

**MARCY B. DAVIS**

Institute for Geophysics, Jackson School of Geosciences  
The University of Texas at Austin  
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**EDUCATION**

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- 2001 M.Sc. Geology, The University of Texas at Austin
- *Thesis:* Subglacial morphology and structural geology in the southern Transantarctic Mountains from airborne geophysics
  - Advisors:* Don Blankenship, Ian Dalziel, Jim Connelly
- 1998 B.Sc. Geology, University of California Santa Barbara
- *Senior Thesis:* Paleogeography, provenance, and tectonic implications of the late Eocene – early Miocene Sespe Formation, southern and central California
  - Advisor:* Tanya Atwater
  - Honors and distinction within the major

**PROFESSIONAL POSITIONS**

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- 2008-present GeoRef Indexer, American Geological Institute
- 2003-present Adjunct Faculty, Dept. of Physical Sciences, Austin Community College
- Physical Geology (GEOL 1403), Environmental Geology (GEOL 1305)
- 2002-present Research Scientist Associate II, Institute for Geophysics, Jackson School of Geosciences, University of Texas at Austin
- Marine and aerogeophysical data acquisition and processing
  - Graphic illustration, web design/maintenance
  - Educational program liaison
- 2001-2002 Expedition Staff Naturalist, Intrav/Clipper Cruise Line
- Underway lecturer on the geology of Alaska, Baja, Oceania, Caribbean
- 1997-1999 Research Assistant, Institute for Crustal Studies, University of California, Santa Barbara
- Multibeam data acquisition and processing

**COMPUTER SKILLS**

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Experience with:

MS Office	Adobe Illustrator & Photoshop
Generic Mapping Tools (GMT)	MB System
Macromedia Dreamweaver	Caris HIPS & SIPS
Fledermaus	Arc GIS
Sioseis	Focus
Geoframe	

**PUBLICATIONS (Refereed)**

Davis, M.B., Roadside Geology of Tennessee, Mountain Press Publishing, Missoula, MT, *in prep.*

Davis, M.B. and Blankenship, D.D., 2005, Geology of the Scott-Reedy Glaciers Area, Southern Transantarctic Mountains, Antarctica, *Geological Society of America*, Maps and Charts Series, MCH093, 1 sheet.

**CONFERENCE PRESENTATIONS & ABSTRACTS**

Lawver, L., Davis, M.B., and Wilson, T.J., and shipboard scientific party, 2007, Neotectonic and other features of the Victoria Land basin, Antarctica, interpreted from multibeam bathymetry data, *in A Keystone in a Changing World*, Online Proc. 10<sup>th</sup> ISAES, edited by A.K. Cooper, C.R. Raymond, et al., USGS Open-File Rept. 2007-1047, Extended Abstract 017, 4 p., doi:10.3133/of007-1047.ea017.

Lawver, L.A., van Avendonk, H.J., Hornbach, M., Davis, M., Vermeesch, P.M., Phillips, R.L., Henkart, P., Henkart, M., 2007. *USCGC Healy* cruise HLY0602: an integrated geophysical and geological study of the western Canada Basin, The International Conference on Arctic Margins (ICAM V), Tromso, NO, 3-6 Sept. 2007.

Phillips, R.L., Lawver, L.A., Brumley, K., Hornbach, M., Davis, M., 2007. Quaternary sedimentation and bedrock cores from Chukchi Cap and Mendeleev Ridge, The International Conference on Arctic Margins (ICAM V), Tromso, NO, 3-6 Sept. 2007

Lawver, L., Davis, M.B., Van Avendonk, H., Hornbach, M., Vermeesch, P., Henkart, M., and Henkart, P., 2006, HLY0602: An integrated geophysical and geological study of the western Canada Basin, *EOS Trans.*, AGU, 87 (52), Fall Meeting Suppl., Abstract OS53B-1116.

Davis, M.B., Blankenship, D.D., and Ellins, K.K., 2004, The University of Texas Science and Engineering Apprentice Program as a model for an REU site, *EOS Trans*, AGU, 85(47), Fall Meeting Suppl., Abstract ED41C-01.

Davis, M.B., Blankenship, D.D., and Holt, J.W., 2004, Subglacial geology of the southern Transantarctic Mountains, Antarctica, from airborne radar sounding, *EOS Trans*. AGU, 85(47), Fall Meeting Suppl., Abstract T11A-1235.

Lawver, L.A., Wilson, T.J., and Davis, M., 2004, Neotectonics of the McMurdo Sound Region, Antarctica interpreted from multibeam data, *Eos Trans*. AGU, 85(47), Fall Meet. Suppl., Abstract T14A-07.

Smith, A., Wilson, T., Davis, M.B., Lawver, L.A., and Mukasa, S., 2004, Franklin Volcanic Field: Characteristics of a submarine volcanic field in the western Ross Sea, Antarctica, *EOS Trans*, AGU, 85(47), Fall Meeting Suppl., Abstract T11A-1231.

Davis, M.B. and Blankenship, D.D. 2003, New methods for enhancing subglacial morphology from airborne radar sounding with implications for uplift history and glaciation between the Transantarctic Mountain front and the South Pole, Antarctica, *EOS Trans.*, AGU, 84(46), Fall Meeting Suppl., Abstract C31B-0401.

Davis, M.B. and Blankenship, D.D., 2003, Subglacial morphology and structural geology along 150°W between the Transantarctic Mountain front and the South Pole, Antarctica: new data from an airborne ice-penetrating radar survey, *International Symposium on Antarctic Earth Sciences IX*, Fall Meeting, Potsdam, Germany, September 8-12.

**CONFERENCE PRESENTATIONS & ABSTRACTS (cont.)**

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- Davis, M.B., Blankenship, D.D., and Holt, J., 2001, Subglacial morphology and structural geology in the Southern Transantarctic Mountains from airborne geophysics, *Antarctic Neotectonics Workshop*, Siena, Italy, July 11-15.
- Wilson, D.S., Luyendyk, B.P., Siddoway, C.S., and Davis, M., 2000, Preliminary results from an aerogeophysical survey of western Marie Byrd Land, *EOS Trans*, AGU, 81(48), Fall Meeting Suppl., Abstract H52C-24.
- Stock, J., Luyendyk, B., Clayton, R. and shipboard scientific party, 1998, Tectonics and structure of the Manihiki Plateau, western Pacific Ocean, *EOS Trans.*, AGU, 79(45), Fall Meeting Suppl., Abstract T31C-10.

**PUBLICATIONS (Non-refereed)**

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- Davis, M.B., 2008, [Viewing Greenland's Past Climate With Cosmic Ray Vision](#), *Field Notes – The Polar Field Services Newsletter*, August, 2008, 2 pp.
- Davis, M.B., 2008, Sleds, Helicopters, Planes, and Automobiles, *Field Notes – The Polar Field Services Newsletter*, July31, 2 pp.
- Davis, M.B., 2008, Holy Mackerel!, *Field Notes – The Polar Field Services Newsletter*, July31, 1p.
- Davis, M.B., 2008, Finding the Words: The Language of Ice and Climate, *Field Notes – The Polar Field Services Newsletter*, April 16, 2 pp.
- Davis, M.B., 2008, Finding the Words: Faces of IPY: The Artist Adventurer, *Field Notes – The Polar Field Services Newsletter*, April 16, 2 pp.
- Davis, M.B., 2008, Shallow Cores Yield Deeper Understanding of Global Climate History, *Field Notes – The Polar Field Services Newsletter*, March 14, 2 pp.
- Davis, M.B., 2007, A Play on Words: Preserving Native Languages Through Game, *Field Notes - VECO Polar Resources Newsletter*, October 9, 2pp.
- Davis, M., and Ellins, K., 2007, Air, Land, and Sea: Leaders in Polar Research, *Environmental Science Institute Newsletter*, The University of Texas at Austin, 3 pp.
- Davis, M.B., 2007, At Work in Lake Country, *Field Notes - VECO Polar Resources Newsletter*, August 31, 2 pp.
- Davis, M.B., 2007, Faces of IPY: Ginny Catania, One Cool Glaciologist, *Field Notes - VECO Polar Resources Newsletter*, August 23, 2 pp.
- Davis, M.B., 2007, Well, hello, Dolly!, *Field Notes - VECO Polar Resources Newsletter*, August 16, 2 pp.
- Davis, M.B., 2007, The Next Top Modeler, *Field Notes - Field Notes - VECO Polar Resources Newsletter*, August 9, 2 pp.
- Davis, M.B., 2007, Playing with Fire: Reconstructing Climate and Burn History in Alaska's Boreal Forests, *Field Notes - VECO Polar Resources Newsletter*, August 2, 2 pp.
- Davis, M.B., 2007, International NEEM Team has an Eemian Dream, *Field Notes - VECO Polar Resources Newsletter*, June 28, 2 pp.
- Davis, M.B., 2007, Slip-Sliding Away: Glacier Erosion Processes, *Field Notes - VECO Polar Resources Newsletter*, June 21, 2 pp.
- Davis, M.B., 2006, Our Favorite Martians, *VECO Polar Resources Newsletter*, July 26, 2 pp.
- Davis, M.B., 2006, The Bejeweled Landscape, *VECO Polar Resources Newsletter*, July 12, 2 pp.
- Davis, M.B., 2006, Little Birds, Big Attitudes, *VECO Polar Resources Newsletter*, June, 29, 2 pp.
- Davis, M.B., 2006, Pseudo-what? Old Rocks Explain Future Earthquakes, *VECO Polar Resources Newsletter*, June 7, 2 pp.

Davis, M.B., 2006, Working at the 'Moulin Bleu': Studying Greenland's Ice Sheet, *VECO Polar Resources Newsletter*, May 23, 2 pp.

Davis, M.B., 2006, The Wiener Takes All, *Texas Highways*, April, p. 9-10.

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### **PUBLICATIONS (Non-refereed, cont.)**

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Davis, M.B., 2005, What's Hot in Antarctica?, *Bowlers Journal International*, 01/05, p. 100-101.

Duncan, L., and Davis, M.B., 2004, Contributing authors to *U\*X\*L Encyclopedia of Water Science*, Lerner, K.L. and Lerner, B.W., eds., U\*X\*L Publishing, Farmington Hills, MI.

Davis, M.B., 2004, Understanding a Changing Ice Sheet: Airborne Geophysics over Deepest West Antarctica, Web Spotlight, *Institute for Geophysics web site*, The University of Texas at Austin.

### **FIELD EXPERIENCE**

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- 2008 Scotia Sea and Drake Passage, R/V Nathaniel B. Palmer
- Marine geology and geophysics cruise (NBP0805 - UT Austin)
- 2007 Chukchi Cap, Arctic Ocean, USCGC Healy
- UNCLOS (HLY0703 – UNH/CCOM & NOAA)
- 2006 Western Canada Basin, Arctic Ocean, USCGC Healy
- Marine geology and geophysics cruise (HLY0602 - UT Austin)
- 2004 – present Tennessee
- Working Author, Roadside Geology of Tennessee
- 2004 Ross Sea, Antarctica, R/V Nathaniel B. Palmer
- Marine geology and geophysics cruise (NBP0401 - UT Austin)
- 2003 Baja California, Mexico, M/V Yorktown Clipper
- Expedition Staff/Naturalist Intrav/Clipper Cruises
- 2002 New Caledonia and Australia, M/V Clipper Odyssey
- Expedition Staff/Naturalist Intrav/Clipper Cruises
- 2002 Alaska's Inside Passage, M/V Yorktown Clipper
- Expedition Staff/Naturalist Intrav/Clipper Cruises
- 2000 Central Andes and Atacama, Peru
- Graduate student, The University of Texas at Austin
- 1998 Antarctica
- Field Assistant, Support Office for Aerogeophysical Research, Institute for Geophysics, UT Austin
- 1998 Santa Barbara Channel, California (UCSB)
- Sonar survey of offshore hydrocarbon seeps, R/V Ballena
- 1998 Espanola Basin, New Mexico
- Intern, SAGE, land-based geophysics
- 1998 Manihiki Plateau, South Pacific Ocean
- Marine geophysics cruise Kiwi Leg 12, R/V Roger Revelle
- 1993-1998 Geologic field investigations in the western U.S. and Canada

### **ACADEMIC INTERNSHIPS**

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- 1998 Summer of Applied Geophysical Experience (NSF-REU SAGE)
- Land-based geophysical theory, methods, and applications in the Espanola Basin, New Mexico
- 1996 Southern California Earthquake Center (NSF-REU SCEC/SURE)

- Geomorphic studies to determine earthquake hazard for Santa Barbara, CA

**ACADEMIC HONORS AND AWARDS**

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- 1996-1998 College of Letters and Science, Dean's Honor Roll
- 1996 William Bushnell Memorial Award Geological Sciences
- 1997 Coast Geological Society Award
- 1996 American Business Women's Association Scholarship
- 1995 Regents Scholarship Award, UCSB
- 1995 Santa Barbara Gem and Mineral Society Annual Award
- 1995 Department of Earth Sciences Gold Pan Award, Santa Barbara City College
- 1994 Department of Earth Sciences Outstanding Geology Student,  
Santa Barbara City College