

Indiana Clinical and Translational Sciences Institute (CTSI) TL1 Postdoctoral Training Awards in Translational Research *Innovation, Entrepreneurial Track*

The National Center for Advancing Translational Sciences (NCATS), a component of the National Institutes of Health, defines translation as the process of turning observations in the laboratory, clinic, and community into interventions that improve the health of individuals and the public. This includes a wide range of research that includes diagnostics and therapeutics, medical procedures, and behavioral changes. NCATS is committed to fostering the recognition and growth of translational science as a field, as well as cultivating the next generation of translational scientists.

The Indiana Clinical and Translational Sciences Institute (CTSI) TL1 Postdoctoral Training Awards, funded in part by NCATS, are designed to provide promising postdoctoral fellows with the opportunity to be mentored in research-intensive multi-disciplinary settings toward the goal of developing careers across the spectrum of translational research.

<https://ncats.nih.gov/translation/spectrum>

Research shows that diverse teams working together and capitalizing on innovative ideas and distinct perspectives outperform homogenous teams. Scientists and trainees from diverse backgrounds and life experience bring different perspectives, creativity, and individual enterprise to address complex scientific problems. There are many benefits that flow from a diverse NIH supported scientific workforce, including: fostering scientific innovation, enhancing global competitiveness, contributing to robust learning environments, improving the quality of the research, advancing the likelihood that underserved or health disparity populations take part in, and benefit from health research, and enhancing public trust.

Emphasis of CTSI postdoctoral training awards in translational research are to move findings from basic laboratory and pre-clinical research (referred to as T1 research) toward the development of new treatment options or interventions or clinical trials (referred to as T2 research) to eventual dissemination or clinical implementation (referred to as T3 research) to studying population health outcomes and health metrics (referred to as T4 research). The phases of translational research may not necessarily be linear and can jump steps depending on the research project and the starting point. The goal of the CTSI is to make awards at all of these stages.

In addition, there may be opportunities to commercialize translational science research that will benefit individuals and the public and have *clear applications to human disease and health outcomes*.

The CTSI strongly encourages applications from postdoctoral fellows who have a keen interest in directed training in advancing innovations into commercialization and entrepreneurship. The CTSI postdoctoral fellow will undertake a translational research project focused on the development of life science technology pertaining to health and human disease. The project could include research on the development of therapies, diagnostics, or medical devices. The postdoc will work in an entrepreneurial ecosystem located at one of the four CTSI partner campuses (IUB, IUSM, Purdue, and Notre Dame). The position could involve engagement in commercialization activities pre-company formation, which could include working with mentors to move a technology through their home institutions commercialization or significant work with startup companies including, pharmaceutical and medical device companies. The fellow will work in an environment with mentors who can help the fellow develop

the necessary skills to become a successful entrepreneur. The proposal will require advance planning with the innovation center and an already existing relationship and commitment between the center and the trainee. **Submission of a letter of intent is required in order to receive approval for the submission of a full proposal. The letter of intent should address the following elements; 1) commitment of the host organization to the post-doctoral position, 2) Brief description of the project and role of the post-doctoral fellow in the work proposed and 3) the names and titles of the co-mentors. The letter of intent is due 30 days prior to the proposal due date.**

To that end, postdoctoral training through this CTSI program is viewed as a collaborative endeavor among the trainee, the primary mentor, and the co-mentor. Therefore, the application must be completed by both the primary mentor and the applicant. The training is experiential, supplemented with seminars and invited talks that will help the fellow evaluate the potential of a scientific career in industry. This postdoctoral experience will also involve the preparation of business plans, exposure to different forms of fund raising and publication submissions.

Funding for all postdoctoral training awards is for up to two years (with the 2nd year of funding contingent upon review and demonstration of satisfactory progress). Benefits include salary support as well as health insurance.

The application process mirrors an abbreviated NIH National Research Service Award (NRSA) for Individual Postdoctoral Fellows (F32). As such, applicants are encouraged to apply for the F32 during their first year of support. More information on the NRSA program is available from the [National Institutes of Health](#).

Criteria for CTSI TL1 Postdoctoral Fellowship application include:

- Applicants must be located at and mentored by faculty at one of the CTSI campuses, Indiana University-Purdue University at Indianapolis, Indiana University at Bloomington, Purdue University at West Lafayette, or the University of Notre Dame.
- Candidates must have received a PhD or equivalent degree from an accredited domestic or foreign institution. These postdoctoral fellowships may not be used to support studies leading to the MD, DO, DDS, DVM, or similar health-professional degree. Neither may these awards be used to support the clinical years of residency training.
- Candidates may have no more than 36 months combined experience as a postdoctoral fellow at any academic institution or industry by April 1, 2022.
- Per NIH policy, no individual trainee may receive more than three years of aggregate Kirchstein-NRSA support at the postdoctoral level, including any combination of support from Kirchstein-NRSA institutional research training grants and individual fellowships.
- Candidates must receive interdisciplinary mentorship from a clinician or clinician-scientist with a doctoral degree and a basic or non-clinician scientist with a doctoral degree. This means there must be at least two mentors (i.e. one person cannot fill both roles). Either one may serve as primary mentor.
- Candidates must have a demonstrated interest in multi- and inter-disciplinary scientific training in translational research consistent with the ongoing work of the primary and co-mentors.
- The primary mentor must have a research program that includes peer reviewed, extramurally

funded research.

- Per NIH policy, candidates must be U.S. citizens or hold permanent resident status.

Opportunities available for CTSI TL1 Postdoctoral Fellows:

- Annual stipend aligned with NIH postdoctoral fellowships.
- Mentoring with a faculty member whose research program includes peer reviewed, extramurally funded clinical or translational research.
- Networking with other pre and post-doctoral trainees, program mentors and allied researchers from multiple institutions in Indiana to develop a cross-disciplinary community of scientists.
- Attendance, including poster presentation at: 1) National Association for Clinical and Translational Science (ACTS) meeting in Washington DC each spring that involves similar trainees from more than 50 other research institutions; 2) Annual Indiana CTSI meeting.
- Opportunities to participate seminars and invited talks that will help the fellow evaluate the potential of a scientific career in industry.
- Opportunities to participate in the preparation of business plans, exposure to different forms of fund raising and publication submissions.
- Funding is for one year and is renewable for one additional year pending review and demonstration of satisfactory progress.

CTSI trainees are required to attend and present a poster at the annual Indiana CTSI meeting in the fall, attend the national Association for Clinical and Translational Science (ACTS) meeting in Washington DC in the spring, and attend several Indiana CTSI gatherings during the academic year and complete an annual progress report.

Letter of Intent to apply must be submitted by 11:59:59 PM November 8, 2021 to Patty McGuire via email (pcmcguir@iu.edu).

Applications must be submitted by 11:59:59 PM December 9, 2021 via the link that Patty McGuire will provide for you after your Letter of Intent submission.

Awards will start on **April 1, 2022.**

Please note that you will be submitting through the Indiana CTSI's grants management software WebCAMP. Please allow enough time to be familiar with the system. The WebCAMP user's guide is also available under the funding announcement here: <https://indianactsi.org/researchers/services-tools/translational-research-development/open-funding-opportunities/>

Upload the submission via the link that Patty McGuire will provide for you after you submit your Letter of Intent

Interested candidates needing help identifying appropriate mentors should contact the Indiana CTSI Navigator at their institution:

Indiana University Purdue University - Indianapolis Navigator:
Lane Coffee, PhD, rlcoffee@iu.edu, 317-278-2150

Indiana University – Bloomington Navigator:
Joel Ybe, PhD, jybe@indiana.edu, 812-856-4882

Purdue University Navigator:
Tommy Sors, PhD, tsors@purdue.edu, 765-494-1678

University of Notre Dame Navigators:
Paul Helquist, PhD, phelquis@nd.edu, 574-631-7822
Jessica Brookshire, MS, jbrooksh@nd.edu, 574-631-5829

For general questions related to this RFA please contact Patricia McGuire, pcmccuir@iu.edu, 317-278-2824 or Andrew Bullock, PhD, sabullock@nd.edu, 574-631-2136.