

Margaret E. Rusmore
Gibby Endowed Professor Emerita of Geology
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EDUCATION

B.S. Earth Sciences, University of California at Santa Cruz, 1980
M.S. Geological Sciences, University of Washington, 1982
Ph.D. Geological Sciences, University of Washington, 1985
Graduate Advisor: Dr. Darrel S. Cowan

PROFESSIONAL EXPERIENCE

Gibby Endowed Professor of Geology, 2019 – present
Chair of Geology, Occidental College, 1995-1998, 2005-2008, 2010-2012, 2013-2016, 2019-2020, 2023-2024
Professor, Department of Geology, Occidental College, 1998-2025
Associate Professor, Department of Geology, Occidental College, 1992-1998
Assistant Professor, Department of Geology, Occidental College, 1986-1992
Adjunct Assistant Professor, Department of Geology, Occidental College, 1985-86

AFFILIATIONS

Fellow and lifetime member, Geological Society of America
Member, American Geophysical Union

RESEARCH GRANTS

National Science Foundation Tectonics Program 2014- 2018
National Science Foundation, Continental Dynamics 2003-2010
National Science Foundation, Tectonics Program 2000-2004
National Science Foundation, Tectonics Program, 1998- 2001
National Science Foundation, Tectonics Program, 1995 -1998
National Science Foundation, Tectonics Program, 1991-1993
National Science Foundation, Tectonics Program, 1988-1990
American Chemical Society, Petroleum Research Fund Grant 1986-1988

PROFESSIONAL SERVICE

Editor, Tectonics, 2018 – present (term ends 12/26).
Co-Leader: Geological Society of America Thompson Field Forum, 2018
Geological Society of America Structure and Tectonics Division Management Board 2014-2018
Geological Society of America Cordilleran Section Nominating committee, 2013
Associate Editor, Tectonics, 2006-2014

Geological Society of America Career Contribution Award Committee, Structural Geology and Tectonics Division, 2000-2002 (Chair, 2002)
Editorial Board, *Geology*, 1999-2001
Tectonics Panel, NSF, 1995-1998
Geological Society of America Cordilleran Section Management Board, 1997-2001

COLLEGE SERVICE (*selected*)

Head or member of 8 T3 searches in Geology + several others in Physics and Spanish
Member, ad hoc Environmental Science group at request of President, 2015-2020
Planning Steering Committee 2009 – 2012
Undergraduate Research Task Force Co-Chair and PSC-Liaison, 2010-11
Environmental Science Planning Task Force, Member and PSC Liaison, 2010 – 2011
Faculty Council, 1986-1989, 1997-2000, 2009 – 2011
Advisory Council 1992-1994
Faculty Coordinator for planning and construction of Hameetman Science Center, 1998 – 2004
P.I. NSF Grant for Physical Science Building 1998-2003;
Contributing author and P.I. on several other foundation grants for HSC
Physical Science Building design committee, 1997- 2001

SELECTED PUBLICATIONS

- Gordon, S.M., Miller, R.B., Rusmore, M.E., and Tikoff, B. (Eds.), (2026). Jurassic–Paleogene Tectonic Evolution of the North American Cordillera: Geological Society of America, doi:[10.1130/SPE565](https://doi.org/10.1130/SPE565).
- Grujic, D., Rusmore, M., Rossetti, F., & Schildgen, T. (2025). Tectonics in Turbulence: Defending Science in Unstable Times. *Tectonics*, 44(4), e2025TC008942. <https://doi.org/10.1029/2025TC008942>
- Rusmore, M. E., Woodsworth, G. J., Cecil, M. R., Stowell, H. H., Bollen, E., Gehrels, G. E., Grove, M., & Young, P. (2024). Modulation of Deformation by Magmatic Tempo, Coast Mountains Batholith, British Columbia, Canada. *Tectonics*, 43(11), e2024TC008318. <https://doi.org/10.1029/2024TC008318>
- Bollen, E. M., Stowell, H. H., Rusmore, M. E., Woodsworth, G. J., & Cecil, M. R. (2022). The tempo and conditions of metamorphism during magmatism, southern Coast Mountains batholith, British Columbia, Canada. *Journal of Metamorphic Geology*, 40(4), 601–630. <https://doi.org/10.1111/jmg.12640>
- Cecil, M. R., Gehrels, G. E., Rusmore, M. E., Woodsworth, G. J., Stowell, H. H., Yokelson, I. N., et al. (2021). Mantle control on magmatic flare-ups in the southern Coast Mountains batholith, British Columbia. *Geosphere*, 17(6), 2027–2041. <https://doi.org/10.1130/GES02361.1>
- Dafon, M.N., Carrera, A., Gehrels, G.E., Alberts, D., Pereira, M., Cecil, M.R., Rusmore, M.E., Stowell, H.H., and Woodsworth, G.J., 2020, U-Th-Pb Geochronology and Lu-Hf Isotope Geochemistry of Detrital Zircons in Metasedimentary Rocks of the Southern Coast

- Mountains Batholith (S. M. Roeske, Ed.): Lithosphere, v. 2020, p. 1–21, doi:[10.2113/2020/8854686](https://doi.org/10.2113/2020/8854686).
- Woodsworth, G. J., Rusmore, M. E., Stowell, H. H., & Hollister, L. S. (2020). *Architecture and Evolution of the Crust during Continental Arc Magmatism: A Transect through the Coast Mountains Batholith, British Columbia*. Geological Society of America. <https://doi.org/10.1130/FLD058>
- Cecil, M. R., Rusmore, M. E., Gehrels, G. E., Woodsworth, G. J., Stowell, H. H., Yokelson, I. N., Chisom, C., Trautman, M., & Homan, E. (2018). Along-Strike Variation in the Magmatic Tempo of the Coast Mountains Batholith, British Columbia, and Implications for Processes Controlling Episodicity in Arcs. *Geochemistry, Geophysics, Geosystems*, 19(11), 4274–4289. <https://doi.org/10.1029/2018GC007874>
- Rusmore, M. E., Bogue, S. W., & Woodsworth, G. J. (2013). Paleogeography of the Insular and Intermontane terranes reconsidered: Evidence from the southern Coast Mountains Batholith, British Columbia. *Lithosphere*. <https://doi.org/10.1130/1288.1>
- Girardi, J. D., Patchett, P. J., Ducea, M. N., Gehrels, G. E., Cecil, M. R., Rusmore, M. E., Woodsworth, G. J., Pearson, D. M., Manthei, C., & Wetmore, P. (2012). Elemental and Isotopic Evidence for Granitoid Genesis From Deep-Seated Sources in the Coast Mountains Batholith, British Columbia. *Journal of Petrology*, 10.1093/petrology/egs024. <https://doi.org/10.1093/petrology/egs024>
- Rusmore, M. E., Bogue, S. W., Dodson, K., Farley, K. A., & Woodsworth, G. J. (2010). Deformation of continental crust along a transform boundary, Coast Mountains, British Columbia. *Tectonics*, 29(4), TC4007. <https://doi.org/10.1029/2009tc002502>
- Gehrels, G., Rusmore, M., Woodsworth, G., Crawford, M., Andronicos, C., Hollister, L., Patchett, J., Ducea, M., Butler, R., Klepeis, K., Davidson, C., Friedman, R., Haggart, J., Mahoney, B., Crawford, W., Pearson, D., & Girardi, J. (2009). U-Th-Pb geochronology of the Coast Mountains batholith in north-coastal British Columbia: Constraints on age and tectonic evolution. *Geological Society of America Bulletin*, 121(9–10), 1341–1361. <https://doi.org/10.1130/b26404.1>
- Ehlers, T. A., Farley, K. A., Rusmore, M. E., & Woodsworth, G. J. (2006). Apatite (U-Th)/He signal of large-magnitude accelerated glacial erosion, southwest British Columbia. *Geology*, 34(9), 765–768.
- Shuster, D. L., Ehlers, T. A., Rusmore, M. E., & Farley, K. A. (2005). Rapid glacial erosion at 1.8 Ma revealed by $^4\text{He}/^3\text{He}$ thermochronometry. *Science*, 310(5754), 1668–1670.
- Rusmore, M. E., Woodsworth, G. J., and Gehrels, G. E., 2005, Two-stage exhumation of midcrustal arc rocks, Coast Mountains, British Columbia: *Tectonics*, v. 24, 25 p., doi: 10.1029/2004TC0001750.
- Rusmore, M. E., Gehrels, G., & Woodsworth, G. J. (2001). Southern continuation of the Coast shear zone and Paleocene strain partitioning in British Columbia–southeast Alaska. *Geological Society of America Bulletin*, 113(8), 961–975.
- Farley, K. A., Rusmore, M. E., & Bogue, S. W. (2001). Exhumation and Uplift History of the Central Coast Mountains, British Columbia, from Apatite (U-Th)/He Thermochronometry. *Geology*, 29(2), 99–102.

- Rusmore, M. E., Woodsworth, G. J., Gehrels, G., (2000). Late Cretaceous evolution of the eastern Coast Mountains, Bella Coola, British Columbia, in Stowell, H.H., McClelland W.C.eds., *Tectonics of the Coast Mountains, SE Alaska and Coastal British Columbia*: Geological Society of America Special Paper 343, p.89–106.
- Rusmore, M. E., & Woodsworth, G. J. (1994). Evolution of the eastern Waddington thrust belt and its relation to the mid-Cretaceous Coast Mountains arc, western British Columbia. *Tectonics*, 13, 1052–1067.
- Umhoefer, P. J., Rusmore, M. E., & Woodsworth, G. J. (1994). Contrasting tectono-stratigraphy and structure in the Coast Belt near Chilko Lake, British Columbia: Unrelated terranes or an arc—back-arc transect? *Canadian Journal of Earth Sciences*, 31, 1700–1713.
- Rusmore, M. E., & Woodsworth, G. J. (1991). Distribution and tectonic significance of Upper Triassic terranes in the eastern Coast Mountains and adjacent Intermontane belt, British Columbia. *Canadian Journal of Earth Sciences*, 28, 532–541.
- Rusmore, M. E., & Woodsworth, G. J. (1991). Coast Plutonic Complex: A mid-Cretaceous contractional orogen. *Geology*, 19, 941–944.
- Rusmore, M. E., Potter, C. J., Umhoefer, P.J. (1988). Middle Jurassic terrane amalgamation along the western edge of the Intermontane superterrane, southwestern British Columbia. *Geology*, 16, p. 891-894.
- Rusmore, M.E., (1987). Geology of the Cadwallader Group and the Intermontane-Insular superterrane boundary, southwestern British Columbia: *Canadian Journal of Earth Sciences*, 24, 2279-2291.
- Rusmore, M.E. & Cowan, D.S. (1985). Jurassic-Cretaceous rock units along the southern edge of the Wrangellia terrane on Vancouver Island, British Columbia. *Canadian Journal of Earth Sciences*, 22, 1223-1232.

Geologic Maps:

- Haggart, J.W., Diakow, L. J., Mahoney, J.B., Woodsworth, G.J., Struik, L.C., Gordee, L.C., Israel, S., Hooper, R.L., Rusmore, M., Lett, R., Ceh, M., Hastings, N.L., and Wagner, C., 2007, Bedrock geology, Bella Coola region (93C, 93D, 93E, 92M, and 92N) British Columbia, Geological Survey of Canada, Open file 5410, CD.
- Haggart J.W., Diakow L.J., Mahoney J.B., Woodsworth G.J., Struik L.S.,Gordee S.M., Rusmore M., 2006, Geology, Bella Coola region (NTS 93D/01, /07, /08, /10, /15, and parts of 93D/02, /03, /06, /09, /11, /14, /16, and 92M/15 and /16), British Columbia: Geological Survey of Canada Open-File 5385, and British Columbia Geological Survey Geoscience Map 2006–7, 3 sheets, scale 1:100,000
- Rusmore, M.E., and Woodsworth, G.J., 1993, Geological maps of the Mt. Queen Bess (92N/7) and Razorback Mountain (92N/10 map areas, Coast Mountains, British Columbia; Geological Survey of Canada, Open File 2586, 2 map sheets, scale 1:50,000.
- Garver, J. I., Umhoefer, P. J., Rusmore M. E., and Schiarizza, P., 1989. Geology of the Eldorado Mountain area (92O/S and 92J/15N). British Columbia Ministry of Energy, Mines and Petroleum Resources Open file map 1989.