



# Opportunities for Undergraduate and Graduate Students through the National Science Foundation

*Jeremiah Williams*

*Program Director*

*Physics Section, Directorate for Math and Physical Sciences*

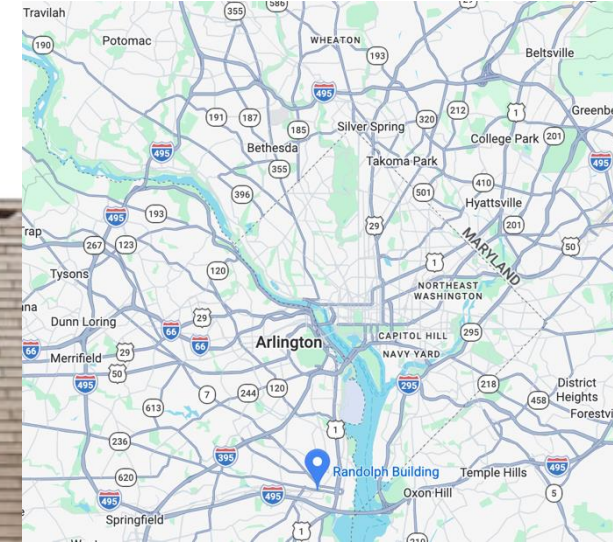
*National Science Foundation*

*June 10, 2026*

# National Science Foundation



Photo Credit: Maria Barnes, NSF



## FAST FACTS

**\$9.06B**

NSF's Fiscal Year 2024 Enacted Budget

**93%**

Percent of budget committed to research, education and related activities

**11K**

Average number of awards NSF funds each year

**1.9K**

NSF-funded institutions

**353K**

People supported through NSF funding

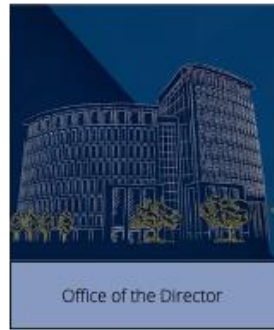
**262**

Total number of Nobel Prize winners who have received NSF funding



[Who is NSF?]

# National Science Foundation

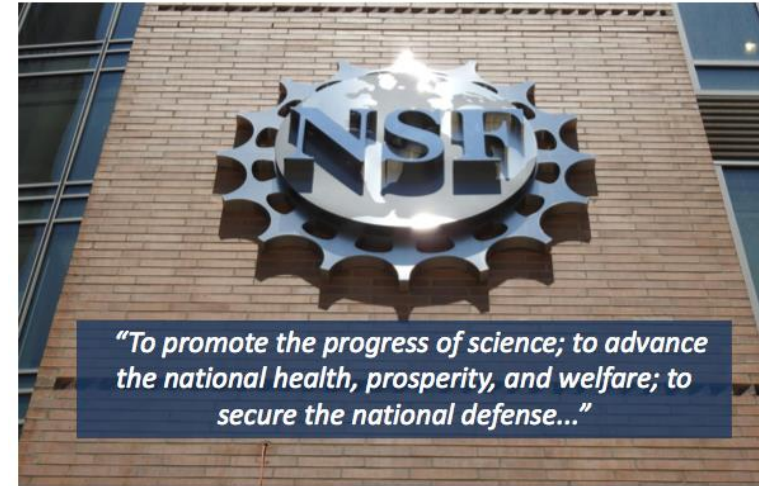


Office of the Director

OD

Number of People Involved in NSF Activities

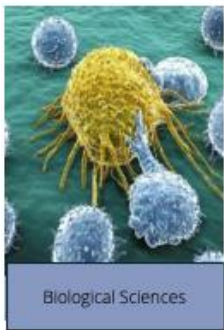
	FY 2025 Plan Estimate	FY 2026 (TBD)	FY 2027 Request Estimate
Senior Researchers	50,900		17,700
Other Professionals	10,200		4,300
Postdoctoral Associates	4,500		1,000
Graduate Students	40,200		13,000
Undergraduate Students	30,700		8,300
PreK-12 Teachers	37,000		8,600
PreK-12 Students	131,900		41,200
<b>Total Number of People</b>	<b>305,400</b>		<b>94,100</b>



*"To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..."*

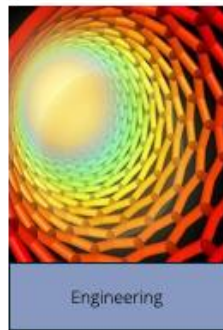
Photo Credit: Maria Barnes, NSF

## NSF Research Directorates



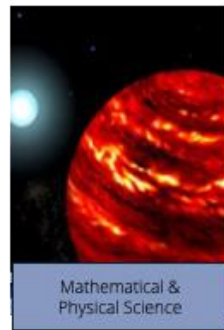
Biological Sciences

BIO



Engineering

ENG



Mathematical & Physical Science

MPS



Computer & Information Science & Engineering

CISE



Social, Behavioral & Economic Sciences

SBE\*



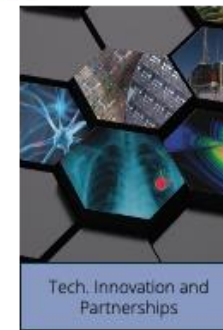
STEM Education

EDU



Geosciences (incl. Polar Programs)

GEO



Tech, Innovation and Partnerships

TIP



**FAST  
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NSF funding

# Plasma Physics at the National Science Foundation

- Plasma Physics is a study of matter and physical systems whose intrinsic properties are governed by collective interactions of large ensembles of free charged particles. 99.9% of the visible Universe is thought to consist of plasmas. **The underlying physics of the collective behavior in plasmas has applications to space physics and astrophysics, materials science, applied mathematics, fusion science, accelerator science, and many branches of engineering.**
- **The Plasma Physics program supports research that can be categorized by several broad, sometimes overlapping, sub-areas of the discipline, including: magnetized plasmas in the laboratory, space, and astrophysical environments; high energy density plasmas; low temperature plasmas; dusty, ultra-cold, and otherwise strongly coupled plasmas; non-neutral plasmas; and intense field-matter interaction in plasmas**



PHYSICS

## National Science Foundation: Understanding the visible Universe through plasma physics

**The U.S. National Science Foundation is supporting a broad portfolio of research across the field of plasma science and engineering**

THE U.S. National Science Foundation (NSF) describes the discipline of plasma physics as a study of matter and physical systems whose intrinsic properties are governed by collective interactions of large ensembles of free charged particles.<sup>1</sup> 99.9% of the visible Universe is thought to consist of plasmas. The underlying physics of the collective behaviour in plasmas has applications to space physics and astrophysics, materials science, applied mathematics, fusion science, accelerator science, and many branches of engineering.

This description of the discipline has served as the defining guidepost of the Plasma Physics program within the NSF Division of Physics for the past decade. The broader field of Plasma Science and Engineering (PSE) was most recently reviewed in 2021 by the National Academies of Sciences, Engineering, and Medicine (NASEM) in the Decadal Assessment

of Plasma Science.<sup>2</sup> "Plasma Science: Enabling Technology, Sustainability, Security, and Exploration" PSE encompasses many of the nominally distinct disciplines where the knowledge of the physics of plasmas is critical to understanding the Universe as we know it, and to developing new technologies that rely on plasma's unique properties. In the US, many of these are supported by dedicated programs within NSF and other federal science agencies.

The study of collective interactions in complex, many-body, nonequilibrium systems is not unique to plasmas. In fact, one could argue that a plasma where electromagnetic forces dominate the collective interactions is one of the simplest examples of such a system. A recent NSF-funded workshop,<sup>3</sup> Working Across Scales in Complex Systems, explored parallels between plasma physics and biological physics in



The P3 (Plasma Physics Platform)-installation at ELI Beamlines where the experiments will take place. Credit: ELI Beamlines

NSF | The Innovation Platform ISSUE 22 | www.innovationnewnetwork.com

The Innovation Platform, Issue 22



[PD 23-1242]

# Plasma Physics at the National Science Foundation

Advanced Search - NSF Award Search

nsf.gov/awardsearch/advancedSearch.jsp

An official website of the United States government [Here's how you know](#)

Learn about [updates on NSF priorities](#) and the agency's [implementation of recent executive orders](#).

U.S. National Science Foundation

Simple Search | **Advanced Search** | Popular Searches | Download Awards | Send Comments | Award Search Help

### Awards Advanced Search

[Overview of Award Search Features](#)

#### Recipients Information

<input type="text" value="Principal Investigator First Name"/>	<input type="text" value="Organization"/>
<input type="text" value="Principal Investigator Last Name"/>	<input type="text" value="State: Select one"/>
<input type="checkbox"/> Include Co-Principal Investigator in name search	<input type="text" value="Zip Code"/>
	<input type="text" value="Country: Select one"/>

Program Information

Feedback



NSF Award Search



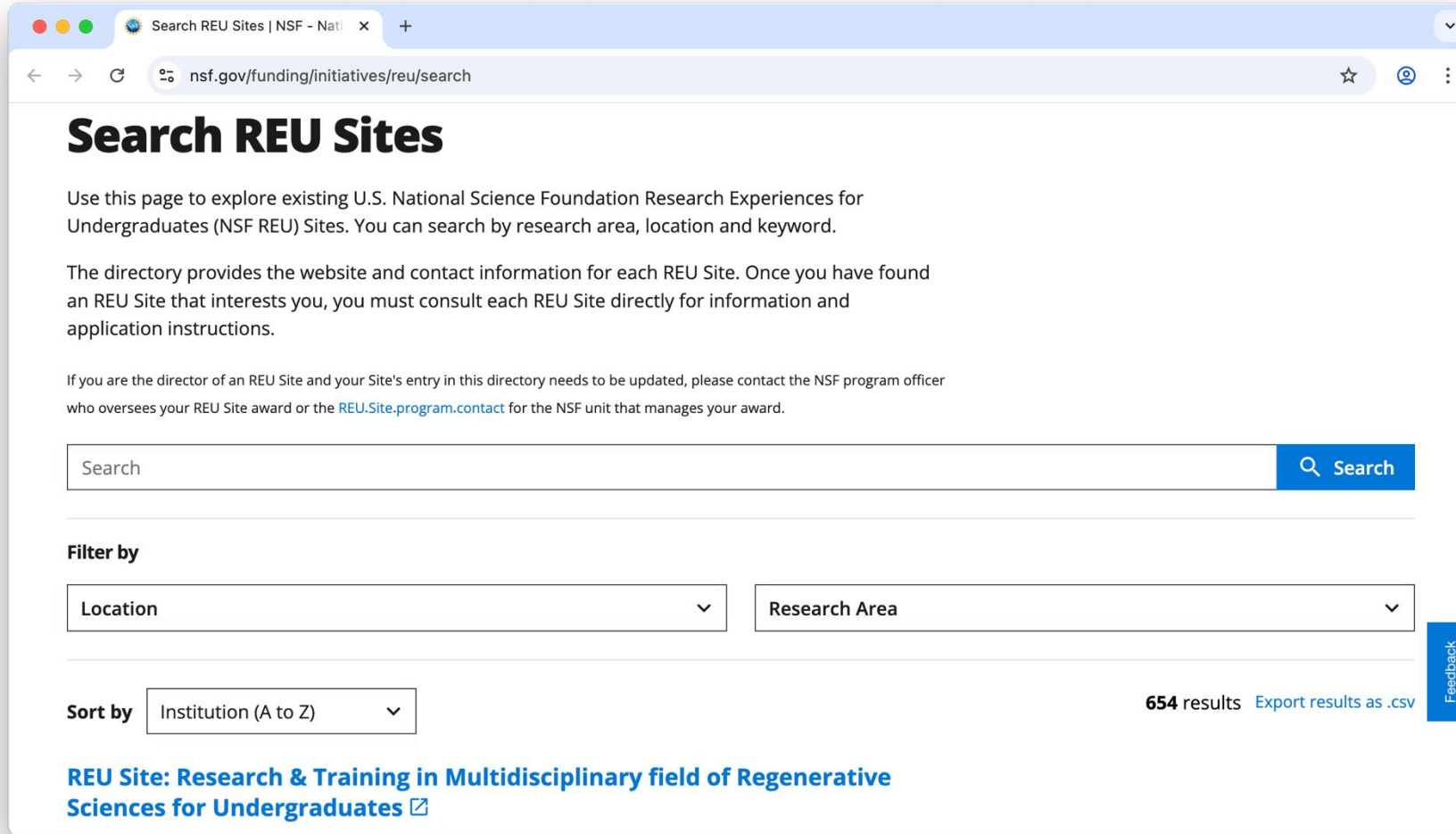


# NSF Research Experience for Undergraduates

- Supports intensive research by undergraduate (college and university) students pursuing an associate or bachelor's degree and who are U.S. citizens, permanent residents or U.S. nationals are eligible to apply in any area of research funded by NSF.
- Individual REU opportunities may establish additional criteria that further restrict eligibility.



# NSF Research Experience for Undergraduates



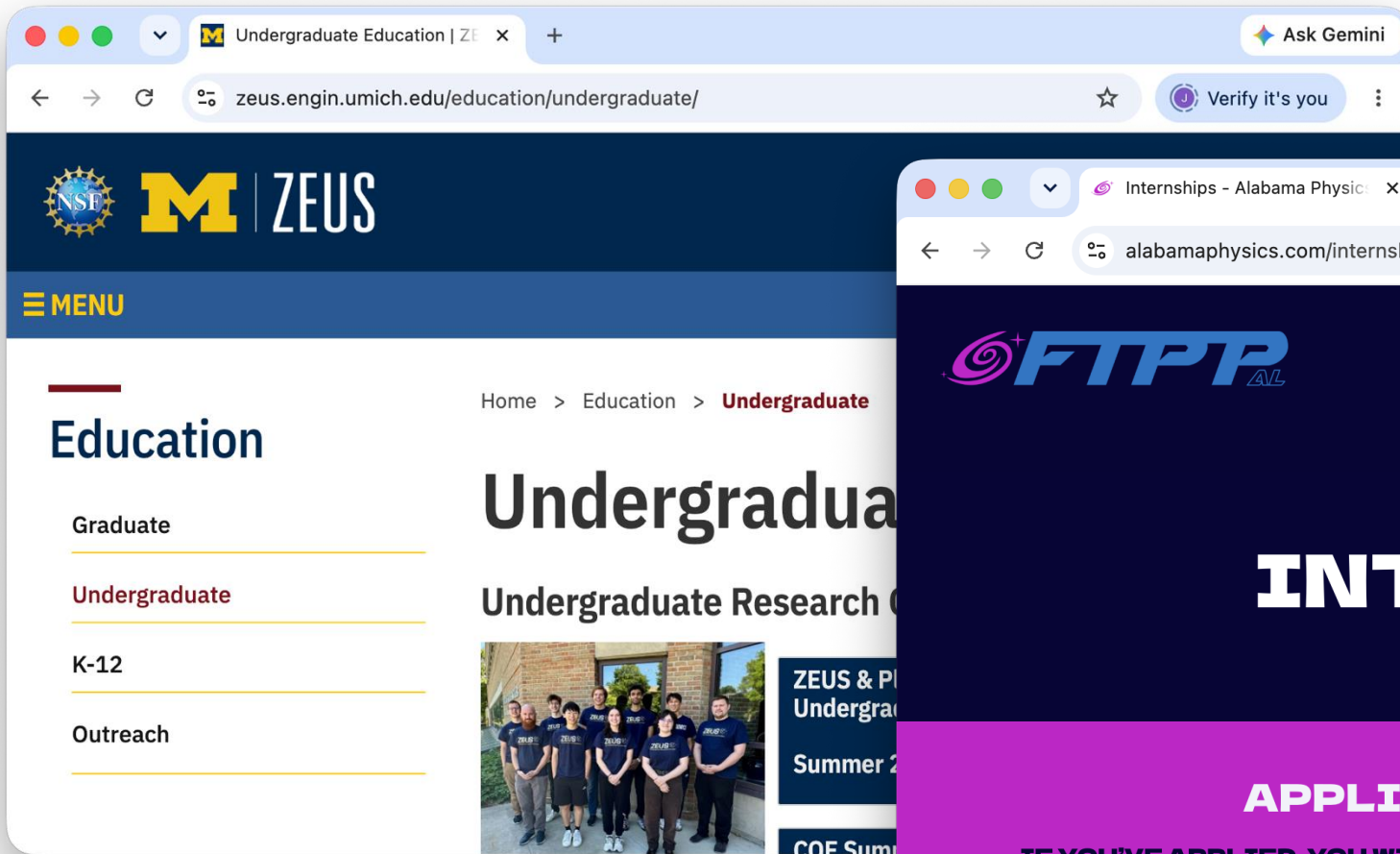
The screenshot shows a web browser window with the URL [nsf.gov/funding/initiatives/reu/search](https://nsf.gov/funding/initiatives/reu/search). The page title is "Search REU Sites". Below the title, there is a paragraph explaining the purpose of the page: "Use this page to explore existing U.S. National Science Foundation Research Experiences for Undergraduates (NSF REU) Sites. You can search by research area, location and keyword." Another paragraph states: "The directory provides the website and contact information for each REU Site. Once you have found an REU Site that interests you, you must consult each REU Site directly for information and application instructions." A third paragraph provides contact information for site directors: "If you are the director of an REU Site and your Site's entry in this directory needs to be updated, please contact the NSF program officer who oversees your REU Site award or the [REU.Site.program.contact](#) for the NSF unit that manages your award." Below the text is a search bar with the placeholder "Search" and a blue "Search" button. Underneath the search bar are two dropdown menus labeled "Filter by" with "Location" and "Research Area" selected. Below these is a "Sort by" dropdown menu with "Institution (A to Z)" selected. To the right of the dropdowns, it says "654 results" and "Export results as .csv". A blue "Feedback" button is located on the right side of the page. At the bottom of the page, there is a link: "REU Site: Research & Training in Multidisciplinary field of Regenerative Sciences for Undergraduates" with an external link icon.



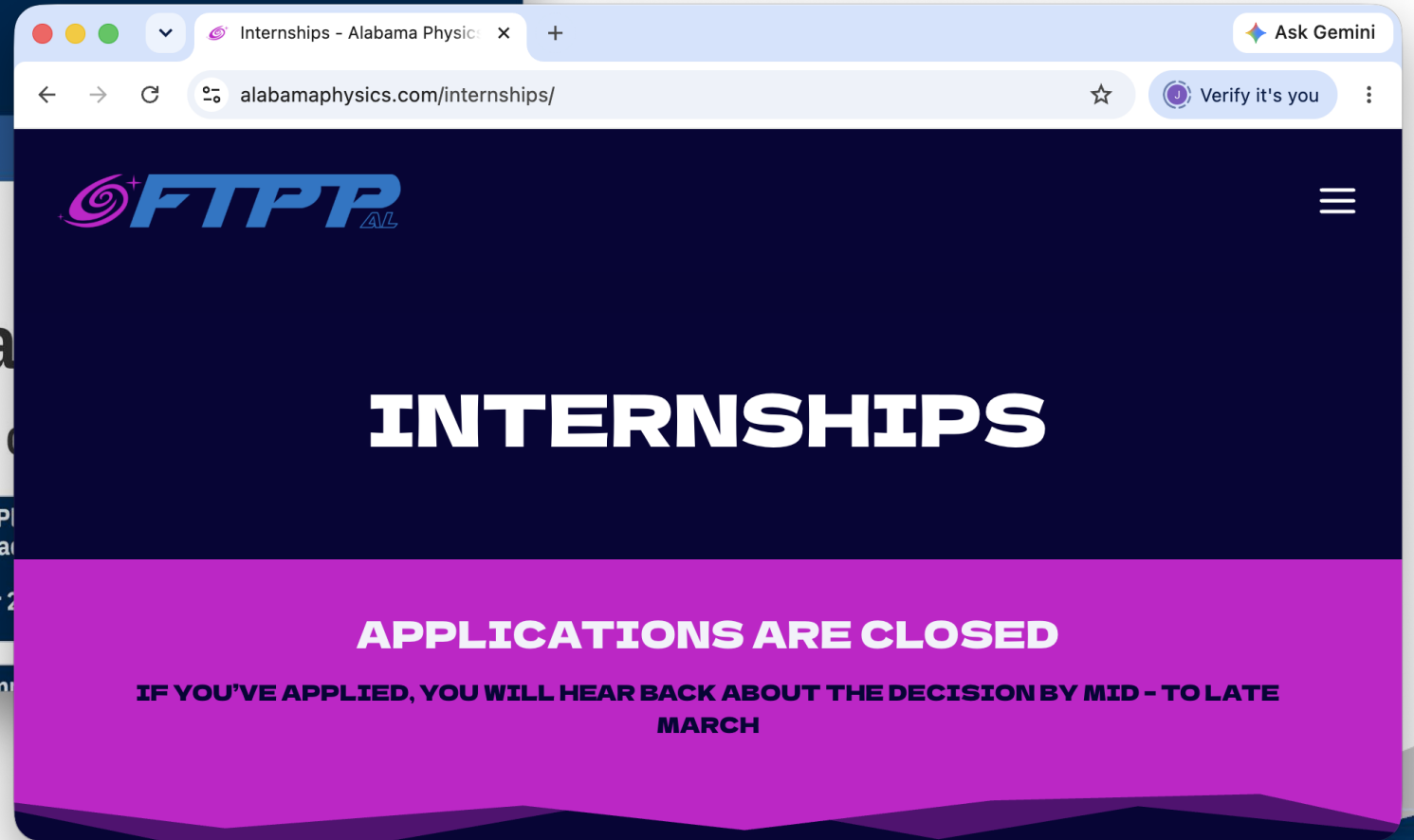
[REU Site Search](#)



# Summer Experiences NSF Centers and Facilities



The screenshot shows a web browser window with the URL `zeus.engin.umich.edu/education/undergraduate/`. The page features the NSF logo and the text "M | ZEUS". A navigation menu on the left lists "Education", "Graduate", "Undergraduate", "K-12", and "Outreach". The main content area shows a breadcrumb trail "Home > Education > Undergraduate" and a large heading "Undergraduate". Below the heading, there is a section titled "Undergraduate Research" with a photograph of a group of people in blue shirts. To the right of the photo, there is a vertical list of items including "ZEUS & P...", "Undergra...", "Summer 2...", and "COE Sum...".

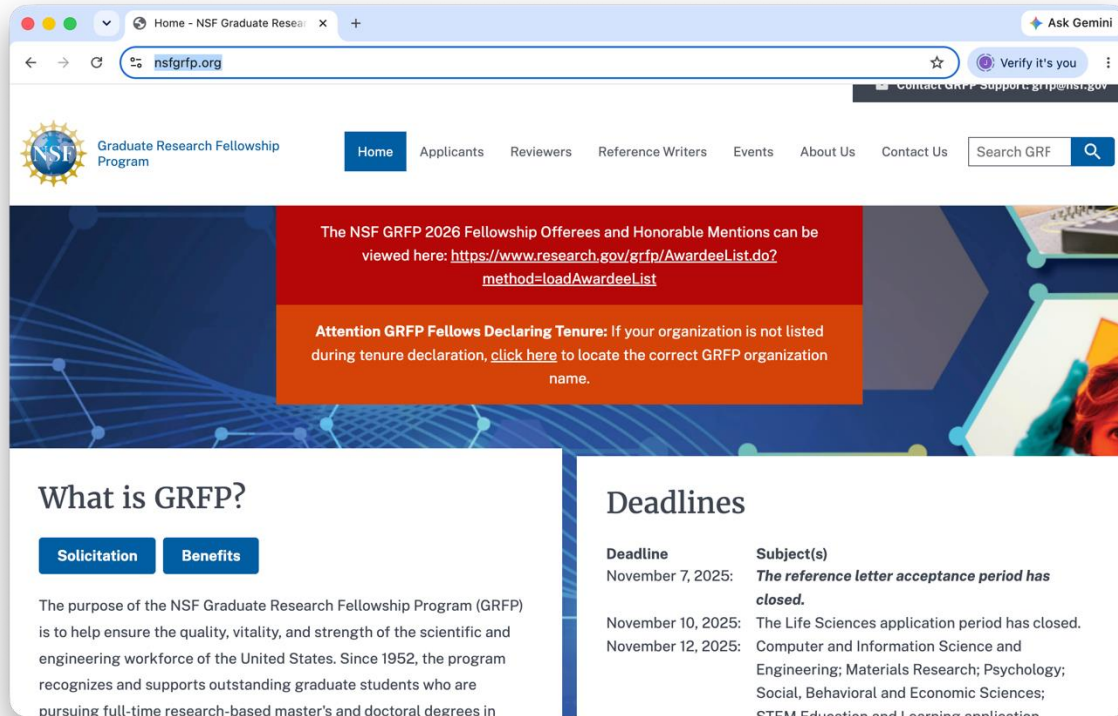


The screenshot shows a web browser window with the URL `alabamaphysics.com/internships/`. The page features the "FTPP AL" logo. The main heading is "INTERNSHIPS". Below the heading, a large purple banner contains the text "APPLICATIONS ARE CLOSED" and "IF YOU'VE APPLIED, YOU WILL HEAR BACK ABOUT THE DECISION BY MID - TO LATE MARCH".



# Graduate Research Fellowship Program (GRFP)

- Supports fellowships for outstanding graduate students who are pursuing full-time, research-based masters and doctoral degrees in science, technology, engineering or math or STEM education.



GRFP Program Page



Non-NSF website on GFRP



[NSF 25-547]

# About the Graduate Research Fellowship Program

- The overall goal of the Graduate Research Fellowship Program is to recruit individuals into Science, Technology, Engineering, and Mathematics (STEM) fields
  - To select, recognize, and financially support individuals who have demonstrated the potential to be high achieving scientists and engineers, early in their careers
  - NSF actively encourages submission of applications from the full spectrum of talent that the U.S. has to offer
- Five Year Fellowship period that provides three years of financial support
  - \$37,000 stipend + \$16,000 educational allowance directly to institution
  - Payment covers all tuition and mandatory fees (no cost to the student)



# GRFP – Eligibility I

- U.S. citizens, nationals, and permanent residents
  - Not be a current NSF employee
- Early-career: undergraduate & graduate students
- Pursuing research-based master's and/or doctoral degrees (no professional degrees) in STEM or STEM Education
- Full-time enrollment in graduate degree program at accredited, non-profit US institution of higher education



# GRFP – Eligibility II

- Undergraduate in the final year of a bachelor's degree program
- Bachelor's degree-holder with NO enrollment in a graduate degree program (non-degree graduate coursework allowed)
- Individual enrolled in a joint bachelor's-master's degree program with at least three undergraduate years completed
- First-year graduate student in their first graduate degree program with less than one academic year completed in the degree



# GRFP – Application Packet

- Personal Information, Education, Work/Research Experience, Proposed Major Field of Study, Honors, Awards, Publications
- Personal, Relevant Background and Future Goals Statement (3-page PDF)
  - Tell your story; demonstrate your potential for STEM research; Discuss experiences (professional and personal) that contributed to your motivation and preparation for pursuing a STEM career
- Graduate Research Statement (2-page PDF)
  - Communicate your proposed research plan to non-specialist
- Transcripts (PDFs; mandatory, required for all degree programs)
- Letters of reference
  - 3 (up to 5) reference letter writer names and 2 (3) are mandatory (recommended)



# GRFP – Review Criteria

- Intellectual Merit
  - How important is the proposed activity to advancing knowledge within its own field or across different fields?
- Broader Impacts
  - How well does the proposed activity benefit society or advance desired societal outcomes?
- Applicants are reviewed based on:
  - Their demonstrated potential for significant achievement in STEM
  - Using a comprehensive, holistic approach
  - A balanced consideration to all components of the application
    - Including the educational and research record, leadership, outreach, service activities, plans for the future, individual competencies, experiences, and other attributes



# Non-Academic Research Internships for Graduate Students (INTERN) Program

- Enables graduate students to acquire core professional competencies and skills to support careers in any sector of the U.S. economy.
  - Complementary, non-academic training for graduate students.
  - Professional development experience in preparation for multiple career pathways.
  - Opportunities that encourage the participation of the full spectrum of diverse talent in science, technology, engineering, and mathematics (STEM).
- INTERN supplements provide up to \$55,000 to support travel, tuition and fees, health insurance, additional stipend and other costs.
  - Active NSF awardees may submit supplemental funding requests for up to six additional months of graduate student support on their grant.



# Summer/Winter Schools – A very incomplete listing

- [Complex and Magnetized Plasma \(CAMP\) Winter School](#)
- [US Low Temperature Plasma Summer School](#)
- [International Space Weather Camp](#)
- [Polar Aeronomy and Radio Science \(PARS\) Summer School](#)
- [Topical Group in Astrophysics \(GPAP\) Summer School](#)
- [Discovery Science Center Summer School for Matter at Extreme Conditions in the Laboratory and the Cosmos](#)



# Questions?



[REU Site Search](#)



[GRFP Program Page](#)



[e-mail me](mailto:jdwillia@nsf.gov)  
[jdwillia@nsf.gov](mailto:jdwillia@nsf.gov)



[Link](#)





# Opportunities for Grads in the Fusion Industry

**Caroline Anderson**

Director of External Affairs

Fusion Industry Association

**PPPL Seminar**

June 10, 2026

# Presentation Overview



- About me
- About FIA
- Quick industry overview
- Opportunities:
  - @ FIA directly
  - In the fusion industry

# About Me



- Lives in Washington, D.C.
- Went to UNC Chapel Hill
  - BA degrees in Economics and Peace, War, & Defense
- Worked at a nonprofit that led economic development and conflict resolution programs in the Middle East
- Now at FIA! Been here for the last 4.5 years

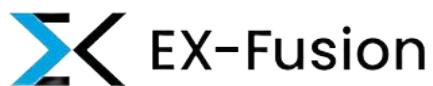
# About FIA



*The **Fusion Industry Association (FIA)** is the unified voice of the global fusion industry. The FIA is a 501(c)(6) nonprofit membership organization dedicated to accelerating and deploying commercial fusion energy through policy advocacy and transparent public communication.*

*We collaborate globally with policymakers, investors, power producers, regulators, and affiliated companies to gain the investment and support needed to make fusion power a reality.*

# FIA Membership



# FIA Affiliate Members: Fusion Suppliers



# FIA Affiliate Members: Advocacy & Nonprofits



# FIA Affiliate Members: Fusion Customers



CHUBU  
Electric Power



Dominion  
Energy®



Google



 *Sumitomo Corporation of Americas*

Enriching lives and the world

# Education and Research Partners



UNIVERSITY OF  
CAMBRIDGE



COLORADO STATE  
UNIVERSITY



COLUMBIA  
Fusion Research Center



AUBURN  
UNIVERSITY



MIT Plasma Science  
& Fusion Center



WISCONSIN  
UNIVERSITY OF WISCONSIN-MADISON

FSU  
FLORIDA STATE  
UNIVERSITY

NC STATE  
UNIVERSITY



THE UNIVERSITY OF  
NEW MEXICO



Idaho National Laboratory



WASHINGTON STATE  
UNIVERSITY

PURDUE  
UNIVERSITY



VCU College of  
Engineering

OntarioTech  
UNIVERSITY



Los Alamos  
NATIONAL LABORATORY

OAK RIDGE  
National Laboratory



THE UNIVERSITY OF  
TENNESSEE  
KNOXVILLE

LABORATORY FOR  
LASER ENERGETICS



University  
of Rochester

# FIA's Principles for Accelerating Fusion



## Public-Private Partnerships

The private sector should have access to the scientific research that governments have pursued for decades. While government programs transition from pure science to supporting commercialization, Public-Private Partnerships that include government support to private fusion companies can rapidly accelerate fusion development by driving new private investment.

## Ensuring Regulatory Certainty

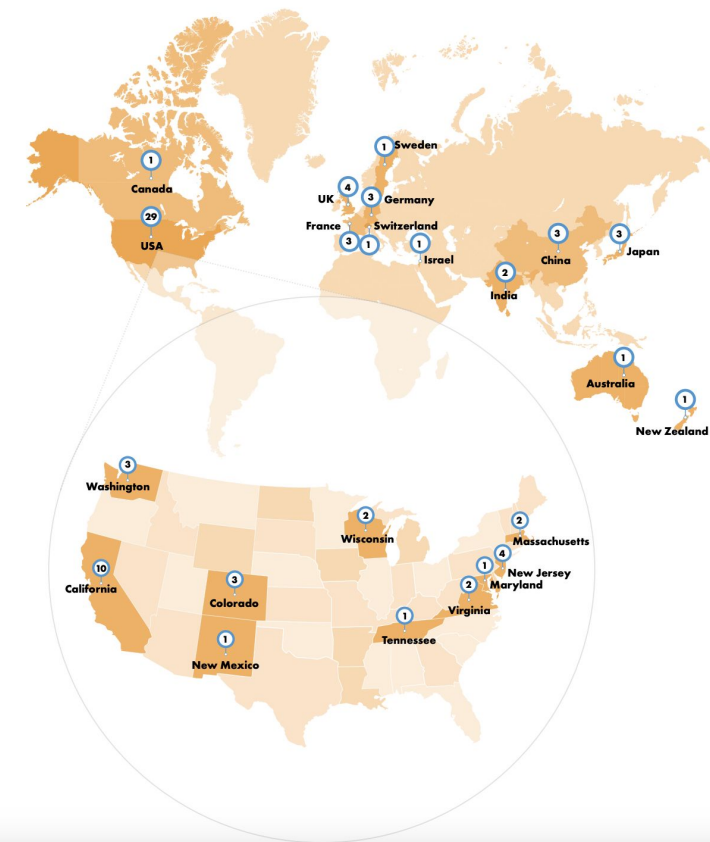
The regulatory regime for fusion should be predictable, proportional to the risk, and supportive of innovation, while also giving confidence about ensuring public safety and security. Fusion energy regulation must be permanently separated from fission regulation and should not require lengthy permitting process for every facility.

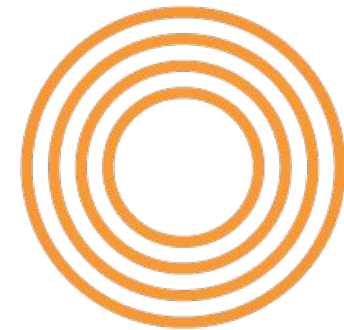
## Communicating Fusion's Benefits

Stakeholders should understand the promise of fusion energy, that it is coming on an accelerated timeline, and actively support its deployment. A knowledgeable public should support fusion deployment at scale.

# Industry Overview

- **53** verified private fusion companies of diverse technologies
- **\$9.5B+** invested in the companies
- Based in **13 countries**
- **84%** increase in government funding for public-private partnerships in the last 12 months and growth in fusion-forward policies
- **4,600 jobs** in or supported by the fusion industry
- **Estimated 18k jobs** by pilot plant operations
- **84%** of companies anticipate commercial fusion by 2030s or before.
- Many challenges remain.





# Opportunities for students

# 3 ways for students to get involved @ FIA



1. Partner with FIA through Education & Research Partnership program

2. Join FIA's virtual Summer Seminar series



3. Intern at FIA HQ in DC. We have an open internship opportunity right now!

Bonus: stay connected with FIA on social media, newsletters, events, etc. We regularly update about what's going on in industry, policy, and FIA activity.

# Partnership Levels & Benefits



Partner Level & Annual Dues	<b>SUPPORTING Partner</b> <i>(Intended for Individuals)</i> <b>\$500</b>	<b>SUSTAINING Partner</b> <i>(Intended for Universities, National Labs, or Institutions)</i> <b>Universities: \$1,000</b> <b>National Labs: \$3,000</b>
<b>Networking &amp; Association Activities</b>	<ul style="list-style-type: none"> <li>• Invitation to all FIA public events</li> <li>• Membership in FIA Education &amp; Research Partnership Working Group, which proposes policy action to the FIA</li> <li>• Participation in bimonthly FIA Partnership meeting with presentation from FIA member company</li> <li>• Opportunity to join FIA Colloquium technical meetings with all of FIA Membership</li> </ul>	<u>All benefits of SUPPORTING level, plus:</u> <ul style="list-style-type: none"> <li>• Invitations to FIA’s private VIP and policymaker events, when deemed applicable by FIA</li> <li>• 1 ticket to FIA Annual Policy Conference</li> <li>• Opportunity to share internal openings on FIA Job Board</li> <li>• Opportunity for interns and young professionals at your organization to join virtual FIA Summer Seminar program</li> </ul>
<b>Communications &amp; Promotional Support</b>	<ul style="list-style-type: none"> <li>• Access to FIA talking points on fusion energy development</li> <li>• Connections for press outreach / PR efforts</li> </ul>	<u>All benefits of SUPPORTING level, plus:</u> <ul style="list-style-type: none"> <li>• Organization logo on FIA website and promotional materials</li> <li>• Opportunity for brief description of organization activities or announcement published in FIA monthly Membership Highlight</li> </ul>

For more information, contact FIA Membership Manager, Sara Eaves at [sara@fusionindustryassociation.org](mailto:sara@fusionindustryassociation.org).

# Opportunities to get involved in the fusion industry

- Work at one of the fusion companies, supply chain companies, or even external orgs that have fusion in their portfolios (law firms, think tanks) - there is a lot of growing activity and now is a great time to get involved.
- The need for all backgrounds and skills is increasing as industry accelerates.
  - Less of an emphasis on PhDs as fusion scales - more on engineers and other skills.

## THE STATS: Fusion job opportunities at a glance

### WHERE ARE THE JOBS GOING TO BE?

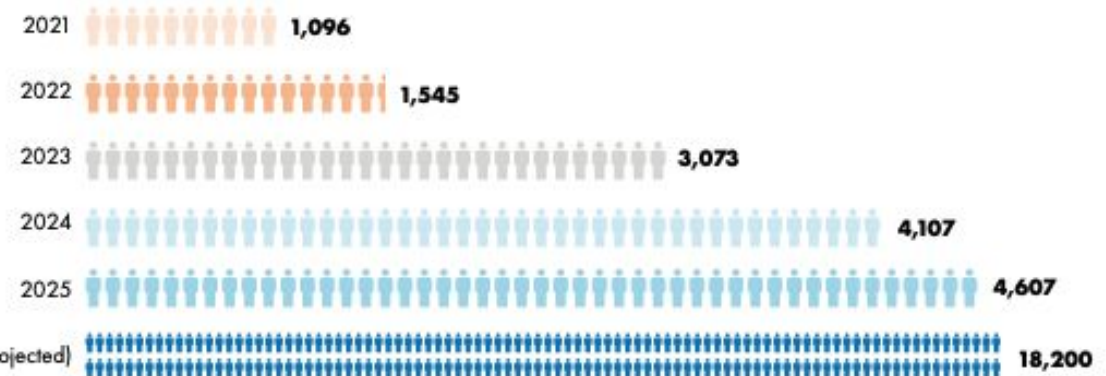
#### The Fusion Supply Chain Jobs: Future demand

Based on fusion companies predicted needs and supply constraints as they scale



### Employed by fusion companies

(30 responses)



# How to do that...

- Stay up to date on fusion industry news - company announcements, partnerships, etc.
- Join events & meet companies in person
  - Can volunteer @ events or email: "I'm a student - discount?"
- Get your school to partner/explore fusion in some capacity.

## Examples:

- An FIA intern last semester was in Georgetown's energy policy club and organized a club trip out to NearStar Fusion - fusion developer in Virginia.
- HBS did a business study on FIA
- Spoke at a GW STEM event
- UFA; FuSD; FIA partnership

## Upcoming Events

Keywords: \_\_\_\_\_ Location: \_\_\_\_\_ Select Date Range: \_\_\_\_\_

Events

- 17 APR** Fusion Energy Development - Aligning EU and National Approaches
- 23 APR** Fusion Supply Chain Trade Show (June 23 - 24, 2026, Santa Fe, New Mexico)
- 23 APR** Stress-Testing Europe's Path Toward Commercial Fusion Energy Deployment
- 21 APR** DIII-D National Fusion Facility 2026 DIII-D Industry Day Event
- 14 MAY** UK Fusion Forum
- 22 SEP** FusionVision
- 14 OCT** First International Conference on Commercial Advances for Fusion Power Plants 2026



### Jobs & Opportunities

Submit an Opportunity

Region: Internship

Education Requirement: Associates Degree, Bachelor's Degree, Enrolled in accredited undergraduate program, High School Diploma, Master's Degree, PhD, Technical Certification, N/A

Princeton Plasma Physics Laboratory (PPPL) Princeton, NJ

Zap Energy Everett, WA

Thoa Energy Kearny Point, NJ

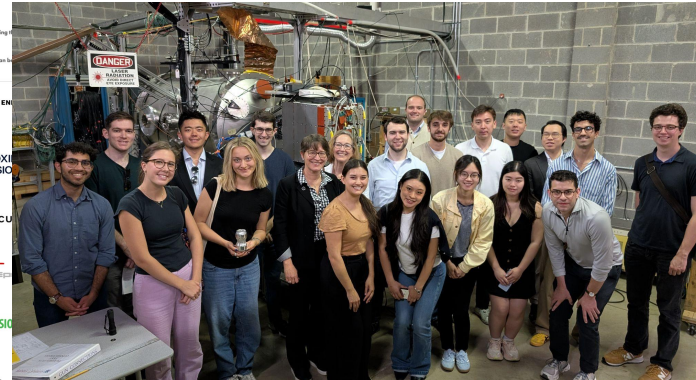
SHINE Technologies Janesville, WI

Fuse San Leandro, CA

### Join the growing fusion industry...

Over 5,000 jobs have been created in the fusion industry since 2021, and even more in the supply chain. The fusion industry needs people of all backgrounds and fields to achieve fusion power on the grid as a timeline that matters for mitigating climate change.

Click the logos below to view open positions at FIA Member companies for plasma physicists, engineers, materials scientists, technicians, financial analysts, project managers, communication specialists, and more. Other industry job listings can be found on [US Fusion Energy Jobs](#).



# Thank you!



Feel free to reach out:

[Caroline@FusionIndustryAssociation.org](mailto:Caroline@FusionIndustryAssociation.org)

*“My SCGSR experience was an amazing, life changing one. I think it accelerated my development as a scientist... Being in that environment and being exposed to those kinds of intellectual minds challenged me and pushed me to become a stronger scientist.”*

SCGSR 2023 S2 Awardee

# Office of Science Graduate Student Research Program (SCGSR)



Igor I. Slowing, PhD  
Program Manager

*June 10, 2026*



U.S. DEPARTMENT  
of **ENERGY**

Office of  
Science

[Energy.gov/science](https://www.energy.gov/science)

# About me...



License in Chemistry  
San Carlos University,  
Guatemala, 1995



Organic Chemistry Professor  
2 Universities, Guatemala  
1996 – 2003



PhD Organic Chemistry  
Iowa State University,  
2008



Scientist  
US DOE Ames National Lab  
2009 – 2022  
Adjunct Professor of Chemistry  
Iowa State University  
2013 – 2022

Catalysis science, nanomaterials  
chemistry, drug delivery.  
> 100 peer reviewed publications,  
~20,000 citations



Program Manager  
US DOE WDTS  
2022 –



# SCGSR Program

Foster advanced workforce development in areas critically important to SC mission

Supports **PhD candidates** for conducting part of their **thesis research at DOE National Laboratories**

**3 – 12 months** in collaboration with a DOE National Laboratory scientist

**Become a Scientist in Residence**  
**Build network and establish yourself in the field**

- U.S. citizens or Lawful Permanent Residents
- Alignment with priority research areas
- New research experiences

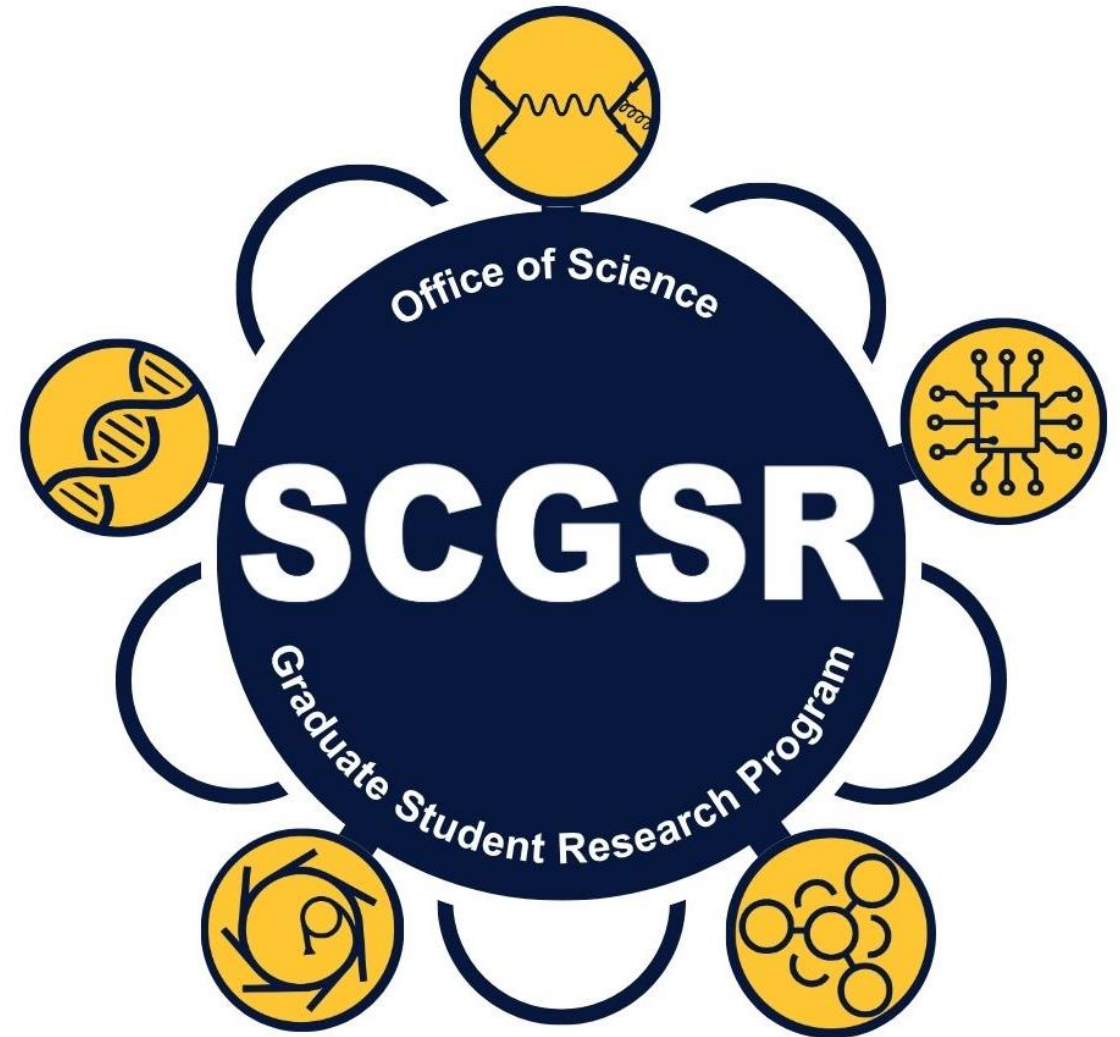
**Stipend: Up to \$3,600/month**  
**Travel Reimbursement: Up to \$3,000**  
**Travel to Select Institutions Abroad: Up to \$7,500**



# Areas of Interest

SCGSR supports **Fundamental Research** in:

- Fusion and Plasma Science
- High Energy Physics
- Nuclear Physics
- Chemical Sciences
- Isotopes
- Materials Science and Engineering
- Quantum Information
- Geosciences/Planetary Sciences
- Biosciences (non-medical)
- Computer and Computational Sciences
- Applied Mathematics
- Accelerator Science
- AI and ML
- Data Science
- Microelectronics



# DOE National Laboratories: A Unique Asset for Training and Discovery

1 Ames Laboratory  
Ames, Iowa

2 Argonne National Laboratory  
Argonne, Illinois

3 Brookhaven National Laboratory  
Upton, New York

4 Fermi National Accelerator Laboratory  
Batavia, Illinois

5 Lawrence Berkeley National Laboratory  
Berkeley, California

6 Oak Ridge National Laboratory  
Oak Ridge, Tennessee

7 Pacific Northwest National Laboratory  
Richland, Washington

8 Princeton Plasma Physics Laboratory  
Princeton, New Jersey

9 SLAC National Accelerator Laboratory  
Menlo Park, California

10 Thomas Jefferson National Accelerator Facility  
Newport News, Virginia

1 Idaho National Laboratory  
Idaho Falls, Idaho

2 National Energy Technology Laboratory  
Morgantown, West Virginia  
Pittsburgh, Pennsylvania  
Albany, Oregon

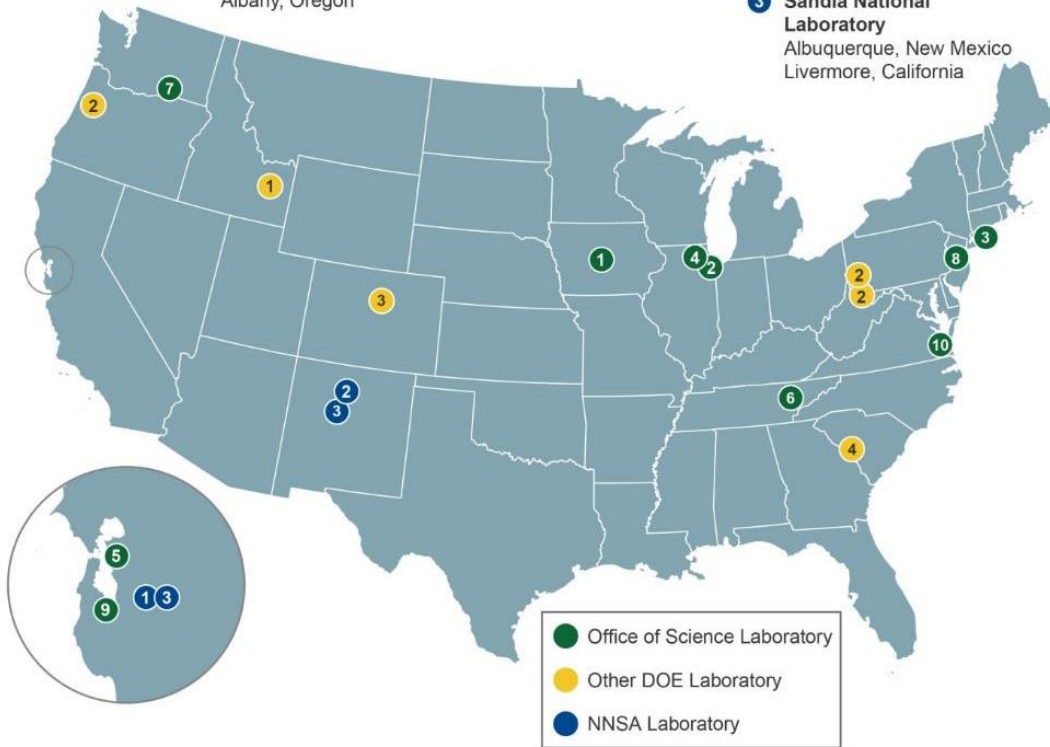
3 National Renewable Energy Laboratory  
Golden, Colorado

4 Savannah River National Laboratory  
Aiken, South Carolina

1 Lawrence Livermore National Laboratory  
Livermore, California

2 Los Alamos National Laboratory  
Los Alamos, New Mexico

3 Sandia National Laboratory  
Albuquerque, New Mexico  
Livermore, California



Large-scale and costly scientific facilities and equipment that universities cannot afford

DOE National labs employ >30,000 scientists and engineers

World-leading scientific user facilities, expertise, and resources

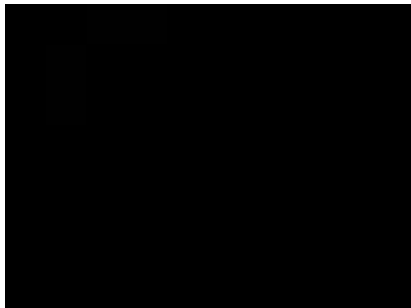
Large multidisciplinary research programs not available in universities or industry

[https://www.symmetrymagazine.org/article/from-sea-to-scientific-sea?language\\_content\\_entity=und](https://www.symmetrymagazine.org/article/from-sea-to-scientific-sea?language_content_entity=und)

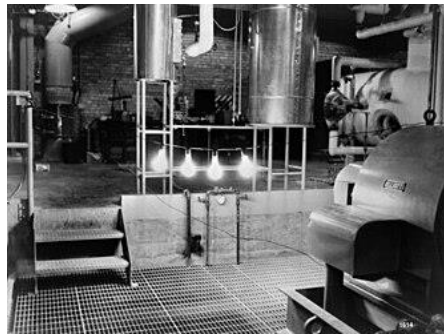


# A Couple of Cool Facts About DOE National Labs...

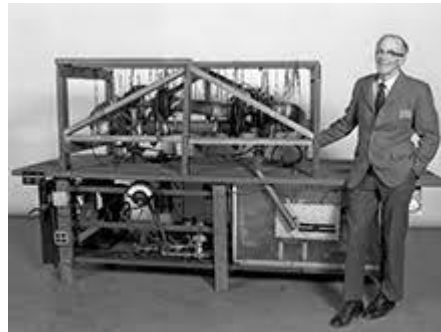
First video game (1958):  
"Tennis for Two" at BNL



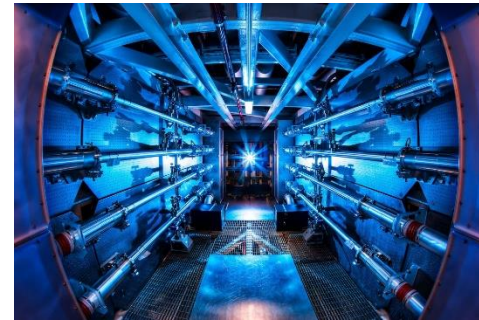
The first nuclear reactor for electricity: ANL → INL (1951)



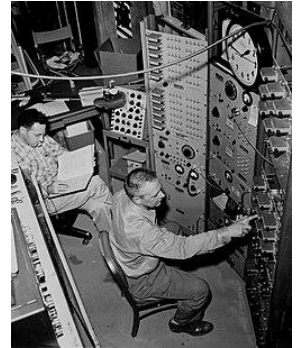
The first stellarator: Spitzer, PPPL (1953)



The first Fusion Ignition: LLNL (2022)



Discovery of the neutrino (1956) LANL → SRNL



**23 Elements discovered by DOE National Labs**

H	Li	Be	B	C	N	O	F	Ne									
Na	Mg	Al	Si	P	S	Cl	Ar										
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba		Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra		Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu			
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr			

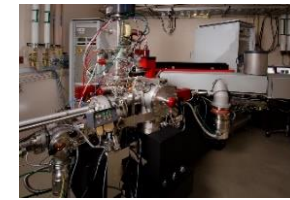
Top 3 supercomputers in the world from DOE National Labs  
14 DOE supercomputers in the top 100 of the world.



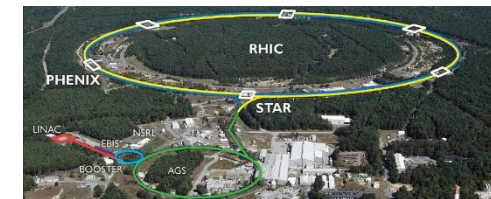
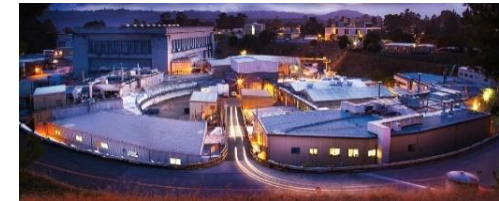
- 129 Nobel laureates supported by DOE
- 68 associated with DOE National Labs



# 28 Scientific User Facilities



- High Performance Computing: ALCF, OLCF, NERSC, ESnet
- X-Ray Light Sources: ALS, APS, NSLS-II, LCLS, SSRL
- Neutron Scattering: HFIR, SNS
- Nanoscale Science Centers: CFN, CINT, CNM, CNMS, TMF
- Earth System Modeling: ARM
- Biomolecular Characterization: EMSL, JGI
- Plasma Confinement: DIII-D, NSTX-U
- Particle Accelerators: FAC, FACET-II, ATF, ATLAS, CEBAF, FRIB, RHIC

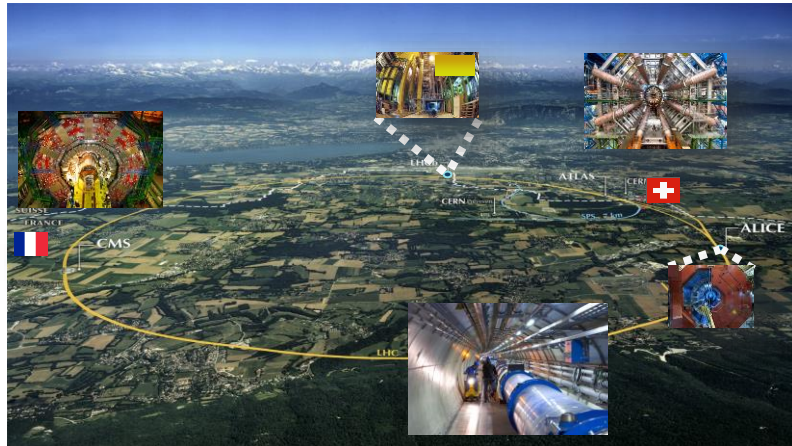


**Over 38,000  
users per year**



# SCGSR Collaborations Abroad

Short research visits (6 weeks) to select research institutions abroad



European Organization for Nuclear Research (CERN)  
Geneva, Switzerland



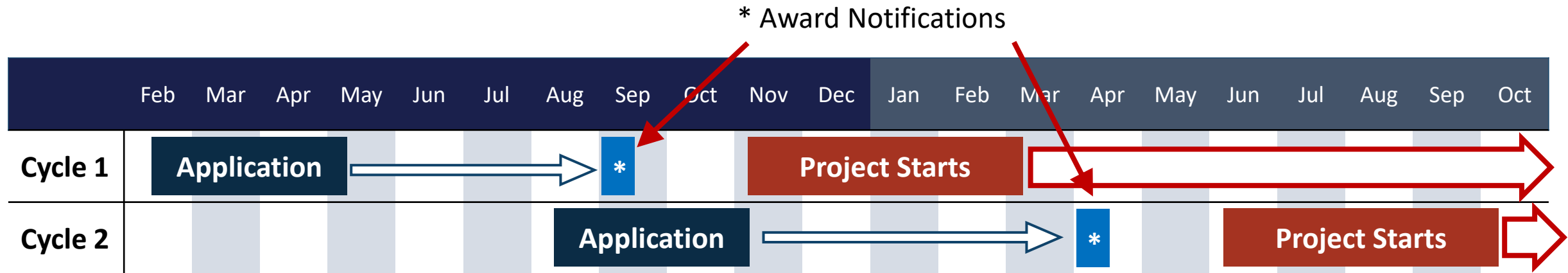
Institute for Physical and Chemical Research (RIKEN)  
Center for Computational Science (CCS)  
Kobe/Tokyo, Japan

Coming in 2027...

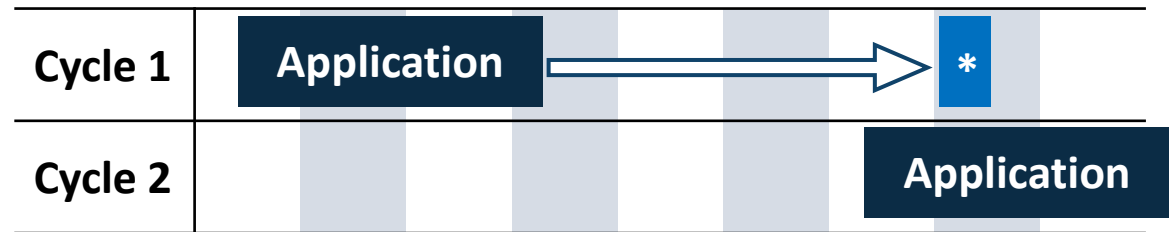


U.S. DEPARTMENT  
of ENERGY | Office of  
Science

# 2 Application Cycles per Year



Following year:



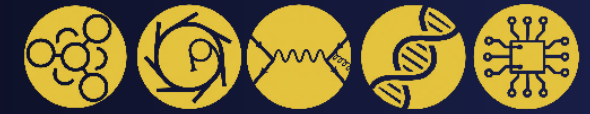
**Next solicitation opens in mid-August 2026**

# Key Components of the Application

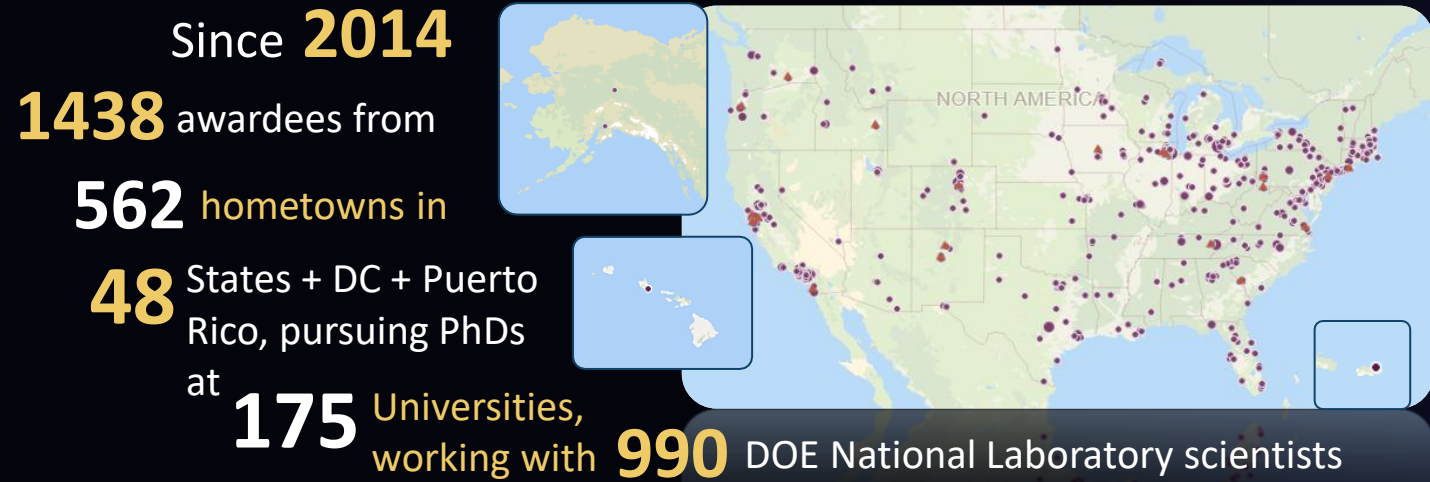
- Establish a collaboration with a DOE National Lab scientist
  - Expertise
  - Techniques, methodologies
  - Instrumentation
- Research proposal
  - Part of your PhD dissertation
  - 3 pages long
  - 3 months – 1 year long project: you decide the length

The screenshot displays the SCGSR (Office of Science Graduate Student Research) application interface. The top navigation bar includes 'Instructions', 'Complete Your Application', 'Request Letters of Support', 'Verify & Submit', and 'Check Your Status'. A sidebar on the left lists application sections: Applicant Profile (General Information, Address, Citizenship/Eligibility, Demographics), Professional Background (Undergraduate Institutions, Graduate Education Status, Current Graduate Institution, Additional Graduate Education, Primary Graduate Thesis Advisor Information, Graduate Thesis Abstract, Prior Scientific Research Experience, Scientific Publications and Presentations, Academic Awards and Honors), Program Information (Eligibility, Association with DOE Office of Science, Current Graduate Support, Previous Participation), and Research Proposal (Host DOE Laboratory, Proposed Research Project, Additional Project Information, Anticipated Graduate Training, Relevance of Proposed Research Project). The main content area is titled 'Applicant Profile' and shows the 'General Information' section with input fields for First Name (Albert), Middle Name (Optional), Last Name (Einstein), Previous Last Name(s) (Optional), Primary Email Address (wasnct@invented.yet), Confirm Primary Email Address (wasnct@invented.yet), Alternate Email Address (1) (always@good.to.have), Confirm Alternate Email Address (1) (always@good.to.have), Alternate Email Address (2) (Optional), Confirm Alternate Email Address (2) (Optional), Mobile Phone (+ 123456 789), and CRCID ID (0000-0002-9319-8639). A 'Save & Continue' button is located at the bottom right.

# SCGSR Program by the Numbers



*"This has been the most productive year of my PhD."* – SCGSR 2023 S2 Awardee



## What Awardees Say About SCGSR

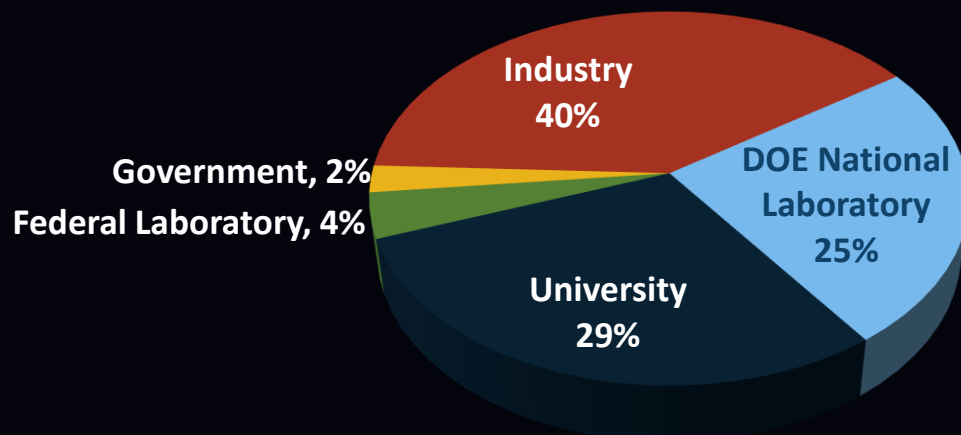
**99%** Received training not available at their universities

**99%** Expanded their networks

**99%** SCGSR introduced them to careers outside academia

**100%** Their SCGSR award led to completion of a key part of their PhD dissertation

## SCGSR Alumni Work in...



**>950** Research articles

**>30,000** Citations

**>850** Research presentations

**>110** International Presentations

**11** Patents

# Thank You!

## Questions?

Find out  
more at



Or contact: Igor I. Slowing  
[Igor.Slowing@science.doe.gov](mailto:Igor.Slowing@science.doe.gov)  
[SC.SCGSR@science.doe.gov](mailto:SC.SCGSR@science.doe.gov)

