



# DIRECTOR'S REMARKS

## NATIONAL SCIENCE BOARD MEETING

Sethuraman Panchanathan, U.S. National Science Foundation

May 1, 2024



# UPDATES FROM THE HILL

**FY2024**

**\$9.06 BILLION**

**FY2025**

**\$10.183 BILLION**

*Requested*



**8.9% INCREASE OVER FY2023**



# Quantum Showcase



Image Credit: Charlotte Geary/NSF



Image Credit: Charlotte Geary/NSF



Image Credit: Charlotte Geary/NSF



Image Credit: Charlotte Geary/NSF



# CONGRESSIONAL ENGAGEMENTS



Image Credit: Amanda Greenwell/NSF



University at Buffalo  
Sen. Chuck Schumer – April 2024



Images Credit: Amanda Greenwell/NSF



Images Credit: Amanda Greenwell/NSF

Images Credit: Amanda Greenwell/NSF



Arctic Encounter Symposium, AK  
Sen. Murkowski – April 2024



Images Credit: Amanda Greenwell/NSF



Indiana  
Purdue, Indiana University, & Notre Dame  
Sen. Young – April 2024



Images Credit: Angelic Rose Hubert, Notre Dame Research, University of Notre Dame



Images Credit: Angelic Rose Hubert, Notre Dame Research, University of Notre Dame





# SOLAR ECLIPSE ACTIVITIES



# SOLAR ECLIPSE FESTIVAL ON THE NATIONAL MALL



Image Credit: Amanda Joy Meyers/NSF



Image Credit: Amanda Joy Meyers/NSF



Image Credit: Amanda Joy Meyers/NSF



Image Credit: Amanda Joy Meyers/NSF

# FAIR PARK COTTON BOWL IN DALLAS, TEXAS

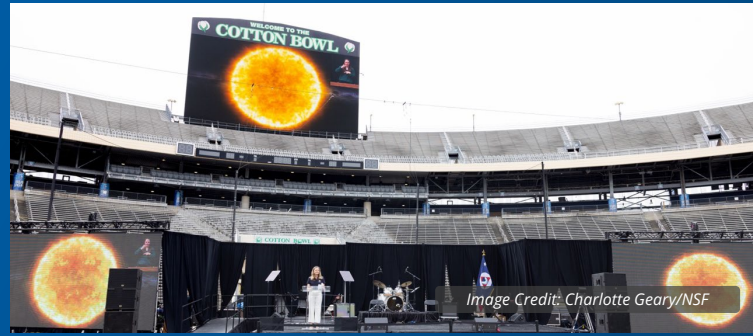


Image Credit: Charlotte Geary/NSF



Image Credit: Charlotte Geary/NSF



Image Credit: Charlotte Geary/NSF



Image Credit: Charlotte Geary/NSF

# ECLIPSE STAFF EVENT AT NSF HQ



Image Credit: Giovanni Rodriguez/NSF



Image Credit: Giovanni Rodriguez/NSF



Image Credit: Giovanni Rodriguez/NSF



Image Credit: Giovanni Rodriguez/NSF





# NSF'S STRATEGIC PRIORITIES

## STRENGTHENING ESTABLISHED NSF

With **investments that expand the frontiers of knowledge and discovery**

## INSPIRING MISSING MILLIONS

Using **capacity building and interventions** that enhance and broaden participation

## ACCELERATING TECHNOLOGY AND INNOVATION

Through innovative, **cross-cutting partnerships** and programs



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**MAJOR PRIZES**

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IN FUNDAMENTAL RESEARCH

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# Award Recipients



## A.M. TURING

**Avi Wigderson**

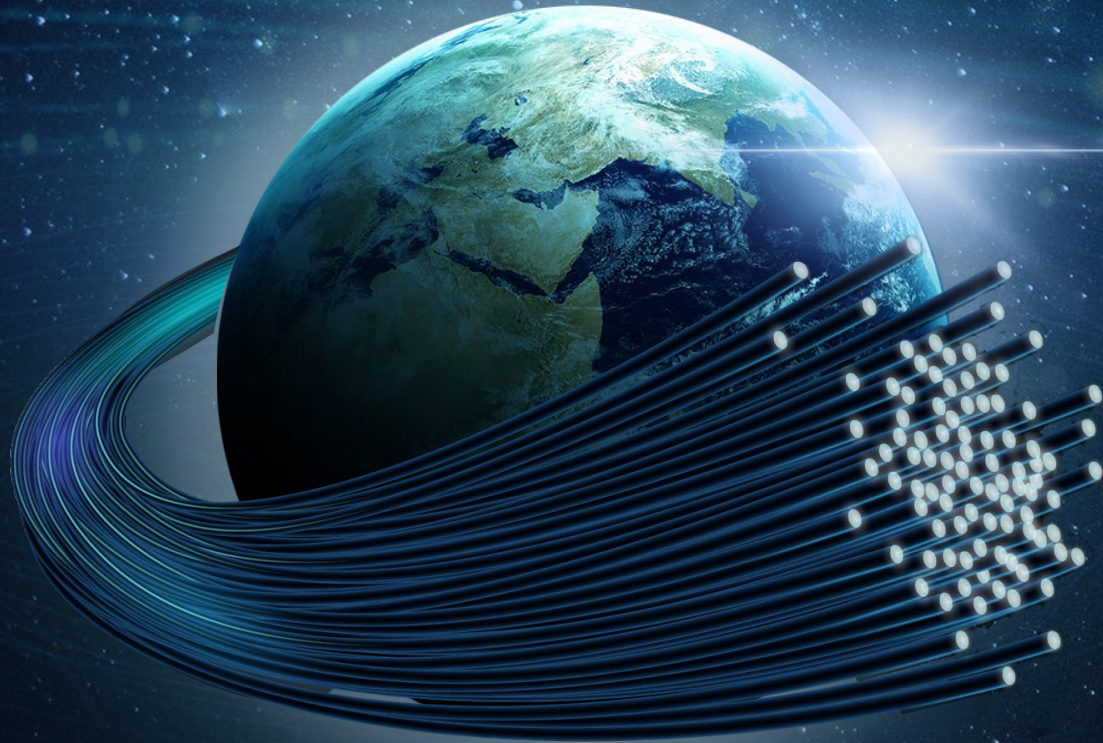
*Herbert H. Maass Professor at the School of Mathematics  
Institute for Advanced Study, Princeton*



## ABEL PRIZE

**Michael Talagrand**

*Centre National de la Recherche Scientifique (CNRS)  
Paris, France*



## Spintronics Breakthrough Unlocks Optical Communications Possibilities

- Discovery by University at Buffalo researchers could transform data transmission across vast distances
- New spintronic device capable of converting electron spin into light signals that preserve polarization
- Breakthrough could lead to advanced applications in quantum computing, interplanetary communications, and more efficient data centers



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**2024**

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WATERMAN AWARDS

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# 2024 Waterman Award Recipients



**Muyinatu A. Lediju Bell**

*Biomedical Engineer*  
Johns Hopkins University



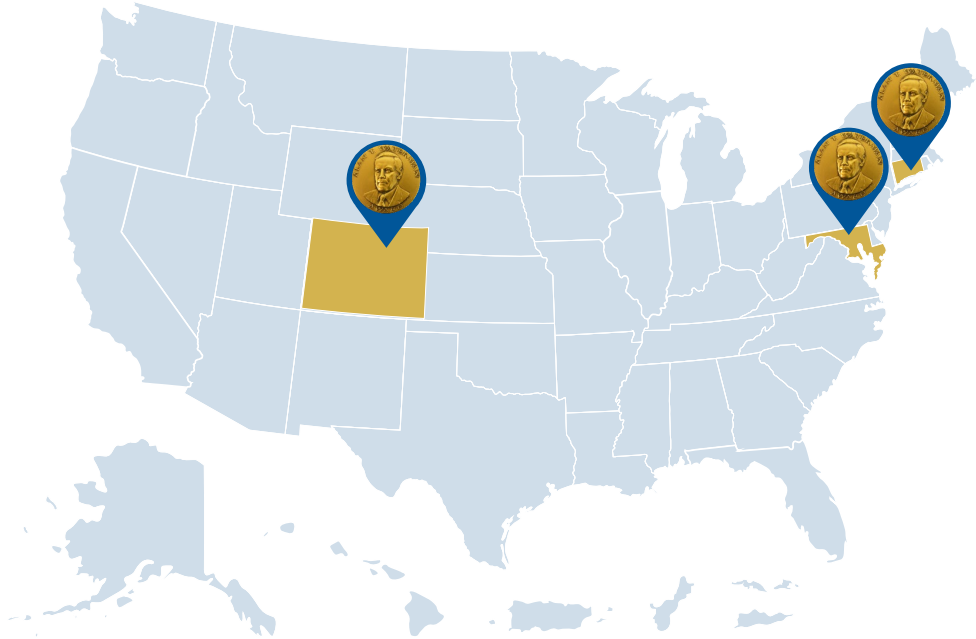
**Katrina G. Claw**

*Assistant Professor*  
University of Colorado Anschutz  
Medical Campus



**Rebecca Kramer-Bottiglio**

*Associate Professor*  
Yale University





# INSPIRING MISSING MILLIONS





# Visionary Interdisciplinary Teams Advancing Learning (VITAL) Prize Challenge

- **NSF announces 9 winners**
- **3 Application Tracks:**
  - Rapid and Continuous Learning Assessment
  - Mathematical Literacy to Promote a Future STEM Workforce
  - Other Innovations in Translational Learning Technologies





Rapid & Continuous Learning Assessment

## Dreami

Team Lead: Ashima Sharma



Mathematical Literacy to Promote a Future STEM Workforce

## Kasi by Alchemie

Team Lead: Julian Winter



Mathematical Literacy to Promote a Future STEM Workforce

## Tyto Online

Team Lead: Lindsey Tropf



# WOMEN OF THE DEEP

## SCRIPPS INSTITUTION OF OCEANOGRAPHY



# ACCELERATING TECHNOLOGY & INNOVATION

# ROBOTIC VINES



# NSF GLOBAL CENTERS

*Use-Inspired Research Addressing Global Challenges Through the Bioeconomy*



# NSF Global Centers Competition

*Use-Inspired Research Addressing Global Challenges Through the Bioeconomy*

In partnership  
with **5 countries**

Awards up to **\$5M** to implement  
**new Global Centers**

Syncing  
**global talent**



NATIONAL  
ENDOWMENT  
FOR THE  
HUMANITIES



SSHRC  
CRSH



Biotechnology and  
Biological Sciences  
Research Council



BUSINESS  
FINLAND



Image Credit: OIRM/Division of  
Administrative Services



## *In Memory of*

# Mr. Charles Mayes

*April 16, 2024*

The U.S. National Science Foundation honors the legacy of Mr. Charles Mayes.

Mr. Mayes spent **61 years** as an NSF public servant, serving under all **15 NSF directors**. He began his career in 1963 as a messenger, later becoming the Assistant Head of Operations, and finishing his time at NSF as a Physical Security Specialist. We are forever grateful for his many decades of service to NSF and the country.

Image Credit: Courtesy of Mr.  
Charles Mayes Estate

Image Credit: OIRM/Division of  
Administrative Services





# Senior Executive Introductions

## **Mr. Clyde Richards**

*Deputy Office Head for the Office of the  
Chief Information Officer*

## **Ms. Star Anderson**

*Deputy Division Director, Division of Human  
Resource Management in the Office of Information  
and Resource Management*

## **Dr. Greg Hager**

*Assistant Director of the Directorate for Computer  
and Information Science and Engineering*

## **Dr. Kaye Husbands Fealing**

*Assistant Director of the Directorate for  
Social, Behavioral and Economic Sciences*





**SYLVIA BUTTERFIELD**  
*Acting AD SBE*



# 2023 Presidential Rank Awards Winners

**SYLVIA  
BUTTERFIELD**  
*Deputy Assistant Director  
EDU*

*Image Credits: Lily Le/NSF*



*Image Credits: Charlotte Geary/NSF*

**REBECCA  
KEISER**  
*Chief of Research Security  
Strategy and Policy*

*Image Credits: Presidential Rank Awards*





