EDUCATION

- Washington State University, Pullman, WA 99164-2812 Ph.D. in Geology, Fall 2007 to Spring 2011
- *Humboldt State University*, Arcata, CA 95521 M.S. in Geology, Degree received June 2004
- **Portland State University,** Portland, OR 97201 B.S. in Geology, Degree received June 2001
- University of Iceland, Reykjavik, Iceland Exchange program studying geothermal dynamics, Summer 2000

PUBLICATIONS

- Larsen, I.J.; Farley, K.A.; Lamb, M.P.; Pritchard, C.J (2021) Empirical evidence for cosmogenic 3He production by muons: Earth and Planetary Science Letters, https://doi.org/10.1016/j.epsl.2021.116825
- Pritchard, CJ; Gaylord, DR; Adams, DB; Ernst, S; Hermanson, M (2020) Role of Quaternary glacialoutburst megaflood paleochannel deposits in a basalt-dominated aquifer system in the West Plains area of eastern Washington, USA: Hydrogeology Journal, v. 28, p. 921-939 <u>https://doi.org/10.1007/s10040-019-02100-1</u>
- Box, SE; Pritchard, CJ; Stephens, TS; O'Sullivan, PB (2020) Between the supercontinents Mesoproterozoic Deer Trail Group, an intermediate age unit between the Mesoproterozoic Belt-Purcell Supergroup and the Neoproterozoic Windermere Supergroup in northeastern Washington, USA: Canadian Journal of Earth Sciences, v. 57: 12, p. 1411-1427: <u>https://doi.org/10.1139/cjes-2019-0188</u>.
- Pritchard, CJ; Cebula, L (2016) Geologic and anthropogenic history of the Palouse Falls area: Floods, fractures, clastic dikes, and the receding falls, in: Lewis, R.S., and Schmidt, KL, eds., Exploring the Geology of the Inland Northwest: Geological Society of America Field Guide 41, doi:10.1130/2016.0041(02).
- Morgavi, D; Arzilli, F; Pritchard, C; Perugini, D; Mancini, L; Larson, P; Dingwell, DB (2016) The Grizzly Lake Complex (Yellowstone Volcano, USA): Mixing between basalt and rhyolite unraveled by microanalysis and X-ray microtomography: Lithos. v 260, p. 457-474, doi:10.1016/j.lithos.2016.03.026.
- Kiver, E; Pritchard, C; Orndorff, R (2016) Washington Rocks! A guide to geologic sites in the Evergreen State: Montana Press Publishing, Missoula Montana, 131 p.
- Pritchard, CJ; Larson, PB; Spell, TL; Tarbert, KD (2013) Eruption-triggered mixing of extra-caldera basalt and rhyolite complexes along the East Gallatin-Washburn fault zone, Yellowstone National Park, WY, USA. Lithos. v. 175-176, p. 163-177. http://dx.doi.org/10.1016/j.lithos.2013.04.022.
- Pritchard, CJ; Larson, PB (2012) Genesis of the post-caldera eastern Upper Basin Member rhyolites, Yellowstone, WY, from volcanic stratigraphy, geochemistry, and radiogenic isotope modeling: Contributions to Mineralogy and Petrology: v. 164, no. 2, p. 205-228, doi:10.1007/s00410-012-0733-9.
- Ellis, BS; Mark, DF; Pritchard, CJ; Wolff, JA (2012) Temporal dissection of the Huckleberry Ridge Tuff using the ⁴⁰Ar/³⁹Ar dating technique: Quaternary Geochronology: v. 9, p. 34-41, doi: 10.016/j.quageo2012.01.006.
- Larson, PB; Phillips, A; John, D; Cosca, M; Pritchard, C; Andersen, A; Manion, J (2009) Older hydrothermal alteration in the Yellowstone Caldera: Journal of Volcanology and Geophysical Research, v 188, p.225-236, doi. 10.1016/j.jvolgeores.2009.07.017.

- 1 of 14 –

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

Pritchard, C.J. (2006) Coseismic subsidence of Arcata Bay: In Friends of the Pleistocene, Pacific Cell 2006 Guidebook, Signatures of quaternary crustal deformation and landscape evolution in the Mendocino deformation zone, NW California, Paper 3-2-B, p. 265-268. http://www.fop.cascadiageo.org/pacific_cell/2006/FOP2006_guidebook.htm

PhD Dissertation & MS Thesis:

- Pritchard, CJ (2011) Post-Caldera volcanism in Yellowstone National Park: Petrogenesis of the intracaldera Upper Basin Member of the Plateau Rhyolite and Extra-Caldera mingled magma complexes: [Ph.D. Dissertation] Pullman, Washington, Washington State University, School of Earth and Environmental Sciences, 103 p.
- Pritchard, CJ (2004) Late Holocene relative sea-level changes, Arcata Bay, California: Evaluation of Freshwater syncline movement using coseismically buried soil horizons: [M.S. Thesis] Arcata, California, Humboldt State University, Department of Geology, 56 p.

COURSES TAUGHT

GEOL 100 – Discovering Geology GEO 101 – Introduction to Geology (Washington State University) ITGS 110 FYE - Cataclysms on the Columbia ITGS 110 FYE - Geological Journey to the Center of the Earth ITGS 110 FYE – Washington Rocks! GEOL 120 - The Physical Planet

GEOL 120 - The Physical Planet

GEOL 430 – Structural Geology I

GEOL 431 - Structural Geology II and Field Methods

GEOL 479 - Hydrogeology

GEOL 491, 299-499 - Senior Thesis / Interdependent Study

GEOL 490 - Geology Field Camp EWU, also taught at for WSU.

GRANTS

- Principal Investigator for "Geologic Research in Support of Mineral Resource Studies in the Inland Northwest" a cooperative agreement with the U. S. Geological Survey, **\$180,000**, Fall 2016 Fall 2021
- Awarded grant for "Unraveling the Complex Geology History of Spokane's Isolated Hills using a Collaboratively Derived Detrital Zircon Database" a Faculty Research and Creative Works Grant through Eastern Washington University, Office of the Provost, **\$10,000**, Summer 2020 through Spring 2021
- Co-PI for "Engaging students in planning and multidisciplinary research: EWU Prairie Restoration Project" an EWU Foundation Start Something Big Grant, **\$19,870**, Winter 2020
- Awarded "Avista Geohazard Idaho & Risk" contract to fund faculty and undergraduate research for research of geologic hazards for utilities located throughout western Idaho for Avista, **\$40,106** Spring Fall 2018.
- Awarded "*Avista Geological Hazard Evaluation*" contract to fund faculty and undergraduate research for research of geologic hazards for utilities located throughout eastern and southern Washington for Avista, Budinger and Associates, **\$9,713** Summer-Spring 2017.
- Awarded grant for *"Connecting Spokane to Regional Geology with Detrital Zircons"* a Faculty Research and Creative Works Grant through Eastern Washington University, Office of the Provost, **\$10,000**, Summer 2017 through Spring 2018

Chad J. Pritchard, PhD, LG Department Chair & Professor Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

- Awarded "Infiltration Research for Downtown Area, Spokane, WA" contract to fund faculty and undergraduate research of stormwater infiltration and subsurface projection of geologic contacts with the City of Spokane and Budinger and Associates, **\$1,505** Spring 2017.
- Awarded grant for 'Establishing a *Natural Geologic Laboratory* at Spokane County Willow Lake Natural Area" a Faculty Research and Creative Works Grant through Eastern Washington University, Office of the Provost, **\$10,000**, Summer 2016 through Spring 2017
- Awarded grant with Dr. Anna Dvorak (Geography) for "LiDAR imaging of the Spokane fault with future uses in Geology, GIS, Geography Environmental Science and other departments at EWU." A Start Something Big Grant through Eastern Washington University Foundation, \$3,000, Summer 2014.
- Awarded grant for *"Deciphering the Cheney Fracture Zone Using Fracture Analysis"* a Faculty Research and Creative Works Grant through Eastern Washington University, Office of the Provost, **\$9,970**, Summer 2014 through Spring 2014
- Awarded "Updating County Database" contract to fund an undergraduate position with Spokane County to update a well-log database, Google Earth interface, and Rockworks modeling. *\$2,908*, provided for Winter 2014, *\$1,000* for Spring 2014, *\$2,182* for Summer 2014 **Total of \$6,090**.
- Awarded grant, "Subsurface Projection of the Stratigraphy of the Columbia River Basalt Group and Paleochannel Units in the West Plains Area" Research was a small part of a larger project funded by Washington Department of Ecology Grant No. G1000326, **\$22,500**, 2012-2013.
- Project Coordinator for grant, "Mapping of geologic structures affecting water movement and flow in the West Plains area of Spokane County." Research was a small part of a larger project funded by Washington Department of Ecology Grant No. G1000326, **\$11,500**, 2011-2012.

PROFESSIONAL GROUPS & COMMITTEES

- Columbia Basin Geologic Society, co-re-founder 2014-2016, President 2018 to present
- Co-founder and co-editor for <u>www.floodexplorer.org</u>, displays location-based research on geology, history, and natural sciences of the Missoula Floods.
- EWU Faculty Senate, Department of Geology Senator September 2013 to June 2019
- West Plains Hydrogeologic Framework Technical Advisory Committee, 2014-2015
- Geological Society of America, 2007; American Geophysical Union, 2007; Mineralogical Society of America, 2007; Association of Environmental and Engineering Geologist, 2009; National Association of Geoscience Teachers, 2013

Invited Reviewer/Referee for the following: GSA Bulletin (2019-2020), Lithosphere (2018), VEULCO Project with Springer Publication (2016), GSA Field Guide (2016), Nature Scientific Reports (2015), Journal of Petrology (2015); Lithos (2015); Pure and Applied Geophysics (2014); NSF Grant Proposal (2014); Contributions to Mineralogy and Petrology (2013); Journal of Volcanology and Geothermal Research (2013)

EWU Award: Avista Educator of the Game, EWU vs. UC Davis football game, Nov. 10, 2018.

CERTIFICATIONS

Small unmanned aircraft system license with FAA (2017) - Licensed Geologist with the State of WA and ID (2010) - Mineral Inclusions Short Course, Mineralogical Society of America ReMi-69 (2008) - Radioactive

- 3 of 14 –

Curriculum Vitae: Chad J. Pritchard

Materials Short Course (2008) - Learning ArcGIS, USDA Soil Scientist ArcGIS training (2006) - Princeton Groundwater and Pollution Hydrology Course (2005) - Hazardous Waste Operations and Emergency Response (since 2005) - PADI Divemaster (SCUBA Diving Professional – 2001)

ABSTRACTS FROM MENTORED UNDERGRADUATE RESEARCH PROJECTS:

- Howard, C.K., Pritchard, C.J., Mackenzie, L.A., (2020) Clastic dike formation in slackwater deposits triggered by Pleistocene megafloods. Geological Society of America Abstracts with Programs. Vol 52, No. 6 doi: 10.1130/abs/2020AM-357379.
- Howard, C.K., Prtichard, C.J., (2020) Experimental synthesis of soft-sedimentary features and clastic dikes. Geological Society of America Abstracts with Programs. Vol. 52, No. 3 doi: 10.1130/abs/2020RM-346485.
- Bjork, G; Pritchard, CJ (2019) Hydrogeologic properties of Columbia River Basalt continuous core: 22nd Annual EWU Student Research and Creative Works Symposium, May 2019, Cheney, WA
- Ducken, E, Pritchard, CJ (2019) Landslide/building assessment using drone mounted thermal imaging: 22nd Annual EWU Student Research and Creative Works Symposium, May 2019, Cheney, WA
- Howard, C, Pritchard, CJ (2019) Experiments to synthesize bizarre soft-sedimentary features and clastic dikes: 22nd Annual EWU Student Research and Creative Works Symposium, May 2019, Cheney, WA
- Shaw, JJ, Pritchard CJ (2019) Contact Metamorphism, mineralization, and detrital zircon interpretation for Silver Hill, Spokane, WA: Geological Society of America Abstracts with Programs, Vol. 51, No. 4, ISSN 0016-7592, doi:10.1130/abs/2019CD-329138 – As well as the 2019 Northwest Scientific Association Meeting, and the 22nd Annual EWU Student Research and Creative Works Symposium, May 2019, Cheney, WA
- Cleveland, A, Adams, D, Pritchard, CJ (2017) Geologic and Anthropogenic history of Spokane revealed by subsurface projections for stormwater disposal: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-299074, NCUR 2018, and EWU Research Symposium 2018 as well
- Edgley, J; Pritchard, CJ (2017) An isolated crush breccia in Magnison Butte or part of a larger fault system in eastern Washington: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-301551
- Evart, L; Pritchard, CJ (2017) Constraining Errors in field and lab geochemical analyses using an pXRF calibration for Columbia River Flood Basalt: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-301557
- Goodson, B; Armstrong, A; Pritchard, CJ (2017) Eocene deformation and assimilation in the Willow Lake Natural Area, Spokane County, Washington: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-301544 – Murdock National Meeting, 2017 as well
- Hanson, E, Pritchard, CJ (2017) Structural relationship between folding and faulting preserved in Proterozoic Buttes of the Medical Lake area, eastern Washington: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-301510
- Larson, K, Pritchard, CJ (2017) Deciphering Cretaceous and Eocene granitoids in the Spokane areas: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-301521
- Stephens, T, Pritchard, CJ, O'Sullivan, P (2107) U-Pb geochronology of Silver Hill, Spokane County, Washington: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi:

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

10.1130/abs/2017AM-298572 - Murdock National Meeting, 2017, NCUR 2018, and EWU Research Symposium 2018 as well

- Huddleston, KA, Pritchard, CJ (2017) Comparison of two cretaceous age granites along the Spokane River using estimated age, mineral composition, and applicable geothermobarometry: , GSA Rocky Mountain Section 69th Annual Meeting, Calgary, Canada Geological Society of America Abstract with Programs, v. 49, no. 5, doi:10.1130/abs/2017RM-293242
- Edgley, J; Pritchard, CJ (2017) Geologic reconnaissance of Magnison Butte, Medical Lake, Washington: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Evart, L; Pritchard, CJ (2017) Analyzing local basalts using portable XRF on fresh and weathered surfaces: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Fitzgerald, A; Pritchard, CJ (2017) Medical Lake, Diving into the Geology: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Goodson, B; Armstrong, A; Pritchard, CJ (2017) Preliminary structural interpretation of the Willow Lake aureole: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Hansen, E; Duckett, K; Pritchard, CJ (2017) Faulted Buttes of the Medical Lake Area: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Huddleston, KA; Pritchard, CJ (2017) Comparison of Dam Rocks along the Spokane River: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Larson, K; Pritchard, CJ (2017) Deciphering of Cretaceous and Eocene granitoids in the Spokane area: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Thompson, B; Pritchard, CJ (2017) Look out for the Latah: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Williamson, L; Pritchard, CJ (2017) Hawk Creek's winding recession based on portable x-ray fluorescence: 20th Annual EWU Student Research and Creative Works Symposium, May 2017, Cheney, WA
- Adams, D; Pritchard, C (2016) Three Dimensional Modeling of Paleochannels of the West Plains: 19th Annual EWU Student Research and Creative Works Symposium, May 2016, Cheney, WA
- Armstrong, A; Goodson, B.; Pritchard, C (2016) Preliminary identification and classification of the rocky types of Willow Lake, eastern Washington: Geological Society of America Rocky Mountain Section Meeting, May 2016, Moscow, ID - Geological Society of America Abstracts with Programs, v. 28, no. 6, doi: 10.1130/abs/2016RM-276043
- Blackwood, J; Pritchard, C (2016) Rock Lake: Columbia River Basalt Group: 19th Annual EWU Student Research and Creative Works Symposium, May 2016, Cheney, WA
- Evart, L; Pritchard, C (2016) Geochemical and field identification of a landslide at Steamboat Rock, Washington using Portable X-ray fluorescence: Spokane Intercollegiate Research Conference, April 2016, Whitworth University, Spokane, WA; 19th Annual EWU Student Research and Creative Works Symposium, May 2016, Cheney, WA & Geological Society of America Abstracts with Programs, v. 28, no. 6, doi: 10.1130/abs/2016RM-276156.
- Garcia, L; Buchanan, J; Pritchard, C (2016) Origins of rip-up clasts in Missoula Floods deposits of the West Plains, eastern Washington: Geological Society of America Rocky Mountain Section Meeting, May 2016, Moscow, ID - Geological Society of America Abstracts with Programs, v. 28, no. 6, doi: 10.1130/abs/2016RM-276177

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

- Goodson, B; Armstrong, A; Pritchard C (2016) Preliminary mapping and structural interpretation of an aureole in eastern Washington: Spokane Intercollegiate Research Conference, April 2016, Whitworth University, Spokane, WA Geological Society of America Rocky Mountain Section Meeting, May 2016, Moscow, ID - Geological Society of America Abstracts with Programs, v. 28, no. 6, doi: 10.1130/abs/2016RM-276179
- Hansen, E; Schneider, J; Pritchard, C (2016) Geochemistry of Pre-Miocene Sedimentary Rocks of eastern Washington using Portable XRF: 19th Annual EWU Student Research and Creative Works Symposium, May 2016, Cheney, WA
- Hennings, C; Lund, B; Pritchard, C (2015) Vertical propagation of lateral slip in basement rock as instigator for the Cheney Fracture Zone, eastern Washington: A fracture analysis, Abstract, National Conference on Undergraduate Research (NCUR), April 2015, Cheney, WA
- Luppens, J; Pritchard, C (2015) Investigation of nitrate hotspots in Spokane County, Abstract, Northwest Science Conference, April 2015, Pasco, WA & National Conference on Undergraduate Research (NCUR), April 2015, Cheney, WA
- Arms, Z; Ulakovich, A; Pritchard, C (2014) Cheney Fracture Zone: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA & 17th Annual EWU Student Research and Creative Works Symposium (EWU Symposium), May 2014, Cheney, WA.
- Bearup, C; Daley, R; Pritchard, C (2014) Possible Splay of the Spokane and Latah Fault Systems: Examination of a thrust fault in Hangman Valley: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA.
- Campbell, N.; Warren, J.; Pritchard, C. (2014) Shear zone at Needham Hill Evidence of a metamorphic core complex, Spokane County, WA: Abstract, 17th Annual EWU Symposium, Cheney, WA.
- Daley, R; Bearup, C; Pritchard, C (2014) Thrust fault in Hangman Valley: A possible splay of the Spokane and Latah fault systems: Abstract, Joint Meeting 66th Rocky Mountain and 110th Cordilleran Section meetings, Geological Society of America (GSA), May 2014, Bozeman, MT.
- Daley, R; Campbell, D; Bearup, C; Pritchard, C (2014) Origins of Hangman Creek deformation at Campion Park, Spokane, WA: Abstract, 17th Annual EWU Symposium, Cheney, WA.
- Garland, N; Schillhammer, S; Sorensen, C; Uecker, T; Pritchard, C (2014) Formation of Basalt Rings in Odessa, WA: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA & 17th Annual EWU Symposium, May 2014, Cheney, WA.
- Haston, A; Adams, D; Pritchard, C (2014) The use of photographic interpretation to determine the compositional volume of mixed magma from basalt and rhyolite complexes at Yellowstone National Park: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA, Joint Meeting 66th Rocky Mountain and 110th Cordilleran Section meetings, GSA, May 2014, Bozeman, MT & Talk, 17th Annual EWU Symposium, Cheney, WA.
- Hatch, S; Faulds, A; Pritchard, C (2014) Structural analysis and Columbia River Basalt Group Stratigraphy of the Palouse Falls area, eastern Washington: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA; Joint Meeting 66th Rocky Mountain and 110th Cordilleran Section meetings, GSA, May 2014, Bozeman, MT & 17th Annual EWU Symposium, May 2014, Cheney, WA.
- Hayes, J; Belock; Pritchard, C (2014) Analysis of the available research on the Spokane Fault: Abstract, 17th Annual EWU Symposium, May 2014, Cheney, WA.
- Holman, C; Lloyd, R; Orndorff, R; Pritchard, C (2014) Seismic testing of selected soils in Spokane County: Abstract - poster, Joint Meeting 66th Rocky Mountain and 110th Cordilleran Section meetings, GSA, May 2014, Bozeman, MT.
- Jensen, D and Pritchard, C (2014) Possible core complex south of the priest river complex in Bonnie Lake, eastern Washington: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA;

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

Joint Meeting 66th Rocky Mountain and 110th Cordilleran Section meetings, GSA, May 2014, Bozeman, MT & 17th Annual EWU Symposium, May 2014, Cheney, WA

Lloyd, R and Pritchard, C (2014) Microfracture patterns in basalt cores as an analog for the Cheney Fracture Zone: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA

Perham, A; Butz, N.; Peters, J; Pritchard, C (2014) Kinimatic analysis of the Beacon Hill mylonite, Spokane, WA: Abstract, 17th Annual EWU Symposium, Cheney, WA.

Pritzl, J and Pritchard, C (2014) Mapping of Tower Mountain/ Rocks of Sharon: Abstract, 12th Annual SIRC, April 2014, Gonzaga, Spokane, WA & 17th Annual EWU Symposium, May 2014, Cheney, WA

Ahern, G; Kostka, S; Pritchard, C (2013) Sandbox modeling of faulting in compressional regimes: 16th Annual EWU Research and Creative Works Symposium, May 2013, Cheney, WA.

Arms, Z; Gosal, S; Ulakovich, A; Pritchard, C (2013) Groundwater interaction between Columbia River Basalt Group and paleodrainage aquifers, West Plains, Washington: Abstract, 11th Annual Spokane Intercollegiate Research Conference (SIRC), April 2013, Spokane, WA & 16th Annual EWU Research and Creative Works Symposium, May 2013, Cheney, WA.

Kostka, S; Ahern, G; Pritchard, C (2013) A model of orogenic settings: Abstract, 11th Annual SIRC, April 2013, Spokane, WA

Landkammer, M; Thompson, A; Pritchard, C (2013) Structural Orientation Analysis from the Beacon Hill Area of the Spokane Dome: Abstract, 11th Annual SIRC, April 2013, Spokane, WA & 16th Annual EWU Research and Creative Works Symposium, May 2013, Cheney, WA.

Schilter, J; Nesinger, R.; Pritchard, C (2013) Modeling of strike-slip faults: 16th Annual EWU Research and Creative Works Symposium, May 2013, Cheney, WA.

Snyder, L; Pritchard, C (2013) Geologic Reconnaissance of Tower Mt./Iller Creek Conservation Area: 16th Annual EWU Research and Creative Works Symposium, May 2013, Cheney, WA.

Ulakovich, A; Arms, Z; Gosal, S; Pritchard, C (2013) Stratigraphy of the Columbia River Basalt Group in the West Plains, eastern Washington: Abstract, 11th Annual SIRC, April 2013, Spokane, WA & 16th Annual EWU Research and Creative Works Symposium, May 2013, Cheney, WA.

Shillhammer, S; Pritchard, C (2013) Window into the Cenozoic tectonic history of eastern Washington: geochronology and microstructures of an intruded fault plane: Abstract, 27th National Conference on Undergraduate Research (NCUR), April 2013, La Crosse, Wisconsin

Brundige, S; Suter, T; Hartley, E; Pritchard, C (2012) Strain analysis of the Metaline limestone utilizing deformed trilobites: Abstract, National Association of Geoscience Teachers, Pacific Northwest Section, 2012 Annual Conference, Spokane, WA.

Campbell, H; Pritchard, C (2012) U-Pb ages of plutons near Long Lake dam and Little Falls dam, Lake Spokane, Washington: Abstract, National Association of Geoscience Teachers, Pacific Northwest Section, 2012 Annual Conference, Spokane, WA. & 15th Annual EWU Research and Creative Work Symposium, May 2012.

Crim, C, Smith, D, McCollum, L, Pritchard, C (2012) Large landslide discovered using stratigraphy of the Columbia River basalts, Deep Creek, Riverside State Park, Spokane, WA: 15th Annual EWU Research and Creative Work Symposium, May 2012.

Thurston, J; Campbell, H; Crim, C; Pritchard, C (2012) Structural analysis of the Cheney Fracture Zone: Abstract, National Association of Geoscience Teachers, Pacific Northwest Section, 2012 Annual Conference, Spokane, WA. & 15th Annual EWU Research and Creative Work Symposium, May 2012.

ABSTRACTS & TALKS:

- Pritchard, CJ; Gaylord, D; Adams, DB; Ernst, S. (2019) Role of Quaternary glacial outburst megaflood paleochannel deposits in a basalt-dominated aquifer system, West Plains area of eastern Washington, Geological Society of America Abstracts with Programs, Vol. 51, No. 4, ISSN 0016-7592, doi:10.1130/abs/2019CD-329169
- Box, SE; Pritchard, CJ; Stephens, TS; O'Sullivan, PB (2019) Deer Trail Group in northeastern Washington: An intermediate Mesoproterozoic age unit between the westernmost Mesoproterozoic Belt Supergroup and the Neoproterozoic Windermere Group: Geological Society of America Abstracts with Programs, Vol. 51, No. 4, ISSN 0016-7592, doi:10.1130/abs/2019CD-329312
- Pritchard, CJ; Hansen, E: Pirch, K; Briggs, L. (2019) Unique First-Year Experiences for student and faculty engagement: Annual Conference of the FYE, Las Vegas, NV November 2019 https://sc.edu/nrc/system/pub_files/1549550307_0.pdf
- Pritchard, CJ; O'Sullivan, P, Lewis, RS; (2017) Late Miocene vapor-phase enrichment of REE in basaltic enclaves: Geological Society of America Abstracts with Programs. Vol. 49, No. 6 doi: 10.1130/abs/2017AM-299129
- Pritchard, CJ; Lewis, RS; O'Sullivan, P (2017) Bubble segregation transport and vapor phase LREE enrichment of mafic enclaves: International Association of Volcanology and Chemistry of the Earth's Interior Annual Meeting, August 2017, Portland, OR
- Pritchard, CJ; Loyd, R. (2016) Cheney and Palouse Falls Fracture Zones, eastern Washington with analogies to fractured basalt cores: Geological Society of America Abstracts with Programs, v. 28, no. 6, doi: 10.1130/abs/2016RM-276049
- Pritchard, CJ; Cebula, L. (2016) Exploring the geology and history of Missoula Floods through undergraduate research projects, <u>www.floodexplorer.org</u>: Geological Society of America Abstracts with Programs, v. 28, no. 6, doi: 10.1130/abs/2016RM-276047
- Pritchard, C.J., Hennings, C., Lund, B., Ernst, S. (2015) Possible Influences of the Cheney Fracture Zone and paleodrainages on basalt aquifers of the West Plains, eastern Washington: *Abstract* – *Talk*, Northwest Scientific Association 86th Annual Conference, April 2015, Pasco, WA
- Morgavi, D; Arzilli, F; Pritchard, CJ; Petrelli, M.; Larson, PB; Dingwell, DB.; Perugini, D. (2015) Magma mixing and crystallization between basaltic and rhyolitic melts: *Abstract*, Goldschmidt 25th Anniversary Conference, August 2015, Prague, Czech Republic
- Morgavi, D; Arzilli, F; Pritchard, CJ; Perugini, D; Mancini, L; Larson, PB; Dingwell, DB (2015) Magma mixing in the Yellowstone Plateau Volcanic Field brought to light by X-ray microtomography and chemical analysis: *Abstract*, European Geosciences Union, General Assembly, April 2015, Vienna, Austria.
- Pritchard, CJ; Larson, PB; Morgavi, D; Perugini, D; Arzilli, F; Mancini, L; Dingwell, DB (2014) Preliminary field, petrologic, experimental mixing and x-ray computed microtomography results from the mixed basalt and rhyolite complexes along the East Gallatin-Washburn Fault Zone, Yellowstone National Park, WY, USA: *Abstract - Talk,* Joint Meeting 66th Rocky Mountain and 110th Cordilleran Section meetings, Geological Society of America, May 2014, Bozeman, MT.
- Morgavi, D; Arzilli, F; Pritchard, CJ; Perugini, D; Mancini, L; Larson, PB; Dingwell, DB (2014) 3D morphochemistry of basaltic/rhyolitic mixed eruptions revealed via microanalysis and X-ray microtomography (12447). *Abstract,* American Geophysical Union National Meeting, Dec. 2014, San Francisco, CA.
- Di Genova, D; Morgavi, Hess, KU; Pritchard, CJ; Borovkov, N; Perugini, D; Larson, PB; Dingwell, DB (2014) Raman investigation of magma mingling experiments as a tool for tracking the chemical and structural evolution of melt (15212). *Abstract,* American Geophysical Union National Meeting, Dec. 2014, San Francisco, CA.

- 8 of 14 –

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

- Morgavi, D; Perugini, D; Pritchard, CJ; De Campos, CP; Larson, PB; Dingwell, DB (2013)
 Experimental constraints on mixing between basaltic and rhyolitic magmas (2072-1).
 Abstract, International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI), Scientific Assembly July, 2013, Kagoshima, Japan.
- Pritchard, CJ, Ellis, BS, Larson, PB, Mark, DF (2011) New High Precision 40Ar/39Ar measurements of the Huckleberry Ridge Tuff: Member C – A caldera forming post-caldera rhyolite, Yellowstone, WY, USA. *Abstract & Talk*, Geological Society of America, National Meeting, Minneapolis, Oct. 2011.
- Larson, PB; Pritchard, CJ (2011) Geochemical changes due to propylitization in the Eocene Sawtooth Ring Zone, Idaho Batholith, USA: Abstract, Geological Society of America, National Meeting, Minneapolis, Oct. 2011.
- Larson, PB; Pritchard, CJ (2010) The geochemical signature of propylitic alteration in the Idaho Batholith: Abstract, Goldschmidt Geochemistry International Conference, 2010.
- Pritchard, CJ; Larson, PB (2010) Isotopic modeling and the formation of the post-caldera eastern Upper Basin Member rhyolites, Yellowstone, WY: *Abstract,* American Geophysical Union National Meeting, 2010, San Francisco, CA.
- Pritchard, CJ and Larson, PB (2009) Isotopic shifts of Yellowstone and the eastern Upper Basin Member of the Plateau Rhyolites, Yellowstone Caldera, WY: *Abstract & Talk,* Geological Society of America Penrose Conference: Low delta 18-O rhyolites and crustal melting: Growth and redistribution of the continental crust, September 2009.

FYE WORKSHOPS HOSTED AT FACULTY COMMONS

- FYE Feedback and Brownie night, April 2, 2019, 3 to 5 pm (~30 attendees)
- FYE Engaging Discussions with Dr. Sean Agriss, January 8, 3 to 5 pm (~30 att.)
- FYE Summer Learning Outcomes Workshop, September 12, 10 am to 4 pm (~30 attendees)
- FYE Faculty Pizza Night and General Education Introduction, April 30, 2018, 3 to 5 pm (~20 att.)
- FYE Faculty BBQ with EPIC Paddle Boarding, Medical Lake Waterfront Park, May 31, 2018 3 to 5 pm (~15 att.)
- General Education Workshops, about 12 discussions open to campus to discuss about defining Breadth Areas and GE Learning Outcomes, general attended by 10 to 20 people.

INVITED PRESENTATIONS

- Pritchard, CJ and Abby, E., 2020 Before the Bottle: The Science Behind Wine for the EWU Alumni Association, <u>https://www.youtube.com/watch?v=x8KesLj9XDE&t=2476s</u> September 17, 2020
- Stoess, L., Pritchard, C., and Hair, J., 2020, Lower Telford-Crab Creek, Lower Grand Coulee Tour September 28, 2020, Field Trip Guide for the Palouse Falls Chapter of the Ice Age Flood Institute Annual Meeting, 16 p.
- Pritchard, CJ and Stasney, D (2020) sUAS geoscience research and Drones in Geology, Society of Inland Northwest Environmental Scientists (SINES), Shawn O'Donnell's Irish Pub, Spokane, WA. February 12, 2020
- Pritchard, CJ (2020) Washington State Geology and Wines, Mobius Nerd Night, Mobius Science Center, Spokane WA, February 7, 2020
- Kiver, E., Pritchard, C., and Stoess, L., 2019, Lower Cheney-Palouse Scabland Tract Tour 2019, Field Trip Guide for the National Ice Age Flood Institute Annual Meeting, 36 p.

- 9 of 14 –

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

- Pritchard, CJ (2019) Drones in the Classroom: Invited Talk, EWU in the High School, Veteran Instructor & New Instructor Training Day, June 18, 2019
- Pritchard, CJ (2019) Volcano and Earthquake Hazards in eastern Washington: Invited Talk, Spokane Community Organizations Active in Disasters (COAD), Spokane, WA, May 7, 2019
- Pritchard, CJ (2018) U-Pb geochrnolology of Silver Hill mine, a tin and tungsten bearing roof pendant in Spokane, WA: *Invited Talk*, Washington State University & University of Idaho Seminar Series, Pullman, WA, Sept. 20, 2018
- Pritchard, CJ (2018) Geology of the Cheney and Palouse Falls fracture zones: Invited Talk, Benton County PUD, Kennewick, WA, May 8, 2018.
- Pritchard, CJ; Keattch, S; and Lutey, T (2018) EWU Policies for the Field, AGU Heads and Chairs program and the American Geosciences Institute, webinar on Implementing Effective Field Camp and Field Course Policies and Procedures, online webinar <u>https://www.americangeosciences.org/workforce/webinars/implementing-effective-fieldcamp-policies-and-procedures April 20, 2018</u>
- Pritchard, CJ (2017) Geology of the Cheney and Palouse Falls fracture zones: Invited Talk, Wenatchee Valley Museum, WA, Dec. 13, 2017.
- Pritchard, CJ (2017) Earthquakes and tectonic history of "Washington Rocks!": Invited Talk, Othello Sandhill Crane Festival, Othello, Washington, March 25, 2017.
- Pritchard, CJ (2017) Three dimensional projections of paleochannels in the west plains of eastern Washington: *Invited Talk*, Columbia Basin Geologic Society, Scotty's Doghouse, Spokane, WA March 22, 2017.
- Pritchard, CJ (2017) Natural hazards of Washington Rocks!: *Invited Talk*, Auntie's Bookstore, Spokane, WA, Feb. 9, 2017
- Pritchard, CJ (2017) Tectonics of Washington Rocks!: *Invited Talk*, Lake Lewis Chapter of the Ice Age Floods Institute, Benton County Public Utility District, Kennewick, WA, Jan. 31. 2017
- Pritchard, CJ (2016) Tectonics of Washington Rocksl: *Invited Talk*, Wenatchee Valley Erratics Chapter of the Ice Age Floods Institute, Wenatchee Valley Museum, WA, Dec. 13, 2016
- Pritchard, CJ (2016) Three-dimensional models of Paleochannels, West Plains for eastern Washington: social benefits from deposits of the Missoula Floods: *Invited Talk*, Washington State University & University of Idaho Seminar Series, Pullman, WA, Sept. 1, 2016
- --

Pritchard , CJ (2015) The Ice Age Floods, Invited Presentation for HIST 407, April 9, 2015

- Pritchard, CJ (2014) Magma Mixing in the east Gallatin-Washburn fault zone of Yellowstone, WY. Talk, Winter quarter EWU Geology Seminar, February 18, 2014
- Pritchard, CJ (2013) Subsurface Projection of the Stratigraphy of the Columbia River Basalt Group and Paleodrainages in the West Plains Area: Invited Talk & Professional Report, WRIA 54 Watershed Implementation Team Meeting, Airway Heights Water Reclamation Facility, September, 2013, Airway Heights, WA
- Pritchard, CJ (2013) Magma Mixing in Yellowstone and from Experiments: Invited Talk, Spokane Falls Community College Geology Department, May 17, 2013, Spokane, WA
- Pritchard, CJ (2013) Geology of the Cheney & Palouse Falls fracture zones. Invited Talk, Ice Age Flood Institute Meeting, March 7, 2013, Cheney, WA
- Pritchard, CJ (2012) When the Yellowstone Supervolcano blows again, how will Spokane fare? Invited Talk, Sigma Xi Banquet & Speaker, October 22, 2012, Cheney, WA
- Pritchard, CJ (2012) Geology and hydrology of the Cheney and Palouse Falls fracture zones: Invited Talk, Spokane-West Rotary meeting, September 25, 2012, Spokane, WA
- Pritchard, CJ (2012) Structural Influences on Geomorphology and Hydrology of the Cheney Fracture Zone and Palouse Falls Area: *Invited Talk*, Washington State University & University of Idaho Seminar Series, August 30, 2012, Pullman, WA

- 10 of 14 –

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

 Pritchard, CJ (2012) Geologic Structures Affecting Water Movement and Flow Direction in the CRBG West Plains Aquifer, WRIA 54: *Invited Tal*k & Professional Report, WRIA 54
 Watershed Implementation Team Meeting, Spokane County Utilities Department, July 2012, Spokane, WA

COMMUNITY EVENTS

- Mt St. Helen's 40th Anniversary and Trashcano, May 18, 2020: https://www.youtube.com/watch?v=5ylb7Y4eGkA&t=5s
- Geology & History of Medical Lake, 1.5-mile hike from Medical Lake Waterfront Park along the public trail and lecture through Spokane County Library District, April 27, 2019 (35 people)
- Trashcano and Washington Geology presentation for Lakeside High School Nine-Mile Elementary Science Night, April 18, 2019 (>100 people)
- Led a Wolf Den from Medical Lake Cub Scouts on "Digging the Past", where we set up bowls of sand for the scouts to dig and sieve for fossils, make trilobite imprint fossils, bury animal crackers in strata of liquid-N ice cream and then had a trashcano experiment, March 13, 2019 (6 kiddos in the den, about 40 people participated)
- Hosted viewing of, "*Enormous: The Gorge Story*" at the 2019 Spokane International Film Festival to a sold out show, February, 2019, Magic Lantern Theater. (30 people)
- Representative for EWU Department of Geology for the Spokane Public School's fifthgrade career fair, Spokane Convention Center, November 13, 2018 (500 people)
- Geology & History of Medical Lake, 1-mile hike from Medical Lake Waterfront Park along the public trail and lecture through Spokane County Library District, June 9, 2018 (15 people)
- Volunteer Judge and helped recruit judges for Franklin Elementary Science Fair, March 7, 2018 (50 posters)
- Trashcano and Washington Geology presentation for Lakeside Elementary Science Night, February 27, 2018 (50 people)
- Hydrology and Local Geology presentation and exhibits at Reardan Middle School for three of Ms. Littleton's classes, January 19, 2018. (three classes ~25 students each)
- Medical Lake Rocks! Geology presentation and exhibits at the Medical Lake Library, January 8, 2018 (~25 people)
- Chemistry Rocks! At the Spokane City Library, general geology presentation and exhibits, collaborated with Ashley Lamm from Chemistry Department, October 21, 2017 (>100 people)
- Field Trip leader for Spokane Area Steptoes for the Belt Symposium, Sept 17, 2017 (20 people)
- Judge for Regional and State Science Olympiad, Dynamic Planet, GeoLogic Mapping, and Road Scholar, 2012 through present

MEDIA ENCOUNTERS

- Spokesman Review, Spokane's Ashfall By Rachel Alexander. Published on <u>Front Page</u>, May 20, 2018. <u>http://www.spokesman.com/stories/2018/may/20/volcanoes-in-the-pacific-northwest-a-lasting-impre/#/0</u>
- The Spokesman Review, Palouse Falls a 'site of wonder' for thousands of years By Becky Kramer, Cover article **Front Page**, May 21, 2016. Short video also produced.

- 11 of 14 –

Chad J. Pritchard, PhD, LG Department Chair & Professor Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

http://www.spokesman.com/stories/2016/may/20/washingtons-palouse-falls-a-site-of-wonder-for-tho/

- The River Journal, Whole Lotta Shaken: What is Happening on the Hope Fault By Trish Gannon, Cover article – p. 6-9, December 2015 <u>https://issuu.com/trishgannon/docs/riverjournal_dec2015</u>
- Spokesman Review, EWU geologist measures 'Bloomsquake' By Rachel Alexander. Published on Front Page, May 4, 2015. This story was also picked up by TV Channel 6. <u>http://www.spokesman.com/stories/2015/may/04/ewu-geologist-measures-bloomsquake/</u>
- The Easterner (EWU newspaper), *Idaho's Silver Valley, a common epicenter for earthquakes* By Katie Dunn, Page 2, May 6, 2015, volume 66, issue 26.
 <u>http://easterneronline.com/35694/news/idahos-silver-valley-a-common-epicenter-for-earthquakes/#sthash.l4MW7WL5.dpbs</u>
- KXLY (Channel 4) for a news segment on TV about the Spokane fault, Geologists discover new quake fault line in Spokane, interviewed by Jeff Humphrey. Aired on January 2, 2014: <u>http://www.kxly.com/news/spokane-news/geologists-discover-new-quake-fault-line-in-spokane/23746464</u>
- KXLY (Channel 4) for a news segment on TV, Mt. St. Helens celebrates relatively quiet decade, interviewed by John Hendricks. Aired on October 1st 2014: <u>http://www.kxly.com/news/spokane-news/mt-st-helens-celebrates-relatively-quietdecade/28363866</u>

RECENT TECHNICAL REPORTS

- Stoess, L., Pritchard, C., and Hair, J., 2020, Lower Telford-Crab Creek, Lower Grand Coulee Tour, field trip guide for the Palouse Falls Chapter of the Ice Age Flood Institute Annual Meeting, 16 p.
- Kiver, E., Pritchard, C., and Stoess, L., 2019, Lower Cheney-Palouse Scabland Tract Tour 2019, Field Trip Guide for the National Ice Age Flood Institute Annual Meeting, 36 p.
- **EWU** Pritchard, C.J., Buchannan, B., Avista Idaho Long-Term Geohazard Identification and Hazard Ranking Project, Results of Geotechnical Geohazard Evaluation Analysis and Report, Eastern Washington University, September 10, 2018
- **EWU** Adams, D., Lehn, D., Pritchard, C.J., and Finnegan, J., Avista WA Long-Term Geohazard Identification and Hazard Ranking Project, Results of Geotechnical Geohazard Evaluation Analysis and Report, Budinger and Associates, Inc. project number S17158, December 2017
- **EWU** Finnegan, J., Pritchard, C.J., Adams, D., and Cleveland, A., Hydrogeologic Research of Existing Subsurface Exploration Studies in Basin for Infiltration Research for Downtown Area, Spokane WA, Budinger and Associates, Inc. project number H17202, June 2017
- Armstrong, A; Goodson, B; Pritchard, CJ (2017) Geology of Willow Lake Natural Aureole: for Spokane County Parks and Recreation Geologic Field Guide, 23 p., November 6, 2017. Available at: <u>https://www.spokanecounty.org/DocumentCenter/Home/View/17426</u>
- Finnegan, J., Christensen, R.W., and Pritchard, C.J., Results of Preliminary Geotechnical Evaluation for the Porcupine Bay Slide, Lincoln County, Washington, Budinger and Associates, Inc. project number S17232 June 2017
- Finnegan, J., Budinger, B., and Pritchard, C.J., Results of Geotechnical Reconnaissance for Latah Creek Road Slide, Spokane County, Washington, Budinger and Associates, Inc. project number \$17391 June 2017

- 12 of 14 –

- Finnegan, J., Budinger, B., and Pritchard, C.J., Results of Geotechnical Reconnaissance for Euclid Road Slide, Spokane County, Washington, Budinger and Associates, Inc. project number S17363 June 2017
- Black, T. and Pritchard, C.J., Results of Preliminary Field and Laboratory Testing for the Beck Road Pit Qualification, State Line, Idaho, Budinger and Associates, Inc. project number M17264 May 2017
- ---
- Pritchard, C.J. and Finnegan, J., Hydrogeology Review for Aquifer Susceptibility Classification for Property on East Palouse Highway, Valleyford, WA, Budinger and Associates Inc. project number G16105, March 2016.
- Callendar, D., Pritchard, C.J., and Burchett, S., Hydrogeologic Characterization Report for Repair Airfield Drainage System, Fairchild AFB, WA, Budinger and Associates Inc. project number H14452, March 2015.
- Pritchard, C.J. and Burchett, S., Re-evaluation of slope stability on Lindsey, Windermere Heights, Spokane, Washington, Budinger and Associates Inc. project number G14300, November 2014
- Pritchard, C.J. and Finnegan, J., Latah Pit Reclamation, Latah, Washington, Geotechnical Evaluation of Pit-Reclamation Plan, technical report submitted to Spokane County Engineering and Roads, Budinger and Associates Inc. project number S13223, September 2013.
- Pritchard, C.J. and Burchett, S., Driveway Improvements, Newman Lake, Washington, Results of Preliminary Geologic-Hazard Evaluation, technical report submitted to private home owner, Budinger and Associates Inc. project number G13439, September 2013.
- Pritchard, C.J. and Burchett, S., Residence on Lindsey, Windermere Heights, Spokane, Washington, Preliminary Rock Stability Analysis, technical report submitted to Condron Homes, Budinger and Associates, Inc. project number G13400, August, 2013.
- Pritchard, C.J. and Burchett, S., Aspen Summit Canopy EcoPark, Liberty Lake, Spokane County, Washington, Results of Preliminary Geologic-Hazard Evaluation, technical report submitted to Epiphany Applied Concepts Inc., Budinger and Associates Inc. project number G13337, July 2013.
- **EWU** Pritchard, C.J Subsurface Projection of the Stratigraphy of the Columbia River Basalt Group and Paleodrainage Units in the West Plains Area, technical report submitted to WRIA 54 Watershed Planning Group, June 2013.
- Pritchard, C.J. and Stanford, K., Sherman Source Approval, Priest River, Idaho, Results of field and laboratory testing for Idaho materials qualification, technical report submitted to Sherman Rock and Concrete, Budinger and Associates Inc., project number M13237, May 2013.
- EWU McCollum, M and Pritchard, C.J., Delineating geologic structures affecting water movement and flow in the West Plains area of Spokane County, technical report submitted to WRIA 54 Planning Group, June 2012
- Pritchard, C.J. and Burchett, S., Chattaroy-Riverside Intertie, Spokane County, Washington, Results of Preliminary Geologic-Hazard Evaluation, technical report submitted to private company, Budinger and Associates Inc. project number G12174, October, 2012.

- 13 of 14 –

REPRESENTATIVE EXPERIENCE

Eastern Washington University, Department of Geology, 130 Science Building, Cheney, Washington 99004-2439

Dates Employed: September 2011 to present

Position: DEPARTMENT CHAIR & ASSOCIATE PROFESSOR

<u>Duties:</u> Design course, lecture, and prepare/teach/evaluate laboratory exercises for principles and field application of *Structural Geology I and II* (Geology 430 and 431). Teaching load also included introductory geology, *Discovering Geology* (GEOL 100) and introductory geology for science majors, *Physical Geology, The Solid Earth* (GEOL 120). Member of a faculty team for *Geology Field Camp* (GEOL 490), a class aimed at teaching undergraduate students how to map and interpret geologic structures in the Dillon, MT area. I also mentored multiple undergraduate research projects.

Eastern Washington University, University College, Washington 99004 Dates Employed: July 2017 to June 2019

<u>Position:</u> DIRECTOR OF THE GENERAL EDUCATION PROGRAM/ FYE DIRECTOR <u>Duties:</u> Directed the implementation a complete change of the General Education Program (GE) for EWU and operationalized the First Year Experience (FYE) portion of GE. Facilitated communication between Academic and Student Affairs, faculty workshops, and drafted policy and documentation to promote and operationalize GE at EWU. <u>Supervisor:</u> Dr. Lynn Briggs, Dean University College. <u>Phone</u> (509) 359-2305.

Budinger and Associates, Inc., 1101 North Fancher Rd, Spokane, Washington 99212 **Dates Employed:** September 2005 to December 2011 – continue on a project basis *Position*: SENIOR GEOLOGIST

<u>Duties</u>: Completed mapping and field sampling including: soil, surface-water, and groundwater sampling and the installation and development of monitoring wells. Project management for geotechnical and environmental jobs, complete reports for multiple types of studies from slope stability, drainage conditions, calculating pavement and subgrade thicknesses, groundwater studies, to environmental site assessments. Completed seismic and electrical resistivity geophysical surveys as well as soil testing for a geothermal heat exchange systems and slope stability models. Experience with direct push, coring, air rotary, hollow stem auger drilling as well as using backhoes and large track hoes.

Supervisor: Steve Burchett. Phone (509) 535-8841.

Washington State University, School of Earth and Environmental Sciences

Pullman, Washington 99164-2812

Dates Employed: August 2007 to December 2010

<u>Position:</u> GEOLOGY 101 AND FIELD CAMP INSTRUCTOR / TEACHING ASSISTANT <u>Duties:</u> Prepare, teach, and evaluate students for Geology 101 lectures (250 students) – Introduction to Geology, Spring/Fall 2009. Prepare, teach, and evaluate students in laboratories classes for *Geology* 101 – Introductory Geology, Geology 356 – Igneous & Metamorphic Petrology, Geology 350 – Mineralogy, and Geology 470 – Economic Geology. Assisted in teaching three summers of Field Camp II, a class aimed at teaching undergraduate students how to map and interpret geologic structures in Dillon, Mt. <u>Supervisors:</u> Dr. Peter Larson. <u>Phone</u> (509) 353-3095.

Spokane County Conservation District / National Resource Conservation Services 210 North Havana, Spokane, WA 99202 / 8815 East Mission, Suite B, Spokane, WA 99212

- 14 of 14 –

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

Dates Employed: December 2005 to September 2006

<u>Position</u>: SOIL SCIENTIST

<u>Duties</u>: Collected and logged soil samples from pits and auger as part of the Spokane County Soil Survey update. Associated soil pits to larger areas of similar soils (soil series) and then present data using maps created in ArcGIS 9.0. Compiled pedon and data-map-unit data in the national soils database. Conducted quality assurance and statistical models in ArcGIS. Comparable to GS 9 <u>Reason for leaving</u>: Temporary position.

Supervisor: Kyle Stephens. Phone (509) 924-7350.

State of Hawaii Department of Health - Solid and Hazardous Waste Branch

919 Ala Moana Boulevard, Suite 212, Honolulu, Hawaii 96713 Dates Employed: January 2005 – August 2005

Position: ENVIRONMENTAL HEALTH SPECIALIST

<u>Duties</u>: Documented petroleum releases, notified responsible party of EPA and State codes, and ensured appropriate measures were taken to remediate releases from underground storage tanks. Reviewed & responded to underground release reports for over 70 sites in the Hawaiian Islands. <u>Supervisor</u>: Roxanne Kwan. <u>Phone</u> (808) 586-4226.

Mid Pacific Testing and Inspection

94-547 Ukee Street, Suite 200, Waipahu, Hawaii 96797

Dates Employed: August 2004 – January 2005

<u>Position</u>: LAB MANAGER AND STAFF GEOLOGIST <u>Duties</u>: Managed lab setup, equipment, and supervised/instructed employees in the lab. Collected,

logged, and ran a variety of tests on soils, concrete, grout, mortar, and asphalt to determine physical characteristics according to ASTM standards. Data was compiled to easily readable graphs and documents using Microsoft office.

<u>Reason for leaving</u>: Recruited by Hawaii State Department of Health <u>Supervisor</u>: James Merriman. <u>Phone</u> (808) 676-2720.

Humboldt State University

Department of Geology, Founders Hall, Arcata, California 95521

Dates Employed: October 2003 – July 2004

Position: STUDENT TEACHING

<u>Duties:</u> Assisted in teaching a six-week *Field Camp* mapping in the Roberts Mountain Thrust zone, Nevada. Field camp consisted of two sections: 1) volcanic & bedrock mapping and 2) Quaternary soils geomorphology. Also taught and assisted during field excursions for classes during the academic school year, including lectures on tsunamis, geomorphology, and volcanology of Iceland and Oregon. <u>Reason for leaving:</u> Completed an M.S. in Geology from Humboldt State University <u>Supervisors:</u> Dr. John Longshore, (707) 826-4182 and Dr. Raymond "Bud" Burke, (707) 826-4292

Humboldt State University

Department of Geology, Founders Hall, Arcata, California 95521

Dates Employed: September 2002 – March 2004

Position: RESEARCH ASSISTANT

<u>Duties</u>: During a two week field work period, assisted in hand auguring, mechanical coring, soil description, and sampling from the Sixes River area of coastal southern Oregon for the project titled, Refining Cascadia Earthquake Chronologies that Bracket a Candidate Segment Boundary. After completion of the field work I then provided detailed soil descriptions, photo-documentation, and prepared

- 15 of 14 –

Department of Geosciences - Eastern Washington University Patterson 129, Cheney, Washington 99004-2439 (509) 359-2286 cpritchard@ewu.edu

samples for radiocarbon age determination and further described organic content of cores using a dissection microscope. <u>Reason for leaving:</u> Project completed. <u>Supervisors:</u> Dr. Harvey Kelsey (707) 826-3991 and Dr. Robert Witter (541) 574-7969.

Six Rivers National Forest Service, Eureka, California

1330 Bayshore Way, Eureka, California 95501 **Dates Employed:** February 2003 – March 2003 <u>Position</u>: INTERN <u>Duties</u>: Landslides visible along the canyon wall of the Smith River's South Fork (Northern California) were identified using aerial photographs. Once identified, the landslides where digitized into polygon formations using ArcView and Arc Map software. <u>Reason for leaving</u>: Project completed. <u>Supervisor</u>: Mark Smith. <u>Phone</u>: (707) 442-1721.

REFERENCES

Dr. Harvey Kelsey, Adjunct Professor and Research Associate at Humboldt State University whose research focuses on active geomorphology and coastal tectonics of the western US and Japan. Dr. Kelsey was the chair of my MS thesis committee. *Phone: (707) 826-3991, e-mail: hmk1@humboldt.edu*, 1 Harpst Street, Arcata, CA 95521

Dr. George Luiz Luvizotto, Professor at Unesp – Rio Claro, SP Brazil whose research focuses on structural geology, metamorphic petrology, and hydrocarbon reserves. Dr. Luvizotto and I worked together during the 2012 EWU Geology Field Camp. *Phone: 00 55 19 3526 92 68, e-mail: george.luvizotto@gmail.com*

Dr. Peter Larson, **LG**, Professor, Washington State University whose research focuses on geochemistry and petrology of volcanic rocks and hydrothermal alteration in Yellowstone National Park and the Western US. Dr. Larson was the chair of my Ph.D. committee. *Phone: (509) 335-3095*, *e-mail: plarson@wsu.edu*

Stephen Burchett, PE, Engineer, Co-owner and Principal Engineer with Budinger and Associates, Inc. focusing on complex geotechnical and hydrogeologic problems as well as environmentally contaminated sites throughout Washington, Idaho, Oregon, and Montana *Phone: (509) 535-8841, e-mail: sburchett@budingerinc.com*