



U.S. DEPARTMENT OF
ENERGY

Office of
Science

January 27, 2023, Informational Webinar for DE-FOA-0002939

NUCLEAR PHYSICS REACHING A NEW ENERGY SCIENCES WORKFORCE (NP-RENEW)

FOA Issue Date:	January 9, 2023
Submission Deadline for Pre-Applications:	February 20, 2023, at 5:00 PM Eastern Time
Pre-Application Response Date:	March 6, 2023, at 11:59 PM Eastern Time
Submission Deadline for Applications:	April 17, 2023, at 11:59 PM Eastern Time

<https://science.osti.gov/Initiatives/RENEW>

https://science.osti.gov/-/media/grants/pdf/foas/2023/SC_FOA_0002939.pdf

Disclaimer : This presentation summarizes the contents of the FOA. Nothing in this webinar is intended to add to, take away from, or contradict any of the requirements of the FOA. If there are any inconsistencies between the FOA and this presentation or statements from DOE personnel, the FOA is the controlling document.

Stewardship of a Diverse, Capable Workforce

PhDs granted to NP supported students in the past 5 years:

558

Number granted to Black or African American students:

16 (2.9%)

Number granted to Hispanic or Latino students

18 (3.2%)

Underrepresentation factors relative to the US population

4 and 6

Despite past efforts, representation of negatively stereotyped groups within the DOE NP supported community remains substantially below that observed in the US population.

In 2020, NP developed a traineeship program to help build a more diverse community and to reduce barriers for negatively stereotyped and underrepresented groups.

In 2022, the Office of Science established the RENEW initiative to provide traineeships across all programs.

The NP traineeship program, now part of RENEW, has been broadened beyond traineeships.



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Evolution of the NP Traineeship Program

Interest in the FOA was much stronger than expected with many high-quality proposals: **27 awards were made** in two phases. Awards in 2022 were funded through RENEW (\$3M).

Emphasis was placed on engagement with MSI faculty and students through direct awards or partnerships and **~70% of the funds went to MSIs, MSI faculty, or MSI students**

INSIGHT at MSU was funded to provide program evaluations and other program support and coordination

Evaluations and surveys indicate mostly positive experiences for trainees. **Of the seniors who participated in the program in 2021, ~50% are now attending graduate school.**

Extended-duration, research traineeships emphasizing engagement with emerging research institutions are now a central aspect of the DOE Office of Science RENEW program

For the 2023, NP has substantially broadened the NP-RENEW program to 1) increase **pathways** of entry, 2) bolster **retention**, 3) increase **research capacity** at MSIs.

Reaching a New Energy Sciences Workforce (RENEW)

NP Participation in RENEW \$3M (FY22) and \$6M (FY23)

Building foundations through undergraduate and graduate training opportunities for students and institutions historically underrepresented in the SC research portfolio



- SC conducted outreach and listening sessions in FY21-22 on barriers to participation in SC opportunities to inform FY 2022 FOAs



- FY 2022 FOAs are piloting models of support that directly address barriers to participation in SC supported fields of research; Models will be evaluated



- FY 2023 doubles investment and commitment to advance discovery and innovation by increasing the diversity of individuals and institutions supported

What is the vision for NP-RENEW in 2023

NP envisions expanding its program in 2023 through renewals, supplementals, and new awards that

- ▶ Build on the NP traineeship program to increase entry points and maintain its sustainability
- ▶ Support retention through graduate student supplements and awards for other retention related activities
- ▶ Increase research capacity at MSIs through support for research-teaching postdoctoral fellows, teaching buy-outs, faculty expansion positions, and joint research endeavors.

Notes:

- Evaluation related to the impacts of RENEW will be conducted through a centralized SC effort, administered by ORISE on behalf of SC.
- Awardees from the first phase of the NP traineeships who want to renew their awards should apply to the FY23 NP-RENEW FOA. Awardees from the second phase may apply in FY24.
- Projects should start on 9/01/2023 (we will not be able to provide funds in time to support activities this summer).



Building on the NP traineeship program

- ▶ Award duration two to five years. If an award is recommended, we may negotiate a revised budget that changes the total funding and/or the award duration.
- ▶ The undergraduate-only restriction for beneficiaries is removed. Typically, projects should provide 15 hours of trainee support per week during the academic year and 40 hours of support per week during the summer. Preference given to applications with compensation comparable to the cost of living.
- ▶ To recognize the role of those involved in mentoring, the proposed inclusion of partial support for summer salary for faculty and/or partial salary support for postdoc or graduate student mentors (up to 30%) will be considered.
- ▶ Applications with clear recruitment and mentoring will be favored. Simultaneous support of multiple trainees (a cohort) is required.
- ▶ Applications should clearly articulate benefits to the participant trainees, including skills acquired, networking opportunities, and practical assistance in career planning.

Supporting Retention

- ▶ Awards, or supplements to existing research awards, may be requested to provide support for graduate students from MSIs/HBCUs who are participating in NP research within our current scope or for graduate students who are previous NP traineeship participants. Applicants with current NP awards should seek guidance from their relevant topic area Program Manager before submission.
- ▶ Applicants should aim to address large scale issues with retention in nuclear physics. Successful awards will improve retention of underrepresented groups in NP-sponsored research areas at any point in the “pipeline” or “pathways.” These can include proposals addressing improvements to the climate within research collaborations. Issues related to the climate in departments or institutions are not encouraged.

Expanding Research Capacity

- Research-Teaching Postdocs: Ideally, 25-50% of the postdoc's time will be spent teaching with the remaining time spent on research. Teaching time must be covered by other sources.
 - Proposals that leverage the postdoc's teaching time to increase the PI's research time (through teaching buyout) are encouraged allowing the postdoc to gain teaching experience while freeing faculty time and avoiding problems for the department.
- MSI Research Faculty Expansion: NP will consider supporting 50-75% of a new hire's time to be spent on research.
 - Applications will be considered from institutions or alliances of institutions to encourage the expansion of nuclear physics research at MSIs through new faculty positions. RIKEN and FRIB theory fellowships are relevant models.

Expanding Research Capacity: Joint Endeavors

- ▶ Support for a focused research activity undertaken jointly between an established research institution, including but not limited to national labs, and an MSI.
- ▶ These should typically include a two-way exchange of researchers.
- ▶ Should establish and maintain a long-term, equitable relationship between institutions.
- ▶ May include joint-faculty positions
- ▶ The goal of this category is to spur a sustained increase in research capacity at MSIs — Proposals will be evaluated based on their likelihood of achieving that goal.



NP-RENEW and FAIR

- ▶ RENEW is focused on traineeships, workforce development, and research capacity and can include equipment requests while FAIR is focused on infrastructure and research capacity including workforce
- ▶ They complement each other with elements of overlap
 - ▶ If the focus of your proposal is clearly dominated by traineeships, submit to RENEW.
 - ▶ If the focus of your proposal is on establishing a lab or research infrastructure, submit to FAIR
- ▶ You are also encouraged to consider submitting to both.
- ▶ If submitting to both, avoid trying to support what should be one cohesive project through separate but interdependent proposals. Reviewers need to evaluate how your project will work without external assumptions about other proposals.
- ▶ NP will evaluate RENEW and FAIR proposals with the same panel on the same week; all RENEW panelists will be FAIR panelists and all FAIR panelists will be RENEW panelists.



Where to find more information

- ▶ FOA: [DE-FOA-00027937](#)
- ▶ This webinar is being recorded; slides and the recording will be posted on the [RENEW page](#)
- ▶ Questions about the FOA? Check out the [FAQ](#)