



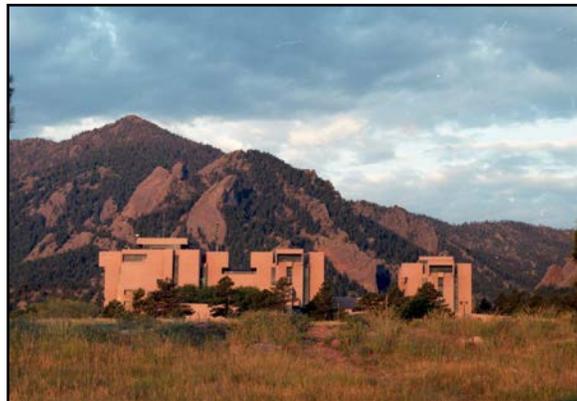
# NCAR

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

Boulder, Colorado

## Director National Center for Atmospheric Research

### Leadership Profile



WITT / KIEFFER

*Leaders Connecting Leaders*

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This leadership profile is intended to provide information about UCAR and the position of Director, National Center for Atmospheric Research. It is designed to assist qualified individuals in assessing their interest in this position.

**The National Center for Atmospheric Research** is a federally funded research and development center sponsored by the National Science Foundation. Since NCAR's founding in 1960, the University Corporation for Atmospheric Research, a nonprofit consortium of 117 North American academic institutions, has managed NCAR on behalf of NSF.

**The University Corporation for Atmospheric Research** is an equal opportunity/equal access/affirmative action employer that strives to develop and maintain a diverse workforce. UCAR is committed to providing equal opportunity for all employees and applicants for employment and does not discriminate on the basis of race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy.

UCAR is committed to inclusivity and promoting an equitable environment that values and respects the uniqueness of all members of the organization.



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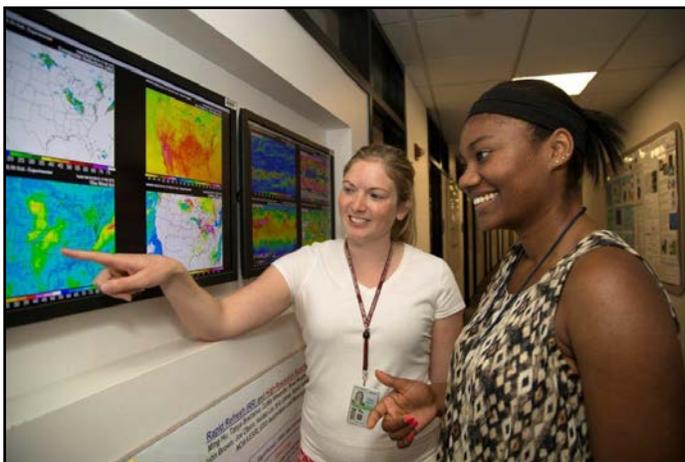
## The Opportunity: Overview

The University Corporation for Atmospheric Research invites inquiries, nominations, and expressions of interest for the position of Director of the National Center for Atmospheric Research. Since NCAR's founding in 1960, UCAR, a nonprofit consortium of 117 North American academic institutions, has managed NCAR on behalf of the National Science Foundation.

Headquartered in Boulder, Colorado, NCAR is devoted to research, education, and service in the atmospheric and related Earth system sciences. NCAR's mission is to understand the behavior of the atmosphere and related Earth and geospace systems; to support, enhance, and extend the capabilities of the university community and the broader scientific community, nationally and internationally; and to foster the transfer of knowledge and technology for the betterment of life on Earth.

Reporting to the President of UCAR, the Director is the management executive and scientific leader of NCAR. The Director is responsible for the scientific vision, direction, productivity, innovation capacity, and overall excellence of NCAR research, facilities, and programs, including the formulation and implementation of strategic plans, budgets, and priorities of the national center. The Director fosters interaction and collaboration between NCAR and UCAR staff and programs. In addition, the Director represents NCAR in a number of forums, including with government agencies, UCAR member and non-member institutions, and the scientific community at large. A major responsibility of the Director of NCAR is, in collaboration with UCAR, to build and maintain strategic partnerships with NSF and other key funding agencies, and with the 117 academic members of UCAR.

While a PhD. in a science discipline relevant to the NCAR mission and at least 10 years of experience leading and managing complex science programs are highly desired, we will also consider candidates with a comparable outstanding record of accomplishment relevant to the NCAR mission. International recognition as a scientific leader in one or more areas of NCAR research and/or related areas, as demonstrated by a current research record of considerable depth and breadth on topics relevant to the NCAR strategic mission, research, and goals is



highly desired but not required. The new Director will have demonstrated successful leadership and administration of complex research, facility, and personnel activities; success working with a broad range of constituencies; breadth of interest, vision, and judgment; advanced communication, organizational, and change management skills; and a strong commitment to increasing diversity and inclusion.

For more information, please see the section at the end of this document titled "Procedure for Candidacy."

# The Role: Director of the National Center for Atmospheric Research

The Director is the management executive and scientific leader of NCAR. The Director is responsible for the scientific vision, direction, productivity, innovation capacity, and overall excellence of NCAR research, facilities, and programs, including the formulation and implementation of strategic plans, budgets, and priorities of the national center.

The Director fosters interaction and collaboration between NCAR and UCAR staff and programs. In addition, the Director represents NCAR in a number of forums, including with government agencies, UCAR member and non-member institutions, and the scientific community at large. A major responsibility of the Director of NCAR is, in collaboration with UCAR, to build and maintain strategic partnerships with NSF and other key funding agencies, and with the 117 academic members of UCAR.

## **Responsibilities include:**

- Provides scientific leadership and direction for the success of NCAR. Develops and implements strategic vision for the institution.
- Ensures workforce diversity and excellence.
- Establishes a sound management structure, utilizing UCAR documented procedures and practices to ensure that NCAR programs achieve effective performance-based management.
- In concert with UCAR, establishes and maintains an effective system of communication, consultation, and coordination with NSF, as well as with other agencies, on operational matters related to NCAR scientific programs, facilities, budgets, and administration.
- Serves as the final spokesperson on all NCAR matters and as the senior NCAR liaison to NSF.
- Fosters high-quality programs through collaboration among NCAR staff, with inclusion of the university community and other stakeholders, as appropriate.
- Partners effectively with the UCAR President, senior management, and UCAR Board of Trustees in establishing and implementing strategic goals and ensuring compliance with UCAR policies and procedures. Supports and ensures implementation of UCAR modernization initiatives.
- Leads the NCAR Executive Committee, collaboratively formulating institutional programs, practices, and priorities, that ensure the integrity of NCAR science and its role in the science community; prioritizes scientific initiatives within NCAR.
- Advocates new national and international programs and funding sources in collaboration with universities and other institutions. Channels national and international community inputs into the NCAR planning process.

- Promotes science opportunities by fostering an “Earth systems” approach which includes interdisciplinary programs, by stimulating and facilitating coordinated science across NCAR laboratories and within the research community.

## Qualifications and Personal Qualities

The Director of NCAR will present a demonstrated ability to lead and inspire NCAR staff and professional visitors to pursue and achieve focused research goals and objectives commensurate with the stature of the nation’s premier center for weather, water, climate, air quality, space weather, and related Earth system science. The Director will have the personal qualities, energy, and ability to successfully advocate for the resources and bring about the changes needed to realize the vision.

While a PhD. in a science discipline relevant to the NCAR mission and at least 10 years of experience leading and managing complex science programs are highly desired, we will also consider candidates with a comparable outstanding record of accomplishment relevant to the NCAR mission. International recognition as a scientific leader in one or more areas of NCAR research and/or related areas, as demonstrated by a current research record of considerable depth and breadth on topics relevant to NCAR’s strategic mission, research, and goals is highly desired but not required.



The Director will demonstrate intellectual curiosity, decisiveness, and perseverance. They will value collaboration, diversity, and commitment to excellence. Above all, they will embrace the highest level of personal integrity, compassion, fairness, and transparency.

The ideal candidate will also have significant experience in working successfully with the national and international scientific community. Administrative leadership experience is a must, as is experience engaging multiple constituencies.

In addition, preferred attributes of the next Director include:

*High impact and visionary leadership:*

- demonstrated successful leadership, planning, management, execution, and administration of complex research, facility, and personnel activities;
- demonstrated success working with a broad range of constituencies, such as the academic research community, appropriate government agencies (especially NSF), public and private institutions, as well as foundations and philanthropic organizations;

ability to engage and motivate stakeholders toward shared goals and outcomes that can enhance the distinctive competence and reputation of NCAR and UCAR;

- advanced skills in assessing priorities among research and research facility objectives; demonstrated results in achieving high quality programs that integrate and complement the efforts of the broad atmospheric and Earth system science community;
- strong communication skills, including the ability to represent NCAR in public, to engage diverse people and audiences individually and collectively, to write and speak in a compelling manner, and to listen effectively;
- advanced organizational and change leadership skills;
- demonstrated commitment to and appreciation of diversity at all levels; demonstrated commitment to increasing diversity and inclusion in the atmospheric and Earth system science community and to supporting educational engagement initiatives;
- demonstrated commitment to ethics, transparency, and integrity as the cornerstone of effective leadership;

*Thought leadership within science:*

- significant record of scientific or technical achievement in the atmospheric or related sciences;
- breadth of interest, vision, and judgment, demonstrated through the successful management of research and/or technological development, and through effective service on national or international boards and committees dealing with science and public policy goals, strategies, organization, and management;
- strong understanding of the opportunities and challenges in the atmospheric and related sciences, including a deep awareness of new and emerging trends in this field;
- experience achieving goals in a competitive environment and an ability to understand and apply business tools and disciplines to achieve the mission of NCAR;
- demonstrated experience working effectively and collaboratively with scientists, with respect for diverse areas of expertise and approaches;

*Commitment to operational excellence and high-quality execution:*

- demonstrated success recruiting, developing, and retaining distinguished scientists and staff and appreciation for the culture of a scientific research environment;
- an inclusive approach to strategic and operational planning;
- a data-driven decision-making style, accompanied by a sense of urgency and decisiveness in evaluating and selecting appropriate courses of action;
- ability to delegate effectively while instilling a high degree of accountability;

- ability to exercise and encourage creativity, entrepreneurship, and the willingness to explore innovative ways of achieving targeted objectives;
- effectiveness in managing conflict and managing needs and interests across diverse stakeholder groups while maintaining mutual respect and inclusive decision-making.

## Opportunities and Expectations for Leadership

NCAR's new Director will assume the office at a most propitious time. UCAR will have just been awarded the renewal of the NSF Cooperative Agreement to manage NCAR, following previous decades of strong leadership and success. President Busalacchi will be in the prime of his presidency, with new organizational culture initiatives coming to fruition. The capacity of the organization to achieve new levels of productivity and innovation will likewise be high. With these assets firmly in hand, then, the new Director will begin immediately to consider what comes next for NCAR. Within this context, the new Director will be asked to address the following critical leadership issues, among others:

### **Create a vision for NCAR's leadership into the future**

The new Director will have the opportunity to re-envision the role of NCAR as it seeks to extend its leadership and define its legacy over the next 50 years. The new Director will collaborate with members of the UCAR and NCAR community to develop and promote a vision for the future that fulfills the NCAR mission to advance new understanding of the atmosphere and related Earth and geospace systems, support the broader scientific community, and foster transfer of knowledge and technology for societal benefit. The vision will inspire, challenge, and motivate scientists and staff to a new level of excellence and impact across the three-part mission. The NCAR vision will also articulate a clear and compelling place for NCAR within the global scientific community, now and well into the future. The new Director must be a visionary and skilled facilitator to bring together and unite NCAR around a common vision, purpose, and goals that meet the current and future needs of the center within the context of UCAR's broader strategies.

### **Develop the NCAR workforce of the future**



NCAR is home to a talented team of world-class scientists, engineers, technicians, administrators, and support staff. In addition to the standing staff, NCAR hosts over 800 scientific visitors annually, a large portion of whom are with the center for longer than two months. This creates a significant human capital opportunity which can be deployed in helping the center articulate its grand challenges and integrate them into NCAR's next strategic plan. The next Director will need to assess NCAR's current needs and implement solutions that ensure that the center's human

resources are optimally developed and leveraged to support the organization in fulfilling its mission. Vital to this endeavor will be placing a high priority on diversifying the workforce at all levels and creating an environment where diversity, equity, and inclusion are core to excellence. The next Director will be a gifted leader in recruiting, developing and supporting others in these and other endeavors, as evidenced prior in their career.

### **Strengthen and modernize NCAR operations**

The new Director of NCAR will be expected to bring a fresh perspective to the administrative structure and functioning of NCAR and to develop, modernize, and strengthen business practices and support services. To support performance at the highest levels of excellence, the director will ensure best practices, accountability, operational efficiencies, and appropriate centralization and cost effectiveness of scale. This endeavor will require the director to exercise outstanding communication and change leadership skills to engage the NCAR and UCAR communities to envision new models, to create buy-in and support, and to ensure that changes are thoroughly and smoothly implemented and supported over the long term through lasting cultural change.

## **The National Center for Atmospheric Research: An Overview**

NCAR is a federally funded research and development center sponsored by the National Science Foundation and devoted to service, research and education in the atmospheric and related sciences. Significant additional support is provided by other U.S. government agencies, other national governments, and the private sector.

NCAR's mission is:

- *to understand the behavior of the atmosphere and related Earth and geospace systems*
- *to support, enhance, and extend the capabilities of the university community and the broader scientific community, nationally and internationally, and*
- *to foster the transfer of knowledge and technology for the betterment of life on Earth*

NCAR supports the community of atmospheric and geoscience researchers with:

- tools—such as aircraft and radar, to observe the atmosphere, and
- technology and assistance—to interpret and use these observations, including supercomputer access, computer models, and user support.

NCAR research projects cover a vast array of topics and involve collaborations between NCAR scientists and researchers in the academic, public, and private sectors. Primary areas we investigate include:

- atmospheric chemistry—such as the chemical structure of healthy and polluted air
- climate—including temperature, rainfall, winds, and extreme events over decades or centuries, from prehistoric times to the present and into the future
- weather science— including cloud physics, storm structure, and other keys to improved weather forecasting
- weather hazards to transportation—including detection and warning systems for air, road, and rail travel
- decision support systems at the intersection of weather and renewable energy, wildfire prediction, precision agriculture, and other new and emerging economic sectors
- interactions between the Sun and Earth—including solar and space weather
- computer science innovation—for understanding and visualizing the whole Earth system
- emerging impacts of weather and climate on the built environment, commerce, safety, and national security

For more information about NCAR: <https://ncar.ucar.edu>

NCAR organization chart: <https://ncar.ucar.edu/org-chart>

NCAR strategic plan:

[https://ncar.ucar.edu/sites/default/files/NCAR\\_Strat\\_Plan\\_Final\\_102014.pdf](https://ncar.ucar.edu/sites/default/files/NCAR_Strat_Plan_Final_102014.pdf)

## NCAR Advisory Panel

The NCAR Advisory Panel is composed of leading scientists and users of NCAR facilities and tools. All of its members have a broad view and deep understanding of the field, where it is going, and the role of NCAR within it. The charge to the panel is to provide input on the overall direction and content of the NCAR research and technical program, provide advice on the priority core capabilities (center-appropriate, imperative functions and activities), and provide advice on the organizational structure of NCAR.

## NCAR Labs and Programs

NCAR is organized into seven labs and one program:

- The **Atmospheric Chemistry Observations & Modeling Laboratory** focuses on advancing understanding and predictive capability for atmospheric composition and related processes.
- The **Climate & Global Dynamics Laboratory** develops understanding of the Earth system and is a leader of community-developed and community-owned models of the Earth system.

- The **Computational & Information Systems Laboratory** is a world leader in supercomputing and cyberinfrastructure, providing services to NCAR, UCAR member universities, and the broader geosciences community.
- The **Earth Observing Laboratory** provides state-of-the-art atmospheric observing systems and support services to the university-based research community for climate, weather, and related Earth system research.
- The **High Altitude Observatory** conducts fundamental and applied research in solar-terrestrial physics using observational, theoretical, and numerical methods. Research at HAO extends from the solar core to the surface of the Earth.
- The **Mesoscale & Microscale Meteorology Laboratory** advances the understanding of the meso- and microscale aspects of weather and climate and applies this knowledge to benefit society.
- The **Research Applications Laboratory** conducts directed research and engineering toward the solution of problems relevant to society and facilitates the transfer of our information, expertise, and technology developed to the public and private sectors.
- The **Education and Outreach Program** supports a variety of activities, including the Advanced Study Program, which focuses on fostering the professional development of early career scientists, promoting advanced scientific educational opportunities at NCAR through visitor programs, directing attention to emerging areas of science, and facilitating interactions between NCAR, universities, and the broader community. The NCAR Explorer Series connects public audiences with NCAR scientists through live presentations and webcasting.

The head of each laboratory/program reports to the Director. For more information:

<https://ncar.ucar.edu/labs-observatory> and  
<https://ncar.ucar.edu/education-outreach/education-and-outreach>

## Locations

NCAR and UCAR are headquartered in Boulder, Colorado, with most activity taking place on four campuses:

- NCAR Mesa Laboratory and UCAR Fleischmann Building (southwest Boulder)
- Center Green Campus (northeast Boulder)
- Foothills Laboratory and Anthes Building (northeast Boulder)
- Research Aviation Facility (Rocky Mountain Metropolitan Airport; Broomfield, Colorado)



Additional facilities in Wyoming, Hawaii, and Washington, D.C., include:

- The NCAR-Wyoming Supercomputing Center (NWSC) - Cheyenne, Wyoming
  - Operated by NCAR's Computational and Information Systems Laboratory
- Mauna Loa Solar Observatory (MLSO) - near Hilo, Hawaii

- Operated by NCAR's High Altitude Observatory
- UCAR Washington Office - Washington, D.C.
  - Operated by the UCAR President's Office

Our collaborations connect us to universities, labs, and private industry across the country and around the world.

### NCAR Facts & Figures at a Glance

- Award-winning, internationally recognized staff of about 850 employees, including
  - 223 scientists, 37 postdoctoral fellows, and 84 associate scientists
  - 150 engineers or software engineers
- Annual expenditures of about \$197M
- Research facilities including
  - NCAR-Wyoming Supercomputing Center
  - Two NSF research aircraft and a suite of ground-based observing systems
  - Open-source community models for weather, climate, atmospheric chemistry, the Sun, and the Sun-Earth system

Managed and operated by UCAR

- 117 member colleges and universities from across North America
- 5 community programs with about 270 scientific, technical, and support staff
- 212 employees providing operational and administrative services

Total combined annual expenditures for NCAR and UCAR of about \$246.7M.

## The National Science Foundation Cooperative Agreement

Since its inception, NCAR has been managed by UCAR on behalf of NSF. For over 50 years, UCAR's stewardship has enabled NCAR to:

- provide advanced facilities to universities,
- make transformative contributions to understanding weather and climate,
- lead the application of basic knowledge for the benefit of society,
- develop some of the world's leading scientists, and
- engage students of all ages in science, technology, engineering, and mathematics.

UCAR has managed NCAR, a federally funded research and development center (FFRDC), since 1960 under a Cooperative Agreement subject to periodic renewal. The current agreement was entered into in 2008 and renewed in 2013. This Cooperative Agreement expires on September 30, 2018. The financial value of the current Cooperative Agreement for the 60-month term was over \$500M. It includes a management fee to UCAR of \$500,000 per year.

During fiscal year 2016, NSF conducted science reviews of every NCAR science laboratory. In addition, NSF conducted a management review of UCAR. These reviews were part of the terms of the Cooperative Agreement.

As directed by the National Science Board (NSB), in 2017 NSF conducted a competition for the management of NCAR by issuing a Request for Proposals.

During its meeting May 2–3, 2018, the National Science Board voted to approve a resolution authorizing the NSF Director, at her discretion, to make an award to UCAR to manage and operate NCAR for the period October 1, 2018 – September 30, 2023.

The action is posted on the [NSB website](#):

The Board passed a resolution (NSB-2018-19) authorizing the Director to make an award to the University Corporation for Atmospheric Research for the management and operations of NSF's National Center for Atmospheric Research.

## The University Corporation for Atmospheric Research: An Overview

Our understanding of weather, water, climate, and related aspects of the Earth and Sun has continued to be important for safeguarding lives, infrastructure, and economic well-being. Our capacity to expand our knowledge of these complex, interwoven systems has never held greater potential. UCAR serves a unique and fundamental role as a vibrant hub connecting the academic, public, and private sectors of this enterprise. As the primary nexus for problem solving and collaboration within our broad community, UCAR is committed to building upon and expanding the reach and impact of our activities. This work is enhanced by a global network that sustains our vision and allows us to empower our stakeholders.

UCAR manages a portfolio of primarily federally funded programs with total staff of about 1,390 and annual expenditures exceeding \$200M. The largest and most prominent of these programs is the [National Center for Atmospheric Research](#), which is the National Science Foundation's largest [federally funded research and development center](#). UCAR has managed NCAR continuously since 1960 on behalf of NSF. The other programs, collectively known as [UCAR Community Programs](#), broaden the impacts of NCAR's work and support the capabilities of the research, education, and professional communities.



UCAR facilitates technology transfer and brings research attention to societal needs and requirements. UCAR leverages these activities through a consortium of 117 member colleges and universities and through an extended community network of partners in the public and private sectors. Another key activity is representing and amplifying the voice of this community,

particularly in addressing the many societal benefits of the nation's investments in research and technology.

The aggregate of everyday weather events on the changing planet, from routine to extreme, shapes our society in ways that are not yet fully understood. Decision-makers from all walks of life increasingly depend on the knowledge developed through the power of UCAR—our consortium, our community programs, and the national center—to understand the atmosphere, Earth, and Sun that together sustain and shape our lives.

UCAR Organization chart: <https://www2.ucar.edu/ucar-organizational-chart>

### **UCAR President Antonio J. Busalacchi, Ph.D.**

Dr. Antonio J. Busalacchi, president of the University Corporation for Atmospheric Research since August 2016, has a distinguished career in the geosciences; extensive experience in management of academic, laboratory, and government programs; and a broad knowledge of the geoscience research and education community. Prior to his appointment at UCAR, he served as director of the University of Maryland's Earth System Science Interdisciplinary Center (ESSIC) and as a professor in the Department of Atmospheric and Oceanic Science.

After receiving a Ph.D. in oceanography from Florida State University, Busalacchi began his professional career at NASA's Goddard Space Flight Center in 1982. He has studied tropical ocean circulation, its role in the coupled climate system, and phenomena such as El Niño. His interests include the development and application of numerical models combined with in situ and space-based ocean observations to study the tropical ocean response to surface fluxes of momentum and heat. His research on climate variability and predictability has supported a range of international and national research programs dealing with global change and climate, particularly as affected by the oceans.

In 1991, he was appointed as chief of NASA's Laboratory for Hydrospheric Processes and a member of the U.S. Senior Executive Service. In 2000, he was selected to be the founding director of ESSIC. Busalacchi has been involved in the activities of the World Climate Research Programme for many years. From 2008-2014 he chaired the Joint Scientific Committee that oversaw the WCRP. He previously was co-chair of the scientific steering group for CLIVAR, its sub-program on Climate Variability and Predictability.

Busalacchi has served extensively on activities of the National Academies of Science, Engineering and Medicine, including as chair of the Board on Atmospheric Sciences and Climate, chair of the Climate Research Committee, chair of the Committee on Earth Science and Application: Ensuring the Climate Measurements from NPOESS and GOES-R, and co-chair of the Committee on National Security Implications of Climate Change on U.S. Naval Forces. He also has served as a member of the Committee on Earth Studies, Committee on the Effect of Climate Change on Indoor Air Quality and Public Health, Committee on Assessing the Impacts of Climate Change on Social and Political Stresses, and Committee on the Assessment of NASA's Earth Science Program.

Busalacchi has received numerous additional awards and honors. In 2016, he was elected to the National Academy of Engineering. In 2014 he was elected as chair of the American Association for the Advancement of Science "Section W" on Atmospheric and Hydrospheric Sciences. That year he was also elected to UCAR's Board of Trustees. In 1991, he was the recipient of the prestigious Arthur S. Flemming Award, as one of five outstanding young scientists in the entire federal government. In 1995 he was selected as Alumnus of the Year at Florida State University, in 1997 he was the H. Burr Steinbach Visiting Scholar at Woods Hole Oceanographic Institution, and in 1999 he was awarded the NASA/Goddard Excellence in Outreach Award and the Presidential Rank Meritorious Executive Award. He is a fellow of the American Meteorological Society, the American Geophysical Union, and the American Association for the Advancement of Science. In 2006, he was selected by the AMS to be the Walter Orr Roberts Interdisciplinary Science Lecturer.

## History

Scientific leaders on the faculty of 14 U.S. universities incorporated UCAR as a nonprofit 501(c)(3) in 1960. These visionaries recognized the need for community observational and computational facilities and a world-class research staff, which together would allow the community to carry out complex, long-term scientific programs beyond the reach of individual universities.

UCAR's founding mission was simple: to operate the National Center for Atmospheric Research on behalf of NCAR's sponsor, the National Science Foundation, for the benefit of the atmospheric and related sciences community. Although much has changed since 1960, and UCAR's activities have expanded and diversified, our core purpose continues to guide our work.

More history: <https://www2.ucar.edu/about-us/history>

Founding document for the establishment of a "National Institute for Atmospheric Research": <https://opensky.ucar.edu/islandora/object/archives:3054>

## Member Institutions

Today the founding 14 universities have grown to 117 member institutions focused on research and training in the atmospheric and related Earth system sciences. Collectively, the members strengthen and promote professional interactions, collaborations, and collegiality in the broader research and education community. This partnership is unique in science and engineering and has produced some of the best research and technology in the world.

Members appoint member representatives who serve as important links between the community and UCAR and its programs. Member representatives serve on governance and scientific advisory committees that help shape the course of UCAR, its science, and its service to the universities. At the UCAR Annual Members Meeting, the members elect trustees and members of UCAR governance and advisory committees; participate in scientific planning sessions; and discuss matters affecting the scientific enterprise as a whole. Sponsoring agencies often use the meeting as a vehicle for communicating goals and directions and seeking advice.

The member representatives keep university colleagues informed about UCAR activities and opportunities and, in turn, bring university perspectives to the President's Advisory Committee on University Relations and the Board of Trustees.

Many member representatives play a key role in education activities for policy decision-makers that help sustain federal support of the atmospheric and related sciences.

UCAR Members: <https://president.ucar.edu/governance/members>

## **Board of Trustees**

The UCAR Board of Trustees is elected by the members at the UCAR Annual Members Meeting each October. Drawn from academia, research institutions and the private sector, the 18 trustees determine the overall direction of the corporation. They discharge their fiduciary responsibilities at their regularly scheduled meetings (February, May, and October), and through a set of committees that recommend actions regarding UCAR scientific appointment, financial management, and audit matters.

Board of Trustees: <https://president.ucar.edu/governance/board>

## **UCAR Vision, Mission & Values**

In 2015 UCAR published its current strategic plan in consultation with the Board of Trustees, President's Advisory Committee on University Relations, UCAR Member Representatives, and the National Science Foundation. Input was gathered from employees, scientific and professional visitors, and members of the broader atmospheric and related sciences community. From that process emerged our vision, mission, and guiding values.

### ***Vision***

*Understanding tomorrow's weather and climate through partnership, research, discovery, and innovation.*

### ***Mission***

*To empower our Member Institutions, our National Center, and our Community Programs by*

- *Promoting research excellence*
- *Developing fruitful collaborations*
- *Managing unique resources*
- *Creating novel capabilities*
- *Building critical applications*
- *Expanding educational opportunities*
- *Engaging in effective advocacy*

## Guiding Values

- *Scientific integrity*
- *A diverse workforce*
- *Collaboration and partnerships*
- *Innovation and agility*
- *Transparency and open access*
- *Fiscal accountability*

UCAR Strategic Plan 2015–2018:

[https://president.ucar.edu/sites/default/files/files/president/strat-plan/2015/UCAR\\_Strat\\_Plan\\_2015.02.25.pdf](https://president.ucar.edu/sites/default/files/files/president/strat-plan/2015/UCAR_Strat_Plan_2015.02.25.pdf)

## Diversifying the Atmospheric & Related Earth System Sciences



UCAR has a successful record of leadership and achievement in expanding opportunities to participate in this field, which historically has been one of the least diverse branches of the physical sciences.

Students from groups underrepresented in the field began participating in summer internships early in UCAR's history. In 1996, with leadership from the UCAR president, guidance from previous interns, and financial sponsorship by NSF, the UCAR

SOARS Program (Significant Opportunities in Atmospheric Research and Science) was launched. Based on sustained research, mentoring, and community building that bridges undergraduate to graduate training, the program received the U.S. Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring in 2001. The program has leveraged the talent of NCAR and UCAR staff mentors as well as additional sponsorship and mentoring at other Boulder-area research laboratories and the University of Colorado. The success of SOARS continues to serve as a model within and beyond the atmospheric and related Earth science community.

In addition to managing the year-round program and summer intensives, the SOARS director and staff now consult with and support development of inclusive education programs for the broader Research Experiences for Undergraduate community via career webinars, internship partnerships, and workshops at the annual meeting of the American Geophysical Union.

The SOARS Program: <http://soars.ucar.edu/>

The SOARS Program is one of many ways that NCAR and UCAR invite students, university faculty, lab scientists, engineers, and other professionals to participate in research, education, and community building. More information about these opportunities is provided on the website.

Visitor Programs, Internships, Fellowships & Workshops: <https://www2.ucar.edu/opportunities>

## The UCAR Community Programs

The programs under the UCAR Community Programs umbrella offer a suite of innovative resources, tools, and services for the atmospheric and Earth science community. UCP's activities include:

- Training weather forecasters, emergency managers, and other decision-makers in current research
- Developing STEM (science, technology, engineering, and mathematics) education resources
- Bringing real-time data and software tools to university classrooms and research labs
- Managing field projects, conferences, and fellowship programs
- Supporting satellite-based Earth and atmospheric monitoring
- Providing staffing solutions nationally and internationally

Website: <https://ucp.ucar.edu>

## Boulder, Colorado

Boulder sits at the foot of the Rocky Mountains in northern Colorado, about 30 minutes from Denver. Denver International Airport, among the busiest in the United States, connects the region to anywhere on the planet.

The city of Boulder describes itself this way:

Tucked into a picturesque valley below the iconic Flatirons, Boulder hosts thriving tech and natural foods industries, supports a renowned entrepreneurial community, has some of the region's best restaurants, and is home to many federal research labs and a world-class university. No wonder this Rocky Mountain town of approximately 107,000 people is a world-class destination.... Boulder has preserved more than 45,000 acres of open space, much of which surrounds the city and helps maintain its geographical boundaries. More than 150 miles of trails abound for nature lovers.... The University of

Colorado sits in the heart of Boulder and educates more than 30,000 students each year.

For all of these reasons, Boulder is able to attract and sustain a vibrant cultural calendar, including concerts, performances, and exhibitions in every genre, featuring nationally and internationally known talent. Summer festivals include the Colorado Music Festival and Colorado Shakespeare Festival, as well as numerous family-friendly activities along Boulder Creek, which runs through the heart of downtown.

More about Boulder: <https://bouldercolorado.gov/visitors> and <https://www.bouldercoloradousa.com>

About the Boulder Valley School District: <https://www.bvsvd.org/about>



## Procedure for Candidacy

Inquiries, nominations, and applications are invited. Review of applications will begin immediately and will continue until the position is filled.

Candidates should provide a *curriculum vitae*, a letter of application that addresses the responsibilities and requirements described in this Leadership Profile, and a completed Personal Diversity Statement, per the instructions in Appendix I. The names and contact information of five references should be submitted at the same time. References will not be contacted without prior knowledge and approval of candidates.

These materials should be sent electronically via email to UCAR consultants Suzanne Teer and Robert Luke at [NCAR-Director@wittkiewfer.com](mailto:NCAR-Director@wittkiewfer.com). The consultants can be reached by telephone via the desk of Meagan Shimkus at 630-575-6725.

*UCAR is an equal opportunity/equal access/affirmative action employer that strives to develop and maintain a diverse workforce. UCAR is committed to providing equal opportunity for all employees and applicants for employment and does not discriminate on the basis of race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy.*

*Whatever your intersection of identities, you are welcome at UCAR. We are committed to inclusivity and promoting an equitable environment that values and respects the uniqueness of all members of our organization.*

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The material presented in this leadership profile should be relied on for informational purposes only. This material has been copied, compiled, or quoted in part from UCAR documents and personal interviews and is believed to be reliable. While every effort has been made to ensure the accuracy of this information, the original source documents and factual situations govern.

## Appendix I: Personal Diversity Statement

UCAR and NCAR are dedicated and committed to embracing an environment that is diverse and inclusive. We strive to create a culture that is welcoming to everyone, regardless of differences in personal or cultural backgrounds. We are looking for candidates who share an interest in and commitment to fostering this environment.

As part of this commitment, we require a personal diversity statement from candidates that discusses (a) the role of diversity, equity, and inclusion in STEM fields, and (b) the applicant's past and future contributions to enhancing and supporting diversity, equity, and inclusion.

Our policy states that a candidate's race, gender, ethnicity or other personal characteristics may not be considered in the evaluation of appointments. However, search committees can consider past or proposed contributions to diversity and inclusion as part of the overall review process.

### Guidelines

Please note that a demonstrated record of past effort is given greater weight than articulating awareness of barriers or stating future plans. A developed and substantial plan is expected for candidates. When reviewing these statements, we will take into consideration the experience level of the applicant. *Your statement should be one page in length including the following:*

#### Understanding of Barriers

Describe your understanding of the barriers that exist for historically underrepresented groups in higher education and/or your field. This may be evidenced by personal experience and educational background. For purposes of evaluating contributions to diversity, *underrepresented groups (URGs)* includes under-represented ethnic or racial minorities (URM), women, LGBTQ, first-generation college, people with disabilities, and people from underprivileged backgrounds.

#### Past Activities

For all past activities, please be specific about the context, your role, scope or level of effort, and the impact. Below are examples of activities that qualify as contributions to diversity and equity. These are illustrative and by no means exhaustive.

- *Mentoring/Tutoring:* This includes leading or participating in mentoring, advising, or tutoring programs for underrepresented groups, including faculty, postdocs, students, or the broader community. This may also include sustained outreach efforts aimed at underrepresented students; attendance at a conference aimed at recruiting, supporting, or advancing URGs; participation in panels or talks as a speaker on related issues.
- *Committee Service:* This includes serving on a committee or board that focuses on diversity, equity, inclusion and/or cultural climate.
- *Research Activities:* This includes research (articles, editorials, etc.) that contributes to understanding the barriers facing URGs or that otherwise contributes to diversity and equal opportunity, including artistic expression and cultural production that reflects culturally diverse communities or voices underrepresented in the arts and humanities.
- *Other* (e.g. recruitment/retention/teaching): This includes efforts to diversify your research group or lab; other efforts to diversify your department or field; development

or use of pedagogies that address different learning styles and/or learning disabilities;  
development of a course on equity, diversity and inclusion issues.

#### Future Plans

Describe how you plan to contribute to diversity, equity, and inclusion at NCAR and UCAR and in the broader scientific community. Be as specific as possible.

## Appendix II: NCAR Director Search Committee

**Kristie Boering, Ph.D. – Committee Chair**

*Trustee, UCAR Board  
Trustee Liaison, UCAR President's Advisory  
Committee on University Relations  
Professor, University of California, Berkeley*

**Terri Adams, Ph.D.**

*Member, UCAR President's Advisory  
Committee on University Relations  
Deputy Director, NOAA Cooperative Science  
Center in Atmospheric Sciences &  
Meteorology  
Associate Professor, Howard University*

**Rita Colwell, Ph.D.,**

*Distinguished University Professor  
at the University of Maryland at College Park  
and at the Johns Hopkins University  
Bloomberg School of Public Health  
President and CEO, CosmosID, Inc.*

**Chris Davis, Ph.D.**

*Director, NCAR Mesoscale & Microscale  
Meteorology Laboratory, and  
Associate Director, National Center for  
Atmospheric Research*

**Charlette Geffen, Ph.D.**

*Trustee, UCAR Board  
Director, Research Strategy, and Chief Science  
& Technology Officer for the Earth &  
Biological Sciences Directorate, Pacific  
Northwest National Laboratory, Department  
of Energy*

**Anke Kamrath, M.S.**

*Director, NCAR Computational & Information  
Systems Laboratory, and  
Associate Director, National Center for  
Atmospheric Research*

**Ying-Hwa "Bill" Kuo, Ph.D.**

*Director, UCAR Community Programs,  
University Corporation for Atmospheric  
Research*

**Rachel McCrary, Ph.D.**

*Chair, NCAR Early Career Scientist Assembly  
Project Scientist, National Center for  
Atmospheric Research*

**Michael Morgan, Ph.D.**

*Trustee, UCAR Board  
Chair, NCAR Budget & Programs Committee,  
UCAR Board of Trustees  
Professor, University of Wisconsin–Madison*

**Scott Rayder, M.P.A.**

*Senior Advisor to the UCAR President,  
University Corporation for Atmospheric  
Research*

**Jadwiga "Yaga" Richter, Ph.D.**

*Co-Chair, UCAR Research Innovation  
Council  
Scientist III, National Center for  
Atmospheric Research*

**Kathryn "Kathy" Sullivan, Ph.D.,**

*Senior Fellow, The Potomac Institute for  
Policy Studies  
Ambassador-At-Large, Smithsonian National  
Air and Space Museum*

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