CURRICULUM VITAE

BRENDA PHILIPS
RESEARCH PROFESSOR, CO-DIRECTOR
ENGINEERING RESEARCH CENTER FOR
COLLABORATIVE ADAPTIVE SENSING OF THE ATMOSPHERE
ELECTRICAL & COMPUTER ENGINEERING/RESOURCE ECONOMICS
UNIVERSITY OF MASSACHUSETTS, AMHERST
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INTERESTS

Socio-technical systems: Research, design and evaluate of hazardous weather warning systems that optimize user decision-making and impacts; development of user-relevant metrics for system performance that link the meteorology, technology, policy, and user response.

Distributed radar networks: Planning, deployment, operation, assessment of radar networks for improved observation, forecasting, and response to atmospheric hazards.

Living Labs: Creator and leader of the CASA Dallas Fort Worth Living Lab for Severe weather Warning Systems, a sensors-to-human severe weather warning system infrastructure for interdisciplinary research and technology transfer. 3,600 stakeholders and members of the public participate in the Living Lab.

EDUCATION

2008 - 2012	**University of Massachusetts** PhD (in progress) Resource Economics Passed Quantitative Methods Exam	**Amherst, Massachusetts**
1984 - 1986	**Yale University** MBA Yale School of Management Concentration in non-profit management and finance	**New Haven, Connecticut**
1977 - 1981	**Yale College** BA French, with distinction	**New Haven, Connecticut**

PROFESSIONAL APPOINTMENTS

2020 -2022	Research Professor and Co-Director, CASA Engineering Center, Electrical & Computer Engineering, University of Massachusetts, Amherst
2013-2020	Co-Director & Senior Research Fellow, CASA Engineering Center, Electrical & Computer Engineering, University of Massachusetts, Amherst
2012-2013	Deputy Director, End User Integration Research Thrust Leader, NSF Engineering Research Center (ERC) for Collaborative Adaptive Sensing of the Atmosphere (CASA), University of Massachusetts, Amherst

2012-2015	Senior Research Associate, NOAA Cooperative Institute for Research in the Atmosphere (CIRA), Colorado State University, Fort Collins, CO
2008-2012	Associate Director, End User Integration Research Thrust Leader, CASA, University of Massachusetts, Amherst, MA
2003 - 2008	Director, Government, Industry, End User Partnerships, CASA, University of Massachusetts, Amherst, MA
2000 - 2003	Executive Director, Commonwealth Information Technology Initiative (CITI), University of Massachusetts Amherst, Amherst, MA
1998 - 2000	Co-Founder and Executive Director, EntreNetwork – The Western Massachusetts Entrepreneurship Consortium, Hadley, MA
1993 - 2000	Co-Founder and Director, Lemelson National Program at Hampshire College and National Collegiate Inventors and Innovators Alliance, Hampshire College, Amherst, MA
1986 - 1993	Vice President, Marketing and Advertising, Shawmut Bank, Hartford, CT
1985	Intern, Lincoln Center for the Performing Arts, New York, NY
1981 - 1984	Assistant Manager, European Banks, Chemical Bank, New York, NY

RESEARCH GRANTS & PROJECTS

8/2021 – 8/2023 Weather Program Office, NOAA: *Using Quick Response Surveys to Generate a Public Perception and Response Database*
PI: B. Philips
Award: $396,885

3/2013 - ongoing North Central Texas Council of Governments Master Agreement: *CASA DFW Network Installation and Operations*
PI: B. Philips
Award: $1.1 million

7/2013 – ongoing EarthNetworks/Global Sciences and Technology, Prime NOAA: *National Mesonet Program Contract*
PI: B. Philips
Award: $826k

1/2017 – 12/2022 Dallas Fort Worth Airport Board: *Improvements to Severe Weather Decision-Making*
PI: B. Philips
Award: $399k

7/2020 – 12/2022 UMASS Interdisciplinary Faculty Research Award: *Understanding and predicting human response to personalized severe weather warnings for urban flash floods*
PI: B. Philips, Co-Is: Qian Yu, David Jensen
Award: $40k

5/2020 – 12/2021 TruWeather: *Demonstration of Weather Alerting for UAS*
PI: B. Philips
Award: $85k

3/2020 – 3/2021 UMASS OCTV Technology Development Award: *Weather Avoidance Software for Unmanned Aircraft Systems*
PI: B. Philips
Award: $25k

12/2016 – 3/2021 Jerome M. Paros '60 Fund for Atmospheric Sensing to support UMass Amherst's research and technology translation activities for high-resolution environmental sensing and warning systems
PI: B. Philips
Gift: $1 million

1/2017 - 12/2020 Raytheon: *CASA support for Raytheon Phased Array Radar Development activities*
PI: B. Philips, Co-PI: David Pepyne
Award: $780k

5/2019 – 9/2020 Bell Textron: *Support of UAS integration*
PI: B. Philips
Award: $121k

9/2016 - 9/2019 NSF Partnerships for Innovation, Building Innovation Capacity: *CityWarn - A Smart, Hyperlocal, Context-Aware Hazard Notification Service System*;
PI: B. Philips, Co-I: V. Chandrasekar
Award: $1 million

9/2013 - 9/2018 NSF Interdisciplinary Research in Hazards and Disasters (Hazards SEES): *Next Generation Resilient Warning Systems for Tornados and Flash Floods*;
PI: B. Philips, Co-I's: M. Zink, V. Chandrasekar, J. Trainor.
Award: $3.2 million

7/2012 - 7/2016 NSF Accelerating Innovation Research (AIR): *CASA Warning Systems Institute*;
PI: B. Philips
Total Award: $1.5M
National Science Foundation: $915k
National Weather Service Office of Science and Technology: $275k
City of Fort Worth Storm Water Department: $300k

7/2012 - 7/2014	CASA DFW Urban Demonstration Network; PI: B. Philips (via CIRA), Co-PI: V. Chandrasekar National Weather Service Office of Science and Technology: $245k
3/2013 - 6/2013	Integrated Warning Systems for Healthcare Providers; PI: B. Philips, Co-PI: E. Bass, V. Chandrasekar. North Central Texas Trauma Regional Advisory Council: $75k
3/2007 - 9/2011	CASA NWS Forecaster Evaluation Project, Experimental Warning Program, NOAA Hazardous Weather Test Bed; PI: B. Philips, Co-PIs: E. Bass, J. Brotzge CASA: included in core research funds NOAA: funds for forecaster participation, test bed infrastructure

TECHNOLOGY & RESEARCH PRODUCTS

Software Copyright. Westbrook D, Lyons E, Philips B, Bajaj A. CityWarn - A Hazard Notification System. [CD-ROM]. Amherst, MA: University of Massachusetts Amherst; 2018. Software has been licensed to a company in the drone space.

Creator and Leader, CASA Dallas Fort Worth Living Lab for Severe Weather Warning, a socio-technical system of sensors, weather products, communications and networking, and mobile apps used for warning and response by NWS forecasters, emergency managers, broadcast media, and the public. The lab functions simultaneously as a real-time warning system, an interdisciplinary research platform, and a vehicle for co-creation with users.

Database of Public Response to weather events. Philips, B., League, C. (2020). Public Perception of and Response to Flash Floods, Tornados, and Severe Weather in the Greater Dallas Fort Worth Metroplex: Quick Response Survey Results (2017-2020) [data files collected/managed as part of NSF award #1331572]. Amherst: University of Massachusetts, Amherst.
https://umassamherst.co1.qualtrics.com/Q/MyProjectsSection

NATIONAL ADVISORY WORK

Philips, B. (2017b). Living Lab Test Bed for Wireless Emergency Alerts. Presented at **National Academies of Sciences, Engineering, and Medicine** *Committee on The Future of Emergency Alerts and Warning Systems: Research Directions*. LaJolla, California

Philips, B. (2016). Living Labs: A Platform for Multidisciplinary Social Science Research and Transition to Practice. Presented at **National Academies of Sciences, Engineering, and Medicine** *Committee on Advancing Social and Behavioral Science Research and Application within the Weather Enterprise*. Washington DC

Project Participant, "Urban Meteorology: Scoping the Problem, Defining the Needs" July 2011, **National Research Council Board on Atmospheric Sciences and Climate (BASC)**

Project Participant, "Progress and Priorities of US Weather Research and Research-to-Operations Activities." July 2009, **National Research Council Board on Atmospheric Sciences and Climate (BASC)**

Co-Moderator and Organizing Committee, "Framing the Questions – Addressing the Needs: Moving To Incorporate Social Science Results into Meteorological Operations/Services",

Interagency Workshops for USDA, US Navy, DHS, NOAA, Nuclear Regulatory Commission, Army Corps of Engineers, and USGS, May, Oct 2010, **Office of the Federal Coordinator for Meteorology**

Invited Participant, Inaugural Weather Ready Nation Workshop, December 2011, **National Weather Service**

PEER-REVIEWED JOURNAL ARTICLES & CONFERENCE PAPERS

Kim, S., Shen, H., Noh, S., Seo, D.J., Welles, E., Pelgrim, E., Weerts, A., Lyons, E. and Philips, B., 2021. High-resolution modeling and prediction of urban floods using WRF-Hydro and data assimilation. *Journal of Hydrology*, *598*, p.126236.

Bajaj, A., Philips, B., Lyons, E., Westbrook, D., & Zink, M. (2020). Determining and Communicating Weather Risk in the New Drone Economy. In *2020 IEEE 92nd Vehicular Technology Conference (VTC2020-Fall)* (pp. 1-6). IEEE.

Bajaj, A., Philips, B., Lyons, E., Westbrook, D., Zink, M., Chandrasekar, V., & Huffman, E. (2020). Remote Sensing Systems for Urban-Scale Drone and Air Taxi Operations. In *IGARSS 2020-2020 IEEE International Geoscience and Remote Sensing Symposium* (pp. 6483-6486). IEEE.

Chandrasekar, V., Chen, H., & Philips, B. (2018). Principles of high-resolution radar network for hazard mitigation and disaster management in an urban environment. *Journal of the Meteorological Society of Japan. Ser. II*, *96*, 119-139

Moghadam, A. S., Lyons, E., Philips, B., & Minsker, B. E. (2021, December). Predicting Roadway Flood Severity Based on Waze Traffic Alerts Using Machine Learning. In *AGU Fall Meeting 2021*. AGU

Lyons, E. J., Zink, M., & Philips, B. (2017, July). Efficient data processing with exogeni for the casa dfw urban testbed. In *2017 IEEE international geoscience and remote sensing symposium (IGARSS)* (pp. 5977-5980). IEEE.

Philips, B., T. Ryan, V. Chandrasekar, E. Lyons, T. Bradshaw, M. Fox, F. Junyent, & A. Bajaj. (2017). Tracking Tornados Down Streets: Using CASA Radars in Real-Time Warning Operations in North Texas. Paper presented at *IGARSS 2017*, Fort Worth, Texas.

Trainor, J. E., Nagele, D., Philips, B., & Scott, B. (2015). Tornadoes, social science, and the false alarm effect. *Weather, Climate, and Society*, *7*(4), 333-352.

Stalker, James, John Lasley, George Frederick, Renee McPherson, Paul Campbell, Brenda Philips, Bob Pasken, 2013: A Nationwide Network of Networks. *Bull. Amer. Meteor. Soc.*, **94**, 1602–1606.

B. Philips, Chandrasekar V. (2012). The Dallas Fort Worth urban remote sensing network. In *Proceedings of IGARSS* 2012, 6911-6913.

Rude, D. J., Bass, E. J., & Philips, B. (2011). Quantifying the impact of adding gap filling radar data on forecaster wind assessments, warnings, and confidence. *Meteorological Applications*.

E.J. Bass, B. Hogan, D.J. Rude, C. League, P. Marsh, L. Lemon, B. Philips, D. Westbrook, J. Brotzge, and R. Riley (2011). A method for investigating real-time distributed weather forecaster-emergency manager interaction. In *Proceedings of SMC*. 2011, 2809-2815.

Hirschberg, P. A., Abrams, E., Bleistein, A., Bua, W., Monache, L. D., Dulong, T. W., J.E. Gaynor, B. Glahn, T.M. Hamill, J.A. Hansen, D.C. Hilderbrand, R.N. Hoffman, B.H. Morrow, B. Philips, J. Sokich, Stuart, N. (2011). A weather and climate enterprise strategic implementation plan for generating and communicating forecast uncertainty information. *Bulletin of the American Meteorological Society*, *92*, 1651-1666.

League, C.E., W. Diaz, B. Philips, E.J. Bass, E.C. Gruntfest, K. Kloesel, A. Gessner (2010). Emergency Manager Decision Making and Tornado Warning Communication. *Met. Applications*, 17(2):163-172.

Brotzge, J., K. Hondl, B. Philips, L. Lemon, E. Bass, D. Rude, and D. Andra, Jr. (2010). Evaluation of Distributed Collaborative Adaptive Sensing for Detection of Low-level Circulations and Implications for Severe Weather Warning Operations. *Wea. Forecasting*, 25, 173-189.

McLaughlin, D., D. Pepyne, V. Chandrasekar, B. Philips, J. Kurose, M. Zink, K. Droegemeier, S. Cruz-Pol, F. Junyent, J. Brotzge, D. Westbrook, N. Bharadwaj, Y. Wang, E. Lyons, K. Hondl, Y. Liu, E. Knapp, M. Xue, A. Hopf, K. Kloesel, A. Defonzo, P. Kollias, K. Brewster, R. Contreras, B. Dolan, T. Djaferis, E. Insanic, S. Frasier, and F. Carr (2009): Short-Wavelength Technology and the Potential For Distributed Networks of Small Radar Systems. *Bull. Amer. Meteor. Soc.*, 90, 1797–1817.

Baumgart, L.A., Bass, E.J., Philips, B. & Kloesel, K. (2008). Emergency management decision-making during severe weather. *Weather and Forecasting*, 23(6) 1268–1279.

B. Philips, D. Westbrook, D.L. Pepyne, J. Brotzge, E.J. Bass, and D.J. Rude (2008). User Evaluations of Adaptive Scanning Patterns in the CASA Spring Experiment 2007. In *Proceedings of IGARSS* (5). 2008, 156-159.

Pepyne, D., Westbrook, D., Philips, B., Lyons, E., Zink, M., & Kurose, J. (2008). Distributed collaborative adaptive sensor networks for remote sensing applications. In *American Control Conference, 2008* (pp. 4167-4172). IEEE.

Baumgart, L. A., Bass, E. J., Philips, B. and Kloesel, K. (2006). Emergency management decision-making during severe weather. The 50th Annual Meeting of the Human Factors and Ergonomics Society. San Francisco, CA, October 16-20, 2006. Published 2006-10-01

J. Brotzge, V. Chandresakar, K. Droegemeier, J. Kurose, D. McLaughlin, B. Philips, M. Preston, S. Sekelsky, "Distributed Collaborative Adaptive Sensing for Hazardous Weather Detection, Tracking, and Predicting," *Computational Science – ICCS 2004: 4th International Conference, Krakow, Poland, June 6-9, 2004, Proceedings, Part III, Lecture Notes in Computer Science*, Springer-Verlag Heidelberg, pp. 670 – 677.

CONFERENCE PAPERS AND OTHER PUBLICATIONS

Michaud M, Trainor J, Philips B, League C. Social, Behavioral and Economic Science Data in the National Weather Service. Silver Spring, Maryland: NOAA Research, Weather Program Office, Social Science; 2020. (NOAA Supplement to NSF Award #1331572).

Bajaj, A., B. Philips. 2012. Casting the Net – A revolutionary business model for deploying weather radar networks. *Meteorological Technology International*, August 2012, pp. 106-108

Office of the Federal Coordinator for Meteorological Services and Supporting Research, 2010. *Framing the Questions – Addressing the Needs: Moving to Incorporate Social Science Results into Meteorological Operations/Services*. By Philips, B., B. Phillips, and D. Stephenson. Office of the Federal Coordinator for Meteorological Services and Supporting Research, August 2010, FCM-R28-2010.

Brotzge, J., B. Philips, R. Contreras, and K. Brewster, 2009: Radar feasibility study. NOAA Technical Report, 130 pp.

Gao, J., J. Brotzge, Y. Wang, K. Thomas, M. Xue, V. Chandrasekar, Y. Wang, B. Philips, and M. Zink (2009). High temporal and spatial resolution 2D wind analysis of CASA and WSR-88D radar data using the ARPS 3DVar. In *Preprints*, 13th Conf IOAS-AOLS, Phoenix, AZ, Amer. Meteor. Soc.

Philips, B, D. Pepyne, D. Westbrook, E. Bass, J. Brotzge, W. Diaz, K. Kloesel, J. Kurose, D. McLaughlin, H. Rodriguez, and M. Zink (2007). Integrating End User Needs into System Design and Operation: The Center for Collaborative Adaptive Sensing of the Atmosphere (CASA). *Preprints*, 16th Conf. Applied Climatology, American Meteorological Society Annual Meeting, San Antonio, TX.

Brotzge, J., K. Brewster, V. Chandrasekar, B. Philips, S. Hill, K. Hondl, B. Johnson, E. Lyons, D. McLaughlin, and D. Westbrook (2007). CASA IP1: Network Operations and Initial Data. In *Preprints*, 23rd International Conf. on Interactive Information Processing Systems (IIPS) for Meteor., Ocean., and Hydrology, AMS Conf., San Antonio, TX.

J. Kurose, E. Lyons, D. McLaughlin, D. Pepyne, B. Philips, D. Westbrook, and M. Zink (2006). An End-User-Responsive Sensor Network Architecture for Hazardous Weather Detection, Prediction, and Response. *Preprints*, Asian Internet Conference (AINTEC) 2006, Pathumthani, Thailand, November 2006.

Brotzge, J., M. Zink, D. Westbrook, K. Brewster, B. Johnson, B. Philips and M.Preston (2005). CASA's first test bed: Integrative Project #1, October 22 – 29, 2005, in *Preprints*, 32nd Conference on Radar Meteorology, Albuquerque, NM

D. McLaughlin**,** V. Chandrasekar, K. Droegemeier, S. Frasier, J. Kurose, F. Junyent, B. Philips, S. Cruz-Pol, and J. Colom, 2005. "Distributed Collaborative Adaptive Sensing (DCAS) for Improved Detection, Understanding, and Prediction of Atmospheric Hazards," *preprint*s, 9th Symposium on Integrated Observing and Assimilation Systems for the Atmosphere, Oceans, and Land Surface, 9-13 January 2005, San Diego, CA, American Meteorological Society.

Brotzge, J., K. Brewster, B. Johnson, B. Philips, M. Preston, D. Westbrook, and M. Zink (2005). CASA'S First Test Bed: Integrative Project #1. *Preprint*, 32nd Conf. Radar Meteor., Amer. Meteor. Soc., Albuquerque, NM.

INVITED TALKS

Philips, B (September, 2019). *Unique Ways of Collecting Human Response Data.* Invited speaker at the Social and Behavioral Sciences Research to Operations Workshop, NOAA Office of Weather and Air Quality, Silver Spring, MD.

Philips, B (June 2018). *Human Mobility, Hazard Perceptions, and Individualized Context-Aware Severe Weather Warning Systems.* Meso & Microscale Meteorology Lab Seminar Series, National Center for Atmospheric Research, Boulder, CO.

Philips, B (January, 2107). *An Infrastructure for Observing the Publics' Perception and Response to Weather Information in Multiple Contexts*. Panelist at the Special Symposium on Individual, Social, and Cultural Observations in Weather and Climate Contexts, 97th American Meteorological Society Annual Meeting, Seattle, WA,

Philips B., J. Trainor, C. League, A. Everly, J. Frizell, D. Westbrook, E. Lyons, A. Bajaj (December 2018). *Living Labs as a Method to Foster Practice Relevant Research.* Invited Speaker, Special Symposium on New Directions in Academic-Practitioner Research Collaborations, Universitat de Barcelona, Barcelona, Spain.

Panelist, "Economic Benefits of the Weather and Climate Enterprise," American Meteorological Society 2012 AMS Washington Forum · 10–12 April 2012, Washington DC.

"Dallas Fort Worth Urban Demonstration Network," American Meteorological Society Summer Community Meeting, National Center for Atmospheric Research, 8–11 August 2011, Boulder, Colorado

"The Benefits of CASA Radar Networks for Warning and Response," National Weather Association Meeting. Norfolk, VA., October 17, 2009.

"CASA Radar Systems for Improved Decision Making," 2009 Fall Meeting of the Oklahoma Emergency Management Association, Tulsa, OK, September 29-October 1, 2009.

"Designing New Technology to Improve Warning and Response: CASA's on-going research" (2008). NOAA workshop on Warnings of the Future, Norman, Oklahoma, December 4, 2008.

"Users, Impacts, and Radar Networks: The CASA Experience in Designing an End-to-End System," International Symposium on X-band Weather Radar Networks, National Research Institute for Earth Science and Disaster Prevention, Tskuba, Japan, October 5, 2007.

"Evaluation of CASA (and other Gap-Filling) Radars," with Kurt Hondl. Presented at the 2nd Workshop on Severe Weather Technology for NWS Warning Decision Making, Norman, Oklahoma, July 11, 2007.

"CASA: A New Paradigm for End User Driven Data Collection". Presented at American Meteorological Society 2007 Corporate Forum, March 22-23 2007, Washington, DC

"Incorporating Users into System Design." Presented at the Disaster and Emergency Services Workshop, National Weather Service Forecast Office, Glasgow, Montana, January 5, 2006.

"Incorporating Users into System Design," with Havidan Rodriguez. Presented at the Weather and Society Integrated Studies Workshop, National Corporation for Atmospheric Research, Boulder, Colorado, November 9, 2005.

CONFERENCE PRESENTATIONS

Philips, B. J., Ryan, T., Lyons, E., Dunn, J., Bradshaw, T., Bajaj, A., & Chandrasekar, V. (2020, January). 129 Warnings in 3 Months! How CASA High-Resolution Radars Helped Forecasters and Stakeholders during the Active 2019 Convective Storm Season in the Greater Dallas–Fort Worth Area. In *100th American Meteorological Society Annual Meeting*. AMS.

Philips, B., Westbrook, D., Trainor, J., Lyons, E., League, C., & Bajaj, A. (2020, January). Representing People in Severe Weather Warning Systems. In *100th American Meteorological Society Annual Meeting*. AMS.

Philips, B. J., League, C., Trainor, J., & Meyers, N. (2020, January). Surveying the Public about Their Perception and Response to "Everyday" Severe Weather. In *100th American Meteorological Society Annual Meeting*. AMS.

Philips, B. J., Chandrasekar, V., Lyons, E., Bajaj, A., & Everly, A. (2020, January). Lessons Learned from a Multisector Partnership for Severe Weather Warning Research to Operations. In *100th American Meteorological Society Annual Meeting*. AMS.

League, C., Philips, B., Meyers, N., & Westbrook, D. (2020, January). Follow-the-Leader Syndrome: Motorists' Responses to Flash Flooding in Texas. In *100th American Meteorological Society Annual Meeting*. AMS.

Philips, B. J., Trainor, J. E., Westbrook, D., Bajaj, A., & Lyons, E. J. (2018, January). Context-Aware Weather Warning Systems. In *98th American Meteorological Society Annual Meeting*. AMS.

Philips, B., V. Chandrasekar, F. H. Carr, A. Bajaj, and J. Brotzge (2013). CASA DFW Urban Demonstration Network: An Update on a Multi-Sector Partnerships for Research to Operations, Third Conference on Transitions to Operations, American Meteorological Society, Austin Texas, January 13, 2013.

Philips, B., Przybylinski, R., Brotzge, J., Rude, D.J., Diaz, W., Dolan, B., Bass, E. (2009) The leading edge: using CASA radars to detect lower troposphere winds in quasi-linear convective systems. American Meteorological Society, 13th Conference on Integrated Observing and Assimilation Systems for Atmosphere, Oceans, and Land Surface, January 12, 2008

B. Philips E. Bass, D. L. Andra, D. Rude, and R. Kammerer, (2008). Evaluation of the CASA System in the NOAA Hazardous Weather Test Bed. 24th International Conf. on Interactive Information Processing Systems (IIPS) for Meteor., Ocean., and Hydrology, 88th American Meteorology Society Annual Meeting, New Orleans, LA, January 24, 2008.

B. Philips, R. Krzysztofowicz, W. Donner, E. Bass, D. Pepyne, H. Rodriguez, W. Diaz, and K. A. Kloesel (2008). *Designing an end-to-end decision model for CASA networks*, Symposium on Linkages among Societal Benefits, Prediction Systems and Process Studies for 1–14-day Weather Forecasts, 88th American Meteorology Society Annual Meeting, New Orleans, LA, January 24, 2008.

Philips, B., Rodriguez, H., Kloesel, K, Diaz, W. (2004). "Integrating End User Needs into System Design." National Weather Association 29th Annual Meeting, Portland, Oregon, October 23, 2004.

PROFESSIONAL ACTIVITIES

UMASS

- ECE Diversity Equity and Inclusion Committee

National Science Foundation

- Proposal Review Panels – National Science Foundation
- Council of Visitors, National Science Foundation Partnerships for Innovation program

American Meteorological Society

- Member
- Ad Hoc Committee on Nationwide Network of Networks; Leader, Human Dimensions Working Group (2010 – ongoing)
- Ad Hoc Committee on Uncertainty in Forecasts (ACUF), Co-Lead of Sub-Group 4: Roles and Responsibilities of Enterprise Partners
- Board Member, American Meteorological Society, Weather and Climate Enterprise Commission, Board on Enterprise Economic Development (2006-2009)

AWARDS

2007 Chancellor's Citation Award for exemplary and outstanding service to the University of Massachusetts, Amherst, MA.

Thesis Committee Member (additional member)
Leigh Baumgart, MS Thesis, Systems Engineering, University of Virginia
Don Rude, MS Thesis, Systems Engineering, University of Virginia
Yue Xu, MS Thesis, Geosciences, University of Massachusetts, Amherst