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For Immediate Release

## **Alliance for Cancer Gene Therapy Announces Three New Grant Awardees for Cancer Research**

*Research into Leukemia/Lymphoma, Melanoma and Blood Cancers to be Focus of 2016 Research Grants*

**STAMFORD**, Conn., March 2, 2016 -- **Alliance for Cancer Gene Therapy (ACGT)**, the nation's only nonprofit dedicated exclusively to cell and gene therapies for cancer, is delighted to announce the recipients of its **2016 ACGT Young Investigator Grants**. These grants are awarded to help the researchers build upon earlier research and take them to the next level in cancer treatment, setting the stage for possible clinical trials. While ACGT funds research into all forms of cancer, this year's recipients from the **University of California, Los Angeles, Duke University Medical Center** and **Yale Cancer Center** represent the future of cancer research specifically **leukemia/lymphoma, melanoma and blood cancers**.

This year's grant cycle brought in a record 115 scientific applications for the ACGT Young Investigator Grants, the most in ACGT's 15 year history. ACGT's highly competitive grants have been funding breakthrough cancer research scientists such as Dr. Carl June at the University of Pennsylvania and Dr. Michel Sadelain at Memorial Sloan Kettering, for their work successfully treating leukemia through gene therapy, which have been touted in recent national documentaries on cancer aired on PBS and HBO. ACGT has funded more than \$25 million in cancer research.

This year's Young Investigator Grantees are:

**Yvonne Chen, MS, PhD**  
**Assistant Professor, University of California, Los Angeles (UCLA)**  
**Eradicating Leukemia/Lymphoma with Immunotherapy**

Dr. Chen is using CAR-T therapy, with a focus on proteins that bind to a specific disease marker known as CD19 found in advanced leukemia and lymphoma patients. Because of this marker, conventional treatments have been ineffective. Several clinical trials have shown that CD19 CAR-T therapy achieves positive outcomes, but there are still questions on the optimum parameters for success and too often studies depend on trial and error. Dr. Chen plans to further research the technique to better understand the biochemistry and to refine the screening method in order to ensure even more consistently high outcomes.



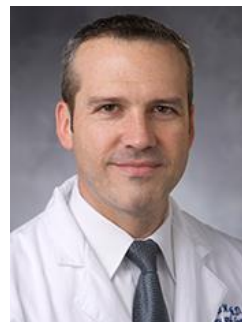
Dr. Chen's interest is the development of synthetic biological systems with applications in health and medicine. She brings to her research interdisciplinary skills learned in academic training and professional work experience in the pharmaceutical industry, as well as advanced studies in immunotherapy and systems biology. She earned an MS and a PhD in Chemical Engineering at the California Institute of Technology, Pasadena, California, and held postdoctoral positions at Seattle Children's Research Institute, Washington, and Harvard Medical School, Boston, Massachusetts.

**Brent Hanks, MD, PhD**

**Assistant Professor, Duke University Medical Center, Durham, North Carolina**

**A Vaccine for Melanoma Using Immunotherapy**

Melanoma has been steadily increasing in recent years and despite improvements in diagnosis and early stage treatment, metastatic cancer patients have less than a 10% prognosis for recovery. Dr. Hanks is studying pathways that block the immune system's ability to destroy cancers. These fundamental pathways, which are present in many cancers, inhibit potent dendritic cells that would otherwise open the door to an immune system attack. This research has identified a fatty acid transporter that plays a crucial role in this process and the possibility of a drug intervention that will shut down the barrier to treatment. Based on these findings, and laboratory research, Dr. Hanks has proposed to engineer a vaccine that will genetically silence the inhibitor so the body's natural killer T-cells can do their job. ACGT grant funding will support further testing to confirm the effect of the transporter, with the intent to develop a vaccine treatment primarily for melanoma.



Dr. Hanks has dedicated the last decade to research in the fields of tumor immunology and immunotherapy. He served as Fellow and Resident at Duke University Medical Center, Durham, North Carolina, after earning an MD in Medicine and a PhD in Cancer Immunology at Baylor College of Medicine in Houston, Texas. He has published extensively and has received numerous awards for his work.

**Samuel G. Katz, MD, PhD**

**Assistant Professor, Yale School of Medicine, New Haven, Connecticut**

**Using RNA to Kill Blood Cancers**

Great progress has been made in harnessing a patient's own immune cells to attack blood cancers. A particularly effective alternative is to harvest the patient's T-cells [killer white cells] and reprogram them to recognize the cancer as a threat. Once returned to the body, these reprogrammed cells use a dual-action protein known as a chimeric antigen receptor [CAR] that first recognizes the tumor and then attacks. Most protocols use retroviruses to alter the cells, but the new proteins might also attack healthy tissue. Dr. Katz's research instead employs RNA, which directs the cells to attack only the cancer and has the added advantage of minimal side effects. In addition, RNA reprogramming is more transient, meaning that after conclusion of treatment, RNA and derivative proteins return to their normal state, which further minimizes possible side effects.



In addition to research, Dr. Katz teaches genetic, biochemistry and cell biology techniques to better provide patient care. He earned his MD in Medicine and a PhD in Genetics at Harvard Medical School, Division of Medical Sciences in Boston, Massachusetts, and served his resi-

gency and fellowship at Brigham and Women's Hospital, and his post-doctoral fellowship at Dana Farber Cancer Institute, both in Boston.

Barbara Netter, ACGT co-founder and president noted that, "2016 marks a big change in cancer research in that gene and immunotherapy are being heralded as breakthroughs which scientists have been searching for since the early 1970's when the 'war on cancer' was launched." "It's exciting to see the depth and promise of what these scientists are developing and ACGT is proud to be able to fund them at this pivotal time."

Mrs. Netter added that, "Funding scientists studying cancer gene and immunotherapy hasn't always been so widely popular and, in fact, many organizations declined to fund this type of research until results were proven. ACGT has long believed that the cure for cancer resides in the genes and proudly supported gene and cell research into finding effective treatments for cancer."

To learn more about the ACGT Young Investigator Program, visit [acgtfoundation.org](http://acgtfoundation.org).

### **About Alliance for Cancer Gene Therapy (ACGT)**

Established in 2001, ACGT is the nation's only non-profit dedicated exclusively to cell and gene therapy treatments for all types of cancer. One hundred percent of contributions go directly to research. ACGT has funded 49 grants in the U.S. and Canada since its founding in 2001 by Barbara Netter and her late husband Edward, to conduct and accelerate critically needed innovative research. Since its inception, ACGT has awarded 34 grants to Young Investigators and 15 grants to Clinical Investigators, totaling more than \$25 million in funding. ACGT is located at 96 Cummings Point Road, Stamford, Connecticut 06902; 203-358-5055. To learn more, visit [acgtfoundation.org](http://acgtfoundation.org) or join the ACGT community on Facebook, Twitter and YouTube at @acgtfoundation.

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