

Other Support  
Michael LeBlanc, Ph.D.

ACTIVE

<b>5 U10 CA38926 (John Crowley)</b>	01/01/2010-12/31/2015	5.04 cal mos
National Institutes of Health/National Cancer Institute	\$3,983,675	

Southwest Oncology Group Statistical Center

The Southwest Oncology Group is a national consortium of institutions and investigators organized to improve survival of cancer patients through clinical research. The Statistical Center staff assist with study protocols, manage and edit study data, generate semiannual reports of findings, and conduct workshops on data management activities. They also research statistical aspects of Group studies and analyze and publish study results. Several programs previously funded via the Group Operations Office/Cancer Therapy and Research Center are included here: Cooperative Group Outreach Program (CGOP), Pathology Central Office, Urologic Cancer Outreach Program (UCOP), CTEP Minorities Program, High Priority Clinical Trials and Leukemia Biology.

<b>5 R01 CA90998 (LeBlanc)</b>	07/01/2008 – 06/30/2012	3.00 cal mos
National Institutes of Health	\$175,000	

Statistical Methods for Clinical Studies

This research grant will continue to develop practical tools for addressing new and continuing challenges in the design and analysis of clinical studies. Primary aims include: 1) the study of Phase II and Phase III studies for new targeted treatments. 2) Adaptive regression methods for exploring patient outcome and exploring the relationships between genetic attributes and treatment efficacy and 3) Improved methods to study the impact of sequentially measured biomarkers and treatment efficacy.

<b>2P01 CA53996 (Prentice/Hsu)</b>	07/01/2001 – 06/30/2011	1.20 cal mos
National Cancer Institute	\$318,600	

Statistical Methods

Major Goals: This program project centers on the development of statistical methods for disease prevention, epidemiological studies, and biomarker research. The project aims to research better methods for the design, conduct and analysis of disease prevention and risk factor intervention trials, cohort and case-control studies, and clinical trials.

<b>R01 CA114567 (Olson)</b>	12/06/2005 – 11/30/2010	0.36 cal mos
NIH NCI	\$133,000	

Targeted Therapy in Ex Vivo Medulloblastoma/PNET

The broad long term goals of the biology correlative studies to this clinical trial are to 1.) identify biomarkers with prognostic and predictive value for future clinical trials and 2.) prioritize candidate targeted therapies for future clinical trials. The specific aims of this proposal are to utilize ex vivo surgical specimens to 1.) identify biomarkers predicting therapy failure in high-risk medulloblastomas/SPNETs and 2.) prioritize targeted therapies for future clinical trials. The significance of this work is that it is a direct means toward replacing current pediatric brain tumor treatment modalities with more effective and less toxic alternatives.

<b>Institutional Support</b>	Ongoing	2.40 cal mos
Fred Hutchinson Cancer Research Center		

PENDING

<b>RFA PA-10-067</b>	3/1/2011 – 2/28/2015	1.20 cal mos
NIH	\$200,000	

Adaptive Statistical Methods for Genetic Association Studies

The major focus of this project is the development of methodologies for high-dimensional data that arise from new emerging high-throughput genomic technologies.

<b>1R01HL105824-01A1 (Dai)</b>	07/01/2011 -0 6/30/2015	1.20 cal mos
NIH/NHLBI	\$250,000	

High-dimensional Inference on Interaction and Mediation.

The focus of this proposal is to develop novel statistical methods for dissecting genetic and environmental architecture of disease etiology, using epidemiological data, high-dimensional genetic data, and data from randomized clinical trials. The proposed methods will identify genetic predisposition and environmental exposures that lead to prevention and treatment of common diseases.

<b>1R01OD009062-01 (Olson, PI)</b>	07/01/11-06/30/2016	0.36 cal mos
NIH NCI	\$1,934,109	

Mitotic Catastrophe: Targeting the Corrupted Spindle Checkpoint in Cancer

A defining characteristic of glioblastoma multiforme and other late stage cancers is karyotypic complexity. Cancer cells with translocated or extra chromosomes corrupt the normal spindle assembly checkpoint. By circumventing the spindle checkpoint, mutant cells complete mitoses and contribute to widespread genetic heterogeneity. Surprisingly, existing cancer therapies do not target the physical (e.g., anaphase bridges), biochemical (e.g., altered histone modification), and enzymatic differences that accompany mitotic spindle checkpoint corruption. Combining an unbiased shRNA screen in patient-derived glioblastoma stem cell (GSC) lines with an integrated Bayesian analysis of glioblastoma expression data sets, we identified a priority glioblastoma candidate target. We further showed that knockdown of this target had no effect on 3 normal human neural stem cell lines or normal astrocytes, but induced mitotic catastrophe cell death in multiple GSC lines. In this proposal, we focus on pre-clinical stages of drug discovery. Our Specific Aim is to develop at least one drug scaffold that ultimately extends survival for glioblastoma patients and others with karyotypically complex cancer.

## OVERLAP

There is no scientific or budgetary overlap in the grants listed above. If pending applications are funded, appropriate adjustments will be made to Dr. LeBlanc's effort. At no time will his effort exceed 100%, or 12 calendar months.