



Leveraging ExLENT

Dr. Mary Crowe

Workforce and Capacity Building Section Head

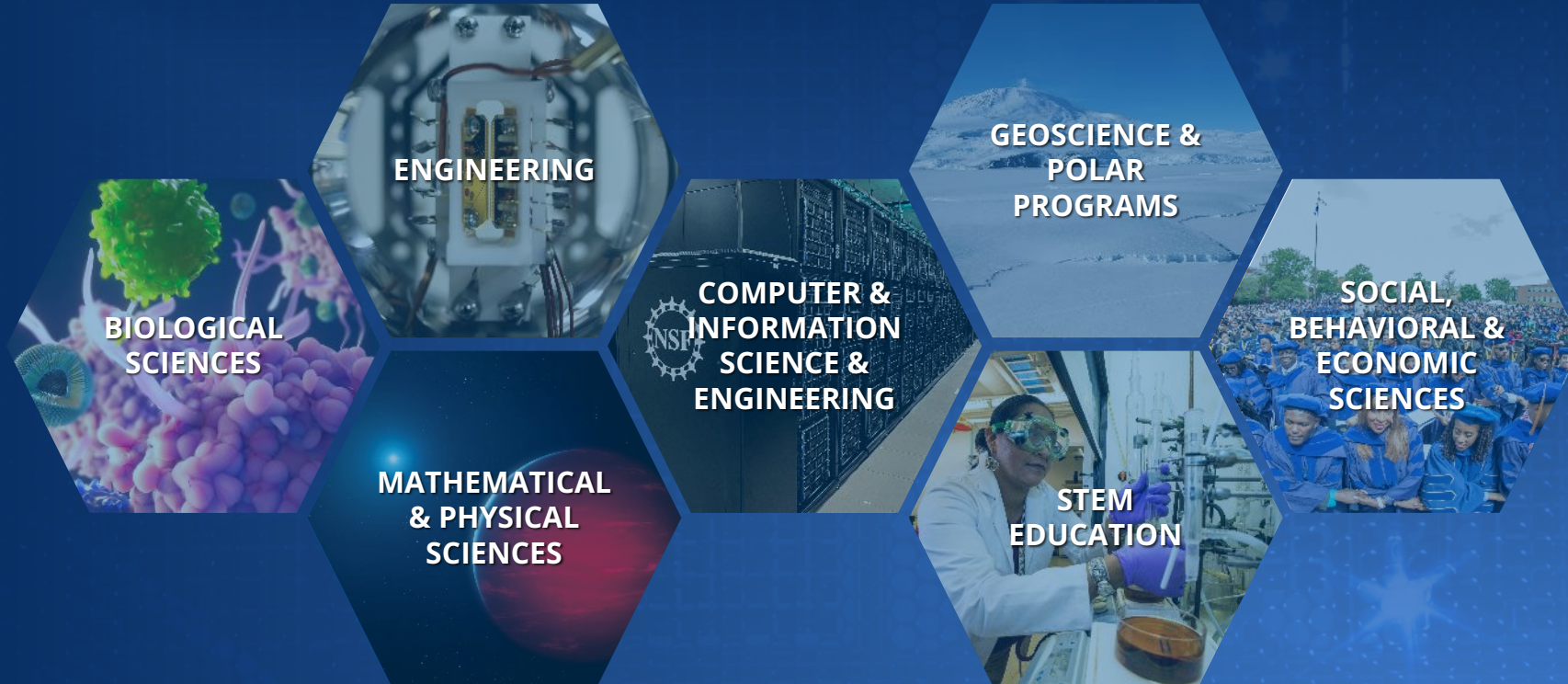
Technology, Innovation and Partnership (TIP)

National Science Foundation



PROMOTE the progress of science
ADVANCE the national health, prosperity, and welfare
SECURE the national defense

NSF Supports All Areas of Science and Engineering

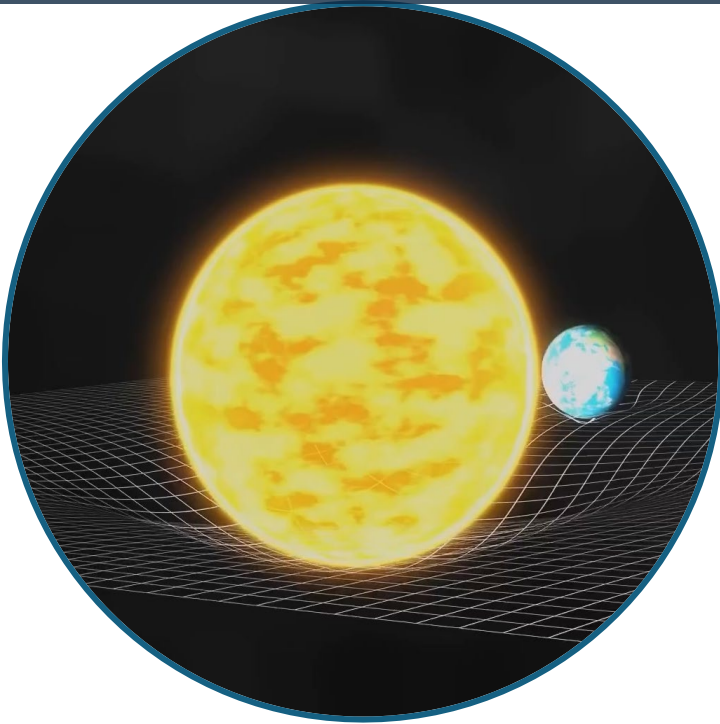


Integrative Activities

International Science & Engineering

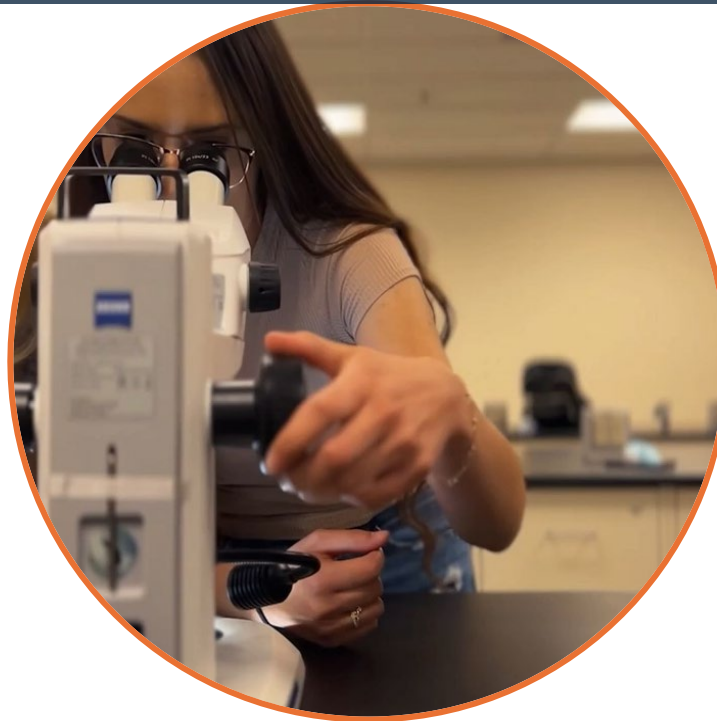


NSF's STRATEGIC PRIORITIES



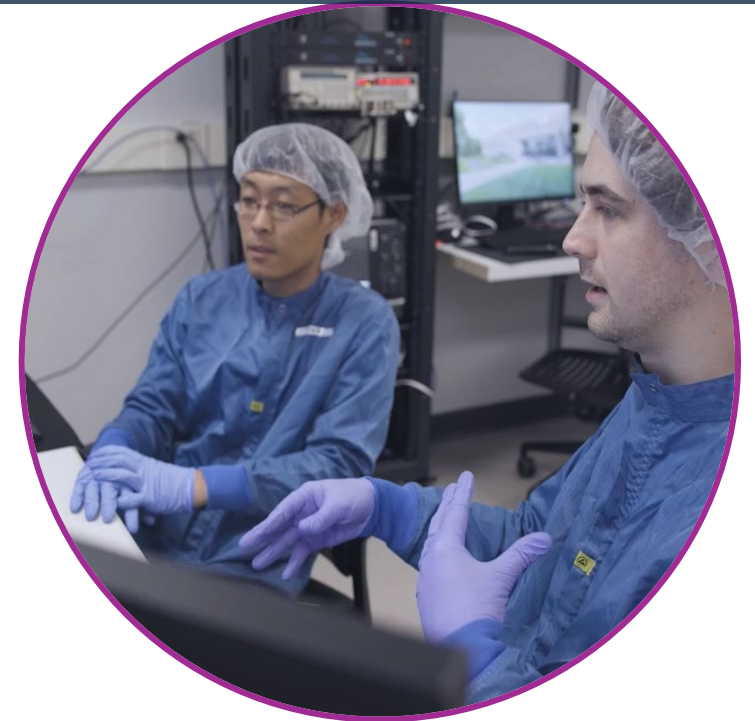
STRENGTHENING ESTABLISHED NSF

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



INSPIRING ALL AMERICANS

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



ACCELERATING TECHNOLOGY AND INNOVATION

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



TIP: Accelerating research to impact



Regional Innovation and Economic Growth



Technology Translation and Development

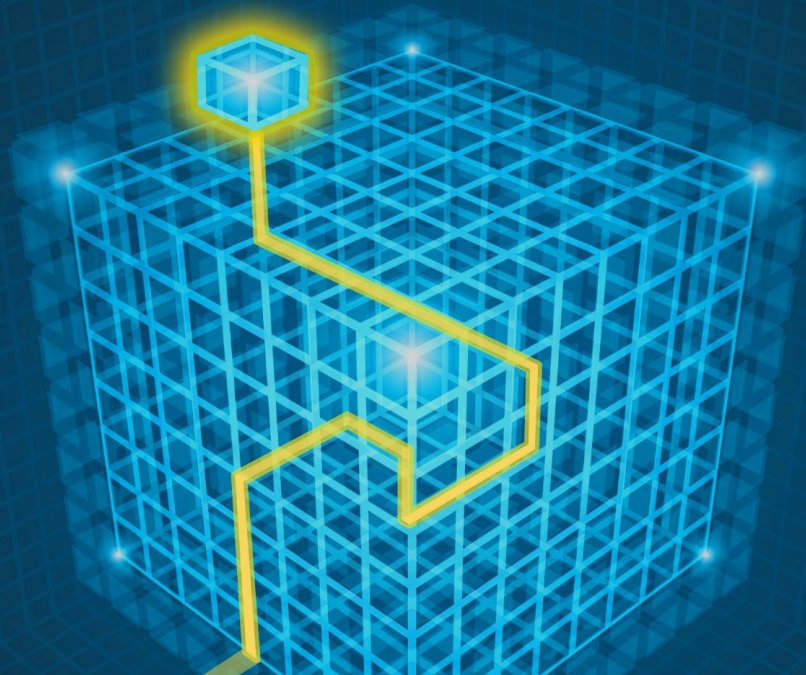


Preparing the Workforce



TIP WORKFORCE DEVELOPMENT ROADMAP

Building Pathways and Innovations for the
Critical and Emerging Technology Workforce.

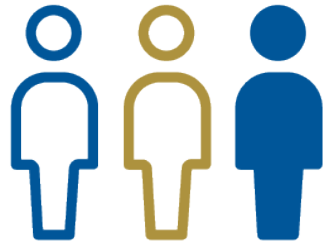


Workforce Development & Capacity Building Strategies



BUILD

cross-sector networks to address workforce needs to connect students and workers to industry



INVEST

in industry-informed workforce development in critical and emerging technologies



ACCELERATE

translation of educational technology innovation from research to practice for workers





Falling Behind

How Skills Shortages Threaten Future Jobs



Nicole Smith
Martin Van Der Werf
Madeline Adelson



2026 Manufacturing Outlook Study

The "2026 Manufacturing Outlook Study" surveyed more than 100 U.S. manufacturing professionals.

Conducted by CADDi

Produced in collaboration with CADDi's "2026 Manufacturing Outlook Study" surveyed manufacturing professionals.



Search everything



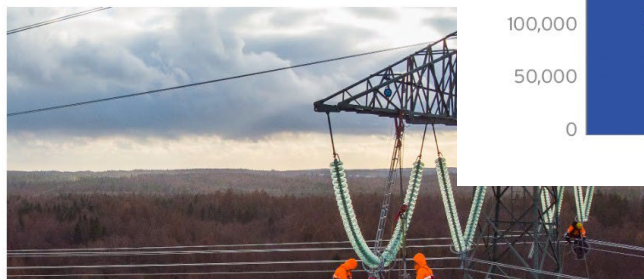
Energy system

Topics

Countries

Data

Energy employment has surged, but growing skills shortages threaten future momentum



Roll Call

Politics

Policy

Heard on the Hill

Podcasts

Factbase

Video

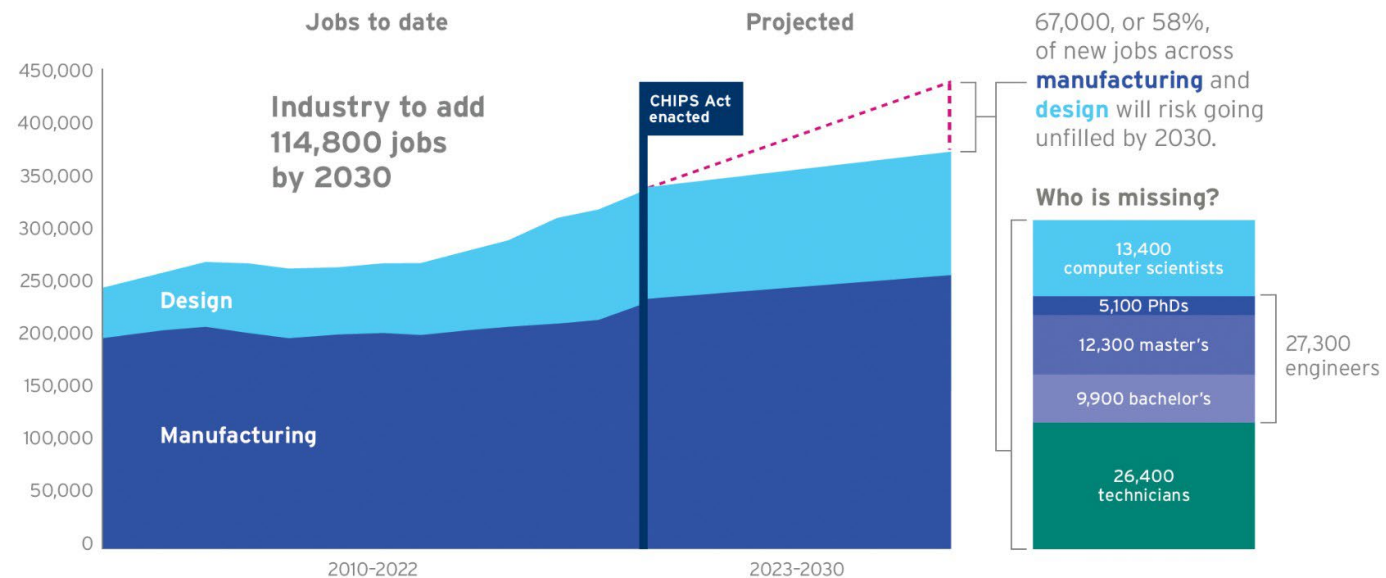
POLICY

Worker shortage looms over new US nuclear power focus

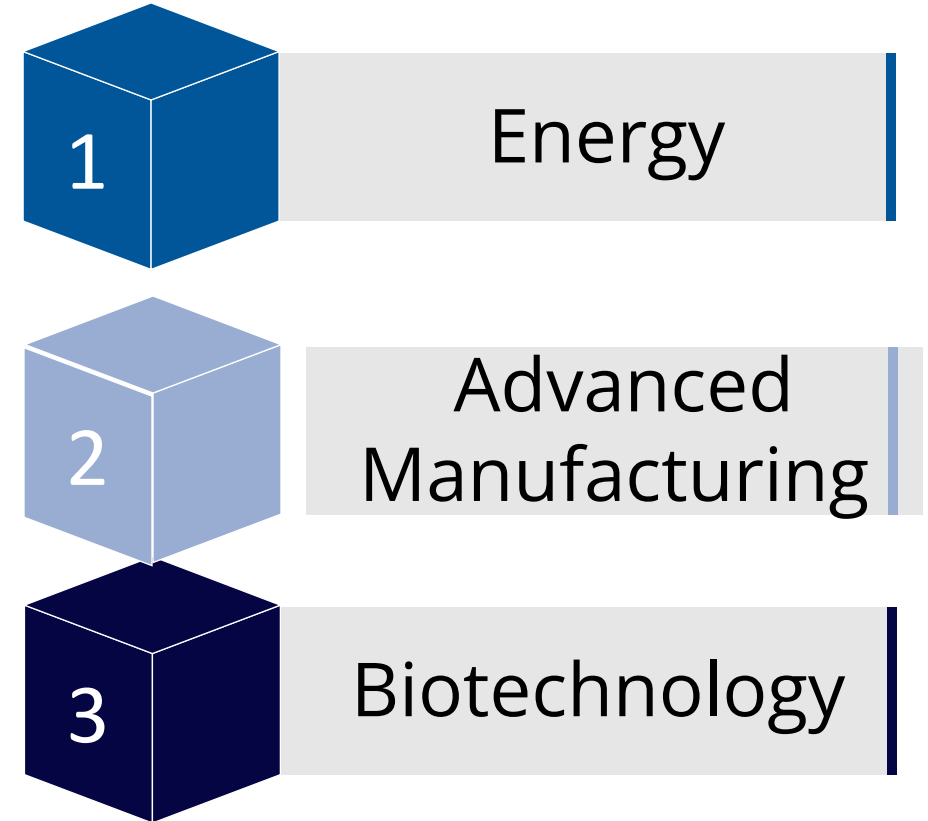
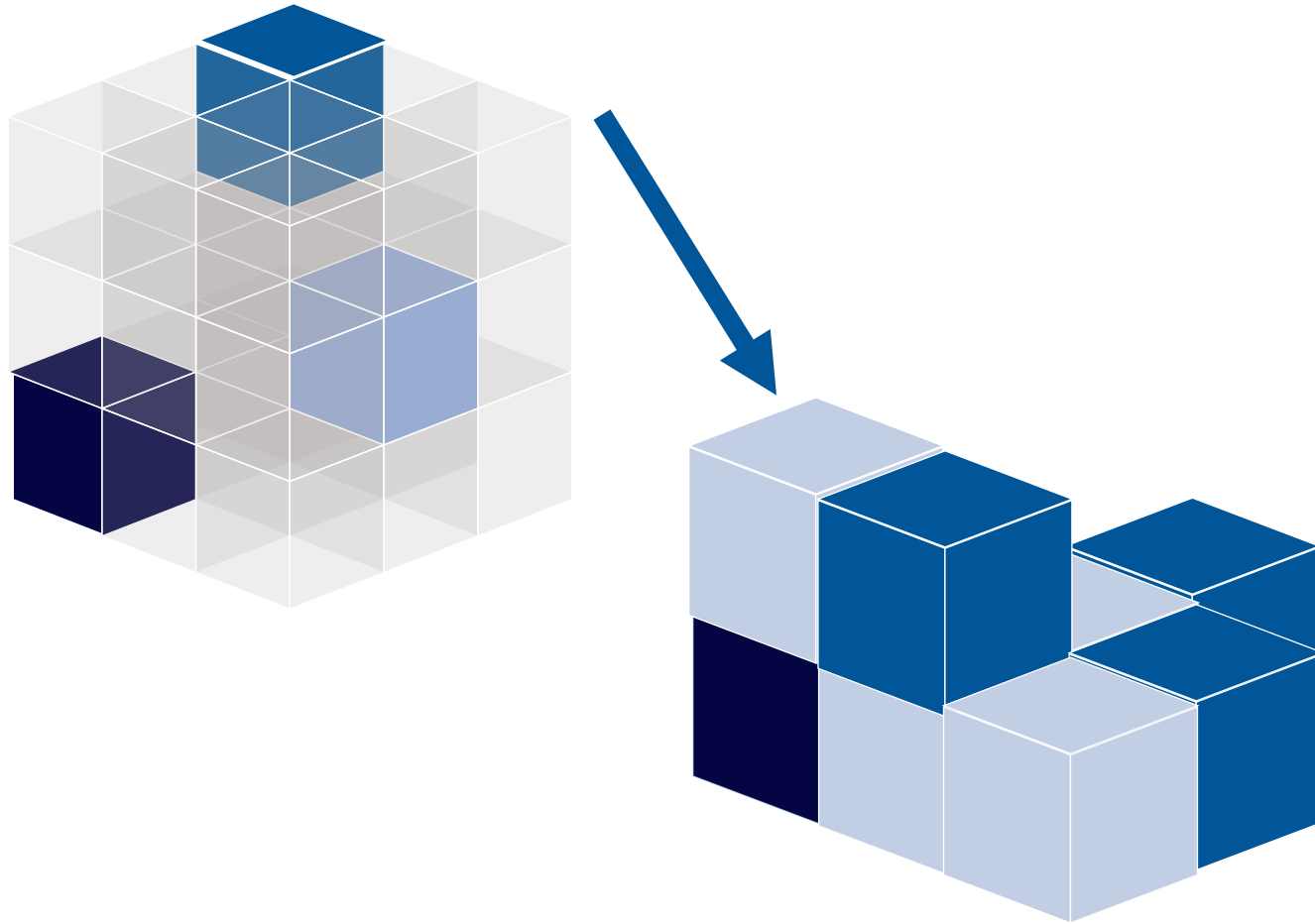
Lack of highly skilled workers and supply chain may stymie administration's goal of 'nuclear renaissance'

Percent of manufacturing workforce facing the skilled-labor shortage is their biggest challenge, according to new research from AI data.

FIG. 1: Historical semiconductor workforce and projected 2023-2030 gap



Coordinated WF efforts





Experiential Learning for Emerging and Novel Technologies (ExLENT)



Awaiting new publication

Up to \$1 million over 
three years

- ExLENT program promotes partnerships between organizations in emerging technology fields and those with expertise in workforce development to expand practical learning opportunities for individuals interested in entering or gaining more experience in emerging and novel technology.



Beginnings Track

Track: *Beginnings*

The Beginnings track aims to provide individuals possessing some existing STEM competencies (e.g., those with stackable certificates in STEM or those enrolled in associate's degree programs, etc.) with experiential learning opportunities that deepen knowledge and skills in emerging technology fields. Proposed projects should enable participants to pursue or advance their career in an emerging technology field.



A different kind of meeting- learning with you

Learning from each other

Learning from you

What leverage point(s) are you working on?

Is that the appropriate point ?

What do you anticipate the result will be if you successful “ flip the switch”:

What is working? What is not?

