Science Letters; Earth Science Reviews; Earth Surface Processes and Landforms; Frontiers in Earth Science; Geochemistry Geophysics Geosystems; Geology; Geological Society of America Bulletin; Geological Magazine; Geoscience Frontiers; Global and Planetary Change; Gondwana Research; International Journal of Earth Sciences; Journal of Sedimentary Research; Journal of South American Earth Sciences; Tectonics; and Terra Nova.

*Funding Agency Referee:* National Science Foundation Division of Earth Sciences

### Professional Affiliations

Geological Society of America (GSA), American Geophysical Union (AGU), Society for Sedimentary Geology (SEPM), International Association of Sedimentologist (IAS)

### Field Areas

southern Central Andes (*Pampean and Payenia Flat-Slab subduction segments Argentina*); Great Basin (NV, CA); northern Rocky Mountains (UT, ID, WY); Pyrenees (*Spain and France*); Southern and Eastern Carpathians (*Romania*); Iceland

### CONFERENCE ABSTRACTS (underline = student author)

- [52] Horton, B.K., **Capaldi, T.N.**, Perez, N.P. (2023) Andean Flat Slab Subduction, Tectonic Inheritance, and Broken Foreland Basins. American Geophysical Union Meeting, San Francisco, CA.
- [51] Adamson, M., Odum, M.L., **Capaldi, T.N.**, Johnsen, R., Smith, G. (2023) Multiphase deformational history of the Saddle Island metamorphic core complex in the northern Colorado River Extensional Corridor Nevada. Geological Society of America Annual Meeting, Pittsburg, PA.

- [50] **Capaldi, T.N., Plonka, Z.C.,** Odlum, M.L., Mackaman-Lofland, C., Ortiz, G., Alvarado, P. (2023) Along-strike tectonic evolution of the Neogene Bermejo Foreland Basin and Andean Thrust Front, Argentina (30-32°S). Geological Society of America Annual Meeting, Pittsburgh, PA.
- [49] **Lehmann, M.D.,** Mackaman-Lofland, C., Hren, M.T., Fosdick, J.C., Capaldi, T.N., Bertoa del Llano, M.I. (2023) Unraveling stable isotope signals of Cenozoic climate, tectonics, and topography in a high-elevation hinterland basin, southern Central Andes (~31-33°S). Geological Society of America Annual Meeting, Pittsburgh, PA.
- [48] **Okweuze, O.,** Konrad, K., **Capaldi, T.N.** (2023) New detrital methodology for mafic terrains: Single basalt grain incremental  $^{40}\text{Ar}/^{39}\text{Ar}$  age determinations. Geological Society of America Annual Meeting, Pittsburgh, PA.
- [47] **Regier, N.,** Horton, B.K., Starck, D., **Capaldi, T.N.,** Fuentes, F. (2023) Pre-Andean tectonics and basin evolution during late Paleozoic glaciation in west-central Argentina. Geological Society of America Annual Meeting, Pittsburgh, PA.
- [46] **Weeks, C.,** Odlum, M.L., Mackaman-Lofland, C., Ortiz, G., Fosdick, J.C., **Capaldi, T.N.** (2023) Exhumation history of the Sierra Pie de Palo uplift and implications for tectonic drivers of broken foreland basin evolution, Argentina. Geological Society of America Annual Meeting, Pittsburgh, PA.
- [45] Pojar, I., Melinte-Dobrinescu, M., Dragoş, A.G., Babos, T., Olariu, C., **Capaldi, T.** (2023) Source-to-sink relation between the Romanian Carpathians and the Lower Danube Basin: an overview based on geochronology, lithology and geomorphology. XXI International Union for Quaternary Research Congress, Rome, Italy.
- [44] Mackaman-Lofland C., Horton B.K., Ketcham R.A., McQuarrie N., Fosdick J.C., Fuentes F., Constenius K. N., **Capaldi T.N.,** Stockli D.F., Alvarado P. (2022) Causes of variable shortening and tectonic subsidence during changes in subduction: insights from flexural thermokinematic modeling of the Neogene southern central Andes (28–30°S). American Geophysical Union Meeting, Chicago, IL.
- [43] **Capaldi, T.N.,** Rittenour, T.M., Pederson, J.L., Nelson, M. (2022) Evaluating Quartz OSL sensitivity as a sediment provenance tool: examples from modern and Pleistocene depositional systems. 13<sup>th</sup> New World Luminescence Dating Workshop, Palisade, CO.
- [42] **Capaldi, T.N.,** Odlum, M.L., Curry, M.E., Stockli, D.F. (2022) Multi-mineral detrital geo-/thermochronology and PECUBE thermokinematic modeling of modern river sands record variable thermal histories across the Pyrenees orogen. Geological Society of America Annual Meeting, Denver, CO.
- [41] Horton, B.K., **Capaldi, T.N.,** Perez, N.D., Mackaman-Lofland, C., Fuentes, F., and Constenius, K.N. (2022) Flat slab subduction, tectonic inheritance, and broken foreland basins in the Andes. Geological Society of America Annual Meeting, Denver, CO.
- [40] Ramos, E.J., **Capaldi, T.N.,** Kemeny, P.C. (2022) How do river water Li isotope ratios relate to net carbon transfer during weathering? Geological Society of America Annual Meeting, Denver, CO.
- [39] Pojar, I., Melinte-Dobrinescu, M., Dragoş, A.G., Roban, R.D., Ducea, M., **Capaldi, T.,** Olariu, C., (2022) Detrital zircon geochronology and sedimentary provenance of the Lower Danube River. XXII International Congress of the CBGA, Plovdiv, Bulgaria.
- [38] **Duncan, J.T.,** **Capaldi, T.N.,** Wells, M.L., Odlum, M.L., DeFelice, C. (2022) The Antler Orogeny recorded in detrital zircon U-Pb geochronology, southern Nevada. Geological Society of Nevada Symposium, Sparks, NV.
- [37] **Plonka, Z.C.,** **Capaldi, T.N.,** Odlum, M.L., Ortiz, G., Alvarado, P. (2022) Tracking the Neogene tectonic evolution of the active Andean thrust front using the foreland basin record and detrital geo-/thermochronology, western Argentina (28–30°S). Geological Society of America Cordillera and Rocky Mountain Section Joint Meeting, Las Vegas, NV.

- [36] Duncan, J.T., **Capaldi, T.N.**, Wells, M.L., Odlum, M.L., DeFelice, C. (2022) The Antler Orogeny recorded in detrital multi-mineral U-Pb geochronology, southern Nevada. Geological Society of America Cordillera and Rocky Mountain Section Joint Meeting, Las Vegas, NV.
- [35] **Capaldi, T.N.**, Rittenour, T.M., Pederson, J.L., Nelson, M. (2022) Detrital zircon geochronology and quartz OSL track progressive Pleistocene fill and spill of the paleo Bear River basins of Utah and Idaho. Geological Society of America Cordillera and Rocky Mountain Section Joint Meeting, Las Vegas, NV.
- [34] Mackaman-Lofland, C., Horton, B.K., Ketcham, R.A., McQuarrie, N., Fosdick, J.C., Fuentes, F., Constenius, K.N., **Capaldi, T.N.**, Stockli, D.F., Alvarado, P. (2021) Causes of variable shortening and tectonic subsidence during Neogene changes in subduction, southern central Andes (28–30°S). American Geophysical Union Meeting, New Orleans, LA.
- [33] Plonka, Z.C., **Capaldi, T.N.**, Odlum, M.L., Ortiz, G., Alvarado, P. (2021) Resolving along-strike Andean thrust front evolution using the foreland basin record in the flat slab region of Argentina. Geological Society of America Annual Meeting, Portland, OR.
- [32] Curry, M.E., van der Beek, P., Odlum, M.L., **Capaldi, T.N.** (2021) 3D thermokinematic modeling of a multi-thermochronometer dataset from the Pyrenees Mountains: tectonic development, landscape evolution, and detrital applications. 17<sup>th</sup> International Conference on Thermochronology, Santa Fe, NM.
- [31] **Capaldi, T.N.**, Ritenour, T.M., Barlow, B.C., Pederson, J.L., Nelson, M. (2021) Downstream Change in Quartz OSL Sensitivity in Modern River Sand Reflects Sediment Source Variability. 16<sup>th</sup> International Luminescence and Electron Spin Resonance Dating Conference, virtual.
- [30] Garzanti, E., **Capaldi, T.N.**, Vezzoli, G., Limonta, M., Numa, S. (2021) Transcontinental retroarc sediment routing controlled by subduction geometry and climate (Central and Southern Andes, Argentina). GeoKarlsruhe 2021, Karlsruhe, Germany.
- [29] **Capaldi, T.N.**, Odlum, M.L., Curry, M.E., Stockli, D.F. (2020) River sand detrital geothermochronology record contrasting thermal histories across the Pyrenees of Spain and France. American Geophysical Union Meeting, San Francisco, CA.
- [28] Ramos, E.J., **Capaldi, T.N.** (2020) Coupled effects of climate, lithology, and morphometrics on river water Li isotope record. American Geophysical Union Meeting, San Francisco, CA.
- [27] Barlow, B.C., **Capaldi, T.N.**, Rittenour, T.M., Pederson, J.L. (2020) Tracking erosion and sediment transport in the Bear River, UT, WY, and ID using detrital zircon and optically stimulated luminescence provenance. Geological Society of America Rocky Mountain Section Meeting, Provo, UT. (*Canceled due to Coronavirus*)
- [26] Pojar, I., **Capaldi, T.N.**, Olariu, C., Melinte Dobrinescu, M.C. (2020) Detrital zircon geochronology and sedimentary provenance of the Lower Danube. European Geophysical Union Meeting, Vienna, Austria.
- [25] **Capaldi, T.N.**, Odlum, M.L., Stockli, D.F. (2020) Variations in exhumation across the Pyrenees Orogen recorded in modern river detrital mineral geo- and thermochronology from Spain and France. Society of Sedimentary Geologist International Sedimentary Geology Congress, Flagstaff, AZ. (*Canceled due to Coronavirus*)
- [24] Mackaman-Lofland, C., **Capaldi, T.N.**, Horton, B.K., Orozco, Stockli, D.F., Ketcham R.A., Alvarado, P. (2019) Foreland basin evolution in response to thin-skinned vs. basement-involved (Laramide-style) deformation: a case study from the southern Central Andes, Argentina (28–29°S). American Geophysical Union Meeting, San Francisco, CA.
- [23] Ramos, E.J., Sickmann, Z., and **Capaldi T.N.** (2019) Fluid residence time modulates Li isotope transport during silicate weathering. American Geophysical Union Meeting, San Francisco, CA.



- [22] **Capaldi, T. N.**, Horton, B. K., McKenzie, R., Mackaman-Lofland, C., Stockli, D. F. (2019) Cordilleran magmatism and tectonic evolution of the western South American plate margin. American Geophysical Union Chapman Conference, Shelfoss, Iceland.
- [21] Mackaman-Lofland, C., Horton, B. K. Fuentes, F., Constenius, K.N., Ketcham, R.A., Stockli, D. F., Ammirati, J-B, **Capaldi, T. N.**, Orozco, P. and Alvarado, P. A. (2019) Kinematic development and structural architecture of the southern central Andean fold-thrust belt (31–33°s): implications for Andean deformation modes and driving mechanisms. Geological Society of America Annual Meeting, Phoenix, AZ.
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