

Donna L. Witter

Kent State University, Department of Geology
221 McGilvrey Hall Kent OH 44242
Phone: (330) 672-7002 Fax: (330) 672-7949
Email: dwitter@kent.edu

Education:

Oregon State University, College of Oceanic and Atmospheric Sciences
Ph.D., Oceanography, 1995
Thesis: Unstable Jet Flow Along Zonal Ridge Topography
Advisor: Dr. Dudley B. Chelton
University of California at Santa Barbara
B.A. Geography, 1987
B.S., Physics, 1987

Professional Research Experience:

Assistant Professor, Member of the Graduate Faculty Kent State University, Department of Geology	2006-present
Senior Research Fellow, Member of Graduate Faculty Kent State University Department of Geology	2001-2006
Associate Research Scientist Lamont-Doherty Earth Observatory of Columbia University (L-DEO)	1998-2001
Storke-Doherty Lecturer, L-DEO	1999-present
Postdoctoral Research Fellow, L-DEO	1996-1998
Graduate Research Assistant, Physical Oceanography Oregon State University (OSU)	1988-1995
Visiting Graduate Student Colorado Center for Astrodynamics Research, University of Colorado	1987-1988
Summer Intern, Physical Oceanography, OSU	1986

Professional Teaching Experience:

"Oceanography" (GEOL 21080) – Taught most semesters, 2001-present
This undergraduate course emphasizes the interdisciplinary nature of oceanography by exposing the student to basic principals of geological, chemical, physical and biological oceanography. Relationships among these systems and interrelationships between oceans and human populations are emphasized. This course satisfies Kent State University's Liberal Education Requirement (LER) for non-majors. This lecture-based course incorporates learning technology through material presented in the course web site which is designed and maintained by D.Witter. Enrollment: 100-400 students per semester.

Professional Teaching Experience (cont):

“Scientific Method in Geology” (GEOL 4/5/72035) - Fall 2007, Fall 2008

Many sub-fields within modern geology and Earth science require quantitative analysis of large, complex, or multi-dimensional datasets. This course provides students with the skills and confidence needed to quantitatively analyze scientific data. A diverse array of analysis methods are studied and applied real world contexts.

“Inquiry-Based Earth System Science I” (GEOG 4/5/70195, GEOL 4/5/60095) - Fall 2005, Fall 2006

This graduate and advanced undergraduate-level course covers how the Earth "works" as a system, by considering geological, chemical, physical and biological processes and their interactions. Weekly class sessions explore scientific topics using a broad variety of inquiry-based teaching methodologies. Participation in a diverse array of collaborative group activities is a central element of the course, and includes work with physical models, maps and satellite imagery, “real-world” data, and internet-based resources.

“Inquiry-Based Earth System Science II” (GEOG 4/5/70195, GEOL 4/5/60095) - Spring 2006

This graduate and advanced undergraduate class emphasizes the presentation of Earth System Science concepts using inquiry-based approaches. Members of the class deepen their understanding of Earth System Science through the development of a variety of curricular materials, including plans for classroom presentations and activities, laboratory experiments and field excursions.

“Honors Oceanography” (GEOL 21080) - Spring 2004

This Honor-level version of GEOL 21080 was coordinated by D. Witter and involved a five-member teaching team. Each three-week section of the course focused on a current issue in oceanography. Focus issues were chosen to highlight scientific aspects of oceanography and the impact of oceans on society and other elements of the environment. Grading for the course emphasized synthesis and analysis of scientific material and critical thinking skills.

“Earth System Science Workshop for Teachers” (C&I 50093) - Summers 2006-2008

This professional development workshop enhanced understanding of the interconnected systems that comprise the Earth, with all activities in the workshop addressing Ohio Academic Content Standards, Benchmarks and Indicators for grades K-12. The specific goals of the workshop were to enhance understanding of Earth science concepts and their interactions with society, to convey effective methodologies for integrating Earth science information into the K-12 classroom, and to develop expertise in the use of laboratory, computer and field technologies to enhance K-12 Earth science education. This workshop was offered as part of the GK-12 program sponsored by the National Science Foundation, and was team-taught by GK-12 faculty and graduate fellows. D.Witter served as the lead instructor and workshop coordinator.

“Global Assessment and Monitoring Using Remote Sensing”, Columbia University Dept. of Earth and Environmental Sciences - Fall 2000

This upper-level undergraduate course covered ultraviolet, visible, infrared, and microwave remote sensing of the Earth and was team taught with Drs. Jeffrey Weissel and Chris Small. My component of the course covered remote sensing of the oceans, atmosphere, and cryosphere. Computer-based laboratory projects were developed in conjunction with the lecture-material.

Professional Teaching Experience (cont):

Guest Lecturer:

- Scientific Method, KSU GEOL 52035, “Multivariate Regression Techniques”
- Scientific Method, KSU GEOL 52035, “Scientific Visualization of Data”
- Invertebrate Paleontology, KSU GEOL 34061, “Thermohaline Circulation”
- Earth’s Environmental Systems, Columbia Univ. DEES W2100, “The Climate System”

Graduate Teaching Assistant, Time Series Analysis 1990
Oregon State University

Additional Experience and Skills:

- Oceanographic remote sensing (visible, infrared and microwave)
- Theoretical fluid dynamics, including dynamics of large-scale atmospheric and oceanic flows, instability theory, and eddy-mean flow interaction
- Computational fluid dynamics and numerical ocean modeling
- Time series analysis, spectral analysis, statistical methods
- Design and analysis of large data sets
- Visualization techniques, including Interactive Data Language (IDL) and Matlab
- Scientific programming
- ArcView GIS, ENVI (the ENvironment for Visualizing Images)
- Proficiency with Linux, Unix, VMS, and Windows operating systems
- Computer hardware and software purchasing
- Computer system security (Linux OS)

Professional Honors:

- Elected Physical Oceanography Ocean Sciences Secretary for the 2008-2010
American Geophysical Union (AGU). The Ocean Sciences section
of AGU was founded in 1920 as an original section of AGU and
currently has 6827 members, including over 2000 physical
oceanographers. With a total membership of over 50,000 in 11 sections
encompassing all areas of Earth science, AGU is one of the world’s largest
professional societies for Earth science researchers, teachers and students
- Outstanding Faculty Award Winner, Kent State University 2005
Student Disability Services and Ability Unlimited
- Distinguished Teacher Award Nominee, Kent State University 2002-2003
College of Arts and Sciences
- Storke-Doherty Lectureship. This is the most prestigious award 1999-2003
given to a junior-level researcher by the Columbia University
Department of Earth and Environmental Sciences. Selection is
based on outstanding scientific merit and potential.

Professional Honors (cont):

- NASA New Investigator Awardee. One of 17 proposals selected from a pool of 84. This program provides funding for scientists at early stages of their careers to pursue opportunities in Earth systems science research and teaching. 1999-2002
- William T. Pecora Award for Group Achievement, presented to the TOPEX/POSEIDON Science Working Team, 1998. This award is presented annually to recognize outstanding contributions by groups toward the understanding of the Earth by means of remote sensing. Award sponsored by the Department of the Interior and NASA. 1998
- Travel Award, Fourth International Conference on Southern Hemisphere Meteorology and Oceanography, American Meteorological Society 1993

Peer Reviewed Publications:

- A.Kaplan, M.A. Cane, D.Chen, **D.L. Witter**, and R.E. Cheney, Small-scale variability and model error in tropical Pacific sea level, *J. Geophys. Res.*, doi: 10.1029/2002JC001743, 2002.
- Witter, D.L.**, and A.L. Gordon, Interannual variability of South Atlantic circulation from four years of TOPEX/POSEIDON satellite altimeter observations, *J. Geophys. Res.*, **104**, 20927-20948, 1999.
- Chen, D., W.T. Liu, S.E. Zebiak, M.A. Cane, Y. Kushnir, and **D.L. Witter**, Sensitivity of the Tropical Pacific ocean simulation to the temporal and spatial resolution of wind forcing. *J. Geophys. Res.*, **104**, 11261-11272, 1999.
- Witter, D.L.**, and D.B. Chelton, Eddy-mean flow interaction in zonal oceanic jet flow along zonal ridge topography. *J. Phys. Oc.*, **28**, 2019-2039, 1998.
- Witter, D.L.**, and D.B. Chelton, A Geosat wind speed algorithm and a method for altimeter wind speed algorithm development. *J. Geophys. Res.*, **96**, 8853-8860, 1991.
- Witter, D.L.**, and D.B. Chelton, An apparent wave height dependence in the sea-state bias in Geosat altimeter range measurements. *J. Geophys. Res.*, **96**, 8861-8868, 1991.
- Chelton, D.B., M.G. Schlax, **D.L. Witter**, and J.G. Richman, Geosat altimeter observations of the surface circulation of the Southern Ocean. *J. Geophys. Res.*, **95**, 17877-17903, 1990.
- Witter, D.L.**, and D.B. Chelton, Temporal variability of sea state bias in Seasat altimeter height measurements. Proceedings of the WOCE/NASA Altimeter Algorithm Workshop, 1987.

Abstracts and Presentations:

- P.L. Weghorst, **D.L. Witter**, J.D. Ortiz and R.T. Heath, Monitoring Lake Erie Chlorophyll-a Concentration with MODIS: An Assessment of Two Algorithms, 51st Annual Conference on Great Lakes Research, International Association for Great Lakes Research, May 2008.
- D.L. Witter**, Connecting the Cape Basin with the South Atlantic Subtropical Gyre Using Fourteen Years of Satellite Altimetry: ASTTEX in the Broader Context, American Geophysical Union/American Society for Limnology and Oceanography Meeting, Mar. 2008

Abstracts and Presentations (cont):

- N. Wijekoon, J.D. Ortiz, and **D.L. Witter**, Spectral biomass algorithms vs principle component analysis in water quality mapping, Kent State Univ. Water Resources Research Institute Annual Conference, Apr. 2007.
- D.L. Witter**, Eddy kinematics during the Agulhas-South Atlantic Thermohaline Transport Experiment (ASTTEX): Sea level variability along the ASTTEX mooring line and beyond, American Geophysical Union, National Meeting, Dec. 2006.
- D.L. Witter**, J.D. Ortiz, S.C. Sheridan, M.J. Munro-Stasiuk, V.J. Myers, P.L. Schwenk, Y.A. Vlack, B.J. Arnold, B.L. Bosley, J. Chermansky, B.I. Hart, and W.T. Kline, Bringing Earth science to the K-12 classroom: Implementation and impacts of a five-day professional development workshop for teachers, American Geophysical Union, National Meeting, Dec. 2006.
- D.L. Witter**, J.D. Ortiz, M.J. Munro-Stasiuk, S. Sheridan, Dovetailing science content instruction and pedagogical training for successful GK-12 Fellow preparation, Geological Society of America, National Meeting, Oct. 2006.
- M.J. Munro-Stasiuk, **D.L. Witter**, J.D. Ortiz, and S.C. Sheridan, NEOGEO (Northeast Ohio Geoscience Education Outreach): Providing effective teacher professional development opportunities, Geological Society of America, National Meeting, Oct. 2006.
- D.L. Witter**, J.D. Ortiz, M. Munro-Stasiuk, S. Sheridan, Teaching Earth system science from an inquiry-based perspective, American Geological Society North Central Meeting, Apr. 2006.
- S. Palm, **D.L. Witter**, J.D. Ortiz, R. Heath and J. Budd, Ground-truthing satellite chlorophyll concentration Algorithms in Lake Erie, American Geological Society North Central Meeting, Apr. 2006.
- D. Feucht, J.D. Ortiz, M. Munro-Stasiuk, **D.L. Witter**, Partitioning of total suspended particulates in the Western Basin of Lake Erie and Sandusky Bay by laser particle size analysis, American Geological Society North Central Meeting, Apr. 2006.
- D.L. Witter**, Satellite altimeter observations of regional circulation during the Agulhas-South Atlantic Thermohaline Transport Experiment (ASTTEX), American Geophysical Union, Ocean Sciences Meeting, Feb. 2006.
- D.A. Byrne, **D.L. Witter**, D.R. Watts, N.R. Pettirew, C.M. Duncombe Rae, S. Baker-Yeboah, Inter-ocean heat and salt transports from the Agulhas Leakage: First results from ASTTEX, American Geophysical Union, Ocean Sciences Meeting, Feb. 2006.
- D.L. Witter**, Satellite altimetry during the ASTTEX deployment, ASTTEX Post-Cruise Workshop, Univ. of Maine, Oct. 2005.
- J. Ortiz, **D.L. Witter**, S. Reagan, and D. Feucht, Developing a Satellite-Derived Plant Pigment Estimation Method for Lake Erie, Water Resources Research Institute Annual Meeting, Apr. 2005.
- S. Reagan, **D.L. Witter**, J. Ortiz, and R. Heath, Ground-truthing SEAWiFS chlorophyll concentration algorithms in Lake Erie, Research Experience for Undergraduate Summer Program Presentations, Kent State University, Water Resources Research Institute, Jul. 2003.
- Byrne, D.A., D.R. Watts, N.R. Pettigrew, and **D.L. Witter**, The Agulhas-South Atlantic Thermohaline Transport Experiment: Measuring Inter-ocean Exchange, CLIVAR South Atlantic Observing System Workshop, Angra dos Reis, Brazil, Feb. 2003.
- D.L. Witter**, Energetics of unstable waves in the Antarctic Circumpolar Current, American Geophysical Union Meeting, San Francisco, CA, 2002.
- D.L. Witter**, D.A. Byrne, D.R. Watts, and N.R. Pettigrew, Combining Altimeter and In Situ Observations to Assess Thermohaline Transport Variability: The Agulhas-South Atlantic Thermohaline Transport Experiment (ASTTEX), TOPEX/POSEIDON/Jason-1 Science Working Team Meeting, New Orleans, LA, 2002.

Abstracts and Presentations (cont):

- D.L. Witter** and A.L. Gordon, Interannual variations of South Atlantic basin-scale circulation, Agulhas eddy propagation, and the regional wind field, TOPEX/POSEIDON/Jason-1 Science Working Team Meeting, Miami, FL, 2000.
- D.L. Witter**, The Earth 2 Class Project, TOPEX/POSEIDON/Jason-1 Science Working Team Meeting, Miami, FL, 2000.
- Passow, M.J., **D.L. Witter**, J. Ortiz, R. Newton, R. Lotti Bond, C. Small, and M. Visbeck, What can classroom teachers learn from research scientists? American Meteorological Society, Ninth Symposium on Education, Long Beach, CA, 2000.
- Witter, D.L.**, and A.L. Gordon, Low-frequency variations of South Atlantic circulation. American Geophysical Union Fall Meeting, San Francisco, CA, 1998.
- Kushnir, Y., **D.L. Witter**, and M. Cane, Assessing sampling errors in ship-based historical wind reconstructions using satellite scatterometer observations. American Geophysical Union Fall Meeting, San Francisco, CA, 1998.
- Witter, D.L.**, and Y. Kushnir, NSCAT observations of South Pacific wind variability as applied to reconstructions of low-frequency climate variations. QuikSCAT Pre-launch Workshop, Kohala, HI, 1998.
- Witter, D.L.**, and Kushnir, Y., NSCAT observations of Southeast Pacific wind variability as applied to reconstructions of low-frequency climate variations, American Geophysical Union Spring Meeting, Boston, MA, 1998.
- Witter, D.L.**, and A.L. Gordon, South Atlantic seasonal and interannual variability and its relation to interbasin exchange, TOPEX/POSEIDON Science Working Team Meeting, Biarritz, France, 1997.
- Witter, D.L.**, and A.L. Gordon, Inferring interannual to decadal variations in interbasin exchange from TOPEX/POSEIDON observations and atmospheric reanalyses, Monitoring the Oceans in the 2000s: An Integrated Approach, International Symposium, Biarritz, France, 1997.
- Witter, D.L.**, and A.L. Gordon, Seasonal and year-to-year variability of South Atlantic circulation from TOPEX/POSEIDON altimetry and its relation to wind forcing, International Association of Meteorology and Atmospheric Sciences and International Association for Physical Sciences of the Oceans Joint Assemblies, Melbourne, Australia, 1997.
- Witter, D.L.**, Effects of topography on eddy mixing in a zonal oceanic jet, American Geophysical Union Fall Meeting, San Francisco, CA, 1996.
- Witter, D.L.**, Unstable jet flow over zonal ridge topography, American Geophysical Union Fall Meeting, San Francisco, CA, 1994.
- Witter D.L.**, and D.B. Chelton, Effects of isolated topography on the spatial distribution of eddy energy: a quasigeostrophic modeling study. Fourth International Conference on Southern Hemisphere Meteorology and Oceanography. Hobart, Australia, 1993.
- Witter, D.L.**, and D.B. Chelton, Alternative parameterizations of the sea-state bias in Geosat altimeter height measurements, American Geophysical Union Ocean Sciences Meeting, New Orleans, LA, 1990.
- Chelton, D.B., M.G. Schlax, **D.L. Witter** and J.G. Richman, Geosat altimeter observations of the surface circulation of the Southern Ocean, American Geophysical Union Ocean Science Meeting, New Orleans, LA, 1990.
- Witter, D.L.**, D.B. Chelton, and M.G. Schlax, Satellite altimeter observations of the surface circulation in the Southern Ocean, The Oceanography Society Meeting, Monterey, CA, 1989.

Student Advising:

Major advisor for the following MS and PhD students:

- P. Weghorst, M.S., MODIS algorithm assessment and principal component analysis of Lake Erie chlorophyll concentration, KSU Dept. of Geology. Graduated, Aug, 2008.
- M. Razzano, M.S., Predicting algal production using satellite imagery for Akron water supply reservoirs in Northeastern Ohio, KSU Dept. of Geology. Anticipated graduation, 2009.
- K. Ali, Ph.D., joined the PhD in Applied Geology in Aug, 2007.

Major advisor for the following completed undergraduate student projects:

- S. Reagan, NSF -Research Experience for Undergraduates Lake Erie Watershed Project, Summer 2003.
- A. Ritter, KSU Honors College, Dolphins and Sound, Fall 2002.

Committee member for the following completed dissertations, theses and projects

- N. Wijekoon, Ph.D., 2007, Spatial and Temporal Variability of Surface Cover and Suspended Sediments in an Estuarine Ecosystem from Satellite Imagery and Field Observations, KSU Dept. of Geology.
- J. Senkbeil, Ph.D., 2007, The spatiotemporal role of irrigation on May-September daily precipitation in the Great Plains, 1950-2005, KSU Dept. of Geography.
- L. Yurco, Senior Honors Thesis, 2007, Glacial-interglacial grain size and color reflectance variations on the Northwind Ridge, Chukchi Sea: A regional study of Arctic climate in the late Pleistocene, KSU Dept. of Geology.
- M. Wilsbacher, M.S., 2006, Reconstructing past climate of the Soledad Basin from planktonic foraminiferal faunal assemblages, KSU Dept. of Geology.
- D. Cripe, Ph.D., 2005, Investigation of the relationship between the Pacific/North American (PNA) and North Atlantic Oscillation (NAO) teleconnections, and Great Lake-effect snowfall, KSU Dept. of Geography.
- J. Snyder, M.S., 2003, Improved interpolation of atmospheric trajectories from a global climate model for use in a local climate model, KSU Dept. of Geology, 2003.

Committee member for the following MS theses and dissertations in progress:

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| K. Amey, Ph.D. Applied Geology | J. Hark, M.S. Geology |
| K. Enzweiler, M.S. Geology | W. Kline, M.A. Geography |
| J. Fisher, M.S. Geology | A. Sutton, Ph.D. Computer Science |

Funded Proposals:

Project Title	Supporting Agency	Award Amount	Award Period
<i><u>Principal Investigator on the following funded proposals:</u></i>			
Agulhas-South Atlantic Thermohaline Transport Experiment (ASTTEX) Collaborative proposal with D. Byrne (Univ. Maine) and R. Watts (Univ. Rhode Island). Total award for the project, \$986,213.	NSF	\$125,613	3/01-2/07
Hydrodynamic Instabilities and Eddy-Mean Flow Interaction in the Southern Ocean Proposal funded as part of the NASA New Investigator Program.	NASA	\$296,882	7/99-6/03
<i><u>Co-Investigator on the following funded proposals:</u></i>			
Track 1, GK-12: Inquiry-based Approaches to Earth System Science (with M.Munro-Stasiuk, J.Ortiz, and S.Sheridan)	NSF	\$1,872,790	3/04-2/08
Track 1, GK-12: Supplemental Award (with M.Munro-Stasiuk, S.Sheridan and J.Ortiz)	NSF	\$16,801	awarded 6/2007
Track 1, GK-12: Supplemental Award (with M.Munro-Stasiuk, S.Sheridan and J.Ortiz)	NSF	\$24,685	awarded 5/2008
Calibration of Remotely-Sensed Suspended Sediment Concentration in the Western Basin of Lake Erie (Case II Waters), (with J.Ortiz and M.Munro-Stasiuk)	Ohio Sea Grant	\$3,872 (ship time)	2004
Application of Remote Sensing Data to Produce High Resolution Gridded Analyses of Historical Climate Observations (with M. Cane, Y. Kushnir)	NOAA	\$377,424	9/00-8/03
South Atlantic Seasonal and Interannual Variability and its Relation to Interbasin Exchange (with A. Gordon) Proposal funded as part of the TOPEX/POSEIDON Extended Mission.	NASA	\$325,000	1/97-12/00
<i><u>Contributor to the following funded proposals:</u></i>			
The Impact of Scatterometer Winds on Tropical Ocean Modeling (with D. Chen, M. Cane)	JPL	\$544,384	1/00-12/02
The Impact of NSCAT Winds on Tropical Ocean Modeling (with M. Cane, Y.Kushnir, S. Zebiak, D. Chen)	JPL		1/97-12/99

Professional Service:

Physical Oceanography Secretary, American Geophysical Union (elected) (see Professional Honors section for more details)	2008-2011
Convener, North Central GSA Meeting, "Biophysical Forcing of Water Quality in Large Lakes"	2006
Convener, AGU Ocean Sciences Meeting, "The Agulhas Current System: Sources, Sinks, Variability and Influence.	2006
Panelist, Mentoring Physical Oceanography Women to Increase Retention, An AGU Meeting Town Hall	2006
Panelist, National Science Foundation, Division of Ocean Sciences	2004
Project Evaluator, Lake Erie Ecosystem Watershed Project, Kent State University Research Experience for Undergraduates, Water Resources Research Institute	2003-2004
Editor, Ocean Dynamics	2001-2006
Earth Science Colloquium Coordinator, LDEO and DEES	1999-2000
Member, TOPEX/POSEIDON Science Working Team	1997-2000
Participating Scientist, Quik-SCAT Pre-launch Workshop, a meeting of the NSCAT Science Working Team	1998
English Language Editor, Journal of Geophysical Research Oceans. My work with this program helped deserving authors from the Former Soviet Union and France publish their work. This program benefits the scientific community at large by enabling journal editors to accept papers that otherwise would not have been suitable for publication.	1998-2002
Invited Speaker, NOAA/CORC Southern Ocean Ventilation Workshop: Assessing Southern Ocean Ventilation Power at Present and During the Last Glacial Maximum, LDEO. Seminar title: "Theoretical Constraints on the Migration of Fronts within the Antarctic Circumpolar Current."	1998
Reviewer for the following publications and proposal granting agencies: Journal of Fluid Mechanics Journal of Geophysical Research, Oceans Journal of Oceanic and Atmospheric Technology Journal of Physical Oceanography National Science Foundation, Physical Oceanography Program NASA proposals Cooperative Grants program of the U.S. Civilian Research and Development Foundation Ohio Supercomputer Center Kent State University Research Incentive Program	

Professional Development:

State of Ohio Environmental Protection Agency, Division of Surface Water Volunteer Monitoring (Credible Data) Program, Qualified Data Collector (Level 1, QDC number 208)	2008
Chautauqua Program – National Science Foundation Short Course for College Teachers, “Inquiry-Based Instruction: Enhance the Way You Teach and the Way Your Students Learn”, 3 days	2005
Chautauqua Program – National Science Foundation Short Course for College Teachers, “Introduction to Computer and Network Security”, 3 days	2002

Outreach:

Invited Speaker, Kent State University Stark Campus Geology Club, “Getting Your Feet Wet – A New View of the Oceans From Satellites”	2006
Observing Earth from Space, Ohioview Summer Teacher Institute, “Exploring the Oceans with Satellites”, (with J.Ortiz).	2005
Panelist, Women in Science Career Workshop (for high school girls), Cuyahoga Community College.	2002-2005
Judge, Association for Women in Science Award for Outstanding Geoscience Project, Ohio State Science Day, The Ohio State University.	2002
Science Team Member, Signals of Spring. Signals of Spring is a NASA-funded Earth science educational initiative for students of grades 5-12.	2001-2002
Speaker, Earth 2 Class Educators Workshop, Sponsored by the American Meteorological Society (AMS) Maury Project, Science Teachers Association of New York State (STANYS)/Westchester Section, and the National Association of Geoscience Teachers (NAGT)/Eastern Section, "From Old Technology to New: Assembling a 100-Year Record of Ocean Winds from Ships and Satellites."	2000
Speaker, STANYS/NAGT Educators Workshop, "Using Satellite Data to Study the Oceans."	1999
Speaker, STANYS/NAGT Educators Workshop. "Measuring Sea Level from Space."	1998
Speaker, Lamont-Doherty Earth Observatory Open House, "Oceanography from Space: What Do Earth-Orbiting Satellites Tell Us About Ocean Circulation?"	1996
Panelist, Symposium on Graduate Study in Science for Undergraduate Women, Oregon State University	1994
Oceanography Program Coordinator, Symposium on Graduate Study in Science for Undergraduate Women, Oregon State University	1992 1992
Volunteer, Science Careers Workshop for 7th and 8th Grade Girls, Oregon State University	

Kent State University Service:

Service to the University:

Stakeholder Group for updating the Liberal Education Requirements (LERs) in the University Academic Plan	Appointed 2008
Participant, Noel-Levitz focus group on graduate programs	2008
Participant, Noel-Levitz focus group on developing strategies for increasing student enrollment and retention	2008
Retention Working Group (convened by the Provost and Senior Vice President for Academic Affairs)	2007-present
Convenor (with Sally Kandel, Associate Vice President of Research, Planning, and Institutional Effectiveness) of focus groups charged with discussing efforts to transform freshman experiences in large-enrollment courses by investing in course redesign. These focus groups were attended by Chairs, Directors and faculty members from across the University.	2007
Week of Welcome, New Student Orientation, Volunteer	2005-present

Service to the College of Arts and Sciences:

College Curriculum Committee, Department of Geology Representative	2006-2008
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Service to the Department of Geology:

Faculty Advisory Committee (FAC)	Elected 2008
Geology Recruitment Committee	Appointed 2008
Curriculum Committee, Chair	2006-2008
Computer/Website Committee, Chair	2006-2007
Speakers Program Committee	2006-2008
Website Committee	2002-2006
Computer Committee	2002-2003

Field Work:

Participant in FLUX STATS '91 aboard the *R/V Wecoma* (May 1991, 21 days). Responsible for collecting microstructure profiles of the upper 700-1000 m of the ocean. Assisted with CTD deployment and data collection.

Professional Affiliations:

American Geophysical Union, member	1989-present
American Meteorological Society, member	1990-present
Geological Society of America	2006-present