

Dr. Kelvin K. Droegemeier

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Vice President for Research

Regents' Professor of Meteorology, Weathernews Chair Emeritus in Applied Meteorology

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Dr. Kelvin K. Droegemeier is Vice President for Research, Regents' Professor of Meteorology, Weathernews Chair Emeritus, and Teigen Presidential Professor at the University of Oklahoma. He 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. He joined the University of Oklahoma in September, 1985 as an Assistant Professor of Meteorology, and was co-founder in 1989 of the National Science Foundation (NSF) Science and Technology Center (STC) for Analysis and Prediction of Storms (CAPS), serving 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. In 2003, Dr. Droegemeier co-founded the NSF Engineering Research Center for Collaborative Adaptive Sensing of the Atmosphere (CASA) and served for several years as its deputy director. From 1999-2001, he wrote a daily weather science column for the *Daily Oklahoman* newspaper, which is Oklahoma's largest.

Dr. Droegemeier has served the science and engineering research and education communities at the national level for more than 25 years. Nominated by President George W. Bush and confirmed by the US Senate, he served a six-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. Dr. Droegemeier was re-nominated by President Obama and again confirmed by the Senate, serving a second six-year term on the National Science Board, the last four years as Vice-Chairman. On the National Science Board, he also chaired a number of key committees and led or participated in task forces on cost sharing, administrative research regulations, transformative research, and hurricane research. He has testified before the House and Senate on seven occasions on topics ranging from the importance of science and engineering research to the value of high performance computing and Federal investments in R&D.

Dr. Droegemeier served as Chair of the Association of Public and Land Grant University's (APLU) Council on Research Policy and Graduate Education (CRPGE), now the Council on Research. He is a Trustee and Vice Chairman of the Board of Southeastern Universities Research Association (SURA) and former Chairman of the Board of Trustees of the University Corporation for Atmospheric Research, which operates the National Center for Atmospheric Research (NCAR) on behalf of the NSF. He also served a member of the Board of Directors of Oak Ridge Associated Universities (ORAU), the Oak Ridge Associated Universities Foundation, and the Council on Governmental Relations (COGR). Dr. Droegemeier currently is a member of the Board of Directors of the Alliance for Science and Technology Research in America and serves on the Council on Competitiveness Technology Leadership and Strategy Initiative (TLSI).

Dr. Droegemeier is a Fellow of the American Meteorological Society and Fellow of the American Association for the Advancement of Science. He chaired the Weather and Climate Team for Oklahoma Governor Brad Henry's EDGE (Economic Development Generating Excellence) Program and was appointed in 2017 by Governor Mary Fallin as Oklahoma's fourth Secretary of Science and Technology, having previously served

on Governor Fallin's Science and Technology Council, chairing the Sub-Committee on Academic Research and Development. He also is a member of the Oklahoma EPSCoR State Committee and led the creation of the new State EPSCoR Strategic Plan. In 2014, Dr. Droegemeier organized an informal coalition of some 30 vice presidents and vice chancellors of research from universities 12 states in the central and southern Plains to work collaboratively on problems ranging from food production and energy to water quality and availability.

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 founding 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. He 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. 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 a consultant to Honeywell Corporation, American Airlines, the National Transportation Safety Board, and Climatological Consulting Corp, and has testified numerous times as an expert witness in commercial airline accidents. In his more than 30 years at the University of Oklahoma, Dr. Droegemeier has generated over \$40 million in external research funding, authoring or co-authoring more than 80 refereed journal articles and over 200 conference publications.