Community College Internships (CCI) Application Assistance Workshop

Breakthroughs at the DOE National Laboratories

- Advanced Supercomputing -The National Labs operate some of the most significant high performance computing resources available, including 32 of the 500 fastest supercomputers in the world. El Capitan is currently the world's fastest supercomputer and is owned by the U.S. DOE.
- 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 of 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.
- Largest Digital Camera The SLAC National laboratory earned a Guinness World Record for developing the largest digital camera known as the LSST Camera.
- World's First Video Game- Before there was PlayStation or Nintendo, 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.
- Nuclear Physics PhDs Research-One-third of all nuclear physics PhDs awarded in the U.S. are based on research happening at Thomas Jefferson National Accelerator Laboratory.
- **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.





Office of Science

More than **29,400** researchers supported at more than 300 institutions and 16 DOE national laboratories

Our Mission:

Deliver scientific discoveries and major scientific tools to transform our understanding of nature and advance the energy, economic, and national security of the United States.



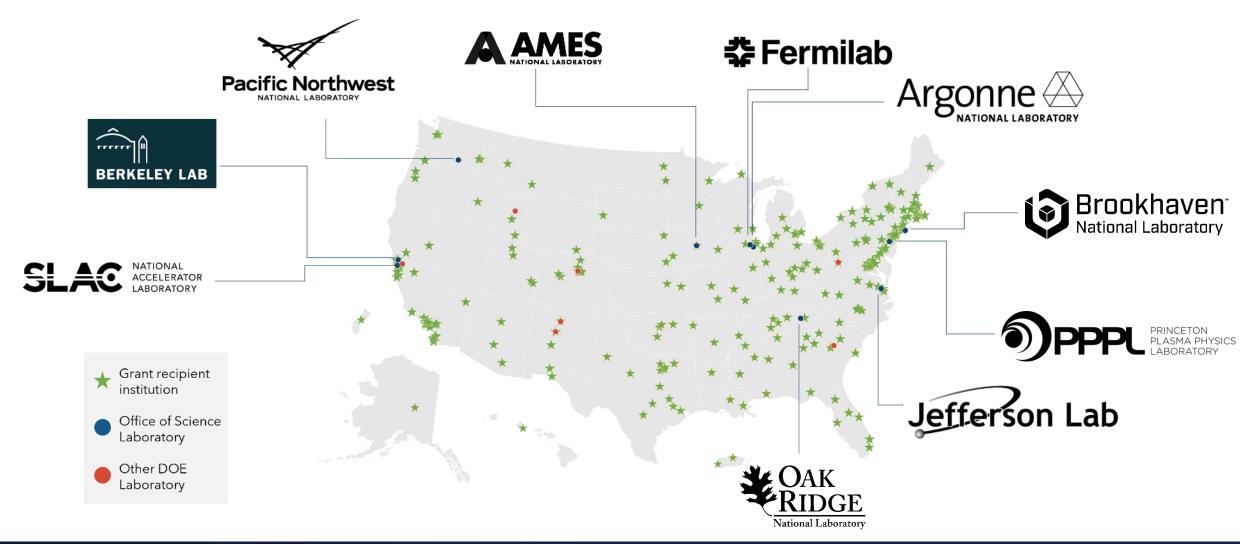
Steward 10 of the 17 DOE national laboratories

Nearly 40,000 users of 28 Office of Science scientific

user facilities

\$8.2B (FY 24 enacted)

Where we are, who we support



Office of Science User Facilities

FY 2024
28 scientific
user facilities
nearly 40,000 users





























































Driving Discovery Science for the Nation

Discovery science supported by the Office of Science builds the foundation for ensuring America's future prosperity and competitiveness by addressing its energy, environment, and national security challenges.

Fostering Great Minds and Great Ideas

The Office of Science addresses the world's most challenging scientific problems, supporting innovation from America's brightest minds, across multiple disciplines, and at universities, DOE's national laboratories, and other research institutions.

Providing Unique, World-Class Facilities

The Office of Science stewards a suite of scientific user facilities that provide the broad scientific community with world-leading capabilities for research - from physics, materials science, and chemistry to genomics and medicine.

- Workforce Development is a pillar for DOE Science and Technology Mission
- DOE National Laboratories provide unique, world-class research and training environment for science and technology leaders for tomorrow
- Engaging students, educators, institutions, and communities from a spectrum of backgrounds DOE, SC, and WDTS opportunities

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



Elevating graduate training and research

Supporting non-R1 faculty to collaborate at DOE Labs

Inspiring K-12 students and supporting STEM teacher leaders nationwide

Community College Internships (CCI)

- Prepare for technical careers and/or pursue 4-year degrees
- Hands-on, discovery learning, and professional development guided by mentors.
- Benefits: \$650/week stipend, travel and lodging assistance
- Program Offered: Spring, Summer, Fall
- Fall 2024 Term Placements: ~30

Learn more about CCI and apply at:





Image Courtesy of Berkeley Lab

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 part-time or full-time student at a community college or accredited two-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 2.7 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. Note: Applicants with a GPA of 2.7 to 2.95 must submit a waiver statement during the application to be considered.
- **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 CCI program to no more than two internships. Applicants can apply to the CCI program a maximum of three times.

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

Eligibility requirements: https://science.osti.gov/wdts/cci/Eligibility



Key Dates

CCI Internship Term:	Fall 2025
On-line Application Opens	March 13, 2025
Applications including recommendations due	May 21, 2025 5:00 PM EST
Offer Notification Period Begins on or around	June 4, 2025
All DOE Offers and Notifications Complete	On or around August 5, 2025

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

Application Requirements

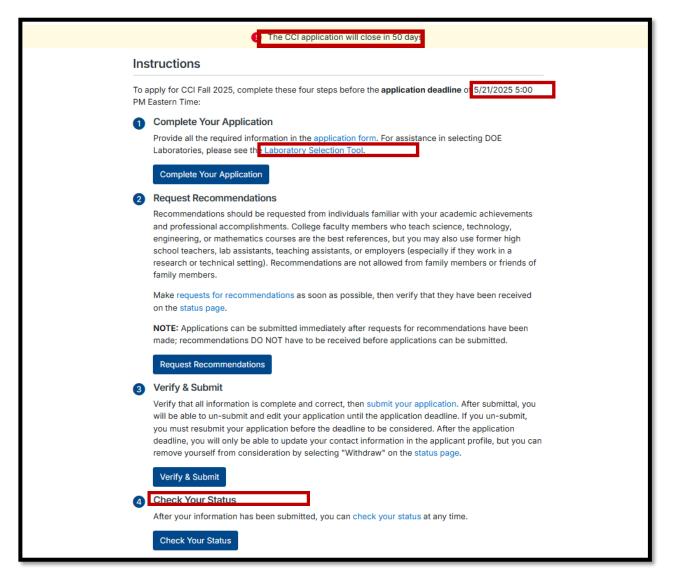


- All applications must be completed online through the <u>online application system</u>. You will need to create an account to access the online application system.
- Only complete applications submitted by the deadline will be considered for evaluation and placement. As a reminder, letters of recommendations 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 May 21, 2025 through the online application system.

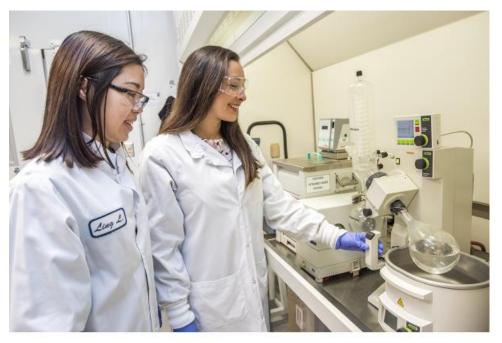
Navigating the Application

application materials
must be submitted
through the Application
Portal:
https://apps.orau.gov/cci/Account/Login



Components of the CCI Application Menu

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

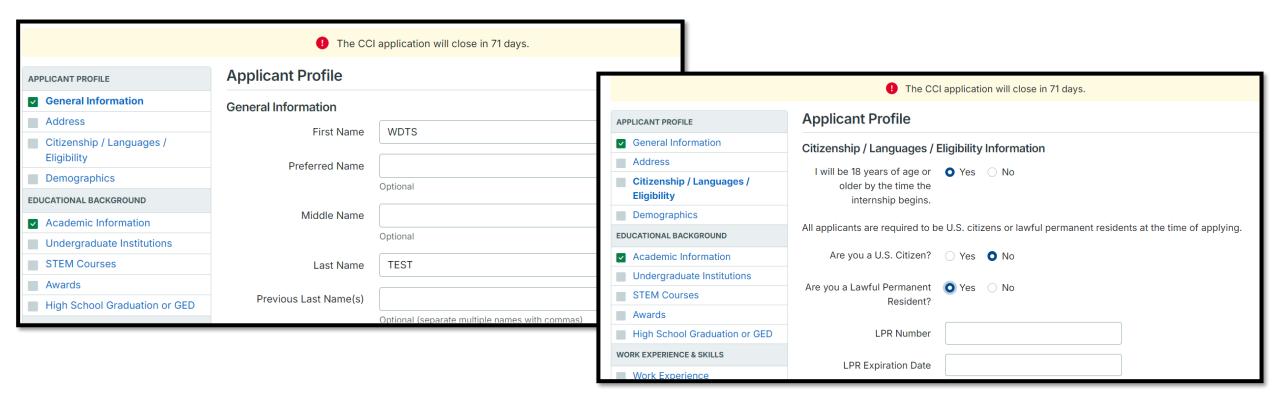


Credit: Lawrence Berkeley National Laboratory

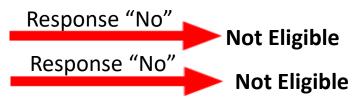
Applicant Profile



Applicant Profile



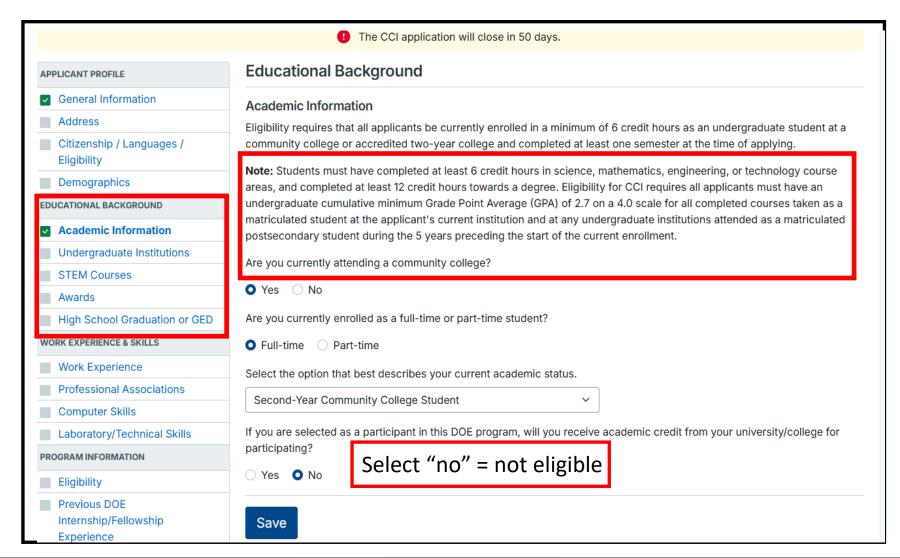
- Name must match that on transcript and letters of recommendation
- Will you be 18 years or older by the start of the internship?
- Are you a U.S. citizen or U.S. permanent resident?



Educational Background

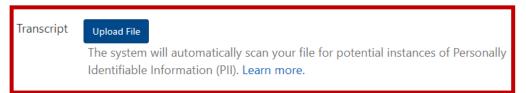


Educational Background



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 March 13, 2025.
- Upload a transcript in Pdf format in the application system for 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.

Education Background: Awards

- Include all awards you received during your academic career. Examples
 of awards may include:
 - Dean's List
 - Membership in Honor's Society
 - Merit Scholarships
 - Honors Program
 - Winner of contests, challenges, and tournaments



Lab Director Chi-Chang Kao presents the Ernest Coleman Award to SULI intern Anna Leskova.

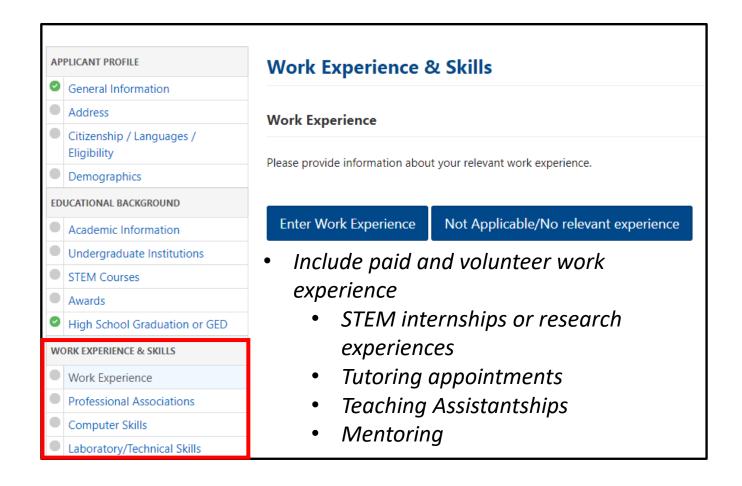
SLAC

Accessed 1/9/2019 at https://www6.slac.stanford.edu/news/2016-08-26-undergraduate-interns-learn-summer-research.aspx

Work Experience

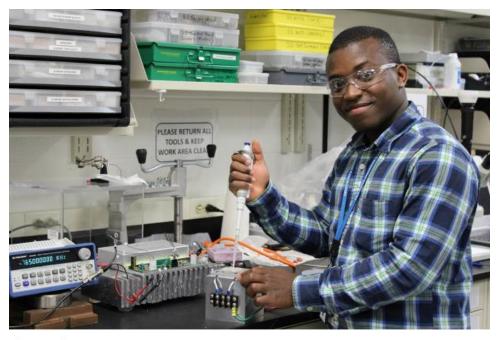


Work Experience and Skills: Work Experience



Work Experience and Skills: Laboratory and Technical Skills

- Describe your research and technical skills in detail
- The skills may be obtained through employment or coursework.



Credit: Oak Ridge National Laboratory



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-studentsextoll-benefits-national-laboratory-research Accessed 1/9/2019



Office of Science

Energy.gov/science

Fall 2025 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 Renewable Energy Laboratory
- Oak Ridge National Laboratory
- Pacific Northwest National Laboratory

- ▲ Princeton Plasma Physics Laboratory
- ▲ Thomas Jefferson National Accelerator Facility

Selecting a Host DOE Lab: https://science.osti.gov/wdts/cci/How-to-Apply/Selecting-a-Host-DOE-Laboratory

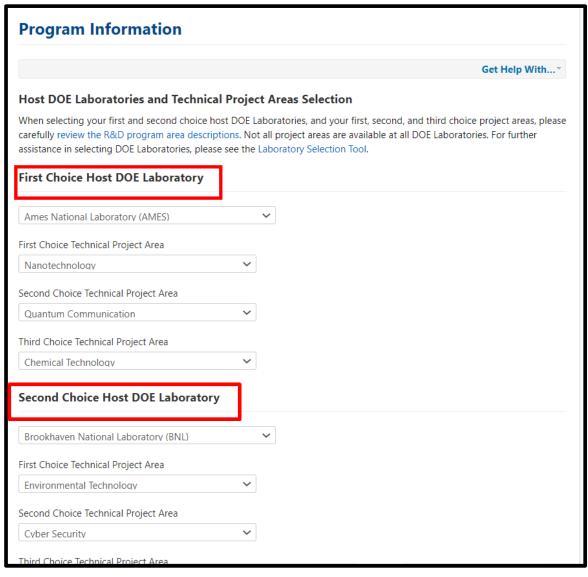
Technical Project Areas for CCI

- 1. Accelerator Engineering and Technology
- Biotechnology (nonmedical)
- Chemical Analysis and Instrumentation
- Chemical Technology
- Computer Technology
- Cyber Security
- 7. Energy Technology Bio
- 8. Energy Technology Buildings
- Energy Technology Fossil
- 10. Energy Technology Nuclear
- 11. Energy technology Solar
- 12. Energy Technology Transportation
- 13. Energy technology Vehicles
- Energy Technology Wind
- 15. Engineering Technology Aeronautical
- 16. Engineering Technology Biological (nonmedical)
- 17. Engineering Technology Chemical
- 18. Engineering Technology Civil
- 19. Engineering Technology Computer
- 20. Engineering Technology Electrical
- 21. Engineering Technology Environmental
- 22. Engineering Technology Industrial

- 23. Engineering Technology Materials
- 24. Engineering Technology Mechanical
- 25. Engineering Technology Mining
- 26. Engineering Technology Nuclear
- 27. Engineering Technology Operations/Systems
- 28. Engineering Technology Optical
- 29. Engineering Technology Petroleum
- 30. Engineering Technology Power
- 31. Environmental Management
- 32. Environmental Technology
- 33. Information Technology
- 34. Instrumentation Technology
- 35. Materials Technology
- 36. Nanotechnology
- 37. Nuclear Technology
- 38. Quantum Communication
- 39. Quantum Computing
- 40. Quantum Engineering
- 41. Quantum Information Science- Other
- 42. Quantum Materials
- 43. Quantum Sensing
- 44. Quantum Simulation

Program Information: DOE Laboratories and Technical Project Areas

- 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. You're encouraged to confirm your selections as they cannot be changed after the application deadline.
- Applicants are encouraged to review <u>laboratory websites</u> and contact DOE researchers to learn about their research.
- Visit 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.



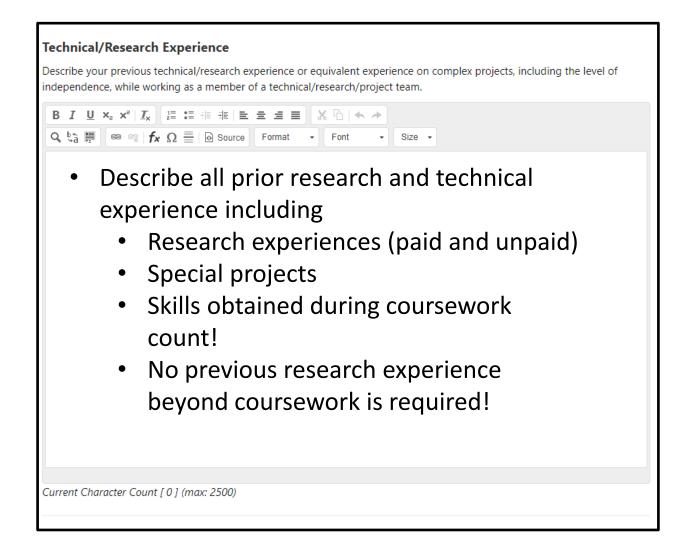
^{**}Note: For the Fall/Spring terms, you may choose to have your application reviewed by any lab if you're not selected by your first or second-choice lab.

Essays



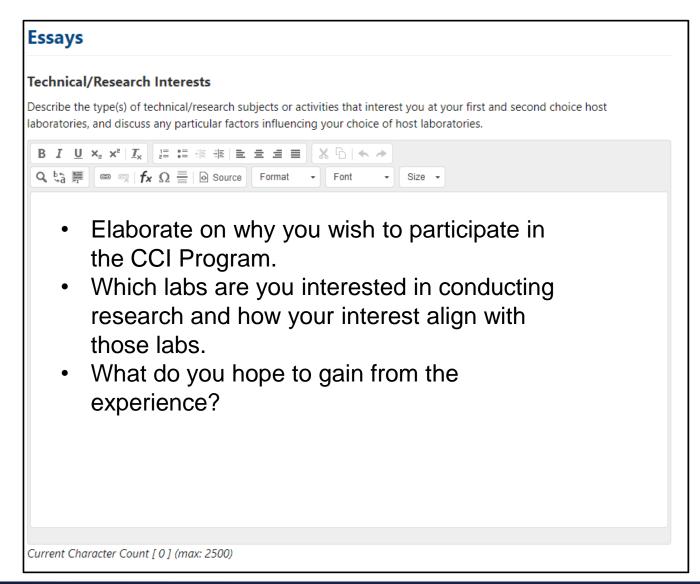


Essays: Technical and Research Experience

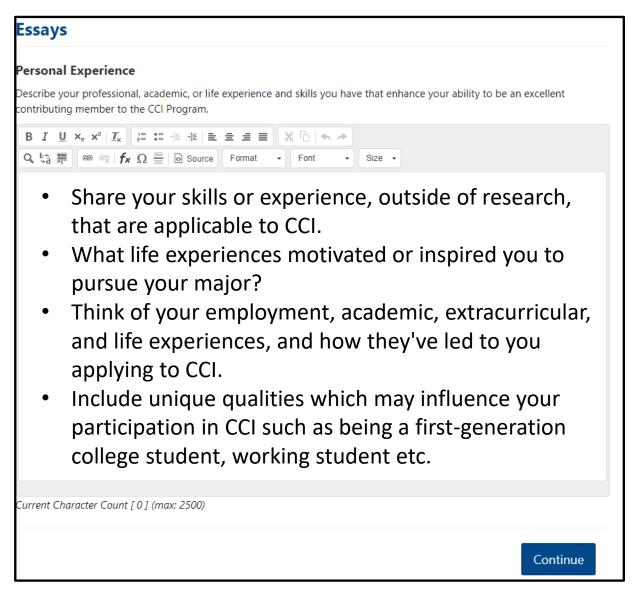


Essays: Technical and Research Experience

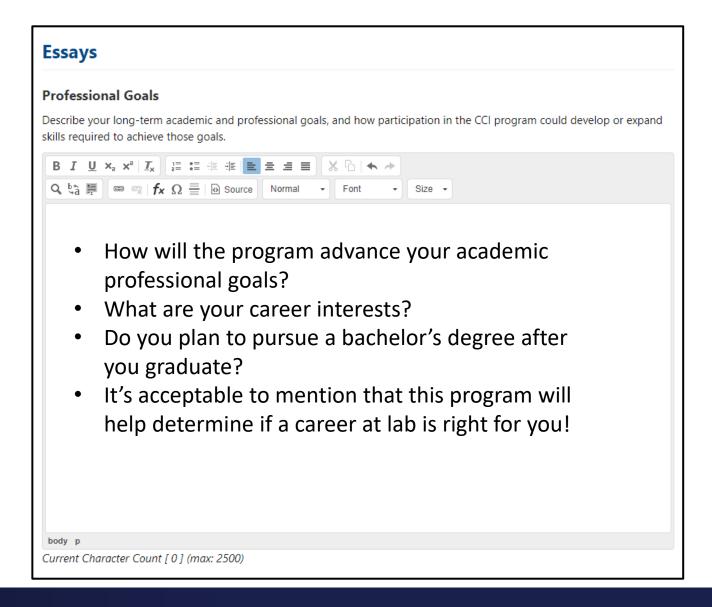
Interests



Essays: Personal and Professional Goals



Essays: Professional Interests



Letters of Recommendation





Letters of Recommendation

- A completed CCI application requires recommendations from <u>two</u> individuals familiar with the applicant's education, training, experience, aptitude, or promise relevant to the CCI Program. Note: Family, friends, 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 May 21, 2025.

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/cci/Frequently-Asked-Questions

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 <u>performance in completed academic coursework</u>, <u>strength of recommendations letters</u>; <u>expressed scientific or technical interests</u>; and the <u>applicant's background</u>, <u>experience</u>, <u>accomplishments</u>, and <u>interests as they relate to the host</u> 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/permanent residency and the outcome of a formal background check.

Participant Obligations

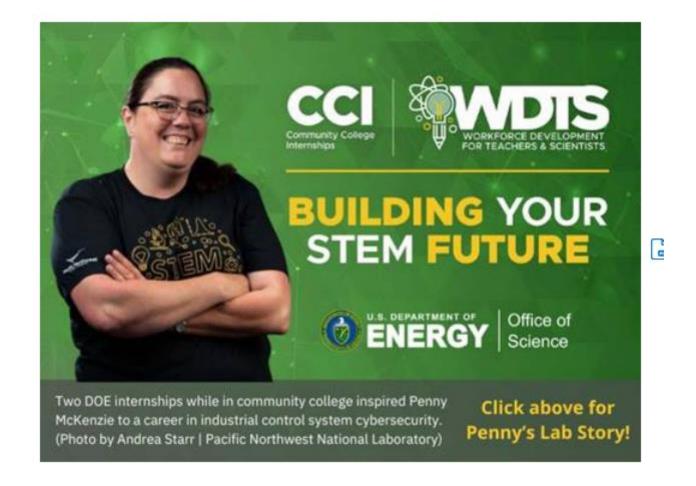
- Commit to 10-weeks (40 hrs/week) in the program.
- Maintain health insurance during the appointment.
- Complete deliverables by deadline
 - Pre-survey
 - Post-survey
 - Research paper (6-8 pages)
 - Poster or oral presentation
- Maintain professional behavior.



Benefits to Participating in CCI

- 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.

CCI Alumni Spotlight: Meet Penny McKenzie



Interested in reading more Lab Stories? Visit https://science.osti.gov/wdts/WDTS-Lab-Stories-and-Participant-Spotlights.

Join Us for Virtual Office Hours!!

Dates:

April 30th at 2:00 p.m. EDT May 7th & 14th at 2:00 p.m. EDT

Who Can Attend?

- Applicants
- Letter of Recommendation Writers

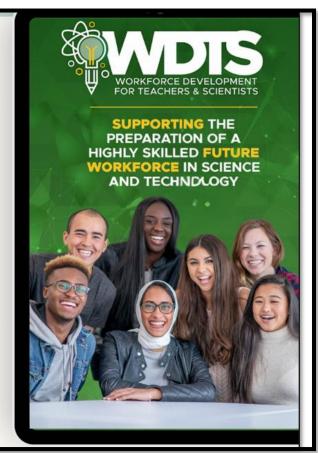
More info including registration is available on the CCI website.

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.



Don't forget!!

- Application deadlines and requirements are firm, including receipt of recommendations (no exceptions!)
- The application deadline is May 21, 2025 at 5:00 p.m. EDT.
- 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.cci@science.doe.gov.



Connect with us.....

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









Thank you!

