New Jersey Alliance for Clinical and Translational Science (NJ ACTS)
Clinical and Translational Science Trainee (CTST) Award
Trainee Program Description

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Overview
Funded by the National Institutes of Health under its Clinical and Translational Sciences Award program, the TL1 award supports predoctoral and postdoctoral trainees who are seeking a broad introduction to clinical and translational research. The goal of the TL1 training award is to provide career development, beyond that encountered in traditional pre-and postdoctoral programs, by focusing on the knowledge and expertise needed to conduct translational team research across disciplines.

The NJ ACTS Trainee Program
The goal of the NJ ACTS training program is to develop translational scientists who can think across systems and are skilled communicators, rigorous researchers, domain experts, process innovators, and team players who are able to cross the boundaries that traditionally separate disciplines (see figure, right). To accomplish this, and in collaboration with the TL1 Research Preceptor (defined as the Ph.D. thesis advisor or the postdoctoral primary research mentor), the trainee and the TL1 leadership will design a personalized program based on each trainee’s prior experience, current research project and future research goals. This training program will run simultaneously with the trainee’s ongoing doctoral/research training, allowing each trainee to gain the knowledge and skills needed to achieve the goal of the program. It will focus on both didactic and experiential learning opportunities, incorporating the clinical/translational components of the TL1 program into the trainee’s ongoing research project, culminating in a Rutgers Certificate in Clinical and Translational Science (CCTS) upon program completion.

The requirements and opportunities of the TL1 Training program include:
- Each Trainee will develop an Individual Development Plan (IDP) to guide training and acquisition of translational science knowledge and skills. The IDPs will include a research question, hypothesis, study design and approach and a narrative statement of longer-term career aspirations.
- Trainees will also participate in a Core Curriculum comprised of courses appropriate to their research and level of training. These courses are in addition to the trainee’s program requirements (for predoctoral trainees), although there may be overlap between the two.
Training plans include required and elective didactic programs, NJACTS-sponsored seminars/workshops, and other career development programs.

- A required **Core Curriculum** is based on an expectation that a number of core competencies will be achieved. At the end of the program, the trainees should be able to:
  1. Develop the clinical/translational research question
  2. Critique the literature
  3. Understand aspects of Study design
  4. Appreciate the heterogeneity of disease/precision medicine
  5. Understand research implementation/sources of error
  6. Have expertise in statistical approaches
  7. Understand and participate in translational teamwork
  8. Understand and commit to the responsible conduct of research
  9. Excel in scientific communication
  10. Understand the need for and have the ability to function well in a culturally diverse environment.
  11. Excel in additional skills needed for successful career development
  12. Understand approaches to community engagement
  13. Participate in peer mentoring.

- We anticipate that this **Core curriculum** will require an average of ~10-15% of the trainee’s time during each year of the 3 year training period, and will require an additional 2-4 courses beyond the trainee’s current graduate program requirements (for predoctoral trainees) or prior coursework (for postdoctoral trainees). **Required courses** include Responsible Conduct of Research, Biostatistics/Scientific Rigor and Responsibility, Grant-writing, and Team Science; prior successful participation in a for-credit course may substitute for a required course at the discretion of the TL1 leadership and mentoring committee. Each trainee, in conjunction with their Mentorship Committee, will define a personalized curriculum.

- A variety of experiential learning opportunities will also be available (for example, shadowing clinicians, participating in computational studies, community outreach) and a minimum of 24 of these contact hours are required for completion of the program.

- Trainees will be expected to publish their findings in well-respected scientific journals and prepare applications for fellowships (predoctoral trainees) or independent funding (postdoctoral trainees) prior to program completion.

**TL1 Award Provisions**
The NJ ACT TL1 award will support 5 trainees each year, **providing each trainee a full first year of support that includes:**
- Full stipend/salary and benefits
- Full tuition (for Ph.D. students)
- Up to $1000 for professional travel.

Participation in the program **requires a total commitment of 3 years**, including an initial research year of support from the TL1 award. This will afford the flexibility to schedule the didactic and experiential learning experiences so as to avoid a negative impact on the progress of the trainee’s primary research/program commitments; it will also provide an opportunity for peer mentoring of future trainee cohorts. The program also requires a commitment to provide follow-up information annually.

**Eligibility Criteria**
To be eligible for the NJ ACTS Trainee Program, applicants must:
- Be a pre- or postdoctoral trainee at Rutgers, NJIT or Princeton University.
- **Be a US citizen or a Permanent Resident of the US.**
- Have a strong science background, as demonstrated by performance in didactic courses, prior research experience and letters of reference.
- Have a research Preceptor who is a member of the **NJ ACTS Academy of Mentors** (see below).
• Be involved in a research project with strong translational potential, and be committed to applying the knowledge acquired during the TL1 training program to moving the current research project along the translational research spectrum.
• Have joined a laboratory and be able to articulate a mature and complete proposal of the PhD project (for PhD or PhD-phase students) or agreed research project (post-doctoral applicants) by the due date of the application.
• Not currently hold or be a prior recipient of an externally-funded research fellowship in your current position.
• Commit a minimum of 3 years to the program (with one year funded by this award).

We strongly encourage applications from women and individuals from groups that are underrepresented in medicine and translational research including, but not limited to, ethnic minorities and individuals with disabilities or from disadvantaged backgrounds.

A complete application comprises:
• The Application Form, which includes:
  o Applicant information
  o Applicant education
  o Honors and Awards
  o Prior research experience
  o Thesis (predoctoral) or Research (postdoctoral) proposal - (no more than 2-pages single spaced): Highlight how this research project has the potential for 1) a significant impact on the prevention, diagnosis and/or treatment of disease or 2) improving healthy environments/lifestyles. Research that addresses heterogeneity of disease and treatment response (i.e. research that takes into account individual differences in people’s genes, environments, and lifestyles) will be viewed highly.
  o Publications
  o Personal statement - (no more than 250 words): Explain how the additional training provided by the NJ ACTS TL1 program will inform your current research studies and enhance your career goals. Please be explicit.
  o Regulatory approvals #s, if applicable: IRB and IACUC approvals are not necessary at the time of application, but must be in place prior to the award start date. As these approvals must also be obtained from a separate NIH panel, applicants are strongly encouraged to begin the process immediately.
• Most recent transcript (i.e. graduate or professional school); “informal” transcripts are acceptable.
• 2 (predoctoral trainee) or 3 (postdoctoral trainee) letters of reference. One letter must be from the research preceptor stating the trainee’s qualifications as well as the mentor’s commitment to guarantee completion of the TL1 training program (i.e. 3 year total)
• Thesis (predoctoral) or Research (postdoctoral) Proposal
• Personal Statement
• Regulatory Approvals: IRB and IACUC approvals are not necessary at the time of application, but must be in place prior to the award start date. As protocols must also be approved by the NIH, applicants are strongly encouraged to begin the process immediately.

Completed applications should be sent to the Program Director, Dr. Kathleen Scotto (Kathleen.scotto@rutgers.edu) and the Program Administrator, Dr. Wayne Zhou (wz241@gsbs.rutgers.edu), by 5:00 pm EST on the application due date.

Key Dates:
• Applications due: Monday, August 26, 2019
• Interviews: September 2019
• Earliest Award Start Date: October 1, 2019
**Selection Process**

Upon committee review of the applications, the most promising candidates will be contacted and invited to interview with the TL1 selection committee. Final selections will be based upon the initial application as well as written evaluations from each interviewing faculty member.

**NJ ACTS Academy of Mentors**

All research preceptors must be members of the NJ ACTS Academy of Mentors. Preceptors who are not currently members of the Academy can apply for membership prior to the TL1 application deadline. Please contact Dr. Kathleen Scotto kathleen.scotto@rutgers.edu for details. A list of current Academy preceptors is attached.

Preceptors are defined as the thesis mentor for predoctoral trainees or the primary research mentor (i.e. Principal Investigator) for postdoctoral trainees. Preceptors are expected to play an active role during the course of the award by fostering the applicant’s career development as a translational/clinical scientist. They are expected to act as advocates for the applicant at the departmental, institutional and professional levels and provide scientific guidance for the proposed project. In addition to his/her research preceptor, each trainee will establish a mentoring committee that includes faculty whose translational or clinical research expertise is pertinent to the research project, and will supplement that of the research preceptor.

**Trainee Evaluation**

Trainee evaluation and feedback is an important component of the Program and is intended to provide positive and actionable feedback to the Trainee. Specific components include:

- The Mentorship Committee, which includes the thesis/primary research mentor, other scientific mentors as required by the academic program, and a TL1-specific mentor will monitor research and career progress biannually, utilizing student grades, research accomplishments and progress on the trainee’s original goals and activities as outlined in the IDP.
- The Trainee will submit a brief written progress report of his/her accomplishments to the Mentorship Committee biannually.
- The Trainee will also provide feedback to the Executive Committee (EC) on his/her view of the components of the training program, including recommendations for improvement.
- The Trainee's Mentorship Committee will complete a biannual written evaluation form for submission, along with the Trainee’s self-evaluation, to the EC.
- The trainee will be expected to participate in NJ ACTS workshops and seminar series seminar series and present his/her research accomplishments at the annual retreat.
- A formal review of the Trainee will be performed annually by the EC. Further participation in the program will be based on:
  - Successful progress in the primary research project
  - Successful completion of the first-year personalized curriculum as outlined by the Trainee’s Mentoring Committee.
  - Successful presentations (oral and/or written) at designated CTSA events (i.e. seminar series, workshops, retreats).
  - Preparation of an application for additional mentored research or career development.

**Please direct all questions to the Program Administrator:**

Wayne Zhou, Ph.D.
School of Graduate Studies- Biomedical and Health Sciences
Rutgers, State University of New Jersey

Email: wz241@gsbs.rutgers.edu
# Clinical and Translational Science Training Award Program

## Academy of Mentors Preceptor List

### Rutgers University Faculty

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<tr>
<td>Princeton University Faculty</td>
<td>Boulanger, Lisa</td>
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