

## Overview of Major T32 Parent FOA Changes for 2023

### *Transcript*

Hello and welcome to another presentation hosted by the UCLA CTSI Grant Submissions Unit. My name is Kelly Lozo, and I will be sharing with you some key changes made to the NIH Institutional Training Grant T32 parent funding opportunity announcement that goes into effect this year.

The FOA in discussion was posted on January 26<sup>th</sup>, 2023 and is a reissue of the previous parent T32. All May and September 2023 submissions must use this new FOA, which I will link to in our final slide.

Please note that this presentation does not go into detail about all current T32 requirements. Its focus is to highlight major changes, additions, removals, or modifications from the previous issuance. It is not inclusive of all updates. For that I encourage you to please review the new FOA in full.

To begin, I'll summarize four main changes that run through the new announcement. Although these adjustments may seem minor on the surface, they are indicative of more major thematic shifts in the NIH's interest in, and approach to, institutional training awards.

First, the new FOA has more plainly stipulated that the proposed program's focus area must clearly fit within the applicable Institute or Center's focus area or disease concern.

Regarding the leadership team, mentors' diversity considerations no longer include mention of career stage or scientific background. This uplifts the importance of each mentor's years of training experience, as junior mentors are no longer explicitly highlighted.

It also stresses that most mentors have relevant active funding in the program or IC's focus area.

A number of new curriculum elements have been called out as well, including data transparency, sharing, and storage; Human Subjects research ethics and integrity; presentation and publication skills, as well as networking and other skills; and development and critical thinking skills.

There is also an emphasis on various career options beyond academia.

Finally, in the recruitment and evaluation area, direct feedback from trainees is now required as well as demonstrating efforts to recruit not only diverse students, but also students from diverse institutions so that the training programs pipeline is broader than just a few schools.

The new FOA also qualifies that these four criteria will be used to determine eligible organizations. Some of this may seem obvious and you may already be addressing these points. However, they bear mentioning because the NIH took the time to codify and emphasize these elements so it's important that they're explicitly addressed.

First, the institution must have strong high-quality research in the proposed program area, which can be evaluated through active research funding, centers cores, other established training programs in the area, etc.

Second, the institution must have appropriate faculty, staff, potential trainees, and facilities to feed and support the proposed program.

Third, synergy with other existing programs on campus is encouraged while also ensuring that the new program is appropriately distinct. Otherwise, what's the point in a new separate training program?

And fourth, a substantial number of mentors should have active research projects that trainees can participate on so that the trainees have a wide selection of research topics to explore, develop through, and publish on.

Diving into these program plan components, the Proposed Administration section made two language adjustments that have some larger implications.

First, they changed the emphasis from promoting the success of trainees to their productivity, which further stresses that trainees should be publishing while on the program.

Second, Multi PD/PIs are now particularly encouraged, especially when each PI brings a unique perspective and skill set that enhances the training environment and comes from diverse backgrounds. Program leadership is of course addressed in the Program Administration section but also the Multi PD/PI Leadership Plan, the Institutional Support Letter, and the Institutional Environment and Commitment to Training.

It's important to note that the Proposed Training component is listed twice in the FOA. Much of this new information is grouped first under the Program Plan and then again in its original Forms H position.

In addition to the existing curriculum requirements, additional requirements to the proposed training area that I teased earlier include describing program activities that will develop trainees working knowledge and prepare them for the next step in varied research careers in the biomedical workforce.

This means first, the proposed program should provide oral and written presentation opportunities, support for applying for follow-up fellowships and grants, and for post-docs, to give them lab and project management opportunities. This language also stands to widen acceptable careers beyond academia to include viable industry options as well.

For short-term training programs they want to see a well-structured and appropriate program given the shorter duration, which should include supervised research with the primary objective of developing or enhancing research skills and knowledge for varied future careers.

In terms of renewals, the program should be evolving in response to changes in scientific and technical knowledge, educational practices, and insights gained throughout evaluations that have occurred over the five-year training period.

It also stands to reason that the NIH has updated what they want to see in the program's curriculum. Much of this was mentioned in the thematic overview, but to further expand on these points: in addition to its previous components the program curriculum should explicitly include training in research ethics, integrity, the responsible conduct of research, and rigor and reproducibility. These areas should address and develop data transparency sharing and storage, Human Subjects ethics and integrity, presentation and publication skills, networking and other skills development, and critical thinking.

In terms of training candidates three new requirements have been added to the existing instructions for this component.

One, identification and recruitment of candidates from a variety of institution types to diversify the candidate pool beyond a homogeneous set of partner institutions.

Two, plans to engage trainees in research career development, mentoring, and skills development so that they find, and encourage others to find, rewarding professions in research.

And three, transition plans to ensure the trainees are supported in various career options, be that in Academia or otherwise. Now, this is one of the most significant changes and bears repeating again. The NIH is no longer just interested in seeing students go on to academic careers, they have expanded their emphasis to various career options, which includes private industry.

The new FOA has also added some details to the 10-page Institutional Support Letter specifying that the safety of trainees includes safe and healthful working conditions and fostering work environments that are conducive to high quality research.

The review criteria has also expanded to include some new explicit considerations for reviewers such as: the program's potential for developing independent researchers who can make important contributions to their field, the number of years of experience mentors have in successfully training students that have gone on to researcher related careers, the value that the proposed career development program would pose for students to achieve independent careers (for example the program could require that trainees submit for independent grant funding).

Training experience and mentoring must be clearly described whether it be formal or informal.

Consideration of how well important criteria is described and integrated throughout the application.

And for renewals, how the program has evolved in response to scientific, technical, educational, and evaluation change.

For more long-standing programs the NIH has introduced an overarching evaluation as well. Within 10 years of the initial award reviewers will assess the program's overall outcomes, effectiveness in enhancing diversity, and whether the program should continue based on specific metrics.

For all programs they're looking for subsequent participation in formal research training, career development programs, research projects and employment in STEM, as well as authorship of scientific publications.

For undergraduate programs they want to see the successful completion of an undergrad degree in STEM and pending application for, or enrollment in, an advanced STEM degree program.

For graduate students they want to see the successful completion of a STEM graduate degree program.

And for both pre- and post-docs they're looking for a subsequent independent research grant support from the NIH or other sources.

Based on this criteria the NIH will decide whether the program should continue as proposed, continue with modification, or discontinue entirely.

Some final changes to consider relate to the advisory committee, which has shifted from being optional to highly recommended.

T32 applications are required to adhere to forms H and all other relevant NIH updates.

The purpose and program consideration section of the FOA has been rewritten and may warrant a reread.

And finally, the NIH is stressing diversity in all elements of the grant, which includes mentors and people in leadership not just trainees.

This concludes our summary of major changes. If you have any lingering questions, please don't hesitate to contact the CTSI GSU Training Grant Support Team at [GSUTraining@mednet.ucla.edu](mailto:GSUTraining@mednet.ucla.edu). I also suggest that you take a look at the full FOA linked here for your convenience.

I hope you found this guidance helpful and wish you the best of luck in your upcoming submission