

Appendix 4.
Faculty Resumes

WILLIAM I ROSE

Professor, Department of Geological Engineering and Sciences
Michigan Technological University
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PROFESSIONAL PREPARATION:

Ph.D. in Geology, **Dartmouth College**, 1970;
A.B. in Geography, Geology, **Dartmouth College**, 1966.

APPOINTMENTS:

9/79-present: Professor of Petrology, Michigan Technological University, Houghton.
12/99-6/01: Director Michigan Technological University Remote Sensing Institute.
6/90- 6/ 98 Department Chair, (planned new building; hired 8 new faculty); 9/74-9/79: Associate Professor of Petrology, 9/70-9/74; Assistant Professor of Petrology.
1/99-12/99: Visiting Leverhulme Fellow, Dept of Earth Sciences, University Of Bristol, UK.
8/85-6/86: Visiting Scientist, Los Alamos National Laboratory.
1/81-present: Geochemist (W.A.E. basis), USGS, Cascade Volcano Observatory , Vancouver, WA; Alaska Volcano Observatory, Anchorage; VDAP.
8/77-8/78: Senior Visiting Scientist, Upper Atmosphere Group, National Center for Atmospheric Research, Boulder, CO.
8/77-8/78: Visiting Scientist, Branch of Isotope Geology, USGS , Denver, CO.

RELATED PUBLICATIONS

Rose, W. I., D. J. Delene, D. J. Schneider, G. J. S. Bluth, A. J. Krueger, I. Sprod, C. McKee, H. L. Davies and G. G. J. Ernst, 1995, **Ice in the 1994 Rabaul eruption cloud: implications for volcano hazard and atmospheric effects**, *Nature*, 375: 477-479.

Rose, W. I., J J Bommer, D L Lopez, M J Carr and J J Major (eds), 2004, **Volcanic Hazards in El Salvador**, GSA Special Paper 375, 478pp.

Rose W I, G A Millard, T A Mather, D E Hunton, B Anderson, C Oppenheimer, B F Thornton, T M Gerlach, A A Viggiano, Y Kondo, T M Miller and J O Ballenthin, 2006, **The atmospheric chemistry of a 33-34 hour old volcanic cloud from Hekla Volcano (Iceland): insights from direct sampling and the application of chemical box modeling**, *J Geophys Res Atmospheres*, 111, D 20206, doi 10.1029/2005JD006872.

Rose, W I, S Self, P J Murrow, G G J Ernst C Bonadonna and A J Durant, 2007, **Nature and significance of small volume fall deposits at composite volcanoes: Insights from the October 14, 1974 Fuego eruption, Guatemala**, *Bull Volcanol*, in press.

Durant, A J, R A Shaw and W I Rose, 2007, **Ice nucleation and overseeding of ice in volcanic clouds**, *J Geophys Res*, in press.

SYNERGISTIC ACTIVITIES

1. Since 1970: Efforts to help build infrastructure within volcanic hazards efforts in developing countries, funded by NSF International Programs and OFDA/USGS/VDAP grants: **Guatemala**--Decade Volcano Workshop 1993; Collaborative hazards work 1999-2004. **Ecuador**: Cospec training, 1989; Lahars work, 2002. **El Salvador**: Synergistic efforts at post war science contacts; 1996-2004; Special GSA Publication 2004. **Mexico**: PhD student training, 1995-98; Collaborative visits from Hugo Delgado, 2002-4. **Chile**: initial research collaborative visit, 1989. **Argentina**: Initial visit 2002; field studies 2003. Several field projects in Guatemala and El Salvador funded by USGS/OFDA. Support for two Central American students via USGS/VDAP (CAMI). **Pacific Latin America**: 2005-2011 Peace Corps PIRE-OISE funding for Remote Sensing applied to Hazard Mitigation

2. Since 1980: **Educational efforts shared with many other campuses**: Video based educational efforts in Optical Mineralogy, 1982; Volcanic Rock Textures, 1985; and video field trips: 1987-1993; Volcanic Rocks and their vent areas, Industry Short Courses (field trips and lectures); 1976-1985; Graduate Student field trip efforts, 1997 (Western Mexico and IAVCEI meeting); NSF funded International Travel Grant to IAVCEI Bali meeting, and associated Hawaii and Pinatubo field trips, July 2000; NSF Int Travel Grant for students to attend IAVCEI meeting in Chile, 2004. Special session exploring graduate volcanology educational efforts, AGU 2002. 2005-2009: **FIPSE-NAFTA 6 University Consortium in Earth Hazards (EHaz)**, funded by Dept of Education.

3. Since 1986: Development of volcanic cloud detection algorithms for meteorological satellite detectors, and communication about the use of these for hazard mitigation—continual outreach to advanced users from regional Volcanic Ash Aviation Centers; extensive webbased communications effort; **International Volcanic Cloud Remote Sensing Workshops**, 2001, 2003, Managua 2004, Costa Rica, 2007; South American Workshops, March 2002, Nov 2004.

4. Since 1992: Development of Michigan Tech Remote Sensing Institute. Co-organizer and Interim Director of an institute with 35 faculty members from nine different MTU departments, Development of shared lab facilities, success with equipment funding as a NASA center of excellence, development of an interdisciplinary minor program in remote sensing; many interdisciplinary seminar series and several new interdisciplinary classes.

5. 2004: New Peace Corps Masters International Program, Mitigation of Geological Natural Hazards. 1992-2001: NASA EOS IDS Science group member, Volcano Remote Sensing.

RECENT COLLABORATORS EXTERNAL TO MICHIGAN TECH (2000-2005)

Stephen Self (Open University); Andrew Harris (University of Hawaii); Luke Flynn (University of Hawaii); Hans Graf (Cambridge Univ); Fred Prata (CSIRO, Australia); Arlin Krueger (UMBC); Vincent Realmuto (NASA/JPL); Frank Marzano (University "La Sapienza" of Rome) ; Costanza Bonadonna (Univ So Florida); Christiane Textor (Max Planck Inst Meteorology); Alain Bernard (University of Bruxelles);

THESIS ADVISEES AND POSTDOCTORAL SCHOLARS SPONSORED, LAST 5 YEARS

Tianxu Yu, STC/NOAA Washington, DC

Song Guo, Canadian Centre for Remote Sensing, Montreal

Sebastien Dartevelle, Los Alamos National Lab

Demetrio Escobar, Volcanologist, SNET, El Salvador

Yingxin Gu, SAIC/USGS EROS Data Center, Sioux Falls, SD

I Matthew Watson, Bristol University UK

Matthew Patrick (current Post Doc) *Owen P Mills, Adam Durant, Janelle Byman, Kelly Durst,*

John Lyons, Ellen Engberg, Hans Lechner, Adam Blankenbicker, Jemile Erdem, Karinne

Knutsen, Ingrid Fedde (current graduate students)

GRADUATE STUDENTS SUPERVISED: 39 M.S. and 14 Ph.D.

GRADUATE ADVISOR: Richard E Stoiber, Dartmouth College, deceased.

BLAIR ORR

School of Forest Resources and Environmental Science
Michigan Technological University

Professional Preparation

B.Sc. Double major: Forestry, Soil Science. University of Wisconsin – Madison, 1977.
M.A. Economics, University of Wisconsin-Madison. 1986.
PhD Forestry, University of Wisconsin-Madison, 1988. Major field: Forest Economics

Appointments

2008 – present: Director of Peace Corps Programs. Michigan Technological University
2006 – present: Professor of Forestry, Michigan Technological University
1998 – 2006: Associate Professor of Forestry. Michigan Technological University
1992 – 2006: Assistant Professor of Forestry. Michigan Technological University
1988 – 1992: Assistant Professor of Forestry, The University of the South
1982 – 1983: Project Forester and Field Forester, Interchurch Response, Luuq, Somalia.
1981: Utilization Officer, Lesotho Woodlot Project, Leribe, Lesotho. Peace Corps
Volunteer.
1978 – 1980: District Forest Officer, Thaba-Tseka District, Thaba-Tseka, Lesotho. Peace
Corps Volunteer.

Five Relevant Publications

Cohen, M.E., J. B. Pickens, J. Cardenas Castillo, and B. Orr. 2005. Ecological suitability and tree seedling survival in the Bolivian Altiplano. *Ecologia Austral* **15**:207-215.
Jones, Michael J., and B. Orr. 2007. Resin Tapping and Forest Cooperatives in Honduras. *J. of Sustainable Forestry* **22**(3/4):135-169.
Slatton, R., and B. Orr. 2008. A Smorgasbord of Agricultural Technologies: Farmers' Choices and Lessons from Chalite, Panama. *Development in Practice*. **18**(1):125-130.
Satterlee, B.M., M. Yemefack, and B.D. Orr. 2009. Maize yield and soil property responses to *Entada abyssinica* (Steud. ex A. Rich.) cuttings in the Adamawa Lowlands, Cameroon. *J. of Food, Agriculture and Environment* **7**(1):192-196.
Paulete, F.E., B. Orr. Forthcoming. Combining Technical Competence and Stakeholder Impact in Environmental Education: The Gambia All Schools Nursery Competition. *Applied Environmental Education and Communication*.

Five Other Publications

Orr, B. 2007. Cross-Country Skiing USSA Points as a Predictor of Future Performance among Junior Skiers. *The Sports Journal*. Online. Vol 10, No. 4.
<http://www.thesportjournal.org/2007Journal/Vol10-No4/03orr.asp>
Orr, B., C.E. Coole, and G.M. Sowards. 2000. Costs of Demonstration Projects: A Case Study of Timber Bridge Construction. *Journal of Transportation Engineering* **126**(3):279-281.
Orr, B., J.R. Mihelcic, and T. Van Dam. 2003. Engineering help while getting a degree. *IEEE Potentials* **22**(2):32-34.

Martinez, I., J.B. Pickens, D.L. Richter, and B. Orr. 2003. Eutypella Canker Clustering and Volume Loss in the Western Upper Peninsula of Michigan. *Northern J. of Applied Forestry*. 20(4):186-187.

Orr B., and J.B. Pickens. 2003. Public Access to Lake Superior and Attribute Values of Proximate Non-Shoreline Property. *J. of Great Lakes Research* 29(4):616-629.

Synergistic Activities

Peace Corps Master's International Program
EU-US Atlantis Program
TIES – FIPSE and SustR programs in Mexico; Veracruz Study Abroad Program
World Forestry Committee of the Society of American Foresters
International Society of Tropical Foresters

Courses and Workshops:

Trees in Agricultural Systems; Overseas Research; Graduate Tropical Forestry; International Forestry Practicum; International Forestry Seminar; Community Planning and Analysis, Master's Graduate Seminar; Doctoral Graduate Seminar

Collaborators and Affiliations

Dr. James B. Pickens, Michigan Technological University
Dr. Alex S. Mayer, Michigan Technological University
Dr. Willem Beets, retired
Dr. Karlyn Eckman, University of Minnesota
Dr. James Mihelcic, U. of South Florida
Dr. Kathleen Halvorsen, Michigan Technological University
Dr. Miquel Armando Ramirez, Universidad Veracruzana
Dr. Martin Yemefack, Institute of Agricultural Research for Development, Cameroon
J. Cardenas Castillo, Oruru Technical School, Bolivia
Dr. Thomas Van Dam, Michigan Technological University

Graduate Advisor: Dr. J. Buongiorno, U. of Wisconsin – Madison

Graduate Students (M.S.)

Glade M. Sowards, Don Czarniewski, Andrew Brower, Daniel Bergert, Jeffrey Ploetz, Kerry L. Ploetz, Katrina M. Schnobrich, Lynne Kraskouskas, Joshua D. Amend, William Heist, Alec Jarvis, Kristen M. Rahn, Wendy Owens, Kristina Owens, Matthew P. Judd, Frank Aragona, C. Michael Downs, Andrea M. Durham, Sara D. Keinath, Margaret Shao, Michael Jones, Susan G. Fox, Matthew Cohen, Kelley Bassett Gundale, Kara M. Filius, Jennifer L. Papillo, Adrienne Blausser, Marge Ely, Greer Gurganus, Kathryn Lincoln, Russell P. Slatton, Daniella K. Zanin, Jason Anderson, David R. Critton, William A. Hart, Francesca Paulete, Olaf Zerbock, Amber Kenny, Casey Rosengarden, Bryan Roosien, Tasha Hernandez, Gisselle Mejia, Noah Daniels, Jason Rhoades, Patricia Butler, Kristina Denison, Jonathan D. Carlson, Callie M. Bertsch, Michelle Cisz, Ashley Hippler, Kristin Hettich, Evan A. Anderson, Joshua Mann, Paige Cox, Kyle Earnshaw, Paul D. Francis, Brian Pattullo, Margaret Fox

Biographical Sketch
Alex S. Mayer
Department of Civil & Environmental Engineering
Michigan Technological University

Professional Preparation

Brown University, Sc.B. Civil/Environmental Engineering, 1981
University of North Carolina at Chapel Hill, M.S. Environmental Engineering, 1987
University of North Carolina at Chapel Hill, Ph.D. Environmental Engineering, 1992

Appointments

September 2005-present: Director, Michigan Technological University Center for Water & Society
September 2002-present: Professor
September 1998-August 2002: Associate Professor
March 1992-August 1998: Assistant Professor
Department of Geological Engineering and Sciences
Michigan Technological University, Houghton, MI
September 2000-May 2001: Visiting Professor
Department of Civil Engineering and Geosciences
Technological University of Delft, Netherlands
August 1995-November 1995: Visiting Professor
Department of Chemical Engineering
University of Sonora
1981-1985: Civil Engineer
Water Resources Projects Section, Planning Division
East Bay Municipal Utility District, Oakland, CA

Five Relevant Publications

Robles, A., Halvorsen, K.E., and Mayer, A.S., "Waterborne disease-related risk perceptions in the Sonora River Basin, Mexico," *Risk Analysis*, in review, 2009.
Mayer, A.S. and A. Muñoz Hernandez, "Integrated Water Resources Optimization Models: An Assessment of a Multidisciplinary Tool for Sustainable Water Resources Management Strategies," *Geography Compass*, in press, 2009.
Mayer, A.S., Sandman, T., and M. Breidenbach, "The Effect of Flow Regime on Physical Non-Equilibrium Transport in Unsaturated Porous Media," *Vadose Zone Journal*, 7, 981–991, 2008.
Robles, A., Mayer, A.S., and M.H. Durfee, "Community Partnered Projects: A Case Study of a Collaborative Effort to Improve Sanitation in a Marginalized Community in Northwest Mexico," *Environment, Development and Sustainability*, DOI 10.1007/s10668-007-9104-5, 2007.
Ilija, M., Mayer, A.S., and B.D. Solomon, "Economic Valuation of Environmental Services Sustained by Water Flows in the Yaqui River Delta," *Ecological Economics*, DOI 10.1016/j.ecolecon.2007.06.006, 2007.

Five Other Publications

Bau, D. and A.S. Mayer, "Optimal Design of Pump-and-Treat Systems under Uncertain Hydraulic Conductivity and Plume Distribution," *Journal of Contaminant Hydrology*, 100, 30-46 2008.
Mayer, A.S., May, W., Lukkarila, C. and J. Diehl. "Estimation of Fault Zone Conductance by Calibration of a Regional Groundwater Flow Model – Desert Hot Springs, California," *Hydrogeology Journal*, DOI 10.1007/s10040-007-0158-0, 2007.
Mayer, A.S. and K.L. Endres, "Simultaneous Optimization of Contaminant Source and Plume Remediation," *Journal of Contaminant Hydrology*, DOI 10.1016/j.jconhyd.2006.11.009, 2007.
Bau, D. and A.S. Mayer, "Data-worth Analysis for Multi-Objective Optimal Design of Pump-and-Treat Remediation Systems," *Advances in Water Resources*, DOI 10.1016/j.advwatres.2007.02.008, 2007.
Bau, D. and A.S. Mayer, "Stochastic Management of Pump-and-Treat Strategies Using Surrogate Functions," *Advances in Water Resources*, 29, 1901–1917, 2006.

Synergistic Activities

AQUA3, ExCIT, SustR, and TIES Programs in Water Resources Management: managed projects, recruited and advised graduate and undergraduate students from Mexico, U.S. and Canada, developed curriculum, developed and led field trips dealing with Mexican water resources issues, working with engineers, economists, sociologists, etc., has led to several collaborative research and education initiatives.

Textbook on groundwater contamination: co-edited and co-authored with engineers, geologists, and soil scientists, book accessible to university professors and students and practitioners, funded by Fulbright Scholarship.

Rio Yaqui basin modeling project: principal investigator for effort to develop integrated hydrologic-economic-institutional model, involves working with economists, policy-makers, government agencies.

Michigan Tech Center for Water and Society: Director and co-founder of university-wide effort to integrate research, education and outreach efforts at Michigan Tech, involves engineering, forestry and environmental sciences, biology, chemistry, humanities and social science departments; state and federal agencies, non-governmental organizations, etc.

Watershed management plan for Huron Creek: lead investigator on multi-disciplinary group of faculty and students and community advisory group developing watershed management plan for Huron Creek, a small, highly-impacted creek that empties into Lake Superior. Development of plan has included local K-12 teacher and student involvement in gathering data, producing a community watershed interpretive program, and participation in a watershed advisory committee.

Michigan Environmental Education Curriculum Support (MEECS) program: Developed and authored several modules for middle school environmental curricula made available to all middle school science teachers in Michigan.

Courses, Workshops or Special Courses Taught During the Past Three Years

Undergraduate Courses: Geohydrology, Water & Society, Environmental Engineering Senior Design Project, Geological Engineering Senior Design Project

Graduate Courses: Mathematical Modeling of Earth Systems, Field Engineering for the Developing World

Workshops: Watershed Management Certificate Program (Sonora, Mexico)

Collaborators & Other Affiliations

Asbornsen, H., co-investigator, University of Iowa

Chadde, J., co-investigator, Center for Science, Mathematics and Environmental Outreach; Houghton, MI

Garcia Ruiz, J.L., co-investigator, U. Sonora, Hermosillo, Mexico

Gorman, H., co-investigator, Michigan Technological University, Houghton, Michigan

Hand, D., co-author, Michigan Technological University, Houghton, Michigan

Halvorsen, K., co-investigator, Michigan Technological University, Houghton, Michigan

Hassanizadeh, S.M., co-author, U. Utrecht, Utrecht, The Netherlands

Mihelcic, J., co-investigator, University of South Florida, Houghton, Michigan

Perez Lugo, co-investigator, University of Puerto Rico Mayagüez

Sivapalan, M., co-investigator, University of Illinois

Solomon, B., co-author, Michigan Technological University, Houghton, Michigan

Watkins, D., co-investigator, Michigan Technological University, Houghton, Michigan

Zhang, Q., co-investigator, Michigan Technological University, Houghton, Michigan

Zimmerman, J., co-investigator, Yale University

Graduate Advisor: Miller, C.T., U. North Carolina, Chapel Hill, NC

Recent STEM Graduate Dissertation/Thesis/Project Advisees

Bau, D., Ph.D. Environmental Engineering, 2006

Ballard, M., Ph.D. Environmental Engineering, in progress

Betz, K., M.S. Geological Engineering, 2006

Endres, K., Ph.D. Environmental Engineering, 2004

Fitzgerald, K., M.S. Geological Engineering, in progress

Kersten, L. M.S. Environmental Engineering, 2008

Munoz Hernandez, A., Ph.D. Environmental Engineering, 2009

Ollila Ojeda, M., M.S. Environmental Engineering, 2006

Robles Morua, A., Ph.D. Environmental Engineering, in progress

Rodriguez Ibarra, W., M.S. Environmental Engineering, 2005

Van Grinsen, M., M.S. Geology, in progress

Biographical Sketch for John S. Gierke, Ph.D., P.E.,

a. Professional Preparation

Michigan Technological University	Civil Engineering	BSCE 1984
Michigan Technological University	Civil Engineering	MSCE 1986
Michigan Technological University	Environmental Engineering	Ph.D. 1990

b. Appointments

Associate Professor - September 1996 to Present;

Michigan Technological University, Houghton, Michigan 49931-1295

Visiting Associate Professor - January 1999 through December 1999

University of Delaware, Newark, Delaware

Assistant Professor - July 1990 through August 1996

Michigan Technological University, Houghton, Michigan 49931-1295

Summer Research Faculty Visitor - June 1991 to August 1991

Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831.

c. Publications

(i) Five Relevant Publications

Bruning, J.N., J.S. Gierke, and A.L. Maclean, "Digital Processing and Data Compilation Approach for Using Remotely Sensed Imagery to Identify Geological Lineaments in Hard-Rock Terrains: An Application for Groundwater Exploration in Nicaragua," to be submitted to Photogrammetric Engineering & Remote Sensing, a full length paper appeared in the proceedings of: American Society of Photogrammetry and Remote Sensing, 2009 Annual Conference, March 9-13, 2009 Baltimore, Maryland, USA.. ASPRS is the publisher of PE&RS.

Gierke, J.S., "Manually Constructed and Operated Water Wells," Chapter 16 in Field Guide in Environmental Engineering for Development Workers: Water, Sanitation, Indoor Air, Mihelcic, J.R., E.A. Myre, L.M. Fry, B.D. Barkdoll (eds), American Society of Civil Engineers (ASCE) Press, Reston, VA, in press (scheduled publication May 2009).

Gross, E.L., J.S. Gierke, A. Komes, "Characterizing Seasonal Variability of Productivity in Rope Pump Wells Using Manual Pumping Tests," *Waterlines*, in review.

Huntzinger, D. N., M. J. Hutchins, J. S. Gierke, J. W. Sutherland, "Enabling Sustainable Thinking in Undergraduate Engineering Education," *International Journal of Engineering Education*, 23(2), 218-230, 2007.

Sherman, H. M., J. S. Gierke, C. P. Anderson, "Controls on Spatial Variability of Uranium in Sandstone Aquifers," *Ground Water Monitoring & Remediation*, 27(2), 106-118, 2007. doi:10.1111/j.1745-6592.2007.00142.x

(ii) Five Other Significant Publications

Bachmann LeFevre, N-J., D.W. Watkins, J.S. Gierke, and J. Brophy-Price, "Hydrologic Performance Monitoring of an Underdrained Low-Impact-Development Stormwater Management System," *Journal of Irrigation and Drainage Engineering*, in review.

Fuchs, V.J., J.S. Gierke, J.R. Mihelcic, "Hydraulic Model Comparison of Vertical Flow Regimes During Soil Clogging," *Water Practice (Special Issue on Watershed Management and Ecology)*, in review.

Heron, G., J.S. Gierke, B. Faulkner, S. Mravik, A.L. Wood, and C.G. Enfield, "Pulsed Air Sparging in Aquifers Contaminated with Dense Non-Aqueous Phase Liquids," *Ground Water Monitoring and Remediation*, 22(4), 73-82, 2002.

Huntzinger, D.N., J.S. Gierke, S.K. Kawatra, T.C. Eisele, and L.L. Sutter, "Carbon Dioxide Sequestration in Cement Kiln Dust through Mineral Carbonation," *Environ. Sci. Tech.*, in press.

Van Antwerp, D.J., R.W. Falta, and J.S. Gierke, "Numerical Simulation of Field Scale Contaminant Mass Transfer During Air Sparging," *Vadose Zone Journal*, 7(1), 294-304, 2007. doi:10.2136/vzj2006.0126

d. Synergistic Activities

(1) Principal investigator for the Michigan Tech Remote Sensing for Hazard Mitigation and Resource Protection in Pacific Latin America Project, National Science Foundation Partnerships for International Research and Education, where research is conducted on developing, applying, and testing remote sensing in geologic hazards and water resources in Costa Rica, Ecuador, El Salvador, Guatemala, Nicaragua, and Panama; (2) Graduate advisor for M.S. students in Michigan Tech's Masters International/Peace Corps programs in geohazards and in civil and environmental engineering where students conduct their masters research whilst serving in the U.S. Peace Corps; (3) Collaborating with faculty at the University of Puerto Rico—Mayaguez to involve their undergraduate geology students in remote sensing research in Pacific Latin America; (4) Organized a 1-day workshop on applications of remote sensing for characterizing groundwater aquifers in conjunction with the 9th Congress on Latin American Hydrogeology in Quito, Ecuador, July 7, 2008; (5) Research on hydrology of glacier melting in Alaska and invited for participating in a workshop (proposal pending) on the future impacts of climate change on glaciers and the ecology of the Andes.

e. Collaborators and Other Affiliations

(i) *Collaborators and Co-Editors*: Falta, Ronald W. (Clemson University), Imhoff, Paul (University of Delaware), McCray, John M. (Colorado School of Mines), Stewart, Bo (Praxis Environmental).
(ii) *Graduate Advisor*: Neil J. Hutzler, Michigan Technological University
(iii) *Thesis Advisor for (last five years denoted in bold)*: **Anderson, Cecilia P.** (ERM-West), ***Bachmann, Nancy-Jeanne** (Emmons & Olivier Resources, Inc), **Bruning, Jill N.** (searching for employment), Carpenter, Michael D. (consulting), Castor, Meaghan G. (consulting), Ebsch, Jeffery (Coleman Engineering), **El-Beshry, Manar, **Fish, Randy E.** (Peace Corps, serving in Tanzania), **Fader, Caleb** (Peace Corps, serving in Uganda), **Fuchs, Valerie J.** (Michigan Technological University), Gross, Essa L. (Michigan Technological University), Gu, Yingxin (McGill University), Harrison, Elizabeth (Los Alamos National Laboratory), **Hegemann, Robert** (Peace Corps, serving in Honduras), *Hein, Gretchen L. (Michigan Technological University), **Huntzinger, Deborah N.** (Post-doc, University of Michigan), ***Hutchins, Margot J.** (Michigan Technological University), **Jenson, Jeremy** (Peace Corps, serving in Benin), *Keating, Gordon (Los Alamos National Laboratory), Kremer, Theodore J. (Malcolm Pirnie, Inc.), **Kucharski, Matthew J.** (Peace Corps, serving in Philippines), Mackenzie, Heidi L. (Grenkowitz) (Ford Motor Company), Muraski, Jennifer L. (Montgomery Watson), ***Myre, Elizabeth A.** (Engineering development work in Haiti), *Quinnan, Joseph (ARCADIS), *Ritchie, Beatrice, Rios Sanchez, Miriam (Michigan Technological University), Sanders, Deborah L. (ERM-West), Sawall, R. Hardy (Geotrans), Schmunk, Steven W. (Marquette Intermediate School District), **Sherman, Heidi M.** (Consulting), **Shonsey, Cara W.** (Michigan Technological University), **Smith, Gwynneth** (Peace Corps, serving in Suriname), Stright, Lisa E. (Stanford University), Taege, Deborah A. (AMEC), ****VanAntwerp, Darby J.** (RMT), **Vincent, Ashlee K.** (Michigan Technological University), Wang, Congli (Consulting), *Wojick, Christopher L. (Michigan Technological University). *Served/serving as co-advisor, **Served as co-advisor, student at different university.

Advisor for 20 M.S. and 2 Ph.D. graduates, co-advisor for 3 M.S. and 2 Ph.D. graduates; currently advising 2 Ph.D. students and 10 M.S. students and co-advising 1 Ph.D. student.

Biographical Sketch: Andrew J. Storer

School of Forest Resources and Environmental Science
Michigan Technological University,
1400 Townsend Drive, Houghton, Michigan, 49931, USA
Telephone: (906) 487-3470, **Email:** storer@mtu.edu, **Fax:** (906) 487-2915

Professional Preparation

St. Anne's College, University of Oxford.	Pure and Applied Biology.	B.A. (Hons) 1986
St. Anne's College, University of Oxford.		M.A. 1993
Department of Zoology, University of Oxford.	Forest Entomology.	D.Phil. 1993
University of California, Berkeley	Forest Entomology & Pathology	Post Doc 1992-1997

Appointments

2005 – Present	Associate Professor, Forest Insect Ecology, School of Forest Resources and Environmental Science, Michigan Technological University
2007 – Present	Director, The Honors Institute, Michigan Technological University
2001 –2005	Assistant Professor, Forest Insect Ecology, School of Forest Resources and Environmental Science, Michigan Technological University
1998 - 2001	Assistant Research Entomologist, Division of Insect Biology, University of California, Berkeley.
1999 - 2001	Instructor, Department of Landscape Horticulture, Merritt College, Oakland.
1992 - 1997	Postdoctoral Researcher, Division of Insect Biology, University of California, Berkeley.
1986 - 1991	Research Student and Tutor, University of Oxford.
1988 - 1989	Wiener-Anspach Research Fellowship, University of Brussels, Belgium.
1984 - 1986	Forestry Consultant, Crichton-Maitland and Co., Hereford, England.

Publications (5 most closely related – from work in Africa or other locations outside the US)

Opuni-Frimpong E, DF Karnosky, AJ Storer and JR Cobbinah. 2008. Key roles of leaves, stockplant age, and auxin concentration in vegetative propagation of two African mahoganies: *Khaya anthotheca* Welw. and *Khaya ivorensis* A. Chev. *New Forests* 36: 115-123.

Opuni-Frimpong E, DF Karnosky, AJ Storer and JR Cobbinah. 2008. Silvicultural systems for plantation mahogany in Africa: Influences of canopy shade on tree growth and pest damage. *Forest Ecology and Management* 255: 328-333.

Opuni-Frimpong E, DF Karnosky, AJ Storer, EA Abeney and JR Cobbinah. 2008. Relative susceptibility of four species of African mahogany to the shoot borer *Hypsipyla robusta* (Lepidoptera: Pyralidae) in the moist semideciduous forest of Ghana. *Forest Ecology and Management* 255: 313-319.

Storer AJ, MF Jurgensen, AC Risch, J Delisle and MD Hyslop. 2008. The fate of an intentional introduction of *Formica lugubris* to North America from Europe. *Journal of Applied Entomology*. 132: 276-280.

Ichikawa, K, Y Hara, BP Henry, AJ Storer and K Takeuchi, 2007. Planting environment and growing condition of dogwood (*Cornus florida*) street trees in the 23 wards of Tokyo prefecture. *Journal of the Japanese Institute of Landscape Architecture* 70: 527-532.

Publications (5 other)

Erbilgin N, G Ritokova, TR Gordon, DL Wood and AJ Storer. 2008. The pine engraver beetles show temporal variation in their contamination with *Fusarium circinatum* in Monterey pine forest in California. *Plant Pathology* Doi: 10.1111/j.1365-3059.2008.01887.x.

Lilleskov EA, WJ Mattson, AJ Storer. 2008. Divergent biogeography of native and introduced soil macroinvertebrates in North America north of Mexico. *Diversity and Distributions* 14: 893–904.

Shields JM, CR Webster and AJ Storer. 2008. Short-term community-level response of arthropods to group selection with seed-tree retention in a northern hardwood forest. *Forest Ecology and Management*, 255: 129-139.

- Risch AC, MF Jurgensen, AJ Storer, MD Hyslop and M. Schutz. 2008. Abundance and distribution of organic mound-building ants of the *Formica rufa*-group in Yellowstone National Park. *Journal of Applied Entomology*. 132: 326-336.
- Marshall JM, AJ Storer, and B Leutscher. 2008. Comparative analysis of plant and ground dwelling arthropod communities in lacustrine dune areas with and without *Centaurea biebersteinii* (Asteraceae). *American Midland Naturalist* 159: 261-274

Synergistic Activities

- 1) Active research in forest health and educational programs in global technological leadership in Ghana.
- 2) Director of the Honors Institute at Michigan Technological University. This institute encourages undergraduates to develop research and other professional experience during their undergraduate career.
- 3) Grant Proposal Reviews: NSF Population and Evolutionary Processes, NSF Ecosystem Sciences, USDA Small Business Innovation Research (SBIR) program, NSF Ecology: Panelist, 2006, 2008
- 4) Member of the editorial board of the Journal of Pest Science (Springer). Subject editor for Forest Entomology
- 5) Manuscript reviews for journals including Journal of Chemical Ecology, Environmental Entomology, Forest Ecology and Management, Journal of Economic Entomology, Ecological Entomology, Ecological Applications, Journal of Applied Ecology, Pan-Pacific Entomologist.

Collaborators and other affiliations

a) Collaborators and coeditors

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b) Graduate and Postdoctoral Advisors

Graduate: Martin R. Speight, University of Oxford; David Wainhouse, Forest Research, England
 Postdoctoral: David L. Wood, UC Berkeley; Thomas R. Gordon, UC Davis

c) Thesis Advisor and Postgraduate Scholar Sponsor

Thesis Advisor to: Tara Bal (Michigan Technological University), Brian L. Beachy (deceased), Jessica A. Beachy (Michigan Technological University), Sarah Brodeur-Campbell (Michigan Technological University), Ryan DeSantis (University of Oklahoma), Michelle Freeman (Michigan Technological University), Elizabeth E. Graham (University of Illinois), Brian P. Henry (Washington DC), Jordan M. Marshall (Michigan Technological University), Emmanuel Opuni-Frimpong (Forest Research Institute of Ghana), Melissa Porter (Michigan Technological University), Bryan K. Roosien (Michigan Technological University), Justin M. Rosemier (Kentucky Wesleyan University).

Total advised: Graduate students: 13, Postdoctoral Scholars: 1