

CURRICULUM VITAE

Jon M. Schrage

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College of Arts and Sciences
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ACADEMIC POSITIONS

- 2008-present Associate Professor of Atmospheric Sciences (Secondary Appointment in the Environmental Sciences Program), Department of Atmospheric Sciences, Creighton University, Omaha, NE
- 2002-2008 Assistant Professor of Atmospheric Sciences (Secondary Appointment in the Environmental Sciences Program), Department of Atmospheric Sciences, Creighton University, Omaha, NE
- 2000-2002 Visiting Professor of the Atmospheric Sciences, Department of Earth and Atmospheric Sciences, Purdue University, West Lafayette, IN.
- 1999-2000 Part-Time Visiting Professor of Meteorology, Department of Geography and Meteorology, Valparaiso University, Valparaiso, IN.
- 1998-2002 Post-Doctoral Research Assistant, Department of Earth and Atmospheric Sciences, Purdue University, West Lafayette, IN.
- Summer 2006 Visiting Professor, Institute for Geophysics and Meteorology, University of Cologne, Cologne, Germany.
- Summer 2003 Visiting Scientist, Institute for Geophysics and Meteorology, University of Cologne, Cologne, Germany.
- Summer 2009 Visiting Professor, Institute for Geophysics and Meteorology, University of Cologne, Cologne, Germany.

DEGREES EARNED

- 1998 Ph.D., Atmospheric Sciences, Purdue University
Major field: Tropical meteorology
Dissertation: "On the modulation of intraseasonal tropical-extratropical teleconnections by the superimposed ENSO cycle in the ECMWF Reanalysis (ERA) data set"
Advisor: Dr. Dayton G. Vincent
- 1994 M.S., Atmospheric Sciences, Purdue University
Major field: Tropical meteorology
Dissertation: "Tropical convection on 7-21 day time scales over the western Pacific"
Advisor: Dr. Dayton G. Vincent
- 1992 B.S.At.S., *summa cum laude*, Statistics and Atmospheric Sciences, Creighton University

PUBLICATIONS

REFEREED JOURNAL ARTICLES

Fink, A.H., J.M. Schrage and S. Kotthaus, 2010: On the potential causes of the nonstationary correlations between West African precipitation and Atlantic hurricane activity. Accepted for publication in *J. Clim.*

Schrage, J.M., A.H. Fink, 2007: Use of a rain gage network to infer the influence of environmental factors on the propagation of quasi-linear convective systems in West Africa. *Weather and Forecasting*, 22, 1016-1030.

Schrage, J.M., S. Augustyn, and A.H. Fink, 2006: Nocturnal stratiform cloudiness during the West African monsoon. *Meteor. Atmos. Phys.*, 95, 73-86.

Schrage, J.M., A.H. Fink, V. Ermert, and E.D. Ahlonsou, 2006: Three MCS cases occurring in different synoptic environments in the sub-Saharan wet zone during the 2002 West African monsoon. *J. Atmos. Sci.*, 63, 2369-82.

Schrage, J.M., Clayton, C.A., and B. Strahl, 2001: Statistical properties of episodes of enhanced 2-3 day convection in the Indian and Pacific oceans. *J. Climate*, 14, 3482-3494.

Clayton, C.A., B. Strahl, and J.M. Schrage, 2001: 2-3 day convective variability in the tropical western Pacific. *Mon. Wea. Rev.*, 130, 529-548.

Schrage, J.M., D.G. Vincent, and A.H. Fink, 1999: Modulation of intraseasonal (25-70 day) processes by the superimposed ENSO cycle across the Pacific basin. *Meteor. Atmos. Phys.*, 70, 15-27.

Schnadt, C., A. Fink, D.G. Vincent, J.M. Schrage and P. Speth, 1998: Tropical cyclones, 6-25 day oscillations, and tropical-extratropical interaction over the northwestern Pacific. *Meteor. Atmos. Phys.*, 68, 151-169.

Vincent, D.G., A. Fink, J.M. Schrage, and P. Speth, 1998: High and low frequency intraseasonal variance of OLR on annual and ENSO time scales. *J. Climate*, 11, 968-986.

Schrage, J.M., and D.G. Vincent, 1996: Tropical convection on 7-21 day time scales over the western Pacific. *J. Climate*, 9, 587-607.

Vincent, D.G., K.-C. Ko, and J.M. Schrage, 1996: Subtropical jet streaks over the South Pacific. *Mon. Wea. Rev.*, 125, 438-446.

Vincent, D.G., J.M. Schrage, and L.D. Sliwinski, 1995: Recent climatology of kinematic variables in the TOGA-COARE region. *J. Climate*, 8, 1296-1308.

ATLASES

Vincent, D.G., and J.M. Schrage, 1994: *Climatology of the TOGA-COARE and Adjacent Regions (1985-1990). Vol. I: Kinematic Variables*. Department of Earth and Atmospheric Sciences, Purdue University, West Lafayette, IN 47907, 104 pp.

Vincent, D.G., and J.M. Schrage, 1995: *Climatology of the TOGA-COARE and Adjacent Regions (1985-1990). Vol. II: Thermodynamic and Moisture Variables*. Department of Earth and Atmospheric Sciences, Purdue University, West Lafayette, IN 47907, 123 pp.

BOOK CHAPTERS

Karoly, D.J., D.G., Vincent, and J.M. Schrage, 1999: "General Circulation of the Atmosphere," *Meteorology of the Southern Hemisphere*, D.J. Karoly and D.G. Vincent, editors. American Meteorological Society, Boston, MA, pages 47-86.

CONFERENCE PROCEEDINGS

Schrage, J.M., A.H. Fink and S. Kotthaus, 2010: The non-stationary correlations between West African precipitation and Atlantic hurricane activity. *Twenty-ninth Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston, MA.

Schrage, J.M. and A.H. Fink, 2010: A possible mechanism regulating nocturnal stratocumulus decks in West Africa. *Twenty-ninth Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston, MA.

Yanchilina, A. and J.M. Schrage, 2009: Statistical Analysis of the Correlations between the Sea Surface Temperatures and the West African Monsoon Precipitation in Western Sahel, Central Sahel, and Guinea Coast Regions. *Eighth Annual American Meteorological Society Student Conference*. American Meteorological Society, Boston, MA.

Schrage, J.M., 2008: Weather Break: meteorological outreach, university recruiting, and improvement of student communication skills via a radio program. *Seventeenth Symposium on Education*. American Meteorological Society, Boston, MA.

Dickey, B., J.R. Gomez, R. Caniglia, A. Rudersdorf, and J.M. Schrage, 2008: Weather Break: a broadcast skills enhancing program for students. *Seventh Annual American Meteorological Society Student Conference*. American Meteorological Society, Boston, MA.

Schrage, J.M., 2008: A reexamination of the statistical relationships between West African precipitation anomalies and Atlantic hurricane activity. *Twentieth Conference on Climate Variability and Change*. American Meteorological Society, Boston, MA.

Schrage, J.M. and A.H. Fink, 2008: The nonstationary correlations between indices of West African precipitation and Atlantic hurricane activity. *Twenty-eighth Conference on Hurricanes and Tropical Meteorology*. American Meteorological Society, Boston, MA.

Schrage, J.M., 2007: Implementation of the WRF model for teaching scientific methodology in an undergraduate tropical meteorology course. *Sixteenth Symposium on Education*. American Meteorological Society, Boston, MA. *Second International Conference of the African Monsoon Multidisciplinary Analysis Program*.

Fink, A.H. and J.M. Schrage, 2007: The non-stationary correlation between Sahel precipitation indices and Atlantic Hurricane activity. *Nineteenth Conference on Climate Variability and Change*. American Meteorological Society, Boston, MA.

Schrage, J.M., S. Augustyn, and A.H. Fink, 2006: Nocturnal stratiform cloudiness and the structure of the atmosphere during the West African summer monsoon. *Twenty-seventh Conference on Hurricanes and Tropical Meteorology*. American Meteorological Society, Boston, MA.

Schrage, J.M., 2006: Mesoscale modeling of the influence of environmental factors on West African squall lines. *Proceedings of the Nebraska Academy of Sciences*.

Schrage, J.M. and M. Sullivan, 2006: Environmental factors influencing propagation of West African squall lines. *The Doug Lilly Symposium*. American Meteorological Society, Boston, MA.

Schrage, J.M. S. Augustyn, and A.H. Fink, 2006: Nocturnal low-level clouds during the West African summer monsoon. *Eighteenth Conference on Climate Variability and Change*. American Meteorological Society, Boston, MA.

Schrage, J.M. A.H. Fink, V. Ermert, and E.D. Ahlonsou, 2005: Three MCS studies occurring in different synoptic environments in the Soudanian wet zone (Upper Oueme Valley, Benin) during the 2002 IMPETUS upper-air campaign. *First International Conference of the African Monsoon Multidisciplinary Analysis Program*.

Schrage, J.M. S. Augustyn, and A.H. Fink, 2005: Low-level stratiform clouds during the West African summer monsoon. *First International Conference of the African Monsoon Multidisciplinary Analysis Program*.

Schrage, J.M., 2005: Waves in the African Easterly Jet in summer 2002. *Proceedings of the Nebraska Academy of Sciences*.

Schrage, J.M. and A.H. Fink, 2005: Case studies of Mesoscale convective systems in sub-Saharan West Africa. Sixteenth Symposium on Global Change and Climate Variations, American Meteorological Society, Boston, MA.

Schrage, J.M. and A.H. Fink, 2004: Two synoptic case studies of tropical squall lines in the Soudanian climate zone of West Africa. Twenty-sixth Conference on Hurricanes and Tropical Meteorology. American Meteorological Society, Boston, MA.

Schrage, J.M. A.H. Fink, T. Bruecher, M. Christoph, P. Knippertz, and P. Speth, 2004: Low-frequency rainfall variability in northwest Africa and the Sahelian and Sudanian zones. Fifteenth Symposium on Global Change and Climate Variations, American Meteorological Society, Boston MA.

Schrage, J.M., and C.A. Clayson, 2003: Precipitation and freshwater lens formation in the Tropical Western Pacific. First Conference in Observing and Understanding Variability of Water in Weather and Climate, American Meteorological Society, Boston MA.

Schrage, J.M., C.A. Clayson, D.M. Schultz, and R.J. Machtmes, 2002: Ocean model simulations of a gap wind event in the Gulf of Tehuantepec. Twenty-fifth Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, Boston, MA.

Strahl, B., C.A. Clayson, and J. Schrage, 2000: A study of 2-3 day convective processes in the tropical western Pacific Warm Pool. Twenty-fourth Conference on Hurricanes and Tropical Meteorology, American Meteorological Society, Boston MA, 512-513.

Schrage, J.M. D.G. Vincent, A.H. Fink, and C.A. Clayson, 1999: Modulation of intraseasonal (25-70 day) processes by the superimposed ENSO cycle across the Pacific basin. *Twenty-third Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston MA, 739-742.

Vincent, D.G., A. Fink, J.M. Schrage and P. Speth, 1998: Annual and interannual variability of precipitable water over the tropical Indian and Pacific oceans. *Ninth Symposium on Global Change Studies*, American Meteorological Society, Boston MA, 12-16.

Vincent, D.G., J.M. Schrage, A. Fink, and P. Speth, 1997: Reanalysis of moisture climatology over the TOGA-COARE region. *First WCRP International Conference on Reanalysis*, 223-226.

Vincent, D.G., C.C. Hennon, and J.M. Schrage, 1997: Climatology of the TOGA COARE region and a comparison to the IOP period. *Twenty-second Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston MA, 519-520.

Fink, A., D.G. Vincent, J.M. Schrage, and P. Speth, 1997: Annual and interannual variability of intraseasonal convective oscillations over the Indian and Pacific oceans: Part 2: Sources of variation. *Twenty-second Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston MA, 453-454.

Schrage, J.M., D.G. Vincent, A. Fink, and P. Speth, 1997: Annual and interannual variability of intraseasonal convective oscillations over the Indian and Pacific oceans: Part 1: Annual and ENSO cycles. *Twenty-second Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston MA, 451-452.

Speth, P., D.G. Vincent, A. Fink, and J.M. Schrage, 1997: Annual and interannual variability of intraseasonal convective oscillations over the tropical Indian and Pacific oceans. *Fifth International Conference on Southern Hemisphere Meteorology and Oceanography*, American Meteorology Society, Boston MA, 214-215.

Vincent, D.G., K.-C. Ko, and J.M. Schrage, 1997: Tropical versus mid-latitude forcing of subtropical jet streaks over the South Pacific. *Seventh Conference on Climate Variations*, American Meteorological Society, Boston MA, 368-371.

Schrage, J.M., and D.G. Vincent, 1996: Low-latitude 7-21 day convective variability and extratropical cyclones in the Southern Hemisphere. *Eighth Conference on Air-Sea Interaction and Conference on the Global Ocean-Atmosphere-Land System (GOALS)*, American Meteorology Society, Boston, MA, 331- 334.

Schrage, J.M., and D.G. Vincent, 1995: Composite studies of the large-scale atmospheric state on 7-21 day time scales during active and inactive convection episodes. *Proceedings of the International Scientific Conference on the Tropical Ocean Global Atmosphere (TOGA) Programme*, World Climate Research Program, 44-47.

Schrage, J.M., 1995: The large-scale atmospheric state on 7-21 day time scales associated with tropical convection. *Twenty-first Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston, MA., 124-126.

Vincent, D.G., L.D. Sliwinski, J.M. Schrage, N.E. Davidson, K. Puri, and J. McBride, 1994: TOGA-COARE IOP results compared to recent climatology. *Sixth Conference on Climate Variations*, American Meteorological Society, Boston, MA, J23-J27.

Vincent, D.G., L.D. Sliwinski, and J.M. Schrage, 1994: Temporal variations of the large-scale flow in the TOGA-COARE region. *Sixth Conference on Climate Variations*, American Meteorological Society, Boston, MA, J18-J22.

Vincent, D.G., J.M. Schrage, and L.D. Sliwinski, 1993: A case study of the intraseasonal oscillation traversing the TOGA-COARE LSD. *Twentieth Conference on Hurricanes and Tropical Meteorology*, American Meteorological Society, Boston, MA, 559-562.

GRANTS AND FELLOWSHIPS

Internal Awards at Creighton University

Summer 2003: Graduate Research Fellowship from the Graduate School

Summer 2004: Faculty Development Award from the College of Arts and Sciences

Summer 2005: Academic Development and Training Fellowship (i.e., "eFellows")

Summer 2009: Graduate Research Fellowship from the Graduate School

External Funding

- 2004: Seed Grant from NASA EPSCoR
- 2006: Travel Grant from NASA EPSCoR to present research at the AMS Conference on Hurricanes and Tropical Meteorology
- 2007: Publication Grant from NASA EPSCoR to partially cover costs associated with an article to appear in *Weather and Forecasting*
- 2009: Publication Grant from NASA EPSCoR to partially cover costs associated with an article to appear in *Monthly Weather Review*
- 2009: Outreach Grant from NASA EPSCoR to support *Weather Break's* special coverage of the interaction of technology and high-impact weather events

AWARDS

Office of Disability Accommodation Faculty Award (presented “in appreciation of outstanding service as an advocate for students with disabilities”), Spring 2003.

RESEARCH INTERESTS

- Convective systems embedded within the West African monsoon
- Active and inactive periods of the West African monsoon on intraseasonal and synoptic timescales
- Climate processes contributing to long-term drought in West Africa
- The nature of the relationship between West African precipitation anomalies and Atlantic hurricane activity

TEACHING INTERESTS

- Dynamic and physical processes in the atmosphere
- Tropical meteorology on all timescales
- Meteorological software packages for visualization of weather systems
- Computational, numerical and mathematical methods in the Atmospheric Sciences
- Introductory meteorology

TEACHING

CREIGHTON UNIVERSITY

All courses are taught using a pedagogy that is meaningfully integrated with technology to provide mechanisms for student engagement outside of the classroom. Students contribute to wikis, discuss course topics and assignments using online bulletin boards, and contribute in various ways to class websites and blogs.

* Denotes course with a new preparation

- Fall 2009**
 - ATS/EVS 113: Introduction to the Atmospheric Sciences
 - ATS/EVS 553: Tropical Meteorology
 - ATS 510: Introduction to Physical Meteorology
 - ATS 495: Directed Independent Study (for Yien Douth)
- Spring 2009**
 - ATS 113: Introduction to the Atmospheric Sciences
 - ATS 315: Computer Applications in Meteorology
 - ATS 570: Quantitative Methods in the Atmospheric Sciences
- Fall 2008**
 - ATS/EVS 113: Introduction to the Atmospheric Sciences
 - ATS/EVS 553: Tropical Meteorology
 - *ATS 510: Introduction to Physical Meteorology
 - ATS 793: Directed Independent Readings (for Keith Thompson)
- Spring 2008**
 - ATS 113: Introduction to the Atmospheric Sciences
 - ATS 315: Computer Applications in Meteorology
 - *ATS 570: Quantitative Methods in the Atmospheric Sciences

ATS 497: Directed Independent Research (for Anastasia Yanchilina)
ATS 497: Directed Independent Research (for Alissa Dienhart)

Fall 2007 ATS/EVS 113: Introduction to the Atmospheric Sciences
ATS/EVS 553: Tropical Meteorology
*ATS 642: Physical Meteorology
ATS 793: Directed Independent Readings (for Sean Campbell)

Spring 2007 ATS 315: Computer Applications in Meteorology
ATS 572: Dynamic Meteorology II
ATS 497: Directed Independent Research (for Anastasia Yanchilina)

Fall 2006 ATS/EVS 113: Introduction to the Atmospheric Sciences
ATS/EVS 553: Tropical Meteorology
ATS 571: Dynamic Meteorology I
ATS 797: Directed Independent Research (for Andrew Elliott)
ATS 797: Directed Independent Research (for Ray Christensen)
ATS 797: Directed Independent Research (for Michael Otepka)

Summer 2006 ATS 795: Directed Independent Study (for Andrew Elliott)
ATS 795: Directed Independent Study (for Ray Christensen)

Spring 2006 ATS/EVS 113: Introduction to the Atmospheric Sciences
ATS 480: Military Weather Service Internship (for Stephen Augustyn)
ATS 572: Dynamic Meteorology II
ATS 625: Advanced Dynamic Meteorology II (for David Craft)
ATS 797: Directed Independent Research (for David Craft)

Fall 2005 ATS/EVS 113: Introduction to the Atmospheric Sciences
ATS/EVS 553: Tropical Meteorology
ATS 571: Dynamic Meteorology I
ATS 793: Directed Independent Readings (for Kelley Michael Koolen)
ATS 795: Directed Independent Study (for David Craft)

Spring 2005 ATS/EVS 113: Introduction to the Atmospheric Sciences
ATS 315: Computer Applications in Meteorology
ATS 572: Dynamic Meteorology II
ATS 799: Master's Thesis (for Aaron Musfeldt)

Fall 2004 ATS/EVS 113: Introduction to the Atmospheric Sciences
ATS/EVS 553: Tropical Meteorology
ATS 571: Dynamic Meteorology I
ATS 793: Directed Independent Readings (for William Taylor)
ATS 795: Directed Independent Study (for William Taylor)
ATS 799: Master's Thesis (for Aaron Musfeldt)

Spring 2004 *ATS 315: Computer Applications in Meteorology
ATS 572: Dynamic Meteorology II
ATS 663: Weather Systems Analysis (for David Craft, Nicholas Novella, and William Taylor)

Fall 2003 ATS/EVS/NSC 113: Introduction to the Atmospheric Sciences
ATS 481: National Weather Service Internship (for Amanda Shalberg)
ATS 493: Directed Independent Readings (for Josiah Hollibaugh)
ATS/EVS 553: Tropical Meteorology
ATS 571: Dynamic Meteorology I

Spring 2003 ATS/EVS/NSC 113: Introduction to the Atmospheric Sciences
 ATS 480: Military Weather Service Internship (for Kevin Selin)
 *ATS 572: Dynamic Meteorology II

Fall 2002 ATS/EVS/NSC 113: Introduction to the Atmospheric Sciences
 ATS/EVS 553: Tropical Meteorology
 *ATS 571: Dynamic Meteorology I

PURDUE UNIVERSITY, 2000-2002

 Taught Introduction to the Atmospheric Sciences course for four semesters. Also supervised multiple sections of the corresponding lab course, which was taught by graduate students.

VALPARAISO UNIVERSITY, 1999-2000

 Taught a 300-level tropical meteorology course for two semesters and Introduction to Meteorology one semester. Taught the corresponding lab course for three semesters.

UNIVERSITY OF COLOGNE, SUMMER 2006 AND SUMMER 2009

 Taught an accelerated, advanced version of Creighton University's ATS 553 ("Tropical Meteorology").

PROFESSIONAL DEVELOPMENT

Summer 2007 Attended week-long workshop at the University Corporation for Atmospheric Research (UCAR) on the use and management of two key meteorological software packages (i.e., the LDM and GEMPAK)

Summer 2005 Participated in the Academic Development and Training Center's eFellows program at Creighton University.

SERVICE

(Service record is represented in reverse chronological order, with ongoing activities at the top of each list.)

WEATHER BREAK

2006-present Developed and produced the ongoing *Weather Break* radio program as a tool for improving oral and written communication skills for ATS majors. *Weather Break* is broadcast on KINI-FM and on the internet, and it serves the department in a recruiting capacity and in outreach, particularly to the Native American population on and near the Rosebud Indian Reservation.

UNIVERSITY

Spring 2008 Presented "Use of Wikis in Atmospheric Science Education" at Creighton's annual Jacobson Symposium on Teaching with Technology.

2007-present Reviewed applicants for the Goldwater Scholarship and for the Presidential Mentoring Scholarship.

Spring 2008 Faculty Senate. Appointed to Academic Policy, Discipline, and Appeals Committee (beginning Spring 2008).

Spring 2007 Participant in the "60 Second Seminar Series" for the Honors Program on the topic of Global Warming.

2003-2008 Annual St. Albert's Day Conference. Worked with ATS students to develop posters and presentations illustrating undergraduate research projects and educational opportunities within the ATS department.

Fall 2003 Presentation on the use of streaming video technology in teaching, part of a DoIT seminar series organized by Colette Hanson, Assistant Vice President.

COLLEGE OF ARTS AND SCIENCES

2003-2008 Appointed to the Claire Booth Luce Scholarship Committee. Evaluate applicants for the scholarship.

Fall 2006 Appointed to NSAFE (National Scholarships and Fellowships), a committee of Creighton University faculty who promote national and international scholarships and fellowships, help identify potential applicants, and mentor applicants. Serve on committee as representative for the National Science Foundation Graduate Research Fellowship.

Fall 2006 Appointed by the Dean to be Campus Coordinator for the National Science Foundation Graduate Research Fellowship. Identify and mentor underclassmen in the sciences who are preparing for this graduate fellowship opportunity and assist upperclassmen in the completion of their application.

Fall 2006 Appointed by Dean to Fulbright Campus Committee. Assist with conducting campus interviews and evaluating students' applications.

Spring 2006 Presented a seminar on the use of Macromedia Flash technology in teaching for members of the College of Arts and Sciences, in partial fulfillment of one requirement of the eFellows Program of the Academic Development and Teaching Center.

Spring 2006 Presented a seminar on the use of blue-screen video technology in teaching for members of the College of Arts and Sciences.

Fall 2005 Appointed to the Barry Goldwater Scholarship Committee. Evaluated applicants for the scholarship.

Fall 2005 Presented a seminar on the benefits and opportunities of the eFellows Program at Creighton University.

Fall 2005 Invited by the Department of Computer Sciences to discuss "Computing in Meteorology" with students in one of their courses and to give the students tours of the computing resources in the ATS department.

DEPARTMENT OF ATMOSPHERIC SCIENCES (FORMERLY DEPARTMENT OF ENVIRONMENTAL AND ATMOSPHERIC SCIENCES, EVS)

- 2002-present Represented the ATS department at numerous “CU Sundays,” “Major Exploration Fairs,” and “Jay Days” events. Counseled prospective ATS majors.
- 2002-present Served as Academic Advisor for undergraduate and graduate students in the ATS department.
- 2002-present Served on the graduate committees of at least 12 ATS graduate students since 2002. Wrote oral and written exams.
- 2002-present Assist Admissions Office by giving prospective students tours of ATS department and counseling these students.
- 2002-present Departmental liaison for WXP, a commercial weather visualization software package. Negotiated arrangement that allows the ATS department free use of this product in exchange for serving as the university beta-testing site for updates to the software. Provided expertise to students and faculty members using the software.
- Summer 2007 At the request of the chair of ATS, attended week-long workshops on key meteorological software packages (i.e., Idm and GEMPAK), at the University Corporation for Atmospheric Research.
- Summer 2007 Solicited feedback from several meteorologists in industry about the skills and knowledge of recent graduates from Creighton University and am currently using this information to revise ATS courses to meet better the needs of industry.
- Spring 2007 Presented a seminar on the West African monsoon as part of the EVS Senior Seminar series
- Fall 2006 Completely redesigned and redeveloped the website for the ATS department at the request of the chair.
- Fall 2006 Member of the ATS Chair Search Committee.
- Spring 2005 Applied for and received a secondary appointment to the Environmental Sciences Program.
- 2004-2005 Appointed Graduate Program Director for ATS by chair. Oversaw the admissions process, handled requests for information, and managed students’ Plans of Study.
- Spring 2003 Presented a guest lecture on “Dust Storms in Iraq” to students taking EVS 210, “Surviving On Earth: Geologic Hazards and Society”.
- Fall 2002 Presented a seminar on air/sea interactions in the tropics as part of EVS Senior Seminar series.
- Fall 2002 Member of the ATS Search Committee.

COMMUNITY

- Spring 2007 Science fair judge for Mockingbird Elementary School at the invitation of the school.
- Fall 2006 Served as a faculty mentor for the Lakota Immersion Program and advised a high school senior in Pine Ridge, South Dakota during his successful application for a Gates Millenium Scholarship.
- Spring 2006 Gave presentation on careers in meteorology at Pacesetter Academy at the invitation of the school.
- Spring 2006 Science fair judge for Mockingbird Elementary School at the invitation of the school.
- Spring 2005 Hosted more than 60 elementary students from King Science Center for one day. Developed activities to teach students about cloud microphysical processes that result in rainfall.
- Fall 2004 Gave an invited presentation on hurricane meteorology to the Golden Key Kiwanis Club of Omaha.
- Fall 2003 Served on the committee of the Omaha-Offutt Chapter of the American Meteorological Society tasked with bringing the Scholastic Magic Schoolbus (a traveling, interactive learning exhibit about meteorology) to the Omaha Children’s Museum.
- Spring 2003 Gave presentation on “Careers in Academia” for the Omaha-Offutt Chapter of the American Meteorological Society’s Career Night at the invitation of the Society.

PROFESSIONAL SERVICE

- Fall 2008 Served as a reviewer for a manuscript submitted to the Journal of Hydrology.
- Fall 2007 Reviewed proposals for the NASA Nebraska Space Grant.
- Spring 2007 Presented an invited seminar to the Omaha-Offutt Chapter of the American Meteorological Society. Topic was “The West African Monsoon”.
- Spring 2007 Reviewed applicants for the Minority Scholarship of the Omaha-Offutt Chapter of the American Meteorological Society.
- Summer 2006 Served as a reviewer for a manuscript submitted to the journal *Weather and Forecasting*.
- Spring 2006 Served as a reviewer for a manuscript submitted to the *Journal of Climate*.

- 2005 Reviewed a textbook (*Meteorology: Understanding the Atmosphere* by Ackerman and Knox) at the request of the publisher. Provided extensive feedback to the authors for improving future editions of the text.
- 2003 Reviewed a textbook (*Understanding Weather and Climate* by Aguado and Burt) at the request of the publisher. Provided extensive feedback to the authors for improving future editions of the text.

PROFESSIONAL ORGANIZATIONS

Fellow of the Royal Meteorological Society since Spring 2007.

Member of the American Meteorological Society since 1993.

Member of Sigma Xi, the Scientific Research Society since 1998.

Member of the Omaha-Offutt Chapter of the American Meteorological Society since 2007.

Honorary Member of Delta Phi Alpha (the National German Honor Society) since Spring 2007.