UCAR Trustee Candidate
Fred Carr

I am honored to be considered for election to a second term on the UCAR Board of Trustees. I have been involved with many aspects of UCAR and NCAR for over 30 years, beginning with participation in NCAR’s summer programs and colloquiums as a student. I have made extensive use of its computing and observational facilities, and have collaborated with its scientists and leaders. I am especially familiar with UCAR’s Office of Programs, having participated in some capacity in COMET, Unidata, the Visiting Scientist Program, JOSS, and COSMIC. As a faculty member in a UCAR member university for the past 31 years, I am familiar with the UCAR-University relationships envisioned by the “Blue Book” founders, and how they have evolved over the years. One of the primary roles of a Trustee is to strengthen these interactions.

The NCAR Strategic Plan provides an excellent blueprint for its vision, goals and priorities. The Board of Trustees should work with UCAR and NCAR leaders to help achieve the 7 NCAR Imperatives and 5 NCAR Frontiers articulated in that document. I believe I can be of assistance in the several imperatives and frontiers that seek to improve NCAR's (and the U.S.'s) observational and prediction capabilities, as well as to seek improved understanding of the myriad of physical processes influencing the weather and climate. I was pleased to have been an author of the recent NRC Report on “Observing Weather and Climate from the Ground Up: A Nationwide Network of Networks”, and this report, together with the NRC Decadal Survey on “Earth Science and Applications from Space”, provides comprehensive guidance for what needs to be done. UCAR and NCAR should work with leaders at all levels to keep observational capacity building as a top priority for our community. Also, serving as co-chair of the 2009 comprehensive review of NCEP has given me a broad perspective on the research and operational needs of our national weather and climate prediction enterprise, and what is required to enhance its capabilities. Finally, I would be pleased to share my experience as an academic director of a thriving meteorology program over the past 14 years. Other areas of particular interest and experience include interactions with the private sector, professional development of students and young scientists, science and public policy, and professional ethics.
Biographical Information

Frederick H. Carr  
Professor of Meteorology, School of Meteorology  
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PROFESSIONAL PREPARATION

Florida State University  
Meteorology  B.S.  1969

Florida State University  
Meteorology  M.S.  1971

Florida State University  
Meteorology  Ph.D.  1977

SUNY-Albany  
Meteorology  Post Doc  1975-79

APPOINTMENTS

1995-present  
Professor, School of Meteorology, University of Oklahoma

2002-2010  
Mark and Kandi McCasland Professor of Meteorology

1996-2010  
Director, School of Meteorology, University of Oklahoma

1996-2000  
McCasland Foundation Presidential Professor, U. of Oklahoma

1995-2010  
Associate Director of CAPS, University of Oklahoma

1993-94  
Visiting Scientist, COMET and Forecast System Lab., Boulder

1987  
Visiting Scientist, NCAR, Boulder, CO.

1986  
Visiting Scientist, National Meteorological Center, Camp Springs, MD

1986-94  
Associate Professor, School of Meteorology, Univ. of Oklahoma

1979-85  
Assistant Professor, School of Meteorology, Univ. of Oklahoma

1975-79  
Research Scientist, SUNY-Albany

PUBLICATIONS


OTHER SIGNIFICANT PUBLICATIONS


SYNERGISTIC ACTIVITIES

1. Member of NRC Committee on “Developing Mesoscale Meteorological Observations to Meet Multiple National Needs”; (2007-08)

2. Co-Chair, AMS Annual Partnership Topic Committee on “Feasibility of Multi-Partner, Multifunctional Mesoscale Observing Networks” (2006-2008)
3. Co-Chair of Committee to review NCEP and all 9 NCEP Centers in 2009-10
4. Member, Board of Trustees, University Corporation for Atmospheric Research
5. Instructor of “Responsible Conduct of Research” short courses for the OU Graduate College

COLLABORATORS & OTHER AFFILIATIONS

Keith Brewster - CAPS, University of Oklahoma
Jerry Brotzge - CAPS, University of Oklahoma
Walt Dabberbt - Vaisala Corporation
Ming Xue - School of Meteorology, University of Oklahoma
Victor Passetti - FAA, Hughes Technical Center
Earnest Sessa - FAA, Hughes Technical Center
Naresh Kumar - EPRI

GRADUATE AND POSTDOCTORAL ADVISORS

T. N. Krishnamuti, Thesis Advisor, Florida State University
Lance Bosart, post-doc supervisor, SUNY-Albany

THESIS ADVISOR AND POSTGRADUATE-SCHOLAR SPONSOR

8 PhD students; 34 MS students supervised. PhD students are listed:
Mohan Ramamurthy - Director, UNIDATA, UCAR, Boulder, CO
Qingyun Zhao - Research Scientist Navel Research Lab., Monterey, CA
Jian Zhang - Research Scientist, CIMMS, NSSL, Norman, OK
Keith Brewster – Senior Research Scientist, CAPS, OU, Norman, OK
Phillip Bothwell - Scientist, Storm Prediction Center, Norman, OK
Michael Baldwin - Assistant Professor, Purdue University, Indiana

Pamela Heinselman - Research Scientist, CIMMS, NSSL, Norman, OK

Curtis Alexander - Research Scientist, GSD/ESRL, Boulder, CO

BIOSKETCH

Frederick H. Carr is a Professor of Meteorology at the University of Oklahoma. From 1996 until July 2010, he served as the Mark and Kandi McCasland Professor of Meteorology and the Director of the School of Meteorology. He received his PhD in meteorology from Florida State University, followed by a post-doctoral appointment at SUNY-Albany. His research interests include synoptic, tropical and mesoscale meteorology, numerical weather prediction and data assimilation, and the use of new observing systems in diagnostic and numerical weather prediction studies. Dr. Carr has held visiting scientist positions at the National Centers for Environmental Prediction, the National Center for Atmospheric Research, and NOAA’s Forecast Systems Laboratory. He has served as the associate director of the Center for the Analysis and Prediction of Storms at the University of Oklahoma and also as an associate director of Collaborative Adaptive Sensing of the Atmosphere, an NSF Engineering Research Center. Carr is a Fellow of the American Meteorological Society and has served as a member of the AMS Council, chair of the AMS Board on Higher Education, and a member of the AMS Educational Advisory Committee, and he has also served as an editor of the Monthly Weather Review. Dr. Carr was chair of the first COMET Advisory Panel and was named one of the 10 “Founders of COMET.” In addition, he has served on the NSF Committee of Visitors to evaluate ATM, the UCAR Nominating Committee (as chair), the North American Observing Systems committee, and NOAA External Review Panels of the Forecast Systems Laboratory and the Mesoscale Development Laboratory, and was co-organizer of USWRP Workshops on Data Assimilation and Mesoscale Observing Systems. He served on the National Research Council committee that authored the report “Observing Weather and Climate from the Ground Up: A Nationwide Network of Networks”. He currently serves on the UCAR Board of Trustees and chaired its Personnel Committee (2009-2010). He recently co-chaired a major review of the National Centers for Environmental Prediction, and now co-chairs the UCAR Community Advisory Panel for NCEP.