



CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:
RP140102

Project Title:
Baylor College of Medicine Comprehensive Cancer Training Program

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

Principal Investigator:
Rosen, Jeffrey M

Entity:
Baylor College of Medicine

Lay Summary:

This is a continuation of our highly successful comprehensive CPRIT training program. "The overall goal of this training program continues to be to facilitate the training of the next generation of outstanding cancer biology researchers to help ensure a diverse pool of highly trained scientists are available to meet the State's and nation's basic, clinical and translational cancer needs". To accomplish this goal, we have developed a comprehensive cancer biology training program involving undergraduate, graduate PhD, postdoctoral, and clinical fellow trainees with an emphasis on both basic and translational cancer research. The program is built on a solid foundation of already established, nationally competitive and successful training programs at Baylor College of Medicine (BCM) with a strong record of training underrepresented minorities. We have used the CPRIT training program to help integrate and leverage our existing training support in cancer biology at BCM. The CPRIT training grant has served and will continue to attract additional talented trainees to Texas. These trainees complemented the trainees in our existing federally supported training programs. The CPRIT training grant has enabled BCM to recruit talented new students and fellows from a large pool of highly qualified applicants, whom we were unable to support previously because of the limited number of training slots and/or residency requirements for trainees. This has included 60 summer students, 20 predoctoral students, 6 postdoctoral fellows and 6 clinical fellows during the past three years. As of Dec 10, 2013, of the 30 CPRIT funded undergraduates who have graduated from college, 12 have entered PhD programs (5 in Texas), 6 have entered medical school (1 in Texas). Four non-Texans returned to Texas to BCM for PhD study, so CPRIT funding allowed us to attract four excellent scientists to Texas, all of who are in programs with cancer researchers. Eight are working as technicians in science/medical institutions; one is taking graduate school courses as a tech. At least two CPRIT alumni are applying for PhD programs, two for MD/PhD programs and three for medical school admission. Of the 20 predoctoral students, 17 are still completing their Ph.D. research and three have graduated. Of those, one MSTP student is returning to medical school in January, one former Ph.D. student is doing postdoctoral studies at BCM for one year in the Westbrook laboratory to finish some publications, and one is trying to raise venture capital to start his own company based upon the technology developed at BCM. Of the six postdoctoral fellows, five are still at BCM, and one is a Medical Director at Millennium in Cambridge, MA. In the first 3 years of funding, there were 15 applications for the clinical fellowship award. Six clinical fellows were supported including one surgery resident, two pediatric oncology fellows, one medical oncology fellow, one breast cancer fellow and one fellow in Cell and Gene Therapy. Three were male and three female and

there was one African-American and two Asians. These fellows have published a total of 18 publications so far based on their CPRIT-supported research and have attended and presented at a mean of three meetings. They have undertaken additional specific training based on their project and career goals to prepare them for successful independent academic careers – for example Dr Perna, a Cell and Gene Therapy fellow attended the American Society for Blood and Marrow Transplantation, Clinical Research Training Course and Dr Foster, a pediatric oncology fellow whose research focus is in Developmental Therapeutics is enrolled in Baylor's Clinical Scientist Training Program and is taking additional Clinical Pharmacology courses. Four of the supported fellows have now obtained faculty positions in academic medicine while two are continuing their training. Two have secured subsequent funding –Dr Yen has an ASCO young investigator award and Dr Naik has funding on a Leukemia and Lymphoma Society Specialized Center of Research award. One is an Assistant Professor in the Department of Clinical and Molecular Endocrinology and Oncology in Naples, Italy. One MSTP student also received a NRSA predoctoral fellowship. Finally, publications resulting from the trainees' research have appeared in such prestigious journals as the Journal of Clinical Investigation, Cell, PNAS, Oncogene, Cancer Research and Science to list but a few examples.