

Inclusivity at NIST

*Perspectives and action for
equity, diversity, and inclusion*

Safe and Inclusive Research Environments: A U.S. National Priority

“To advance S&T progress and ensure maximum return on taxpayer investment in R&D, the laboratory, the factory, the field, and any other setting where R&D is performed must welcome all individuals without prejudice and enable them to work safely, efficiently, ethically, and with respect, consistent with the American values of free inquiry, competition, openness, and fairness.”

Fiscal Year 2021 Administration Research and Development Budget Priorities Memo, August 30, 2019



High-priority area: Creating safe and inclusive research environments

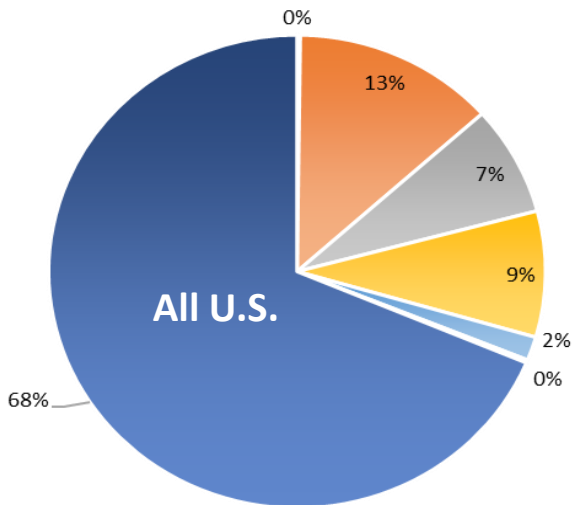
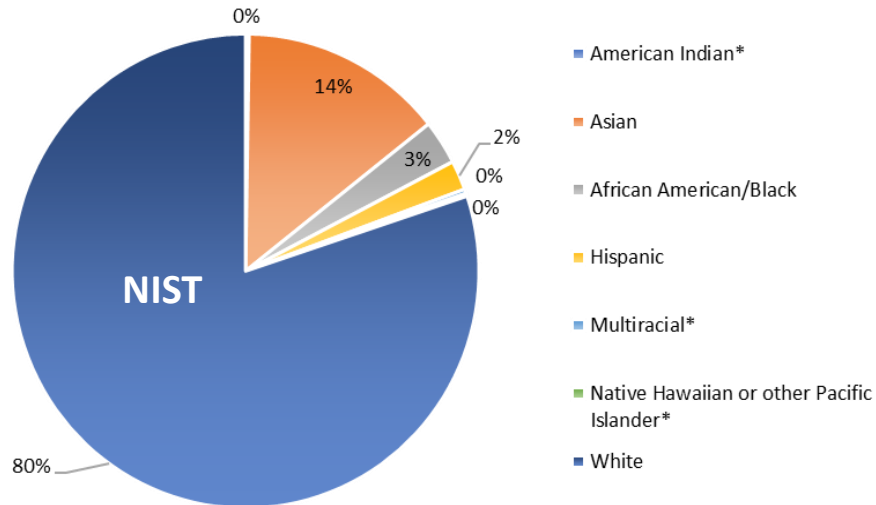
Perseverance: We take the long view. We use science and imagination to create positive impacts for our stakeholders.

Integrity: We are ethical, honest, independent, and objective.

Inclusivity: We work collaboratively. We value diversity of people and ideas to attain the best solutions to multidisciplinary challenges.

Excellence: We apply rigor and critical thinking to achieve world-class results and continuous improvement in everything we do.

NIST & National STEM Employment Trends



Compared to national trends, NIST science and engineering workforce is less diverse.
What is NIST doing to address?

Grow more diverse talent pipeline

Build culture of inclusivity and equity

Be more strategic in hiring and promotion

Cultivating “STEM” Magic

To develop the future Science, Technology, Engineering and Mathematics (STEM) workforce, it’s imperative to stimulate interest in STEM as early as possible. NIST achieves this goal by sponsoring K-12 school grade engagement opportunities for children and educators.

Take Our Daughters and Sons to Work Day

A national program held annually (traditionally the last Thursday in April) to exposes the next generation to STEM topics. NIST host nearly 500 children (ages 9-14 years) annually.



NIST Summer Institute

Brings together teachers and NIST scientists and engineers for two weeks of hands-on science based on the cutting-edge measurement science research at NIST and designed to match the middle school curricula.



Growing NIST's STEM Pipeline

NIST Graduate Student Measurement Science and Engineering Fellowship (GMSE)

Administered through grant with National Physical Science Consortium, with emphasis on women and minorities

Professional Research Experience Program (PREP)

Partnership with U.S. colleges and universities to bring undergraduates, graduates, postdocs, and faculty to NIST



Five of the PREP postdocs working at NIST: Jasjeet Bhullar, Sarah Robinson, Caglar Emiroglu, Adam Hannon and Huong Giang Nguyen.



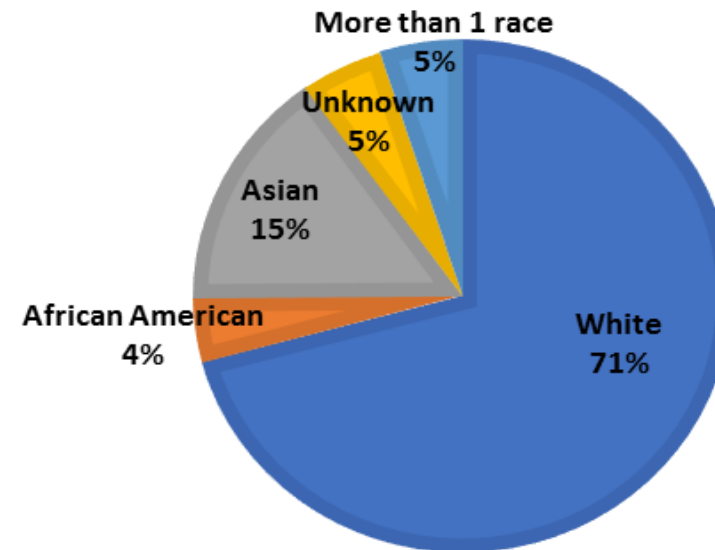
GMSE graduate student Andre Thompson in one of NIST's Fire Research laboratories, testing the flammability of materials

NIST's STEM Pipeline: Summer Undergraduate Research Fellowship (SURF)



- SURF inspires undergraduate students to pursue STEM careers through a unique research experience that supports the NIST mission
- Focus on diversifying the SURF participants through targeted recruiting and outreach
- 2019 already significant impact, and much work still to come

SURF PARTICIPANTS CATEGORIZED BY RACE



2018 Data

■ White ■ African American ■ Asian ■ Unknown ■ More than 1 race

Building Inclusivity Through Equity

Steering Group for Equity in Career Advancement

- Representatives from across NIST, from early career staff to laboratory managers
- Key advisor to NIST Director and Associate Director for Laboratory Programs



Winner of **OSA Foundation's "Diversity and Inclusion Advocacy Recognition"**
(Award ceremony September 2019)

NIST steering group recognized for *"having significant results within the agency and is an excellent a model for other agencies, companies and universities"*

Ongoing Data-Driven Efforts to Advance Equity



- Rotational Assignments to Study Equity, Diversity and Inclusion

- Two staff selected based on proposals to conduct data-driven investigations of equity, diversity, and inclusion at NIST



NIST computer scientist Mary Theofanos
Project: “Assess the Inclusivity of Women at NIST”



NIST materials scientist Laura Espinal
Project: “Assess Inclusivity as a First Step to Harness Human and Social Capital for Innovation at NIST”

- External Contract to conduct “STEM Equity Disparity and Resolution to Known Equity Disparity”

- Contract awarded to University of Oregon, who will analyze career advancement process for STEM disciplines
- Identify critical factors in promotion disparity, including causes and trends
- Final presentation by April 2021



Engaging Staff



*Equity Café March 7, 2019,
NIST Boulder*

Having the Conversation

From top leadership to all parts of NIST, inclusivity is part of all our discussions

- Inclusion and diversity – a part of every NIST senior leadership meeting.
- “Equity café” informal, structured staff discussions of challenges and opportunities for promoting equity and inclusion
- Inclusivity Summit with all managers and supervisors
- Grassroots groups focused on women in STEM, LGBTQ, and more

1.

Position NIST to Advance U.S. Science and Innovation

2.

Maximize NIST's Stakeholder Impact through High-Value Service Delivery

3.

Create the Infrastructure for a 21st Century Research Institution

4.

Build a One NIST Culture

Diversity, Inclusion and Equity at NIST

NIST

*Each leader, each person:
Purposefully building our culture of inclusivity*

Leadership, Engagement, Measurements, Conversations, Tools, Training, Mentorship, Recognition, Nurturing, Insightful Questions, Affinity Groups ...



Taste of Asia Event



Musica Under the Stars Event



WiSTEM Leadership Summit



NIST & NOAA PRIDE