## **Related Publications and Presentations:**

Yalda, S., R. Clark, S. States, S. Celeski\*, B. Kerschner\*, R. Junod\*, L. Davis, E. Wiziecki, T. Daley\*, and H. Gadde\*, 2009: A demonstration of an instructional pathway for undergraduate meteorology education using a science gateway. 25th IIPS Conference. American Meteorological Society, Phoenix, Arizona

Clark, R.D., 2008, Space Weather in the Undergraduate Curriculum (invited). NOAA/SPEC Space Weather Workshop, Boulder, CO. 29 April 2008.

Clark, R. D., and Seth Clevenstine\* et al: Teaching with tanks: Geophysical fluid experiments in undergraduate education. (Preprints). 17th Symposium on Education. American Meteorological Society, New Orleans, LA, January 2008.

Clark, R. D., et al.: The LEAD-WxChallenge Pilot Project: Enabling the Community. (Preprints). 24th International Conference on Interactive Information Processing Systems. American Meteorological Society, New Orleans, LA, January 2008.

Yalda, S., R. Clark, E. Wiziecki, T. Daley\*, H. Gadde\*, E. Meyers\*, and R. Junod\*, 2008: Integrating LEAD Research In Education, 18th Symposium on Education, New Orleans, LA, American Meteorological Society.

Meyers, Eric\*, H. Gadde\*, J. Kurdzo\*, T. Daley\*, J. Vogt\*, R. Junod\*, E. Wiziecki, S. Yalda, and R. Clark, 2007: Integrating LEAD Research in Education. TeraGrid 2007 Conference (peer-reviewed paper).

Plale, B., D. Gannon, J. Brotzge, K. Droegemeier, J. Kurose, D. McLaughlin, R. Wilhelmson, S. Graves, M. Ramamurthy, R. Clark, S. Yalda, D. Reed, E. Joseph, V. Chandrasekar, 2006: CASA and LEAD: Adaptive cyberinfrastructure for real-time multiscale weather forecasting. Computing: IEEE Transactions on Parallel and Distributed Systems. IEEE Computer Society. 38, (11), pp. 56-64.

Droegemeier, K., T. Baltzer, K. Brewster, R. Clark, B. Domenico, D. Gannon, S. Graves, E. Joseph, V. Morris, D. Murray, B. Plale, R. Ramachandran, M. Ramamurthy, L. Ramakrishnan, D. Reed, J. Rushing, D. Weber, R. Wilhelmson, A. Wilson, M. Xue, and S. Yalda, 2005: Service-oriented environments in research and education for dynamically interacting with mesoscale weather. Grid Computing: Computing in Science and Engineering, IEEE Computer Society and Amer. Inst. of Physics. Nov/Dec 2005.

Yalda, S., R. D. Clark, and E. Joseph, 2006: LEAD Educational Initiatives. Preprints, 15th Symposium on Education. American Meteorological Society, Atlanta, GA, January 2006. Clark, R. D., D. Fitzgerald, T. Baltzer, E. Joseph, R. Ramachandran, and S. Chiao, 2006: EarlyLEAD: A WRF ensemble demonstrating a data mining capability. Preprints, 22nd International Conference on Interactive Information Processing Systems for Meteorology, Oceanography, and Hydrology. 86th Annual Meeting, Amer. Meteor. Soc., Altanta, GA.

Droegemeier, K. K., V. Chandrasekar, R. Clark, D. Gannon, S. Graves, E. Joseph, M. Ramamurthy, R. Wilhelmson, K. Brewster, B. Domenico, T. Leyton, V. R. Morris, D. Murray, B. Plale, R. Ramachandran, D. Reed, J. Rushing, D. Weber, A. Wilson, M. Xue, and S. Yalda, 2005: Linked Environments for Atmospheric Discovery (LEAD):

Architecture, Technology Road Map and Deployment Strategy. Preprints, Joint 21 IIPS and 14 Education. American Meteorological Society, San Diego, CA.

Yalda, S., R. D. Clark, E. Joseph, J. Alameda, T. Baltzer, K. Droegemeier, D. Bender\*\*, and W. Yarnell\*\*, 2005: LEAD Learning Communities. Preprints, Joint 21 IIPS and 14 Education. American Meteorological Society, San Diego, CA.

\* Denotes undergraduate students; \*\* Denotes high school teachers

## **Recent Grants and Contracts:**

Acquisition of remote sensing systems for lower atmospheric research and undergraduate research training at Millersville University. National Science Foundation, MRI. \$280K. 2006-2009.

Exploiting laboratory experiments in the teaching of meteorology, oceanography, and climate: Phase II. NSF, contract with Massachusetts Institute of Technology. \$26K. 2006-2009.

Atmospheric Sensing Technology. Contract with Penn State University. \$15K. 2004-2005.

Wintertime Particle Study. NESCAUM (MANE-VU). \$55K, 2003-2004.

Linked Environments for Atmospheric Discovery. NSF-ITR (Large) Collaborative. \$691.9K, 2003-2008.

Investigations of Source-Receptor relationships during NARTSO-NE-OPS. DEP, \$42K, 2003.

SuomiNet: A real-time national GPS network for atmospheric research and education. NSF-MRI partner, \$15K, 2000-2002

Instrumentation and Equipment for air chemistry/meteorology undergraduate research and education at Millersville University. NSF-DUE: CCLI-A&I, \$62K, 2000-2003 Investigation of factors determining the occurrence of ozone and fine particles in the Northeast USA. US-EPA. \$244.5K. 1998-2001

Workstations to support interactive learning and research in atmospheric science using Unidata applications. NSF-ATM: UCAR and Lower Atmospheric Facilities Section, \$11K, 2000-2001

## **Professional and Synergistic Activities:**

- Unidata Policy Committee (member, 2006-09)
- 2006 Unidata Users Workshop, "Expanding the Use of Models as Educational Tools in the Atmospheric & Related Sciences," LEAD Session participant
- Partner in a NSF-ITR (Large) Collaborative, LEAD education and outreach
- Chair, Vice-Chair, Member NSF-NCAR Observing Facilities Advisory Panel, 2003-2006
- NSF-funded Forum on Geoscience Information Technology (FGIT), Washington, DC
- UCAR Unidata Users Committee, served two terms as chair, 2000-2004
- 2003 Unidata Users Workshop, "Expanding Horizons...," organizer and host

- Program Chair, First AMS Student Conference and Career Fair, Orlando, FL 2002
- Millersville University representative to the UCAR Academic Affiliates Program

## **Awards:**

2008 AMS Teaching Excellence Award The 2006 Russell L. DeSouza Award for Outstanding Service to the Unidata Community.