Diversity Project title: NCAR presence at the 2013 SACNAS Annual National Conference – an opportunity to introduce Hispanic and Native American students to opportunities at NCAR

NCAR PI Name: Rich Loft  
PI Email: loft@ucar.edu  
Lab:  
Division/Program: CISL

All of the following components and questions are required:

1. Executive Summary: Provide a one paragraph executive summary of the project.

This proposal aims to raise awareness about NCAR’s science among students from traditionally underrepresented populations in STEM by attending, recruiting and presenting at the 2013 Society for Advancement of Chicanos and Native Americans in Science (SACNAS) Annual National Conference, and to use the presence at SACNAS to recruit students into NCAR’s undergraduate research experiences. SACNAS is a society of scientists dedicated to fostering the success of Hispanic/Chicano and Native American scientists—from college students to professionals—to attain advanced degrees, careers, and positions of leadership in science. Started in 1977, the SACNAS Annual National Conference is known to be one of the largest national gatherings of underrepresented minority scientists and students from all scientific disciplines. In 2012 alone, there were over 3,500 attendees, 300 exhibiting institutions, and 1,000 student research poster presentations. The SACNAS Conference aims to “motivate, inspire and engage participants to achieve their highest goals in pursuing education and careers in STEM fields.” (SACNAS website) Conference programming is specifically tailored to support undergraduate and graduate students, postdoctoral researchers, and career professionals at each transition stage of their career as they move towards positions of science leadership. As such, the missions of the SACNAS Conference can be seamlessly aligned with and/or support the diversity and inclusion visions/initiatives at NCAR such as: impacting the education and career goals of minority students by providing awareness of the opportunities for all STEM disciplines to contribute to the geosciences; and moving toward the NSF and nationally supported goals of increasing the diversity of students pursuing degrees and careers in the geosciences/atmospheric science and other related-STEM disciplines. Unfortunately, in past years, NCAR hasn’t taken advantage of leveraging the SACNAS Conference well-established recruitment and networking platforms, missing out on opportunities to access students from diverse backgrounds and build relationships with faculty from Minority Serving Institutions (MSIs).

We are proposing to have a strong NCAR presence at SACNAS 2013 by:

A) Hosting a booth that represents all NCAR/UCP research opportunities for undergraduate and graduate students. A joint booth would be a first for NCAR/UCP and materials developed for this conference could be used at future recruiting events. The booth would be staffed by several representatives from CISL, EOL, Unidata and SOARS, with CISL Diversity Coordinator, Stephanie Barr and Spark Program Coordinator for Student Opportunities, Laura Allen serving as cross-organizational ambassadors on the exhibition floor. The booth will enhance the connections made at the Geoscience Session, co-organized by NCAR/UCAR. Students who attend the session and get excited about opportunities at NCAR can follow up with NCAR/UCP staff during the career fair and exhibit hall hours.

B) Sponsoring three undergraduate student poster awards. We propose to sponsor one award each in the categories of engineering, geosciences and computing. The poster awards are an excellent way to honor outstanding student research in NCAR fields and recognition among the SACNAS student and faculty attendees as each award is called out at the conference award ceremony.

Activities A and B would be funded through this proposal. In addition, UCAR/NCAR is co-organizing a
geoscience session, SOARS students are presenting their research.

2. Diversity Objective(s) and Action Plan: Describe the diversity objectives of this project (refer to the UCAR Diversity Fund Guidelines for more information) and the action plan for accomplishing the objectives (typically 1-3 pages).

This proposal aims to increase or improve efforts within NCAR to reach and recruit applicants and students from groups that have historically been under-represented in the U.S. geosciences workforce and academic programs (goal a); and to provide education and outreach about academic or job opportunities and increase knowledge of the geosciences in general and interest in NCAR in particular with under-represented populations in the United States (goal b). The proposal has the potential to support the initial establishment of long-term scientific, technical or education/outreach partnerships with collaborators at U.S. institutions serving underrepresented populations (goal c). Until now NCAR has not had a formal presence at this conference. NCAR has only participated indirectly in previous years, through SOARS students presenting their summer research, a SOARS booth, and few NCAR scientists volunteering as poster and presentation judges. Strengthening our presence at SACNAS through a co-organized geoscience session [not part of this proposal], attendance of the conference by several NCAR representatives, and a presence at the Exhibit hall will enhance NCAR visibility with minority serving institutions and their students. NCAR would be joining the ranks of the other national labs such as NOAA, NASA, NIH, EPA, and many of our UCAR members and affiliate universities. The SACNAS Exhibit Activities mission statement reflects clearly the focus on recruiting minority scientists: “SACNAS creates an exhibiting environment for you to: Make meaningful connections with prospective applicants, Encourage and support the next generation of minority scientists, Network with colleagues and leaders in science from across the nation, Transfer knowledge and information about graduate programs, research internships, and other resources to advance students in their scientific careers, Open doors of opportunity and increase access for all students, Recruit and retain talented minority scientists at all levels” (http://sacnas.org/institutions/exhibiting). Finally, SACNAS has an extremely strong network of participants and supporters who are afforded several opportunities each year to collaborate including, but not limited to national conference, regional meetings, seminar, leadership workshops, student chapters, and newsletters. Another added benefit of the SACNAS network is its consistency in tracking the academic levels and disciplines of their attendees as shown in the figure 1 and 2. These data clearly show two things: the quality of access to college students, especially at the undergraduate level; and the need for a movement toward a stronger engineering and computational science presence at the conference.

Figure 1: 2012 Participants by Educational Level

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Professionals</th>
<th>Not Specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>N= 3,746 Total Attendees</td>
<td>57%</td>
<td>32%</td>
<td>11%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students by Sub-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precollege: 26%</td>
</tr>
<tr>
<td>Undergrad: 70%</td>
</tr>
<tr>
<td>Postbac: 4%</td>
</tr>
<tr>
<td>Grad: &lt;1%</td>
</tr>
</tbody>
</table>

N= 2,148 Total Student Attendees
3. Define how the program/activity success will be measured: We will measure activity success by number of students and faculty that visit the booth. We will track applications to our programs that reference SACNAS as where they learned about NCAR. The booth will enhance the connections made at the Geoscience Session, co-organized by NCAR/UCAR. Student who attend the session on Thursday and get excited about opportunities at NCAR can follow up with NCAR/UCP staff during the career fair and exhibit hall hours.

4. Period of Performance: Describe the timeframe for this project (≤ 24 months). The project must begin in FY13.
   - Begin Date: 8/30/13
   - End Date: 12/31/13

5. Does this proposal begin to establish or build toward a long-term scientific relationship(s) between NCAR and a US institution(s) serving underrepresented populations (hereinafter, the “Target Institution(s”)”)?
   - YES X
   - NO 

6. If YES, how describe how progress toward this long-term objective will be measured:
   The proposal does this in two ways. First, it combines and extends the outreach and network-building activities of the CISL Diversity Coordinator, capitalizing on the success and recognition of SPARK/SOARS/UCP in the SACNAS network. The extended efforts under this proposal, with those of and support of EOL and Unidata staff, provide resources dedicated to strengthening communications and partnerships with Target Institutions and students. Because of the interdisciplinary nature of the SCANAS Conference and the inclusion of an education research component, our proposal will undoubtedly expand NCAR’s engagement beyond the atmospheric science departments at member universities to multiple departments and colleges ultimately strengthen relationships with Target Institutions.

7. Does this proposal develop or strengthen NCAR’s partnership(s) with the faculty, students or career offices associated with the US Target Institution(s)?
   - YES X
   - NO 

8. If YES, describe how these efforts will increase communication and recruitment opportunities for NCAR long-term and why a long-term partnership with this institution would be beneficial to NCAR:
   The expanded network of connections made at SACNAS with university faculty, diversity-oriented staff at peer organizations and university career centers, will be valuable for future recruiting efforts.

9. Is this project likely to increase knowledge regarding the geosciences in general and an interest in NCAR in particular among students at the US Target Institution(s)?
   - YES X
   - NO 

10. If YES, how describe how progress toward this long-term objective will be measured:
    NCAR/UCP staff will track the number of contacts made with students at the different venues at the Conference. References to these contacts by applicants will be also tracked.

11. Is this project designed to promote awareness among students and faculty at the US Target Institution(s) regarding available academic opportunities and job opportunities in the geosciences and at NCAR?
12. If YES, how describe how progress toward this long-term objective will be measured:
NCAR/UCP staff will track the number of contacts made with students at the different venues at the Conference. References to these contacts by applicants will be also tracked.

13. Is this project designed to increase the retention of staff by developing the potential of employees, improving communication or the collaboration and mentoring skills of employees? Examples include offering mentoring to all new employees; formalizing networking and support (social and otherwise) in order to ensure positive impact for all new employees and students; and efforts to develop and strengthen partnerships with Target Institutions in order to help maintain and enhance our open and inclusive environment.
YES ☐ NO ☒

14. If YES, how describe how progress toward this long-term objective will be measured:

15. Does this project involve co-investigators and/or collaborators (internal and external)?
YES ☐ NO ☒

If YES, provide the name, title and institution affiliation (if any) for each person:

Stephanie Barr, CISL
Sara Metz, EOL (SACNAS material development)
Rebecca Haacker-Santos, SPARK/ SOARS
Laura Allen, SPARK/ SOARS
Jeff Weber, Unidata

Proposal Budget Request

- Complete and attach a budget using the Excel document, NCAR Diversity Funds Request Template available at https://ncar.ucar.edu/diversity-committee/ncar-directorate-diversity-funding
- In the field below, please provide a brief budget justification, similar to the NSPIRES or Fastlane requirement and no more than two (2) paragraphs.

Proposal Budget Total: $10,877

Co-sponsorship is preferred and evaluated in the review process. Please note that regular staff salary may not be counted toward co-sponsorship.

Materials ($1000): Funds requested cover development and printing of recruiting materials ($500) and shipment of booth content to SACNAS ($500).
Purchased services ($6000): Funds requested cover the booth registration ($1,750), furnishings such as high top tables, chairs and a monitor ($1,800), Internet connection in the booth ($1,000), as well as three undergraduate student poster awards ($1,500).

Both CISL and SOARS (UCP) are co-sponsoring this activity. SOARS is covering travel and registration for both the SOARS director and the program coordinator to represent all internships at NCAR/UCP, as well as travel for six SOARS protégés who can serve as ambassadors for NCAR and recruit other students. CISL is covering travel of their
diversity coordinator to represent all internships at NCAR and to build connections and relationships with minority serving institutions.

Proposal Submission Approval

Diversity Project title: NCAR presence at the 2013 SACNAS Annual National Conference – an opportunity to introducing Hispanic and Native American students to opportunities at NCAR

NCAR PI Name: Dr. Richard D. Loft

Submitted by: [Signature] Date 21 Aug 2013

Approved by: [Signature] Date 21 Aug 2013

NCAR Associate Director(s) Signature(s)
**FY12 NCAR Diversity Proposal Budget Template**

**NCAR Lab/Division:** CISL  
**Project Title:** NCAR presence at the 2013 SACNAS Annual National Conference – an opportunity to introducing Hispanic and Native American students to opportunities at NCAR  
**NCAR PI(s):** Loft, Rich  
**Period of Performance:** 8/30/2013 - 9/30/2014  
**NOTE:** PoP is 12-24 months from award date. The project must begin in the current FY and may extend into the following FY.

<table>
<thead>
<tr>
<th>PART I: Diversity - Year 1</th>
<th>PART II: Matching Funds - Year 1</th>
<th>TOTALS</th>
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<tbody>
<tr>
<td><strong>MATERIALS &amp; SUPPLIES</strong></td>
<td></td>
<td></td>
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<tr>
<td>Printing</td>
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<td>500</td>
</tr>
<tr>
<td>Shipping</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>1,000</td>
<td>1,000</td>
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</tbody>
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| **PURCHASED SERVICES**    |                                  |        |
| Booth Registration        | 1,750                            | 1,750  |
| Booth Furnishings         | 1,800                            | 1,800  |
| Booth Internet            | 1,000                            | 1,000  |
| Poster awards             | 1,500                            | 1,500  |
| **SUBTOTAL**              | 6,050                            | 6,050  |

| **TRAVEL**                |                                  |        |
| Registration Staff #1     | 0                                | 0      |
| Travel Staff #1, CISL     | 0                                | 1,500  |
| Registration Staff #2     | 0                                | 0      |
| Travel Staff, SPARK, Staff| 0                                | 0      |
| **SUBTOTAL**              | 0                                | 1,500  |

**SUBTOTAL Modified Total Direct Costs (MTDC)**  
7,050 1,500 3,365 11,915

**NCAR INDIRECT COSTS (IC) @ 0.543**  
3,827 815 1,827 6,469

**TOTAL MTDC + Applied IC**  
10,877 2,315 5,192 18,384

**Exclusions from MTDC**  
Non-NCAR PARTICIPANT SUPPORT COSTS  
**Travel support for students**  
0 0 7,200 7,200

**TOTAL Funding**  
10,877 2,315 12,392 25,584