

DONNA J. CHARLEVOIX

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University of Illinois
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EDUCATION

- Ph.D. University of Illinois; Science Education, 2008
- M.S. University of California, Davis; Atmospheric Science, 1996
- B.S. University of Wisconsin, Milwaukee; Atmospheric Science, 1993

ACADEMIC POSITIONS

University of Illinois, Urbana-Champaign

- *Assistant Professor* (2008-present)
- *Director of Introductory Courses* (2005–present)
- *Campus Honors Program Affiliated Faculty* (2003–present)
- *Lecturer* (1997–2008)

San Francisco State University; Geosciences Department

- *Lecturer* (1996-1997)

COURSES TAUGHT

- College Teaching (EOL 585)
- Teaching Higher Education Earth & Environmental Science (ATMS 563)
- Severe and Unusual Weather (ATMS120)
- Introduction to Meteorology (ATMS100)
- Societal Impacts of Weather and Climate (ATMS 202)
- The Violent Atmosphere and Ocean, SFSU (Metr302)
- California Weather Events, SFSU (Metr356)
- Introduction to Meteorology, SFSU (Metr100)

AWARDS

- UIUC Student Senate Award for Excellence in Lecturing, 2006
- Campus Award for Excellence in Undergraduate Teaching, University of Illinois 2003
- LAS College Award for Excellence in Undergraduate Teaching, Univ. of Illinois 2003
- Named to University of Illinois “List of Teachers Ranked as Excellent” Fall 2000 through Spring 2008 including “outstanding” rankings.
- Marquis Who’s Who in America, 2006

GRANTS

Title: Teaching Teachers to Use NSDL: A Critical Examination of Incorporating NSDL Earth Science Content into Pre-Service Elementary Education

Investigators: Donna Charlevoix (PI), Barbara Hug (PI)

Funding Agency: National Science Foundation

Award Value: \$173,199 (pending, 2009-2011)

Title: I-ILLINI Partnerships

Collaborators: Michael Williams (PI), Evangeline Pianfetti (PI), Jonathon Tomkin, Barbara Hug

Funding Agency: Illinois Board of Higher Education

Award Value: \$975,000 (2007-2009)

Title: Mathematics Science Partnerships: Sense-Making in Science and Mathematics

Collaborators: Barbara Hug (PI), Sarah Lubienski (PI), Donald Hackmann, George Reese, Lizanne DeStefano, Jonathon Tomkin

Funding Agency: Illinois State Board of Education

Award Value: \$200,000 (2007-2008)

Title: Developing Online Content for Blended Learning in Severe Weather Courses

Investigator: Donna Charlevoix (PI)

Funding Agency: University of Illinois Provost's Office

Award Value: \$10,000 (2007-2008)

Title: A Blended Learning Campus Exemplar

Investigator: Donna Charlevoix (PI)

Funding Agency: University of Illinois Provost's Office, College of LAS

Award Value: \$10,000 (2007-2008)

PROFESSIONAL ACTIVITIES / SERVICE

National

- Board on Higher Education, 2002–present, past Chair; American Meteorological Society
- AMS Education Symposium Chair of University Initiatives Session, 2003–present
- Meteorology consultant/expert witness 2002–present

Campus

- Teaching Advancement Board, 2003–present, Office of the Provost, UIUC
- UIUC IT Strategic Planning Team, Education and Ed. Technologies Working Group, 2006–07
- Information Technology Advisory Board-Learning Technologies subcommittee, Office of the CIO, UIUC, 2006–2007
- Educational Technologies Board, 2003–2006, Office of the CIO, UIUC, *ex-officio*
- UIUC-Educational Technologies Featured Faculty, I-Teach, Vol 1, No 2, Spring 2007
- UIUC CITES Faculty showcase, summer 2005
- Faculty Spotlight selection UIUC Office of Instruction Resources, summer 2003
- UIUC Center for Teaching Excellence User Group, invited participant 2002–2003
- LAS Teaching Circle on Large Undergraduate Classes, invited participant 2002–2003
- LAS Reflective Teaching Seminar, nominated participant 2000–2001

Department

- Curriculum Committee, 1997–2006
- Awards Committee, 2006-2009
- Teaching Assistant Orientation, 2003-2008
- New Graduate Student Orientation, 2007-2008

PROFESSIONAL MEMBERSHIPS

American Geophysical Union

American Meteorological Society

National Science Teachers Association

American Educational Research Association

National Association of Geoscience Teachers

National Association for Research in Science Teaching

International Society for the Scholarship of Teaching and Learning

INVITED WORKSHOPS & PRESENTATIONS

- Instructional Technology in the 21st Century: Tapping into the iPod Generation, Department of Atmospheric Sciences, University of Illinois, December 2007
- Blended Learning, Expert Panel, Online Learning Symposium, UIUC, October 2007
- UIUC LAS SoTL Workshop, “The Scholarship of Teaching and Learning: An Overview.” 2006
- Keynote Speaker, McNair Scholar Banquet, University of Wisconsin-Milwaukee, 2005
- “Challenges Encountered in Classroom Research.” SoTL Reading Group, UIUC, 2005.
- “Improving Teaching through Student Interviews: Examining Long-Term Retention.” Annual Faculty Retreat, UIUC , 2005.
- “Stormy Weather.” Focus 580 radio program, WILL AM-580. Urbana, Illinois, August 2004
- “Engaging and Motivating Students Who Are New to the Discipline.” UIUC 2004 Annual Faculty Retreat on Active Learning From the Science of Learning to the Practice of Teaching, University of Illinois, February 2004.
- “Hands-On Meteorology: An Example of Active Learning Using Technology.” Teaching and Learning with Technology Brown Bag Series, CITES Education Technologies, University of Illinois, October 2003.
- “They are Awake and Learning! Incorporating Active Learning into Meteorology,” Department of Atmospheric Sciences, University of Illinois, September 2002.
- “Thunderstorms: Forecasting and Identification,” 2002 IFR/VFR Safety Seminar, Willard Airport, Champaign, IL, Institute of Aviation/Illinois Pilots’ Assoc/Illinois Dept. Trans., 2002.
- “Severe Weather Hazards” Illinois Pilots Association, Frasca Field, Urbana, IL, May 2001.
- “So, You Want to Be a Meteorologist?” Throw like a girl! Grrrlfest 2001: Career Walk, Champaign, IL, April 2001.
- “Understanding Severe Weather,” 2001 IFR/VFR Safety Seminar, Willard Airport, Champaign, IL, Institute of Aviation, Illinois Pilots’ Assoc. and Illinois Dept. Trans., April 2001.
- “Meteorology & Math” Guest Lecturer, California State University, Stanislaus, 1996.
- “What is Meteorology?” Reach for the Stars Math/Science Conference for Girls, 1996.

GRADUATE ADVISORS

Margery Osborne	University of Illinois, Ph.D.
Robert Flocchini	University of California–Davis, M.S.

BOOKS

- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2008 (ed 3). *Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA, 642 pp.
- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2008 (ed 3). *Instructors Manual to Accompany Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA, 509 pp.
- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2008 (ed 3). *Active Learning Exercises for Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA, 211pp.
- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2005 (ed 2). *Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA, 558 pp.
- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2005 (ed 2). *Instructors Manual to Accompany Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA, 284 pp.
- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2005 (ed 2). *Active Learning Exercises for Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA. 103 pp.
- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2002. *Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA, 616pp.
- R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2002. *Instructors Manual to Accompany Severe and*

Hazardous Weather, Kendall/Hunt Pub. Dubuque, IA, 273 pp.

R. Rauber, J. Walsh, and **D.J. Charlevoix**. 2002. *Active Learning Exercises for Severe and Hazardous Weather*, Kendall/Hunt Pub. Dubuque, IA, 102 pp.

REFEREED PAPERS

In Progress

Charlevoix, D.J., E.R. Snodgrass, & B.A. Guarante. Blended Learning in Large Enrollment Classes: Curriculum to Build Communities. *Journal of the Research Center for Educational Technology*, Special Issue on Blended Learning. (to be submitted November 2008)

Charlevoix, D.J., S.A. Strey, B.A. Guarante, & E.R. Snodgrass. Evaluation of Student Success in Large Enrollment Blended Learning. *Journal of the Research Center for Educational Technology*, Special Issue on Blended Learning. (to be submitted November 2008)

Charlevoix, D.J. Success in Atmospheric Sciences: Building Social Capital Through Self-Efficacy and Resiliency. *Journal of Women & Minorities in Science and Engineering*. (to be submitted December 2008)

Charlevoix, D.J. Facilitating Active Lecturing through Tablet PCs. *Computers and Education* (to be submitted January 2009)

Charlevoix, D.J. Pathways to Atmospheric Sciences: How Meteorology Students Select Their Major. *Bulletin of the American Meteorological Society*. (to be submitted January 2009)

Published

Charlevoix, D.J. 2008. Improving Teaching and Learning through Classroom Research, *Bull. Amer. Met. Soc.* (in press).

Stanitski, D.M., and **Charlevoix, D.J.** 2008. The 2005 Membership Survey: Who Are the Student Members of the American Meteorological Society. *Bull. Amer. Met. Soc.*, 89(6), 892-895.

Charlevoix, D.J. and Stanitski, D. 2008. A Synopsis of Academic Members of the American Meteorological Society. *Bull. Amer. Met. Soc.*, 89(6), 896-900.

Kahl, J. D., **D. J. Charlevoix**, N.A. Zaitseva, R.C. Schnell, M.C. Serreze. 1993. Absence of Evidence for Greenhouse Warming Over the Arctic Ocean in the Past Forty Years. *Nature*, 361(6410):335-337.

MEETING SUMMARIES

Charlevoix, D.J., E. Bierly, and J. Winkler. 2007. Challenges Facing Atmospheric, Earth and Space Science Departments in Higher Education, Meeting summary of 15th Biennial AMS/AGU Heads and Chairs meeting, *Bull. Amer. Met. Soc.*, 88(10) 1631-1633.

Pandya, R.E., D.R. Smith, **D.J. Charlevoix**, G.M. Fisher, S.T. Murillo, K.A. Murphy, D.M. Stanitski, and T.M. Whittaker. 2007. The 15th AMS Education Symposium. *Bull. Amer. Met. Soc.*, 88(1) 83-85.

CONFERENCE PROCEEDINGS

Charlevoix, D.J. B.A. Guarante, and E.R. Snodgrass. 2008. Blended Learning in a Large Enrollment General Education Course. Sloan-C Workshop on Blended Learning and Higher Education, Chicago.

Snodgrass, E.R., **D.J. Charlevoix**, and J.V. Clark. 2008. Preparing a blended learning course in atmospheric sciences: curriculum, assessment and the online experience. Proc. Seventeenth Symposium on Education, New Orleans, LA, American Meteorological Society.

Charlevoix, D.J., S.K. Jackman, and T.E. Twine. 2006. Tablet PC: An Educational Aid for Lecture-Based Survey Meteorology Courses. Proc. Fifteenth Symposium on Education, Atlanta, GA, American Meteorological Society.

Charlevoix, D.J.. 2005. Scholarship of Teaching and Learning (SoTL): Promoting Classroom Research as a Scholarly Activity. Proc. Fourteenth Symposium on Education, San Diego, CA, American Meteorological Society.

Charlevoix, D.J., R. Herman, L. Di Girolamo, and G. McFarquhar. 2003. Development of In-Class Exercises to Accompany Interactive, Hands-On Meteorology for Undergraduate Non-Majors. Proceedings of the Twelfth Symposium on Education, Long Beach, CA, American Meteorological Society.

Charlevoix, D.J., L. Avilés, and L. Di Girolamo. 2003. Assessment of Interactive, Hands-On Meteorology Exercises in a course for Undergraduate Non-Majors. Proceedings of the Twelfth Symposium on Education, Long Beach, CA, American Meteorological Society.

Bramer, D., **D.J. Charlevoix**, G. McFarquhar, R. Herman, L. Avilés, L. Di Girolamo, M. Ramamurthy, and R. Wilhelmson. 2003. Developing Interactive Models to Support a Digital Collection of Earth System Science Resources. Proceedings of the Twelfth Symposium on Education, Long Beach, CA, American Meteorological Society.

Charlevoix, D.J. and D.J. Wuebbles. 2001. Teaching Atmospheric Sciences: A Graduate Course. Proc. Tenth Symposium on Education, Albuquerque, NM, American Meteorological Society.

Charlevoix, D.J., and J. Walsh. 2000. Incorporating Active Learning Into Small Group Meetings in an Undergraduate Introductory Meteorology Course, Proc. Ninth Symposium on Education, Long Beach, CA, American Meteorological Society.

Charlevoix, D.J., and R.T. Stofflett. 2000. Enhancing Content Knowledge Retention in Introductory Meteorology Courses: Recommendations for Large-Lecture Classes, Proc. Ninth Symposium on Education, Long Beach, CA, American Meteorological Society.

Charlevoix, D.J., and R.T. Stofflett. 1999. Content Knowledge Retention by Undergraduate Students in Survey Courses in Meteorology, Proc. Eighth Symposium on Education, Dallas, TX, American Meteorological Society.

Charlevoix, D.J. and K.T. Paw U. 1996. Comparison of Turbulence Closure Schemes Including Photosynthesis for Plant - Atmosphere Microenvironments. Proc. 22nd Conference on Agricultural & Forest Meteorology, Atlanta, GA, American Meteorological Society.

Paw U, K.T., H.B. Su, **D.J. Charlevoix** and T. C. Hsiao. 1996. Testing of An Advanced Plant Physiology Leaf Model Linked with a Plant - Atmosphere Higher - Order Closure Turbulence Model for Response to Elevated CO₂ Concentrations. Proc. 22nd Conference on Agricultural & Forest Meteorology, Atlanta, GA, American Meteorological Society.

Paw U, K.T., R.H. Shaw, A. Moles and **D.J. Charlevoix**. 1996. Modeling and Analysis of Scaling Gaseous Fluxes From Plant Canopies. Report to California Air Resources Board, Sacramento, CA.

Kahl, J.D., **D.J. Charlevoix**, N.A. Zaitseva, R.C. Schnell. 1992. Lower Tropospheric Temperature Trends Over the Arctic Ocean: 1950-1990. Proc. 3rd Conference Polar Meteorology and Oceanography, Portland, OR, American Meteorological Society.