

RESUMÉ
EDMUND STUMP

Personal Data

Date of Birth: 28 December 1946

Education

A.B. cum laude	1968	Geology	Harvard College
M.S.	1972	Geology	Yale University
Ph.D.	1976	Geology	The Ohio State University

Positions held

1971-72, 1973-74	Teaching Associate, Ohio State University
Spring 1974	Instructor, Ohio University
1976-1987	Instructor/Assistant Professor/Associate Professor Arizona State University
1987-2014	Professor, Arizona State University
1991-95	Chair, Department of Geology, ASU
2014-present	Professor Emeritus

Research Interests

Tectonics of mountain belts.
Geological evolution of Antarctica and Gondwanaland, with emphasis on the late Precambrian-early Paleozoic.

Publications

Stump, E., 1968, Geology of an area north of the St. Joe River, Idaho: Senior Thesis, Department of Geology, Harvard College.

Armstrong, R. L., and Stump, E., 1971, Additional K-Ar dates, White Mountain magma series, New England: *Am. Jour. Sci.* 270, p. 331-333.

- Stump, E., 1973, Earth evolution in the Transantarctic Mountains and West Antarctica: in D.H. Tarling and S.K. Runcom, *eds.*, Implications of continental drift to the earth sciences, 2, Academic Press, London-New York, p. 909-924.
- Stump, E., 1974, Volcanic rocks of the early Cambrian Taylor formation, central Transarctic Mountains: Antarctic Jour. U.S. 9, p. 228-229.
- Stump, E., and R. W. Fairbridge, 1975, Antarctica: *in* R. W. Fairbridge, *ed.*, The encyclopedia of world regional geology, part 1: Western hemisphere, Dowden, Hutchinson and Ross, Stroudsburg, p. 2-13.
- Stump, E., 1975, Geology of the Duncan Mountains: Antarctic Jour. U.S., 10, p. 179-180.
- Stump, E., 1976, On the late Precambrian-early Paleozoic metavolcanic and metasedimentary rocks of the Queen Maud Mountains, Antarctica and a comparison with rocks of similar age from southern Africa: The Ohio State University, Institute of Polar Studies, Report 62, 212 p.
- Stump, E., 1976, Accretionary lapilli and lithophysal spherulites from the Taylor Formation, Queen Maud Mountains, Antarctica: Antarctic Jour. U.S., 11, p. 246-248.
- Nilsen, T.H., Bartow, J.A., Stump, E. and M.H. Link, 1977, Unusual occurrences of dish structures in the stratigraphic record: Jour. Sed. Petrology, 47(3), p. 1299-1304.
- Yochelson, E.L., and Stump, E., 1977, Discovery of Early Cambrian fossils at Taylor Nunatak, Antarctica: Jour. Paleontology 51, 872-876.
- Stump, E., P.H. Lowry, G.M. Heintz-Stocker and P.V. Colbert, 1978, Geological investigations in the Leverett Glacier Area: Antarctic Jour. U.S., 13, p. 3-4.
- Stump, E., M.F. Sheridan, S.G. Borg, P.H. Lowry and P.V. Colbert, 1979, Geological Investigations in the Scott Glacier and Byrd Glacier areas: Antarctic Jour. U.S., 14, p. 39-40.
- Stump, E., M.F. Sheridan, S.G. Borg and J.E. Sutter, 1980, Early Miocene subglacial basalts, the East Antarctic Ice Sheet and uplift of the Transantarctic Mountains: Science 207, p. 757-759.
- Stump, E., 1980, Two episodes of folding at Mt. Madison, Antarctica: Antarctica Jour. U.S., 15, p. 13-14.
- Stump, E., 1981, Structural relationships in the Duncan Mountains, Central Transantarctic Mountains, Antarctica: N.Z. Jour. Geology and Geophysics 24, p. 87-93.
- Stump, E., 1981, Observations on the Ross Orogen, Antarctica: *in* M.M. Cresswell and P. Vella, *eds.*, Gondwana Five, A.A. Balkema, Rotterdam, p. 205-208.
- Stump, E., Self, S., Smit, J.H., Colbert, P.V. and Stump, T.M., 1981, Geological investigations in the La Gorce Mountains and central Scott Glacier area: Antarctic Jour. U.S., 16, p. 55-57.
- Stump, E., 1982, The Ross Supergroup in the Queen Maud Mountains: *in* C. Craddock, *ed.*, Antarctic Geoscience, Univ. Wisc. Press, Madison, p. 565-569.
- Stump, E., Spletstoesser, J.F., Colbert, P.V. 1982, Northern Victoria Land Project, 1981-82: Antarctic Jour. U.S., 17, p. 3-4.

- Stump, E., Holloway, J.R., Borg, S.G., Lapham, K.E., 1982, Geological investigations on early to middle Paleozoic magmatic rocks, northern Victoria Land, Antarctica: Antarctic Jour. U.S., 17, p. 17-18.
- Stump, E., 1983, Type locality of the Ackerman Formation, La Gorce Mountains, Antarctica: in R.L. Oliver, P.R. James, and J.B. Jago, eds., Antarctica Earth Sciences, Australian Academy of Science, Canberra, p. 170-174.
- Stump, E., Laird, M.G., Bradshaw, J.D., Holloway, J.R., Borg, S.G., Lapham, K.E., 1983, Bowers graben and associated tectonic features cross northern Victoria Land, Antarctica: Nature, 304, p. 334-336.
- Stump, E., Holloway, J.R., Borg, S.G., and Armstrong, R.L., 1983, Discovery of a Tertiary-aged granite pluton, northern Victoria Land, Antarctica: Antarctic Jour. U.S., 18, p. 17-18.
- Stump, E. and Maccracken, H., 1983, Reconnaissance geological investigation of basement units, McMurdo Sound region, Antarctica: Antarctic Jour. U.S., 18, p. 46-47.
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- Stump, E., Smit, J.H., and Self, S., 1985, Reconnaissance geologic map of the Mt. Blackburn quadrangle, Transantarctic Mountains, Antarctica: U.S. Antarctic Research Program Map A-12, U.S. Geol. Survey.
- Stump, E., 1985, Stratigraphy of the Ross Supergroup, Central Transantarctic Mountains: in M.D. Turner and J.F. Spletstoeser, eds, Geology of the Central Transantarctic Mountains, Am. Geophys. Union, Antarctic Research Series, 36, 225-274.
- Stump, E., Smit, J. H., and Self, S., 1986, Timing of events during the Late Proterozoic Beardmore Orogeny, Antarctica: Geological Evidence from the La Gorce Mountains: Geological Society of America Bulletin, 97, 953-965.
- Smit, J. H., and Stump, E., 1986, Sedimentology of the La Gorce Formation, La Gorce Mountains, Antarctica: Journal of Sedimentary Petrology, 56, 663-668.
- Stump, E., White, A.J.R., Borg, S.G., 1986, Reconstruction of Australia and Antarctica: Evidence from granites and recent mapping: Earth and Planetary Science Letters, 79, p. 348-360.
- Borg, S. G., Stump, E., and Holloway, J. R., 1986, Granitoids of northern Victoria Land, Antarctica: A reconnaissance study of field relations, petrography and geochemistry: in Stump, E., ed., Geological investigations in northern Victoria Land, American Geophysical Union, Antarctic Research Series, 46, p. 1 15-188,
- Stump, E., Edgerton, D. G., and Korsch, R. J., 1986, Structural geological investigations in the Nimrod Glacier area: Antarctic Journal of the United States, 20, p. 35-36.
- Borg, S. G., and Stump, E., 1987, Paleozoic magmatism and associated tectonic problems of northern Victoria Land: in McKenzie, G.D., ed., Gondwana Six: Structure, Tectonics, and Geophysics, American Geophysical Union, Geophysical Monograph 40, p. 67-75.

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- Borg, S. G., Stump, E., Chappell, B. W., McCulloch, M. T., Wyborn, D., Armstrong, R. L., and Holloway, J. R., 1987, Granitoids of northern Victoria Land, Antarctica: Implications of chemical and isotopic variations to regional crustal structure and tectonics: *American Journal of Science*, 287, 127-169.
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- Stump, E., *compiler*, 1989, Reconnaissance geologic map of the Welcome Mountain quadrangle, Transantarctic Mountains, Antarctica: U.S. Antarctic Research Program Map A-14, U.S. Geological Survey.
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- Stump, E., and Fitzgerald, P.G., 1990, Field collection for apatite fission track analysis, Ellsworth Mountains: *Antarctic Journal of the United States*, 25, 38-39.
- Stump, E., Korsch, R.J., and Edgerton, D.G., 1991, The myth of the Nimrod and Beardmore Orogenies: *in* Thomson, M.R.A., Crame, J.A., and Thomson, J.W., *eds.*, *Geological Evolution of Antarctica*: Cambridge University Press, p. 143-147.
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- Stump, E., and Fitzgerald, P.G., 1992, Episodic uplift of the Transantarctic Mountains: *Geology*, 20, 161-164.
- Stump, E., 1992, The Ross Orogen of the Transantarctic Mountains in light of the Laurentia-Gondwana split: *GSA Today*, 2, 25-31.
- Stump, E., 1992, Pre-Beacon development of the Transantarctic Mountains: *in* Yoshida, Y., Kaminuma, K., and Shiraishi, K., *eds.*, *Recent Progress in Antarctic Earth Science*, Terra Scientific Pub. Co., Tokyo, p. 235-240.

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- Sorkhabi, R. B., and Stump, E., 1993, Rise of the Himalaya: A geochronologic approach: *GSA Today*, v. 3, p. 85-92.
- Sorkhabi, R. B., Jain, A. K., Nishimuru, S., Manickavasagam, R. N., and Stump, E., 1993, K-Ar homblende ages from the Higher Himalaya: Implications for the India-Asia collision and Himalayan metamorphism: *Current Science*, v. 64, p. 40-42.
- Fitzgerald, P.G., Reynolds, S.J., Stump, E., Foster, D.A., and Gleadow, A.J.W., 1993, Thermochronologic evidence for timing of denudation and rate of crustal extension of the South Mountains metamorphic core complex and Sierra Estrella, Arizona: *Nuclear Tracks and Radiation Measurements*, 21, 555-563.
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- Sorkhabi, R.B., and Stump, E., 1994, Was Antarctica part of "Gondwana" or "Gondwanaland"?: *Antarctic Journal of the United States*, 29, (2), p. 13-16.
- Sorkhabi, R.B., and Stump, E., 1994, Geodynamic links between the Transantarctic Mountains and Tethys: *Antarctic Journal of the United States*, 29, p. 36-38.
- Fitzgerald, P. G., Sorkhabi, R. B., Redfield, T. F., and Stump, E., 1995, Uplift and denudation of the central Alaska Range: A case study in the use of apatite fission track thermochronology to determine absolute uplift parameters: *Journal of Geophysical Research*, v. 100, p. 20,175-20,191.
- Sorkhabi, R. B., Stump, E., Foland, K. A., and Jain, A. K., 1996, Fission-track and $^{40}\text{Ar}/^{39}\text{Ar}$ evidence for episodic denudation of the Gangotri granites in the Garhwal Higher Himalaya, India: *Tectonophysics*, 200, p. 187-199.
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- Fitzgerald, P. G., and Stump, E., 1997, Cretaceous and Cenozoic episodic denudation of the Transantarctic Mountains, Antarctica: New constraints from apatite fission track thermochronology in the Scott Glacier region: *Journal of Geophysical Research*, v. 102, No. B4, p. 7747-7765.
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- Fayon, A. K., Peacock, S. M., Stump, E., and Reynolds, S. J., 2000, Fission-track analysis of the footwall of the Catalina detachment fault, Arizona: Tectonic denudation, magmatism and erosion: Journal of Geophysical Research, v. 105, p. 11,047-11,062.
- Wareham, C. D., Stump, E., Storey, B. C., Millar, I. L., and Riley, T. R., 2001, Petrogenesis of the Cambrian Liv Group, a bimodal volcanic rock suite from the Ross orogen, Transantarctic Mountains: Geological Society of America Bulletin, v. 113, p. 360-372.
- Stump, E., Edgerton, D. G., and Korsch, R. J., 2002, Geological relationships at Cotton Plateau, Nimrod Glacier area, bearing on the tectonic development of the Ross orogen, Transantarctic Mountains, Antarctica: Terra Antarctica, v. 9, p. 3-18.
- Stump, E., 2002, What put the hook in Minna Bluff and other observations on the Transantarctic Mountains Front, *in* Gamble, J., Skinner, D. N. B., and Henrys, S. *eds.*, Antarctica at the close of a millennium: Royal Society of New Zealand Bulletin 35, p. 233-237.
- Stump, E., Gootee, B. F., Talarico, F., Van Schmus, W. R., Brand, P. K., Foland, K. A., and Fanning, C. M., 2004, Correlation of Byrd and Selborne Groups, with implications for the Byrd Glacier discontinuity, central Transantarctic Mountains: New Zealand Journal of Geology and Geophysics, v. 47, p. 157-171.
- Stump, E., Gootee, B. F., and Talarico, F., 2005, Tectonic model for the Byrd Glacier discontinuity and surrounding regions of the Transantarctic Mountains during the Neoproterozoic-early Paleozoic, *in* Futterer, D. K., Damaske, D., Kleinschmidt, G., Miller, H., and Tessensohn, F., *eds.*, Antarctica: Contributions to global earth sciences, Springer-Verlag, Berlin, p. 179-188.
- Gootee, B., and Stump, E., 2005, Depositional environments of the Byrd Group, Byrd Glacier area: A Cambrian record of sedimentation, tectonism, and magmatism, *in* Futterer, D. K., Damaske, D., Kleinschmidt, G., Miller, H., and Tessensohn, F., *eds.*, Antarctica: Contributions to global earth sciences, Springer-Verlag, Berlin, p. 189-192.
- Talarico, F. M., Palmeri, R., Stump, E., Gootee, B. F., Foland, K. A., Van Schmus, W. R., and Brand, P. K., 2007, Metamorphic evolution of the Selborne Group: First evidence of a "Barrovian"-type metamorphic regime in the Ross orogen of the Byrd Glacier area, central Transantarctic Mountains: Antarctic Science, v. 19, p. 451-470.
- Carosi, R., Giacomini, F., Talarico, F., and Stump, E., 2008, Geology of the Byrd Glacier discontinuity (Ross orogen): New survey data from the Britannia Range, Antarctica, *in* Cooper, A. K., and Raymond, C.

- R., et al., eds., Antarctica: A keystone in a changing world – Online proceedings of the 10th ISAES, USGS Open-File Report 2007-1047, Short Research Paper 030, 6 p; doi:10.3133/of2007-1047.srp030.
- Stump, E., Gehrels, G., Talarico, F., and Carosi, R., 2007, Constraints from detrital zircon geochronology on the early deformation of the Ross orogen, Transantarctic Mountains, Antarctica, in Cooper, A. K., and Raymond, C. R., et al., eds., Antarctica: A keystone in a changing world – Online proceedings of the 10th ISAES, USGS Open-File Report 2007-1047, USGS Open-File Report 2007-1047, Extended Abstract 166, 3 p.
- Brand, P. K., and Stump, E., 2011, Tertiary extension and fault-block rotation in the Transition Zone, Cedar Mountains area, Arizona: Arizona Geological Survey Contributed Map CM-11-A, version 1.1, 3 sheets, with 111 p. text.
- Foley, D. J., Stump, E., Van Soest, M. Whipple, K. X., and Hodges, K. V., 2013, Differential Movement across Byrd Glacier, Antarctica, as Indicated by Apatite (U-Th)/He Thermochronology and Geomorphological Analysis: Special Publication, Geological Society of London, 381.1, p.37-43.
- Paulsen, T. S., Encarnación, J., Grunow, A. M., Valencia, V. A., Layer, P. W., Pecha, M., Stump, E., Roeske, S., Thao, S., and Rasoazanamparany, C., 2015, Detrital mineral ages from the Ross Supergroup, Antarctica: Implications for the Queen Maud terrane and outboard sediment provenance on the Gondwana margin: Gondwana Research, v. 27, p. 377-391.

Books

- Nations, D., and Stump, E., 1981, Geology of Arizona, Kendall-Hunt, Dubuque, 210p.
- Nations, D., and Stump, E., 1996, Geology of Arizona, Second Edition, Kendall-Hunt, Dubuque, 260p.
- Stump, E., 1995, The Ross orogen of the Transantarctic Mountains: Cambridge University Press, Cambridge, 284p.
- Reynolds, S. J., Johnson, J. K., and Stump, E., 1999, Observing and interpreting geology: a laboratory manual for introductory geology, Terra Chroma, Inc., Tucson, 152p.
- Stump, E., 2011, The Roof at the Bottom of the World: Discovering the Transantarctic Mountains: Yale University Press, New Haven, 254 p.

Edited Volumes

- Stump, E., ed., 1986, Geological investigations in northern Victoria Land: American Geophysical Union, Antarctic Research Series, v. 46, 391p.
- Wolberg, D. L., and Stump, E., eds., 1996, Dinofest International Symposium, Program and Abstracts: Arizona State University, Tempe, 120p.
- Wolberg, D. L., Stump, E., and Rosenberg, G. D., eds., 1997, Dinofest International: Proceedings of a symposium held at Arizona State University: The Academy of Natural Sciences, Philadelphia, 587p.

Cooper, A. K., Barrett, P. J., Stagg, H., Storey, B., Stump, E., Wise, W., and the 10th ISAES editorial team, eds., 2008, *Antarctica: A Keystone in a Changing World: Proceedings of the 10th International Symposium on Antarctic Earth Sciences*: The National Academies Press, Washington, DC, 150p.

Research Grants

1. N.S.F. Travel Grant, GV-2527, to NATO Advanced Study Institute, Newcastle-upon-Tyne, England (1972).
2. N.S.F. Travel Grant, GV-33767, to South and South West Africa, examination of late Precambrian rocks (1972-73).
3. Research Grant, Group Chairman's Fund, Anglo-American Corp. of South Africa, study of pre-Cape Series rocks, Cape Province, South Africa (1972-73).
4. N.S.F. Grant, OPP74-04897, Geology and Paleomagnetism of Scott Glacier Area, Antarctica, \$16,400 (1974-76).
5. N.S.F. Grant, DPP76-82040, Geological Investigations in the Leverett and Scott Glaciers Area, Antarctica, \$59,392 (1977-80).
6. N.S.F. Grant, DPP78-20624, Field investigation of the LaGorce Mountains and data reduction on rocks from the Leverett and Scott Glaciers Area, Antarctica, \$41,954 (1979- 81).
7. N.S.F. Grant, DPP78-823515, Scientific and Logistic Planning of the 1980-81 Geological Field Season in Northern Victoria Land, \$8,480 (1979-80).
8. A. S. U. Faculty Grant-in-aid, Geological Reconnaissance of the Southern Basin and Range, \$1,761 (1980-81).
9. N.S.F. Grant, DPP801991, Petrology and regional geology of early to middle Paleozoic magmatic rocks, northern Victoria Land, Antarctica, \$142,154, (1981-8) (John Holloway Co-P.I.).
10. N.S.F. Grant, DPP-8216281, Data reduction of studies from the Northern Victoria Land Project, Antarctica, \$91,762 (1983-85). (John Holloway, Co-P.I.).
11. N.S.F. Grant, DPP-8418088, Deformation during the Beardmore and Ross Orogenies, Nimrod Glacier area, Antarctica, \$56,087 (1985-87).
12. NSF Grant DPP-8612938, Uplift of the Transantarctic Mountains, \$142,049 (1987-88).
13. NSF Grant DPP-8816655, Uplift history of the Ellsworth Mountains, Antarctica, \$115,456 (1989-91) (Paul Fitzgerald, Co-P.I.).
14. NSF Grant DPP-8821937, Uplift history of the central Alaska Range, \$99,258 (1989-91) (Paul Fitzgerald, Co-P.I.).
15. NSF Grant DPP8916057, Pre-Beacon geology of the Transantarctic Mountains, \$57,468 (1990-91).
16. N.S.F. Grant DPP-9017763, Uplift history of the Transantarctic Mountains in northern Victoria Land, \$176,714. (1991-94) (Paul Fitzgerald, Co-P.I.).
17. N.S.F. Grant DPP-9117441, Temporal evolution of the Transantarctic Mountains and West Antarctica, \$175,003. (1992-94) (Paul Fitzgerald, Co-P.I.).

18. N.S.F. Grant EAR-9316974, Thermotectonic evolution of a modern collisional orogen (Everest region of Nepal Himalaya), \$170,649 (1994-97) (Rasoul B. Sorkhabi, Co-P.I.).
19. N.S.F. Grant EAR-9317043, Thermal evolution of the Catalina metamorphic core complex, southeastern Arizona, \$110,027 (1995-97) (Simon M. Peacock, P.I./P.D.).
20. N.S.F. Grant EAR-9626879, Dinofest International: Innovative Science Education Outreach, \$40,000 (1996-97) (Donald L. Wolberg, Co-P.I.).
21. USGS EDMAP, Geologic mapping of the Union Hills, central Arizona, with the aid of remote sensing methods, \$10,000 (1998-99) (Ramon Arrowsmith, Co-P.I.)
22. N.S.F. Grant OPP-9909463, Geology and geochronology of the Byrd Glacier discontinuity, Antarctica, \$177,118 (2000-07).
23. N.S.F. Grant OPP-1059489, Neoproterozoic glaciation in Antarctica?, \$70,045 (2010-11)

Theses and Dissertations Directed

- Lowry, P.H., 1980, The Stratigraphy and petrography of the Cambrian Leverett Formation, Antarctica. M.S. Thesis, Arizona State University.
- Heintz-Stocker, G.M., 1980, Structural geology of the Leverett Glacier area, Antarctica, M.S. Thesis, Arizona State University.
- Borg, S.G., 1980, Petrology and Geochemistry of the Wyatt Formation and the Queen Maud Batholith, Upper Scott Glacier Area, Antarctica. M.S. Thesis, Arizona State University.
- Smit, J.H., 1981, Sedimentology, metamorphism, and structure of the La Gorce Formation, upper Scott Glacier area, Antarctica. M.S. Thesis, Arizona State University.
- Borg, S. G., 1984, Granitoids of Northern Victoria Land, Antarctica. Ph.D. Dissertation, Arizona State University.
- Annis, D. R., 1986, Petrochemical variations in post-Laramide igneous rocks in Arizona and adjacent regions: Geotectonic and metallogenic implications. M.S. Thesis, Arizona State University.
- Edgerton, D. G., 1987, Kinematic orientations of Precambrian Beardmore and Cambro-Ordovician Ross Orogenies, Goldie Formation, Nimrod Glacier area, Antarctica. M.S. Thesis, Arizona State University.
- Estrada, J. J., 1987, Geology of the Four Peaks area, Arizona. M.S. Thesis, Arizona State University.
- Jagiello, K. J., 1987, Structural evolution of the Phoenix Basin. M.S. Thesis, Arizona State University.
- Miller, E., 1987, The Buckeye pluton, Arizona: A Proterozoic, peraluminous two-mica granite. M.S. Thesis, Arizona State University.
- Harrison, D.H., 1989, A Structural and Petrographic analysis of two large intersecting shear zones west of Prescott, Arizona. M.S. Thesis, Arizona State University.
- Redfield, T.F., 1994, The Transantarctic Mountains of northern Victoria Land: Underplating, episodic uplift, and flexural suppression. Ph.D. Dissertation, Arizona State University.
- Fayon, A. K., 1997, Thermal evolution of the upper crust during large-scale crustal extension. Ph.D. Dissertation, Arizona State University.
- Holloway, S. G., 1999, Proterozoic through Quaternary geology of the Union Hills, North Phoenix, Arizona. M. S. Thesis, Arizona State University.
- Gootee, B., 2002, Geology of the Cambrian Byrd Group, Byrd Glacier area, Antarctica. M. S. Thesis, Arizona State University.
- Brand, P., 2005, Tertiary extension and fault block rotation in the Transition Zone, Cedar Mountains area, Arizona. M.S. Thesis, Arizona State University.
- Rhys-Evans, G., 2007, The geology of the Bloody Basin: Central Arizona's Transition Zone. M.S. Thesis, Arizona State University.

Foley, D. J., 2011, Differential movement across Byrd Glacier, Transantarctic Mountains, Antarctica, as indicated by (U/Th)/He thermochronology and geomorphology. M. S. Thesis, Arizona State University.

Courses Taught

General Geology
Physical Geology
Physical Geology Laboratory
Historical Geology
Environmental Geology
Quantitative Methods in Geology
Earth, Solar System, Universe I
Earth, Solar System, Universe II

Orogenic Systems
Cordilleran Regional Geology
Geology of Arizona
Structural Geology
Geology Field Camp
Exploration: The Human Imperative

Membership in Professional Societies

Geological Society of America, Fellow
American Association for the Advancement of Science

University and Departmental Committees

Head Undergraduate Advisor, 1977-90, 2001-present
Field Camp, Co-Director, 1979-89
Faculty Search Committee, Chair, 1996-97, 1999-00, 2003-04.
Personnel Committee, 1980-82, 1984-1986, 1996-2000, 2003-2006
Personnel, Annual Evaluation Sub-Committee, 2008-present.
Curriculum Committee, 1978-1980, 1984-85, 2000-2004
Appeals Committee, 1999-2003
Graduate Committee, 1986
Museum Committee, 1982-83, 1995-2007
Budget Committee, 1979-82
Space Committee, 1978, 1982-85
Future Committee, 1986-87
Student-Faculty Committee, 1978
Department Student Teaching Coordinator, 1979-90
Departmental Library Representative, 1977
Recorder, Departmental Faculty Meetings, 1976-77
Decennial Review Committee, 1988-89
Departmental Honors College Representative, 1996-99
Physical Science Academic Building Committee, 1986-1990
Quality of Undergraduate Education Committee, College, 1991-92
Dean's Strategic Planning and Academic Resources Advisory Council, College, 1994-97
Student Affairs and Grievances Committee, College, 2000-2003, (Chair, 2002-03), 2008-present
University Articulation Taskforce (statewide), 1986-present
Student Outcomes Assessment Committee, 2002
Geological Sciences Expansion Committee, 2002-03
Steering Committee, School of Earth and Space Exploration (SESE), 2004-2006
SESE Subcommittee on Curriculum, 2004-2006
SESE Subcommittee on Governance, 2004-2006
Ad Hoc Bi-Laws Committee, 2005
Faculty Ambassador, 2007
University Senate, 2007- present

Honors and Services

Chief Scientist, Northern Victoria Land Project, U.S. Antarctic Research Program, 1980-81.
Cotton Memorial Lecturer, Victoria University of Wellington, New Zealand, 1983.
Honorary Member, Golden Key Society, 1987.
Outstanding Professor Award, Golden Key Society 1988
Earth Sciences Proposal Review Panel, Division of Polar Programs, NSF, 1987-89
Chair, Department of Geology, 1991-95.
Associate Chair, Department of Geology, 1986-89, 1998-2000.
Coordinator, Dinofest International, 1995-96.
Field Trip Leader, Grand Canyon, 11th Himalayan-Karakorum-Tibet Workshop, Flagstaff, 1996.
Associate Editor, Terra Antarctica, 1998-present.
Geological Sciences, Faculty Appreciation Award, 2004.
Field Trip Leader, Grand Canyon, 10th International Symposium of Antarctic Earth Sciences, 2007.
Chief Scientist, Central Transantarctic Mountains Project, U. S. Antarctic Program, 2010-11.