LI-XUAN QIN GRANT AWARD

Li-Xuan Qin, PhD, was awarded an NIH Research Project Grant (R01) for her study Statistical Methods for Normalizing Microarrays in Cancer Biomarker Studies. This work focuses on analyzing data from microRNA expression arrays. MicroRNA arrays contain only a few hundred microRNAs and a large proportion are likely to be differentially expressed between diverse tumor groups. In contrast to normalization methods developed for gene expression arrays, which assume few or symmetric differentially expressed genes between sample groups, there has been no systematic study of the properties of these methods in normalizing microRNA expression arrays utilizing heterogeneous samples such as tumors. The assessment of normalization methods in this setting is difficult because of the lack of a benchmark dataset. Li-Xuan’s study proposes to design and generate such benchmark datasets, perform a systematic assessment of normalization methods with a particular emphasis on the utility of these models for detecting markers with differential expression, and from the benchmark data derive statistical models that acknowledge heterogeneities inherent to tumor samples.

SHARI GOLDFARB RECEIVES YOUNG INVESTIGATOR AWARD

The Gabrielle’s Angel Foundation for Cancer Research recently awarded Shari Goldfarb, MD, a young investigator award to support her longitudinal protocol evaluating sexual and reproductive health of breast cancer patients and survivors. The goal of this research is to better understand the impact of cancer treatment on reproductive and sexual health from diagnosis through treatment into survivorship. Patients’ sexual function will be monitored over a 5-year period and the patients will be randomized to interventions based on their level of dysfunction and distress. The study will characterize the sexual dysfunction by patient and treatment characteristics, and document factors that influence decisions regarding fertility preservation.

SARA OLSON GRANT AWARD

Sara Olson, PhD, was awarded a U01 grant for her project “Serum IgE and risk of pancreatic cancer.” While allergies such as hay fever have been consistently found to be related to a reduced risk of pancreatic cancer, the biologic basis of this association is not well understood. The specific aim of this study is to investigate the association of pre-diagnostic levels of total IgE, respiratory allergen-specific IgE, and food allergen-specific IgE with the risk of pancreatic cancer. Sara will test the hypothesis that higher levels of total IgE, respiratory allergen-specific IgE, and food allergen-specific IgE are associated with reduced risk. This will be undertaken using a nested case-control study within the large prospective Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial, utilizing serum taken up to 15 years before the development of disease, and will provide estimates of risk unlikely to be influenced by presence of disease. This study will be undertaken in collaboration with investigators at NCI and UCSF.

Sara Olson was also elected to the Steering Committee of the international Pancreatic Cancer Case-Control consortium, PanC4.
IN THE NEWS

- The New York Times has published six essays by Peter Bach, MD, in what will be a seven-part series about his wife's breast cancer. In these essays, Dr. Bach discusses cancer care, through diagnosis, testing, treatment, and clinical trials, from the perspective of a spouse. He relates how everything from diagnostic testing to statistics previously considered understood from the viewpoint of a physician and researcher can seem incredibly foreign. The essays have appeared weekly on Tuesdays, since February 21st, on The New York Times Well Blog. In addition, two installments have been published in the print edition of the Science Times section.

- Andrew Vickers, PhD, published a paper in the Journal of the National Cancer Institute demonstrating that changes in PSA are not a reliable indicator for prostate cancer in men whose PSA is low. The paper gained considerable press attention, including The New York Times and NPR.

PRESENTATION

- Quincy Mo, PhD, received a travel award to present his work on next generation sequencing data analysis at a contributed session on bioinformatics at the Fourth Annual Bayesian Statistics Conference at the MD Anderson Cancer Center. The title of his presentation is A Fully Bayesian Hidden Ising Model for ChIP-seq Data Analysis. His work is currently under review by a statistical journal.

PUBLICATION

- In a paper to be published in an upcoming issue of the International Journal of Cancer, Irene Orloff, PhD, and her coauthors demonstrated a significant correlation between SNPs in the vitamin D receptor gene and increased risk for developing subsequent primary melanomas. This case-control study enrolled 3,676 subjects and represents the largest study of vitamin D receptor polymorphisms in melanoma to date.


STAFF ANNOUNCEMENTS

Please join us in welcoming our new staff!

- Natalie Barragan, Project Coordinator, Health Outcomes Group

Natalie holds a BA in International Relations with a minor in Public Health from Boston University, and is enrolled in a master’s program at NYU Wagner. Prior to coming to MSKCC, she worked at Medicare Rights Center as a Health Advocacy Enrollment Associate and Caseworker. Natalie works with Ethan Basch and coordinates his research operations.

- Yasmeen Majoka, Research Secretary, Epidemiology Service

Yasmeen holds a BA in Biology with a minor in Anthropology from Boston University. Prior to coming to MSKCC, she worked at the Women’s Health Center at Jamaica Hospital Medical Center as an Ambulatory Care Representative. Yasmeen joins the Administrative team and works with the Epidemiology investigators.

- Romina Rodriguez, Research Secretary, Health Outcomes Group

Romina holds a BA in Psychology with a minor in Sociology from Baruch College. In addition to her work at MSKCC, she continues to promote health wellness and education as a Community Liaison for the Clinical and Translational Science Center of Weill Cornell Medical College. Romina joins the Administrative team and works with the Health Outcomes investigators.

- Eve Burstein, Research Study Assistant, Epidemiology Service

Eve holds a BA in Psychology from Yale University, with a concentration in Behavioral Neuroscience. She will be working primarily with Malcolm Pike.

RECENT STAFF PROMOTIONS

- Joseph Christoff, Project Coordinator, Administration

- Lauren Rogak, MA, Research Project Coordinator, Health Outcomes Group

- Laura Sit, Clinical Research Coordinator, Health Outcomes Group