



Broadening Participation in Climate Research: MMAP Partnership with SOARS

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Why focus on Diversity?

- **Growth of US “minority” populations**
- Reaching the best & brightest
- Diversity is *a compelling state interest*¹
 - Diverse perspectives promote discovery
 - A competitive workforce in a global economy
- Science that is usable and relevant for *all* members of society

(1) Majority Opinion (*Grutter v. Bollinger et al.*)

“participation by members of all racial and ethnic groups in the civic life of our Nation is essential”



U.S. Atmospheric Science PhDs (1973 to 2002)

- 1,991 Total PhDs
- 30 Hispanic American PhDs (1.5%)
- 17 African American PhDs (.85%)

Data from Roman Czujko, AIP Statistical Research
Center, with support from the Packard Foundation



SOARS Mission

- Broaden participation in the geosciences by increasing the number of Black or African-American, American Indian or Alaska Native, Hispanic or Latino, female, and first-generation college students who enroll and succeed in graduate school in the atmospheric and related sciences.
- Contribute to “a diverse, internationally competitive, and globally engaged workforce of scientists, and engineers.”
 - National Science Foundation Strategic Plan
- Create the next generation of leaders in the atmospheric and related sciences by helping students develop investigative expertise complemented by leadership and communication skills



SOARS Values

Authentic research experience

Multidimensional mentoring

Supportive community

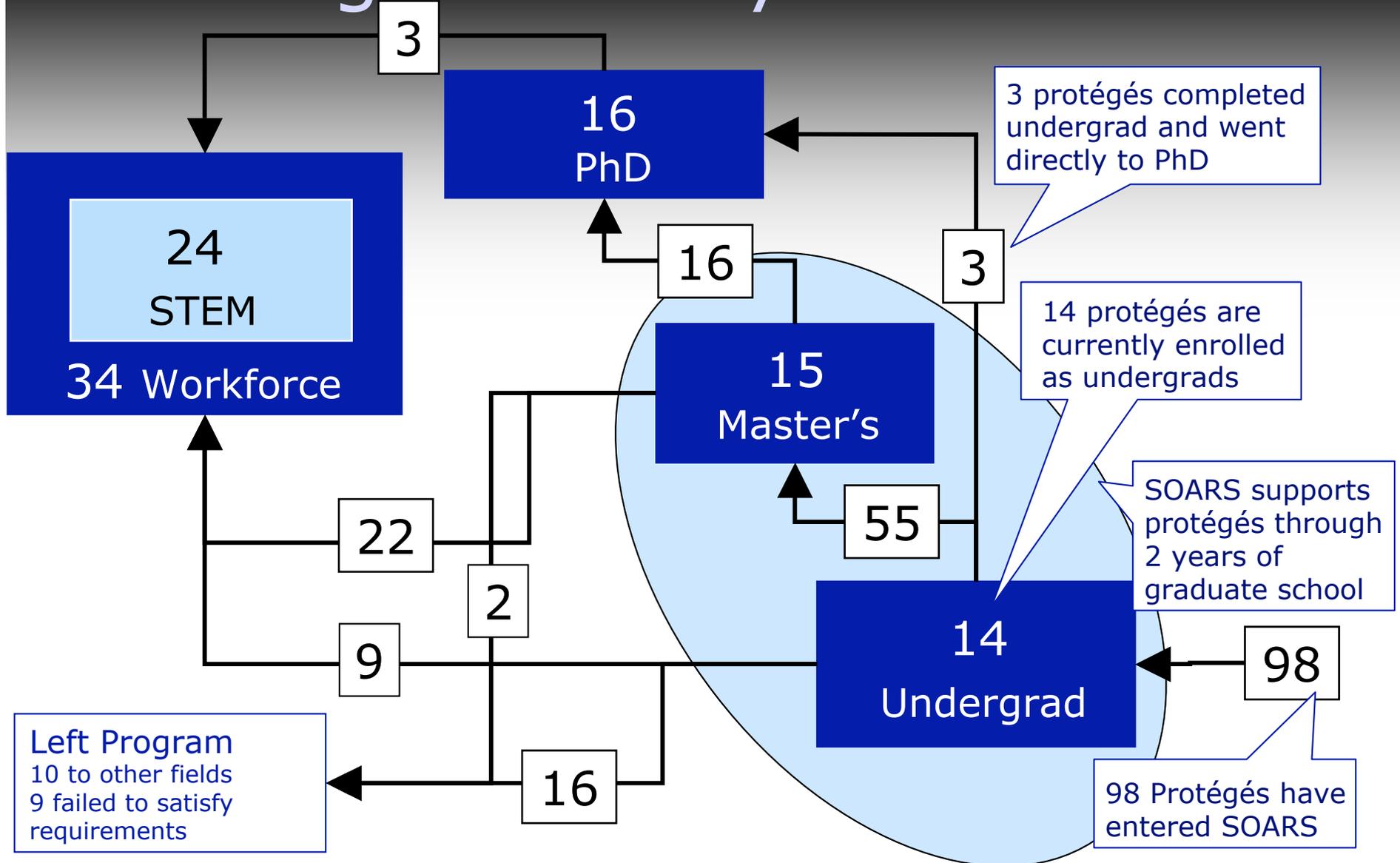
Professional development

Comprehensive financial support

Multi-year experiences



Protégé Pathways



Other SOARS Success

- 12 refereed, protégé co-authored papers from summer research
- 3 AMS graduate fellows
- 3 NSF graduate fellows
- 4 NASA pre-doctoral fellowships
- 65 oral presentations by protégés at national or regional conferences
- 113 posters presented by protégés at national or regional conferences
- SOARS received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring in 2001



Independent Evaluation

- Conducted by the University of Colorado Ethnography and Evaluation Group
- Over 200 interviews with protégés, mentors, and program staff and 100 hours of observation
- “SOARS is a successful program as measured by a number of different metrics.”



MMAP and SOARS

- A history of collaboration
 - 2 recent PhDs
 - 2 students continuing after their MS
 - 2 entering the workforce after MS
 - 2 new graduate students



MMAP and SOARS

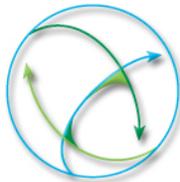
- MMAP will support 1 or 2 undergraduate SOARS protégés in MMAP-related research
- MMAP will support two SOARS graduate students (at CSU)
- MMAP and SOARS will co-recruit



Kimberly Trent, from Yale, will be the first MMAP-SOARS protégé.



SOARS Sponsors and Partners



SOARS Protégés Summer 2005

