

NIH T32 Training Grants available to Pediatric Infectious Diseases Fellows

1. CARING: Combating Antibiotic Resistance into the Next Generation

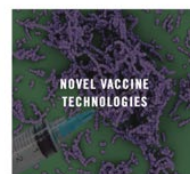
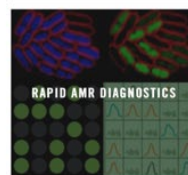
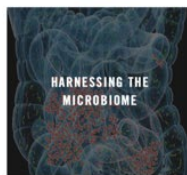
The overarching goal of the CARING T32 training program awarded to UC San Diego from the National Institute of Allergy and Infectious Diseases is to train MD and PhD scientists who wish to pursue rigorous research training that will place them on the pathway to productive, independent academic research careers. CARING entails a high level of commitment to each trainee in terms of training duration and intensity, coupled with the multidisciplinary character of the training experience, thus enabling extremely successful trainees in progressing to the next stages of development of careers as physician investigators. Upon completion of the CARING program, trainees will be well-trained in modern infectious disease research focused on providing innovative solutions to the growing antimicrobial resistance (AMR) crisis.

Our leadership structure, world class research faculty, proven successful educational and training elements, and innovative new offerings -- all galvanize to address one of the greatest challenges facing modern medicine and public health: the global AMR crisis. This new focus is organized into 6 research themes:

- 1) Deciphering Microbial Virulence
- 2) Host Defense & Vaccinology
- 3) Novel Therapeutic Discovery
- 4) Microbiome Science
- 5) Systems Biology & Engineering
- 6) Clinical Microbiology & Therapeutics



UCSD Collaborative to Halt Antibiotic-Resistant Microbes
The AMR crisis reflects limited creativity in drug discovery. Inspired by UCSD motto "we break things better", CHARM investigators are advancing disruptive, cutting-edge technologies for diagnosis and cure of serious infectious diseases.



2. ATTACH: Academic Training in Therapeutic Advancement for Child Health

While tremendous advances in pharmacotherapy for adults have been achieved in recent years, expanding the benefits of these new therapies to infants and children remains a significant challenge. Important developmental changes in pharmacokinetics, pharmacodynamics, disease presentation and progression all impede direct translation of adult therapeutics into pediatrics. The discipline of pediatric clinical pharmacology provides necessary training in developmental physiology to leverage existing knowledge and guide rational therapeutics for infants and children. However, the current pool of pharmacologists and pediatric sub-specialists with formal training in clinical pharmacology is both small and aging. Additional pediatric clinician-scientists with training in clinical pharmacology are urgently needed to ensure that therapies are optimized for infants and children. In 2015, under the leadership of Edmund Capparelli, PharmD (expert in pediatric pharmacokinetic (PK) modeling) and Adriana Tremoulet, MD, MAS (expert in pediatric clinical trials), training in pediatric clinical pharmacology at UC San Diego was formalized as a NICHD-supported T32 Training Program. In this renewal, we proudly seek to (1) modernize our program with new program leadership, (2) recruit more world-renowned faculty to teach our fellows state-of-the-art technologies, (3) launch a systematic tool to assess performance of our program and assist in program improvement, (4) emphasize trainee and faculty mentor training, and (5) enhance recruitment methods to attract a more diverse pool of applicants and trainees to stimulate diversity in the workforce. With our impressive group of mentors with outstanding training track records, UCSD ATTACH Fellows will be poised to be tomorrow's leaders in pediatric clinical pharmacology.