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**Proposal Status:**   [Selected for Retreat Discussion](http://open-proposals.ucsf.edu/bigtent/topic/selected-for-retreat-discussion%22%20%5Co%20%22)

We recommend that the UCSF CTSI initiate a grants program to support collaborative, multidisciplinary, translational research across departments at UCSF and, in future years, across the entire UC system.

**1. Scale and significance of the problem**. Successful translational research requires the collaborative effort of individuals with expertise in a broad range of disciplines, including (among many) bench science, structural biology, chemistry, clinical medicine, and statistics. At UCSF, as at almost all academic research centers, collaboration among faculty and trainees is made difficult by the mechanisms of funding, which reward individual success, and by the measures of academic success, which generally do not reward collaboration. Despite this, there is a strong tradition of collegiality at UCSF and we believe that support for collaborative translational research here will be rewarded with success. We propose that this effort can then be scaled to include the other UC campuses, to broaden expertise and access to patients. This would be facilitated by current initiatives to foster collaborations across UC medical centers (e.g., BRAID and UC ReX).

      **2. Current approaches (nationally).** The NIH has stressed the importance of translational research and academic centers have moved to meet this need in a variety of ways. Often, these approaches are “top-down,” including, for example, the creation of new departments or facilities to create lead compounds or to develop screening procedures for drugs. UCSF has in addition utilized “bottom-up” approaches, supporting investigators with concepts that may lead to new therapies, e.g., the T1 catalyst program and the UCSF/Pfizer Center for Therapeutic Innovation. The CTSI has in particular supported the development of clinical researchers, with notable success. None of these efforts, however, directly addresses the need to increase and to sustain collaborative research efforts. In particular, at UCSF, as at most academic medical centers across the nation, basic scientists and clinical scientists work in different worlds, with little overlap.

      **3. Proposed approach and why it is innovative**. We propose that the CTSI directly counter the barriers to collaborative translational research by supporting research that promotes synergy among investigators across at least two different departments. Collaboration between clinical and basic science departments would be especially encouraged. Awards would be for up to $100,000, spent over a period of up to two years. Criteria would include:  **A**. Goals that will advance the possibility of new therapies or diagnostics that will benefit humans with disease. Translation of discoveries made in UCSF laboratories would be given high priority; **B**. An operational plan that demonstrates how support will promote interactions and collaboration among investigators; **C**. A path to clinical implementation, even if this is not a goal of the grant. **D**. Explanation of how the studies will add value to the work such that it is more likely to generate support from other sources.

      Applicants would be encouraged to make use of the CTSI resources, e.g., in statistics, study design, patient recruitment, etc. Applications would begin with a one-page pre-application. Selected pre-applicants would be invited to submit a 4-page application for review by a standing committee. Full applications would be accepted at least twice yearly.

      By supporting collaboration rather than individual effort, the CTSI program will tap into the great expertise in both clinical and bench science at UCSF. The innovation in this approach is its direct support of a bridge between these domains. Support for team research has long been the approach in industry, but it is little tested in academia.

      **4. Potential Partners.** The program should have appeal as a target for fundraising. Also, as the program expands to other UC campuses, they should contribute.

      **5. Projected Impact.** Translational research inherently carries high risk with a concomitant high payoff if successful. Because of this, it is our expectation that many of the projects will fail. If they do not, we are probably not assuming enough risk. But the payoff can be very large, as shown by the UCSF Program for Breakthrough Biomedical Research (PIBBR), which supports risky research but has brought in support that is many times greater than the investment.

      This proposal is endorsed by:  Joe DeRisi (Biochemistry and Biophysics), John Fahy (Medicine), Kathy Giacomini (BioEngineering and Therapeutic Sciences), Steve Hauser (Neurology), Tippi MacKenzie (Surgery), Mike McCune (Medicine), William Seaman (Medicine), Kevin Shannon (Pediatrics), Kevan Shokat (Cellular and Molecular Pharmacology), Eric Small (Medicine) and Zena Werb (Anatomy).