



# Persons with Disabilities in STEM and STEM Education

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# Broadening the Participation of Persons with Disabilities in STEM and STEM Education



## Advancing STEM and STEM Education Disability Research

NSF 23-160

Dear Colleague Letter: STEM Access for Persons with Disabilities (STEM-APWD)

September 28, 2023

NSF 21-110

Dear Colleague Letter: Persons with Disabilities – STEM Engagement and Access (PWD-SEA)

August 5, 2021

NSF 21-114

Dear Colleague Letter: Research to Improve STEM Teaching, Learning, and Workforce Development for Persons with Disabilities

August 25, 2021

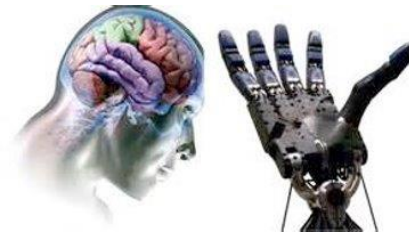


**Workplace Equity for Persons with Disabilities in STEM and STEM Education**

Computer and Information Science and Engineering : Core Programs /

**IIS: Human-Centered Computing (HCC)**

**Science of Learning and Augmented Intelligence**



**Disability and Rehabilitation Engineering (DARE)**

**Perception, Action & Cognition (PAC)**



**NSF's  
Convergence  
Accelerator**



# EDU Invests \$170M+ in 151+ Awards, Across 18+ Programs

Division	Programs	Awards	Investment to Date
EES	ADVANCE, AGEP, CREST, ECR, HBCU-UP, NSF INCLUDES, WEPD	21	\$22M
DGE	CyberCore:SFS, ECR, NRT	16	\$39.5M
DRL	AISL, CS for All, DRK-12, ECR, ITEST, STEM+C	72	\$65.5M
DUE	ATE, ECR, FW-HTF, IUUSE, Noyce, S-STEM	43	\$43.5M



# Most Recent Agency-Wide and EDU Funding Opportunities

- Dear Colleague Letter: STEM Access for Persons with Disabilities ([NSF 23-160](#))
- Dear Colleague Letter: Research to Improve STEM Teaching, Learning, and Workforce Development for Persons with Disabilities ([NSF 21-114](#))
- Dear Colleague Letter: Persons with Disabilities – STEM Engagement and Access ([NSF 21-110](#))
- Workplace Equity for Persons with Disabilities in STEM and STEM Education ([NSF 23-593](#))

# Dear Colleague Letter: STEM Access for Persons with Disabilities ([NSF 23-160](#))

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Supports researchers and trainees with disabilities.

- High school, undergraduate and graduate students; research participants; postdoctoral research scholars; K-12 teachers, staff and faculty with disabilities

Especially interested in submissions that provide creative and innovative solutions that act as multipliers of existing accommodations to enhance access to and participation in STEM



# Dear Colleague Letter: STEM Access for Persons with Disabilities ([NSF 23-160](#))

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**Conference Proposals:** Inclusive of indirect costs, must not exceed \$100K.

**Supplemental Proposals:** As described in the PAPPG. Requests must be submitted at least two months before funds are needed and may not exceed \$100K.





# Dear Colleague Letter: Research to Improve STEM Teaching, Learning and Workforce Development for Persons with Disabilities (NSF 21-114)

NSF 21-114

## Dear Colleague Letter: Research to Improve STEM Teaching, Learning, and Workforce Development for Persons with Disabilities

August 25, 2021

Dear Colleagues:

The National Science Foundation's (NSF's) Directorate for Education and Human Resources (EHR) wishes to notify the community of its intention to support fundamental and applied research on science, technology, engineering and mathematics (STEM) teaching, learning, and workforce development for persons with disabilities, as defined by the Individuals with Disabilities Education Act ([Sec. 300.8](#)). NSF intends to support fundamental and applied research and the development of innovative STEM teaching and learning approaches to be implemented for persons with disabilities from the earliest developmental stages of life through participation in the workforce. This notification identifies opportunities for such research and development through the following programs:

# Dear Colleague Letter: Research to Improve STEM Teaching, Learning, and Workforce Development for Persons with Disabilities (NSF 21-114)

AGEP

AISL

CAREER

CREST

DRK-12

ECR  
BCSER

ECR Core

IGE

ITEST

IUSE

NRT

RETTL



# Dear Colleague Letter: Persons with Disabilities – STEM Engagement and Access (NSF 21-110)



NSF 21-110

## Dear Colleague Letter: Persons with Disabilities – STEM Engagement and Access (PWD-SEA)

August 5, 2021

Dear Colleagues:

With this Dear Colleague Letter, the National Science Foundation's (NSF) Directorate for Education and Human Resources (EHR), with leadership from the Division of Human Resource Development (HRD), seeks to increase the engagement of persons with disabilities in Science, Technology, Engineering, and Mathematics (STEM) fields and STEM education. Educating, preparing, and supporting persons with all types of disabilities, and of all ages, improves the skills of our nation's current and future STEM workforce, as well as improves the prospects for all Americans to learn, work, and contribute to U.S. leadership in science and engineering discovery and innovation. A wide range of disability types are recognized in this Dear Colleague Letter including, but not limited to, deafness or hearing loss; blindness or visual impairment; physical, mental health, medical or other health-related disabilities; and neurodiverse conditions such as dyslexia, autism spectrum disorders, and learning disabilities.

This Dear Colleague Letter particularly encourages submission of new proposals, or requests for supplemental

# Dear Colleague Letter: Persons with Disabilities – STEM Engagement and Access (NSF 21-110)

ADVANCE	AGEP	AISL	ATE	CREST	CS for All
DRK-12	ECR BCSER	ECR Core	EHR Racial Equity	GRFP	HBCU-UP
HSI Program	IGE	ITEST	IUSE	LSAMP	NOYCE
NRT	NSF INCLUDES	SFS	S-STEM	TCUP	



# Workplace Equity for Persons with Disabilities in STEM and STEM Education

## PROGRAM SOLICITATION

NSF 23-593



### National Science Foundation

Directorate for STEM Education  
Division of Equity for Excellence in STEM  
Division of Graduate Education  
Division of Undergraduate Education  
Research on Learning in Formal and Informal Settings

Directorate for Biological Sciences

Directorate for Computer and Information Science and Engineering

Directorate for Engineering

Directorate for Geosciences

Directorate for Mathematical and Physical Sciences

Directorate for Social, Behavioral and Economic Sciences

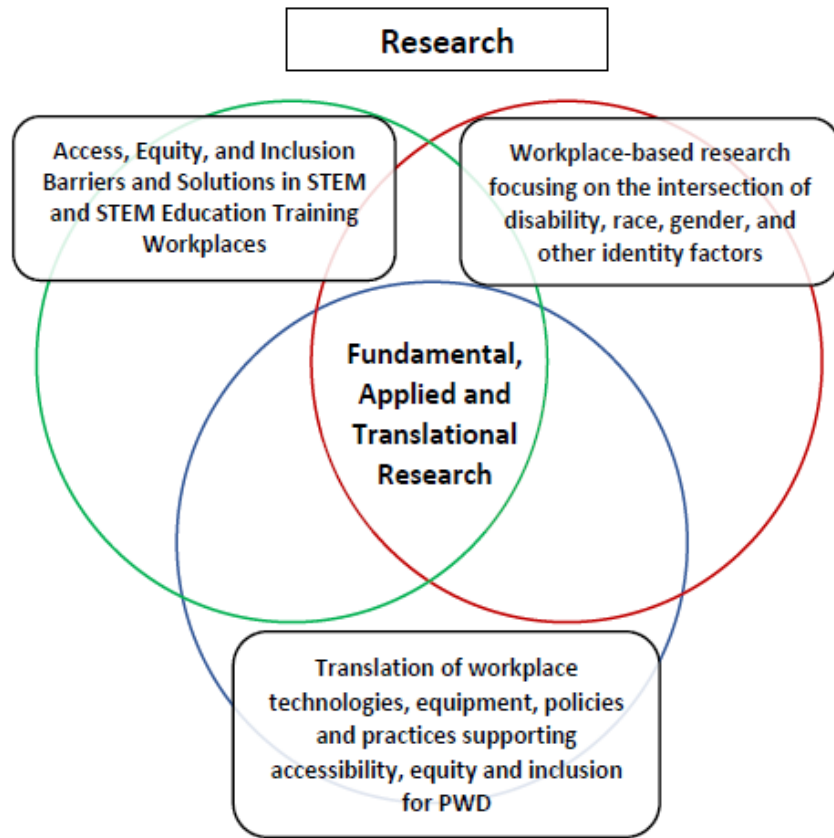
Directorate for Technology, Innovation and Partnerships

Office of Integrative Activities

Office of International Science and Engineering



# Workplace Equity for Persons with Disabilities in STEM and STEM Education



**Supporting fundamental, applied, and translational research that advances knowledge about diverse, equitable, inclusive, and accessible STEM and STEM education workplaces and postsecondary training environments for persons with disabilities.**

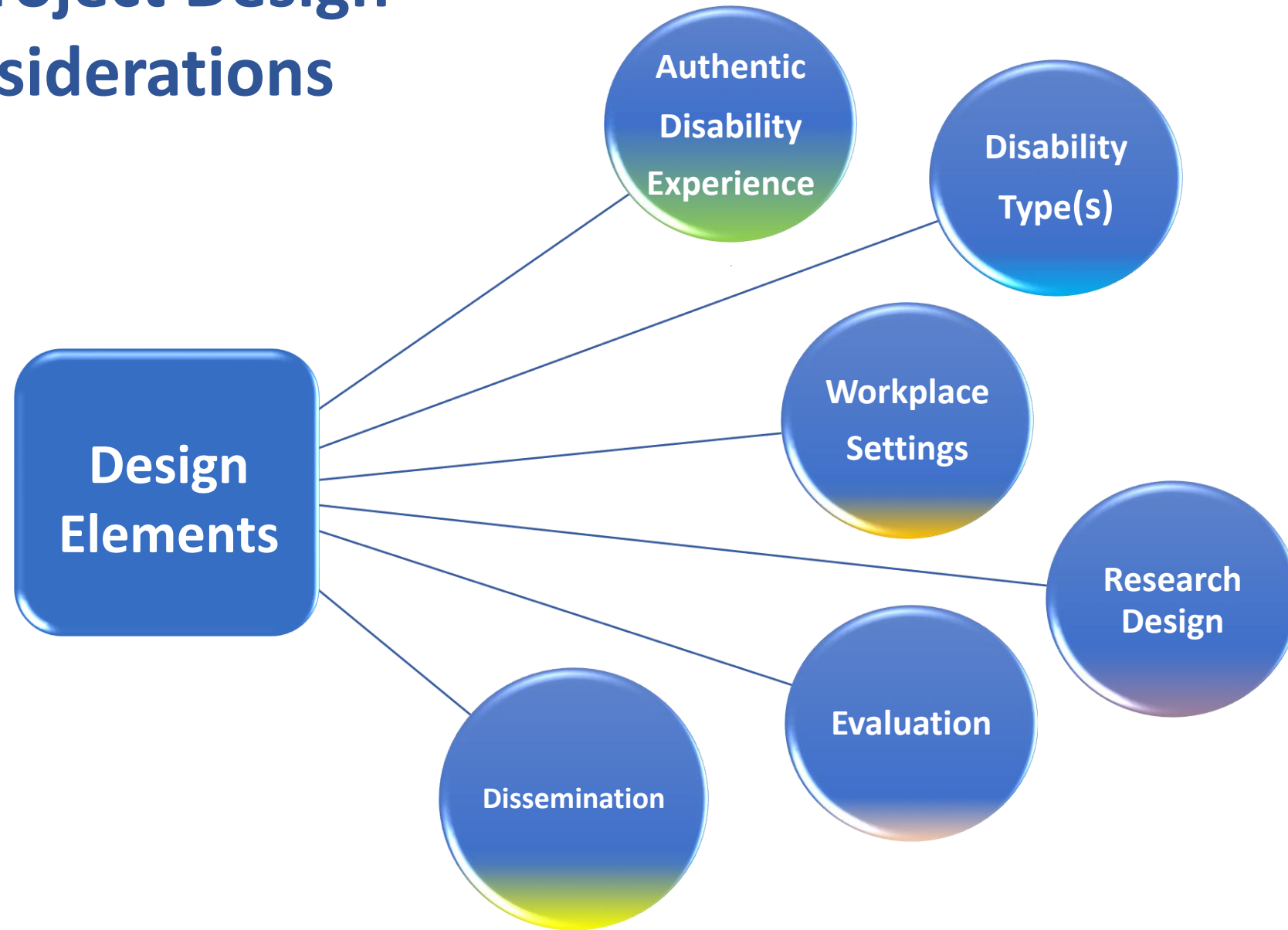


# Research Themes

- Studying barriers and/or solutions to diversity, equity, inclusion and accessibility (DEIA).
- Applying intersectional social identity perspectives to investigate characteristics and conditions that limit and/or improve DEIA.
- Conducting use-inspired and solution-oriented translational research about DEIA.



# Key Project Design Considerations



# Award Details



Proposal Type	Budget Maximum	Duration	Due/Target Date
Research Proposals	Up to \$1,500,000	Up to 5 years	September 19,2023
Synthesis Projects	Up to \$600,000	Up to 3 years	September 19,2023
Conference Proposals	Justified by conference description	Justified by conference description	Accepted with no deadline
EARly-concept Grants for Exploratory Research (EAGER)*	Up to \$300,000	Up to 2 years	Accepted with no deadline
Rapid Response Research (RAPID)*	Up to \$200,000	Up to 1 year	Accepted with no deadline
*An EAGER or RAPID proposal may only be submitted after receipt of an NSF program officer email specifying that a proposal may be submitted.			

# Engineering, TIP, and Other Agency Funding Opportunities for and About Persons with Disabilities



## Directorate for Engineering

The [Disability and Rehabilitation Engineering \(DARE\) program](#) supports fundamental engineering research to improve the quality of life of persons with disabilities through the development of new technologies, devices, or software that advance knowledge regarding a specific human disability, pathological motion, or injury mechanism.

## Other Rehabilitation Research at NSF

NSF funding opportunities for research related to rehabilitation: [Rehabilitation Research at NSF](#).

## Directorate for Technology, Innovation and Partnerships

Convergence Accelerator (NSF [22-583](#)) program offered [Track H](#) "Enhancing Opportunities for Persons with Disabilities." The track converged a wide range of disciplines to develop use-inspired solutions to enhance quality of life, employment access, and opportunities for persons with disabilities.

## Facilitation Awards for Scientists and Engineers with Disabilities (FASSED)

Created to reduce or remove barriers to participation in research and training, and to encourage the pursuit of careers in STEM. Details are provided in the [PAPPG](#).