

**Bernard A. Housen**

Western Washington University  
Geology Department  
and Advanced Materials Science and Engineering Center (AMSEC)  
Bellingham, WA 98225-9080  
phone: (360) 650-6573, fax: (360) 650-7302  
e-mail: [bernieh@wwu.edu](mailto:bernieh@wwu.edu)  
WWW: <http://myweb.facstaff.wwu.edu/bernieh/>

Google Scholar:

[http://scholar.google.com/citations?user=CNp\\_NxoAAAAJ&hl=en&ccstart=0&pagesize=20](http://scholar.google.com/citations?user=CNp_NxoAAAAJ&hl=en&ccstart=0&pagesize=20)

**Education:**

University of Michigan	Ph.D., Geology, 1994.
University of Michigan	M.S., Geology, 1990.
University of Washington	B.S., Geology, 1988.

**Positions:**

Chair, Western Washington University, Geology Department, 2010-present  
Professor, Western Washington University, Geology Department, 2008-present  
Associate Professor, Western Washington University, Geology Department, 2003-2008  
Assistant Professor, Western Washington University, Geology Department, 1997-2003  
Research Associate, University of Minnesota, Geology & Geophysics 1996-1997  
Post-doctoral Associate, University of Minnesota, Geology & Geophysics 1994-1996.  
Graduate Teaching/Research Associate, University of Michigan, Dept Geosciences, 1988-1994

**Teaching:**

Introduction to Geology (Geol 101), Freshman Interest Group Seminar (SEM 101), Honors Geology (Hon 158), Mt. Baker Geology (Geol 197), Plate Tectonics (Geol 202), Physical Geology (Geol 211), Structural Geology (Geol 318), Geological Oceanography (Geol 340), Geophysics (Geol 352), Field Camp (Geol 409, 410), Geophysics Seminar (Geol 417), Applied Geophysics (Geol 452), Plate Tectonics (Geol 453), Practical Paleomagnetism (Geol 457), Magnetic Fabrics (Geol 454)

**Integrated / Ocean Drilling Program participation:**

Shipboard Paleomagnetist, ODP Leg 170 (Costa Rica Margin), 1996  
Shipboard Paleomagnetist, ODP Leg 156 (North Barbados Ridge), 1994  
Shipboard Paleomagnetist, ODP Leg 146 (Cascadia), 1992

**Students:**

Allison Dean, Paleomagnetist, ODP Leg 190 (Nankai Trough), 2000  
Lisa Hawkins, Undergraduate Intern, IODP Exp 301 (Juan de Fuca Ridge), 2004  
Beth Novak, Paleomagnetist, IODP Exp 333, (NanTroSeize), 2010

**Research Interests:**

Applications of geophysics to structural and tectonic problems, paleomagnetism and plate motions, deformation fabrics and tectonics of active accretionary prisms and mélanges, magnetic mineral diagenesis and environmental magnetism of marine sediments, emplacement and deformation fabrics in granitic rocks, magnetic anisotropy, biomagnetism, paleomagnetism of deformed rocks. Ground Penetrating Radar (GPR) and near-surface geophysics (seismic, electrical resistivity) applied to geological, hydrological, and forensic studies.

**Professional Credentials:** Licensed Professional Geologist (State of Washington, Lic. # 728)

**Students:****Undergraduate Senior Theses:**

Taryn Shriver (BS 1998); Eric Gottlieb (BS 2001); Tracy Wiggins (BA 2002); Robert Sargent (BS 2003), Lisa Hawkins (BS 2004), Lisa Linville (BS 2005), Amanda Varsos (BS 2006). Jon Cooper (BS 2009), Sarah Polster (BS 2009), Brendan Miller (BS 2009), Sadie Belica (BS 2010), Margaret Pueringer (BS 2011), Logan Fusso (BS 2011), Kevin Parine (BS 2011)

**Graduates, MS thesis advisor:**

Phyllis Gregoire (MS 2001) "A paleomagnetic study of the Morrison Formation from the Black Hills, South Dakota and Wyoming: Implications for North American apparent polar wander during the Jurassic"

Tammy Fawcett (MS 2001) "Geology of the Cooper Mountain Pluton, North Cascade Mountains, Washington, based on magnetic fabrics, magnetic remanence and petrography"

Allison Dean (MS 2002) "Paleogeography of the Spieden Group, San Juan Islands, Washington"

Elizabeth Kilanowski (MS 2002) "The apparent polar wander path for Jurassic North America: A contribution from the Black Hills of Wyoming and South Dakota"

Chad Hults (MS 2002) "Paleomagnetism of the Jura-Cretaceous Kyuquot Group, Vancouver Island, British Columbia"

Mike Hutchinson (MS 2003) "Delineation of Landslide Slip Surfaces Using Ground Penetrating Radar as Compared and Contrasted with Existing Slip Surface Data: Evaluation of GPR for Landslide Slip Surface Determination"

Kris Addis (MS 2003) "Paleomagnetism of the Eocene German Rancho Formation, Point Arena Terrane, CA"

Linda Donohoo-Hurley (MS 2004) "Evidence of Paleocene-Eocene warming from the Bellingham Bay Member of the Chuckanut Formation, Northwest Washington"

Kirk Heim (MS 2004) "Paleomagnetism of the Stewart's Point and Anchor Bay members of the Point Arena terrane, northern California"

Noel Liner (MS 2005) "A paleomagnetic paleolatitude determination from the upper Cretaceous units of the Gold Beach terrane, southwest coastal Oregon"

Michael Kalk (MS 2008) "Revisiting the Seven Devils-Wrangellia connection: The paleogeography of Triassic rocks in Western Idaho"

Andy Wiser (MS 2008) "Magnetic fabric analysis of slope failure, turbidity currents, and depositional processes along the foreslope of the Fraser River Delta"

Chris Ward (MS 2008) "Paleomagnetism and detrital zircon geochronology of the Skeena Group, British Columbia"

Sean Gallen (MS 2008) "An investigation of the magnetic fabrics and paleomagnetism of the Ghost Rocks Formation, Kodiak Islands, Alaska"

Ben Baugh (MS 2010) "Paleomagnetism and Rock Magnetism of remagnetized carbonate rocks from the Helena Saliient, Southwest Montana"

Chris DeBoer (MS 2012) "Block rotation and magnetostratigraphy of the Fish Creek- Vallecito basin, western Salton trough, CA"

Beth Novak (MS 2012) "Magnetic fabric analyses of ocean floor sediments: Characterizing depositional processes in the Nankai Trough and Shikoku Basin"

Graham Messé (MS 2014) "Magnetostratigraphy and block rotation of the Mecca Hills, CA"

Cassidy Dimitroff (MS 2015) "Paleomagnetic determination of vertical-axis block rotation and magnetostratigraphy in the Mecca Hills and Coachella Valley, California"

**Students in progress:** Zack McGuire, Jennifer Zyczynski, Eric Christensen, Kirsten Weiner, William Callebert, Henry Talley

**MS thesis committee member:** J. Laub (2001), G. Ladd (2003), E. Bilderback (2004), B. Cashman (2003), K. Davis (2007), D. Feeney (2008), K. O'Connell (MS 2008 UC Davis), B. Paulson (2010), R. Dunham (2010), M. Park (2011); J. Hutchinson (2012), N. Longinotti (MS 2012 UC-Davis) E Hoffnagle (2014) Z Schirl (2014). In progress: E. Andrews, J. Brann, D. Merz.

**Invited Lectures:**

Santa Fe III Rock Magnetism Conference (June 1996), University of New Mexico Dept. Earth and Planetary Sciences (Jan. 1997), Pacific Geoscience Centre (Oct. 1997), University of Puget Sound (Sept. 1999), Northwest Geological Society (Nov. 1999), University of Wisconsin, Madison (April 2002), University of Oregon (May, 2005), University of Victoria (March 2008), WWU-retired faculty/staff organization (Nov. 2008), UC-Davis (May 2010), Santa Fe Rock Magnetism Conference, (June 2012), University of South Florida (March 2013), University of Connecticut (March 2014), University of Texas El Paso (April 2014), WWU-Huxley College of Environment (April 2014).

**Professional Societies:**

Member, American Geophysical Union, Geological Society of America  
President-elect, WWU chapter Sigma-Xi, 2001-2002  
President, WWU chapter Sigma Xi, 2002-2003

**University and Department Service:****University level:**

WWU Parking and Transportation Advisory Committee, 2014-  
Ad-hoc Committee on Academic Calendar, 2011-2012  
CREW Task Force, 2012-2013  
University Planning and Resources Committee, 2011-2013  
WWU Catalog & Curriculum Changes Business Process Committee, 2011  
UFWW-WWU Campus Partnership Committee, 2008-2010.  
UFWW-WWU Department Chair Compensation Committee, 2012-2013  
WWU-Summerstart First Year Student Program, 2009- 2013, 2015  
WWU- Transitions summer transfer student advising program, 2002-2004, 2011-2015  
WWU First Year Student Experience Working Group, 2008-2009  
WWU Transportation Planning Initiatives Task Force, 2002-2006  
Faculty Senate Student Academic Grievance Board, 1998-2001

**College level:**

Advanced Materials Science & Engineering Center (AMSEC) Exec. Comm., 2006-2012  
College of Science & Technology: Center for Technology and Industrial Development (CTID) committee, 2006-2008  
College of Arts and Sciences, Faculty Affairs Council, 2001-2003  
Chair AMSEC Inorganic Chem/Mineral Physics faculty Search Committee, 2008-2009  
Chair, Engineering Technology Department Chair Search Committee, 2012  
Chair, Biology Department Chair Search Committee, 2015  
CS&T Resources Committee, 2009-2010

**Department level:**

Chair, Geology Department Geophysics Search Committee, 2004-2005  
Geology Department Transfer Advisor, 1997-2003, 2011-2012  
Geology Dept. Graduate Admissions, Curriculum, and Equipment, Faculty Search Committees, 1997-various  
UFWW Department Steward, 2012-13, Spring quarters 2008-

**Scientific Service:**

Associate Editor, *Frontiers in Earth Science*, 2014-  
Guest Editor, *Lithosphere Special Volume*, 2015-2016, 2016-2017  
Editor, *GSA Today*, *Geol. Soc. America*, 2010-2014  
Member, GSA Publications Committee, 2010-2014  
Member, JOIDES Science Steering and Evaluation Panel on the Dynamics of the Earth's Interior (ISSEP), 1999-2003

Chair, Local Organizing Committee, Geological Society of America Cordilleran Section Meeting, 2006-2007

Reviewer, numerous academic journals and NSF proposal reviews

**Awards:**

WWU Faculty Merit Award for teaching, research, service, 2008

WWU Presidential Team Recognition Award- Advanced Materials Science and Engineering Center- 2010

WWU Presidential Team Recognition Award- Back to Bellingham Alumni Gathering- 2012

**Community Service:**

Judge, Bellingham Harley-Davidson Motorcycle Show, 1999, 2001, 2002

Classroom volunteer, Columbia Elementary School, Bellingham, WA, 2001-2009

Head Coach, Northwest Bellingham Soccer Club, Northside boys soccer team, 2001-2006

Guest teacher, Columbia Elementary School science enrichment days, 2009-2012

**External Research Support:**

**(P.I. unless otherwise indicated, internal or non-funded grant proposals are not listed)**

**Pending:**

**Current:**

National Science Foundation, Earth Sciences, Tectonics:

“RUI: Collaborative Research: Provenance and paleomagnetic analysis of the Ochoco Basin: a window into Late Cretaceous paleogeography”, \$97,518 (April 1, 2015 to March 31, 2017).

**Prior:**

National Science Foundation, Earth Sciences, Tectonics:

“Collaborative Research: Late Cenozoic Vertical Crustal Motions and Erosional Mass Transfer in the Southern San Andreas Fault Zone, Coachella Valley, California”, \$211,644 (Feb 15, 2012-Jan 31, 2016)

Consortium for Ocean Leadership, IODP Exp 333:

“Paleomagnetism and magnetic fabrics of Exp 333 samples: refined magnetostratigraphy and evaluation of inclination error of Nankai Trough sediments”, \$15000 (May 1, 2011 – Aug 31, 2013)

Consortium for Ocean Leadership, IODP Exp 325 (with Luigi Jovane):

“Paleomagnetic and environmental magnetic studies of cores from the Great Barrier Reef”, \$38,426 (Jan 20, 2010 to Aug 31, 2013)

Consortium for Ocean Leadership, IODP Exp 333:

“Beth Novak cruise participation”, \$5979 (Dec 13, 2010 – Dec 12, 2011)

National Science Foundation, Earth Sciences, Tectonics:

“Collaborative Research: Timing and controls on Plio-Pleistocene erosion and sedimentation in the eastern Peninsular Ranges, southern California”, \$152,654 (Feb 1, 2009-Jan 31, 2012).

GDL Foundation, Structural Diagenesis Senior Research Fellowship:

“Evaluation of syndeformational fluid flow/remagnetization in fold and thrust belts: Paleomagnetism of folded carbonate rocks of the southern Helena Salient, MT”, \$10,000 (Dec 1, 2008- Nov 30, 2009)

National Science Foundation, Earth Sciences, Geomorphology and Land Use Dynamics:

“Collaborative Research: Timing and controls on Plio-Pleistocene erosion in the eastern Peninsular Ranges, southern California”, \$27,500 (July 1, 2007 to June 30, 2009).

National Science Foundation, Earth Sciences, Tectonics:

- “Collaborative Research: Plate boundary reconstructions in the northern Cordillera: revisiting the paleomagnetism of a Paleocene trench-ridge-trench triple junction”, \$179,001 (June 1, 2006 to May 31, 2009).
- National Science Foundation, Earth Sciences, Major Research Instrumentation:  
 “Acquisition of a Vibrating Sample Magnetometer for the Paleomagnetism Laboratory, Western Washington University: \$196,019 (June 1, 2004 – July 15, 2007).
- National Science Foundation, Earth Sciences, Tectonics:  
 “Collaborative Research: Comparing deformation rates in wrench borderlands from geodetic and geologic data to evaluate the permanent and recoverable components of strain”, \$85,454 (July 1, 2002 to June 30, 2007).
- Joint Oceanographic Institutions/ U.S. Science Advisory Committee:  
 “Undergraduate Supplement: Effects of hydrothermal alteration on the paleomagnetism of mid-ocean ridge basalts: Rock magnetism of IODP Exp 301 samples”: \$5,140 (May 2005-April 2006).
- National Science Foundation, Earth Sciences, Tectonics:  
 “Collaborative Research: Late Cenozoic Detachment Faulting in the Western Salton Trough: Strain Partitioning in an Oblique Active- Margin Rift”: \$110,851 (Feb. 1, 2002 to Jan. 31, 2005).
- National Science Foundation, Earth Sciences, Tectonics:  
 “Collaborative Research: Integrated isotopic, geochronologic & paleomagnetic investigations of Cretaceous coastal basins: Assessment of northward translation of the 'Baja-BC'”, \$56,600 (June 2000 to June 2003).
- National Science Foundation, Earth Sciences, Tectonics:  
 “North American APW During the Jurassic: An Answer from the Black Hills”, \$140,000 (June 2000 to June 2003).
- Joint Oceanographic Institutions/ U.S. Science Advisory Committee:  
 "Magnetic fabrics, paleomagnetism, and magnetic mineralogy of Nankai Trough Sediments", Aug 2000-July 2002, \$19,407.
- National Science Foundation, Atmospheric Sciences, ESH: (Co-PI with Doug Clark (PI), WWU)  
 “Pilot study: Multiparameter investigation of a deep, pre-late Wisconsin bog in the central Sierra Nevada, California”, Aug 2000-July 2001, \$40,965
- National Science Foundation, Earth Sciences, Geophysics:  
 “Magnetofossils in marine sediments: Rock magnetic experiments on artificial and natural samples”: \$90,295 (April 1998 to March 2001).
- National Science Foundation, Ocean Sciences, Marine Geology & Geophysics:  
 “Magnetic anisotropy and sediment geomagnetism of active accretionary prisms and décollements: evaluating the effects of Fe-oxide diagenesis” \$161,195 (May. 1997- April. 2001).
- National Science Foundation, Earth Sciences, Instruments and Facilities:  
 “Acquisition of a Cryogenic Magnetometer for Western Washington University’s Paleomagnetism Lab”: \$106,278 (Feb 1998 – Jan. 2001).
- Joint Oceanographic Institutions/ U.S. Science Advisory Committee:  
 "Magnetic fabrics and sediment geomagnetism of the Costa Rica Margin", May 1997-Dec. 1998, \$20,000.
- Joint Oceanographic Institutions/ U.S. Science Advisory Committee:  
 "Mineral Fabrics and Magnetic Mineralogy of the Barbados Accretionary Prism” 1996-1997 \$23,523.
- Joint Oceanographic Institutions/ U.S. Science Advisory Committee:  
 "Microstructural Fabrics in the Cascadia Accretionary Prism Characterized by Mineral Preferred Orientation in Leg 146 Samples” 1993-1994, \$21,602.

**Edited Books or volumes:**

Magnetic Methods and Timing of Geological Processes- Geol Society London Special Publication 373, Editors L. Jovane, E. Herrero-Bervera, L.A. Hinnov, B.A. Housen, 2013, 394pp.

Advances in Paleomagnetism and Tectonics of Active Margins: In Honor of the Retirement of Myrl E. Beck, Jr., 2000, Tectonophysics, v. 326, 220 pp.

### **Publications:**

(\* for graduate student co-author, \*\* for undergraduate student co-author)

#### **(In final prep)**

Housen, B.A., 201x, Exploring elongation-inclination relationships in datasets from plutons and remagnetized sediments: examples from the North Cascades and the Blue Mountains-Frontiers in Earth Science.

Longinotti, N.L.\*, M.E. Oskin, T. Peryam, B. Dorsey, C. DeBoer\*, B.A. Housen, K. Blisniuk\*, 201x, Steady <sup>10</sup>Be-derived paleo-erosion rates across the Plio-Pleistocene climate transition, Fish Creek-Vallecito basin, California, submitted J. Geophys Res (surface).

#### **(In review)**

Fattaruso, L.A.\*, M.L. Cooke, R.J. Dorsey, B.A. Housen, 201x, Response of deformation patterns to reorganization of the southern San Andreas fault system since ca. 1.5 Ma, Submitted 8/28/2015- in revision 1/19/2016, Tectonophysics.

Peryam, T.C., M. Bezada, R.J. Dorsey, R.F. Burmester, B.A. Housen, 201x, The influence of orbital climate variability on hillslope denudation and sediment transport: a record from magnetic susceptibility of Pliocene lacustrine deposits in southern California, submitted 1/16/2016, Earth Surface Processes and Landforms.

#### **(In press)**

Lang, K.A.\*, K.W. Huntington, R. Burmester, B. Housen, 2016, Rapid exhumation of the eastern Himalayan syntaxis since the Late Miocene, in press March 2016, GSAB.

### **Published**

(48) Crider, J.G., Globokar, D.M.\*, R.F. Burmester, B.A. Housen, 2015, Unblocking temperature of viscous remanent magnetism in displaced granitic boulders, Icicle Creek glacial moraines (Washington, USA)-Geophys Res Lett., 42, doi:10.1002/2015GL066381.

(47) Sager, W.W., M. Pueringer\*, C. Carvallo M. Ooga, B. Housen, M. Tominaga, 2015, Paleomagnetism of Igneous Rocks from the Shatsky Rise: Implications for paleolatitude and oceanic plateau volcanism, in Neal, C.R., W.W. Sager, T. Sano, E. Erba, eds, The Origin, Evolution, and Environmental Impact of Oceanic Large Igneous Provinces, GSA Special Paper 501, doi:10.1130/2015.2511(08).

(46) Izquierdo-Llavall, E.\*, A.C. Sainz, B. Oliva-Urcia, R. Burmester, E. Pueyo, B. Housen, 2015, Multi-episodic remagnetization related to deformation in the Pyrenean Internal Sierras, G. Journal. Inter., 201, 891-914, doi: 10.1093/gji/ggve042.

(45) Novak, B.\*, B. Housen, Y. Kitamura, T. Kanamatsu, K. Kawamura, 2014, Magnetic fabric analysis as a method for determining sediment transport and deposition in deep sea sediments, Marine Geology, 356, 19-30, doi:10.1016/j.margeo.2013.12.001

(44) Pueringer, M.\*, W. Sager, B. Housen, 2013, Data Report: Paleomagnetic measurements of igneous rocks from Shatsky Rise Expedition 324. In Sager, W.W., Sano, T., Geldmacher, J., and the Exp 324 Scientists, Proc. IODP 324: Tokyo (IODP-MI). doi:10.2204/iodp.proc.324.202.2013. 1-33.

- (43) Hatfield, R.G., J.S. Stoner, A.E. Carlson, A.V. Reyes, B.A. Housen, 2013, Source as a controlling factor on the quality and interpretation of sediment magnetic records from the northern North Atlantic, *Earth Planet. Sci. Lett.*, 368, 69-77, doi:10.1016/j.epsl.2013.03.001.
- (42) Jovane, L., L. Hinnov, B.A. Housen, E. Herrero-Bervera, 2013, Magnetic methods and the timing of geological processes, *Geol. Soc. London, Spec. Pub.* 373, 1-12, doi:10.1144/SP373.17
- (41) Jovane, L., E. Yokoyama, R. Burmester, T. Seda, R. Trindade, B. Housen, 2011, Rock magnetism of hematitic “bombs” from Araguinha Impact Structure, Brazil, *Geochem. Geophys. Geosyst.*, 12, Q12Z34, doi:10.1029/2011GC003758.
- (40) Dunham, R.E.\*, J.G. Crider, R.F. Burmester, E.R. Schermer, B.A. Housen, 2011, Microstructures and magnetic fabrics of kink bands in the Darrington Phyllite, northwestern Washington, USA: Pressure solution modifies interlayer slip, *J. Struct. Geol.* 33, 1627-1638, doi:10.1016/j.jsg.2011.08.010
- (39) Titus, S.J., S. Crump\*\*, Z. McGuire\*\*, E. Horsman, B. Housen, 2011, Using vertical axis rotations to characterize off-fault deformation across the San Andreas fault system, central California, *Geology*, 39, 711-714, doi:10.1130/G31802.1.
- (38) Dorsey, R.J., B.A. Housen, S.U. Janecke, C. Mark Fanning, A.L.F. Spears\*, 2011, Stratigraphic record of basin development within the San Andreas fault system: Late Cenozoic Fish Creek-Vallecito Basin, southern California, *Geol. Soc. Amer. Bull.*, 123, 771-793, doi:10.1130/B30168.1
- (37) Janecke, S.U., R.J. Dorsey, D. Forand, A.N. Steely\*, S.M. Kirby\*, A. Lutz\*, B.A. Housen, B. Belgrade, V. Langenheim, T. Rittenour, 2010, High geologic slip rates since Early Pleistocene initiation of the San Jacinto and San Felipe Fault zones in the San Andreas fault system, Southern California, USA, *GSA Special Paper*, 475, 48 pp.
- (36) Sager, W.W., B.A. Housen, L.M. Linville\*\*, 2008, Paleomagnetic and rock magnetic measurements on Hole 1301B basaltic samples, *in* Fisher, A.T., Urabe, T., Klaus, A. and the Expedition 301 Scientists, *Proc. IODP*, 301, College Station, TX, doi:10.2204/iodp.proc.301.204.2008, 1-22.
- (35) Titus, S.J., B. Housen, B. Tikoff, 2007, A kinematic model for the Rinconada fault system in central California based on structural analysis of *en echelon* folds and paleomagnetism, *J. Structural Geol.*, 29, 961-982.
- (34) Brown, E.H., Housen, B.A., and Schermer, E.R., 2007, Tectonic evolution of the San Juan Islands thrust system, Washington, *in* Stelling, P., and Tucker, D.S., eds., *Fire, Faults, and Floods: Geological Field Trips in Washington State and Southwest British Columbia*: *Geol. Soc. Amer. Field Guide*, p. 143-177, doi: 10.1130/2007.fld009(08).
- (33) Dorsey, R.J., Fluette, A.\*, McDougall, K.A., Housen, B.A., Janecke, S.U., Axen, G.J., Shirvell, C.R.\*, 2007, Chronology of Miocene-Pliocene deposits at Split Mountain Gorge, southern California: A record of regional tectonics and Colorado River evolution, *Geology*, 35, 57-60.
- (32) Kirby, S.M.\*, Janecke, S.U., Dorsey, R.J., Housen, B.A., Langenheim, V., McDougall, K., Steely, A.N.\*, 2007, Pleistocene Brawley and Ocotillo Formations: Evidence for Initial Strike-Slip Deformation along the San Felipe and San Jacinto Fault Zones, Southern California, *J. of Geology*, 115, 21-42.
- (31) Lutz, A.T.\*, Dorsey, R.J., Housen, B.A., Janecke, S.U., 2006, Stratigraphic Record of Pleistocene Faulting and Basin Evolution in the Borrego Badlands, San Jacinto Fault Zone, Southern California, *Geol. Soc. Amer. Bull.*, 118, 1377-1397, doi: 10.1130/B25946.1
- (30) Housen, B. A., and B. M. Moskowicz, 2006, Depth distribution of magnetofossils in near-surface sediments from the Blake/Bahama Outer Ridge, western North Atlantic Ocean, determined by low-temperature magnetism, *J. Geophys. Res.*, 111, G01005, doi:10.1029/2005JG000068
- (29) Housen, B.A. and Dorsey, R.J., 2005, Paleomagnetism and Tectonic Significance of Albian and Cenomanian Turbidites, Ochoco Basin, Mitchell Inlier, Central Oregon, *J. Geophys. Res.*, 110, B07102, doi:10.1029/2004JB003458.
- (28) Beck, M.E., Jr., and Housen, B.A., 2005, Comment on “Paleomagnetism and geochronology of the Ecstall pluton in the Coast Mountains of British Columbia: Evidence for local

- deformation rather than large-scale transport” by R. F. Butler et al., *J. Geophys. Res.*, 110, B01101, doi:10.1029/2004JB003346.
- (27) Hayman, N.W., Housen, B.A., Cladouhos, T.T., and Livi, K., 2004, Magnetic and clast fabrics as measurements of grain-scale processes within the Death Valley shallow-crustal detachment faults, *J. Geophys. Res.* 109, B05409, doi:10.1029/2003JB002902.
  - (26) Beck, M.E., Jr. and Housen, B.A., 2003, Absolute velocity of North America during the Mesozoic from paleomagnetic data, *Tectonophysics*, 377, 33-54.
  - (25) Fawcett, T.C.\*, Burmester, R.F., Housen, B.A. and Iriondo, A., 2003, Tectonic implications of magnetic fabrics and remanence in the Cooper Mountain Pluton, North Cascade Mountains, Washington, *Can. J. Earth Sci.*, 40, 1335-1356.
  - (24) Housen, B.A., Beck, M.E. Jr., Burmester, R.F., Fawcett, T., Petro, G.\*, Sargent, R.\*\*, Addis, K.\*, Curtis, K.\*\*, Ladd, J.\*, Liner, N.\*, Molitor, B.\*, Montgomery, T.\*\*, Mynatt, I.\*\*, Palmer, B.\*, Tucker, D.\*, and White, I.\*, 2003, Paleomagnetism of the Mt. Stuart Batholith revisited again: What has been learned since 1972?, *Amer. J. Science*, 303, 263-299.
  - (23) Mynatt, I.\*\*, Housen, B.A., and Beck, M.E. Jr., 2003, Late Cretaceous paleogeography of Wrangellia: Paleomagnetism of the McColl Ridge Formation, southern Alaska, revisited: Comment, *Geology*, 31, e13.
  - (22) Beck, M.E., Jr., Burmester, R.F., and Housen, B.A., 2003, The red bed controversy revisited: shape analysis of Colorado Plateau units suggests long magnetization times, *Tectonophysics*, 362, 335-344.
  - (21) Housen, B.A., and Kanamatsu, T., 2003, Magnetic Fabrics from the Costa Rica Wedge: Sediment Deformation During the Initial Dewatering and Underplating Process, *Earth Planet. Sci. Letters*, 206, 215-228.
  - (20) Beck, M.E., Jr. and Housen, B.A., 2003, Pre-drift extension of the Atlantic margins of North America and Europe based on paths of Permo-Triassic apparent polar wander, *Geophys. J. International*, 152, 1-10.
  - (19) Housen, B., and Beck, M., 1999, Testing Terrane Transport: An Inclusive Approach to the “Baja-BC” Controversy, *Geology*, v. 27, 1143-1146.
  - (18) Zhao, X., Housen, B. and Solheid, P., 1998, Magnetic Properties of Leg 158 Cores: the origin of remanence and its relation to alteration and mineralization of the active TAG mound, *Proc. ODP, Sci. Res.*, 158, 337-351.
  - (17) Brückmann, W., Moran, K., and Housen, B., 1997, Directional properties of P-wave velocities and acoustic anisotropy in different structural domains of the northern Barbados Ridge accretionary prism complex, *Proc. ODP, Sci. Res.*, 156, 115-124.
  - (16) Housen, B.A., 1997, Magnetic fabrics of the Barbados accretionary prism, *Proc. ODP, Sci. Res.*, 156, 97-105.
  - (15) Maltman, A.J., Labaume, P., and Housen, B.A., 1997, Structural geology of the décollement at the toe of the Barbados accretionary prism, *Proc. ODP, Sci. Res.*, 156, 279-292.
  - (14) Fisher, A.T.; Zwart, G.; Shipley, T.; Ogawa, Y.; Ashi, J.; Blum, P.; Brueckmann, W.; Filice, F.; Goldberg, D.; Henry, P.; Housen, B.; Jurado, M. J.; Kastner, M.; Labaume, P.; Laier, T.; Leitch, E.; Maltman, A.; Meyer, A.; Moore, J. C.; Moore, G.; Peacock, S.; Rabaute, A.; Steiger, T.; Tobin, H.; Underwood, M.; Xu, Y.; Yin, H.; Zheng, Y., Relation between permeability and effective stress along a plate-boundary fault, Barbados accretionary complex, 1996, *Geology*, v. 24, p. 307-310.
  - (13) Housen, B.A., Banerjee, S.K., Moskowitz, B.M., 1996, Low temperature magnetic properties of siderite and magnetite in marine sediments, *Geophys. Res. Lett.*, 23, 2843-2846.
  - (12) Housen, B.A., and Musgrave, R.J, 1996, Rock-magnetic signature of gas-hydrates in accretionary prism sediments, *Earth Planet. Sci. Lett.*, 139, 509-519.
  - (11) Housen, B.A., Tobin, H.J., Labaume, P., Leitch, E.C., Maltman, A.J., and Leg 156 Science Party, 1996, Strain decoupling across the décollement of the Barbados accretionary prism, *Geology*, 24, 127-130.
  - (10) Housen, B.A., and Sato, T., 1995, Magnetic anisotropy fabrics from the Cascadia accretionary prism, *Proc. Ocean Drilling Program, Sci. Results*, 146, Texas A&M University, College Station, TX, 233-254.



- (9) Housen, B.A., van der Pluijm, B.A., and Essene, E.J., 1995, Plastic behavior of magnetite and high strains obtained from magnetic fabrics in the Parry Sound shear zone, Ontario Grenville Province, *J. Struct. Geol.*, 17, 265-278.
- (8) Labaume, P., Henry, P., Rabaute, A., Ogawa, Y., Shipley, T., Blum, P., Ashi, J., Brückmann, W., Filice, F., Fisher, A., Goldberg, D., Housen, B., Jurado, M.-J., Kastner, M., Laier, T., Leitch, E., Maltman, A.J., Meyer, A., Moore, G.F., Moore, J.C., Peacock, S., Steiger, T.H., Tobin, H.J., Underwood, M.B., Xu, Y., Yin, H., Zheng, Y., Zwart, G., 1995, Circulation et surpression de l'eau interstitielle dans le prism d'accrétion nord-Barbade: résultats du Leg ODP 156, *C.R. Acad. Sci. Paris, ser II A*, 320, 977-984.
- (7) Moore, J.C., Shipley, T.H., Goldberg, D., Ogawa, Y., Filice, F., Fisher, A., Jurado, M.-J., Moore, G.F., Rabaute, A., Yin, H., Zwart, G., Brückmann, W., Henry, P., Ashi, J., Blum, P., Meyer, A., Housen, B., Kastner, M., Labaume, P., Laier, T., Leitch, E., Maltman, A., Peacock, S., Steiger, T., Tobin, H.J., Underwood, M.B., Xu, Y., Zheng, Y., 1995, Abnormal fluid pressures and fault-zone dilation in the Barbados accretionary prism: Evidence from logging while drilling, *Geology*, 23, 605-608.
- (6) Carson, B.; Westbrook, G. K.; Musgrave, R. J.; Ashi, J.; Baranov, B.; Brown, K.; Camerlenghi, A.; Caulet, J. P.; Chamov, N.; Clennell, M. B.; Cragg, B.; Dietrich, P.; Foucher, J. P.; Housen, B.; Hovland, M.; Jarrard, R.; Kastner, M.; Kopf, A.; MacKay, M.; Moore, J. C.; Moran, K.; Parkes, R. J.; Sample, J.; Sato, T.; Scream, E.; Tobin, H.; Whitticar, M.; Zellers, S., 1993, ODP Leg 146 examines fluid flow in Cascadia margin, *Eos, Transactions, American Geophysical Union*, v. 74, p. 345-347.
- (5) Housen, B.A., Richter, C., and van der Pluijm, B.A., 1993, Composite magnetic anisotropy fabrics: experiments, numerical models, and implications for the quantification of rock fabrics, *Tectonophysics*, 220, 1-12.
- (4) Housen, B.A., van der Pluijm, B.A., Van der Voo, R., 1993, Magnetite dissolution and neocrystallization during cleavage formation: paleomagnetic study of the Martinsburg Formation, Lehigh Gap, Pennsylvania, *J. Geophys. Res.*, 98, 13,799-13,813.
- (3) Richter, C., van der Pluijm, B.A., and Housen, B.A., 1993, The quantification of crystallographic preferred orientation using magnetic anisotropy, *J. Struct. Geol.*, 15, 113-116.
- (2) Housen, B.A., and van der Pluijm, B.A., 1991, Slaty cleavage development and magnetic anisotropy fabrics, *J. Geophys. Res.*, 96, 9937-9946.
- (1) Housen, B.A., and van der Pluijm, B.A., 1990, Chlorite control of correlations between strain and anisotropy of magnetic susceptibility, *Phys. Earth Planet. Intern.*, 61, 315-323.

**Non-refereed technical reports, contributions to books, or popularizations:**

- Housen, B., 2015, Ground Penetrating Radar survey of the 1801 Ellis St. site, Bellingham WA, report to Whatcom Environmental Services, 54pp.
- Housen, B., 2015, Paleomagnetism of glaciomarine sediments from the Port Ludlow-Hansville (WA) area, report to WA-DNR, Geology and Earth Resources Division, 4pp.
- Housen, B., 2014, Ground Penetrating Radar survey of the 1122 Cornwall Avenue site, Bellingham, WA, Report to Merit Engineering, 8pp.
- Novak, B. and B. Housen, 2012, Paleomagnetism of glaciomarine sediments from the Seabeck-Poulsbo area, report to WA-DNR, Geology and Earth Resources Division, 10 pp.
- Housen, B.A., 2011, A Ground Penetrating Radar Investigation of the 2500 Meridian St, Bellingham, WA site, Report to Merit Engineering, 26pp.
- Housen, B.A., 2011, A Ground Penetrating Radar Investigation of the Tennis Courts of the Bellingham Tennis Club, report to Bellingham Tennis Club, 62pp.
- Housen, B.A., 2010, A Ground Penetrating Radar and Photo Survey of the Greenwood Cemetery, report to Whatcom County Cemetery District 10, 46pp.
- Housen, B.A., 2010, A Ground Penetrating Radar Survey of the Whatcom Middle School Basement, report to Merit Engineering, 19pp.
- Housen, B.A., 2009, A Ground Penetrating Radar Survey of the Lynden Cemetery, report to Whatcom County Cemetery District 10, 536pp.

- Housen, B.A. and Burmester, R.F., 2006, Magnetic Properties of Mars Regolith Simulant, report to Geohazards Consultants International, 9 pp.
- Housen, B.A., 2002, Ground penetrating radar (GPR) investigation of the subsurface geology in the vicinity of Crab Creek, Grant County, WA, report to Grant County PUD, 56 pp.
- Kimura, G., Silver, E., Blum, P., et al. (Housen, B. with 25 others), 1997, *Proc. Ocean Drilling Program, Initial Reports*, 170, College Station, TX (Ocean Drilling Program).
- Leg 156 Scientific Party (written on their behalf by B.A. Housen), 1995, CORKing a plate boundary fault, *Geotimes*, 40, no. 5, 21-23.
- Shipley, T., Ogawa, J., Blum, P., et al. (Housen, B. with 25 others), 1995, *Proc. Ocean Drilling Program, Initial Reports*, 156, College Station, TX (Ocean Drilling Program), 301pp.
- Westbrook, G.K., Carson, B., Musgrave, R.J., et al. (Housen, B. with 24 others), 1994, *Proc. Ocean Drilling Program, Initial Reports*, 146, College Station, TX (Ocean Drilling Program), 611pp.

### **Abstracts of conference presentations:**

#### **2016**

- Gulliver, K.,\*\* S Thurman\*\*, M. Patzke\*\*, K. DeGraaff, BA Housen, CM Fisher, JD Vervoort, 2016, Provenance analysis of Cretaceous inliers of eastern Oregon: assessing the extent of the Ochoco Basin and implications for Cordilleran paleogeography, *GSA Abstracts with program*, v48, n4, paper 17-34.
- Patzke, M.\*\*, S. Thurman\*\*, K. Gulliver\*\*, K DeGraaff, BA Housen, CM Fisher, JD Vervoort, 2016, Provenance analysis of conglomerate cobbles and associated sandstone in the Mitchell Inlier, central Oregon, *GSA Abstracts with program*, v48, n4, paper 17-33.

#### **2015**

- Cooke, M., L. Fattaruso\*, R. Dorsey, B. Housen, 2015, Response of deformation patterns to reorganizations of the southern San Andreas fault system since ca. 1.5 Ma, *Amer. Geophys Union*, T51H-03
- Dimitroff, C.\*, B. Housen, J McNabb, R. Dorsey, R. Burmester, G. Messé\*, 2015, Paleomagnetic determination of vertical axis block rotation and magnetostratigraphy in the Coachella Valley, California, *Amer. Geophys. Union*, T41A-2863.
- Housen, B.A., 2015, Magnetic fabrics, paleomagnetism, and U-Pb zircon ages of clastic marine sediments: implications for provenance and tectonic history of the Gold Beach terrane, *GSA Abstracts with Programs* 47, 6.
- Housen, B.A., 2015, A re-examination of paleomagnetic results from NA Jurassic sedimentary rocks: Additional evidence for proposed Jurassic MUTO?, *Amer. Geophys. Union*, GP23B-1311.

#### **2014**

- Housen, B.A., 2014, Differences in direct transfer degree determines degree duration, *GSA Abstracts with Programs*, 46, 6.
- Housen, B.A., 2014, Evaluation of paleomagnetic inclination error on paleomagnetic results from the Karheen Formation- Implications for the Devonian paleogeography of the Alexander and associated terranes, *GSA Abstracts with Programs*, 46, 6.
- Housen, B.A., 2014, Exploring elongation-inclination relationships in datasets from plutons and remagnetized sediments: examples from the North Cascades and the Blue Mountains, *Amer Geophys Union*, 3628
- Lang, K.A., K.W. Huntington, R.F. Burmester, B.A. Housen, 2014, River antecedence and the onset of rapid exhumation in the Eastern Himalayan syntaxis, *Amer. Geophys Union*, 3519.

#### **2013**

- Housen, B.A., 2013, Tectonic reconstructions of North America and Cordilleran terranes- a paleomagnetic perspective with Paleozoic and Mesozoic examples, *GSA Abstracts with Programs*, 44, 7, 811.

- Housen, B.A., L Fattaruso\*, JC McNabb\*, RJ Dorsey, GT Messé\*, ML Cooke, 2013, Magnetostratigraphy and paleomagnetism of the Palm Spring and Mecca Formations, Mecca Hills, CA: spatial variation of vertical axis rotation in the Coachella Valley, Amer Geophys Union, T11D-2485.
- McNabb\*, JC, RJ Dorsey, BA Housen, GT Messé\*, 2013, Stratigraphic record of basin formation, deformation, and destruction in the past 2 Ma along the southern San Andreas Fault, Mecca Hills, CA, Amer Geophys Union, T11D-2484
- Messé\*, GT, BA Housen, RF Burmester, JC McNabb, RJ Dorsey, 2013, Magnetostratigraphy and paleocurrent directions for the upper member of the Palm Spring Formation, Mecca Hills, CA, Amer Geophys Union, GP41A-1108.

## 2012

- Globakar, D.\*, J.G. Crider, R.F. Burmester, B. Housen, 2012, Testing thermal viscous remanent magnetization as a tool to date geomorphic events at the icicle creek moraines, North Cascades, Washington, GSA Abstracts with Programs, 44, 7, 296.
- Housen, B.A., 2012, Paleomagnetism of the Cretaceous Kootenai Formation, McCarthy Mountain fold and thrust belt, SW Montana, GSA Abstracts with Programs, 44, 7, 426.
- Housen, B.A., D.K. Merz\*, J. Brann\*, 2012, Paleomagnetism, Paleointensity, and Rock Magnetism of the 301 ka andesites of Table Mountain, Mt. Baker, WA, Amer Geophys Union, GP43A-1128.
- Messé, G.T.\*, J.C. McNabb\*, B.A. Housen, R.J. Dorsey, 2012, Magnetostratigraphy of the Palm Spring Formation, Mecca Hills, CA, GSA Abstracts with Programs, 44, 7, 76.
- Peryam, T.C.\*, MJ Bezada, RJ Dorsey, RF Burmester, BA Housen, 2012, Evidence for late Pliocene orbital modulation of erosion rates in Southern California, Amer Geophys. Union, EP53C-1052.

## 2011

- Housen, B.A., R.F. Burmester, C.J. DeBoer\*, A. Hart\*, Z. McGuire\*, B. Novak\*, J. Zyczynski\*, 2011, Paleomagnetism, paleointensity, and rock-magnetism of the 9.5 ka volcanics of Sulfur Creek, Mt. Baker, WA, Amer Geophys Union, GP23A-1041
- Housen, B.A., and L. Jovane, 2011, Magnetic properties of particulate matter collected by tree leaves in Bellingham, WA: Implications for air quality monitoring in urban environments, GSA Abstracts with Programs, 43, no 5, 285.
- Longinotti, N.E.\*, M.E. Oskin, C.J. DeBoer\*, B.A. Housen, T.C. Peryam\*, R.J. Dorsey, 2011, <sup>10</sup>Be-derived paleo-erosion rates recorded in the Fish Creek-Vallecito basin, California indicate no increase across the Plio-Pleistocene climate transition, Amer. Geophys Union, EP31A-0792
- Novak, B.A.\*, B.A. Housen, T. Kanamatsu, Y. Kitamura, K. Kawamura, 2011, Magnetic fabric analyses of deep-sea sediments: Identifying depositional processes at IODP Expedition 333 Sites C0018 and C0011, Nankai Trough and Shikoku Basin, GSA Abstracts with Programs, 43, no 5, 591.
- Novak, B.\*, B.A. Housen, T. Kanamatsu, Y. Kitamura, K. Kawamura, P. Henry, K.T. Moe and IODP Exp 333 Scientists, 2011, The effects of compaction on the paleomagnetic record from IODP Expedition 333, Nankai Through and Shikoku Basin, Amer. Geophys. Union, GP51A-1150.
- Pueringer, M.\*\* and B.A. Housen, 2011, Paleomagnetism of small fore-arc intrusive bodies associated with the Paleocene Kodiak Batholith, GSA Abstracts with Programs, 43, no 4, 29-6.

## 2010

- Baugh, B.\*, B.A. Housen, R.F. Burmester, 2010, Paleomagnetism and rock magnetism of remagnetized carbonate rocks from the Helena Salient, western Montana, EOS Trans. AGU, GP33C-0962

- Crider, J.G., B.A. Miller\*, R.F. Burmester, G.D. Thackray, B.A. Housen, 2010, (Re)assessing the application of viscous remanent magnetism to dating geomorphic events, *Geol Soc Amer, Abstracts with Program*, 42, no 5, 522
- DeBoer, C.J.\*, B.A. Housen, T.C. Peryam, R.J. Dorsey, M.E. Oskin, 2010, Magnetostratigraphy and block rotation of the Canyon sin Nombre area, western Salton Trough, CA, *EOS Trans. AGU*, GP23C-7
- Dorsey, R.J., Housen, B.A., Spears, A.L.F.\*, Janecke, S.U., Axen, G., McDougall, K., Shirvell, C., 2010, Late Miocene onset of plate-boundary strain in the Salton Trough region: stratigraphic evidence from Split Mountain Gorge, southern California, *Geol. Soc. Amer, Abstracts with Programs*, 42, no 4, 1-4.
- Dunham, R.E.\*, J.G. Crider, B.A. Housen, R.F. Burmester, 2010, Micro-scale deformation mechanisms in kink bands: pressure solution modifies interlayer slip, *Geol Soc Amer, Abstracts with Programs*, 42, no 5, 35.
- Gaschnig, R.M., B. Tikoff, J.D. Vervoort, B.A. Housen, R.J. Dorsey, 2010, U-Pb geochronology and Hf isotope geochemistry of detrital zircons from Late Cretaceous sedimentary rocks in eastern Oregon, *Geol Soc Amer, Abstracts with Programs*, 42, no 5, 127.
- Housen, B.A., C. DeBoer\* and A. Hart\*, 2010, Magnetic fabrics and paleomagnetism of sediments deposited in Arroyo Seco del Diablo during January 2010: implications for paleocurrent and paleointensity studies of more ancient deposits, *Geol Soc Amer, Abstracts with Program*, 42, no 5, 527.
- Housen, B.A. and R.J. Dorsey, 2010, Magnetostratigraphy and paleomagnetism of the Plio-Pleistocene Arroyo Diablo and Borrego Formations in the Borrego Badlands, western Salton Trough, CA, *EOS Trans AGU*, GP23C-8
- Peryam, T.C.\*, R.J. Dorsey, M.E. Oskin, K. Blisniuk\*, B.A. Housen, 2010, Controls on mid-Pliocene (ca 2.8 Ma) progradation of coarse detritus in the Fish Creek-Vallecito Basin, southern California, *Geol Soc Amer, Abstracts with Program*, 42, no 5, 429.
- Titus, S., Crump, S.\*\*, McGuire, Z.\*\*, Horsman, E., Housen, B., 2010, Paleomagnetic data from the Rincondada Fault in central California: evidence for off-fault deformation and long-term creep along the San Andreas Fault, *Geol. Soc. Amer., Abstracts with Programs*, 42, no 4, 31-3.
- Yokoyama, E., Housen, B.A., Jovane, L., Seda, T., Trindade, R.I., Franscicon, R., 2010, Rock Magnetism of hematite impact bombs from Araguaninha Crater, Brazil, *Eos Trans. AGU*, 91(26), Jt. Assem Suppl., Abstract GP31D-04
- Yourd, A.R.\*\*, A. Newman\*\*, S.J. Titus, B.A. Housen, 2010, Characterizing deformation at Kettleman Hills North Dome, central California, using paleomagnetism and structural analysis, *Eos Tran AGU*, T31B-2165

## 2009

- Baugh, B.F.\*, B.A. Housen, R.F. Burmester, 2009, Paleomagnetism and rock magnetism of remagnetized carbonate rocks from the Helena Salient, western Montana, *Abstracts with Programs, Geol. Soc. Amer* 41, no 1.
- Crump, S.\*\*, S. Titus, Z McGuire\*\*, BA Housen, 2009, Paleomagnetic data from the Rincondada Fault in central California: evidence for off-fault deformation, *EOS Trans. AGU*, fall meeting 2009.
- Housen, B.A., and L. Jovane, 2009, Monitoring impacts of mass-transit vehicles on particulate matter concentrations in urban environments using magnetic properties of tree leaves: pilot study of bus and bike routes in Bellingham, WA, *Abstracts with Programs, Geol. Soc. Amer* 41, no 1.
- Miller, B.\*\* and B.A. Housen, 2009, Paleomagnetism of the Beckler Peak stock, N. Cascades, WA, *Abstracts with Programs, Geol. Soc. Amer.*, 41, no 1.
- Peryam, T.C., R.J. Dorsey, I. Bindeman, B. Housen, J. Palandri, 2009, Stable-isotope and paleosol data from the Plio-Pleistocene Fish Creek-Vallecito Basin, southern California: new insights into regional tectonics and paleoclimate, *Abstracts with Programs, Geol. Soc. Amer* 41, no 1.

- Polster, S.\*\*\*, R. Burmester, B. Housen, 2009, Chemical and magnetic properties of proposed Martian regolith simulant, Abstracts with Programs, Geol. Soc. Amer, 41, no 4.
- Roeske, S.J., B.A. Housen, S. Gallen\*, K. O'Connell\*, 2009, Late Cretaceous and Paleocene displacement of terranes along the northern Cordillera margin, Abstracts with Programs, Geol. Soc. Amer 41, no 1.
- Suczek, C.A., D.H. Clark, D.M. Hirsch, B.A. Housen, 2009, Changes in geology summer field camp at Western Washington University and their effects on faculty and students, Abstracts with Programs, Geol. Soc. Amer 41, no 1.

#### 2008

- Housen, B.A., R.J. Dorsey, S.U. Janecke, M.E. Oskin, 2008, **(invited)**, Paleomagnetism and magnetostratigraphy of late Cenozoic sedimentary rocks in the western Salton Trough, CA, EOS Trans AGU, 88
- Housen, B.A., S.M. Roeske, S.F. Gallen\*, K. O'Connell\*, 2008, Paleomagnetism of the Paleocene Ghost Rocks, Kodiak Islands, Alaska: Implications for Paleocene Pacific-Basin/North America plate configurations, EOS Trans AGU, 88
- Housen, B., A. Wisner\*, 2008, Paleomagnetism, rock magnetism, and magnetic fabrics of sediment cores from the Fraser River Delta, offshore Vancouver, BC (Canada), Intl. Conf. Rock Magnetism, p48.
- Oskin, M., K. Le, R. Dorsey, B. Housen, T. Peryam, 2008, Plio-Quaternary detrital <sup>10</sup>Be paleo-erosion rates from the eastern Peninsular Ranges, California, EOS Trans AGU, 88
- Peryam, T., R. Dorsey, I. Bindeman, B. Housen, 2008, Preliminary Plio-Pleistocene stable-isotope and paleosol data from the Fish Creek-Vallecito basin, southern California: insights into paleoclimate from pedogenic carbonate, EOS Trans AGU, 88.

#### 2007

- Cooper, J.L.\*\*\*, B.A. Housen, 2007, Geology and paleomagnetism of the Haro Formation, San Juan Island, WA, Abstracts with Programs, Geol. Soc. Amer, 39, no 4
- Gallen, S.F.\*., B. Housen, S. Roeske, K. O'Connell, 2007, Revisiting the Paleomagnetism of the Ghost Rocks Formation of the Kodiak Islands, Alaska, Eos Tran. AGU, 87
- Housen, B.A., 2007 **(invited)** Paleomagnetism of Mesozoic-Cenozoic rocks of the Blue Mountains, Oregon, Abstracts with Programs, Geol. Soc. Amer, 39, no 1.
- Housen, B.A., 2007 **(invited)**, Paleomagnetic constraints on paleogeographic reconstructions of Cordilleran terranes, Abstracts with Programs, Geol. Soc. Amer, 39, no 4.
- Housen, B.A., 2007, Paleomagnetic results from Cretaceous clastic sediments: possible implications for the paleogeography of the Blue Mountains, Klamaths, Great Valley rocks, Abstracts with Programs, Geol. Soc. Amer, 39, no 4.
- O'Connell, K\*, B. Housen, S.M. Roeske, 2007, Revisiting the paleomagnetism of a Paleocene trench-ridge-trench triple junction; Kodiak Islands, Alaska, Abstracts with Programs, Geol. Soc. Amer, 39, no 4.
- Roeske, S.M, B. Housen, K O'Connell\*, 2007, The geologic and paleomagnetic conundrum of Late Cretaceous through Early Eocene major strike-slip faults in Alaska and northern Canada, Abstracts with Programs, Geol. Soc. Amer, 39, no 4.
- Titus, S., DeMets, C., Housen, B., Tikoff, B., 2007, Geodetic and geologic deformation rates from the San Andreas fault system, central California, Abstracts with Programs, Geol. Soc. Amer, 39, no 1.

#### 2006

- Axen, G.J., Janecke, S., Steely, A.\*, Shirvell, C.\*, Fluette, A.\*, Kairouz, M.\*, Housen, B., Stockli, D., Dorsey, R., Grove, M., 2006, The west Salton detachment fault, Salton Trough, California: a primary low-angle normal fault in an evolving dextral wrench zone, Eos Tran. AGU, 87, Abstract T41D-1602.
- Dorsey, R.J., Housen, B.A., Janecke, S.U., McDougall, K., Fanning, M., Fluette, A.\*, Axen, G.J., Shirvell, C.R.\*, 2006, Chronostratigraphy of the Fish Creek- Vallecito basin, SW Salton Trough: a high-fidelity record of slip on the west Salton detachment fault and subsidence in its upper plate, Eos Tran. AGU, 87, Abstract T41D-1600.

- French, M.\*\*\*, Wojtal, S.F., Housen, B.A., 2006, Transpressional deformation style and AMS fabrics adjacent to the southernmost segment of the San Andreas fault, Durmid Hill, CA, Eos Tran. AGU, 87, Abstract T41D-1598.
- Housen, B.A. (**invited**), 2006, Magnetic fabrics and paleomagnetism of sedimentary rocks: examining effects of compaction and deformation, Eos Tran. AGU, 87, Abstract GP33A-07.
- Housen, B.A., Dorsey, R.J., Janecke, S.U., Axen, G.J., 2006, Evolution of rotations in the Fish Creek Vallecito basin, western Salton Trough, CA, Eos Tran. AGU, 87, Abstract T41D-1601.
- Kalk, M.\*, Housen, B.A., Burmester, R.F., 2006, Revisiting the Seven Devils-Wrangellia connection: paleogeography of Triassic rocks in western Idaho, GSA Abstracts with programs, 38, n. 5, p 21.
- Titus, S, Tikoff, B, Housen, B.A., 2006, A kinematic model for the Rinconada fault system in central California based on structural analysis of en echelon folds, GSA Abstracts with Programs, 38, n 7, 19.

## 2005

- Dorsey, R.J., Fluette, A.\*, McDougall, K., Housen, B.A., Janecke, S.U., 2005, Terminal Miocene arrival of Colorado River sand in the Salton Trough, southern California: Implications for the initiation of the lower Colorado drainage, GSA Abstracts with Program, v 37, n. 7, p 109.
- Housen, B.A., Dorsey, R.J., Janecke, S.U., Axen, G.J., 2005, Rotation of Plio-Pleistocene Sedimentary Rocks in the Fish Creek Vallecito Basin, Western Salton Trough, CA, Eos Tran. AGU v. 86.
- Janecke, S.U., Kirby, S.\*, Langenheim, V., Steely, A.N.\*, Dorsey, R., Housen, B., Lutz, A.\*, 2005, High geologic slip rates on the San Jacinto fault zone in the SW Salton Trough, and possible near-surface slip deficit in sedimentary basins, GSA Abstracts with Program, v 37, n. 7, p 275.
- Linville, L.M.\*\*\*, Housen, B.A., Sager, W., Effects of hydrothermal alteration on the magnetic mineralogy of mid-ocean ridge basalts, IODP Site 1301B, Juan de Fuca Ridge, Eos Tran. AGU v86.

## 2004

- Fluette, A.L.\*, Housen, B.A., and Dorsey, R.J., 2004, Preliminary magnetostratigraphic study of the Split Mountain and Lower Imperial Groups, Split Mountain Gorge, Western Salton Trough, CA, Eos Tran. AGU, 85(47).
- Hawkins, L.K.\*\*\*, Burmester, R.F., and Housen, B.A., 2004, Magnetic properties and paleointensity of a Mid-Miocene gabbro from the Coast Rica Accretionary Wedge, ODP Leg 170, Eos Tran. AGU, 85(47).
- Hawkins, L.K.\*\*\*, Housen, B.A., Sager, W.W., Exp. 301 Sci. Party, 2004, Undergraduate student research with the Integrated Ocean Drilling Program on Expedition 301, Eos Tran. AGU, 85(47).
- Housen, B.A., Dorsey, R.J., Janecke, S.U., Kirby, S.M.\*, Lutz, A.T.\*, 2004, Magnetostratigraphy and rotation of Pleistocene sedimentary rocks in the San Jacinto fault zone, western Salton Trough, CA, Eos Tran. AGU, 85(47).
- Housen, B.A., and Dorsey, R.J., 2004, Paleomagnetism and tectonic significance of Cretaceous sedimentary rocks in the Mitchell Inlier, Blue Mountains, Oregon, GSA Abstracts with Program, v 36, n. 5, p 120.
- Janecke, S.U., Kirby, S.M.\*, Langenheim, V.E., Housen, B., Dorsey, R.J., Crippen, R.E., Blom, R.G., 2004, Kinematics and evolution of the San Jacinto fault zone in the Salton Trough: Progress report from the San Felipe Hills area, GSA Abstracts with Program, v 36, n. 5, p 317.
- Kirby, S.M.\*, Janecke, S.U., Dorsey, R.J., Housen, B.A., McDougall, K., 2004, A 1.07 Ma change from persistent lakes to intermittent flooding and desiccation in the San Felipe Hills, Salton Trough, southern California, GSA Abstracts with Program, v 36, n. 5, p 318.
- Lutz, A.T.\*, Dorsey, R.J., Housen, B.A., 2004, 0.5-0.6 Ma onset of uplift and transpressive deformation in the Borrego Badlands, southern California, due to initiation of the Coyote Creek Fault, Eos Tran. AGU, 85(47).

## 2003

- Donohoo, L.L.\*, Housen, B.A., and Mustoe, G., 2003, CLAMP Analysis and Magnetostratigraphy of the Early Tertiary Chuckanut Formation of Northwestern Washington, GSA Abstracts with Program, v 34, n. 7, p A-588.
- Geissman, J.W., Brearly, A.J., Housen, B.A., 2003, Transmission Electron Microscopy of the Magnetic Mineralogy of the Mt. Stuart Batholith: An Attempt to Better Elucidate the Origin of a Controversial Magnetization, Amer. Geophys. Union, v. 84.
- Hayman, N.W., Housen, B.A., Cladouhos, T.T., Livi, K.J.T., 2003, Comparing magnetic and clast fabric in gouge and breccia from the Black Mountain detachments, Death Valley, CA: Implications for the micro-mechanics and kinematics of shallow crustal shear zones, Amer. Geophys. Union, v. 84.
- Heim, K.A.\*, Housen, B.A., 2003, Testing for Compaction-Shallowing, and Tectonic Implications of the Paleomagnetism of the Late Cretaceous Sediments of the Gualala Block, Northern California, Amer. Geophys. Union, v. 84.
- Housen, B.A.; Beck, M.E., Jr.; Burmester, R.F.; Petro, G.\*; Fawcett, T\*. 2003, Paleomagnetism of the Mt. Stuart batholith revisited again--What has been learned in the 30 years after Beck and Noson 1972, Geological Association of Canada Program with Abstracts, v. 28, unpaginated.
- Housen, B.A., Fawcett, T.C.\*, Gregoire, P.\*, 2003, Paleomagnetism of Eocene Intrusive Rocks, Black Hills of South Dakota and Wyoming, Amer. Geophys. Union, v. 84.
- Housen, B.A., Goelzenleuchter, M.\*\*, Greisler, J.R. \*\*, Hall, T.M. \*\*, Springer, K. \*\*, 2003, Paleomagnetism of the North Cascades: Displacement and Deformation in Space and Time, GSA Abstracts with Program, v 34, n. 7, p A-306.
- Liner, N.C.\*, Housen, B.A., Paleomagnetism of the Upper Cretaceous Units of the Gold Beach Terrane, Southwest Coastal Oregon, Amer. Geophys. Union, v. 84.
- Montgomery, T.\*\*; Housen, B.A.; Petro, G.T.\*, 2003, Paleomagnetism of the Spetch Creek Pluton, revisited, Geological Association of Canada Program with Abstracts, v. 28, unpaginated.

## 2002

- Addis, K.L.\*, and Housen, B.A., 2002, Paleomagnetism of the Point Arena Terrane with Inclination Flattening Correction and Implications for Terrane Transport, GSA Abstracts with Program, v 34, n. 5, p A-103.
- Donohoo, L.L.\*, Housen, B.A., and Mustoe, G., 2002, CLAMP Analysis and Magnetostratigraphy of the Early Paleogene Chuckanut Formation of Northwestern Washington, GSA Abstracts with Program, v 34, n. 5, p A-9.
- Hayman, N.W., Housen, B., and Cladouhos, T., 2002, Anisotropic magnetic susceptibility of fault rocks from Death Valley, CA: Comparison with shape preferred orientation, and implications for kinematic models of brittle foliation development, Amer. Geophys. Union, v. 83.
- Housen, B.A., Beck, M.E., Jr., and Burmester, R.F., 2002, Paleomagnetism of the Mt. Stuart Batholith Revisited Again: What Has Been Learned in the 30 Years After Beck and Noson 1972?, Amer. Geophys. Union, v. 83.
- Housen, B.A., and Dorsey, R.J., 2002, Tectonic Significance of Paleomagnetic Results from the Ochoco and Hornbrook Basins, Oregon, GSA Abstracts with Program, v 34, n. 5, p A-103.
- Housen, B.A., Fawcett, T., and Petro, G.\*, 2002, **(invited)** Combined paleomagnetic and magnetic anisotropy analyses of plutons: Towards placing fabric data within a tectonic framework Geol. Soc. Amer., Annual Meeting, abstracts with Programs, v.38.
- Hults, C.K.\*, and Housen, B.A., 2002, Paleomagnetism of the Jura-Cretaceous Kyuquot Group, Vancouver Island, British Columbia, GSA Abstracts with Program, v 34, n. 5, p A-103.
- Kilanowski, E.M.\*, and Housen, B.A., 2002, The APWP for Jurassic North America: A Contribution from the Black Hills of Wyoming and South Dakota, GSA Abstracts with Program, v 34, n. 5, p A-44.
- Petro, G. T.\*, and Housen, B.A., 2002, Tectonic Significance of Paleomagnetism of the Eocene Golden Horn Batholith, GSA Abstracts with Program, v 34, n. 5, p A-96.

Petro, G.T.\*, and Housen, B.A., 2002, Improved isolation of high-temperature paleomagnetic components by combined low-temperature and thermal demagnetization for plutonic rocks with multicomponent magnetization, *Amer. Geophys. Union*, v. 83.

#### 2001

Housen, B.A., and Dorsey, R.J., 2001, Paleomagnetism and Tectonic Significance of Cretaceous Sedimentary Rocks in the Mitchell Inlier, Blue Mountains, Oregon, *EOS Transactions, Amer. Geophys. Union.*, v. 82

#### 2000

Beck, M.E., Jr., and Housen, B.A., 2000, Absolute motion of North America During the Mesozoic from Paleomagnetic Data: Implications for Cordilleran Tectonics, *Geol. Soc. Amer., Annual Meeting, abstracts with Programs*, v.36, p. A169.

Dean, P.A.\*, and Housen, B.A., 2000, Paleogeography of the Mesozoic Spieden Group, San Juan Islands, Washington, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, p. A-107.

Fawcett, T.C.\*, and Housen, B.A., 2000, Emplacement mechanisms for the Cooper Mountain pluton, North Cascade mountains, Washington, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, no. 6, p. A-13.

Fawcett, T.C.\*, and Housen, B.A., 2000, Tectonic significance of fabrics in the Cooper Mountain pluton, North Cascade mountains, Washington, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, p. A-247.

Gregoire, P.\*, and Housen, B.A., 2000, Jurassic Apparent polar wander path for North America, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, no. 6, p. A-15.

Gregoire, P.\*, and Housen, B.A., 2000, In search of the Late Jurassic J-2 Cusp, *EOS Transactions, Amer. Geophys. Union.*, v. 81, p. F362.

Housen, B.A., Beck, M.E., and Tikoff, B., 2000 (**invited**), The Terranes are Far-travelled and There are Faults: Tectonic Significance of Paleomagnetic Results from "Baja-BC", *Geol. Soc. Amer., Annual Meeting, abstracts with Programs*, v.36, p. A245.

Housen, B.A., and Dean, P.A.\*, 2000, Magnetic fabrics and paleomagnetism of two active decollements, *EOS Transactions, Amer. Geophys. Union.*, v. 81, p. F370.

Housen, B.A., and Dorsey, R.J., 2000, Tectonic significance of Cretaceous sediments in the Ochoco basin, Oregon, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, no. 6, p. A-20.

Hults, C.K.\*, and Housen, B.A., 2000, Low temperature chemical remagnetization of the Haro Formation, San Juan Islands, Washington, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, no. 6, p. A-20.

Hults, C.K.\*, and Housen, B.A., 2000, Preliminary paleomagnetic results of the Jura-Cretaceous Kyuquot Group, Vancouver Island, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, p. A-169.

Kilanowski, E.M.\*, Beck, M.E., and Housen, B.A., 2000, The apparent polar wander path for Jurassic North America: A fresh look, *Geol. Soc. Amer., Abstracts with Programs*, v. 36, no. 6, p. A-22.

#### 1999

Housen, B., 1999, Paleomagnetism and sediment provenance of clastic sediment units: Possible records of docking and transport for Cordilleran terranes, *Geol. Soc. Amer., Penrose Conference abstracts and guidebook*, p. 75-76.

Housen, B., 1999, Inverse AMS fabrics from sediment core tops: Disturbed, alive, or unlocked? *Eos, Transactions, American Geophysical Union*, v. 80, Suppl., p.F306

#### 1998

Housen, B.A., 1998 (**invited**), Magnetic minerals, they are a changing, *Eos, Transactions, American Geophysical Union*, v. 79, Suppl., p.73

Housen, B.A., Moskowitz, B.M., 1998, Evaluating magnetofossil lock-in behavior using magnetic fabrics and low-temperature remanences, *Eos, Transactions, American Geophysical Union*, v. 79, Suppl., p.69

Housen, B., Shriver, T.\*\*, Knowles, A.\*, Burgess, M.\*\*, Chase, M.\*\*, Fawcett, T.\*, Hults, C.\*\*, Kenshalo, S.\*\*, 1998, Transport magnetostratigraphy: Preliminary results from the



Cretaceous Nanaimo Group, *Eos, Transactions, American Geophysical Union*, v. 79, Suppl., p.73.

#### 1997

Housen, B., 1997, Magnetic fabrics from active accretionary prisms, *Eos, Transactions, American Geophysical Union*, v. 78, Suppl., p.707.

#### 1996

Housen, B.A. 1996, Inverse magnetic fabrics as possible indicators of bacterial magnetite, *Eos, Transactions, American Geophysical Union*, v. 77, n. 17 Suppl., p. 83.

Musgrave, R.J.; Housen, B.A., 1996, Rock-magnetic signature of methane migration and hydrate formation in marine sediments, *Eos, Transactions, American Geophysical Union*, v. 77, n. 46 Suppl., p. 162.

Musgrave, R.J.; Housen, B.A., 1996, Rock-magnetic signature of gas hydrates in accretionary prism sediments, *Abstracts - Geological Society of Australia*, v. 41, p. 310.

Zhao, X.; Housen, B.; Solheid, P., 1996, Magnetic property variations in Leg 158 cores and their relation to alteration of the TAG mound *Eos, Transactions, American Geophysical Union*, v. 77, n. 46 Suppl., p. 764.

#### 1995

Housen, B.A.; Moskowitz, B.M., 1995, Low temperature behavior of pyrrhotite in marine sediments, *International Union of Geodesy and Geophysics, General Assembly*, v. 21 Week B, p. 93.

Housen, B.A.; Tobin, H.J.; Labaume, P.; Leitch, E.C.; Maltman, A.J. 1995, Strain decoupling across the Barbados accretionary prism decollement indicated by anisotropy of magnetic susceptibility, *International Union of Geodesy and Geophysics, General Assembly*, v. 21 Week B, p. 173.

Solheid, P. A.; Banerjee, S. K.; Housen, B.; Richter, C.; Valet, J. P., 1995, High resolution Quaternary climate change record from rock magnetic study of western Equatorial Atlantic sediments, *Eos, Transactions, American Geophysical Union*, v. 76, n. 46 Suppl., p. 161.

#### 1994

Housen, B.A.; Labaume, P.; Leitch, E.C.; Maltman, A.J.; Tobin, H.J., 1994, Strain decoupling across the Barbados accretionary prism decollement indicated by anisotropy of magnetic susceptibility, *Eos, Transactions, American Geophysical Union*, v. 75, n. 44 Suppl., p. 587.

Housen, B.A.; van der Pluijm, B.A., 1994, Quantification of deformation fabrics in the Cascadia accretionary prism using magnetic anisotropy and X-ray texture goniometry, *Abstracts with Programs - Geological Society of America*, v. 26, n. 7, p. 458.

Knudsen, G.\*\*; Housen, B. A.; van der Pluijm, B. A.; Musgrave, R.J.; Sato, T., 1994, Inclination-shallowing of natural remanence and magnetic anisotropy (AMS and ARMA) in clastic marine sediments (ODP Leg 146, Site 888), *Eos, Transactions, American Geophysical Union*, v. 75, n. 16 Suppl., p. 124.

Underwood, M. B.; Meyer, A.; Jurado, M.; Fisher, A.; Shipley, T.; Ogawa, Y.; Blum, P.; Ashi, J.; Brueckmann, W.; Filice, F.; Goldberg, D.; Henry, P.; Housen, B.; Kastner, M.; Labaume, P.; Laier, T.; Leitch, E.; Maltman, A.; Moore, G.; Moore, J. C.; Peacock, S.; Rabaute, A.; Steiger, T.; Tobin, H.; Xu, Y.; Yin, H.; Zheng, Y.; Zwart, G., 1994, Lithostratigraphic influences on the hydrology of the northern Barbados accretionary prism, ODP Leg 156, *Eos, Transactions, American Geophysical Union*, v. 75, n. 44 Suppl., p. 587.

#### 1992

Housen, B.A.; van der Pluijm, B.A.; Van der Voo, R., 1992, The effects of magnetite dissolution/new-growth on remanence anisotropy and paleomagnetism of the Martinsburg Formation, *Eos, Transactions, American Geophysical Union*, v. 73, n. 14 Suppl., p. 100.

Richter, C.; van der Pluijm, B.A.; Housen, B.A., 1992, Numerical models, synthetic samples and the quantification of magmatic fabrics, *Eos, Transactions, American Geophysical Union*, v. 73, n. 14 Suppl., p. 100.

#### 1991

Housen, B.A.; Richter, C.; van der Pluijm, B.A., 1991, Finite strain modeling of magnetic anisotropy results from an anorthosite ductile shear zone, *Eos, Transactions, American Geophysical Union*, v. 72, n. 17, p. 98.

Richter, C.; van der Pluijm, B.A.; Housen, B.A., 1991, The quantification of rock fabrics using magnetic anisotropy and March analysis, Abstracts with Programs - Geological Society of America, v. 23, n. 5, p. 471.

**1990**

Antonellini, M. A.; Cambray, F. W.; Housen, B.A.; van der Pluijm, B.A., 1990, Magma flow emplacement direction in the Midcontinent rift system intrusives using shear strain indicators, and anisotropy of magnetic and anhysteretic susceptibility, Eos, Transactions, American Geophysical Union, v. 71, n. 43, p. 1288.

**1989**

Housen, B.A.; van der Pluijm, B.A., 1989, Magnetic fabrics and strain; results from a shale-to-slate transition, Lehigh Gap, Pennsylvania, Abstracts with Programs - Geological Society of America, v. 21, n. 6, p. 223.

Housen, B.A.; van der Pluijm, B.A.; Lombard, A.D.; Van der Voo, R., 1989, AMS and AAS of a shale-to-slate transition in the Martinsburg Formation, Lehigh water gap, Pennsylvania, Eos, Transactions, American Geophysical Union, v. 70, n. 15, p. 317-318.