

jump into STEM

Student Guidance Webinar

October 20, 2023

Welcome Students!

- 1 Brief Competition Overview
- 2 Submission Guidance
- 3 Internship Application
- 4 National Labs
- 5 Previous Winners
- 6 Q&A



Management Team



U.S. Department of Energy (DOE)
Building Technologies Office (BTO)



Nicholas Ryan

Oak Ridge National Laboratory
Grid Interactive Controls, Integrated
Building Performance



Dr. Yeonjin Bae

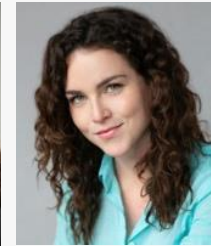


Bill Eckman

National Renewable Energy Laboratory
Building Technologies and Science
Center



Dr. Kim Trenbath



Dr. Kerry Rippy



Allison
Georgeson

Pacific Northwest National Laboratory
Building Simulation & Design, Building
Systems



Dr. Sarah Newman



Carmen Cejudo



Dr. Mini Malhotra



Dr. Yeobeom Yoon



Jason Schmidt



Alyssa Bersine

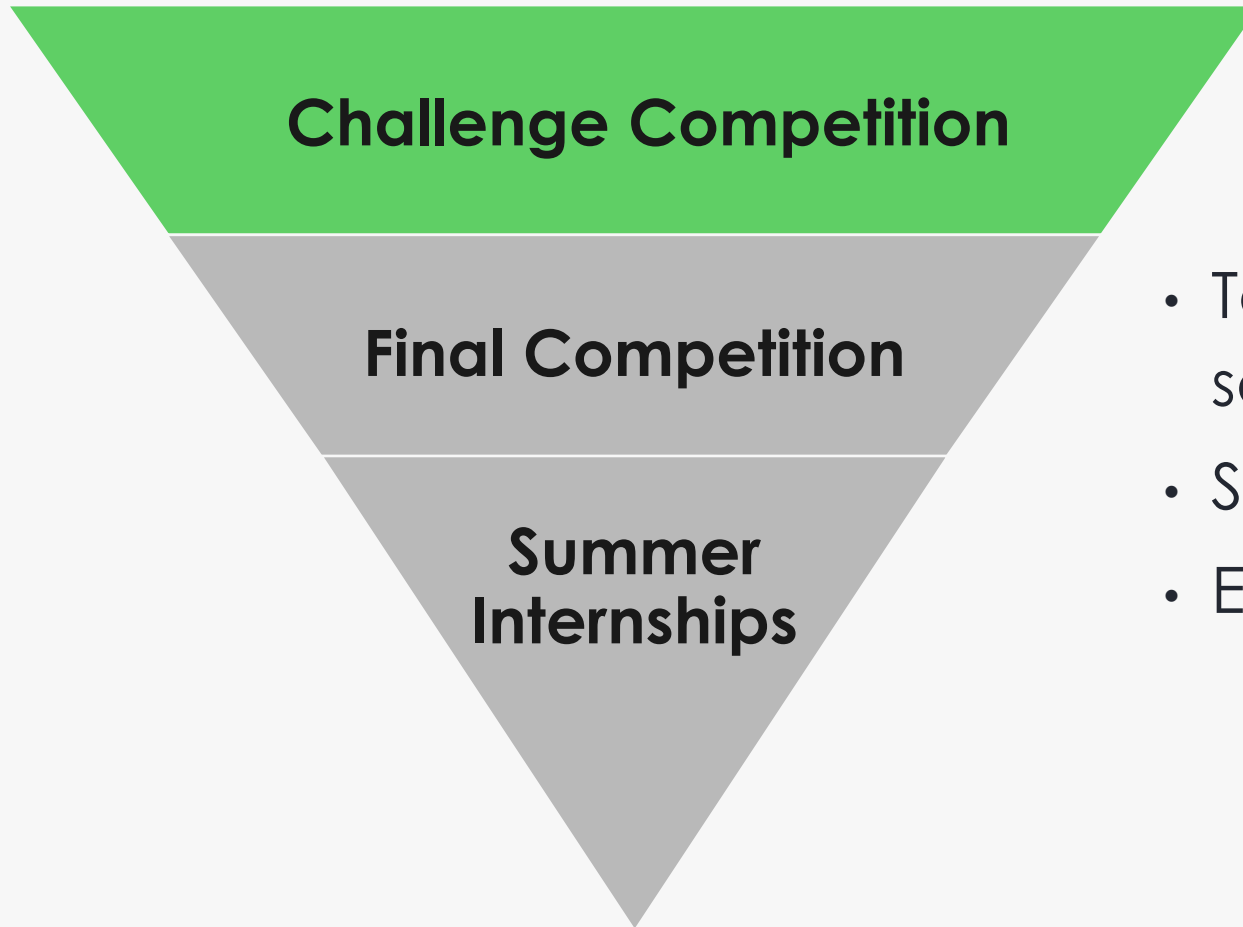


Lindsey McGuirk



Salem Haile

Competition Overview



- Teams of 2–4 students develop a solution to one of our challenge topics
- Submissions are due on **Nov. 10, 2023**
- Each team will create one submission.

For more information,
visit jumpintostem.org

JUMP-start Your Career



- Explore and address real-world scientific and engineering challenges
- Experience building science—no matter your major!
- Recent impact studies on show 100% of participants felt their ideas were valued and heard
- Participants often listed diversity, when asked what they enjoyed most about the program
- Students described positive experiences and appreciation for diversity

New: JUMP into STEM Industry Team



Purpose:

Provide more support to students during the competition to improve submission quality, and provide more engagement between industry and students.

Process:

One Zoom session with each team member

Students and faculty need to register for each session [here](#)

Team members will openly answer questions from students during the session – they will not review work ahead of time



Register now!

Industry Team



Andrew Rodgers, ACE IoT Solutions



Justin Michael Hill, Southern Company

Register now!



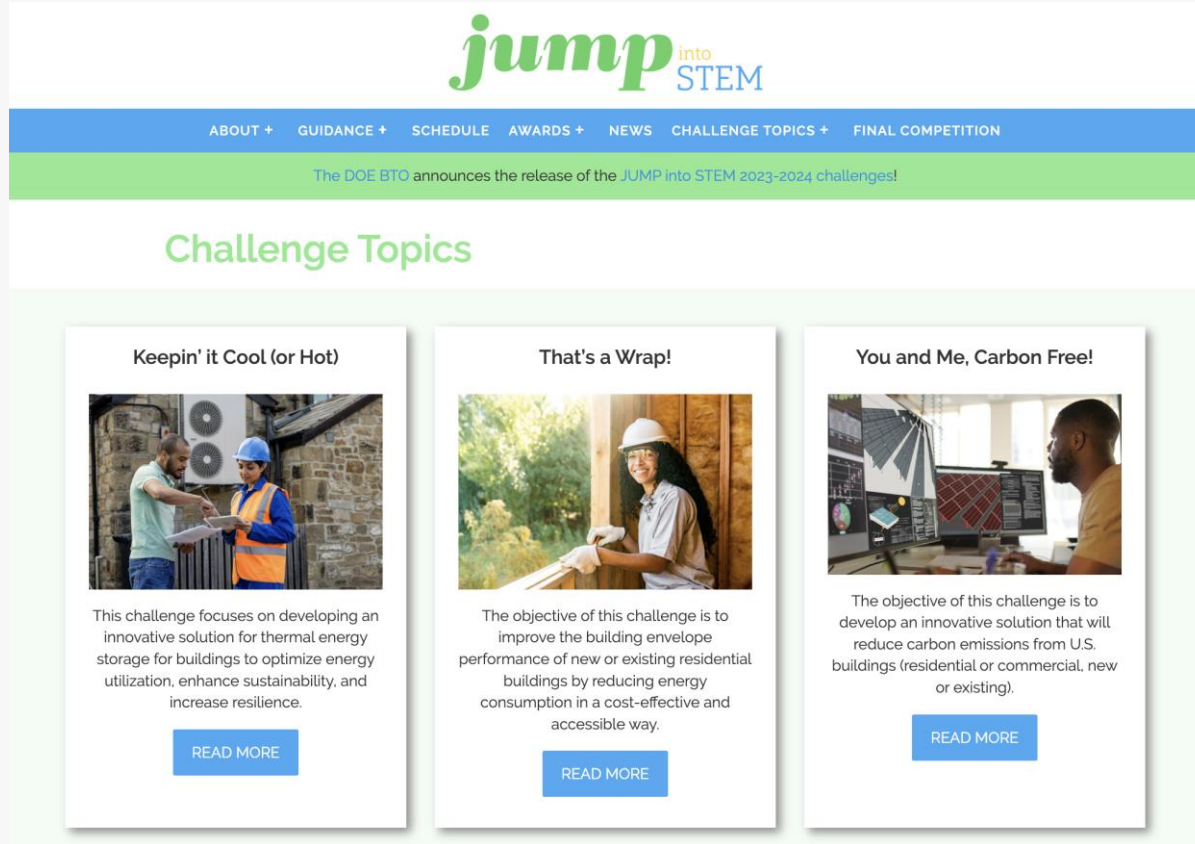
Gavin Mabe, Clayton Home Building Group



Submission Tips

- Read all requirements
- Review evaluation criteria carefully
- Include all required sections in submission
- Use the template provided
- Think of specific communities you could use for a pilot study
- Describe how your solution is scalable to other communities

Website Demo



The screenshot shows the website's navigation menu with links for ABOUT, GUIDANCE, SCHEDULE, AWARDS, NEWS, CHALLENGE TOPICS, and FINAL COMPETITION. A green banner below the menu contains the text: "The DOE BTO announces the release of the JUMP into STEM 2023-2024 challenges!". The main content area is titled "Challenge Topics" and features three cards:

- Keepin' it Cool (or Hot)**: This challenge focuses on developing an innovative solution for thermal energy storage for buildings to optimize energy utilization, enhance sustainability, and increase resilience. Includes a "READ MORE" button.
- That's a Wrap!**: The objective of this challenge is to improve the building envelope performance of new or existing residential buildings by reducing energy consumption in a cost-effective and accessible way. Includes a "READ MORE" button.
- You and Me, Carbon Free!**: The objective of this challenge is to develop an innovative solution that will reduce carbon emissions from U.S. buildings (residential or commercial, new or existing). Includes a "READ MORE" button.

jumpintostem.org



Now Presenting
Bill Eckman, Oak Ridge National Laboratory

Submission Summary

Go to submission form ▼

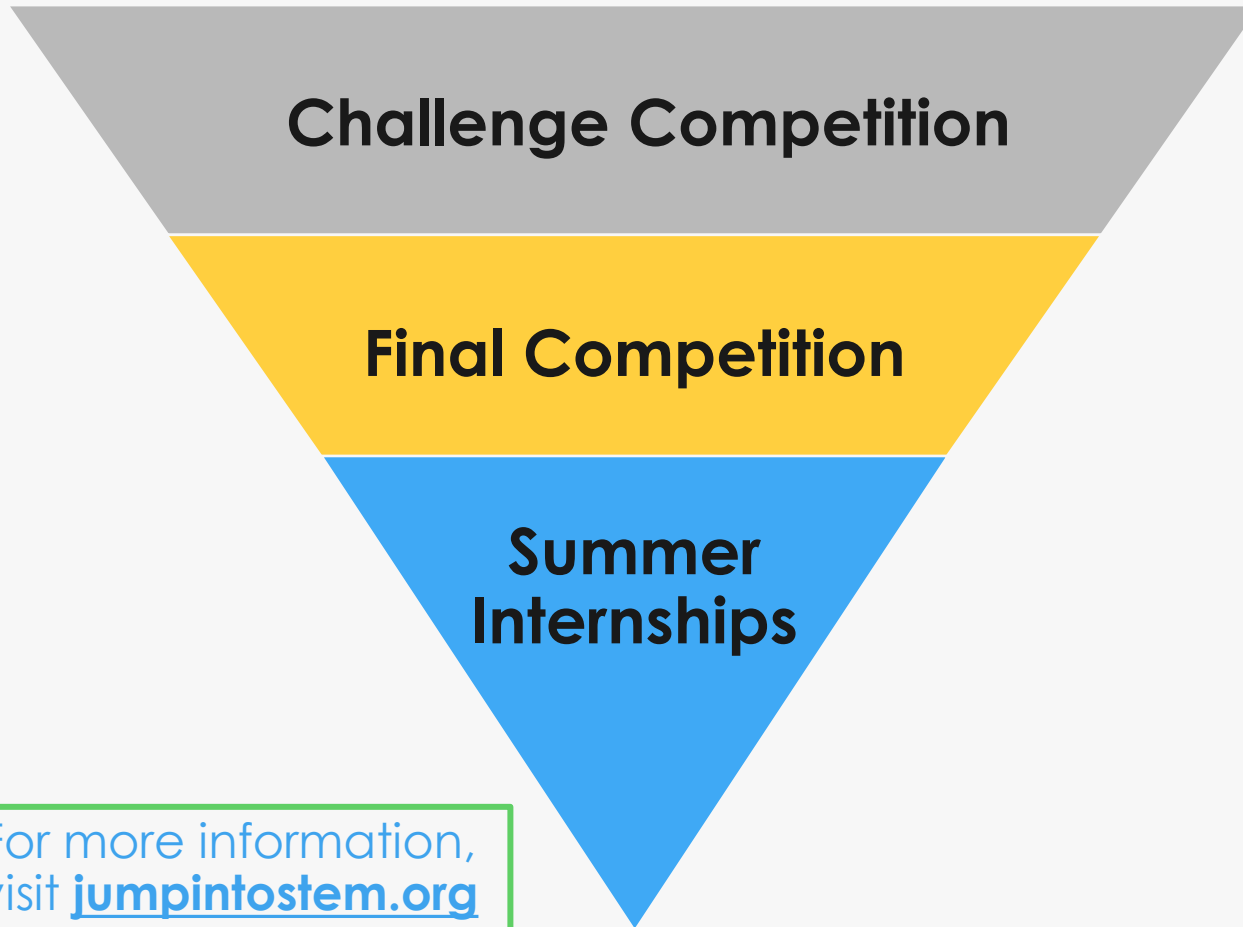
Internship Application

- Submit using specific Challenge Topic page/form
- Ensure submission document meets **Requirements**
- Entire team available during submission
- Include professor's name (if applicable)
- Complete Zintellect (internship) application by 11/10



The screenshot shows the 'jump into STEM' website. At the top is the logo. Below it is a navigation bar with links: ABOUT +, GUIDANCE +, SCHEDULE, AWARDS +, NEWS, CHALLENGE TOPICS +, and FINAL COMPETITION. A green banner below the navigation bar reads: 'The DOE BTO announces the release of the JUMP into STEM 2023-2024 challenges!'. The main content area is titled 'Challenge Topics' and features three cards. The first card is titled 'Keepin' it Cool (or Hot)' and features an image of two men in safety gear looking at plans. The second card is titled 'That's a Wrap!' and features an image of a woman in a hard hat looking at plans. The third card is titled 'You and Me, Carbon Free!' and features an image of a man looking at a computer screen. Each card has a 'READ MORE' button. At the bottom of the screenshot is a green-bordered box containing the URL: jumpintostem.org/challenge-topics/

Competition Overview

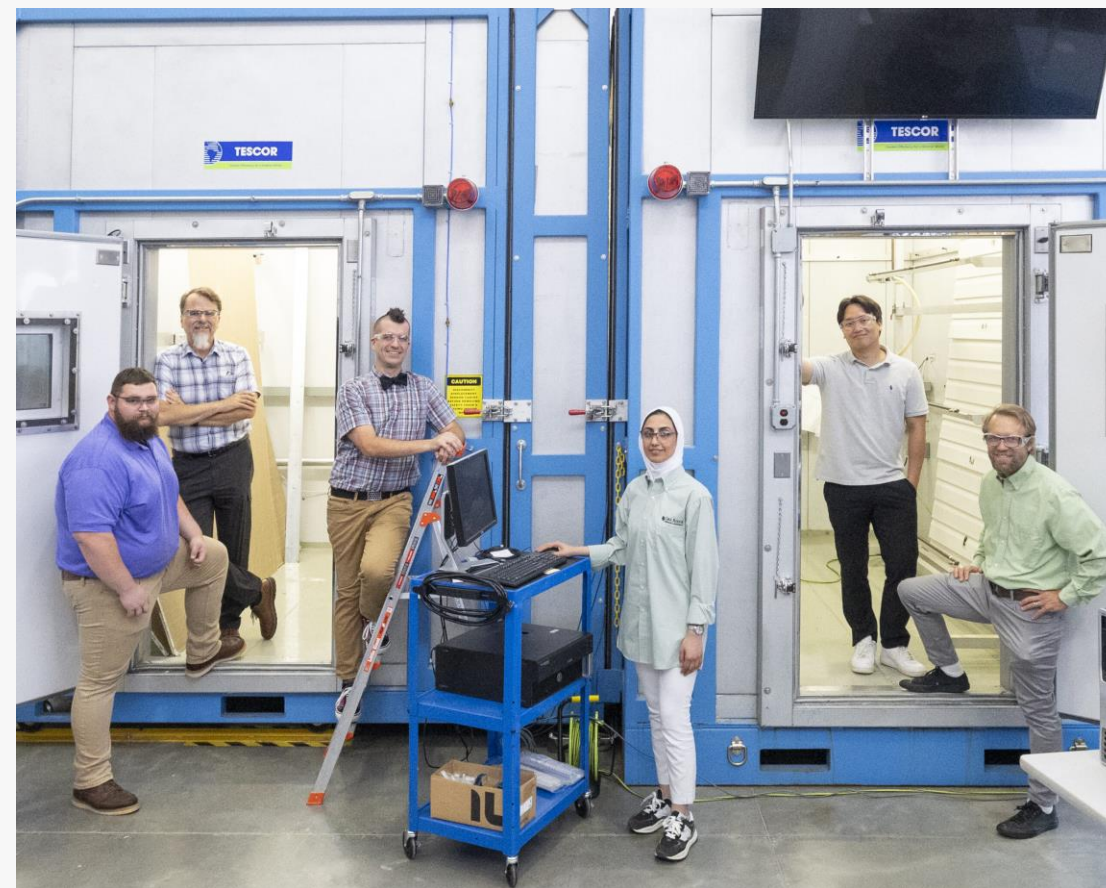


- In order to be eligible to participate in the Final Competition your internship application must be complete by **Nov. 10, 2023**
- Internship application portal (Zintellect)
- Everything is due!
- All team members do NOT have to apply for the internship. Partial teams can compete at the Final Competition.

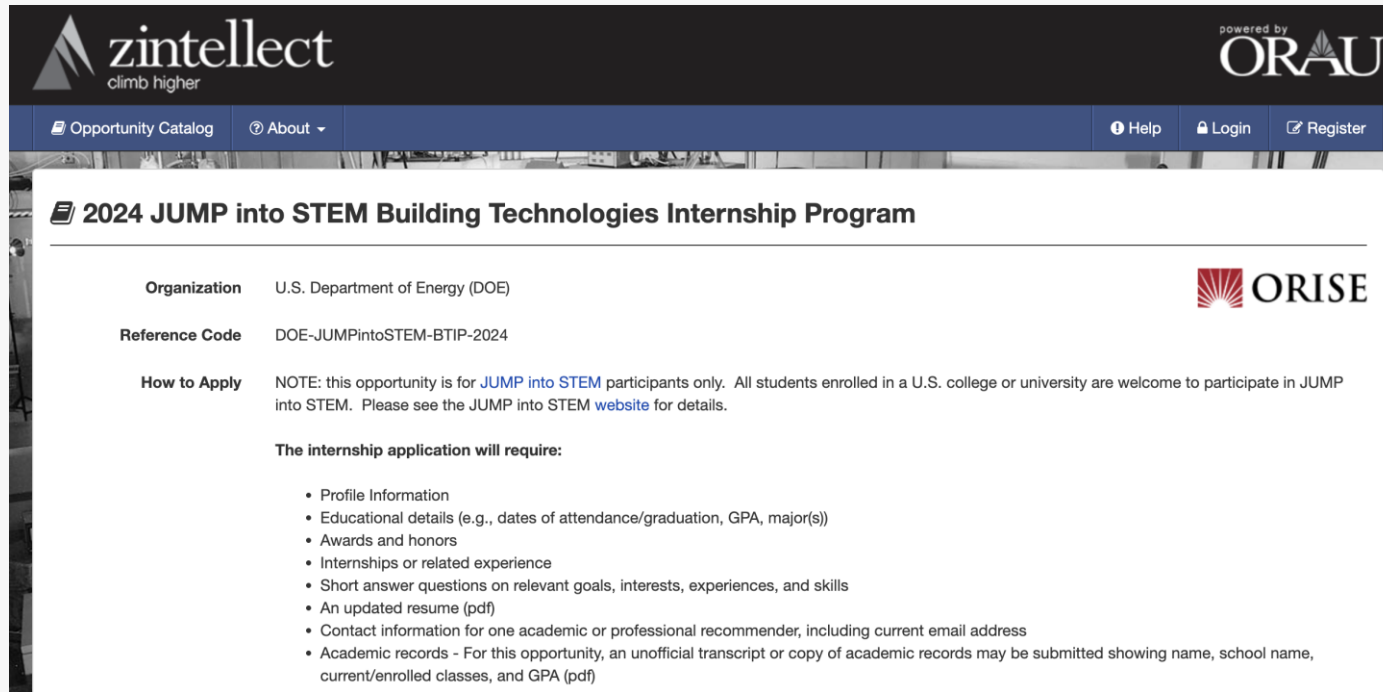
For more information, visit jumpintostem.org

Internship Application

- **Must complete application by Nov. 10, 2023 (5 p.m. EST)**
- Application requirements:
 - Completed through Zintellect
 - Include reference name and contact information
 - Submit all required short answers, academic transcripts, and resume
 - One academic or professional recommendation due Nov. 17, 2023.



Zintellect Demo



The screenshot shows the Zintellect website interface. At the top left is the Zintellect logo with the tagline "climb higher". At the top right, it says "powered by ORAU". Below the header is a navigation bar with "Opportunity Catalog", "About", "Help", "Login", and "Register". The main content area features a title "2024 JUMP into STEM Building Technologies Internship Program" and the ORISE logo. The details include:

- Organization:** U.S. Department of Energy (DOE)
- Reference Code:** DOE-JUMPintoSTEM-BTIP-2024
- How to Apply:** NOTE: this opportunity is for JUMP into STEM participants only. All students enrolled in a U.S. college or university are welcome to participate in JUMP into STEM. Please see the JUMP into STEM website for details.

The internship application will require:

- Profile Information
- Educational details (e.g., dates of attendance/graduation, GPA, major(s))
- Awards and honors
- Internships or related experience
- Short answer questions on relevant goals, interests, experiences, and skills
- An updated resume (pdf)
- Contact information for one academic or professional recommender, including current email address
- Academic records - For this opportunity, an unofficial transcript or copy of academic records may be submitted showing name, school name, current/enrolled classes, and GPA (pdf)



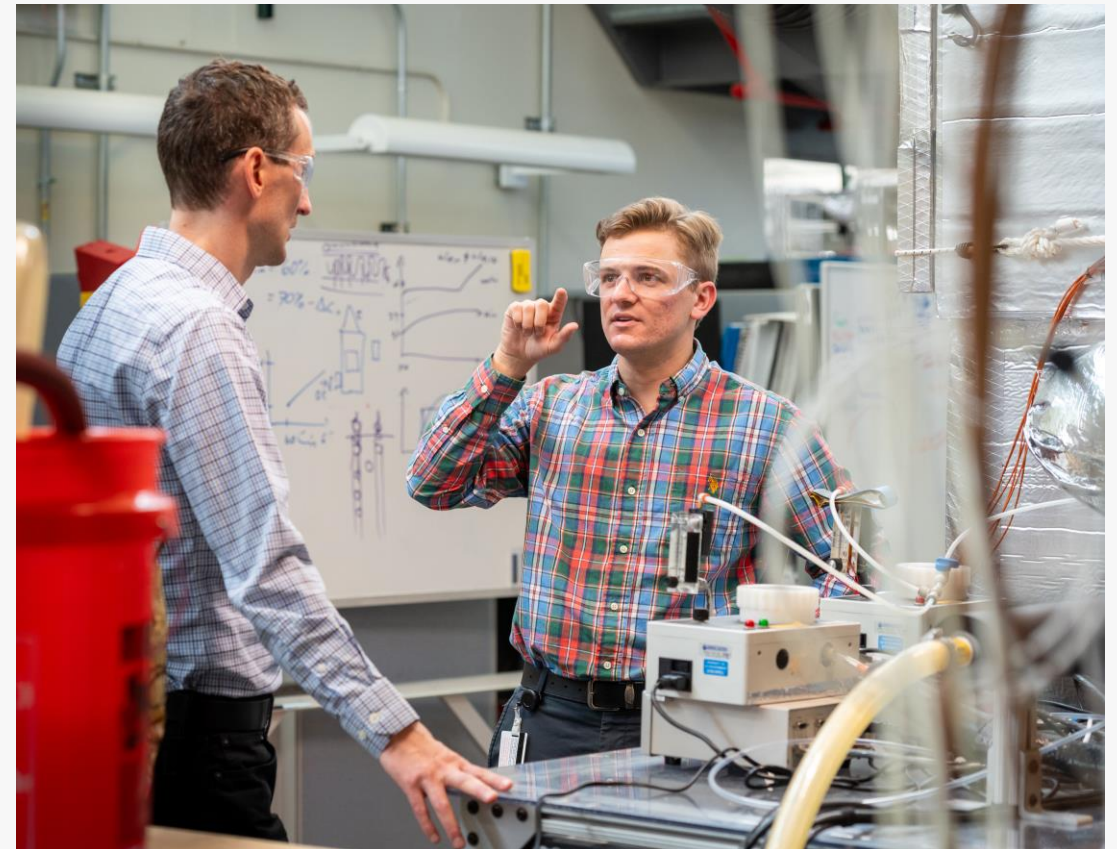
Now presenting:
Chris Nelson, Oak Ridge Associated Universities

<https://zintellect.com/Opportunity/Details/DOE-JUMPintoSTEM-BTIP-2024>

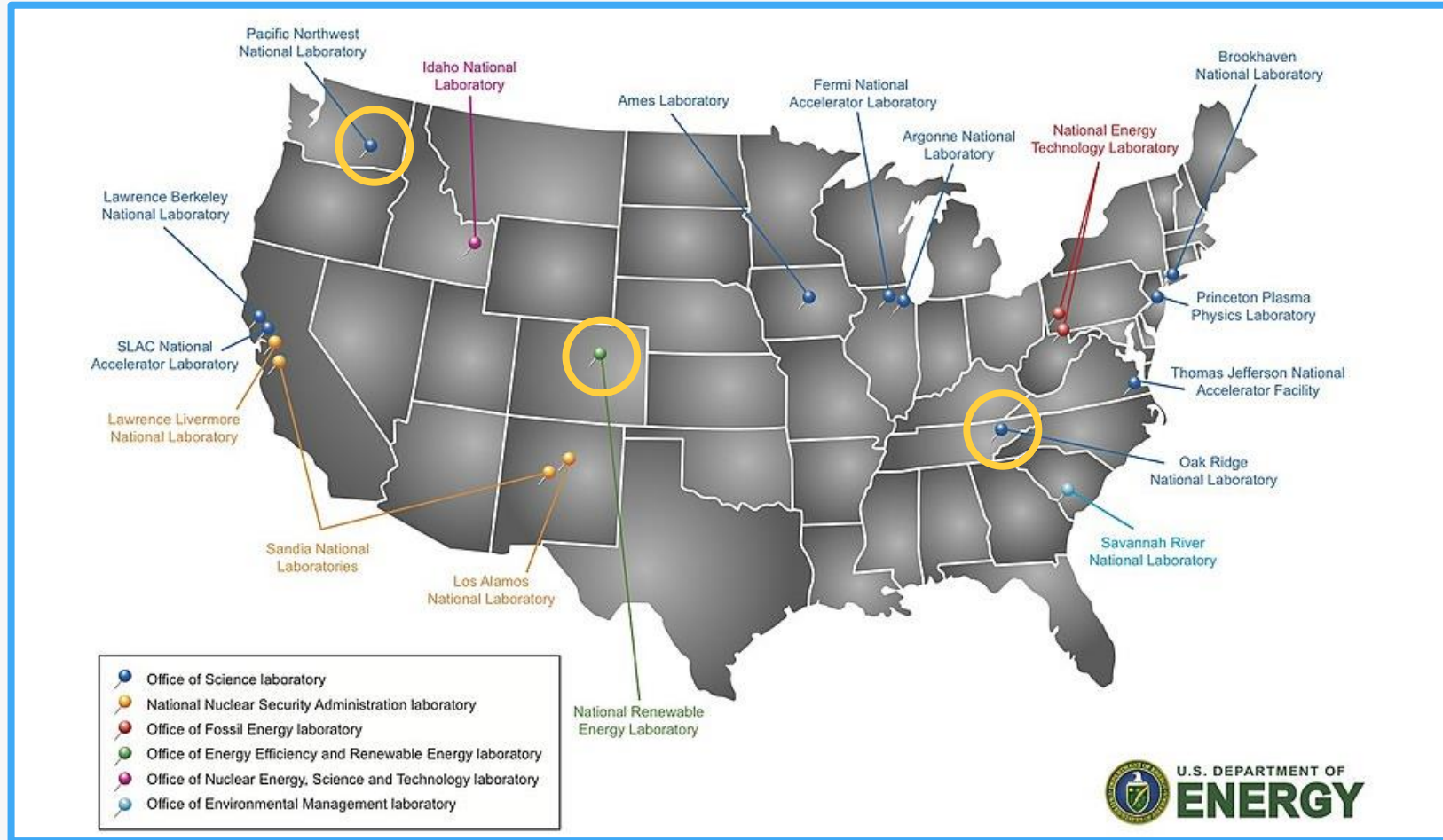
What is this Internship Really?

Not Your Normal Internship

- Students are **directly involved in ongoing cutting-edge research**
- Placements will be determined based on student work and lab focus areas.



National Laboratories



National Renewable Energy Laboratory



Oak Ridge National Laboratory

jump into STEM



Pacific Northwest National Laboratory

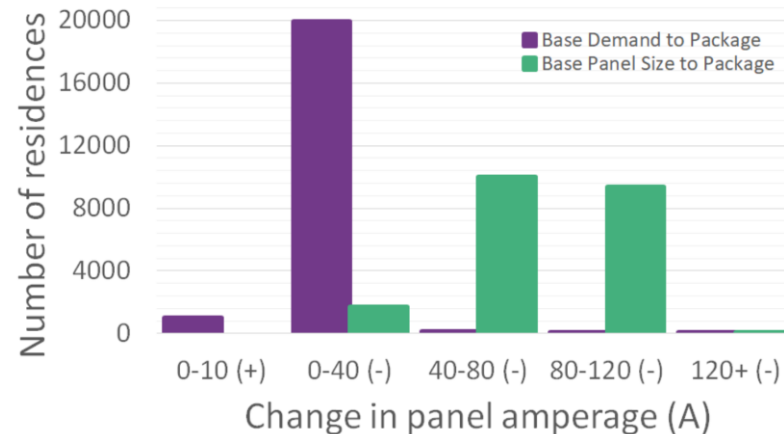


Julia Ehlers

- From Lincoln, Nebraska
- Junior in Architectural Engineering at UNO
- 2022-2023 Jump into STEM Project: Tiny Houses in the Wake of Disaster
- NREL Internship Project: How building envelope upgrades affect slack in electrical panels



UNIVERSITY of NEBRASKA
COLLEGE OF ENGINEERING



What questions do you have about...

- Submission process
- Zintellect application process
- National Labs
- Anything else?

THANK YOU!



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