

DAVID C. GREENE
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EDUCATION

Ph.D. Geology, University of Nevada Reno, May, 1995. Dissertation: *Stratigraphy, Structure and Tectonic Significance of the Northern Ritter Range Pendant, Eastern Sierra Nevada, California.*

M.S. Geology, University of Massachusetts Amherst, 1984. Thesis: *Structural Geology of the Quseir Area, Red Sea Coast, Egypt.*

B.S. Geology, University of California Santa Cruz, 1978. Senior Thesis: *Geology of the Poleta Canyon Pluton, White Mountains, California.*

PROFESSIONAL EXPERIENCE

Professor, Dept. of Geosciences, Denison University, Granville, Ohio; teaching Structural Geology, Environmental Geology, Global Tectonics, and introductory courses, 2015-present.

Associate Professor, Dept. of Geosciences, Denison University, 2002-2015.

Visiting Scientist, Australian National University, Canberra, Australia; structural investigations in southern Georgina Basin, central Australia, 2002-2003.

Assistant Professor, Dept. of Geology and Geography, Denison University, 1996-2002.

Research Scientist, Geological Survey of Denmark and Greenland; GEUS-funded field research on major ductile shear zone in Early Archean rocks of Isua Greenstone Belt, West Greenland, summer, 1999.

Postdoctoral Research Scientist, San Jose State University, San Jose, CA; NSF-funded research on structure and stratigraphy of Paleozoic roof pendants in the eastern Sierra Nevada, California, 1993-96.

Structural Geologist, Marathon Oil Company, Denver, Colorado; regional structural investigation, Atlas fold and thrust belt, Tunisia, 1992.

Instructor, Humboldt State University, Arcata, California; taught Structural Geology, introductory Environmental Geology, and Earthquakes and Volcanoes course for non-majors, Spring Semesters, 1990 and 1991.

Environmental Geologist, Ormat Energy Systems, Sparks, Nevada; consulting on environmental issues related to geothermal power plant development, 1989.

Environmental Geologist, Goldberg-Zoino Associates, Inc., Bridgeport, Connecticut; geotechnical engineering and environmental consulting, 1985-86.

Exploration Geologist, Riofinex Ltd., Saudi Arabia; regional mapping and exploration for base metal deposits, 1978-80.

PUBLICATIONS

- Herring, Donna M., and **Greene, David C.**, 2016, *The Western Utah Thrust Belt in the larger context of the Sevier Orogeny*: in Comer, J.B., Inkenbrandt, P.C., Krahulec, K.A., and Pinnell, M.L., editors, *Resources and Geology of Utah's West Desert*: Utah Geological Association Publication 45, p.131-145.
- Greene, David C.**, 2016, *Increasing resilience to earthquakes through educating community builders: Teaching earthquake-resistant building techniques in Guatemala*: in Wessel, G.R., and Greenberg, J.K., eds., *Geoscience for the Public Good and Global Development: Toward a Sustainable Future*: Geological Society of America Special Paper 520, p. 295-309.
- Greene, David C.**, 2014, *The Confusion Range, west-central Utah: Fold-thrust deformation and a western Utah thrust belt in the Sevier hinterland*: *Geosphere*, v. 10, no. 1; p. 148-169.
- Greene, David C.**, and Herring, Donna M., 2013, *Structural Architecture of the Confusion Range, West-Central Utah: A Sevier Fold-Thrust Belt and Frontier Petroleum Province*: Utah Geological Survey Open-File Report 613, 22 p., 6 pl.
- Greene, David C.**, 2010, *Neoproterozoic rifting in the southern Georgina Basin, central Australia: Implications for reconstructing Australia in Rodinia*: *Tectonics*, v. 29, no. 5, TC5010, p. 10-20.
- Greene, David C.**, 2007, *Great Basin*: in McGraw-Hill Encyclopedia of Science & Technology, 10e: v. 8, p. 252-253; <http://www.accessscience.com>, DOI 10.1036/1097-8542.800320.
- Glazner, A.F., Lee, J., Bartley, J.M., Coleman, D.S., Kylander-Clark, A., **Greene, D.C.**, Le, K., 2005, *Large dextral offset across Owens Valley, California, from 148 Ma to 1872 AD*: Geological Society of America Cordilleran Section Field Trip Guide, 35 p.
- Stevens, C.H., Stone, P., and **Greene, David C.**, 2003, *Correlation of Permian and Triassic deformations in the western Great Basin and eastern Sierra Nevada: Evidence from the northern Inyo Mountains near Tinemaha Reservoir, east-central California: Reply*: Geological Society of America Bulletin, v. 115, p. 1309-1311.
- Hanmer, Simon, and **Greene, David C.**, 2002, *A modern structural regime in the Paleoproterozoic (~3.64 Ga); Isua Greenstone Belt, southern West Greenland*: *Tectonophysics*, v. 346, p. 201-222.
- Greene, David C.**, and Stevens, Calvin H., 2002, *Geologic Map of Paleozoic Rocks in the Mount Morrison Pendant, Eastern Sierra Nevada, California*: California Division of Mines and Geology Map Sheet 52, scale 1:24,000.
- Stevens, Calvin H., and **Greene, David C.**, 2000, *Geology of Paleozoic rocks in eastern Sierra Nevada roof pendants, California*: in Lageson, D.R., Peters, S.G., and Lahren, M.M., eds., *Great Basin and Sierra Nevada: Boulder, Colorado*, Geological Society of America Field Guide 2, v. 111, p. 237-254.
- Stevens, Calvin H., and **Greene, David C.**, 1999, *Stratigraphy, depositional history, and tectonic evolution of Paleozoic continental margin rocks in roof pendants of the eastern Sierra Nevada, California*: Geological Society of America Bulletin, v. 111, p. 919-933.
- Greene, David C.**, and Herring, Donna M., 1998, *Thick sequences of Early Tertiary limestones deposited in a previously undescribed basin, Snake Valley and the Confusion*

Range, western Millard County, Utah: in French, D.E., and Schalla, R.A. (eds.), *Hydrocarbon habitat and special geologic problems of the Great Basin: 1998 Field Trip Guide*, Nevada Petroleum Society, Reno, Nevada, p. 91-92.

Stevens, Calvin H., Stone, Paul, Dunne, George C., **Greene, David C.**, Walker, Douglas J., and Swanson, Brian J., 1998, *Paleozoic and Mesozoic Evolution of East-Central California:* in Ernst, W.G., and Nelson, C.A. (eds.), *Integrated Earth and Environmental Evolution of the southwestern United States: The Clarence A. Hall, Jr. Volume*, Geological Society of America, p. 119-160.

Greene, David C., Schweickert, Richard A., and Stevens, Calvin H., 1997, *The Roberts Mountains allochthon and the western margin of the Cordilleran miogeocline in the Northern Ritter Range pendant, eastern Sierra Nevada, California:* Geological Society of America Bulletin, v. 109, p. 1294-1305.

Greene, David C., Stevens, Calvin H., and Wise, James M., 1997, *The Laurel-Convict fault, eastern Sierra Nevada, California: a Permo-Triassic left-lateral fault, not a Cretaceous intrabatholithic break:* Geological Society of America Bulletin, v. 109, p. 483-488.

Stevens, Calvin H., Stone, Paul, Dunne, George C., **Greene, David C.**, Walker, Douglas J., and Swanson, Brian J., 1997, *Paleozoic and Mesozoic Evolution of East-Central California:* International Geology Review, v. 39, p. 788-829.

Tikoff, Basil, and **Greene, David**, 1997, *Stretching lineations in transpressional shear zones: an example from the Sierra Nevada Batholith, California:* Journal of Structural Geology, v. 19, p. 29-39.

Greene, David C., and Schweickert, R.A., 1995, *The Gem Lake shear zone: Cretaceous dextral transpression in the Northern Ritter Range pendant, eastern Sierra Nevada, California:* Tectonics, v. 14, p. 945-961.

Greene, David C., 1984, *Structural Geology of the Quseir Area, Red Sea Coast, Egypt:* Contribution no. 52, Dept. of Geology, Univ. of Massachusetts Amherst, 159 p.

ABSTRACTS AND ROADLOGS

(* indicates Denison student author)

*Worm, Thomas J., and **Greene, David C.**, 2016, *Syntectonic emplacement of the White Chief pluton, Mineral King pendant, Sierra Nevada, California: Implications for Early Cretaceous deformation:* Geological Society of America Abstracts with Programs, v. 48, no. 7.

Greene, David C., 2013, *A simple way to increase resilience to earthquakes: Teaching earthquake-resistant building techniques to rural builders in Guatemala:* Geological Society of America Abstracts with Programs, v. 45, no. 7, p. 646.

Klemetti, Erik W., *Williamson, Amy L., **Greene, David C.**, and Lackey, Jade Star, 2013, *Geothermobarometry of the Castle Creek quartz monzodiorite supports rapid Cretaceous subsidence of the Mineral King metamorphic pendant, Sierra Nevada, California:* Geological Society of America Abstracts with Programs, v. 45, no. 7, p. 610.

*Van Auken, Cory and **Greene, David C.**, 2013, *Strain analysis and strain profile of the Mineral King pendant, southern Sierra Nevada, California:* Geological Society of America Abstracts with Programs, v. 45, no. 7, p. 611.

- Greene, David C.**, 2013, *The Confusion Range "synclinorium": A western Utah thrust belt analogous to the central Nevada thrust belt*: Geological Society of America Abstracts with Programs. Vol. 45, No. 6, p. 73.
- Greene, David C.**, 2013, Teaching earthquake-resistant building practices in Guatemala: Disseminating existing knowledge to the people who need it most: Geological Society of America *Abstracts with Programs*. Vol. 45, No. 6, p. 61.
- Herring, Donna M., and **Greene, David C.**, 2013, *The western Utah fold-thrust belt: A frontier petroleum province (abs.)*: American Association of Petroleum Geologists Search and Discovery Article #90163.
- Greene, David C.**, *Matteri, Matthew M.C. and *Yezerski, Donald, 2011, *The Confusion Range, west-central Utah: A Sevier-age fold-thrust belt in the hanging wall of the Snake Range decollement*: Geological Society of America Abstracts with Programs, v. 43, no. 4, p. 15.
- *Matteri, Matthew M.C., and **Greene, David C.**, 2010, *New balanced and retrodeformable cross section of the northern Confusion Range, west-central Utah indicates an east-vergent fold-and-thrust belt of Sevier age*. Geological Society of America Abstracts with Programs. v. 42, no. 5, p. 266.
- *Yezerski, Donald, and **Greene, David C.**, 2009, *New Structural Interpretations of the Confusion Range, West-Central Utah, Based on Balanced Cross Sections*: Eos, Transactions, American Geophysical Union, Dec. 2009.
- Greene, David C.**, 2008, *Neoproterozoic rifting in the southern Georgina Basin, central Australia: Implications for connecting Australia and Laurentia in Rodinia*: Geological Society of America Abstracts with Programs, v. 40, no 1, p. 64.
- *Pierson, Mimi L., and **Greene, David C.**, 2008, *Geophysical Evidence for a Neoproterozoic rift basin underlying the Burke River Structural Belt, eastern Georgina Basin, central Australia*: Geological Society of America Abstracts with Programs, v. 40, no 1, p. 68.
- Greene, David C.**, 2006, *Neoproterozoic rifting in central Australia and the breakup of Rodinia*: Geological Society of America Abstracts with Programs, v. 38, no 7, p. 450.
- *Lechler, A.R., and **Greene, D.C.**, 2006, *Fault reactivation during intracontinental deformation: the Toko Syncline and Toomba Fault, Georgina Basin, central Australia*: Geological Society of America Abstracts with Programs, v. 38, no. 5, p. 11.
- Greene, David C.**, 2003, *Laramide-style basement block faulting and fault inversion during the mid-Paleozoic intraplate Alice Springs orogeny, Huckitta region, Northern Territory, central Australia*: Geological Society of America Abstracts with Programs, v. 34, no. 7, p. 344.
- Greene, David C.**, 2000, *Structural Evolution of the Confusion Range, West Central Utah: Upper Plate Tectonics above a Regional Detachment*: in 44th Annual Report on Research Under Sponsorship of the Petroleum Research Fund, American Chemical Society, Washington D.C., p. 408-409.
- *Kohlbecker, M.V., and **Greene, D.C.**, 2000, *Two joint domains in central Ohio: a divide between Appalachian Plateau-style jointing and Midcontinent-style jointing*: GSA Abstracts with Programs, v. 32, no. 4, p. A22.

- *Dubé, J.P., and **Greene, D.C.**, 1999, *Extensional reactivation of a thrust ramp and implications of deformation in the Confusion Range, west-central Utah*: GSA Abstracts with Programs, v. 31, no. 6, p. 51.
- Herring, D.M., **Greene, D.C.**, French, D.E., Schalla, R.A., Taylor, W.A., 1998, *Day 3 Roadlog: Ely to Snake Valley*: in French, D.E., and Schalla, R.A. (eds.), *Hydrocarbon habitat and special geologic problems of the Great Basin: 1998 Field Trip Guide*, Nevada Petroleum Society, Reno, Nevada, p. 81-94.
- Stevens, Calvin H., and **Greene, David**, 1997, *Apparent displacement of the $Sr_{i=0.076}$ isotopic isopleth in the Mono Lake region, east-central California*: GSA Abstracts with Programs, v. 29, no. 6, p. 279.
- Stevens, Calvin H., and **Greene, David**, 1997, *Manifestation of the Mid-Paleozoic Antler orogeny in parautochthonous rocks in the eastern Sierra Nevada, California*: GSA Abstracts with Programs, v. 29, no. 5, p. 67.
- Greene, David C.**, 1996, *Quaternary reactivation of the Lost Lakes fault, a brittle fault zone containing pseudotachylite in the Tuolumne Intrusive Suite, Sierra Nevada, California*: GSA Abstracts with Programs, v. 28, no. 5, p. 70.
- Stevens, Calvin H., and **Greene, David C.**, 1996, *Continuity and original orientation of Paleozoic facies and structural belts from the central Sierra Nevada into southwestern Nevada*: GSA Abstracts with Programs, v. 28, no. 5, p. 114.
- Greene, David C.**, Wise, James M., and Stevens, Calvin H., 1995, *The Laurel-Convict fault: a Triassic left-lateral strike-slip fault in the Mt. Morrison pendant, eastern Sierra Nevada, CA*: GSA Abstracts with Programs, v. 27, no. 5, p. 22.
- Stevens, Calvin H., and **Greene, David C.**, 1995, *Stratigraphy of Paleozoic rocks in eastern Sierra Nevada roof pendants, eastern California*: GSA Abstracts, v. 27, no. 5, p. 79.
- Stevens, Calvin H., Pelley, Tina, and **Greene, David C.**, 1995, *Middle Devonian submarine fans in the eastern Sierra Nevada, California*: AAPG-SEPM Pacific Section Convention Abstracts, p. 46.
- Tikoff, Basil, and **Greene, David C.**, 1994, *Transpressional deformation within the Sierra Crest shear zone system, Sierra Nevada, California (92-80 Ma): vertical and horizontal stretching lineations within a single shear zone*: GSA Abstracts, v. 26, no. 7, p. 385.
- Greene, David C.**, and Stevens, Calvin H., 1994, *Structural repetition and a revised lower Paleozoic stratigraphy for the Mount Morrison pendant, eastern Sierra Nevada, California*: GSA Abstracts with Programs, v. 26, no. 2, p. 55.
- Stevens, Calvin H., and **Greene, David C.**, 1994, *A unified stratigraphy for outer continental shelf and slope Paleozoic rocks in eastern Sierra Nevada pendants*: GSA Abstracts with Programs, v. 26, no. 2, p. 96.
- Stevens, Calvin H., and **Greene, David C.**, 1994, *Middle Devonian sequence boundary traced from an exposed shelf to a submarine fan, eastern California*: GSA Abstracts with Programs, v. 26, no. 2, p. 96.
- Stevens, C.H., Wilahan, D.E., and **Greene, D.C.**, 1992, *A Paleozoic continental-margin composite section in the eastern Sierra Nevada, California*: GSA Abstracts with Programs, v. 24, no. 6, p. 64.

Greene, David C., and Dutro, J. Thomas, Jr., 1991, *Stratigraphic affinity and structural implications of late Paleozoic fossils in the Ritter Range pendant, eastern Sierra Nevada, California*: GSA Abstracts with Programs, v. 23, no. 2, p. 30.

Schweickert, R.A., Fisher, G.R., Lahren, M.M., and **Greene, D.C.**, 1991, *Triassic-Jurassic magmatic arc in eastern California and western Nevada: evolution, correlation, and evidence for the Mojave-Snow Lake fault*: GSA Abstracts, v. 23, no. 7, p. 192.

Schweickert, R.A., Lahren, M.M., **Greene, D.C.**, and Strobel, R.J., 1991, *Record of Phanerozoic tectonic evolution in Saddlebag Lake, Snow Lake, and northern Ritter Range pendants, Sierra Nevada, CA*: GSA Abstracts with Programs, v. 23, no. 2, p. 95.

Greene, David C., Schweickert, R.A., Strobel, R.J., 1989, *Possible westward continuation of the Roberts Mountains Thrust in the Northern Ritter Range Pendant, eastern Sierra Nevada, California*: GSA Abstracts with Programs, v. 21, no. 5, p. 86-87.

Wise, D.U., **Greene, D.C.**, Valentine, M., et al., 1983, *Tectonic trends, timing, and mechanics of the Egyptian edge of the Red Sea and Gulf of Suez*: AAPG Bulletin., v. 67/3, p. 571.

RECENT INVITED LECTURES

University of Kentucky, March 2014

Bowling Green State University, Department of Geology, October 2010

Haiti Relief Coordinating Committee, Denison, February 2010

Institutional Advancement, Denison, February 2010

Kendal at Granville, April 2008

Denison University Alumni College, June 2007

The College of Wooster, Department of Geology, March 2006

Northern Territory (Australia) Geological Survey, June 2005

RESEARCH GRANTS AWARDED

Denison University Research Foundation Grant (2014): *Increasing Earthquake Survival Rates in Developing Countries: Investigating the effectiveness of teaching earthquake-resistant building techniques to rural builders.* (\$3780)

Utah Geological Survey (2012): *Structural Architecture of the Confusion Range, West-Central Utah: A Sevier Fold-Thrust Belt and Frontier Petroleum Province.* (\$6500)

Great Lakes Colleges Association New Directions Initiative (2011): *Spanish Language Acquisition and Geologic Hazard Education in Guatemala.* (\$6365)

Denison University Research Foundation Grant (2010): *Is the Confusion Range a fold-and-thrust belt? Testing a new model for the structural evolution of west central Utah.* (\$2517)

Denison University Research Foundation Grant (2005): *Fault reactivation as a fundamental control on intracontinental geologic structure: an investigation in the southern Georgina Basin, central Australia.* (\$4,575)

Denison University Research Foundation Grant (2002): *Displacement partitioning in the lower crust: An investigation of the Woodroffe-Mann shear zone system in central Australia.* (\$3,725)

Denison University Research Foundation Grant (2000): *Geologic Map of the Mount Morrison pendant, eastern Sierra Nevada, California.* (\$2500)

American Chemical Society Petroleum Research Fund Grant (1998): *Structural Evolution of the Confusion Range, West Central Utah: Upper Plate Tectonics Above a Regional Detachment.* (\$20,000)

Denison University Research Foundation Grant (1998): *Structural Evolution of the Confusion Range, West Central Utah: Upper Plate Tectonics Above a Regional Detachment.* (\$3700)

National Science Foundation, EAR-9218174, (1993-1996): *Stratigraphic and Structural Framework of Paleozoic Continental Margin Rocks in and Adjacent to the Eastern Sierra Nevada;* co-authored with C.H. Stevens of San Jose State University. (\$90,000)

ADDITIONAL INFORMATION

<http://personal.denison.edu/~greened/>