# Science Undergraduate Laboratory Internships (SULI) **Application Assistance Workshop**

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#### Breakthroughs at the DOE National Laboratories

- Advanced Supercomputing-The world's fastest supercomputer, Frontier helped researchers simulate synthesizing a material harder and tougher than a diamond or any other substance on Earth.
- Put the Jolt in Volt- Chevy's Volt would not be able to cruise on battery power were it not for the advanced cathode technology that emerged from a National Lab (specifically, Argonne National Lab).
- **Decoded DNA**-In 1990, the National Labs joined with the National Institutes of Health and other laboratories to kick off the Human Genome Project, an international collaboration to identify and map all the genes of the human genome.
- **Brought the web to the U.S.**-National Lab scientists, seeking to share particle physics information, were first to install a web server in North America, kick-starting the development of the worldwide web as we know it.
- World's First Video Game- Before there was Xbox and PlayStation, there was Tennis for Two, which may have been the first video game ever created, Brookhaven National
  Lab scientists built the pioneering system to entertain visitors to the Lab in 1958.
- Launched the LED lighting revolution-In the 1990s, scientists at a National Lab saw the need for energy-efficient solid-state lighting and worked with industry to develop white LEDs. Today, white LEDs are about 30 percent efficient, with the potential to reach 70 percent to 80 percent efficiency.
- 3D Printing Bigger and Better-A large-scale additive manufacturing platform developed by a National Lab and an industry partner printed 3D components 10 times larger and 200 times faster than previous processes. So far, the system has produced a 3D-printed sports car, SUV, house, excavator and aviation components.
- Discovered 22 elements To date the National Labs have discovered: technetium, promethium, astatine, neptunium, plutonium, americium, curium, berkelium, californium, einsteinium, fermium, mendelevium, nobelium, lawrencium, rutherfordium, dubnium, seaborgium, flerovium, moscovium, livermorium, tennessine and oganesson.
- Noble Prizes-There are 118 Nobel Laurates associated with U.S. Department of Energy. After receiving the Nobel Prize, 70% DOE scientists remain affiliated with the National Labs.

Additional breakthroughs are available at <a href="https://www.energy.gov/downloads/75-breakthroughs-americas-national-laboratories">https://www.energy.gov/downloads/75-breakthroughs-americas-national-laboratories</a>.





Office of

Nearly 29,000 Researchers Supported at >300 Institutions and 17 DOE Labs

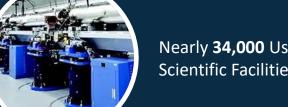
#### **Office of Science Mission**

Delivery of scientific discoveries and major scientific tools to:

- (1) Transform our understanding of nature and
- (2) Advance the energy, economic, and national security of the United States.



Steward 10 of the 17 DOE National labs



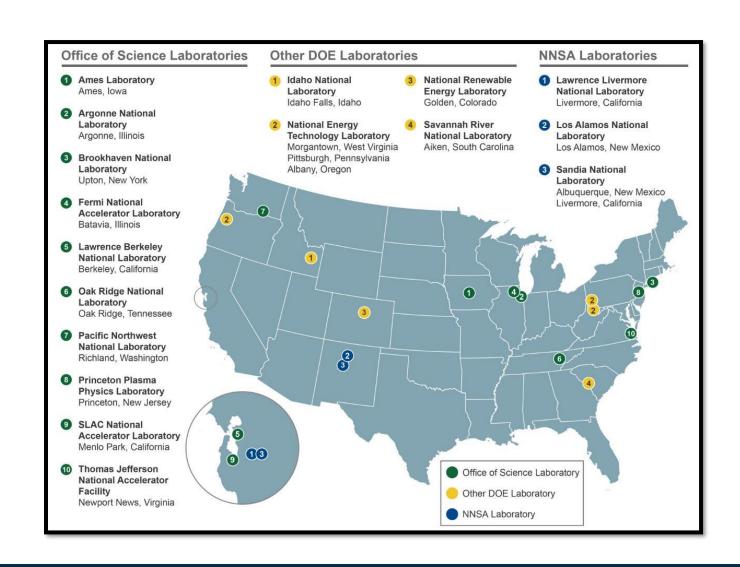
Nearly **34,000** Users of **28** SC Scientific Facilities





#### **DOE National Laboratories**

- Created as a home for large-scale, costly scientific facilities that universities cannot afford.
- The 17 DOE National Laboratories provide the Nation with strategic scientific and technological capabilities.
- The Office of Science stewards 10
   DOE laboratories that provide
   essential support to the missions of
   the SC science programs.
- VFP is hosted on-site at the host DOE National Laboratory.



#### **DOE Office of Science – Scientific User Facilities**

- The DOE's Office of Science maintains and operates 28 user facilities at DOE national laboratories across the country.
- The user facilities include advanced supercomputers, particle accelerators, large x-ray light sources, neutron scattering sources, specialized facilities for nanoscience and genomics.
- The user facilities are shared resources available for faculty and students to use. Access is available on competitive basis using peer review.



# The Office of Science Research Portfolio <a href="https://science.osti.gov/Programs/">https://science.osti.gov/Programs/</a>

## Advanced Scientific Computing Research

 Delivering world leading computational and networking capabilities to extend the frontiers of science and technology

#### **Basic Energy Sciences**

 Understanding, predicting, and ultimately controlling matter and energy flow at the electronic, atomic, and molecular levels

#### Biological and Environmental Research

• Understanding complex biological, earth, and environmental systems

#### **Fusion Energy Sciences**

• Building the scientific foundations for a fusion energy source

#### **High Energy Physics**

• Understanding how the universe works at its most fundamental level

#### **Nuclear Physics**

• Discovering, exploring, and understanding all forms of nuclear matter

#### Isotope R&D and Production

• Supporting National Preparedness for isotope production and distribution during national crisis

#### **Accelerator R&D and Production**

 Supporting new technologies for use in SC's scientific facilities and in commercial products

#### WDTS Mission: Sustaining a highly skilled STEM talent pool for a strong future DOE workforce

Supporting best-in-class, hands-on training for STEM workforce



Delivering ~1,200 undergraduate internships annually

Elevating graduate training and research

Supporting non-R1/R2 faculty to collaborate at DOE Labs

Inspiring K-12 students and supporting STEM teacher leaders nationwide

## **Science Undergraduate Laboratory Internships (SULI)**



Prepare for STEM careers through authentic research experiences



Hands-on research, discovery learning, and professional development guided by mentors



Open to undergraduate students and recent graduates; Stipend of \$650/week + round trip travel to host laboratory + lodging allowance



Fall, Spring, Summer Terms

Learn more about the program and access the application by scanning





#### **Eligibility Requirements**

- Citizenship-Must be a United States Citizen or Lawful Permanent Resident at the time of applying.
- Age-Must be 18 years or older at the time the internship begins.
- **Enrollment**-Must be currently enrolled as a full-time student at an accredited two-year or four-year college and completed at least one semester at the time of applying.
- **High School Diploma or GED** Must have earned a high school diploma or General Educational Development (GED) equivalent at the time of applying.
- **Grade Point Average (GPA)**-Must have an undergraduate cumulative minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale for all completed courses taken as a matriculated student at the applicant's current (or recently-graduated) institution and at any undergraduate institutions attended as a matriculated postsecondary student during the 5 years preceding the start of the current enrollment. *College courses completed during high school are not required to be reported.*
- Coursework-Must have completed at least 6 credit hours in science, mathematics, engineering, or technology course areas, and completed at least 12 credits hours towards a degree
- **Participation and Application Limit**-Applicants are limited to participation in SULI program to no more than two internships. Applicants can apply to the SULI program a maximum of four times.

Before you apply, verify you meet the "all" eligibility requirements.

## **Key Dates**

SULI Internship Term:	Summer 2026
On-line Application Opens	October 23, 2025
Applications including recommendations due	January 7, 2026 5:00 PM EST
Offer Notification Period Begins on or around	February 4, 2026
All DOE Offers and Notifications Complete	On or around April 15, 2026

\*\*\*The Application System closes at 5:00 PM Eastern Time. Materials will not be accepted after the system has closed.

#### **Application Requirements**



- All applications must be completed online through the <u>online application system</u>. You will need to create an account to access the online application system.
- Only complete applications submitted by the deadline will be considered for evaluation and placement. As a reminder, letters of recommendations are a component of a completed application.
- The application system is compatible with smartphones. Completion of applications and letters of recommendation requires use of a computer and web browser.

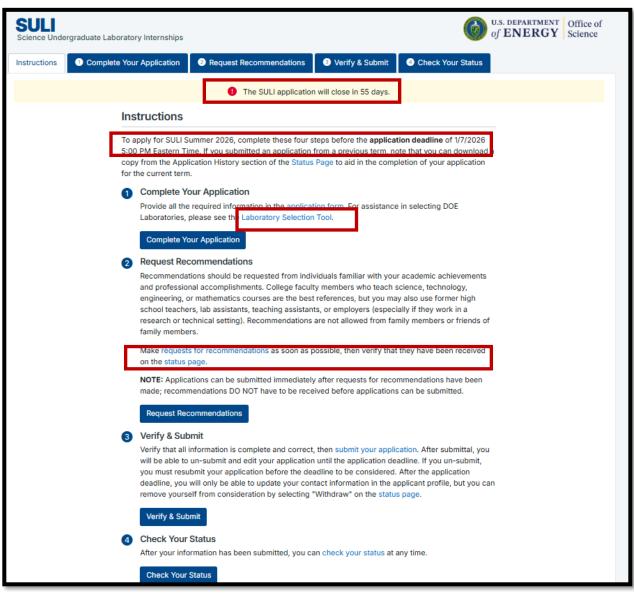
Completed applications must be submitted by 5:00 p.m. EDT on January 7, 2026 through the online application system.

## **Navigating the Application**



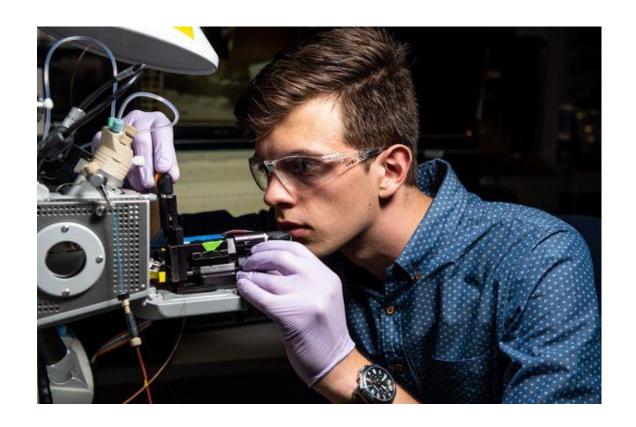
https://apps.orau.gov/suli/Account/Login





#### Components of the SULI Application Menu

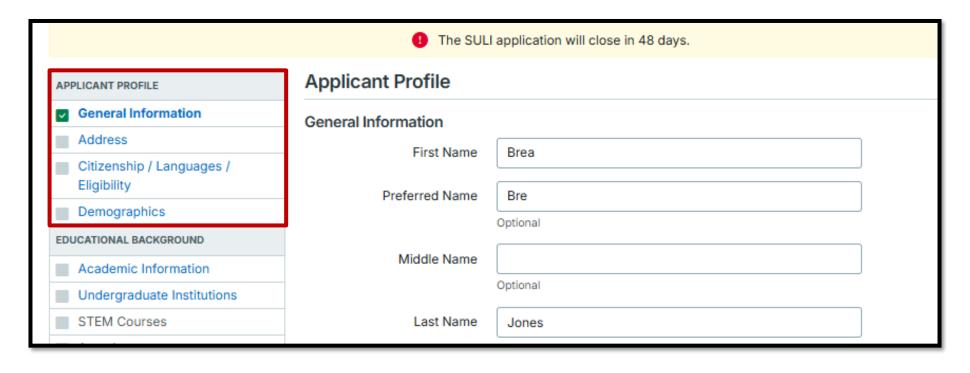
- Applicant Profile
- Educational Background
- Work Experience and Skills
- Program Information
- Essays
- Letters of Recommendation



## **Applicant Profile**



## **Applicant Profile**



 Will you be 18 years or older by the start of the internship?

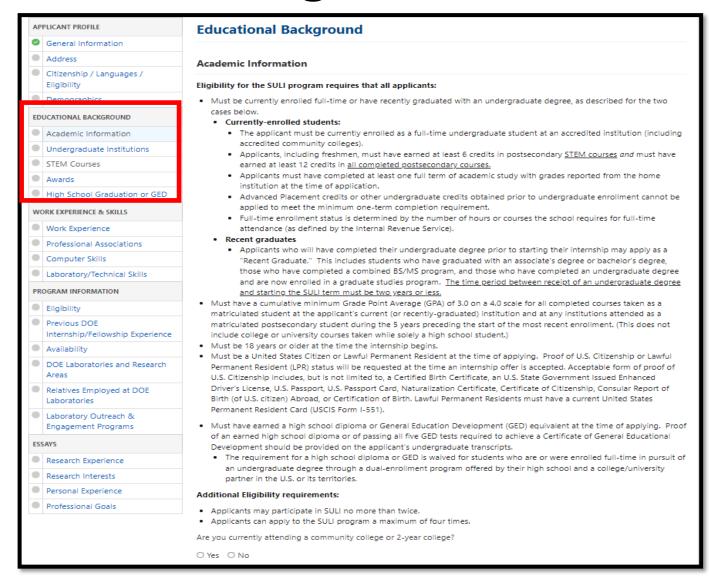


- Are you a U.S. citizen or U.S. permanent resident?
- What is your primary language?

# **Educational Background**

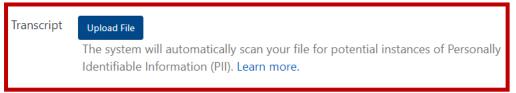


## **Educational Background**



## **Educational Background: Submitting Transcripts**

- Eligibility requires submission of the transcript from an applicant's current institution. This must be the most recent transcript available at the time of application. Recent is defined as the transcript printed or accessed no earlier than the opening date of the application or October 23, 2025.
- Upload a transcripts in Pdf format = your current transcript + transcripts from each postsecondary institution enrolled within the last 5 years of most recent enrollment.

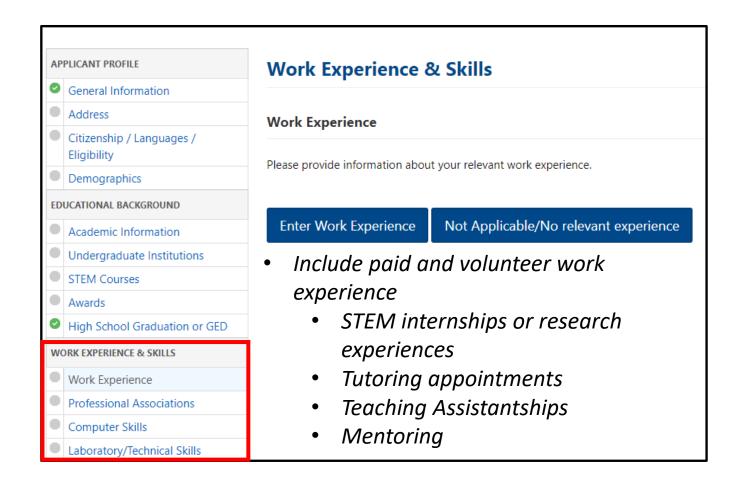


- Redact personal identifiable information (PII) such as full date of birth and social security number.
- Ensure the transcript includes the applicant's name, institution name, and course names and grades and cumulative GPA.
- Unofficial transcripts are acceptable for submission to the application system if they contain applicant's name, institution name, and course names and grades, and cumulative GPA. Otherwise, the applicant must upload an official transcript.
- Watch this <u>video</u> to assist with transcript uploads.

# Work Experience



## Work Experience and Skills: Work Experience



## **Program Information**



From left: **PPPL** physicist Ahmed Diallo, SULI student Jalal Butt, and PPPL physicist Egemen Kolemen. Photo by Raphael Rosen.

From https://www.pppl.gov/news/press-releases/2018/08/undergraduate-students-extoll-benefits-national-laboratory-research

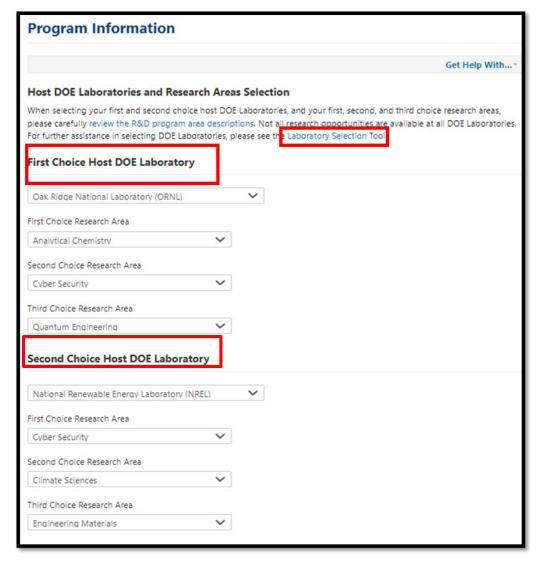
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# Program Information: DOE Laboratories and Research Area Selection

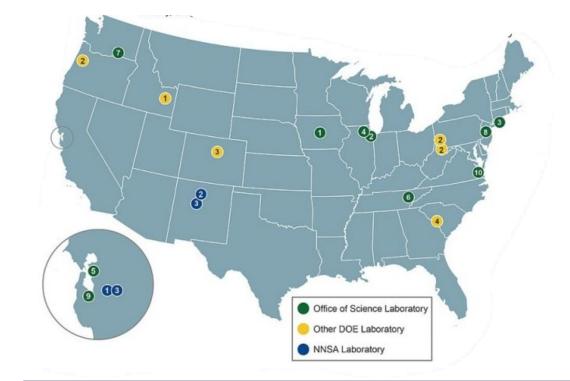
- Applicants must select a first-choice and second-choice laboratory to be considered for placement. These laboratories will conduct a merit review for consideration of a placement.
- Applicants are encouraged to review laboratory websites.
- Assess the Laboratory Selection Tool to learn the success rates of eligible applicants by lab.
- Double check your lab selections before submitting your application! WDTS is unable to switch your laboratory preferences.

Helpful Tip: Contact technical staff at the national laboratories to learn more about their research. Don't be shy!



Summer 2026 Term: Participating Host DOE Laboratories

- Ames Laboratory
- Argonne National Laboratory
- Brookhaven National Laboratory
- Fermi National Accelerator Laboratory
- General Atomics/DIII-D Facility
- Idaho National Laboratory
- Lawrence Berkeley National Laboratory
- Lawrence Livermore National Laboratory
- Los Alamos National Laboratory
- National Energy Technology Laboratory
- National Renewable Energy Laboratory
- Oak Ridge National Laboratory
- · Pacific Northwest National Laboratory
- Princeton Plasma Physics Laboratory
- Sandia National Laboratory CA
- Sandia National Laboratory NM
- Savannah River National Laboratory
- SLAC National Accelerator Laboratory
- Thomas Jefferson National Accelerator Facility



Helpful Tip: Review laboratory websites to learn about ongoing research efforts. Do your homework to assist with completing the essay component of the application!

## **Program Information: Research Area Selection**

#### Research Areas for SULI

Select The Research Areas for Your Laboratory:

- Accelerator Physics/Science
- 2. Artificial Intelligence (AI)-Data Intensive
- 3. Al-Foundation Model Development/Enhancement
- 4. Al-Engineering Research to Enable Al Systems
- 5. AI-High Performance Computing
- Al-Testing or Verification
- 7. Al Research in One or More Problem Domains
- 8. Analytical Chemistry
- Astronomy/Astrophysics
- 10. Atomic, Molecular, and Optical Sciences
- 11. Biochemistry
- Bioinformatics
- Biophysics
- Catalysis Science
- 15. Climate Sciences
- 16. Computational Biology
- 17. Computational Sciences
- 18. Computer Science and Technologies
- 19. Condensed Matter Physics
- 20. Casmalagy
- 21. Cyber Security
- 22. Ecology
- 23. Engineering Aeronautical
- 24. Engineering Biological (nonmedical)
- 25. Engineering Chemical
- 26. Engineering Civil
- 27. Engineering Computer
- 28. Engineering Electrical
- 29. Engineering Environmental
- 30. Engineering Industrial
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- 31. Engineering Materials
- 32. Engineering Mechanical
- 33. Engineering Mining
- 34. Engineering Nuclear
- 35. Engineering Operations/Systems
- 36. Engineering Optical
- 37. Engineering Petroleum

- 38. Engineering Power
- 39. Environmental Management
- 40. Environmental Sciences
- 41. Fusion Energy Science and Engineering
- 42. Fusion Energy Enabling Research and Development
- 43. Fusion Materials and Nuclear Science
- 44. Plasma and Fusion Science
- 45. Genetics/Genomics
- 46. Geochemistry
- 47. Geological Sciences
- 48. Geophysics
- 49. High Energy Physics
- 50. Information Sciences
- 51. Inorganic Chemistry
- 52. Materials Sciences
- 53. Mathematics
- 54. Molecular Biology
- 55. Nanoscience
- 56. Nanotechnology
- 57. Nuclear Chemistry
- 58. Nuclear Physics
- 59. Nuclear Science
- 60. Oceanography
- 61. Organic Chemistry
- 62. Particle Astrophysics
- 63. Physical Chemistry
- ,
- 64. Plasma and Fusion Sciences
- 65. Quantum Communication
- 66. Quantum Computing
- 67. Quantum Engineering
- 68. Quantum Information Science-Other
- 69. Quantum Materials
- 70. Quantum Sensing
- 71. Quantum Simulation
- 72. Renewable Energy Sciences and Technologies
- 73. Structural Biology
- 74. Theoretical Chemistry

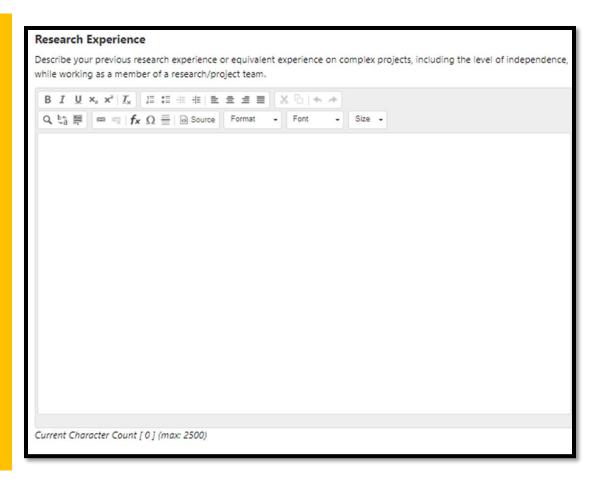


# Essays



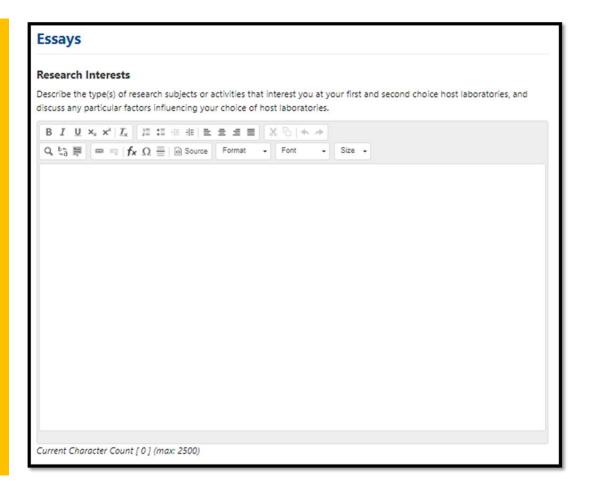
#### **Essay 1: Research Experience**

- Describe all your prior research including paid and unpaid research opportunities
- Special projects
- Skills obtained during coursework count!
- Note: Previous research experience is not required to apply for SULI!



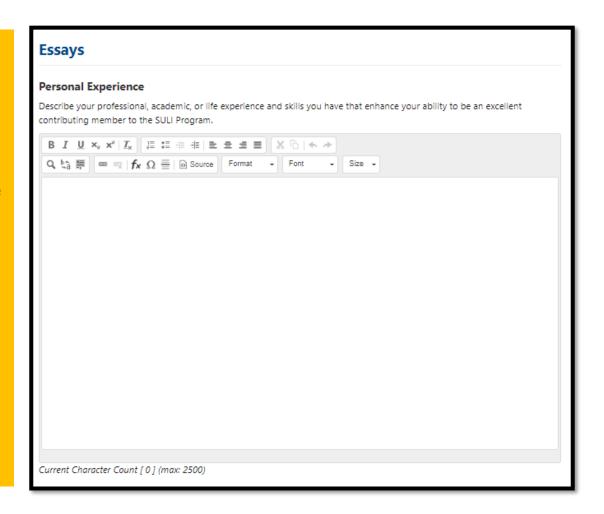
#### **Essay 2: Research Interests**

- Which labs are you interested in conducting research? How does your research interests align with the research areas of your preferred labs?
- Share extensive details about your research interests.
- Major problems/topics you want to focus on in your research.
- How does your research contribute to the field?



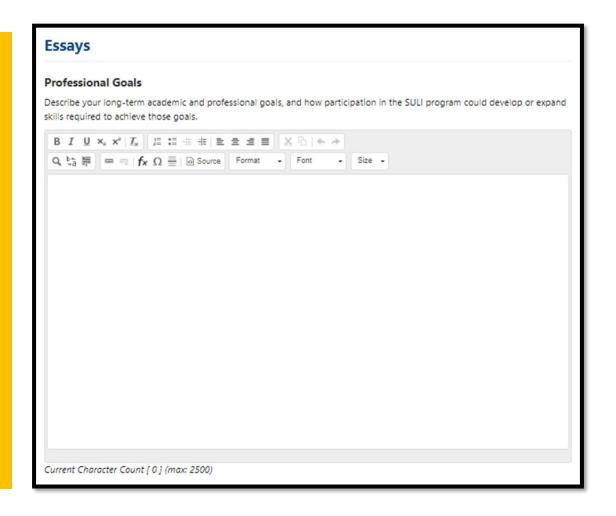
#### **Essay 3: Personal Experience**

- Share personal experiences for choosing your field or research.
- Think of inspiration and life experiences, and how they've led to you applying to SULI.
- Include unique qualities which may influence your participation in SULI such as being a first-generation college student, nontraditional student, leadership skills, etc.
- Describe things which excite you about your field.
- Address any extenuating circumstances which may have had an impact on your academic performance.



## **Essay 4: Professional Goals**

- How will the program advance your career and professional goals?
- What are your career interests?
- Do you plan to pursue a graduate degree?
- It's acceptable to mention that this program will help determine if a career in a national lab is right for you!



## Letters of Recommendation



#### **Guidance for Letters of Recommendation**

- A completed SULI application requires recommendations from two individuals familiar with the applicant's education, training, experience, aptitude, or promise relevant to the SULI Program. Note: Family and friends of family are not allowed to serve as authors of recommendations.
- An applicant will be asked to provide contact information for individuals indicated in the online application system. Applicants are encouraged to make the requests for recommendations as soon as possible.
- Letter of reference must be submitted through the application portal by the application deadline or 5:00 p.m. Eastern Daylight Time on January 7, 2026.

Helpful Tip: Ask letter writers may they compose a glowing letter pertaining to your STEM background ahead of the program deadline.

# Resources To Assist With Application Components

- Application <u>checklist</u>
- Submitting <u>transcripts</u>
- Tips for preparing <u>essays</u>
- Requesting <u>letters of reference</u>
- FAQ's-https://science.osti.gov/wdts/suli/Frequently-Asked-Questions

## **Application Checklist**

U.S. DEPARTMENT OF ENERGY  Office of Science	_	SULI Application Checklist Interested in applying to SULI but don't know where to start? Started an application but feeling overwhelmed? Follow this checklist and you'll finish your application in no time!
SELECT A HOST DOE	1	Read overviews of each lab/facility.
	2	For each lab/facility you are interested in, explore ongoing research through the lab's website.
	3	Pick your top 1-2 labs/facilities!
BON	US	Email 1 or 2 researchers to describe why you are interested in working with them and ask if they are taking interns through SULI.
ASK FOR RECOMMENDATIONS	1	Identify 2 or 3 people who can speak to your education and experience relevant to SULI. For example: current or former employers, professors, or teaching assistants.
	2	Ask these individuals for recommendations as soon as possible after starting your SULI application.
	3	Check the <u>online application system</u> to ensure the recommendations are submitted before the deadline.
BONUS		Watch this YouTube video for more tips!
PREPARE YOUR ESSAYS	1	The 1st essay asks about your research experience - classroom projects and lab experience count!
	2	The 2nd essay asks for your research interests - use what you learned while picking your top host labs/ facilities to answer this question.
	3	The 3rd essay asks for your personal experience - share your skills or experience, outside of research, that are applicable to SULI. Think of your employment, academic, extracurricular, and life experiences, and how they've led to you applying to SULI today.
	4	The 4th essay asks for your professional goals - describe how you hope the SULI internship will advance your current academic or career goals. Figuring out whether you like research is a valid goal!
BON	US	Watch this YouTube video for more tips on writing the 4 essays!
UPLOAD YOUR	1	Your current transcript plus the transcript from any school you attended as a postsecondary student in the last 5 years must be uploaded to the online application system.
TRANSCRIPT(S)	2	Your transcript(s) must have your name, school name, your cumulative GPA, and all course names and grades. You may add your name and school name electronically or in writing.
	3	Your birth date and social security number must NOT be visible on your transcript(s). Check every page and fully cover any instances of your birth date or social security number.
BON	US	Watch this YouTube video for full instructions on what transcripts are required for a SULI application and how to upload them.

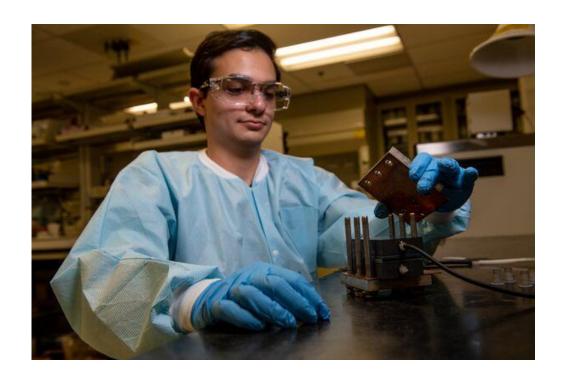
#### **Selection and Notification**

- Eligibility and Compliance Check-All applications must pass eligibility and compliance check.
- Merit Review- Assessment by first and second choice labs selected by the applicant.
  - Applications will be assessed based upon performance in completed academic coursework, strength of recommendations letters; expressed scientific or technical interests; and the applicant's background, experience, accomplishments, and interests as they relate to the host laboratories.
- **Notifications**-Offers made by a host Laboratory Education Director via e-mail. Applicant has 10 calendar days to respond to offer. **Only one offer will be extended to an applicant.**

All appointments are contingent upon proof of citizenship or citizenship status and the outcome of a formal background check.

#### **Participant Obligations**

- Commit to 16-weeks (40 hrs/week) in the program.
- Complete the placement on-site at the host DOE national lab.
- Maintain health insurance during the appointment.
- Complete deliverables by deadline
  - Pre-survey
  - Post-survey
  - Abstract
  - Research paper (6-8 pages)
  - Peer review
  - Oral presentation
- Maintain professional behavior.



#### **Benefits to Participating in SULI**

- Contribute to exciting, real world, innovative, ongoing projects in the DOE national laboratories.
- Build professional networks with scientist and engineers.
- Opportunity to establish a mentor.
- Enrichment opportunities through professional development and technical seminars.
- Enhance science communication skills.
- Decide if a career in research is right for you.
- Land a permanent position.

# Join Us for SULI Alumni Panel Discussion and Virtual Office Hours!!

Workshop: Alumni Panel Discussion

Date: December 4, 2025, at 2:00 p.m. (ET)

**Office Hours** 

**Date:** December 3, 10, & 17, 2025 at 2:00 to 3:00 pm (ET)

#### Who Can Attend?

- Applicants
- Letter of Recommendation Writers

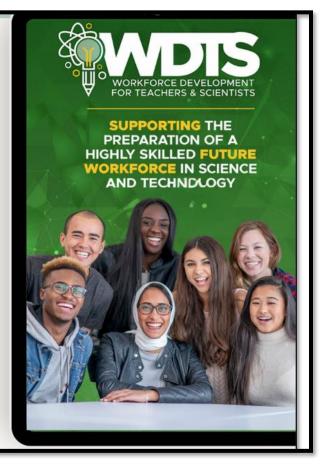
More info including registration is available on the SULI website.

#### **Virtual Office Hours!**

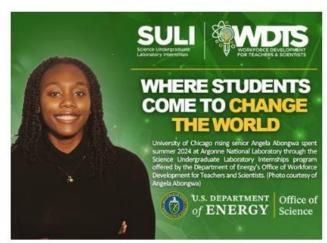


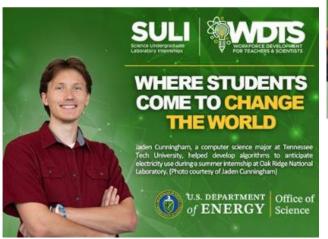
Thinking about applying for the Science Undergraduate Laboratory Internships (SULI) or the Community College Internships (CCI) programs?

Got questions? Applicants and letter of recommendation writers are invited to attend office hours to answer administrative questions such as those pertaining to uploading transcripts, submitting letters of recommendation, and general inquiries.



#### **SULI Alumni Laboratory Story Series**









Interested in learning more about SULI Alumni? Visit <a href="https://science.osti.gov/wdts/WDTS-Lab-Stories-and-Participant-spotlights">https://science.osti.gov/wdts/WDTS-Lab-Stories-and-Participant-spotlights</a>.

Spotlights.

#### Don't forget!!

- Application deadlines and requirements are firm, including receipt of recommendations (no exceptions!)
- The application deadline is January 7, 2026 at 5:00 p.m. ET.
- Plan early. Submit your application ahead of the deadline.
- Contact your reference letter writers as soon as possible. It is the applicant's responsibility to ensure recommendations are submitted by the deadline.
- Do your research! Visit the DOE National Laboratories and host sites webpages to make a more informed decision about your lab preferences.
- Technical support for the online system is available during regular business hours.
- Only complete, compliant, and eligible applications are reviewed by self-selected first and second-choice labs.
- Only one offer will be extended to an applicant during an application period...
- Send us a message if you have questions. Contact sc.suli@science.doe.gov.



# Connect with us.....

- After this session, e-mail us <u>sc.suli@science.doe.gov</u> if you have questions.
- Office of Science Workforce Development for Teachers and Scientists on LinkedIn.

More info is available on the SULI website or scan the QR Code.









# Thank you!