

National Center for Atmospheric Research (NCAR)
Associate Director/Lab Director
Research Applications Laboratory (RAL)
Boulder, Colorado

The Opportunity: An Overview

The Director of the National Center for Atmospheric Research invites inquiries, nominations, and expressions of interest for the position of NCAR Associate Director/Lab Director of the Research Applications Laboratory (RAL). Since NCAR's founding in 1960, UCAR, a nonprofit consortium of 120+ 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.

NCAR's Research Applications Laboratory (RAL) conducts fundamental and use-inspired actionable Earth system sciences research and engineering to discover solutions to problems relevant to society and facilitates the transfer of our information, expertise, and technology to the public and private sectors.

Vision:

To support and expand the reach of actionable Earth system sciences by applying our knowledge and discoveries towards solving weather and climate-related problems that impact society.

Achieving this requires the leadership, inspiration, and diversity of talent to creatively work in a multidisciplinary way with collaborators and stakeholders, building strategic partnerships that flourish well into the future. Just as important as our technology development is our reputation for successfully transferring and implementing practical solutions for the benefit of society. Our technologies and tools enable improved decision-making towards mitigating impacts and increased safety, efficiency, resiliency, and reliability that can save money and lives.

Reporting to the NCAR Director, this position carries a dual-title and role of Director of the Laboratory and NCAR Associate Director. The Lab Director role is responsible for the scientific vision, direction, productivity, innovation capacity, and overall excellence of RAL's research and development programs, including the formulation and implementation of strategic plans, budgets, and priorities of the lab. These responsibilities are carried out in coordination with the

NCAR Director and in close alignment with the NCAR strategic plan and other programmatic priorities. The Lab Director fosters interaction and collaboration between NCAR and UCAR staff and programs and the external scientific community. The role of NCAR Associate Director affords responsibility in the overall leadership and management of NCAR. NCAR Associate Directors support the NCAR Director on NCAR-wide matters and act in the best interest of NCAR rather than a particular lab. They serve on the NCAR Executive Committee, foster collaboration across NCAR, may serve as Acting NCAR Director in the absence of the NCAR Director, and can lead initiatives that are NCAR-wide. They also foster interaction and collaboration between NCAR and UCAR staff and programs.

While a Ph.D. 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 are seeking candidates with an outstanding record of accomplishment in the broader Earth sciences and especially the application thereof to solve societally-relevant problems. National and/or international recognition as a scientific leader and innovative entrepreneur is highly desired. The new Lab Director will have demonstrated successful leadership and development of externally funded partnerships, management of complex scientific research and technical development, operational implementation of practical solutions towards mitigating weather and climate sensitivities, 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. Demonstrated success and achievement in management is required.

For more information, please see the section at the end of this document titled "[Procedure for Candidacy](#)."

About the Role

The Lab Director fosters interaction and collaboration across NCAR labs and programs in the spirit of "one NCAR." The Director also engages the broader research community, professional organizations, stakeholder communities, and policy makers as appropriate.

Responsibilities include:

- Provides scientific leadership and direction for the success of RAL. Develops and implements strategic vision for the laboratory.
- Ensures workforce diversity and excellence; cultivates a positive, equitable, and inclusive culture across a remote, in-person, and hybrid workplace environment.
- Excels at attracting and managing a largely externally soft-funded and matrix-based laboratory.
- Upholds and strengthens a sound management structure, ensuring compliance with UCAR policies, procedures and practices while enabling RAL to achieve effective, performance-based management.

- Fosters high-quality research through collaboration across RAL programs and NCAR staff, with inclusion of the broader university research community and other stakeholders, as appropriate.
- Partners effectively with the NCAR Director and senior management in establishing and implementing strategic goals aligned with NCAR strategic priorities. Supports and ensures implementation of NCAR strategic initiatives.
- Serves on the NCAR Executive Committee, which is composed of: NCAR Director and Deputy Director, NCAR Associate/Lab Directors and Senior Leaders in the NCAR Directorate. The committee collaboratively formulates institutional programs, practices, and priorities that ensure the integrity of NCAR science and its role in the science community and also prioritizes scientific initiatives within NCAR.
- Develops new national and international programs and funding sources in collaboration with relevant stakeholders, universities and other institutions. Channels national and international community inputs into the NCAR planning process.
- Fosters an actionable Earth system science approach that includes interdisciplinary programs by stimulating and facilitating coordinated science across NCAR laboratories and the broader research community.
- Leads proactive development of the future STEM workforce within RAL, in partnership with NCAR labs and NCAR Education, Engagement, and Early-Career Development (EdEC), and promotes lab-specific training on entrepreneurship.
- Ensures the laboratory meets diversity, equity, and inclusion goals identified from the Workplace Culture Survey and outlined in NCAR and UCAR Strategic Plans. Supports partnership with minority-serving institutions across the center.

Opportunities and Expectations for Leadership

The next RAL Lab Director will be asked to address the following critical leadership issues, among others:

Create a vision for RAL's future leadership and service

The new Lab Director will have the opportunity to re-envision the role of RAL as it seeks to extend its scientific and technological leadership and community outreach over the next decade and beyond. The new RAL Director will collaborate with members of the UCAR and NCAR community, and professional organizations, to maintain and grow strong connections with a broad community of Earth system researchers to foster innovative actional science for the benefit of society. The vision must also support building connections with other NCAR laboratories in cutting-edge research, including connections with weather research, atmospheric composition research, observations and models, geospace, climate change, and connections to short-range practical predictability applications. A key focus should be on making use of the

knowledge gained for developing and implementing practical solutions towards reducing humanity's weather and climate-related sensitivities. The new Lab Director must possess the skills to incorporate diverse input into a clear and compelling vision that NCAR staff, the broader community, and the National Science Foundation will support and that is consistent with the goals of the NCAR Strategic Plan and its companion implementation plan.

Develop the NCAR workforce of the future

RAL is home to a diverse and talented team of world-class scientists, software engineers, technicians, project managers and administrators, and other support staff as well as a vital cadre of visiting scientists from other institutions. This creates a significant human capital opportunity that can be deployed in helping RAL articulate and achieve its vision. The next Lab Director will assess current needs and implement solutions to ensure that RAL's human resources are optimally developed and leveraged to support the lab in fulfilling its mission. Vital to this endeavor will be placing a high priority on diversifying the workforce and creating an environment where diversity, equity, and inclusion are core to achieving professional excellence and integrity. The next Lab Director will be an effective leader in recruiting, developing, and supporting others in these and other endeavors, as evidenced previously in their career. The Lab Director will also champion the implementation of an updated scientific appointment structure and utilize a hybrid work environment to ensure NCAR's continued scientific excellence and leadership for the future.

Strengthen and modernize NCAR operations

The new Lab Director will be expected to bring a fresh perspective to the administrative structure and functioning of RAL and to develop, modernize, and strengthen business practices and support services as deemed beneficial. To support performance at the highest levels of excellence, the Lab Director will ensure best practices, accountability, and operational efficiencies. This endeavor will require the Director to exercise outstanding communication and change leadership skills to engage the lab to envision new business models, to create buy-in and support, and to ensure that changes are thoroughly and smoothly implemented and supported over the long-term while maintaining a culture of innovation and excellence.

Connect with the community

Given RAL's unique soft-funded profile and the aim of science serving society, it is imperative that the new RAL Director shows a strong ability to connect with a broad range of communities. This includes the academic research community, government agencies, research laboratories, public and private institutions, foundations and philanthropic organizations both within the United States and abroad. It also includes effectively engaging science policy makers. Additionally, the new Director will support lab-led efforts of community support, including engagement with [Minority Serving Institutions \(MSIs\)](#), continued involvement of [Significant Opportunities in Atmospheric Research and Science \(SOARS\)](#) students, our connection with the [Rising Voices](#) organization, and other education and outreach initiatives.

Key Qualifications & Personal Qualities

The Director of RAL will present a demonstrated ability to lead and inspire RAL staff, visiting students, and professional visitors to pursue and achieve focused research and development 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 Lab Director will have the personal qualities, energy, and ability to successfully advocate for necessary resources and bring about the changes needed to realize the lab's vision.

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

The ideal candidate will have significant experience in working successfully with the national and international scientific community. Demonstrated leadership in actionable Earth system science focused on a direct benefit to society is expected. Administrative leadership experience with soft-funded and matrixed organization is a must, as is experience engaging multiple interdisciplinary constituencies.

In addition, preferred attributes of the next Lab Director include:

High-impact and visionary leadership and management:

- Successful experience leading soft-funded research groups/organizations with a focus on a healthy, harmonious workplace environment;
- Strong program development skills, this includes strengthening existing programs as well as supporting the development of innovative new programs; demonstrated ability to develop long-term funding partnerships;
- Strong reputation of being a good manager of people;
- Demonstrated advocacy of applied research;
- Demonstrated success collaborating with a broad range of constituencies, such as the academic research community, appropriate government agencies (especially NSF, DOE, DOT, USGS, NOAA, NASA, NIH), public and private institutions, and 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; comfortable engaging with a wide range of sponsors (public, foreign, and private);
- Skill in strategic planning and implementation, budget development and deployment, and human resource planning across a range of job types and expertise to achieve broad goals and objectives;

- Advanced skills in assessing priorities among research, operations, and research facility objectives; demonstrated results in achieving high quality programs that integrate and complement the efforts of the broader atmospheric and Earth system science community for the benefit of society;
- Strong communication skills, including the ability to represent NCAR in public, to effectively engage across disciplines and spanning career stages, to engage diverse people and audiences individually and collectively, to write and speak in a compelling manner, and to listen effectively;
- Demonstrated skill in interpersonal relationships and emotional intelligence;
- Advanced organizational and change leadership skills;
- Demonstrated commitment to and appreciation of diversity, equity, justice, and inclusion 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 understanding actionable Earth system science and the application thereof for the benefit of society; advanced knowledge in several of the following areas: water, agriculture, energy, transportation, air quality, wildfires, evolving climate conditions, and benefits assessment;
- Breadth of interest, vision, and judgment, demonstrated through the successful management of innovative research and/or technological development, implementation of practical solutions for the benefit of society, and through effective service on national or international boards and committees dealing with science and public policy goals, strategies, organization, and management;
- 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, software engineers, and technical and administrative staff, with respect for diverse areas of expertise and breadth of approaches needed to execute a successful science program.

Commitment to scientific excellence, integrity, and high-quality execution:

- Strong record of collaborative leadership style, continues to understand the skillsets and interests contained within the lab as it evolves;
- Understanding of RAL's unique culture within the NCAR/UCAR organization;

- Excels at honest, open communication, remains accessible to all staff, and values transparency;
- Demonstrated success recruiting, developing, and retaining a skillful scientific, technical and managerial staff, and an appreciation for the culture of an innovative scientific research environment while promoting a work-life balance;
- Ability to delegate effectively, balancing work evenly throughout the lab building trust among staff through empowerment and respect;
- Ability to exercise and encourage creativity, entrepreneurship, and a willingness to explore innovative ways of achieving targeted objectives;
- Effective in managing conflict and the needs and interests across diverse stakeholder groups while maintaining mutual respect and inclusive decision-making.

Procedure for Candidacy

Isaacson, Miller is assisting NCAR in this search. Inquiries, nominations, and applications are invited. Review of applications will begin immediately and will continue until the position is filled.

Candidates should provide the following materials to complete their application:

- Resume or curriculum vitae that summarizes your background and experiences as it relates to this position.
- Cover Letter or Letter of Application that addresses how you meet the responsibilities and requirements described in the position description including specific examples.
- Inclusion Statement which summarizes your approach to building and leading an inclusive and psychologically safe environment. In your statement, please share specific examples of actions you have taken to build diverse, equitable and inclusive environments in previous roles.

Nominations, inquiries and applications can be directed in confidence to Vijay Saraswat and Courtney Cabansag at <https://www.imsearch.com/open-searches/national-center-atmospheric-research-ncar/director-research-applications-laboratory>

The University Corporation for Atmospheric Research (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 the University Corporation for

Atmospheric Research (UCAR). We are committed to inclusivity and promoting an equitable environment that values and respects the uniqueness of all members of our organization.

The National Center for Atmospheric Research: An Overview

NCAR is the largest federally funded research and development center sponsored by the National Science Foundation and it is devoted to service, research, and education in the atmospheric and related sciences. Significant additional support is provided by other U.S. government agencies, foundations, 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.*

The vision and thematic goals put forward in the 2020-2024 NCAR Strategic Plan are:

- *Vision - Accelerated progress toward a thriving and sustainable society, empowered by the fundamental science and resulting applications made possible by NCAR's leadership and collaboration within the academic and broader community*
- *Thematic goals -*
 - *Enhancing and building on our core strengths*
 - *Promoting community Earth system science*
 - *Advancing Actionable science*
 - *Fostering a diverse and inclusive workforce*
 - *Building strategic partnerships that further community priorities in Earth system science*
 - *Developing and deploying novel education and public engagement strategies*
 - *Fostering strategic integration across NCAR and the community*

NCAR enables 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 among 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

- 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, visit: <https://ncar.ucar.edu>

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

NCAR strategic plan: <https://ncar.ucar.edu/who-we-are/strategic-plan>

NCAR is organized into the NCAR Directorate, plus seven [labs](#) and one NCAR-wide program as follows:

- 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 mesoscale 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 **Center of Excellence for Education, Engagement & Early-Career Development** (also known as Ed EC) coordinates NCAR's programs and activities in public outreach and engagement, training future generations of diverse scientists and engineers, partnerships with universities in training, and early-career staff professional development.

The directors of the laboratories and EdEC report to the NCAR Director and sit on the NCAR Executive Committee. For more information, visit: <https://ncar.ucar.edu/labs> and <https://edec.ucar.edu/>

Locations

NCAR and UCAR are headquartered in Boulder, Colorado, with most activities taking place on the following 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 in Broomfield, Colorado)

Additional facilities include:

- The NCAR-Wyoming Supercomputing Center (NWSC) in 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 in Washington, D.C.
 - Operated by the UCAR President's Office

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

NCAR Facts & Figures at a Glance as of November 2022:

- Award-winning, internationally recognized staff of 854 employees, including:
 - 250 scientists, 48 postdoctoral fellows, and 79 associate scientists
 - 163 engineers or software engineers
 - 314 administrative professionals, educational designers, DEI experts, student assistants, and visitors
- Annual expenditures of approximately \$166M
- 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

In addition, the following are managed and operated by UCAR:

- 120+ member colleges and universities from across North America
- 8 community programs with about 255 scientific, technical, and support staff
- 212 employees providing operational and administrative services

The total combined annual expenditures for NCAR and UCAR equal approximately \$237M.

The National Science Foundation Cooperative Agreement

UCAR's management of NCAR on behalf of NSF is governed by a Cooperative Agreement subject to periodic renewal. The current agreement was awarded on October 1, 2018, and expires on September 30, 2023. The financial value of the current Cooperative Agreement for the 60-month term is over \$570M and includes a management fee to UCAR of \$500,000 per year.

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 a total staff of approximately 1,300. The largest and most prominent of these programs is NCAR. The other programs, collectively known as UCAR Community Programs, broaden the impact 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 120+ 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://www.ucar.edu/who-we-are/org-chart>

UCAR President Antonio J. Busalacchi, Ph.D.

Dr. Antonio J. Busalacchi, UCAR President since August 2016, has led a distinguished career in the geosciences, has extensive experience in the management of academic, laboratory, and government programs, and has a broad knowledge of the geoscience research and education community. For a full biography, please visit the UCAR President's [website](#).

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://www.ucar.edu/who-we-are/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 120+ 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 educational activities for policy decision-makers that help sustain federal support of the atmospheric and related sciences.

UCAR Members: <https://www.ucar.edu/who-we-are/membership-governance/member-institutions>

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 appointments, financial management, and audit matters.

Board of Trustees: <https://www.ucar.edu/who-we-are/membership/board-trustees>

UCAR Vision, Mission & Values

In 2019, 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

- Earth system science for a better world.

Mission

- Leading world-class Earth system science through partnerships, innovation, and service.

Guiding Values

- Community | Creativity | Excellence | Inclusivity | Integrity

Goals

- Provide exemplary management of NCAR and UCP
- Be an advocate, convener, and enabler of the community to advance scientific breakthroughs that solve complex Earth system science questions
- Enable the transition of Earth system science research to operations and applications, resulting in the support of lives and property protection, economic development, and national security
- Be an employer of choice in Earth system science by promoting a welcoming, innovative, and inclusive culture that maximizes the talent, skills, and diversity within the broad Earth system science community
- Champion and extend Earth system science education and outreach
- Reimagining the future of work at UCAR, defining, formalizing, and expanding the flexible work model to meet the changing workforce needs; see more on UCAR's hybrid and remote work program, [Reframe Envision and Modernize](#) (REM)

UCAR Strategic Plan 2019–2028:

<https://www.ucar.edu/who-we-are/strategic-plan-2019-2028>

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://www.ucar.edu/opportunities>

The UCAR Community Programs

The programs under the UCAR Community Programs (UCP) 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

UCP website: <https://www.ucar.edu/community-programs>