COMMITTED TO ENSURING EVERY LEARNER CAN IMAGINE AND ACHIEVE A CAREER IN STEM

Beginning with the National Science Bowl® competition for middle- and high-school students, the Office of Workforce Development for Teachers and Scientists (WDTS) programs seek to have all learners see themselves as scientists. This goal is furthered by the Albert Einstein Distinguished Educator Fellowship, which brings the real-world experience of K-12 educators to Federal and Congressional offices. Through Science Undergraduate Laboratory Internships (SULI) and Community College Internships (CCI), college students discover science and technology careers at the DOE National Laboratories and gain the experience needed to transition from intern to employment. The Visiting Faculty Program (VFP) connects faculty with DOE researchers and resources to advance their research competitiveness. Finally, graduate students in the Office of Science Graduate Student Research (SCGSR) program conduct research of national importance using world-leading facilities and scientific capabilities available only through the DOE complex.

UNIQUE ASSETS, UNPARALLELED ACCESS

WDTS programs stand out among STEM training programs for offering unparalleled access to state-of-the-art scientific facilities at the DOE National Labs and sites. Student researchers don’t just observe – they train alongside world-class scientists and engineers solving today’s energy, environment, and national security challenges.

For over 60 years, the Department of Energy (DOE) has offered students and researchers training opportunities that support its mission in science, energy, national security, and the environment. WDTS plays a leading role in advancing this responsibility. Guided by the goal of providing DOE and our nation with a strong, sustained workforce in science, technology, engineering, and math (STEM), WDTS programs support learners of all ages in preparing for the STEM workforce of tomorrow.
FISCAL YEAR 2020

BY THE NUMBERS

$28 MILLION
TOTAL BUDGET

WDTS PROGRAMS SUPPORTED:
14,529 PARTICIPANTS,
FROM ALL 50 STATES,
Puerto Rico and the District of Columbia
through events and internships at
23 DOE NATIONAL LABS AND SITES.

PARTICIPANTS REPRESENTED:
369 Higher Education
Institutions, including
81 Minority Serving
Institutions (MSIs) and
1,706 K-12 Schools

PARTICIPANTS’ PROJECTS:
Spanned 6 DOE offices and all
6 Office of Science programs.
43% of SCGSR participants
utilized at least one of 28
scientific user facilities.
SCIENCE UNDERGRADUATE LABORATORY
INTERNSHIPS (SULI)

At DOE's world-renowned National Labs and state-of-the-art facilities, dedicated scientists and engineers are on the verge of the next great discovery. And right there, assisting in groundbreaking work to support DOE's mission, are SULI interns. This stipend-based, research-focused internship is available in a 10-week Summer Term or 16-week Fall and Spring Terms.

COMMUNITY COLLEGE INTERNSHIPS (CCI)

The CCI program gives community college students an incomparable opportunity for technical training at DOE National Labs and facilities. During a 10-week term, interns work on technology or instrumentation projects that advance solutions in areas including cybersecurity, artificial intelligence, nuclear and renewable energy, accelerator technology, environmental management and advanced manufacturing.

VISITING FACULTY PROGRAM (VFP)

This stipend-based 10-week program seeks to increase the research competitiveness of faculty members and their students at institutions underrepresented in the research community. Selected faculty collaborate with DOE scientists and engineers on research projects aligned with DOE mission areas.

Impacting students at a pivotal point in their education, WDTS undergraduate student programs strive to transform STEM learning into STEM careers. Working alongside researchers at the DOE National Labs, student interns are not only able to imagine themselves as scientists – they become scientists. Visiting faculty expand their research horizons through new collaborations.
**SULI, CCI, & VFP:**

**BY THE NUMBERS**

**FY 2020 BUDGETS:**

- **$13.6 MILLION** SULI
- **$1.7 MILLION** CCI
- **$2.0 MILLION** VFP

**FY 2020 PARTICIPANTS' PROJECTS**

- 56% DOE Office of Science
- 23% Other DOE-mission related projects
- 21% DOE Office of Energy Efficiency and Renewable Energy

**PARTICIPANTS:**

- **13,477** FY 2002-2020
- **871** FY 2020

Hosted by 16 DOE Labs & Sites

FY 2020 participants represented:

- **357** HIGHER EDUCATION INSTITUTIONS including
- **81** MINORITY SERVING INSTITUTIONS (MSIs)

**FY 2020 SULI & CCI INTERNS REPORT:**

- **83%** They are more likely to consider pursuing a career at a DOE Lab as a result of their internship experience
- **95%** Their mentor was a positive role model
- **96%** They gained skills not taught in class
- **100%** They recommend the program to peers

**SULI:** SCIENCE.OSTI.GOV/WDTS/SULI | **CCI:** SCIENCE.OSTI.GOV/WDTS/CCI | **VFP:** SCIENCE.OSTI.GOV/WDTS/VFP
SCGSR prepares graduate students for STEM careers of critical importance to the DOE Office of Science mission through extended research residencies at the DOE National Labs. Graduate students tackle real-world problems alongside DOE scientists, test-driving a career outside academia while advancing their thesis research. SCGSR graduate students have access to the world-class expertise, capabilities, and resources only available through the DOE national enterprise.
SCGSR: BY THE NUMBERS

FY 20 BUDGET: $4.5 MILLION

**PARTICIPANTS**

130 participants at DOE National Labs

14

Participants represent 81 Ph.D.-granting institutions in the physical sciences; about 33% are women.

Since 2014:

730 participants,
>560 collaborating scientists at 17 National Labs and 1 site.

FACTOR 20 PARTICIPANTS' PROJECTS

Spanned all 6 Office of Science programs and 2 cross-program "convergence areas."

WHAT PARTICIPANTS SAY ABOUT SCGSR:

98% Received training not available at their universities

100% Expanded their networks

>77% Are interested in employment or postdoctoral positions at DOE Labs

99% Reported SCGSR introduced them to careers outside academia

99% Reported SCGSR enabled completion of an important part of their dissertation

43% of participants utilized at least one of 28 scientific user facilities.
NATIONAL SCIENCE BOWL® (NSB)

In this nationwide academic competition, middle and high school student teams face off in a fast-paced Q&A quiz show format, being tested on a range of science disciplines including biology, chemistry, Earth and space science, physics, energy, and math. DOE launched National Science Bowl in 1991 to encourage students to excel in science and mathematics topics of importance to DOE and the Nation.

ALBERT EINSTEIN DISTINGUISHED EDUCATOR FELLOWSHIP (AEF)

AEF offers a unique opportunity for STEM K-12 educators to serve 11 months in a Federal agency or U.S. Congressional Office. Einstein Fellows contribute STEM education expertise and years of teaching experience to their host office's STEM education efforts, while gaining professional development to enhance their teaching and careers.

Developing the next generation of scientists begins before college. Recognizing this, WDTS strives to excite young learners to engage with science and math topics, while supporting their teachers in providing the highest quality STEM instruction. Only by inspiring our K-12 learners can our nation meet its STEM workforce needs of the future.
NSB & AEF:
BY THE NUMBERS

FY 2020 BUDGETS:

$2.9 MILLION
NSB

$1.2 MILLION
AEF

$0.6 MILLION
CONTRIBUTED TO AEF BY PARTNER AGENCIES

NATIONAL SCIENCE BOWL
Starting with:
112 regional events
2,890 regional teams and
13,903 team members from
1,706 schools and
325 Congressional districts

Ultimately...
63 high school & 43 middle school teams (477 students) advanced to the national competition, where approximately 315,000 students have participated over NSB's 30 year history.

COMPETITION FACTS:
4,850 science and math questions asked
810 questions required knowledge of science from DOE National Labs
8,000 volunteered to make NSB a success!

ALBERT EINSTEIN DISTINGUISHED EDUCATOR FELLOWSHIP
FY 2020: 9 fellows

U.S. House of Representatives (4)
U.S. Senate (1)
Library of Congress (1)
NASA (1)
Gr. 9-12 teachers (5)
Gr. 6-8 teachers (5)
K-5 teachers (2)
DOD (1)
DOE (1)

Since 1990, AEF has supported 328 fellows