CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP140110

Project Title:
Cancer Intervention and Prevention Discoveries Program

Award Mechanism:
Research Training Award Continuation Grants for Years 4 and 5

Principal Investigator:
White, Michael

Entity:
The University of Texas Southwestern Medical Center

Lay Summary:

This integrated predoctoral and postdoctoral training program will support the development of exceptionally talented individuals who seek to become innovative leaders in the arena of medically directed cancer research. The experimental and didactic focus of the Cancer Intervention and Prevention Discoveries Program (CIPD) is defined by 4 scientific programs built upon current institutional strengths in discovery science and medicine. These include cancer target and pathway discovery directed by Melanie Cobb, drug discovery and development directed by Steve McKnight, tumor biology and preclinical modeling of human cancer directed by Luis Parada, and molecular therapeutics and translational development directed by Joan Schiller. Participating faculty prosecute basic and translational discovery campaigns against human cancer at multiple levels of mechanistic resolution; spanning atomic structure, molecular biology, chemical genetics, functional genomics, and preclinical modeling through to investigator initiated clinical trials. Our aim is to develop a cadre of Ph.D. and M.D./Ph.D. scientists who can formulate clinically important questions from a basic science perspective, who understand how to interface and collaborate with clinical and translational researchers, and who have the skillset to target their research programs to address unmet therapeutic and diagnostic needs. To empower our trainees to spearhead the bidirectional translation of discoveries between the “bench and bedside”, we have recruited a cohort of world-class clinicians and physician scientists to serve as comentors for all trainees. These comentors will provide structured exposure to cancer patient care and clinical cancer research by appropriate integration of trainees into the Simmons Cancer Center’s Disease Oriented Teams (DOTs). These teams were developed to provide a multidisciplinary approach to the treatment of cancer patients and include oncologists, translational scientists, research nurses, study coordinators and data specialists. The marriage of basic and clinical perspectives is the core goal of the Cancer Intervention and Prevention Discoveries (CIPD) Program. Through structured exposures and experiences, this program will establish a potent cohort of cancer-focused trainees who will forge strong links between basic science and clinical initiatives at UT Southwestern. This will be accomplished by bridging exceptional discovery science training for graduate students and postdoctoral scholars to a translational and clinical frame of reference provided by disease-oriented teams and clinically-based co-mentors. The initial applicant pool for the CIPD consists of >100 predoctoral students and >150 postdoctoral scholars. The proposal will fund 11 predoctoral, 7 postdoctoral, and 10 summer undergraduate trainees. The Steering Committee, Cobb, McKnight, Parada, and Schiller will be responsible for: (i) active recruitment of trainees, including women and under-

represented minorities; (ii) selection of high caliber candidates who are committed to research careers; (iii) tracking the progress of trainees according to specified criteria and standards; (iv) evaluation of the mentorship provided by individual faculty, thereby deciding which faculty remain part of the training program and selecting new faculty for membership; (v) tracking the success of trainees who have completed the training program; and (vi) review and approval of training plans for junior faculty physician scientist trainees. In addition, the Steering Committee is responsible for overseeing the evaluation, review, and updating of courses and the training program on a regular basis. Progress will be evaluated annually through the following mechanisms: 1) Annual assessment: the Director and Steering Committee will evaluate progress and implement reforms as needed at each Steering Committee meeting. 2) Formal evaluations from trainees and mentors. 3) Independent analysis within UT Southwestern via an annual meeting of the Graduate School Dean and DBS staff with trainees. The success of the program will be evaluated by the following: 1. Traditional academic measures, such as number of abstracts presented, number of publications in peer-reviewed journals, and success with obtaining peer-reviewed funding. 2. Career paths of trainees. Post-program tracking will evaluate the impact of the program for each trainee. Participants will be annually reviewed for ten years post-graduation to determine their success and productivity as researchers. All trainees will be evaluated on their publication record, degree or certificate earned, positions in professional societies and other awards, patents and procedures developed, participant's role as primary investigator in research projects, mentoring record, number and monetary value of funded research projects, and the source of funding, as appropriate.