













orise.orau.gov

The ORISE Experience: STEM Workforce Development Internships, Fellowships, Postdoctoral, and Research Opportunities

Rutgers University



ORISE has impacted the lives of 100,000+ through educational experiences #MakingAnImpactThatMatters



https://orise.orau.gov/internships-fellowships/why-orise.html

### What is the ORISE Community?

- 9,000+ students, post-graduates, postdocs, and faculty participants in 2022
  - Including 1,200+ graduate students, 2,000+ postgraduates, and 1,600+ postdocs
- STEM research, policy, technical, and other non-research PAID opportunities



- 757 U.S. universities and
   160+ foreign universities
- 50 states, DC, Puerto Rico and 78 foreign countries
- Sponsored by DOE and 20+ federal departments and agencies
- 350+ premier national laboratories and scientific facilities

### Best-in-Class Experiences that impact Career Development



Gain real-world experience to complement your education



Peer-to-Peer Engagement

Broaden your professional network as a member of the global ORISE

Community





Cutting-Edge Technology

Access state-of-the-art equipment and resources at world-class facilities



Professional Development

Advance your career through exclusive ORISE activities and resources



#### Impactful Mentorship

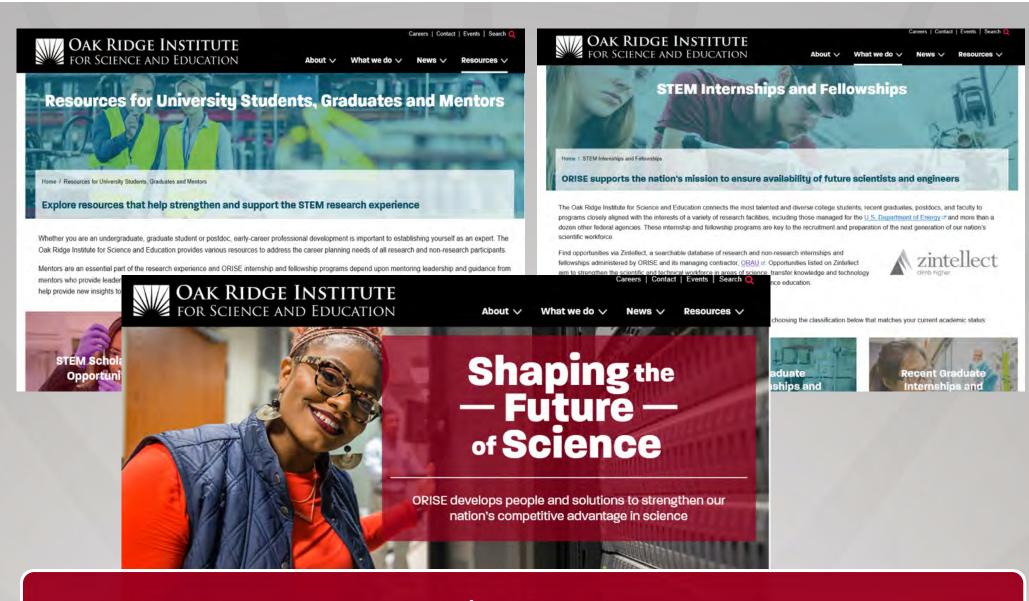
Learn under the guidance of top scientists, researchers and STEM professionals



Culture of Diversity, Equity, Inclusion, and Accessibility

Join a STEM collective that champions diversity, respects differences, and promotes innovation and collaboration





#### orise.orau.gov

University Students and Graduates

Postdocs, Faculty and Mentors

Professionals +

K-12 Students and Teachers

Learn more about ORISE and how we're supporting DOE and other federal agencies' missions to strengthen the nation's science education and research initiatives.



## STEM Internships and Fellowships

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION

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# Internship and Fellowship Programs Managed by ORISE

### Gain hands-on experience at national laboratories and government research facilities

Are you looking for more information about specific research and non-research internship and fellowship programs offered by the Oak Ridge Institute for Science and Education? ORISE manages dozens of programs for the U.S. Department of Energy, U.S. Department of Health and Human Services, U.S. Department of Defense, U.S. Department of Homeland Security and other federal agencies that pair students, recent graduates, postdocs and faculty with programs that help grow their STEM expertise and experience.

Below are links to websites created specifically to provide information about these ORISE programs for prospective applicants, as well as for current research participants and the laboratory staff who mentor them.

U.S. Department of Energy Internship and Fellowship Programs	+
U.S. Department of Defense Internship and Fellowship Programs	+
Federal Agency Internship and Fellowship Programs in Health, Environmental Protection, Food Safety and More	+



STEM Internships and Fellowships
Why ORISE?
Undergraduate Internships and Fellowships
Graduate Internships and Fellowships
Recent Graduate Internships and Fellowships
Postdoctoral Fellowships
Faculty Research Opportunities
View STEM Programs Managed by ORISE

https://orise.orau.gov/internships-fellowships/research-programs.html



## How can you learn more?

#### **Calendar of Events**

Recruiting/Outreach Events –			
Event Date	Event Name		
Sep 25, 2023, 4—5 PM CDT	Join the ORISE Virtual Info Session with Jackson State University		
Sep 28, 2023, 9:30 AM—6 PM EDT	Visit ORISE at the 2023 National HBCU Week Conference & Career Fair		
Sep 28, 2023, 2—3 PM CDT	Join the ORISE Virtual Roadshow for the University of Illinois at Urbana-Champaign Graduate Students and PhD/Postdocs		
Oct 4, 2023, 11—3 PM PDT	Visit NNSA MSIIP@ORISE at the 2023 UCR STEM Virtual Fair @		
Oct 4, 2023, 11—3 PM PDT	Join ORISE at the University of California – Riverside STEM Virtual Fair ₪		
Oct 5, 2023, 10 AM—4 PM EDT	Visit ORISE at the John Hopkins University Government Career Day for Graduate/Postdocs		
Oct 5, 2023, 10—2 PM PDT	Visit NNSA MSIIP@ORISE at the 2023 Science & Tech Virtual Fall Career Fair Ø		
Oct 5, 2023, 1—6 PM PDT	Visit NNSA MSIIP @ ORISE at the Univ of CA – San Diego 2023 Science & Tech Virtual Fall Career Fair ☑		
Oct 5, 2023, 6—7 PM EDT	Visit ORISE at the John Hopkins University STEM Undergraduate Info Session		
Oct 5, 2023, 6—8 PM EDT	Join ORISE at the Georgia State University Co-op & Internship Fireside Chats Ø		
Oct 10, 2023, 11 AM—4 PM EDT	2023 STEM Diversity Summit: Career Connections to Federal Internships and Fellowships		
Oct 12, 2023, 1—2 PM EDT	Future of Science Awards presentation and virtual event		
Oct 12, 2023, 1—6 PM CDT	Join ORISE at the Fall 2023 Hispanic-Serving Institutions (HSI) Virtual Career Expo ☑		
Oct 13, 2023, 4—5 PM EDT	Join the ORISE Virtual Roadshow for the Medical University of South Carolina		
Oct 19, 2023, 12 PM—Oct 19, 2023, 9 PM	Visit the ORISE Booth at the 2023 AISES National Conference in Spokane Ø		

#### **Virtual Career Events**

Throughout the year, the Clak Ridge Institute for Science and Education (ORISE) hosts virtual career fairs and events showcasing internship and fellowship programs for college students, recent graduates and faculty with the U.S. Department of Energy and other federal agencies. These virtual events allow attendees to chat with representatives, expire available opportunities and view live presentations on featured programs.

Find information on upcoming ORISE virtual events below. If you have any questions about an event or have trouble registering, contact us at Experience ORISE@orau.org

First time attending a virtual career fair? Check out these tips for navigating an event.



ORISE Postdoc Mini Symposium Poster Session
September 19, 2023
12:30 to 2:30 p.m. ET



Experience ORISE Virtual Career Fair: Internships and Fellowships at DOE, DHS, and more November 2, 2023 12 to 3 o m ET

ORISE Featurecast spotlights all things ORISE





https://orise.orau.gov/news/calendar

https://orise.orau.gov/news/featurecast.html



### **ORISE Success Stories**

#### What's it like Being an ORISE STEM Researcher?

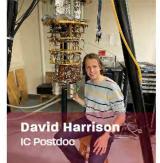
Meet some of the ORISE participants and mentors who are advancing scientific research and discovery







Alexandria Sparks
CDC Research Participation Program











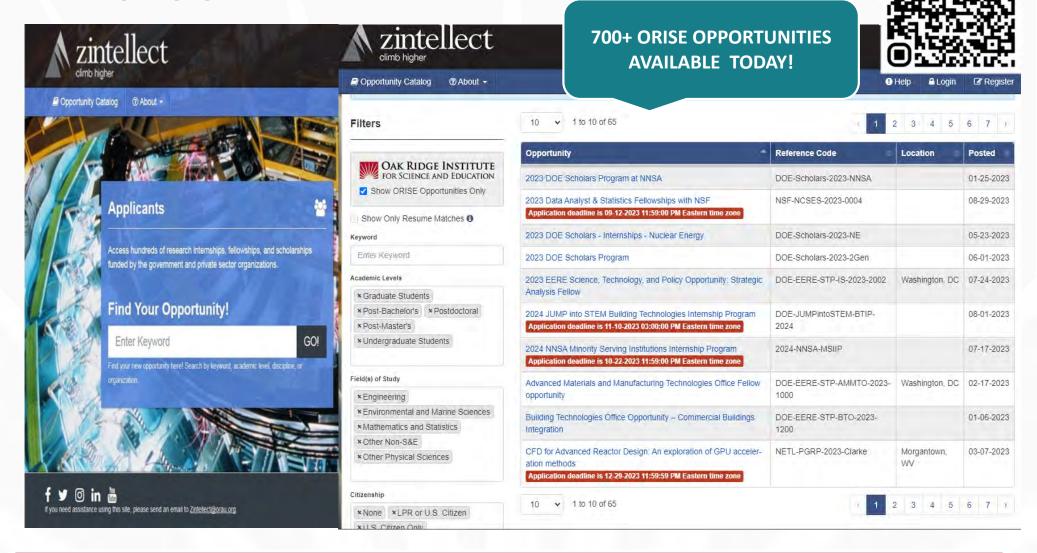
"This has been an enriching program which broadened my view of what science can do." - Jessica Tang, FDA

"The department stated that they would lend a helping hand and teach me everything that I wanted to learn, and this was entirely true from my first day." – Ian Carlin, DOE Scholars

"The possibilities are endless when there are so many talented individuals who are just as passionate and excited about the project." – Sarah Thurmon, ORNL



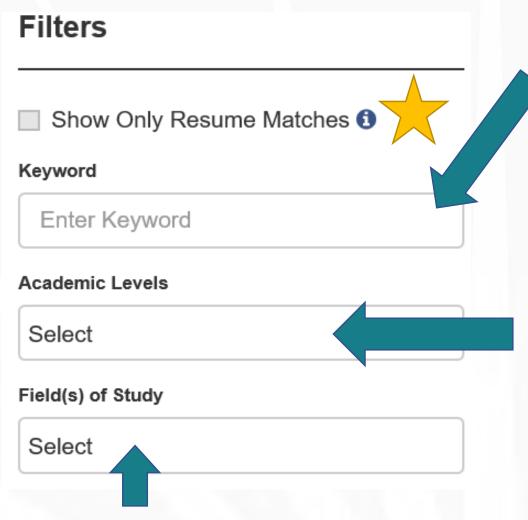
### **Zintellect**



Research opportunities at DOE and other federal laboratories and agencies are posted in the ORISE catalog and are searchable at <a href="https://zintellect.com/Catalog">https://zintellect.com/Catalog</a>



## Searching the Opportunity Catalog



### Field(s) of Study

- Broad STEM discipline categories
- Select most relevant to your degree

### **Keyword search examples**

- "Biomedical"
- "Summer"

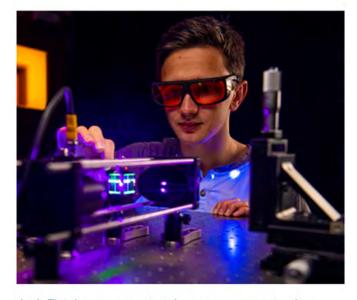
### **Academic Levels**

- Future: graduating with Bachelor's in 6 months or less → "Undergraduate" and "Post-Bachelor's"; Ph.D. in 6 months or less 2023 → "Postdoctoral"



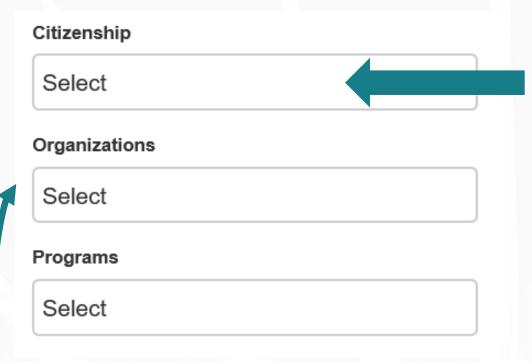
# Eligibility

- **Students** must be enrolled in an accredited U.S. college or university pursuing a degree in a Science, Technology, Engineering or Math (STEM), and must maintain satisfactory progress in academic course work.
- Recent graduates Obtained an AS, BS, MS degree in the past five years
- Postgraduate or Postdoctoral must have received their degree in an appropriate STEM discipline within 5 years of the appointment start date or must complete all requirements for such a degree prior to the desired start date.
- Established Scientists mid-career scientist looking for a new experience
- Faculty must be full-time faculty from an accredited U.S. College or University.



Jack Fletcher prepares to take a measurement using modulated photothermal radiometry at the Missouri University of Science and Technology's Materials Research Center. This device was developed to measure the surface thermal diffusivity of irradiated and non-irradiated materials. Fletcher recently participated in a summer internship at Oak Ridge National Laboratory, where he contributed to research efforts in nuclear reactor modeling. (Credit: Michael Pierce/Missouri S&T)

## Searching the Opportunity Catalog



#### **Organizations**

- Federal Agency/National Laboratory
  - DOE, NETL, CDC, EPA, NIH, DOD, etc.
- Recommended to leave blank

### **Citizenship**

- U.S. Citizens → select ALL options in dropdown or leave blank
- Lawful Permanent Residents
   (LPR) → "None" and "LPR or U.S.
   Citizen"
- Non-U.S. Citizens → "None"
  - Programs may be open to: qualified U.S. Citizens, Lawful Permanent Residents (LPRs), and foreign nationals who are eligible to participate in visa categories approved by the sponsoring federal agency and ORISE.

#### **Programs**

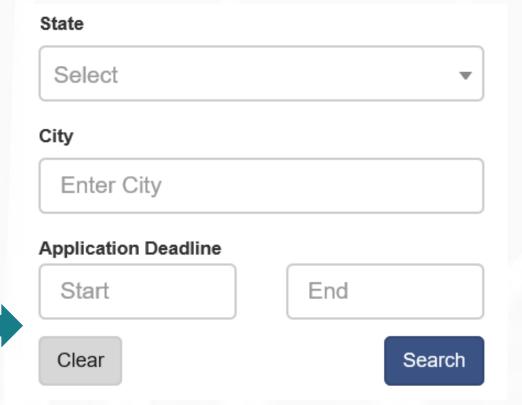
- Specific office/division within Organization you select
  - DOE Scholars, EERE Clean Energy, MEISPP, etc.
- Recommended to leave blank



## Searching the Opportunity Catalog

### **Application Deadline**

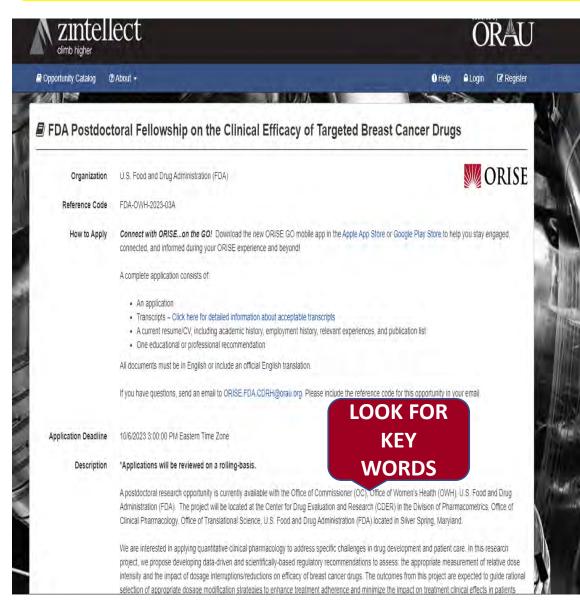
- Start opportunities with a deadline after this date



\*Recommended to leave all these fields blank in order to not limit yourself



# **ORISE Tips on Applying - Posting**



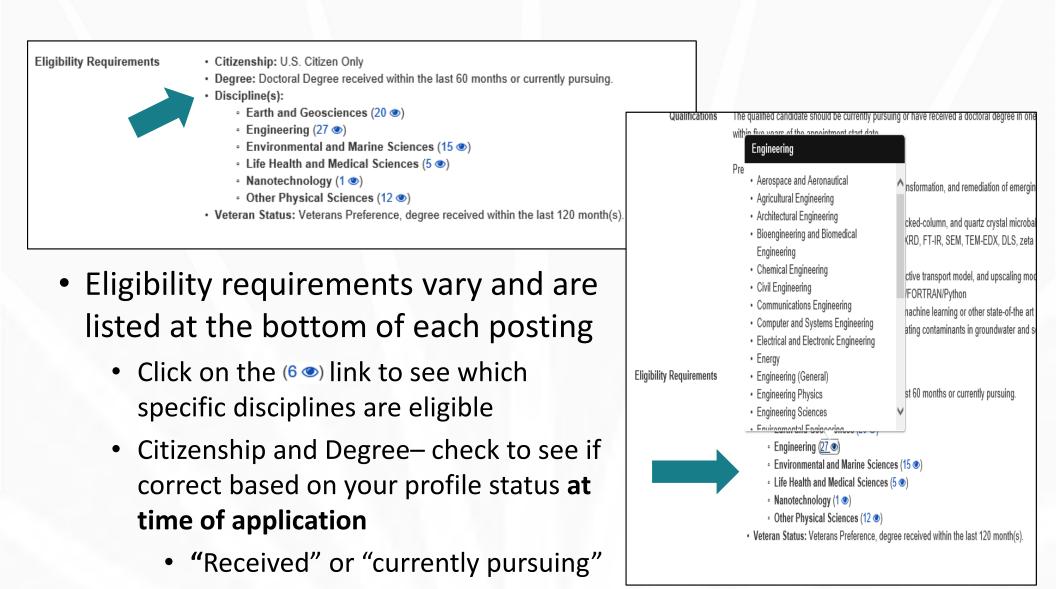
- Apply Early
- Apply Often
- Watch for Deadlines

#### Look for info on:

- Project
- Learning Objectives
- Mentor/Program Contacts
- Dates and Locations
- Stipends
- Websites to learn more

Remember that ORISE programs are learning programs – highlight qualifications + show your passion and interests!

## Am I Eligible to Apply? Check the Posting!



List all disciplines that apply to your degree



# Tips for Application Success



What about remote appointments?

What is a "rolling" application and appointment period?

I have a lower GPA – can I apply?

I am a non-US Citizen
– am I eligible?

Highlight qualifications – required and/or preferred/relevant skills" – focus on differentiators.

Experience not always required - show your passion and why this opportunity will matter to you!

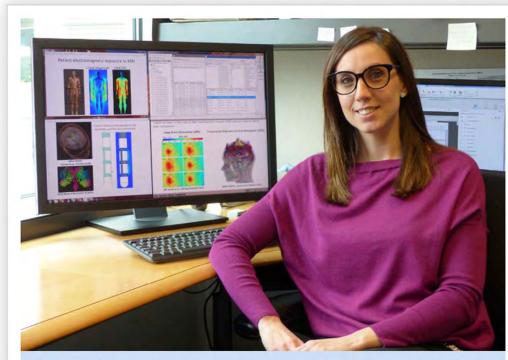
Volunteerism, leadership, teamwork, initiative - STEM (soft) skills matter - don't forget to list them. When filling out your application, check spelling and grammar, answer all the questions, and SUBMIT.

FINAL TIP - Contact the mentor (if listed) and introduce yourself!

OAK RIDGE INSTITUTE FOR SCIENCE AND EDUCATION







Maria Ida Iacono, Ph.D., helped develop a computer model of the head while doing a fellowship with the U.S. Food and Drug Administration. The model has been used by more than 160 research groups worldwide.

# FDA Centers sponsoring ORISE Participants:

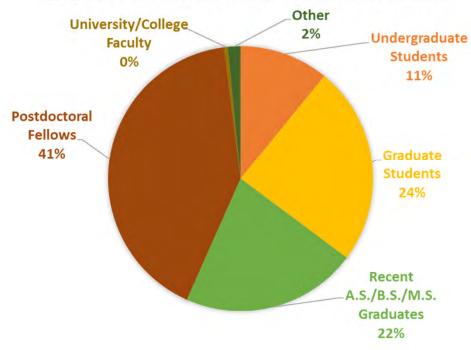
- Center for Biologics Evaluation and Research (CBER)
- Center for Devices and Radiological Health (CDRH)
- Center for Drugs Evaluation and Research (CDER)
- Center for Food Safety and Applied Nutrition (CFSAN)
- Center for Tobacco Products (CTP)
- Center for Veterinary Medicine (CVM)
- National Center for Toxicological Research (NCTR)



### **ORISE FDA Facts**

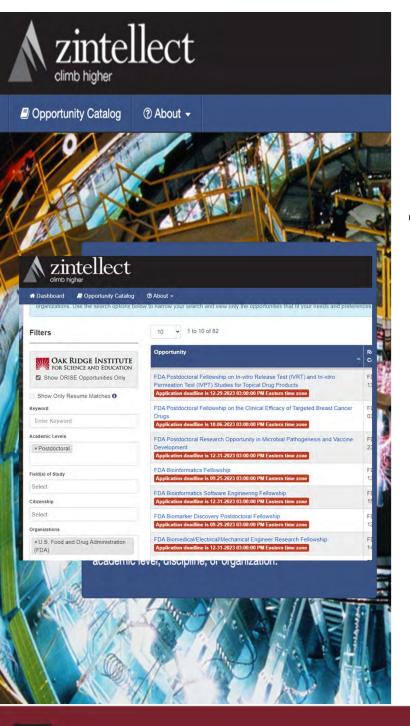
- Last year there were 909 ORISE FDA Appointments
  - Gender is split 46% Male & 54% Female
  - Underrepresented\* minorities = 14%
  - Foreign Nationals may be eligible (must have resided within the U.S. for 36 of the past 60 months)

#### ORISE FDA APPOINTMENT ACADEMIC LEVELS



\*Underrepresented Minorities include: Hispanic or Latino, Black or African American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander.





# ORISE FDA – Research Areas for Opportunities in Zintellect

ORISE FDA opportunities are available in a variety of STEM fields and disciplines, including but not limited to:

- Basic Biomedical Sciences
- Biomedical Engineering
- Biochemistry
- Biology
- Bioinformatics
- Chemistry
- Chemical Engineering
- Epidemiology
- Immunology
- Microbiology
- Pharmacy and Pharmacology



# Postdoc Opportunities— Available year round & new ones added weekly!

### FDA Fellowship in Molecular Toxicology

 The postdoctoral fellow will collaborate on multi-disciplinary research efforts and will conduct research investigating potential drug-induced neurological effects within the Omics, Modeling, Imaging and Chemistry branch of Division of Systems Biology.
 <a href="https://www.zintellect.com/Opportunity/Details/FDA-NCTR-2023-09">https://www.zintellect.com/Opportunity/Details/FDA-NCTR-2023-09</a>

### FDA Research Fellowship in Large Language Models for Clinical Pharmacology

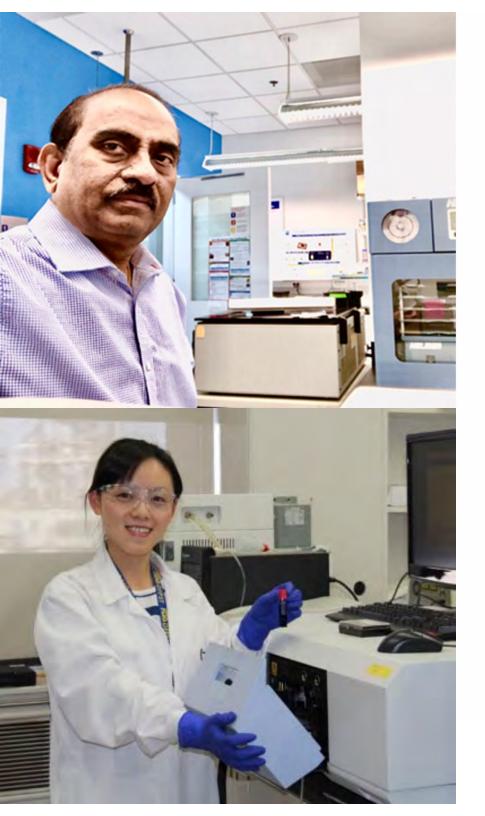
The participant will collaborate closely with scientists at the FDA to conduct research that will advance
new drug development and promote public health. During participation in this program, the fellow will
engage in various activities that include but are not limited to the applications of LLMs for precision
medicine, drug development and regulatory
science.https://www.zintellect.com/Opportunity/Details/FDA-CDER-2023-1326

#### FDA Postdoctoral Fellowship: Analytical Chemist for Medical Device Research

The research will involve performing studies related to analysis of extractable and leachable chemicals
from materials used in medical devices. Tasks will include method development and validation for
extraction, identification, quantification of substances contained in polymeric and other materials to
support CDRH's regulatory mission.

...and many more!





# Contact ORISE FDA Programs:

Email questions to the ORISE FDA: FDARpp@orau.org

Visit our website at <a href="https://orise.orau.gov/fda/">https://orise.orau.gov/fda/</a> for more information!



Research Participation Programs at the Centers for Disease Control and Prevention & the Department of Health and Human Services

https://orise.orau.gov/cdc https://orise.orau.gov/hhs





### ORISE CDC and HHS is...

ORISE Internship/Research Participation Programs are education and training programs designed to provide college students, recent graduates, university faculty, and established scientists opportunities to participate in project-specific research.

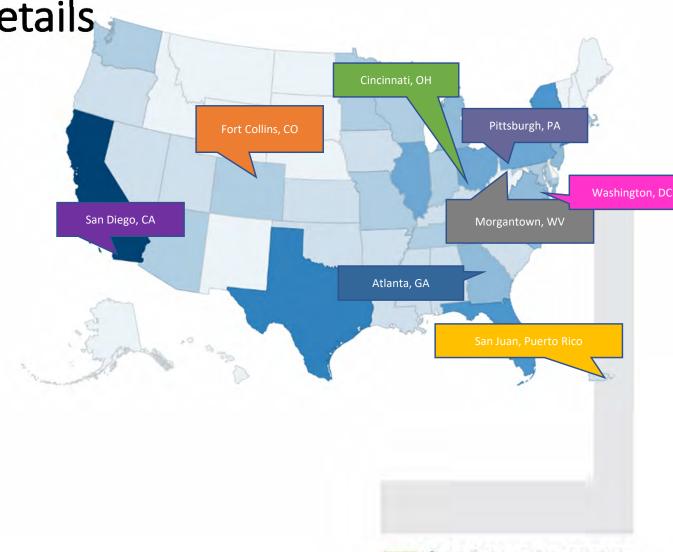




ORISE CDC Details

#### **Locations:**

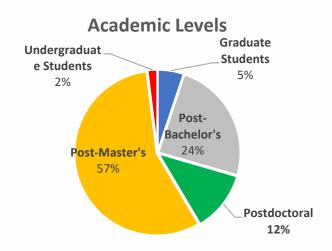
- Atlanta, GA
- Fort Collins, CO
- San Juan, PR
- Cincinnati, OH
- Morgantown, WV
- Pittsburgh, PA
- San Diego, CA
- Washington, DC





### **ORISE CDC Facts**

- There were 1,126 ORISE CDC participants in FY23
- Gender was split 26% Male & 74% Female
- Underrepresented\* minorities = 38%



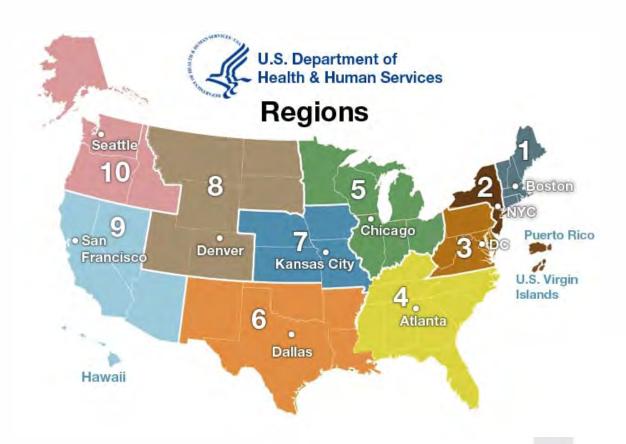
\*Underrepresented Minorities include: Hispanic or Latino, Black or African American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander.



# ORISE HHS Details

#### **Regions:**

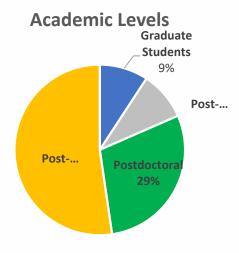
- Region 1 Boston, MA
- Region 2 New York, NY
- Region 3 Philadelphia,
   PA
- Region 4 Atlanta, GA
- Region 5 Chicago, IL
- Region 6 Dallas, TX
- Region 7 Kansas City, IA
- Region 8 Denver, CO
- Region 9 San Francisco,
   CA
- Region 10 Seattle, WA





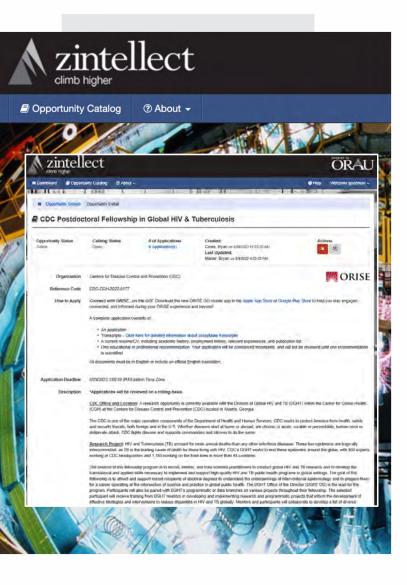
### **ORISE HHS Facts**

- There were 65 ORISE HHS participants in FY23 (excludes BARDA)
- Gender was split 22% Male & 78% Female
- Underrepresented\* minorities = 31%



\*Underrepresented Minorities include: Hispanic or Latino, Black or African American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander..





# ORISE CDC/HHS – Opportunities in Zintellect

ORISE CDC opportunities include information about:

- CDC Office/Lab and Location
- Research Project
- Learning Objectives
- Mentor(s)
- Anticipated Appointment Start Date
- Appointment Length
- Level of Participation
- Participant Stipend
- Qualifications
- Eligibility Requirements



### General "Pool" Research Opportunities

### **CDC and HHS General Opportunities (Pool Postings):**

ORISE/CDC and HHS Research Participation Programs have a **General Application** as well. If you do not find a current opportunity that fits your needs, check back into the Zintellect system regularly, as there are new opportunities being posted daily.

Also, you may access the General posting by following the links below. Often mentors and program personnel look at the applications posted in the General application box when looking for top talent to fill their opportunities. Opportunities include full-time, part-time, and summer appointments.

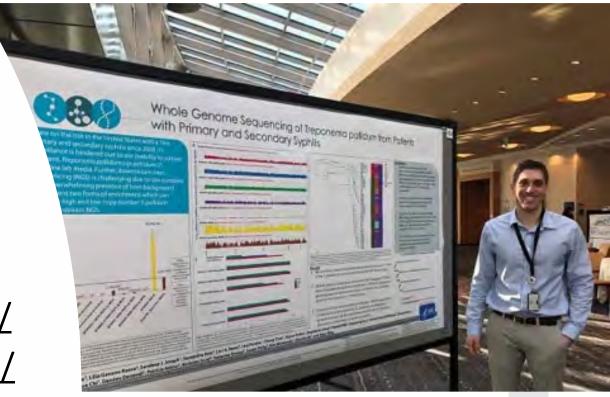
CDC: https://zintellect.com/Opportunity/Details/CDC-General-RPP-2023

HHS: https://zintellect.com/Opportunity/Details/HHS-General-RPP-2023

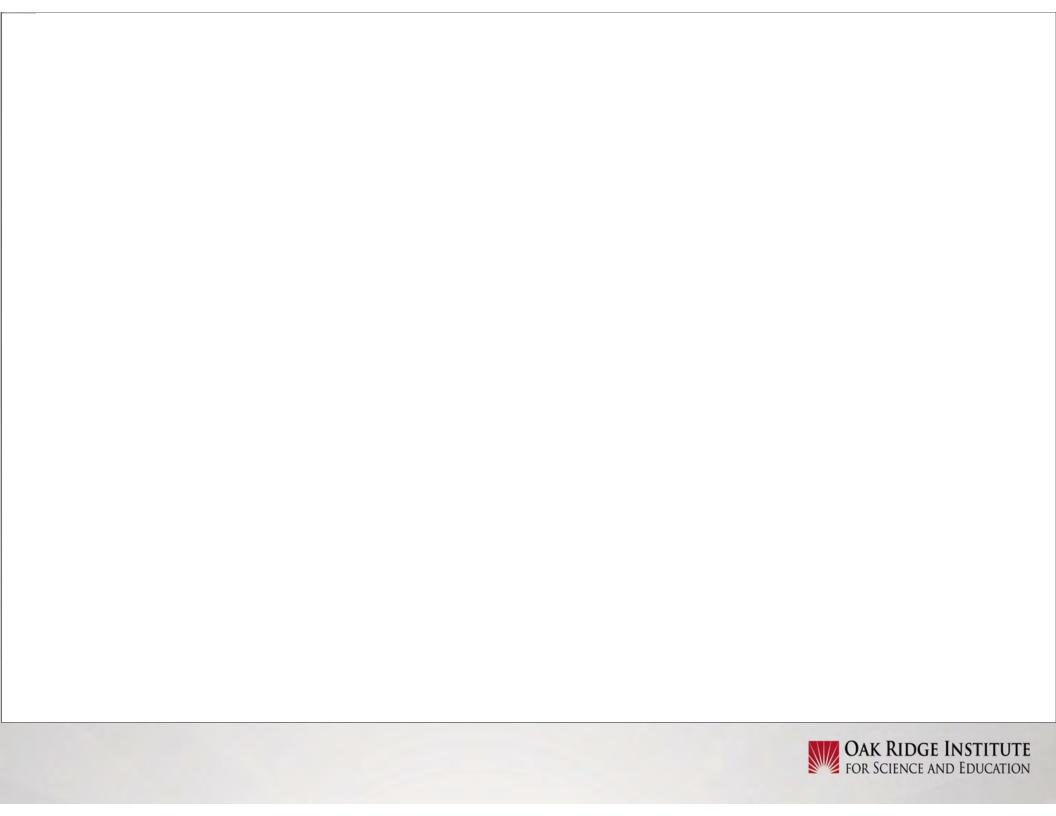


# Contact ORISE CDC Programs

- https://orise.orau.gov/cdc/
- https://orise.orau.gov/hhs/
- CDCrpp@orau.org
- HHSrpp@orau.org







# Why ORISE?





Discover a culture driven by innovation, diversity and a commitment to real-world solutions



Build a valuable network of professional connections with exclusive access to the worldwide ORISE Community



#### Explore paid STEM research, policy and technical opportunities

20+ federal departments and agencies

350+ premier national laboratories and scientific facilities

9,000+ students, postgraduates, postdocs and faculty participants each year

Find your STEM-related opportunity today!



