



## CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

Award ID:  
RP160015

Project Title:  
Collaborative Training of a New Cadre of Innovative Cancer Prevention  
Researchers

Award Mechanism:  
Research Training

Principal Investigator:  
Ness, Roberta

Entity:  
The University of Texas Health Science Center at Houston

### Lay Summary:

The public and policymakers agree that innovation propels U.S. science & technology and with it, our global economic leadership. Yet budding scientists are not taught how to be inventive. The UT Health training program imparts a systematic method proven to produce better innovators. Trainees must devise and pursue cancer research that does not baby-step science forward but leaps it into the future. Dr. Ness (PI) has disseminated her innovative thinking method through a series of books--Innovation Generation & workbook, Genius Unmasked, & The Creativity Crisis and over 80 invited lectureships. CPRIT funding supported the development of a free innovative thinking e-course starting July '15. 20-30,000 students worldwide will likely benefit, including our fellows and summer students (who also get face-to-face lectures), and trainees from other CPRIT programs. Our multidisciplinary mentors represent the breadth of cancer research and spark creativity at the interface of diverse disciplines. The School of Public Health focuses on cancer prevention and has campuses across Texas plus a distance education infrastructure that allows outreach to other CPRIT programs; the School of Biomedical Informatics, unique in the nation, focuses on big data; the Graduate School of Biomedical Sciences is a powerhouse of basic cancer biology; and MD Anderson adds translational research. Achievements of our pre- and postdocs (publications, funding, awards, faculty positions) exceed those our faculty has seen. Their revolutionary approaches greatly influence their "home" labs. We intend to train 17 predocs, 9 postdocs, & 89 undergrad summer students in the next 5 years. The Director of the National Cancer Institute has admitted that the "War on Cancer" has stalled. Bold leaps in discovery and invention are needed to "unglue" it. The disruptive solutions our trainees pursue could have enormous impact on many aspects of prevention, diagnosis, and treatment of cancer.