

Diversity & Inclusion at NRAO

Charlottesville Town Hall – July 16, 2018



Office of Diversity & Inclusion (ODI)

<https://info.nrao.edu/do/odi/broader-impact-programs/odi/>

Director's Office

The NRAO is fully committed to creating a culture and environment that is rich in diversity and naturally inclusive.

Office of Diversity & Inclusion (ODI)

<https://info.nrao.edu/do/odi/broader-impact-programs/odi/>

Purpose of Town Hall

- Describe importance of D&I to NRAO's mission
 - Importance of D&I to NSF
- Briefly describe Broader Impact programs
- Briefly describe Diversity Advocate and Employee Diversity Group roles
- Inclusion exercise

Strategic Vision

To enable diversity to thrive in all areas of the Observatory in a seamless manner, wherein diversity becomes a natural part of the way we think about work, in the decisions we make, and in our behavior towards others.

Diversity Policy Statement

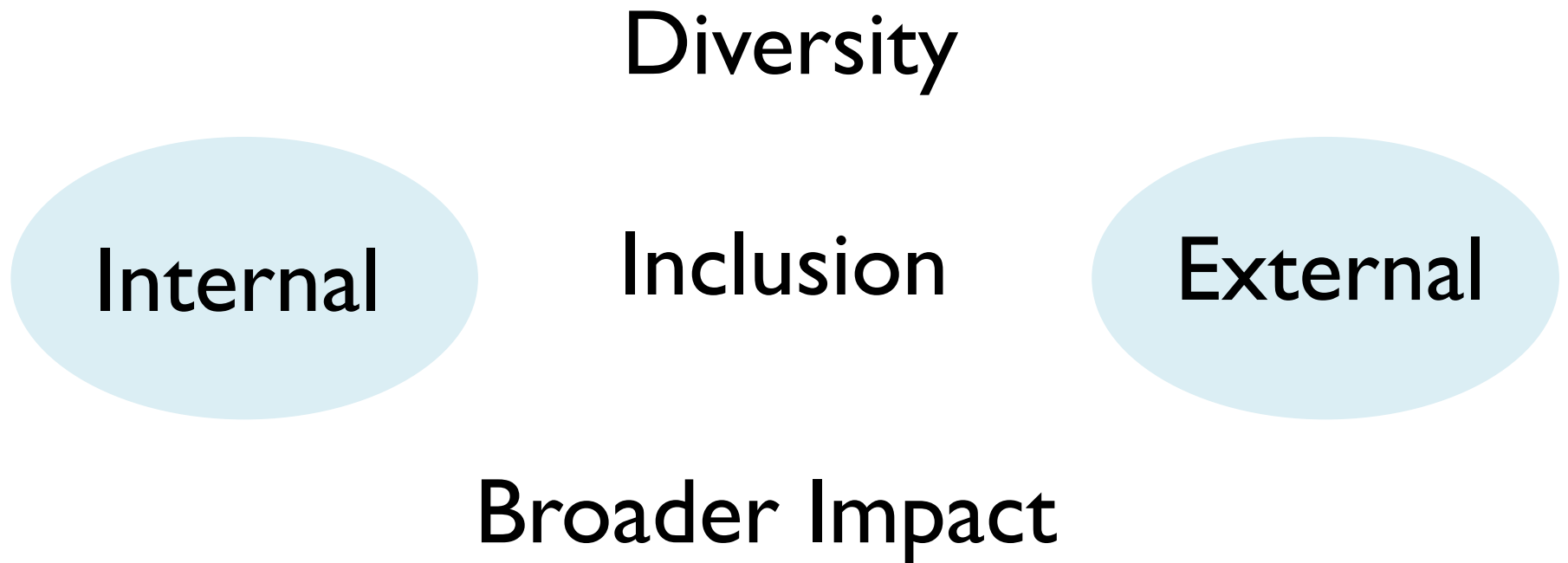
Our employees, essential to our success, are to be valued, treated with respect, and have opportunities to work in an inclusive, multi-cultural and gender diverse environment.

NRAO staff and management are responsible and accountable for achieving the above goals.

NRAO

<https://info.nrao.edu/do/odi>

NRAO's Focus:



What do we mean by “Diversity”?

- Understanding that each individual is unique, and brings a set of unique skills and experiences to NRAO
- Along the dimensions of race, ethnicity, gender, sexual orientation, gender identity, age, and physical abilities

GOAL: To ensure that NRAO is producing the best outcomes. Diverse groups make better decisions.

What do we mean by “Inclusion”?

- Recognizing and **valuing** individual identities and experiences
- Consciously including those who might otherwise be excluded
- Exploration of our diversity in a safe, positive, and nurturing environment
- Understanding the power of diverse ideas and experiences

<https://www.nsf.gov/od/oia/special/broaderimpacts/>

What does NSF mean by “Broader Impact”?

- Building STEM Talent
RAP-NM, RAMP-UP,
H2O, NAC, REU, Grad programs,
PD programs
- Innovating for the Future
Science, research opportunities
- Improving our society
- Reaching beyond borders
NINE, ODI-Chile, Sister Cities
- Engaging a wider audience
EPO



More about this!

NRAO

<https://www.nsf.gov/od/oia/special/broaderimpacts/>

In summary, NRAO is addressing several goals:

- Meeting NSF's mandates toward Broadening Participation
- Building a diverse workforce that is representative of the larger U.S. and local communities
 - NRAO reports race and gender information to NSF
- Creating and maintaining a culture of inclusion so that a diverse workforce can flourish – and so that NRAO operates at its best

ODI and HR

<https://www.nsf.gov/od/oia/special/broaderimpacts/>

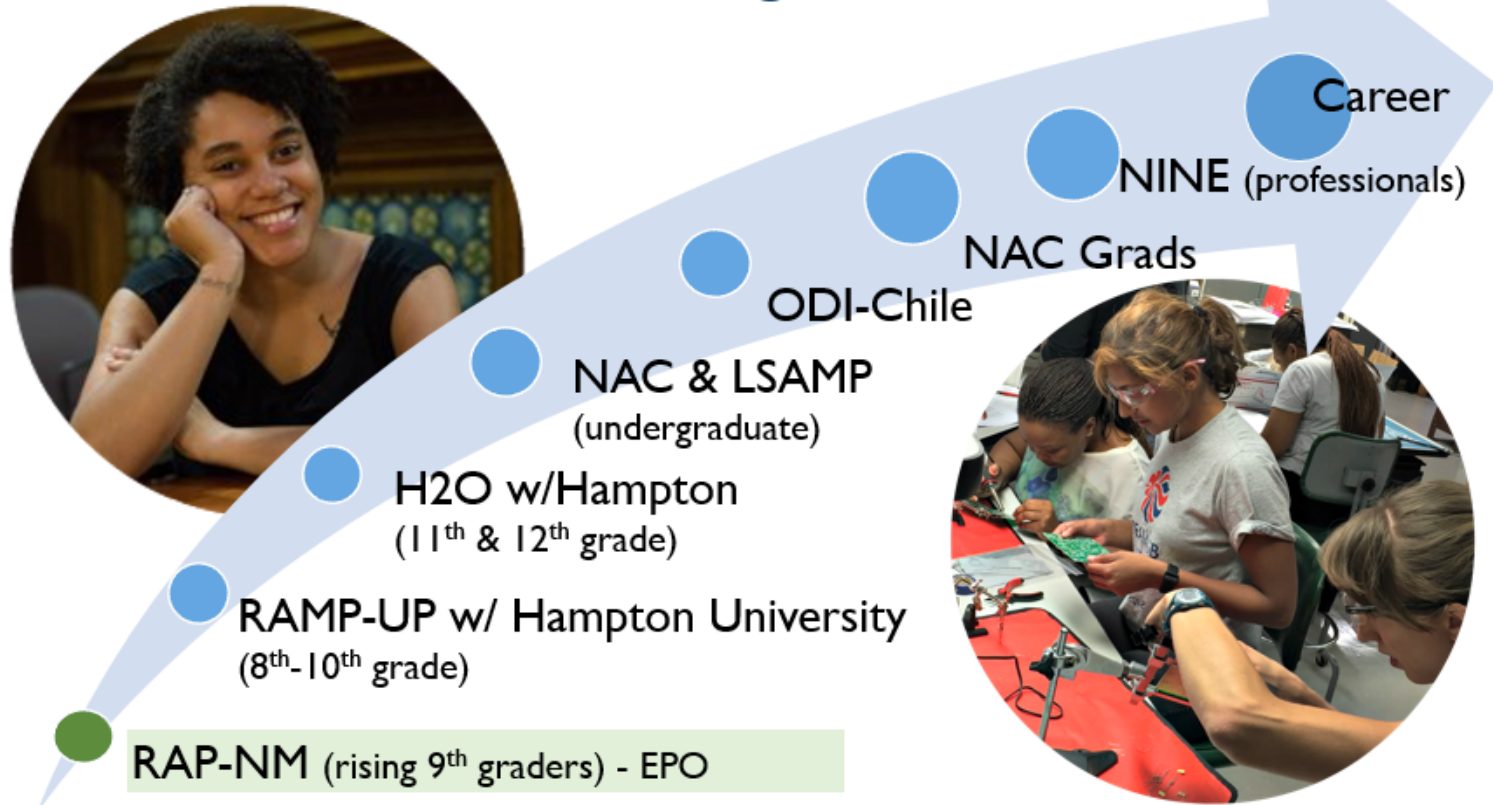
Training

- Unconscious Bias – required...
- Online

NRAO Broadening Participation

Research & Training Experiences Pipeline

Grade School through Professional



Broadening Participation

Education & Training “Pipeline”



Broadening Participation

Education & Training “Pipeline”

RAP-NM
(EPO)

- NRAO EPO STEAM Education Program
- Rising 9th-graders – Socorro, Magdalena
- Residential week-long summer camp
- Paired with NAC mentors



NAC

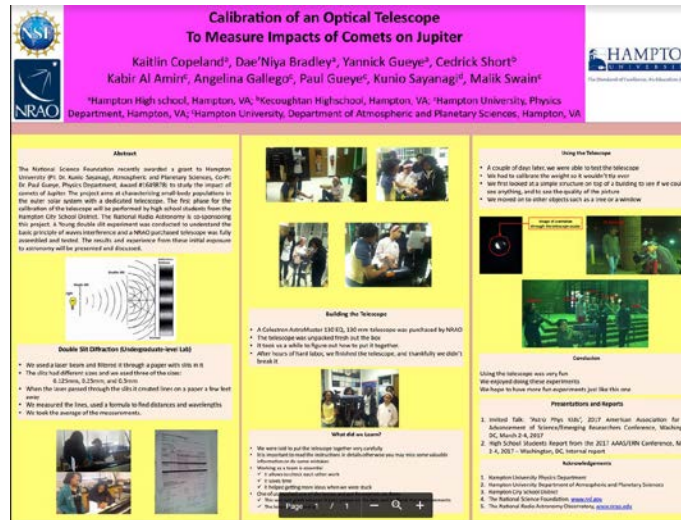
Pathway under
development

Middle School - High School

Broadening Participation Education & Training “Pipeline”

RAMP-
UP

- Hampton University NINE Hub
- Middle school (8th-10th grade) – Hampton Virginia
- Optical and Radio Jove builds
- Presentations at ERN, BEYA, and NSBP



NAC

Middle School - High School

Broadening Participation Education & Training “Pipeline”



NAC
College

H2O: Stimulating STEM Career Pathways

H2O

- Hampton University NINE Hub
- NRAO-Hampton City Schools-Hampton Univ.
- College credit Astronomy course at HU
- Research and presentations at ERN, BEYA, NSBP

Middle School - High School - College

Broadening Participation Education & Training “Pipeline”

The NAC Undergrad Experience



Grad school
NAC/NINE
Career



- Under-represented minority students
- Strong, long-term mentoring and support
- Cohort and network building
- Research, engineering, software, etc. experiences

Undergraduate Students

Broadening Participation Education & Training “Pipeline”



NAC
Grad school
NAC/NINE
Career

LSAMP

- VA-NC Alliance – UVA & NRAO + HBCUs
- Research and engineering experience – CDL
- “Folded into” NAC cohort
- Annual trip to Green Bank Observatory

Undergraduate Students

Broadening Participation Education & Training “Pipeline”



Grad school
Career

ODI-
CHILE

- Students from universities near ALMA
- Mentored by NRAO/ALMA scientific staff
- 10 weeks during Chilean summer
- Present research at annual SOCIAS meeting

Undergraduate Students

Broadening Participation Education & Training “Pipeline”



- NAC student embedded in NINE program
- Learning Project Management skills
- Research or engineering experience
- Servant-Leadership training and experience

Undergraduate Students

Broadening Participation Education & Training “Pipeline”

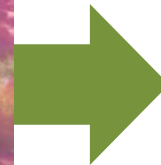


2018 NAC Fellows

Chima McGruder,
Harvard '23

Moiya McTier,
Columbia '22

Sinclair Manning,
UT-Austin '20



Career/
Post-doc

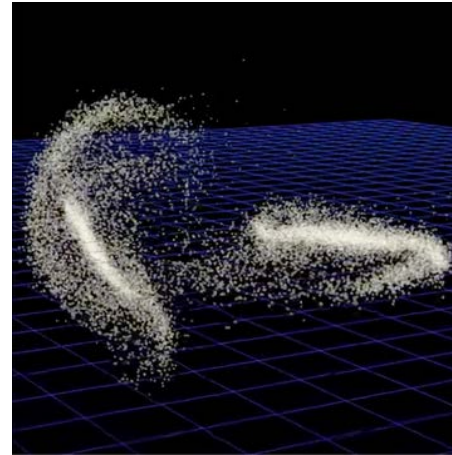


- NAC Alums in graduate school
- Eligible for NAC Fellowships
- Serve as mentors to NAC undergrads
- Support network for fellow graduate students

Graduate Students

Broadening Participation Education & Training “Pipeline”

The NINE Professional Experience



Grad school
NAC/NINE
Career



- Professionals at any career level
- Project Management (PM)
- Raspberry-Pi to combine & analyze astronomical data
- Hub development for home institution

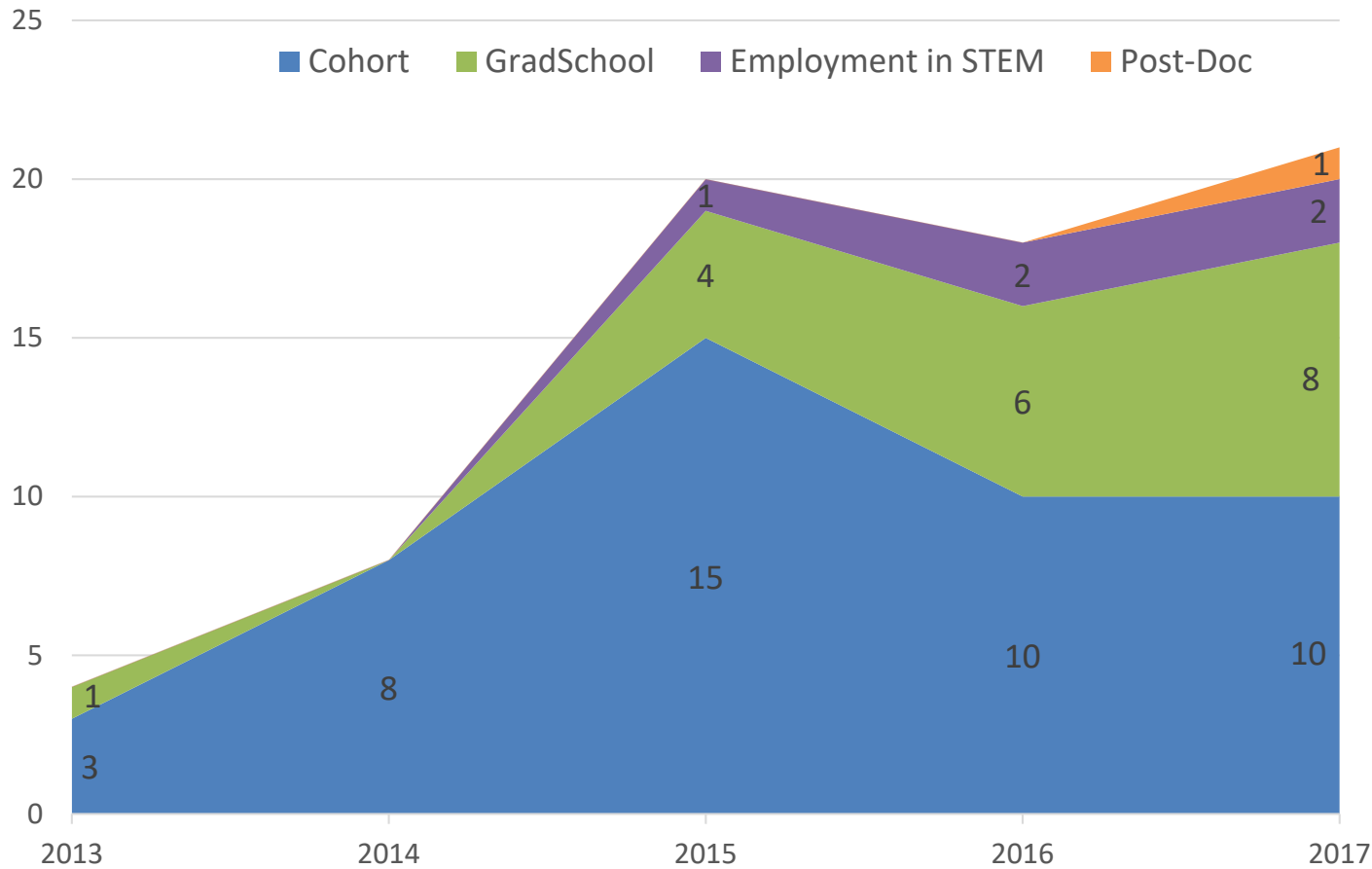
Professionals

Broadening Participation

Outcomes - NAC

NAC Pipeline

February, 2018



15 Still undergrads

4 NSF GRFs

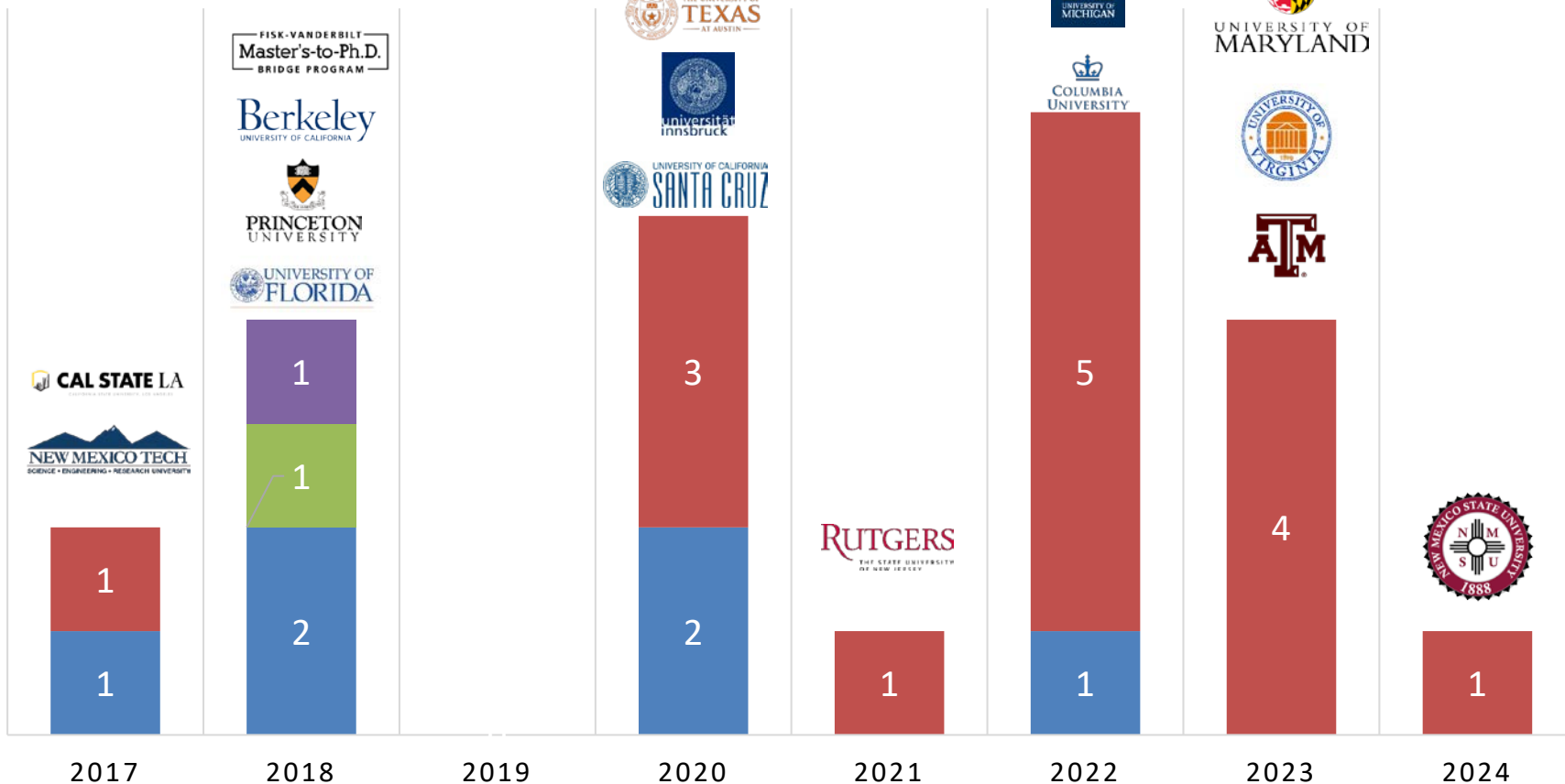
3 NAC/NINE Leadership

4 In Grad school beginning 2018

Broadening Participation Outcomes - NAC

POST-BAC NAC ALUMS

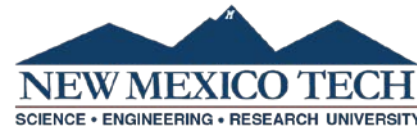
■ MS ■ PHD ■ ENG ■ Post-Doc



Broadening Participation

Outcomes - NAC

GRADUATE SCHOOLS – NAC Students



Broadening Participation

Outcomes - NAC

Undergraduate and Graduate Schools

Undergraduate School	Graduate School
Texas Christian University	Texas A&M - College Station
Norfolk State University	Cal State Univ LA
College of Idaho	New Mexico Tech
Texas Southern University	Rutgers University
Whittier College	Leopold-Franzens Universität Innsbruck
City College of New York	Princeton
Howard University	University of Michigan Applied Physics
University of Alabama, Huntsville	Princeton
University of California - San Diego	University of Barcelona
Howard University	University of Texas - Austin
University of Tennessee, Knoxville	Harvard University
Harvard University	Columbia University
Howard University	UC Berkeley College of Engineering
University of North Carolina, Chapel	Fisk Vanderbilt Bridge Program - MS
Harvard University	UC Santa Cruz
New Mexico Tech	New Mexico Tech
Old Dominion University	New Mexico State University
Piedmont Virginia Community College	University of Virginia
University of Wisconsin	Banneker Institute at Harvard
CSU - San Bernadino	University of Maryland, College Park
Howard University	University of Washington
Howard University	Penn State

Non-R1 School

HBCU

Hispanic-Serving
Institution

R1 School

Broadening Participation

Outcomes - NINE



Recent & Up-coming NINE Hub Activities

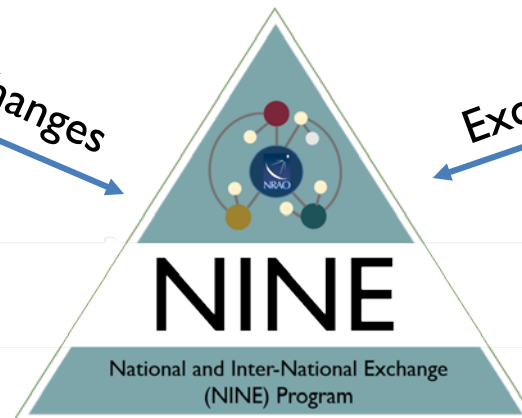


2017-2018

- High school-college bridge
- 1st Radio Astronomy program at HBCU
- NSF Proposal for research and exchange – HBCU-UP

Exchanges

Exchanges



Feb-Mar, 2018

- Education & Public Outreach
- MAPPP training by Lory Wingate
- Methodical approaches to proposals with PM

Summer, 2018

Joint activity

- High school students from South Africa and Hampton University
- Trip to NRAO, Green Bank Observatory & University of Virginia

Joint activity

Broadening Participation

2018 NINE



Established International Hub	Developing U.S. Hub (HBCU)	Developing International Hub
Anja Fourie Science Promotions Coordinator at SKA Africa 2018 NINE PM	Alex Fortenberry Physics	Jason Renwick, B.Sc., Electrical Engineering
Hub Lead: Lorenzo Raynard (Rob Adam) SARAO/UWI collaboration	Hub Lead: Dr. David Morris	Hub Lead: Dr. Shirin Haque, Dep. Dean, Faculty of Science and Technology

Office of Diversity & Inclusion (ODI)

<https://info.nrao.edu/do/odi/diversity-training>

Diversity Training & Speaker Series

- Unconscious/Implicit Bias
- Safe Space/LGBT Cultural Awareness
- Disability Awareness & Etiquette
- Post-traumatic Stress Disorder (PTSD)
- Mentoring Students from a Diverse Background
- Imposter Syndrome
- Professional Skills Development for Women
- Anti-Harassment and Anti-Bullying

Office of Diversity & Inclusion (ODI)

<https://info.nrao.edu/do/odi/diversity-advocates>

Diversity Advocates & Employee Diversity Group

- Actively promote the benefits of diversity
- Speak up to address issues that fail to meet our standards of inclusion
- Value the power of diverse ideas and experiences



Diversity Advocate

Office of Diversity & Inclusion (ODI)

Diversity Advocate

The Diversity & Inclusion (D&I) Advocate promotes the advancement of diversity and inclusion in Charlottesville, and across the Observatory. The D&I Advocate will coordinate activities with the Director of Diversity & Inclusion at NRAO to support specific D&I initiatives throughout the Observatory, in addition to providing recommendations that address Charlottesville-specific D&I issues. The D&I Advocate will act as the site's lead spokesperson for D&I efforts.

The CV D&I Advocate will be selected by a committee composed of the ODI Director, the HR Director, and two other volunteers.

Office of Diversity & Inclusion (ODI)

Duties & Responsibilities:

- Serve as the primary point-of-contact at the site level for D&I related matters;
- Serve as chair of the Charlottesville Employee Diversity Group (EDG), and organize and lead quarterly EDG meetings;
- Represent diversity and inclusion ideals in daily interactions;
- Actively participate in D&I meetings, and communicate outcome of the meetings at each site;
- Manage D&I communication campaigns (post notices of upcoming trainings, events, etc.);
- Support D&I training programs by coordinating logistics, and making recommendations on targeted topics that are pertinent to Charlottesville;
- Champion and advocate all D&I events in Charlottesville;
- Serve as a role model regarding D&I issues at NRAO; and
- Provide site-specific information on D&I activities that NRAO needs to report to NSF on a quarterly basis.

Office of Diversity & Inclusion (ODI)

Qualifications:

- Demonstrated interest in promoting a culture of diversity and inclusion at NRAO
- Completion of the D&I Advocate suite of online training courses before service begins
- Demonstrated ability to lead by example, with a reputation for inclusive interaction with colleagues

Time Commitment:

Time commitments will vary depending on the work at hand. However, D&I Advocates should plan on devoting approximately five working hours per month for meetings, planning, and discussion with employees and managers. Note that this time should be coded as BI on your timesheet, but is still paid from your home account. Advocates serve at least one one-year term with the option to renew if mutually agreeable.

Office of Diversity & Inclusion (ODI)

To Apply:

- Send a letter of interest to Lyndele at odi@nrao.edu. Please include:
 - A statement of motivation (why is this of interest to you)
 - Background/experience in Diversity & Inclusion-related work

Process:

- A committee, composed of the ODI Director, the HR Director, and two other volunteers, will review the applications.
- All candidates, and the 2018/19 Advocate will be notified by September 3rd.
- Service will begin October 1, 2018

Employee Diversity Group Members

Office of Diversity & Inclusion (ODI)

Employee Diversity Group Members

The Employee Diversity Group should be attentive to opportunities to Increase awareness of diversity- and inclusion-related issues and, within the context of EDG meetings, recommend solutions.

Successful EDG members will be motivated to:

- work to promote respectful dialogues that explore the benefits of diversity and inclusion within NRAO;
- promote diversity and inclusion at Observatory sponsored events
- actively represent and promote inclusiveness and respect

Office of Diversity & Inclusion (ODI)

Duties & Responsibilities:

- Actively participate in CV Diversity meetings (monthly or quarterly, as determined by the EDG)
- Assist with sharing Observatory-wide D&I communications
- Serve as role model by attending diversity training and events
- Communicate and report diversity related information to Diversity Advocate
- Be attentive to opportunities to advocate for diversity & inclusion
- Complete assigned suite of D&I-related training courses
- Solicit ideas from employees regarding diversity oriented events/issues relevant to site

Office of Diversity & Inclusion (ODI)

Goals:

- Increase awareness of diversity- and inclusion-related issues and recommend solutions
- Promote a respectful dialogue that explores the benefits of diversity within NRAO
- Promote diversity and inclusion at Observatory sponsored events
- Actively represent and promote inclusiveness and respect
- Assist in developing funding requests to support site-based initiatives.

Office of Diversity & Inclusion (ODI)

Qualifications:

- Demonstrated interest in promoting a culture of diversity and inclusion at NRAO
- Completion of the D&I EDG suite of online training courses before service begins
- Demonstrated ability to lead by example, with a reputation for inclusive interaction with colleagues

Time Commitment:

It is expected that a EDG members will serve no more than one to two hours per month. This service time should be recorded as BI, and will be charged to the employee's home account. EDG members serve 1 year appointments, renewable for an additional year. Appointments are effective at the beginning of **each fiscal year**.

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