

UCAR Listening Conference: Working together to build a diverse workforce in the climate and weather science

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Overview

The lack of diverse approaches and backgrounds in climate and weather sciences jeopardizes the future of atmospheric science. More importantly, it undermines the resilience to climate and weather of the diverse communities that are currently underserved by the science. To help address both these problems, UCAR would like to better support climate research and education at minority serving institutions (MSIs). We believe that enhancing research and/or education at MSIs is critical because MSIs are uniquely suited to address the adaptation, mitigation and workforce needs of their communities and uniquely situated to support and develop a next generation workforce that reflects the diversity of US society. Our central question is how can UCAR and its community support their efforts to in a way that also contributes to our own workforce diversity goals and NSF's. At the same time, we seek to begin a conversation that results in more MSIs becoming part of the UCAR community. Finally, we seek to together make the case for increased resources for these efforts.

The first step – already underway - is to develop key partnerships in and around the communities we seek to better serve. Working with these partners, we will convene a series of "listening conferences", which will identify the opportunities created by the convergence of vision and needs at MSIs and capability at UCAR. These listening conferences will take place within these communities, be designed in partnership with community representatives, and hosted by Minority Serving Institutions.. The outcome of these listening conferences will be a document outlining needs, priorities and opportunities for enhanced weather and climate-related capabilities in each community. In the second step, UCAR and its partners will convene a strategy session in Washington DC to invite federal funders, industry representatives, and other interested parties to develop options for implementing the identified opportunities.

This mirrors the effort 50 years ago, when the university community gathered to articulate their needs in addressing major problems in the atmospheric sciences, a process which resulted in the creation of NCAR and UCAR. With the changes in the demographic make-up of the US in the last 50 years, it is increasingly timely to revisit the exercise with an eye toward greater inclusivity.

Step 1: Listening Conferences

The listening conferences are built around two complementary sets of expertise. MSIs understand the unique landscape in which they work, and UCAR brings the technical infrastructure in NCAR, and the professional networks as a consortium of 71 Universities in the climate sciences. Together, we will convene one or a series of "listening conference(s)" to address:

- Enhancing weather and climate capacity at Minority Serving Institutions – what can UCAR/NCAR do to support the priorities MSIs identify?
- How can we leverage NSF's investment in UCAR/NCAR to achieve this goal
- Suggestions for coordinating Federal, NGO and industry investment

- How these efforts contribute to broadening participation in weather and climate science

Working with partners, we will stage four separate conferences in formats appropriate to the communities involved. Each conference would focus on a specific community: Tribal colleges, HBCU's, Latino Serving institutions, and community colleges. By having a separate meeting for each minority community, UCAR would be reaching out to the community and experiencing the unique needs and opportunities afforded by each kind of institution, rather than just presenting what UCAR thinks could be done. The conferences would be hosted at a representative school in each community and we will invite a variety of people, including faculty and officers from many different MSIs, local UCAR member institution faculty and officers, SOARS alumni, and the governmental agencies and private sectors representatives, suggested by our partners. Since our goal is to understand the way the college serves its community, it is essential that we engage the key campus leaders— be they in the presidents' office, the diversity office, or the department of physics. Working with partners is essential in identifying these leaders and ensuring community engagement.

The conference would begin with an introduction to the goals and agenda by the hosts, followed by an introduction to UCAR and NCAR by either Rick Anthes or Eric Barron. With our partners, we would identify two or three engaging and provocative speakers who will lead off by presenting their vision for their institution and community, and UCAR's potential role in collaborating to further that vision. This would be followed by a general discussion, moderated by the host institution, with participation from everyone. Cliff Jacobs (and/or other NSF representatives) could be invited to attend each meeting to hear first hand what the needs are. It is important that UCAR take seriously its role as a listener. To ensure that, UCAR will be responsible for compiling a summary of opportunities and needs that it heard, and the next morning present this summary to the attendees. Comments and discussion will follow to ensure that the summary accurately reflects what the MSI community presented.

Step 2: Implementing New Ideas

These listening conferences will result in a clearer understanding of the real needs and opportunities of minority serving institutions as they try to enhance their climate and weather research and or education capacity, and a better understanding of how UCAR (both NCAR and the UCAR member community) could partner in that effort. Hearing these needs first hand will give UCAR and partners the opportunity to step back, assess, and explore strategies which can leverage UCAR/NCAR's resources to address these needs. With our partners, UCAR would convene a meeting, or series of meetings, in Washington DC with various federal funders, industry representatives, to develop options for addressing the identified needs. The desired outcome would be a set of projects that could be led by MSI partners, implemented at MSI's, and leverage UCAR's (and its community's) resources and capabilities.

Furthermore, at the DC meeting(s), with federal funders and private industry present, various methods of funding could be identified or solicited to support these projects. In this way we can determine how best we all can work together for the benefit of diverse communities and a more diverse climate workforce. Implementing these strategies will position MSI's at the vanguard of integrative, innovative research and education that is based on the needs of the communities they serve.

Budget

Step 1: This format would probably work best by holding the listening portion of the meeting in the afternoon, then presenting the summary of what was heard the next morning. Costs would include airfare, one night hotel stay, associated per diem and miscellaneous costs. The hosting institution could provide meeting facilities, and might even be willing to host a late afternoon reception – although UCAR could do this as well. For four meetings with 25 out-of-town attendees (5 from UCAR and 20 from elsewhere) and a 2k reception this would be about \$126K, plus appropriate overhead.

Step 2: The costs include a second, two-day workshop including funders, industry representatives as well as participants from the first set of conferences. Costs would include airfare, two nights hotel stay, associated per diem and miscellaneous costs. With a reception this would cost an additional \$80K, assuming the same number of people attend the second workshop as the first (allows for some attrition), plus appropriate overhead.