



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 5
MAY
2021

PAEMST
Presidential Awards for Excellence in
Mathematics and Science Teaching

ECR
EHR Core Research

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

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

TCUP
Tribal Colleges and Universities Program

Letter from the Leadership

MAY 2021



Dr. Karen A. Marrongelle



Dr. Diana Elder

Dear Colleagues:

Despite the global COVID-19 pandemic, our nation's K-12 science, technology, engineering, and mathematics (STEM) teachers remain steadfast in their purpose. Using every available virtual tool kit at their disposal, they continue to teach, train and mentor the next generation of young women and men who will comprise the backbone of the U.S. STEM workforce. Every fiber of their being intones "Stay the course."

For 38 years, the National Science Foundation (NSF) has administered the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST). This White House award is our nation's highest honor given to the women and men who dedicate their livelihood to the education and well-being of the nation's youth. It is a *calling* more than a career; it is a *responsibility* more than a job.

Since the beginning of the PAEMST program, over 5,000 K-12 STEM teachers have been honored with this important recognition. The awardees completed applications requiring evidence of their disciplinary knowledge, instructional expertise, assessment skills, reflection on their teaching outcomes, and leadership both within, and outside of their schools.

You will find stories of amazing teachers in this month's newsletter. These stories inspire and mark the contributions that our nation's STEM teaching corps make every day when they enter their classrooms and begin again, as they do every day, to nurture in their students the excitement that is mathematics and science.



Sincerely yours,

A handwritten signature in black ink that reads "Karen Marrongelle".

Dr. Karen A. Marrongelle

Assistant Director
NSF Education and Human Resources Directorate

A handwritten signature in black ink that reads "Diana Elder".

Dr. Diana Elder

Director
NSF Division of Human Resource Development



PAEMST Event Photos

HRD
NEWSLETTER



The Academic Year 2018 K-6 awardees join the Academic Year 2017 Grades 7-12 awardees for a double recognition ceremony in October 2019.



2017 and 2018 PAEMST awardees from Hawaii: Nel Venzon Jr., Daniel Taira, and Richard Ogawa at the 2019 PAEMST awards ceremony, Department of Interior in Washington D.C.



PAEMST 2017 computer science awardee, Christopher Bartlo of Oregon, points to a photograph in the halls of the White House, as part of activities during the October 2019 PAEMST recognition events. Listen to [Chris](#) as he talks about this experience.

Presidential Awards for Excellence in Mathematics and Science Teaching



HISTORY

In 1983, President Ronald Reagan signed legislation enacting the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST).

Since the beginning of the PAEMST program, more than 5,000 K-12 STEM teachers have been honored with this important commendation. It is our country's acknowledgement of their important contributions reflected in the mission of the NSF: *To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes.*



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Cicely Woodard is the 2017 PAEMST awardee in mathematics, grades 7-12, from the state of Tennessee.

She is an ardent spokeswoman about special ways to open doors for all students through [leveraging STEM education](#).

INTERESTING FACTS



In 1985, the National Parent Teacher Association established Teacher Appreciation Week (TAW) as the first full week of May.

The history surrounding Teacher Appreciation Week goes back to the Roosevelt Administration. Take a moment to read about the history of this remarkable time, once each year, when we pause to remember the essential importance of the teaching workforce and celebrate [TAW](#).



The PAEMST program is more than a reward for past performance and distinctions. It is a promissory note for teachers' evolving excellence in the classroom, their connections to the community, and contributions for the future of their students.

During the last five years, the PAEMST program has produced a number of capstone achievements:

- On August 3, 2020—in the eye of the COVID-19 storm, the PAEMST program held its first-ever virtual announcement of Presidential awardees for the Academic Year 2018/2019. The Director of the White House Office of Science and Technology Policy, Dr. Kelvin Droegemeier, addressed the awardees! NSF will work with the White House to hopefully organize a traditional recognition ceremony in Washington, D.C., when circumstances permit safe travel for the 2018/2019 awardees.
- The PAEMST team has developed an *alumni representative* activity supported by NSF. This activity provides awardees the opportunity to develop unique networks among fellow awardees in order to nurture collaborations and share best instructional practices with all STEM K-12 teachers in their respective states and jurisdictions.
- In the current academic year, 2020/2021, the application for the Presidential award includes a prompt for teachers to provide information about their culturally relevant teaching practices; their emphasis on the human purpose of what is learned; and the connections with stakeholder communities the teachers have made. This new feature of the PAEMST application signifies the importance of inclusion as a hallmark of great teaching.

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STORIES OF IMPACT

PAEMST is a funding source for an NSF grant to TERC in Cambridge, Massachusetts. Dr. Joni Falk at TERC is the Principal Investigator leading the development of a professional learning community for teacher leaders, aspiring teacher leaders, as well as researchers and administrators interested in teacher leadership.

Take a moment and read about Dr. Falk's vision for this interactive site which connects teacher leaders in order to further their work for improving schools, effecting policy, and re-envisioning the future through the [STEM Teacher Leadership Network](#).

So many women and men who comprise the STEM teaching workforce provide solid proof that great teachers overcome their own challenges to become models for their students and fellow teachers. Take a moment to look at the video featuring one such remarkable STEM teacher and Presidential awardee, [Elizabeth Henderson](#) (2018 awardee — K-6 Science — California).

One of the great stories in the professional life of PAEMST awardees is that of Diana Kasbaum, the 1999 Presidential awardee in mathematics from the state of Wisconsin. She is the Presidential Awards Coordinator on behalf of the Association of State Supervisors of Mathematics. Her career-long dedication in service to STEM teachers around the nation is exemplary in every sense of the term. Please take a moment and read more about [Diana](#).

Imagine for a moment you are seven years old, and you walk into your 2nd grade classroom and find your teacher wearing a construction hard-hat. No; you have not walked into the wrong classroom: You have entered the remarkable world of Joel Crowley, the 2018 Presidential awardee in K-6 Science. Take a moment and step into this award winning teacher's class and he weaves serious learning and adventure into his instruction for youngsters at the Milton Hershey School in Hershey, Pennsylvania: [Joel's classroom](#).



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NEWSLETTER

INFORMATION

Information and application instructions for the Presidential teaching award can be found at www.paemst.org.



National Science Foundation

Directorate for Education
and Human Resources

Programs of the
Division of Human
Resource Development

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LOOKING FORWARD

Our next edition of the newsletter for June 2021 will feature the NSF Alliances for Graduate Education and the Professoriate (AGEP) program.

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WHERE DISCOVERIES BEGIN