TRANSFORM TL1 Training Program for Postdoctoral Fellows

INFORMATION AND APPLICATION PROCEDURES AND FORMS

I. Background.

On September 29, 2006, Columbia University became one of the first twelve institutions to compete successfully for the new Clinical and Translational Science Award (CTSA) from the National Institutes of Health. Through the CTSA, the NIH has launched a new national consortium that seeks to transform the conduct of clinical and translational research, ultimately enabling researchers to provide new and effective treatments more efficiently and quickly to patients. A key component of the CTSA at Columbia is the TRANSFORM TL1 Training program for Postdoctoral Fellows. The TRANSFORM TL1 award combines didactic training, mentoring, exposure to multidisciplinary research, and ongoing evaluation to prepare young investigators for an academic research career that can contribute to developing innovative approaches to disease prevention and treatment that takes into account individual differences in people's genes, environments, and lifestyles.

II. Award Provisions.

With TRANSFORM TL1 support, postdoctoral candidates will participate in an integrated didactic and mentored training program. Postdoctoral candidates are required to dedicate full-time to research and training related to precision medicine. Precision Medicine includes research related to, but not limited to, lifestyle, environment, or genetics.

The CTSA support includes funds for stipend (stipend level is determined by the number of full years of relevant postdoctoral experience when the award is issued), travel expenses, training related expenses such as supplies and health insurance, and tuition and fees in accordance with NIH policy, and therefore, may be subject to change.

The TL1 Award is only able to provide the NIH approved stipend amount thus applicants should speak with their mentors and/or department about any stipend supplementation required to meet Columbia University's minimum annual stipend requirements.

III. Eligibility Criteria.

- Applicant must be a U.S. citizen or permanent resident, and must hold a research or healthprofessional doctoral degree or its equivalent.
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- Applicant must have a **postdoctoral appointment** at Columbia University. It is acceptable to have a non-postdoctoral appointment at the time of the application, so long as the applicant has a postdoctoral appointment by the time of the award (July 1, 2020); *this must be clearly indicated in the letter of support from the applicant's department chair*.
- Applicant must be able to devote a minimum of two years to the TL1 training program.

- Each applicant's department chair must provide a supporting letter guaranteeing that if awarded, the trainee will pursue their research training full time
- The applicant must not have a concurrent award from the NIH or other PHS funding.

IV. Further Application and Award Details.

- Note that the typical duration of the TL1 award is <u>2 years</u>, initially awarded as a one-year grant but renewable annually based on performance and renewal of the CTSA grant from NIH.
- The TL1 program places special emphasis on multidisciplinary and interdisciplinary research (see section VIII for definitions), which must be reflected in the research, training, and "team mentorship" plans. By "team mentorship," we mean that each applicant must identify TL1 Mentors from at least two different disciplines to supervise his/her research progress during the period of the award (see sections VIII and IX below for guidance). Additional consultants may also be named, as needed and appropriate. A proposed schedule of meeting times between the scholar and his/her mentors must be provided.
- Candidates who enter the program will take didactic courses related to precision medicine and career development. We also welcome applications from candidates who are currently enrolled in but have not yet completed a research Master's degree program. In all cases, applicants should describe how additional training will enhance their specific research program.
- Successful completion of the 1-credit course entitled "Responsible conduct of research and related policy issues" (G4010) is required of all TL1 scholars.
- Active participation in and attendance (80% or better) at the weekly POR Career Development Colloquium and monthly Precision Medicine Colloquium is a program requirement, as well as completion of all assignments.
- TL1 Scholars will be required to attend at least two Precision Medicine Seminars and lunches per year.
- TL1 Scholars will be required to present oral progress reports 1-2 times per year and to submit a written report annually.
- TL1 Scholars will be required to participate in a collaborative meeting with other NYC area TL1 trainees once during the year which may be a poster session, workshop, presentation, etc
- Awardees will be required to participate in at least one Externship opportunity during the funding period.
- Each scholar and his/her mentors must attend periodic progress report meetings, and must also provide upon request written updates on the scholar's academic career accomplishments and feedback on the program and mentorship, both during the program and throughout the scholar's career.
- Scholars must work with administrators in their home departments as well as CTSA administrators to ensure successful management of TL1 salary and funds for the costs of tuition, research expenses, travel, and supplies.
- At the end of each funding year, TL1 Scholars must complete an audit and planning meeting with the TRANSFORM program manager to review completed requirements and what is expected in year 2.
- In order to receive a TL1 Award, scholars and their mentors must sign the "TL1 Compact" indicating their agreement to all TL1 Award requirements and expectations.

V. Application Information

Each applicant must submit electronically the application form and its supplemental documents, which include:

- Current CV
- NIH Biosketch (version D)
- Externship Preferences
- Personal Statement
- 4-page Research proposal: The research proposal should represent a well-developed scientific initiative in clinical or translational investigation. Because of page limitations, the proposal does not require the full detail of an NIH grant, but must be thorough enough to be evaluated in terms of overall design, significance, statistical approach, and human subjects issues (see the application form for specific TL1 instructions, modeled after NIH research grant instructions). The proposed research must meet the NIH definition of patient oriented research, so that the focus of the research can be translational, mechanistic, therapeutic, clinical trials-oriented, physiological, behavioral, or epidemiologic in nature.
- The names of 2 (or more) proposed multidisciplinary TL1 Mentors and proposed meeting schedule (see section VIII below for more on mentor selections)
- Three letters of recommendation (2 from primary mentors and 1 from the Department Chair)
 - **Note**: Upon submission of your application, an email will be sent to your mentors and Department Chair asking them to complete a short recommendation form and upload their letters.

The Application should be submitted by 5pm on Monday, February 10, 2020.

VII. Emphasis on Precision Medicine Research.

The Postdoctoral Training Program aims to create the next generation of leaders in the development and application of precision medicine science and methods to improve public health. This new training program in precision medicine will train physicians/researchers to identify individual differences to help develop innovative approaches to disease prevention and treatment options. Precision Medicine includes research related to, but not limited to, lifestyle, environment, or genetics.

VIII. Emphasis on Multidisciplinary and Interdisciplinary Research.

The CTSA award, which funds the TRANSFORM TL1 program, seeks to promote multidisciplinary and interdisciplinary research initiatives. Consequently, applications that reflect a strong multidisciplinary or interdisciplinary flavor will be viewed very favorably. According to Patricia Rosenfield in her 1992 article in *Social Science and Medicine*, interdisciplinarity is "when researchers work jointly but from discipline-specific bases to address a common problem." In contrast with multidisciplinary research, interdisciplinary research suggests a more deeply integrated collaboration, and not simply working in parallel, to address a research question of interest.

IX. TL1 Team Mentorship.

Each application must specify at least **two TL1 Mentors** from different disciplines (who may be from different schools, departments, or divisions) to oversee the candidate's progress in precision medicine research. As the ideal TL1 candidate will propose science that is interdisciplinary, the mentors should be chosen to reflect the disciplines needed to gain independence in the proposed research area. For example, a lab-based researcher and an endocrinologist might be chosen to supervise a project on

early diabetes drug development. The TL1 Mentors should be chosen from the large pool of senior investigators at Columbia who have established reputations in clinical/translational research and mentorship. The primary mentor must be a member of any department at Columbia University. The TL1 Advisory Committee will review the credentials of the proposed mentors for appropriateness. Criteria used in their review will include scientific productivity, grant-funding record, and mentoring history. If the committee decides that a mentor is unsuitable, the applicant may be required to meet with CTSA program leaders to discuss how to proceed. In some instances, the TL1 Committee may recommend that a more senior mentor join the mentoring team, or propose additional mentors. Because of the outstanding cadre of clinical/translational investigators at CUMC and its affiliates, we do not expect any difficulty in identifying excellent mentors.

A specific schedule for meetings between the scholar and mentors must be included in the application package. The strongest applications will specify frequent (e.g., weekly) team mentoring meetings in which all mentors meet simultaneously with the scholar. Meetings with other advisors/consultants are expected to take place less frequently. In addition, the TL1 Mentors must be available to report on the candidate's progress to the full TL1 Advisory Committee at meetings and symposia 1-2 times per year. Finally, written feedback and evaluations are required periodically of both scholars and mentors.

X. Miscellaneous Issues.

- There is no need to present a formal budget; just be sure that you will have enough funds to do what you have planned.
- Appendices are not permitted.
- We reserve the right to request additional information at any point during the review process.

XI. Application Procedures and Deadlines.

The application can be accessed <u>here</u>. The priority deadline is Monday, February 10, 2020.

Questions? Contact the Irving Institute Education Center at ctsa edu@cumc.columbia.edu