

Workforce Development for Teachers and Scientists

Overview

The mission of the Workforce Development for Teachers and Scientists (WDTS) program is to ensure that Department of Energy (DOE) has a sustained pipeline for the science, technology, engineering, and mathematics (STEM) workforce. Accomplishing this mission depends on continued support for undergraduate internships, graduate thesis research opportunities, and visiting faculty research appointments; administration of the Albert Einstein Distinguished Educator Fellowship for K–12 STEM teachers for the federal government; and annual, nationwide, middle, and high school science competitions culminating in the National Science Bowl® finals in Washington, D.C. These activities support the development of the next generation of scientists and engineers to address the DOE mission, administer programs, and conduct research.

WDTS activities rely significantly on DOE's 17 national laboratories and scientific user facilities, which employ more than 30,000 individuals with STEM backgrounds. The DOE laboratory system provides access to leading scientists, world-class scientific user facilities and instrumentation, and large-scale, multidisciplinary research programs unavailable in universities or industry. WDTS leverages these assets to develop and train post-secondary students and educators in support of the DOE mission. The WDTS discovery learning-based STEM training programs enable highly qualified applicants to conduct research at DOE laboratories and facilities in support of the DOE workforce development mission.

Highlights of the FY 2023 Request

The FY 2023 Request for \$41.3 million prioritizes funding for programs that place highly qualified applicants in STEM learning and authentic research experiences at DOE laboratories and expands training opportunities to students and faculty from Minority Serving Institutions (MSIs) and individuals from underrepresented, underserved groups. The Request increases support for the Reaching a New Energy Sciences Workforce (RENEW) initiative, which will significantly increase outreach to and workforce training opportunities for underrepresented and underserved groups, described further below. The Request continues strong support for the undergraduate internships, graduate thesis research, and visiting faculty program to help sustain a skilled workforce pipeline. The Request maintains support for the technology infrastructure modernization and evaluation activity, which is critically important for evidence-based management and evaluation practice to sustain the workforce training programs at DOE laboratories. It also prioritizes support for the DOE National Science Bowl®, a signature STEM competition testing middle and high school students' knowledge in science and mathematics. By encouraging and preparing students to pursue STEM careers, these programs address the DOE's STEM mission critical workforce pipeline needs required to advance science innovation and energy, environment, and national security.

Description

Activities at the DOE Laboratories

WDTS supports activities such as the Science Undergraduate Laboratory Internships (SULI) program, the Community College Internships (CCI) program, the Visiting Faculty Program (VFP), the Office of Science Graduate Student Research (SCGSR) program, and RENEW. One of the primary goals of these programs is to prepare students to enter STEM careers that are especially relevant to the DOE mission. By providing research experiences at DOE laboratories under the direction of scientific and technical laboratory staff who serve as research advisors and mentors, these activities provide opportunities for participants to engage in research requiring specialized instrumentation; large-scale, multidisciplinary efforts; and/or scientific user facilities. WDTS activities are aligned with the STEM workforce training recommendations of the Federal Advisory Committees of SC's research program offices, the strategic objectives of the National Science and Technology Council's Committee on STEM Education (CoSTEM) Federal STEM Education 5-Year Strategic Plan, and the Administration's goals for educating and training a diverse and skilled U.S. workforce for the 21st century economy.

SULI places students from two- and four-year undergraduate institutions as paid interns in science and engineering research activities at DOE laboratories, working with laboratory staff scientist and engineer mentors on projects related to ongoing research programs. Appointments are for ten weeks during the summer term and 16 weeks during the fall and spring terms.

CCI places community college students as paid interns in technological activities at DOE laboratories, working under the supervision of a laboratory technician or researcher mentor. CCI provides dedicated technical training for community college students who are interested in technical careers and provides a pathway for those who plan to pursue further educational objectives beyond community college.

The VFP goal is to increase the research competitiveness of faculty members and students at U.S. institutions of higher education historically underrepresented in the research community, including MSIs. Through direct collaboration with research staff at DOE host laboratories, VFP appointments provide an opportunity for faculty and their students to develop skills applicable to programs at their home institutions. VFP helps increase the STEM workforce in DOE science mission areas at institutions historically underrepresented within the DOE enterprise. Appointments are in the summer term for ten weeks, and faculty may participate in the program for up to three terms.

SCGSR's goal is to prepare graduate students for STEM careers critically important to the SC mission by providing graduate thesis research opportunities at DOE laboratories. The SCGSR program provides supplemental awards for graduate students to pursue part of their graduate thesis research at a DOE laboratory or facility in areas that address scientific challenges central to the SC mission. U.S. graduate students pursuing Ph.D. degrees in physics, chemistry, materials sciences, non-medical biology, mathematics, computer or computational sciences, or specific areas of environmental sciences aligned with the SC mission, are eligible for research awards to conduct part of their graduate thesis research at a DOE laboratory or facility in collaboration with a DOE laboratory scientist. Research award terms range from three months to one year.

As an active participant in the SC-wide RENEW initiative, WDTS coordinates with SC research programs and DOE national laboratories to develop SC mission research focused training opportunities for undergraduate and graduate students from population groups and academic institutions not currently well represented in the U.S. S&T ecosystem. WDTS has a unique role to play by significantly expanding SC outreach to students and educators from underrepresented and underserved groups and enabling additional pathways to help them advance along the STEM workforce development pipeline. From October to mid-December in 2021, WDTS completed ten listening sessions with MSIs, community colleges, and underrepresented groups (URGs) to understand the barriers that prevent underrepresented and underserved groups from participating in SC workforce development programs. WDTS is continuing the effort of collecting input from MSIs, community colleges, and underrepresented groups. Additionally, WDTS will, in collaboration with DOE laboratories and SC research programs, continue to develop and implement strategies and mechanisms to remove barriers and facilitate more application/participation by underrepresented and underserved groups, including experimenting with new training models or elements to enable application/participation. Funding will also support DOE National Laboratory-based research or technical training experiences for preparing future scientists, technicians, and professionals to support DOE mission needs.

Albert Einstein Distinguished Educator Fellowship

The Albert Einstein Distinguished Educator Fellowship Act of 1994 charges DOE with administering a fellowship program for elementary and secondary school mathematics and science teachers that focuses on bringing teachers' real-world expertise to government to help inform federal STEM education programs. Selected teachers spend 11 months in a Federal agency or a Congressional office. WDTS manages the Albert Einstein Distinguished Educator Fellowship Program for the Federal government. DOE and other Federal agencies support these Fellows. SC sponsors placement opportunities in WDTS and in Congressional offices. Other Federal agencies sponsor placement opportunities in their own offices. Participating agencies include the National Aeronautics and Space Administration, the Library of Congress, the Department of Defense, the Smithsonian, the U.S. Geological Survey, and the Department of Homeland Security. The Fellows provide educational expertise, years of teaching experience, and personal insights to these offices to advance Federal science, mathematics, and technology education programs.

National Science Bowl®

The DOE National Science Bowl® is a nationwide academic competition testing students' knowledge in all areas of mathematics and science, including energy. High school and middle school students are quizzed in a fast-paced, question-and-answer format. Approximately 320,000 students have participated in the National Science Bowl® throughout its 31-year history, and it is one of the Nation's largest science competitions. WDTS manages the National Science Bowl®, and sponsors the National Science Bowl® finals competition. Regional competitions rely upon volunteers and are supported by numerous local organizations, both public and private.

The National Science Bowl® regional winning teams receive expenses-paid trips to Washington, D.C. to compete at the National Finals in late April. Competing teams are composed of four or five students and a teacher who serves as an advisor and coach. WDTS provides central management of its regional events.

Technology Development and On-Line Application

This activity modernizes on-line systems used to manage application solicitations, review applications, and facilitate data collection, curation, and compilation to support evaluation for WDTS programs. A project to develop, build, and launch new online application and program support systems continues, with evolving new elements that improve accessibility to applicants, advance program oversight and assessment by WDTS program staff, and allow more efficient management and execution of programs by DOE laboratory staff. An important feature of the systems is the integration of a data analysis and visualization capability to support evidence-based management and evaluation of programs.

Evaluation

The evaluation activity supports work to assess whether WDTS programs meet established goals. This is accomplished through triennial reviews of its program performers, of WDTS itself, and of program performance. These reviews involve peer reviews and Federal Advisory Committee-commissioned Committee of Visitors reviews. In addition, as an important part of assessing STEM workforce training programs, activities are supported to measure short-term program outcomes and assess longer-term program impact. The supported activities include the compilation and analysis of data and other materials, including pre- and post-participation surveys, participant deliverables, notable outcomes (publications, presentations, patents, etc.), and longitudinal participant tracking/outcome analysis. WDTS is also tracking and reporting how its programs, and activities at DOE labs and SC scientific user facilities, fulfill program goals and objectives.

The evaluation activity is aligned with the Government Performance and Results Act Modernization Act of 2010, which emphasizes the need for federal programs (including STEM education programs) to demonstrate their effectiveness through rigorous evidence-based evaluation. WDTS works cooperatively with SC programs, other DOE programs, and other federal agencies through OSTP/NSTC/CoSTEM to share best practices for STEM program evaluation to ensure the implementation of evaluation processes appropriate to the nature and scale of the program effort.

In support of the RENEW initiative, the knowledge, infrastructure, and capabilities built through the evaluation activity for the current WDTS programs will be leveraged to help set the goals and craft strategies for assessing the new activities, in coordination with SC research programs and offices.

Outreach

WDTS engages in outreach activities, some in cooperation with other DOE program offices and select federal agencies, to widely publicize its opportunities. The WDTS website (<https://science.osti.gov/wdts>) is the most widely used tool for prospective program participants to obtain information about WDTS, and it provides a gateway to accessing the online applications for the WDTS programs. To help diversify the applicant pool and provide equitable access, outreach is conducted via multiple venues, with intentional brand messaging, such as hosting panels for and giving presentations to targeted stakeholder groups, sharing information with professional societies, and using virtual platforms to host internship and career fairs. WDTS leverages SC's social media resources to amplify the program opportunities to a broad range of stakeholders, including SC research grantees, scientific professional societies, Historically Black Colleges and Universities (HBCUs) and other MSIs, and community colleges with a focus on underrepresented and underserved groups.

WDTS also annually solicits proposals from DOE host laboratories and facilities to develop and execute outreach activities aimed at recruiting more diverse, equitable, and inclusive applicant and participant pools for WDTS laboratory-based programs, and to encourage WDTS program participants to pursue careers supporting the SC and DOE mission, including staffing needs at DOE national laboratories. Emphasis of laboratory outreach activities is on reaching potential applicants who are underrepresented in STEM fields, including building partnerships and targeted outreach to MSIs. Eligible DOE laboratories and facilities are those that host participants in the SULI, CCI, VFP, and/or SCGSR programs. Based upon reported outcomes of annually completed activities, a portfolio of model practices is evolving to help ensure that WDTS activities are fully open and accessible to all eligible students and faculty.

The Laboratory Equipment Donation Program (LEDP) is operated under Outreach and provides excess laboratory equipment to STEM faculty at accredited post-secondary educational institutions. Through the General Services Administration Energy Asset Disposal System, DOE sites identify excess equipment and colleges, and universities can then search for equipment of interest and apply via the website. The equipment is free, but the receiving institutions pay for shipping costs.

**Workforce Development for Teachers and Scientists
Funding**

(dollars in thousands)

	FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request	FY 2023 Request vs FY 2021 Enacted
Workforce Development for Teachers and Scientists				
Science Undergraduate Laboratory Internship (SULI)	13,800	13,800	15,000	+1,200
Community College Internship Program (CCI)	1,900	1,900	2,200	+300
Visiting Faculty Program (VFP)	1,800	1,800	2,100	+300
Office of Science Graduate Student Research (SCGSR) Program	4,600	4,600	5,000	+400
Reaching a New Energy Sciences Workforce (RENEW)	-	-	10,000	+10,000
Internships and Visiting Faculty Activities at DOE Labs	22,100	22,100	34,300	+12,200
Albert Einstein Distinguished Educator Fellowship	1,200	1,200	1,200	-
National Science Bowl	2,900	2,900	3,000	+100
Technology Development and On-Line Application Evaluation	700	700	700	-
Outreach	600	600	600	-
	1,500	1,500	1,500	-
Total, Workforce Development for Teachers and Scientists	29,000	29,000	41,300	+12,300

Program Accomplishments

Science Undergraduate Laboratory Internship (SULI) — In FY 2021, approximately 1,053 placements were supported, of which 12.3 percent were from MSIs and approximately 27 percent were women. Among the participants, more than 98 percent reported positive impacts to their educational and career goals, and 99.6 percent would recommend SULI to their peers. As in prior years, participants continue to make notable contributions to research projects as evidenced by co-authorship in peer reviewed journals, patents, and/or presentations at scientific meetings. A new SULI eligibility category called “Recent Graduates” was implemented in the Summer 2019 Term application period, which replaced “Graduating Seniors” and extends the period of eligibility for graduates of 4-year institutions and community colleges to two years (formerly one year) between the date of their undergraduate graduation and the start of the SULI term. This change provides additional experience-based learning opportunities for students considering a STEM research career and addresses recommendations from the 2016 Committee of Visitors review.

Community College Internship Program (CCI) — In FY 2021, 126 placements were supported, with 47.6 percent from MSIs. Among the participants, 99.1 percent would recommend CCI to their peers and more than 98 percent reported positive impacts to their educational and career goals. Nearly 95 percent of participants reported that they would consider a job or career at their host DOE laboratory or facility.

Visiting Faculty Program (VFP) — In FY 2021, 63 faculty and 29 student placements were supported, and of these participants, 49.2 percent of the faculty and 41.4 percent of the students were from MSIs. Among the faculty participants, 16 percent were Black or African American and 22 percent were women. All VFP Faculty participants reported a positive impact on their careers, and all expressed interest in continuing their research collaboration. All would recommend VFP to their peers. VFP-Student participants reported receiving a high-quality internship experience (92 percent), with 96 percent reporting impacts to their educational and career goals, and 100 percent reporting they would recommend VFP to their peers.

Office of Science Graduate Student Research (SCGSR) Program — For FY 2021, the two planned solicitations were released, with one resulting in 65 new awards and the other going through review and selection process; for FY 2022, one of the two planned solicitations has been released for the online application period. As a result of the 2020 SC reorganization, two new program offices (Isotopes R&D and Production and Accelerator R&D and Production) were established, resulting in their research areas added to the SCGSR list.

The mission areas from the two new offices were added to the SCGSR research area list. In FY 2022 and FY 2023, SCGSR program will continue the support of graduate research opportunities at DOE national laboratories in SC mission areas that are not well represented in academic curricula; in high demand, nationally and/or internationally, resulting in difficulties in recruitment and retention at U.S. universities and at DOE laboratories; for which the DOE laboratories may play a role in providing needed workforce development; and needed for the SC workforce. Additionally, the program received a steady increase of applications in the four convergence research areas started in FY 2019 and updated through FY 2021 (data science, microelectronics, conservation laws and symmetries, and accelerator science) to address workforce needs for SC’s long-range vision on emerging frontiers in science discovery and innovation that increasingly require transdisciplinary approaches. Based on the evidence received in FY 2019-2021, the new convergence research areas will be continued with minor adjustments for the application cycles in FY 2022 and FY 2023.

Response to the COVID-19 Pandemic — All WDTS laboratory-based workforce training programs have been continuously offered and supported throughout the COVID-19 pandemic via alternative arrangements. The Fall 2020, Spring 2021, and Summer 2021 Terms of the SULI, CCI, and VFP programs were impacted by restricted access and minimum operations status at DOE national laboratories due to the persisting pandemic. WDTS, in collaboration with DOE national laboratories, successfully delivered virtual internships to more than 1,400 undergraduate students from 2-/4-year colleges and universities, graduate students, and visiting faculty from underrepresented institutions. During the pandemic, the SCGSR program gave graduate awardees three options: delaying their start dates within a 12-month window of flexibility (normally 4-month window), conducting the research project via a hybrid mode, or modifying the project due to unique circumstances (such as proximity to graduation and family needs). The participants in these WDTS programs, their DOE

National Laboratory scientist mentors, and the host DOE national laboratories were very positive about the virtual internships and hybrid training experiences.

Reaching a New Energy Sciences Workforce (RENEW) — As part of the RENEW initiative, WDTS started and will continue working with SC research programs and DOE national laboratories on understanding barriers that prevent underrepresented and underserved groups from participating in WDTS workforce development programs. WDTS will develop strategies/mechanisms to address these barriers. The effort adopts an evidence-based approach, including listening sessions with MSIs, community colleges, and underrepresented groups, and examining application/participation data from multiple terms for areas of development in outreach, selection, and recruitment and retention. The group effort is ongoing, and the associated findings will be incorporated into the further development and implementation of the RENEW initiative, including the development of metrics for evaluation.

Albert Einstein Distinguished Educator Fellowship (AEF) — In FY 2021, one of the six WDTS-sponsored AEF participants held a WDTS office appointment. As part of the efforts to expand federal agency participation, the 2020-2021 cohort included placements at the Smithsonian Institution and the U.S. Geological Survey. WDTS established partnerships with other agencies that have expressed interest, including the U.S. Department of Homeland Security who will host a Fellow during FY 2022. During the pandemic, the AEF participants of the 2020-2021 cohort engaged with their host federal agencies or Congressional offices remotely and actively participated in the program's professional development activities.

National Science Bowl® — In FY 2021, more than 2,720 middle school students (from 355 schools) and 5,740 high school students (from 811 schools) participated in 108 regional competitions, with 44 middle school teams (211 students) and 64 high school teams (307 students) advancing to the National Finals in May 2021. Forty-nine U.S. States, the District of Columbia, and Puerto Rico were represented at regionals. More than 2,000 volunteers also participated in the local and national competitions. The National Science Bowl® Championship Finals are usually held at the Lisner Auditorium, located on the campus of The George Washington University, and feature a live web-streaming broadcast of the event; however, due to the COVID-19 pandemic, all the regional events and the National Finals were held virtually in 2021. The virtual events, particularly those at the regional competition level, enabled more schools from underrepresented and underserved communities to gain access and participation in the events. Due to the virtual format, more than 250 volunteers served as officials at competitions all over the country in addition to their local event.

Technology Development and On-Line Application — Due to the continued pandemic, significant adaptation of the WDTS Application and Review System (WARS) was made in FY 2020 and through FY 2021 to support the virtual internships, virtual mentoring, and collaborative research opportunities for students and faculty at DOE national laboratories. In FY 2021, a Data analysis And Visualization (DAV) capability was added within WARS to support evidence-based management and evaluation of programs. The DAV integration resulted in the synergy of data collection, data compilation, and data analysis in a streamlined process, which enabled the study from data across multiple attributes and years at various granularity levels. While the integration effort is still ongoing, the newly integrated feature has demonstrated its usefulness in providing annual program data summary reports to all host DOE national laboratories, compiling data and information to support both short-term and longer-term WDTS evaluation projects, and producing quick-turnaround data summary and evidence to address inquiries from public and DOE leadership and to support the Office of Management and Budget and Congressional briefings. In FY 2021, the technical development for an updated NSB online registration system to better support regional and national participants was completed, and the planning for the online management tool for the National Finals was initiated, which will have all travel, lodging, and logistical information accessible within WARS. SC went through a re-organization in FY 2020 and as the result, two new program offices were established (Isotope R&D and Production, and Accelerator R&D and Production). New WARS features were developed so the two new offices and their mission areas could be included in the SCGSR online application system. Additionally, the technical requirements and information architecture for a virtual National Science Bowl® training site on SC's website was continued. Additional development focused on the enhancement of a STEM activity reporting tool with inputs that include event type, sponsorship, targeted audience(s), amplification, and connection to the National STEM Education Plan per OSTP/NSTC/CoSTEM. The goal of this reporting tool is to establish a virtual workspace environment/portal for WDTS program collaboration with its program performers enabling labs to leverage, share, and use participant professional development content and capabilities.

Evaluation — In FY 2021, WDTS, in collaboration with the evaluation experts at the Oak Ridge Institute for Science and Education (ORISE), examined the existing evaluation activities and developed a work plan for building and sustaining a comprehensive evaluation portfolio to support evidence-based management and evaluation of workforce development programs and initiatives in WDTS and SC. Informed by the best practice in the STEM workforce development community, the plan clearly defined the goal, objectives, scope, and expectations for evaluation activities, and established the structure and mechanism for conducting regular short-term assessments of program outcomes and longer-term program impact studies. A list of candidates for short-term projects were developed, with a focus on understanding the information collected via pre- and post-survey about STEM skills/knowledge, career goals, and diversity and inclusion. In FY 2021, WDTS continued and made good process in the planning for the pilot longitudinal study with ORISE. The study was planned for longitudinal evaluation of the impacts of WDTS-sponsored undergraduate internship programs at DOE national laboratories. A proposed study plan has been developed and an internal view has been completed. The next step is to put the plan through a peer review process to gather feedback from external experts before finalizing it. In the meantime, initial efforts have been made to coordinate the study planning with the timeline needed for fulfilling the requirements of the Paperwork Reduction Act and human subjects related regulations. In support of the RENEW initiative, the knowledge, infrastructure, and capabilities built through the Evaluation activity and plan for the current WDTS programs will be leveraged to help set the goals and craft strategies for assessing the new activities, in coordination with SC research programs and offices.

Outreach — In FY 2021, WDTS, in collaboration with DOE national laboratories, completed the development of the DOE complex branded outreach materials. WDTS also supported the distribution of the materials to all DOE laboratories for outreach. In collaboration with ORISE, DOE laboratories, and higher education institutions, WDTS supported and co-hosted a series of virtual events (virtual career fairs and a virtual graduate student recruitment fair) to actively engage MSIs and individuals from underrepresented groups, and to enable equitable access to workforce training opportunities by all. WDTS also supported the development and updates of a comprehensive MSIs database that compiled the MSI designations, Carnegie Classification, institutional information from the Department of Education’s Integrated Post-Secondary Data System, and the contact information of key administrators (provost, deans, chairs/directors) for STEM programs/activities at all MSIs. The database also includes the non-MSI institutions that conferred a high level of Associate’s, Bachelor’s, and Graduate (Master’s and Doctoral) degrees to individuals from underrepresented race and ethnicity groups, including African Americans, Indigenous Americans, and Hispanics or Latinos. The MSIs database has been used to support the engagement efforts with MSIs and to promote diversity, equity, and inclusiveness in SC programs and DOE national laboratories.

DOE host laboratories and facilities executed projects aimed at recruiting a more diverse, equitable, and inclusive applicant and participant pool to WDTS laboratory-based training programs, targeting recruitment of individuals traditionally underrepresented in STEM and addressing needs to increase the applicant and participant pool diversity for the WDTS programs currently implemented at DOE host laboratories and facilities. As one outcome, a “Mini-Semester” experience that brings prospective applicants from underrepresented communities to DOE laboratories in a week-long immersion experience is proving successful and being adopted by increasing numbers of host labs. In FY 2021, Argonne National Laboratory, Brookhaven National Laboratory, Oak Ridge National Laboratory, the National Renewable Energy Laboratory, and Oak Ridge National Laboratory hosted students during their “Mini-Semesters.” A complex-wide virtual career fair was also held during which laboratories were able to access and recruit potential applicants using an online “recruitment booth” presence. WDTS also supported a virtual Graduate School Fair that gave student interns an opportunity to learn about graduate school programs and opportunities directly from university representatives.

WDTS completed the LEDP online system migration from the Office of Scientific and Technical Information to ORISE that integrates LEDP’s equipment catalog, applications, reviews, and processing into WDTS online systems. In FY 2021, the summary reporting capability per General Services Administration requirement was completed and the development of an online reporting tool in WARS for LEDP grantee institutions was started, which would collect information on how the donated equipment were used to support STEM education activities by the receiving institutions. By using established online resources, and their capabilities, this migration improves the client experience when accessing and applying for equipment, and improves management and execution of equipment transfer processes. Updates to eligibility and use

requirements better align LEDP to SC and DOE workforce mission priorities, as well as improves accountability for the excess donated equipment with the implementation of recipient reporting.

Workforce Development for Teachers and Scientists

Activities and Explanation of Changes

(dollars in thousands)		FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
Workforce Development for Teachers and Scientists	\$29,000	\$41,300	+\$12,300
Activities at the DOE Laboratories	\$22,100	\$34,300	+\$12,200
<i>Science Undergraduate Laboratory Internship (SULI)</i>	\$13,800	\$15,000	+\$1,200
Funding for SULI supports approximately 1,132 students.		The Request for SULI will support approximately 988 students with an increased allocation per participant. Over the years, the cost of supporting interns at DOE national laboratories has increased and the housing cost has more than doubled in many places. In addition, increased support is necessary to keep the program competitive in terms of the financial support (stipend and allowance for housing/travel) to individual interns in comparison to other internships programs (such as those supported by NSF and other agencies).	Funding will support 144 fewer students along with the increased allocation per participant.
<i>Community College Internship Program (CCI)</i>	\$1,900	\$2,200	+\$300
Funding for CCI supports approximately 173 students.		The Request for CCI will support approximately 167 students with an increased allocation per participant. Over the years, the cost of supporting interns at DOE national laboratories has increased and the housing cost has more than doubled in many places. In addition, increased support is necessary to keep the program competitive in terms of the financial support to individual interns in comparison to other internships programs (such as those supported by NSF and other agencies).	Funding will support 6 fewer students along with the increased allocation per participant.

(dollars in thousands)

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
National Science Bowl®	\$2,900	+\$100
Funding provides support to sponsor the virtual finals competition and provides central management of 116 virtual regional events, involving 14,300 students from all fifty states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.	The Request will provide support to sponsor the National Finals and provide central management of over 110 virtual and in-person regional events, involving more than 14,000 students from all fifty states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.	The long-time event venue for the National Finals, the National 4-H Conference Center in Chevy Chase, MD, which provided lodging, meals, and conference space, is closed and being sold. The new venue, for at least 2022 and 2023, is a similar, but more spacious, facility with equivalent security measures. While still much less expensive than using hotels, and much more secure for housing approximately 700 children, the new venue, in Leesburg, Virginia, has increased costs for conference space, taxes, and lodging. Instead of 4–5 students sharing a room, students will have their own small room which will help WDTS, and the venue implement health measures in compliance with the state’s COVID-19 guidelines.
Technology Development and On-Line Application	\$700	\$700
Funding continues development and operation of the on-line systems.	The Request will continue development and operation of the on-line systems and support new development to meet the evolving needs of the programs.	No change.
		\$ —

(dollars in thousands)

FY 2021 Enacted	FY 2023 Request	Explanation of Changes FY 2023 Request vs FY 2021 Enacted
Evaluation Funding continues support for evaluation activities, including data archiving, curation, and analyses.	\$600 The Request will support a comprehensive evaluation portfolio with short- and longer-term projects for assessing WDTS program performance and producing knowledge to inform evidence-based management and evaluation practice.	\$600 No change.
Outreach Funding supports outreach activities to the scientific community targeting Office of Science mission-driven disciplinary workforce needs in the next 5 to 10 years, including additional outreach activity proposal solicitations from DOE host labs and facilities. Support continues for the LEDP program.	\$1,500 The Request will support outreach activity proposal solicitations from DOE host labs and facilities. WDTS will maintain support of activities such as those that promote diversity, equity, and inclusion; and/or prioritize recruitment of STEM students to DOE research and development workforce mission-relevant fields of study, and particularly to fields related to SC research programs. Support continues for the LEDP program.	\$1,500 No change.

**Workforce Development for Teachers and Scientists
Funding Summary**

(dollars in thousands)

FY 2021 Enacted	FY 2022 Annualized CR	FY 2023 Request	FY 2023 Request vs FY 2021 Enacted
29,000	29,000	41,300	+12,300
29,000	29,000	41,300	+12,300

Other

Total, Workforce Development for Teachers and Scientists