

UCLA Scholars in Translational Medicine 2011 Awardees

Roger Lo, MD PhD

Dr. Lo is an Assistant Professor in the UCLA Department of Medicine/Dermatology and the Department of Medical and Molecular Pharmacology. He directs the Melanoma Clinic in the Division of Dermatology. Simultaneously, he directs a laboratory that focuses on the pathogenesis of melanoma and the development of in-human therapies to fight this devastating disease. His laboratory interests are focused on discovering melanoma cancer genes, survival signaling networks, and their roles in targeted drug resistance. Dr. Lo's STM Program award is aimed at developing next-generation diagnostic tools to detect melanoma response and failure to so-called BRAF inhibitors (soon to be approved by the FDA) which for the first time ever are making prolonged survival from advanced melanoma within reach. He hopes findings from his research will lead to personalized therapeutics for melanoma that takes into account clinical diagnostics which help prevent or overcome acquired drug resistance to targeted therapies, increasing melanoma survivability.

Isaac Yang, MD

An Assistant Professor in the Department of Neurosurgery with an active surgical practice, Dr. Yang has the clinical experience that positions him to investigate new potential methods of treating brain tumors, specifically glioblastoma multiforme (GBM). GBM is a malignant brain tumor and the most common and deadliest form of primary brain cancer with a survival rate of less than 2 years, despite modern advances in treatments. Dr. Yang's research seeks to improve our understanding of glioma biology in hopes of identifying novel therapies, including immunotherapy. Immunotherapy offers the potential for specifically targeting tumor cells without injury to normal neural and glial structures. Recent discoveries in the scientific community have identified a subpopulation of tumor cells with stem cell like properties, now known as cancer stem cells (CSC). Glioblastoma CSC are commonly resistant to chemotherapy and radiotherapy; with the support of the STM Program award Dr. Yang is working towards developing an effective anti-tumor immune response against glioblastoma CSC that can be characterized in vitro and in vivo to demonstrate a potential novel antigen target of immunotherapy for GBM. His long term goal is to contribute to our understanding of the potential utilization of immunotherapy against glioma CSCs.

Daniel Kahn, MD, PhD

Dr. Kahn is an Assistant Professor in the Department of Obstetrics and Gynecology. As a clinician, Dr. Kahn cares for women with complicated and high-risk pregnancies. During his postdoctoral training, Dr. Kahn studied the mechanisms of immune regulation and immune tolerance in the context of pregnancy. Currently his research seeks to understand the role T regulatory (Treg) cells play in pregnancy and maternal – fetal immune tolerance. His clinical experience and research training enables Dr. Kahn to explore the immune mechanisms surrounding a successful pregnancy. Dr. Kahn's STM Program award is aimed at identifying the role Treg cells play in normal tolerance to the fetus, their dysfunction in pathological states such as preeclampsia, and their potential application for the treatment of auto immune disorders. This research has important implications for maternal-infant interaction, fertility and fetal loss, as well as possibly providing insight into the normal immune mechanisms that govern tolerance with the possibility of impacting medicine's approach to transplantation, autoimmunity and immunotherapy of cancer as well as other disorders.