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Kelvin K. Droegemeier earned a B.S. with Special Distinction in Meteorology in 1980 from the University of Oklahoma, and M.S. and Ph.D. degrees in atmospheric science in 1982 and 1985, respectively, from the University of Illinois at Urbana-Champaign under the direction of R. Wilhelmson. He joined the University of Oklahoma in September, 1985 as an Assistant Professor of Meteorology, and was tenured and promoted to Associate Professor in July, 1991, and promoted to Professor in July, 1998. Dr. Droegemeier was co-founder in 1989 of the NSF Science and Technology Center (STC) for Analysis and Prediction of Storms (CAPS), and served for five years as its deputy director. He then directed CAPS from 1994 until 2006, and today CAPS is recognized around the world as the pioneer of storm-scale numerical weather prediction. Dr. Droegemeier is now Director Emeritus of CAPS. In 1998, Dr. Droegemeier was named a President's Associates Presidential Professor at the University of Oklahoma, and for 2 years, beginning in summer 1999, wrote a daily weather science column for the *Daily Oklahoman* newspaper, which is Oklahoma's largest. He was awarded a Regents' Professorship at OU in fall, 2001, which is a life-long title. In 2003, Dr. Droegemeier co-founded the NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere (CASA) and currently serves as its deputy director. He is the only person in the nation to have co-founded an NSF Science and Technology Center and an NSF Engineering Research Center. In 2004, he was awarded the Roger and Sherry Teigen Presidential Professorship and became the first OU professor to receive two Presidential Professorships. In 2005, he was named the Weathernews Chair in Applied Meteorology at the University of Oklahoma and also the Director of the Sasaki Institute, a non-profit organization that fosters the development and application of knowledge, policy, and advanced technology in the government, academic and private sectors. In 2004, Dr. Droegemeier was appointed by President George W. Bush to a 6-year term on the National Science Board, the governing body of the National Science Foundation that also provides science policy guidance to the Congress and President. In 2005, Dr. Droegemeier was appointed Associate Vice President for Research at the University of Oklahoma.

In 1987, Dr. Droegemeier was named a Presidential Young Investigator by the National Science Foundation. As director of the CAPS model development project for 5 years, he managed the creation of a multi-scale numerical prediction system that has helped pioneer the science of storm-scale numerical forecasting. This computer model was a finalist for the 1993 National Gordon Bell Prize in High Performance Computing. In 1997, Dr. Droegemeier received the *Discover Magazine* Award for Technology Innovation (computer software category), and also in 1997 CAPS was awarded the *Computerworld* Smithsonian Award (science category). Droegemeier also is a recipient of the NSF Pioneer Award and the Federal Aviation Administration's Excellence in Aviation Award.

Dr. Droegemeier has been a major force behind the development and application of high performance computing systems both at OU and across the US. In 1989 and 1990, he chaired the OU Computing Advisory Committee and was the lead author on a 5-year strategic plan. He has served on numerous NSF High Performance Computing and Communication panels and is a member of the NCSA User Advisory

Committee. In 1995 he created as principal investigator, and now directs, a \$1.4 million NSF/OU project known as the Environmental Computing Applications System. He served on the National Science Foundation's Blue Ribbon Panel on Cyberinfrastructure, and is a member of the Board of Directors of the OU Supercomputer Center for Education and Research (OSCER), which he helped establish. Dr. Droegemeier is now a member of the Advisory Committee for the National Center for Computational Sciences and the Computer Science and Math Division at Oak Ridge National Laboratory.

Dr. Droegemeier is a national leader in the creation of partnerships among academia, government and industry. He initiated and led a 3-year, \$1M partnership with American Airlines to customize weather prediction technology for commercial aviation, and this resulted in him starting a private company, Weather Decision Technologies, Inc., located in Norman, that is commercializing advanced weather technology developed by the University of Oklahoma and other organizations. The success with American Airlines also played a role in the establishment in Oklahoma of the Aviation Services Division of Weathernews, the world's largest private weather company. Dr. Droegemeier led a \$10.6M research alliance with Williams Energy Marketing and Trading Company in Tulsa, which is the largest such partnership between a university and a private company in the field of meteorology. He initiated and led the Collaborative Radar Acquisition Field Test (CRAFT), a national project directed toward developing strategies for the real time delivery of NEXRAD radar data via the Internet. CRAFT won two awards from the National Oceanic and Atmospheric Administration, and its success led the National Weather Service to adopt its Internet data delivery strategy. As a follow-on to CRAFT, Droegemeier established Integrated Radar Data Services (IRaDS) at OU, which is a National Weather Service-designed top-tier provider of NEXRAD radar data to private industry.

Dr. Droegemeier's research interests lie in thunderstorm dynamics and predictability, variational data assimilation, mesoscale dynamics, computational fluid dynamics, massively parallel computing, and aviation weather. He has served as an associate editor for *Monthly Weather Review* for 6 years served on the UCAR University Relations Committee, the last two as chair. Elected to the UCAR Board of Trustees in 2002 and as its Vice Chairman in 2003, he became Chairman of the Board in 2004. Dr. Droegemeier has served as a consultant to Honeywell Corporation, American Airlines, the National Transportation Safety Board, and Climatological Consulting Corp. Dr. Droegemeier has graduated 27 students and served on the committees of numerous others. He has served on the Advisory Committee for the Geosciences Directorate at the National Science Foundation and recently began a term on the NSF Advisory Committee for the Computer Information Science and Engineering Directorate.

In his 21 years at the University of Oklahoma, Dr. Droegemeier has generated over \$40 million in external research funding. For over a decade, he has been among the top 5 faculty at the University of Oklahoma in external research grant funding, averaging over \$2 million per year. Dr. Droegemeier has been an invited speaker at or organizer of several international conferences and symposia on meteorology, high-performance computing, and computational fluid dynamics in the U.S., England, Japan, Australia, Korea, and France, notably the series of Joint US-Korea Workshops on Storm and Mesoscale Weather Analysis and Prediction, which he initiated in the mid 1990s. He has authored and co-authored nearly 60 refereed journal articles and over 200 conference publications, and is a former Vice President of the Central Oklahoma Chapters of the American Meteorological Society and National Weather Association. He also is a Member of the Board of Directors of the Norman, OK Chamber of Commerce and chaired the Weather and Climate Team for Governor Brad Henry's EDGE (Economic Development Generating Excellence) Program. He is a Fellow of the American Meteorological Society, and in 2004 was elected a Councilor.