



NSF  
NATIONAL SCIENCE FOUNDATION

EHR  
DIRECTORATE FOR EDUCATION AND HUMAN RESOURCES

HRD  
DIVISION OF HUMAN RESOURCE DEVELOPMENT

# HRD PROGRAMS



**ADVANCE**  
Organizational Change for Gender Equity  
in STEM Academic Professions



**AGEP**  
Alliances for Graduate Education and  
the Professoriate




**CREST**  
Centers of Research Excellence in Science  
and Technology

ISSUE 1  
**JANUARY**  
2021



**PAESMEM**  
Presidential Awards for Excellence in Science,  
Mathematics, and Engineering Mentoring




**HBCU-UP**  
Historically Black Colleges and  
Universities-Undergraduate Program



**HSI**  
Improving Undergraduate STEM  
Education: Hispanic-Serving Institutions



**LSAMP**  
Louis Stokes Alliances for Minority  
Participation



**NSF INCLUDES**  
Inclusion across the Nation of Communities of  
Learners of Underrepresented Discoverers in  
Engineering and Science



**PAEMST**  
Presidential Awards for Excellence in  
Mathematics and Science Teaching



**ECR**  
EHR Core Research



**TCUP**  
Tribal Colleges and Universities Program

# Letter from the Leadership

JANUARY 2021



Karen A. Marrongelle



Diana Elder

## Dear Friends:

Our letter here today is two-fold: To wish you—our grantees, colleagues, stakeholders, and friends—a new year of fulfillment and good health, and to introduce you to a new communication instrument developed by the National Science Foundation (NSF): a digital, monthly newsletter sponsored by NSF’s Division of Human Resource Development (HRD).

Its year-long purpose is to demonstrate both the established and the new efforts by NSF in meeting its strategic objective to attract, retain, and empower a talented and diverse STEM workforce vital for sustaining national prosperity.

The epidemic sweeping our globe has reshaped our lives. It insists that we re-think such terms as *engagement*, *collaboration*, *cooperation*. How we meet this exigency will require new insights and innovations. This will be the age of taking risks at high speed; the age when our nation’s many peoples will amplify a voice for greater expectations. This can be the age of hallmarks; the age of inclusion not as mere insignia, but as a central expectation.

To paraphrase NSF Director Panchanathan, we are in a point in both time and space for new and durable partnerships to meet the challenges and opportunities to move our efforts forward, and faster. As he has spoken eloquently before, we must engage with the “missing millions,” embrace and inspire them.

Each edition of the newsletter will highlight the collective work that NSF supports in order to meet the mission of NSF and HRD: To grow the innovative and competitive U.S. STEM workforce vital for sustaining and advancing the Nation’s prosperity through support for the broader participation and success of individuals currently underrepresented in STEM domains and the institutions that serve them.

We hope you will enjoy the monthly issues. January is national mentoring month, and our first edition in these pages will provide you an overview of those who have been honored with the *Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM)*. Future issues will exhibit cutting edge investments across HRD’s portfolio allowing all of us to have a glimpse into the exciting partnerships and collaborations made possible by your own hard work and dedicated effort.

Our sincerest wishes,

A handwritten signature in cursive script that reads "Karen Marrongelle".

**Karen A. Marrongelle**  
NSF Assistant Director  
Education and Human Resources

A handwritten signature in cursive script that reads "Diana Elder".

**Diana Elder**  
NSF Division Director  
Human Resource Development

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# Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring

## HISTORY



**In August 1994, the Administration of President William Jefferson Clinton produced and issued to the public, *Science in the National Interest*.**

This Presidential document made it clear that progress in science and engineering research and education is essential for national prosperity. President Clinton established the cabinet-level National Science and Technology Council (NSTC) to implement the essential goals of the document—including the establishment of the *Presidential Awards for Excellence in Science, Mathematics, and Engineering Mentoring (PAESMEM)*. This groundbreaking document can be accessed at [\*\*Science in the National Interest\*\*](#).



*This Presidential document made it clear that progress in science and engineering research and education is essential for national prosperity.*



## Nothing quite captures impact like a video.

Click on the links below to view two short films — one by an individual PAESMEM awardee, and one by an organizational PAESMEM awardee. Both are superb highlights of the Presidential Mentoring award.

 [Dr. Salil S. Desai, North Carolina A&T State University](#)

 [The Chicago Botanic Garden](#)



## INTERESTING FACTS



***Science in the National Interest* was the first Presidential statement on the importance of science and engineering research and education issued by the federal government since 1979. It established five national goals.**

- Maintain leadership across the frontiers of scientific knowledge
- Enhance connections between fundamental research and national goals
- Stimulate partnerships that promote investments in fundamental science and engineering and effective use of physical, human, and financial resources
- Produce the finest scientists and engineers for the twenty-first century (herein the origin of PAESMEM)
- Raise the scientific and technological literacy of all Americans



## ACCOMPLISHMENTS

**Since the launch of the program in 1995, the NSF has administered PAESMEM on behalf of the White House Office of Science and Technology Policy.**

To date, 315 individuals and organizations have been honored with this Presidential recognition. Click [www.paesmem.net](http://www.paesmem.net) and read about the nomination and application procedures for the award. As well, the PAESMEM homepage provides access to the biographies of previous awardees who have contributed outstanding efforts in mentoring. These awardees have enhanced the participation of individuals across a wide demographic array, especially those who might not otherwise have considered or had access to opportunities in STEM disciplines and professions. Awardees receive a gift of \$10,000 from the National Science Foundation and a trip to Washington, D.C., to meet with senior leaders in the federal agencies.



*Awardees receive a gift of \$10,000 from the National Science Foundation and a trip to Washington, D.C., to meet with senior leaders in the federal agencies.*



## STORIES OF IMPACT

**Presidential mentor awardees have launched thousands of young women and men from their STEM education programs into meaningful careers in STEM fields critical for national prosperity.**

On page 7 are a few examples of the mentors, and their mentees who have benefitted from their association with these Presidential mentors and mentoring organizations.

## STORIES OF IMPACT

It was 1996 in the ballroom of the storied Mayflower Hotel in the nation's Capital when the White House and NSF officials recognized the first cohort of Presidential Mentors. Dr. Joaquin Bustoz was one of the original 16 national awardees. Arizona State University will honor his memory this month by celebrating the 35th anniversary of the mentoring program that still bears his name and honors his legacy. Click [here](#) to read more.



- **Arlene Evangelista**, one of Joaquin's mentees, told us in an interview that "I know many other people whose lives were impacted by Dr. Bustoz. We all feel tremendous admiration and honor that we had a hero in Dr. Bustoz, someone on our corner who believed in us, and our dreams. I will be forever grateful for his dedication to the program, his legacy, and he will always inspire me to give back to my community, like him."

A young K-12 student, George Melchor of Uvalde, Texas, enrolled in a PAESMEM mentoring project at the University of Texas called [GeoFORCE Texas](#). George literally thrived in the experience. Sometimes it is a challenge to follow mentees as they mature and pursue their careers; however, the project director for GeoFORCE caught up with George. Click [here](#) for a real-time, current screen-shot photo of George. You will absolutely love it.

Determination and longevity are key to mentoring success. Browse through the remarkable achievements of the PAESMEM awardee, *Clubhouse Network* (a non-profit organization) near Boston, Massachusetts. More than 25,000 underserved youth have come through its mentoring program since 1993. Click [here](#) to read more about the Clubhouse.

If ever there were a Presidential mentoring awardee who mirrored the maxim from the late Congressman John Lewis about "...making good trouble," it would be Sheldon Weinbaum of New York City. Read about his remarkable life and career over 52 years of mentoring [here](#). Yes, you read that correctly: 52 years.

2020 PAESMEM awardee, Cristina Villalobos, is an endowed professor in the School of Mathematical and Statistical Sciences at the University of Texas, Rio Grande Valley (UT RGV). She directs her energy towards NSF Director Panchanathan's challenge to embrace and inspire the missing millions. And she dedicates her life to that challenge. She is the second senior faculty member at UT RGV to be honored by the White House. Learn more about Cristina at [Villalobos](#).



# HRD

NEWSLETTER

## INFORMATION

**The *Excellence Awards in Science & Engineering (EASE)* program is administered in the NSF's Directorate for Education and Human Resources, Division of Human Resource Development.**

The EASE program comprises both the PAESMEM and its companion, the *Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)*, the nation's highest honor for K-12 STEM and computer science teachers.

**PAESMEM is offered on an annual basis by NSF (on behalf of the White House Office of Science and Technology Policy).**

Announcement of competition cycle dates, and any changes to the application or the review period will be prominently posted on the banner headline at [www.paesmem.net](http://www.paesmem.net).

**General information about the National Science Foundation may be accessed at [www.nsf.gov](http://www.nsf.gov) and information about the Foundation's Directorate for Education and Human Resources may be accessed at [EHR](#).**

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