C3 / Pedal the Cause 2014

“In vivo modeling of anti-tumor responses of human melanoma patients and their responses to 
checkpoint immunotherapy”

Principal Investigators:
Linda Bradley, PhD (Sanford Burnham Prebys)
Greg Daniels, MD, PhD (Moores Cancer Center)

Abstract:
Melanoma skin cancer is a deadly disease that kills many patients after the cancer spreads. Current 
therapies are not effective, and many patients have very few treatment options after metastasis occurs. 
Recently, immunotherapies have been developed to augment immune cell function to kill tumors. Even 
though these immunotherapies are effective in some patients, many others are nonresponsive. There is 
therefore a pressing need to predict whether a patient will or will not respond to these drugs so that 
effective personalized treatment options can be offered. Pedal-funded research will allow scientists to 
test a patient’s immune system against their tumors to determine whether they will have a productive 
response with clinically available drugs. These studies will be highly significant because if they show 
promise in melanoma, these tools can be further applied to combat other cancers in humans.