

Summer 2024 Appointment

Start Application Here

Applications Due:

Wednesday, May 29, 2024

5:00 PM Central

Notification: June 17, 2024

Start Date: July 1, 2024



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Frontiers TL1 Postdoctoral Program

ABOUT THE PROGRAM

The Frontiers CTSA TL1 Postdoctoral Program is a prestigious training opportunity designed to cultivate a diverse and skilled cadre of postdoctoral translational researchers. Supported by the National Institutes of Health (NIH) Clinical and Translational Science Award (CTSA), the TL1 Program provides trainees with the knowledge, skills, and resources necessary to drive innovative and impactful clinical and translational research. Through a combination of mentorship, education, and hands-on research experience, the program aims to foster a culture of excellence, collaboration, and innovation among its trainees, ultimately leading to improvements in health outcomes for individuals and communities.

The TL1 has three main components:

- 1. Developing productive and beneficial mentoring relationships
- 2. Completing the core curriculum
- 3. Successfully conducting a translational research project

At the heart of the TL1 Program is a strong emphasis on mentorship. Trainees are paired with experienced mentors who provide guidance and support in scientific research, career development, and work-life integration. With access to a diverse range of mentors and resources, trainees have the opportunity to develop into independent researchers capable of addressing complex health challenges. The program also offers a tailored core curriculum that includes training in clinical and translational research, as well as career development activities. By providing trainees with the necessary skills, knowledge, and support, the Frontiers CTSA TL1 Program aims to nurture the next generation of leaders in translational science.

Start your <u>TL1 Postdoctoral Application here!</u> Questions regarding the program can be sent to the KL2 & TL1 Program Director, Holly Zink, Ph.D. at hzink2@kumc.edu.

PROGRAM BENEFITS

The TL1 program offers a range of benefits designed to support trainees in their development as independent clinical and translational researchers:

- **Up to 2 Years of Training and Support**: The TL1 Postdoctoral program offers a comprehensive training experience spanning up to two years, providing scholars with ample time to immerse themselves in their research and professional development.
- Competitive Stipend and Research Project Expenses: Scholars receive a stipend ranging from \$56,484 to \$68,604 (2023 NRSA Level)*, ensuring financial stability during their training. Additionally, a research project fund of \$12,000 is provided to support their research endeavors.
- **Childcare support:** The program provides childcare costs up to \$2,500*, alleviating some of the financial burden for trainees with children and enabling them to focus on their research and training.
- Intensive Mentored Research Experience: The program offers scholars the
 opportunity to engage in an intensive mentored research experience. They work
 closely with experienced mentors to develop their research skills and advance
 their projects.
- Formal Training in Clinical and Translational Research: Scholars benefit from formal training in clinical and translational research, gaining valuable skills and knowledge that enhance their research capabilities.
- Tuition Remission for MS-Clinical Research Coursework: The program offers tuition remission* for scholars pursuing coursework related to the Master of Science in Clinical Research, further enhancing their research training.
- Additional Travel Support: Scholars receive additional travel support to attend
 the National Association for Clinical and Translational conference, providing
 opportunities for networking and professional development.

*Financial support contingent on availability of funds. Frontiers Clinical and Translational Science Institute at the University of Kansas is part of a nationwide network of Clinical and Translational Science Awards institutions working to speed the research process from scientific discovery to patient care. Frontiers supports the spectrum of translational research, from animal health studies to community-based and population health outcomes research. Frontiers recognizes that diverse teams are essential to improve health, and of utmost importance are the partnerships and collaborations with communities, families and individuals. Frontiers is supported by a five-year, \$27 million grant from the National Center for Advancing Translational Sciences (NCATS) of the NIH.

PROGRAM LEADERSHIP

<u>Dr. Jennifer Goldman MD, MS–CR</u> is a pediatric infectious diseases physician. She is a Professor of Pediatrics at the University of Missouri-Kansas City and is a member of the Divisions of Clinical Pharmacology, Toxicology and Therapeutic Innovation and Infectious Diseases at Children's Mercy Kansas City, and co-Lead of the TL1 training program within Frontiers Clinical and Translational Science Institute.

Dr. Jacob Sosnoff, Ph.D. serves as the Associate Dean for Research in the School of Health Professions and a Professor in the Departments of Physical Therapy, Rehabilitation Science, and Athletic Training at the University of Kansas Medical Center, and co-Lead of the TL1 training program within Frontiers Clinical and Translational Science Institute.

MENTORING

Mentoring is a cornerstone of the Frontiers CTSA TL1 Program, playing a vital role in shaping the development and success of our trainees. We believe that effective mentorship is multifaceted, encompassing scientific guidance, career navigation, and personal support. Each TL1 Scholar is paired with a primary mentor and mentorship team, providing a diverse range of perspectives and expertise. Additionally, trainees have access to TL1 Program Directors who serve as active mentors throughout the program. Our approach to mentorship emphasizes the importance of interdisciplinary collaboration and community engagement, reflecting the diverse nature of translational research.

As part of the scholar's seminar series, trainees also receive training from the Center for the Improvement of Mentored Experiences in Research (CIMER). Frontiers CIMER-trained faculty and staff facilitate research mentor and mentee training for individuals at all career stages, ensuring that trainees are equipped with the skills and knowledge to foster effective mentoring relationships. Through CIMER, trainees learn new approaches and resources for advancing mentoring relationships, promote cultural change that values excellence in research mentoring, and build a network of mentors and mentees. This training not only enhances the mentorship experience within the TL1 Program but also contributes to advancing diversity in the research enterprise.

CORE CURRICULUM

Our Core Curriculum is designed to equip trainees with the skills and knowledge necessary to become successful translational scientists. Central to this curriculum is the integration of the "Seven Characteristics of a Translational Scientist," which include being a domain expert, boundary crosser, team player, process innovator, skilled communicator, systems thinker, and rigorous researcher. Through a combination of didactic coursework, hands-on training, and mentorship, trainees develop these characteristics independent of their particular areas of expertise.

The curriculum includes tailored didactic coursework that covers a range of topics essential for translational research, such as grant writing, scientific writing, systematic reviews, clinical trials, and responsible conduct of research. Trainees also participate in the Frontiers Scholar Seminar Series, which includes training from the Center for the Improvement of Mentored Experiences in Research (CIMER). This training helps trainees develop effective mentoring relationships and fosters a culture of excellence in research mentoring. Additionally, trainees have the opportunity to enroll in degree programs and training workshops that align with their career goals and enhance their skills in translational research. Through this comprehensive curriculum, trainees gain the knowledge and expertise needed to drive innovative and impactful clinical and translational research.



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TAILORED DIDACTIC COURSEWORK

The Tailored Didactic Coursework component of our program offers TL1 trainees a range of options to enhance their skills and knowledge in clinical and translational research. Trainees have the opportunity to participate in the Master of Science in Clinical Research program. These programs provide comprehensive training in critical areas of translational research, including informatics, biostatistics, and clinical research methods.

- Master of Science Clinical Research (KUMC)
- Master of Science in Bioinformatics (UMKC)
- Certificate in Clinical Research (UMKC)
- Graduate Certificate Health Data Science (KUMC)

In addition to degree programs, trainees can enroll in various workshops, symposia, and training programs that align with their career goals and interests. All clinical and translational researchers require opportunities to improve their skills and learn new approaches. Frontiers is committed to offering relevant, timely and high value training reflecting all aspects of clinical and translational research. Programs offer training in topics such as best practices for engaged research, nationally vetted recruitment and retention methods, practice facilitation and other useful tools and techniques. Frontiers leverages the expertise among Frontiers partner institutions to offer special training in entrepreneurship and implementation research.

- Grant Writing (KUMC PRVM 872)
- Scientific Writing (KUMC PRVM 873)
- Systematic Reviews (KUMC PRVM 869)
- Clinical Trials (KUMC BIOS 810)
- Responsible Conduct of Research (KUMC- PRVM 853)
- Scientific Rigor and Reproducibility (KUMC BIOS811)
- Implementation Science
- Biostatistics for Clinical and Translational Researchers
- Informatics (REDCap) and HERON Training

TRAINING IN RESPONSIBLE CONDUCT OF RESEARCH

TL1 Trainees are expected to uphold the highest standards of ethical conduct in research. To ensure this, trainees are required to complete training in Responsible Conduct of Research (RCR). This includes taking the Responsible Conduct of Research course (KUMC-PRVM 853). Additionally, trainees conducting human research are required to complete six biomedical Collaborative Institutional Training Initiative (CITI) modules. Trainees must also comply with any other current institutional requirements related to RCR.

MENTORED RESEARCH PROJECT

The Mentored Research Project is at the core of the TL1 program, offering trainees the opportunity to engage in transformative clinical or translational research under the guidance of experienced mentors. Each scholar, supported by their mentor team, develops and implements a research project tailored to the program's two-year timeframe and available resources. This project is expected to be rigorous, potentially impactful, and to lead to academic products such as scientific presentations, peer-reviewed publications, and the preparation of grant proposals. The research conducted during the TL1 program is designed to advance trainees' careers, with the goal of achieving independence and securing future funding, such as individual career development awards (e.g., K01, K08, K23) or R funding equivalents.

Projects within the TL1 program can take various forms, ranging from providing preliminary or pilot data for future grants to being definitively hypothesis-testing. The scope and methodology of each project are tailored to the specific research question and objectives, ensuring that trainees gain valuable experience in designing and executing impactful research. Trainees are expected to submit at least two original papers for peer-reviewed publications each year and to have submitted a meritorious application for the next stage of funding before completing the TL1 program. This emphasis on scholarly output and grant preparation equips trainees with the skills and experience needed to succeed as independent researchers in the field of clinical and translational science.

HOW TO APPLY

ELIGIBILITY

Eligibility for the TL1 postdoctoral program requires applicants to meet the following criteria:

- United States citizen or non-citizen national, or legal admission as a permanent resident.
- Fellow, postdoc, or new instructor with MD, DO, DDS, PharmD, DVM, DPT, AuD, DNP, or clinical PhD (e.g., nutrition, nursing, occupational therapy, psychology, etc.).
- Able to commit 100% effort to the research and training activities of the program.
- No more than four years removed from terminal degree. Exceptions can be made for MD/DO fellows.

FULL APPLICATION

- 1. Start Your Application: https://redcap.kumc.edu/surveys/?s=PJ4WETAAKE
- 2. Applicant NIH Biosketch (https://grants.nih.gov/grants/forms/biosketch.htm)
- 3. Personal Statement (500 Words)
 - 1. **Candidate Background and Training:** Tell us a little bit about yourself, your educational journey, and a description of any prior research and training, including relevant pre-clinical, translational, and/or clinical research. When appropriate, describe your clinical training.
 - 2. **Career Development Goals:** Describe your short- and long-term career development goals, including reasons for applying to the program and a description of how the TL1 will help develop or expand your career in clinical and translational research.
 - 3. **Research Interests:** Describe your current research interests, the mentorship and training that you will receive during the program, and your future research and training plans following completion of the program.

4. Research Strategy (5 Page Limit):

- 1. **Specific Aims**: The specific aims page is 1 page long and should provide a concise summary of the proposed research plan along with a list of the specific aims and relevant hypotheses. All aims should be achievable within a 2-year time frame. Summarize the expected outcomes(s), including the impact that the results of the proposed research will exert on the research field(s) involved. NOTE: Your Specific Aims page will be uploaded as a separate document, however, it does count in the total page limit (6 pages)
- 2. Significance: Explain the importance of the problem or the critical barrier to progress in the field that the proposed project addresses. Explain how scientific knowledge, technical capability, and/or clinical practice will be advanced. How will the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field be changed if the proposed aims are achieved. Include brief background data with appropriate citations (not counted against the page limit). Although some background is needed, don't only include background. You need to convince the reviewer that results stemming from your hypothesis and plan will be important. Don't short-change this section, but make sure you leave enough room for the Approach section.
- 3. **Innovation**: Describe any novel concepts, approaches or methodologies, instrumentation or intervention(s) to be developed or used. Emphasize any innovative approach you are using: why is your approach better than what has been done before; what makes it novel? Innovative methods, innovative equipment, or an innovative way of looking at a problem can be emphasized. One or two paragraphs are generally sufficient for the Innovation section.
- 4. **Approach**: Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims. Include how the data will be collected, analyzed, and interpreted. Discuss potential problems and alternative strategies. If you have any preliminary findings that support the aims of the project, include them in the Approach section. Outline methodology in enough detail to be understood by an expert investigator

- who may not work directly in your area of the field. Proposed activities should be feasible with the provided training-related budget (about \$11,950 per year over 2 years of funding) or convincing evidence must be provided of how your department/center will provide additional resources
- 5. **Environment**: Describe how the scientific environment in which the work will be performed contributes to the probability of success. Describe how the proposed studies take advantage of unique features of the scientific environment or employ useful collaborative arrangements (e.g. building on your mentor's prior work). Describe any institutional support, as appropriate that makes your work particularly feasible.
- 6. **Timeline and Next Steps**. Clearly articulate a two-year plan for your research and plans to submit for future funding.
- 7. Literature Cited (Not counted against page limit)
- **5. Individual Development Plan:** Applicant must submit a 3-5 page individual development plan (no more than 5 pages; references are not included in page count) that includes, but is not limited to, the following:
 - 1. **Career Goals**: Outline your professional aspirations succinctly, aligning them with your academic pursuits and desired career trajectory.
 - 2. **Past Research Experience & Relevant Graduate Coursework**: Summarize your prior research involvement and relevant coursework in a way that highlights their connection to your proposed research.
 - 3. **Mentors Selection & Rationale**: Briefly introduce your mentors and explain why you've chosen them, emphasizing their relevance to your research and career development.
 - 4. **Planned Coursework & Rationale**: Outline the courses you intend to undertake, emphasizing their significance in enhancing your skills and advancing your research goals.
 - 5. **Plans Without the Award**: Briefly describe your contingency plans for the next 2-3 years if you do not secure the grant, indicating how you'll continue pursuing your goals.

6. Impact of the Award on Career Plans: Describe how receiving the award would influence or alter your career trajectory, highlighting the changes or enhancements it would bring to your professional journey.

6. Primary Mentor Letter of Support:

- 1. The support letter should contain:
 - 1. Qualifications of the applicant.
 - 2. Indication of how the award will enhance the development of the applicant's research career
 - 3. A description of:
 - 1. the mentor's experience, training, and philosophy;
 - 2. nature and extent of interactions that will occur during the award period between mentor and mentee;
 - 3. how the proposed research fits into the mentor's research program and/or expertise; and
 - 4. how the mentor will provide guidance with regard to the applicant's career development.
 - 4. Mentor's commitment to:
 - 1. assure adequate and sustainable time and commitment;
 - 2. confirm that adequate space, facilities, and resources will be made available for the successful completion of research projects;
 - 3. confirm that you reviewed the mentee's research plan;
 - attend biannual Frontiers Training Center scholar/mentor meetings, participate in mentor training activities, and take part in grant mock reviews and monthly seminars as appropriate; and
 - 5. acknowledge that if awarded, the Applicant will cite the Frontiers CTSA grant on all work that the awardee contributes to while funded, including work that is published afterward.

- 7. Division Director/ Department Head Letter of Support: This letter should contain:
 - 1. Commitment to ensure the applicant meets the required protected time to conduct research, coursework, and other Frontiers CTSA programmatic activities. This is currently set as 100% for the TL1.
 - 2. Description of the division/department/school's resources (financial and other) that will be provided to the applicant, as a reflection of the department's long-term commitment to the applicant's career development. Address plans for further development after the period of the CTSA award and the applicant's motivation and likelihood to become an independent investigator.
 - 3. Assurance the Primary Mentor supports the applicant's career development and training plan.
 - 4. Declaration of financial commitment from the primary mentor or department to cover fringe benefits during the training time as NIH training grants are not allowed to cover this expense.

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