The FAVOR T32 titled “Filling a Void of Research Training for Transplant Surgeons” will prepare surgical residents for translational research careers in abdominal and thoracic transplant surgery. This program will train and inspire a unique cadre of surgeon-scientists to translate astute observations at the bedside, in the operating room, and in the clinic into novel hypotheses that can be interrogated through immunology-focused translational research. This program is uniquely focused, serving a growing need to train the next generation of transplant surgeon-scientists that can contribute to the burgeoning field of translational and personalized medicine. FAVOR is structured to reverse the dismal trend resulting in only 1.8% of ASTS trained surgical fellows successfully competing for NIH-K series awards, despite 76% being motivated to spend more time in research (Englesbe et al., AJT 2010:10, 191-193; Kirk & Feng, AJT 2011, 11; 191-193). The training includes core courses in Designing Clinical Research, Statistical Computing and Database Management in Clinical Research, Scientific Writing, and Biostatistical Methods for Clinical Research. The FAVOR T32 also includes specialized training electives, which will be tailored to each trainee based on long-term goals and interests. A small cadre of surgical trainees from within UCSF, all training grant eligible and highly diverse (~40% URM, 50% female), will be selected for FAVOR. We will also invite trainees from other academic institutions by competitive application for training slots, where trainees will dedicate two full-time years, without significant clinical responsibilities, towards research education and training. One trainee slot/year will also be eligible to enroll in a 1-2 year degree course in Clinical/Translational Medicine. Trainees will be prepared to apply their training to deepen understanding of the immune system, as well as developing new, immune-based diagnostics, prognostics, therapeutics and clinical approaches that are relevant to surgical procedures and outcomes. While in the program they will also learn how to develop and draw upon clinical databases that integrate surgical outcomes with data from pathology and immunology. FAVOR’s NIH-funded faculty, with distinguished track records in immunology and translational research, have been specially selected to inspire and guide trainees in translational mentored research, with selection of 2 mentors/trainee from each of the clinical and scientific mentor pools. Post-training career advice and guidance will facilitate placement into prestigious fellowships and academic faculty positions for FAVOR trainees. The national impact of the FAVOR program will be realized through the scientific maturation of a trainee group with comprehensive clinical expertise and outstanding translational science, with the ability to apply translational immunology to benefit organ transplant recipients.