



U.S. DEPARTMENT OF
ENERGY

Office of
Science

Planning for Committee of Visitors Review of the Workforce Development for Teachers and Scientists (WDTS)

Briefing to BESAC

December 6, 2021

Ping Ge, WDTS Director

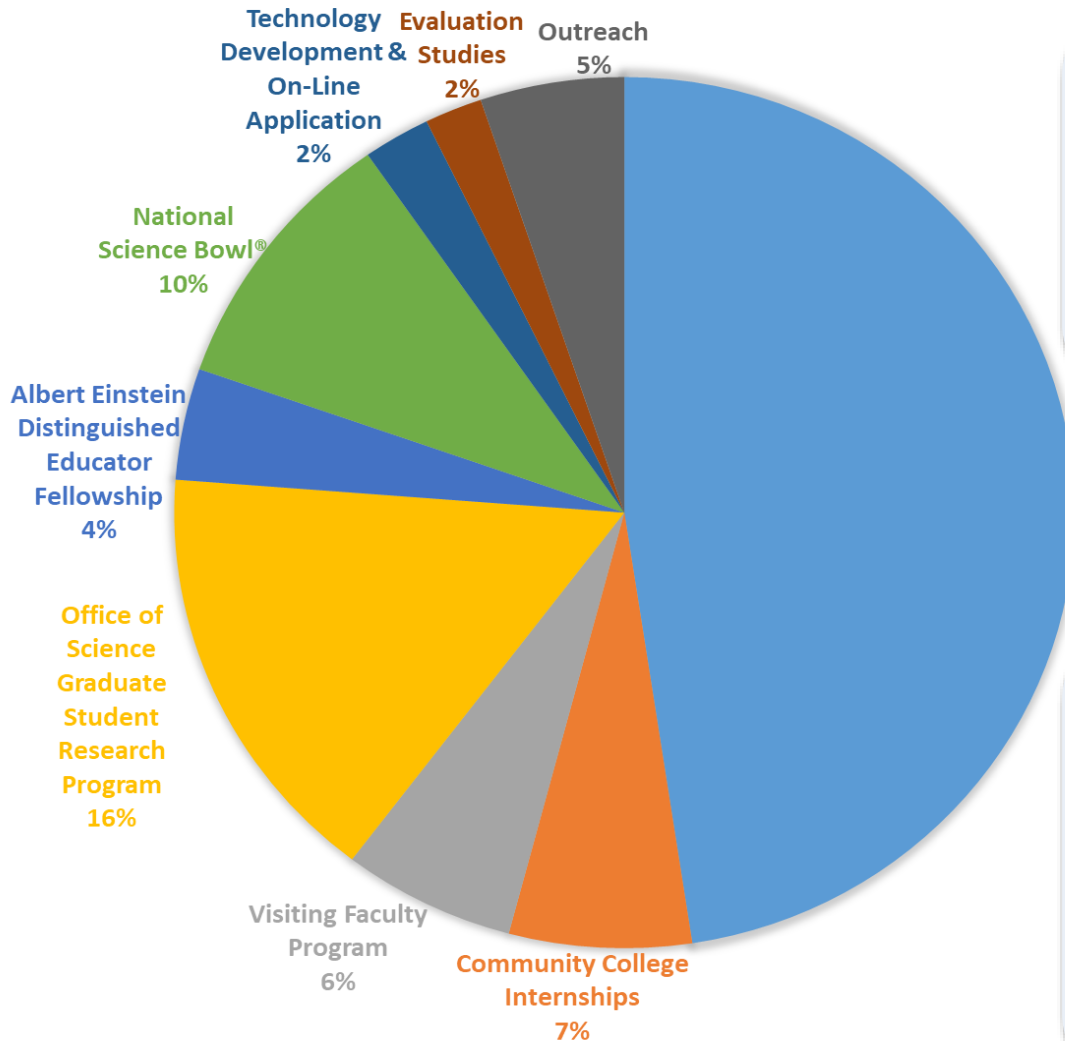
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Office of Workforce Development for Teachers and Scientists, SC-3.3

Office of Science (SC), U.S. Department of Energy

<https://science.osti.gov/wdts>

WDTS vs. Research Programs: Differences and Linkages



An Example: FY 2021 WDTS Distribution of Funding
(Enacted Total \$29M, Typical Distribution)

Mission: To ensure a sustained pipeline for the science, technology, engineering, and mathematics (STEM) workforce for DOE mission

Science Undergraduate Laboratory Internships
48%

Why WDTS?

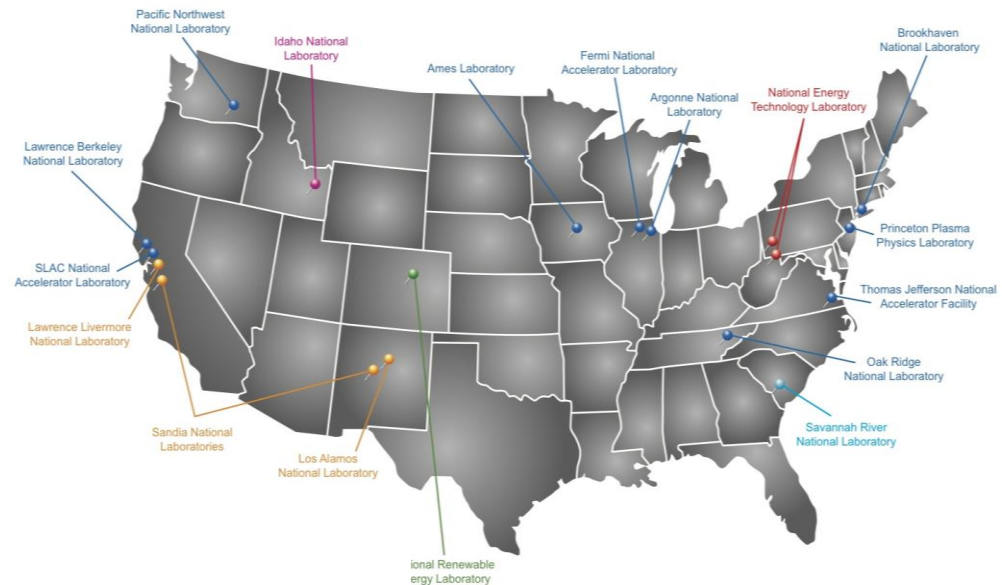
- ✓ A productive partner to other SC programs/offices for mission-driven Workforce Development
- ✓ Cost-effective recruiting mechanism for future SC PIs
- ✓ Enabling multiple pathways to Diversity, Equity, and Inclusion (DEI)



STEM Workforce Training Opportunities at DOE National Laboratories

WDTS manages the following programs via partnership with DOE national laboratories (>70% budget):

- Science Undergraduate Laboratory Internships - **SULI**
- Community College Internships - **CCI**
- Visiting Faculty Program - **VFP**
- Office of Science Graduate Student Research Program - **SCGSR**



The DOE system of National Laboratories is a unique asset for training and workforce development:

- DOE Labs employ >30,000 scientists and engineers (~14,000 at SC Labs)
- World-class scientific user facilities, capabilities, and resources
- Culture of team science, mentoring, and learning through discovery

History of COVs in SC-WDTS

- The first SC-WDTS COV was held in May 2010 with a review of All WDTS programs and activities. The second SC-WDTS COV was held in December 2016 with review focused on the four Lab-based training programs (SULI/CCI/VFP/SCGSR).
- This will be the third WDTS COV. All previous COV reports and WDTS responses can be found at:
<https://science.osti.gov/WDTS/About/WDTS-COV>
- WDTS COVs are a BESAC activity.
- COV reports are approved by BESAC and recommendations are taken seriously by WDTS
 - Restructured WDTS programmatic activities
 - Focused investment leveraging the unique strength of hands-on training experiences at DOE labs
 - Better alignment with SC policy, procedure, and business practice
 - Improved online system for application, review, and selection

Committee of Visitors Charge

For this COV, please assess

1. the efficacy and quality of the processes used to solicit, review, recommend, monitor, and document application, proposal, and award actions;
2. quality of the resulting portfolio, including its breadth and depth and its national standing, benchmarked with other comparable Federal STEM programs.

In addition to this standard charge, please comment on the effectiveness of the online technology development and evaluation activities in support of WDTS programs and outreach efforts to enhance the diverse and inclusive participation in WDTS programs.

WDTS (SC-3.3) Organization Chart

New since
May 2021

**Workforce Development
for Teachers and Scientists (WDTS)**
Ping Ge, Office Director



*The Lead Federal Employee for each program or activity is underlined.

Pre-college Programs

National Science Bowl (NSB)



Jan Tyler
Yolanda White
Kelly Day
PA Vacancy

Albert Einstein Distinguished Educator Fellowship (AEF)



Lab-Based Workforce Training Programs

Science Undergraduate Laboratory Internships (SULI)

Karen Skubal
Cindy White
Yolanda White
PA Vacancy

Community College Internships (CCI)



Karen Skubal

Visiting Faculty Program (VFP)



SC Graduate Student Research Program (SCGSR)

PM Vacancy
(Ping Ge, Acting)
Sheila Johnson
Allison Truhlar

Cross-Program Activities

Online Technology Development



Yolanda White

Evaluation



Allison Truhlar

Outreach



Allison Truhlar
PA Vacancy
Sheila Johnson(LEDP)



WDTS – by the Numbers

- WDTS has an annual budget of ~\$28M
 - SULI/CCI/VFP/SCGSR: ~75%
 - Total annual participants at 17 DOE national labs: ~1,400
 - SULI/CCI/VFP: DOE S&T, ~50% SC areas
 - SCGSR: SC priority areas only, including 4 Convergence topics
 - National Science Bowl (NSB): annually, ~5,500 high/ ~2,500 middle schoolers, ~110 regional competitions across U.S. and its territories, ~2000 volunteers
 - Online Systems/Evaluation/Outreach: cross-program activities
- WDTS staffing
 - 5 team leads (1 PM and 1 PA vacancies, soon 1 more PM vacancy)
 - Team approach for management

Scope for Review: WDTS Programs and Activities from FY 2017 – 2021

- WDTS programs that include:
 - The Science Laboratory Undergraduate Internships (SULI)
 - The Community College Internships (CCI)
 - The Visiting Faculty Program (VFP)
 - The Office of Science Graduate Student Research Program (SCGSR)
 - The National Science Bowl[®] (NSB)
 - The Albert Einstein Distinguished Educator Fellowship (AEF)
- In addition, cross-program activities that include:
 - Online technology development
 - Evaluation activities in support of WDTS programs
 - Outreach efforts to enhance the diverse and inclusive participation in the above WDTS programs

FY 2022 WDTS Committee of Visitors

- COV Chair and 5 members (total 6) being recruited now
- Virtual meeting using Zoom
- Dates: TBD, 2022
 - Expecting the COV report to be approved by BESAC at the Summer 2022 meeting
- WARS-based COV, and Program Documentations in Shared folders
 - WARS: WDTS online Application and Review System

Elements of Agenda

- Preliminary activities (1-2 weeks before COV)
 - presentations and background material available to COV, Zoom/WARS training
- Day 1 (11-5 PM ET)
 - Plenary session: welcome, BESAC charge, SC-3/WDTS overviews
 - Panel breakout sessions: brief portfolios overviews from WDTS team leads; first read of selected packages by COV; Program Managers on call
 - Executive session (chair/panel leads): assessment of key elements and gaps
- Day 2 (11-5 PM ET)
 - Panel breakout sessions: panelist continue review, Program Managers on call
 - Panel breakout sessions: brief portfolios overviews from WDTS team leads; first read of selected packages by COV; Program Managers on call
 - COV meeting with DOE Laboratory Education Directors
 - Executive session (all COV): discuss output from panels, identify key observations, and decide if other reviews are needed
- Day 3 (11-2:30 PM ET)
 - Flexible schedule as needed to complete review and write draft of panel reports
 - Executive session (all COV): discuss key findings & recommendations
 - Closeout plenary session: presentation of major findings and recommendations

Questions/Comments?

Contact

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