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Albert Einstein College of Medicine  
OF YESHIVA UNIVERSITY

*Note: The research projects included in this report are those that were active during the calendar period 2011-2012 and for which a DEPH faculty member was the Principal Investigator or the Co-Principal Investigator either of the grant or a sub-contract.*

## CHAIRMAN'S INTRODUCTION

This report summarizes research undertaken by members of the Department of Epidemiology and Population Health (DEPH) at Einstein during the 2011-2012 calendar period. (A more comprehensive portrait of the department can be obtained by accessing our website at <http://epi.aecom.yu.edu>.) The breadth and depth of the research reflects the strength of our faculty. Both our research portfolio and our faculty base are continuing to expand despite the financial constraints that all research institutions are facing currently. I would like to take this opportunity to thank all DEPH faculty and staff for their superb efforts on behalf of the department.

Thomas E. Rohan, MD, PhD  
Professor and Chairman  
January 2013

## DEPARTMENTAL MISSION STATEMENT

The mission of the Department of Epidemiology and Population Health is to generate and disseminate knowledge, and to inform policy and practice, in order to improve the health of the individual and society.

## OFFICE OF THE CHAIRMAN MISSION

The Office of the Chairman is responsible for overall administration of the departmental research and educational programs. The Office also hosts and collaborates on a number of ongoing studies of the etiology and prevention of cancer. Current projects are focused on cohort investigations of the roles of genetic/molecular and environmental factors in the etiology and molecular pathogenesis of various cancers (e.g. breast, colon, endometrium).

## FUNDED RESEARCH

Thomas E. Rohan, MD, PhD

**MicroRNA Expression Profiling of Benign Breast Tissue and Breast Cancer Risk**  
NIH/National Cancer Institute; 7/15/10-5/31/15

The goal of this project is to study the association between microRNA expression in benign breast disease tissue and risk of subsequent breast cancer.

**Proteomic Prediction of Breast Cancer Risk and Cohort Analyses of Risk Factors for Breast Cancer**

Breast Cancer Research Foundation; 10/1/10-9/30/11

The goals of this project were to examine the feasibility of performing proteomic profiling of formalin-fixed paraffin-embedded breast tissue and to undertake analyses of risk factors for breast cancer in a large, prospective study.

**A Population-Based Study of TMEM and Breast Cancer Prognosis**

Metastat, Inc.; 4/14/11-4/13/14

The goal of this study is to examine the association between TMEM, a marker of metastasis, and risk of metastasis in a large, population-based cohort of breast cancer patients.

**Proteomic Prediction of Breast Cancer Risk, Cohort Analyses of Risk Factors for Breast Cancer, and Single Cell Gene Expression Profiling of Breast Tissue.**

Breast Cancer Research Foundation; 10/1/11-9/30/12

The goals of this project were to examine the feasibility of performing proteomic profiling of formalin-fixed paraffin-embedded breast tissue, to develop and optimize a tissue-specific protocol for use of probes on formalin-fixed paraffin-embedded

breast tissue, and to undertake analyses of risk factors for breast cancer in a large, prospective study.

**Obesity-Related Pathways and Risk of Benign Proliferative Breast Disease, and Further Development of the Canadian Study of Diet, Lifestyle, and Health**

Breast Cancer Research Foundation; 10/1/12-9/30/13

The goals of this project are to investigate the independent associations of baseline fasting insulin, estradiol, C-reactive protein, and adiponectin with risk of benign proliferative breast disease among women enrolled in the WHI Clinical Trial and to continue further development of the Canadian Study of Diet, Lifestyle, and Health, a large prospective study of diet, lifestyle, genetic factors and cancer risk.

Olivier D. Loudig, PhD

The laboratory of Dr. Loudig has developed efficient methods for simultaneous recovery of RNA and DNA molecules from archived formalin-fixed paraffin-embedded (FFPE) tissues. His laboratory recently published an article demonstrating that messenger RNA, microRNAs and DNA methylation profiles can be reliably studied in FFPE tissues. His laboratory has been focused on the analysis of microRNA expression in archived breast tissues with known clinical follow-up. More specifically, his laboratory concentrates on non-invasive breast lesions, to determine if early miRNA expression changes can help differentiate patients who will and patients who will not develop invasive breast cancer. In his recent work on lobular neoplasia, Dr. Loudig identified specific miRNA expression changes in non-invasive *in-situ* lesions that are associated with the presence of an invasive cancer. He recently adapted the use of New Generation Sequencing protocols for the analysis of microRNAs in all types of highly degraded materials, yielding information on both miRNA expression and sequence mutations.

## DIVISION OF BIOSTATISTICS

### MISSION

Biostatistics is the development and application of quantitative methods to address questions arising in medicine, biology, and public health. Our goal is to advance knowledge in these fields by using mathematics, statistics, and computational approaches in all stages of research to ensure that scientific evidence is gathered and interpreted in a valid and efficient manner. Our methodologic research areas include clinical trials, epidemiologic methods, survival analysis, longitudinal data analysis, classification and regression trees, frailty models, measurement error, statistical genetics, and the analysis of microarray data. Collaborative research activities include studies in cancer, AIDS, aging, cardiovascular disease, neurology, rheumatology, health behaviors, and environmental health.

### PROGRAMS and FUNDED RESEARCH

Mimi Y. Kim, ScD, Division Head

Dr. Kim heads the Division of Biostatistics in the Department of Epidemiology and Population Health. She is also Director of the Biostatistics Shared Resource for the Albert Einstein Cancer Center and Director of the Biostatistics, Epidemiology, and Design Resource of the Institute for Clinical and Translational Research. Dr. Kim's methodologic research interests include equivalence and non-inferiority trials; effects of misclassification and measurement error in clinical and epidemiologic studies; interval-censored survival data, and multivariate survival data.

**Predictors of Pregnancy Outcome in SLE and APS**

NIH/National Institute of Arthritis, Musculoskeletal and Skin Diseases (subcontract with Hospital for Special Surgery); 12/1/08-11/30/13



The purpose of this study is to investigate the role of complement activation in the pathogenesis of aPL antibody-mediated pregnancy loss. Dr. Kim is the lead statistician on this project.

**An Integrated Analysis of Data from Multi-Center Trials in Lupus**

Lupus Foundation of America; 2/1/10-9/30/13

In the past two decades, more than a dozen investigational products for lupus have entered phase II/III clinical trials and have failed. These trials have been burdened by the inherent heterogeneity of the disease and the variation in severity of symptoms. The goal of this project is to use statistical modeling approaches to identify predictors of disease outcomes in lupus patients randomized to the placebo arms of multiple clinical trials. The knowledge gained from this study will be used to design more efficient trials of future investigational agents.

**Hillel W. Cohen, DrPH, MPH, FAHA**

Dr. Cohen heads the biostatistics core for the Clinical Research Center which is part of the Institute for Clinical and Translational Research (ICTR). He provides consultations for Einstein investigators through the Biostatistical Consultative and Services Support Resource of the ICTR, teaches Biostatistics I and II in the Clinical Research Training Program (CRTP), and leads seminars in biostatistics for faculty, residents, fellows and post-docs. In addition he provides biostatistical support as a collaborating co-investigator on several clinical research grants.

**Charles B. Hall, PhD**

Dr. Hall is Director of the Statistical Core for the Einstein Aging Study. He also collaborates on aging, memory, and mobility studies with the Department of Neurology and is a biostatistician at the Albert Einstein Cancer Center and the Institute for Clinical and Translational Research. Dr. Hall is also the primary statistician for the Data Coordinating Center for Medical Monitoring of NYC Firefighters and EMS Personnel Exposed to the World Trade Center Collapse of September 11, 2001. His research focuses on the development and application of statistical methods for the analysis of longitudinal data.

**For How Long is WTC Exposure Associated with Incident Airway Obstruction**

National Institute for Occupational Safety and Health/Centers for Disease Control; 9/1/12-8/31/14

The study uses innovative statistical methods – parametric survival models with change points – to study the incidence of new onset obstructive airway disease (OAD) diagnoses and symptoms over the first ten years following WTC exposure, with the goal of determining the length of time that exposure response gradients are observed among exposed FDNY firefighters. This study will allow estimation of the length of time that a relatively short-term, high intensity exposure may be associated with incident respiratory illness.

**Data Coordinating Center for Medical Monitoring of NYC Firefighters and EMS Personnel Exposed to the World Trade Center Collapse of September 11, 2001.**

National Institute of Occupational Safety and Health/Centers for Disease Control; 7/1/04-6/30/11.

This grant supports the medical monitoring of New York City Fire Department Personnel exposed to the collapse of the World Trade Center as well as research related to the continued health of that cohort. Dr. Hall is the lead statistician for the research.

**Moonseong Heo, PhD**

Dr. Heo is a biostatistician for the Division of General Internal Medicine at the Montefiore Medical Center and in the Center for AIDS Research. His research interests are in mixed-effects models, design of randomized clinical trials, meta-analysis, and in the epidemiology of obesity.

**Ryung S. Kim, PhD**

Dr. Kim is a biostatistician for the Albert Einstein Cancer Center. He conducts research on statistical genomics and microarray analysis, and on monitoring and evaluation of humanitarian aid programs.

**Genetic Dissection of Glioblastoma: Cell of Origin**

NIH/National Institute of Neurological Disorders and Stroke; 7/1/10-6/30/15

The major goal is to provide essential insight into Glioblastoma tumor cells and their normal cellular counterparts in the brain to assist in generating accurate, faithful mouse models of the disease.

**Yungtai Lo, PhD**

Dr. Lo collaborates with investigators in the Departments of Medicine, Pathology, Pediatrics, and Orthopedics on the design and analysis of clinical trials and epidemiologic studies. He also serves as a statistical mentor to Fellows in the CRTP. His methodological research interests focus on developing methods for determining the number of components in mixture models, and applications of mixture models in medical research.

**Wenzhu Mowrey, PhD**

Dr. Mowrey collaborates on imaging and neuroscience projects with the Einstein Aging Study, the Cognitive Neurophysiology Laboratory, and the Departments of Neurology and Neuroscience to study aging, Alzheimer's disease and epilepsy. Her statistical methodology interests include analysis of imaging data from all modalities (PET, MRI, fMRI, DTI, EEG, MEG and optical imaging), sparse clustering and dimension reduction of high dimensional data, and survival and longitudinal data analysis.

**Abdissa Negassa, PhD**

Dr. Negassa is a biostatistician for the Albert Einstein Cancer Center. He is also a collaborating biostatistician with the Division of Cardiology, Department of Medicine. His research interests include tree-based methods, survival analysis, analysis of correlated data, omitted covariates, developing prognostic/predictive models, biomarker discovery, and epidemiological methods. He also collaborates on observational studies based on large databases and clinical trials.

**Tree-Structured Prediction Model for Outcomes after PCI**

NIH/National Heart, Lung, and Blood Institute; 8/15/06-5/31/11

The purpose of this project was to develop a tree-structured prognostic model for short-and-long term outcomes following percutaneous coronary intervention that is simple, real-time, and accurate enough for clinical practice as a tool for risk profiling acute myocardial infarction patients in order to enhance patient management and triaging.

**Shankar Viswanathan, DrPH**

Dr. Viswanathan is a biostatistician involved with the Department of Radiation Oncology and with the Albert Einstein Cancer Center. Dr. Viswanathan's research interests include multivariate survival analysis, methods for analyzing missing data, and agreement statistics. His applied areas of interest are injury epidemiology and infectious disease epidemiology.

**Cuiling Wang, PhD**

Dr. Wang is a biostatistician in the Einstein Aging Study and the Institute for Clinical and Translational Research. Her research interests include methods for handling missing data, analysis of longitudinal data, mediation analysis, and survival analysis.

**Tao Wang, MD, PhD**

**Empirical-Bayesian Testing for Family Genome-Wide Association Data**



NIH/National Human Genome Research Institute; 4/1/11-3/31/13

The goal of this study is to develop statistical approaches for complicated GWAS with both family and individual data.

#### **Xianhong Xie, PhD**

Dr. Xie is a biostatistician in the Women's Interagency HIV Study (WIHS). His interests include methods for analyzing longitudinal data with missing values and measurement errors, survival analysis, image data analysis, and nonparametric smoothing splines.

#### **Xiaonan Xue, PhD**

Dr. Xue is a biostatistician for the Albert Einstein Cancer Center and the CTSA. She collaborates on epidemiologic and clinical studies of cancer, cardiovascular disease, and aging. Dr. Xue's methodologic research interests include survival analysis, longitudinal studies, and cancer screening methods.

#### **Kenny Ye, PhD**

Dr. Ye collaborates on the design and analysis of studies in genetics and genomics. He conducts methodological research in statistical modeling and data mining with high dimensional data. He is developing new statistical and computational approaches for the analysis of next generation sequencing data, especially methods that detect structure variations and methods that detect de novo mutations. He is also developing novel statistical approaches that take advantage of the latest sequencing technology in associating the genetic variants with disease traits.

##### **Understanding Genetic Basis of Autism**

Simons Foundation (Subcontract from Cold Spring Harbor Laboratory);  
1/1/12-12/31/12

The aim was to detect de novo mutations using sequencing technology and to understand the roles of de novo mutation and inherited rare variants in autism.

##### **Determining the Genetic Causes of Autism by High-Resolution Representational Oligonucleotide Microarray Analysis (ROMA)**

Simons Foundation (Subcontract from Cold Spring Harbor Laboratory);  
7/1/06-6/30/11

The goal was to develop statistical methods for detecting de novo copy number mutations using microarray technology, and to determine their relationship to autism.

##### **High-resolution Analysis of Genome Copy Number Variation in the HapMap**

(Subcontract from Cold Spring Harbor Laboratory); 4/1/08-3/31/11

The aim was to detect, validate and compile common copy number polymorphisms in the entire set of HapMap samples using high-resolution aCGH.

##### **Structural Genomic Variation Analysis for the 1000 Genome Project**

(Subcontract from Harvard University); 9/16/09-6/30/11

The aim was to develop statistical methods to detect structure variation using NextGen sequencing technology.

#### **Yiting Yu, PhD**

##### **Meta-Analytical Online Repository of Gene Expression Profiles of MDS Stem Cells**

Department of Defense; 6/1/12-5/30/15

The major goals of this project are development of database of gene expression profiles from MDS marrow CD34+ stem cells and healthy controls. The project will also involve construction of a website with an easily searchable interface.

#### **Baiyu Zhou, PhD**

Dr. Zhou's research focuses on the development and application of statistical methods and software to address problems in biomedical and genomic research. Particular interests include developing tools for the analysis of next-generation sequencing data and deciphering gene regulatory networks.

## **DIVISION OF**

## **COMMUNITY COLLABORATION & IMPLEMENTATION SCIENCE**

### **MISSION**

**There is an emerging national and global emphasis on the adaptation and development of sustainable public health programs through close partnerships with local cultures and communities. The mission of the Division of Community Collaboration and Implementation Science is to determine how to work in partnership with local community organizations, providers, and stakeholders in order to address health inequities and tailor innovations in prevention, screening, and health care delivery to specific populations and contexts. Major projects focus on smoking cessation, adherence to cancer screening guidelines, access to care in vulnerable populations (e.g., emergency room users, individuals recently released from incarceration, older adults, immigrants), and quality of life in cancer, HIV and other chronic diseases, as well as psychosocial and systemic factors that affect patients' participation in research. This Division is among the first focused on the science and practice of community implementation in academic medicine.**

### **PROGRAMS and FUNDED RESEARCH**

#### **Bruce D. Rapkin, PhD, Division Head**

##### **The Library-Based Health Partnership Project**

NIH/National Cancer Institute; 9/11/06-7/31/11

A longitudinal study designed to test the efficacy of a comprehensive participatory research approach to reducing disparities by improving use of cancer prevention, screening and treatment interventions in Queens, NY.

##### **Expanded Phase II Trial of Carraguard for Prevention of HPV Infection**

NIH/National Cancer Institute; 1/1/10-12/31/14

This is the first human trial using Carraguard, a microbicide that has been found to be active against HPV in vitro, against HPV. This trial includes the Population Council, which has the IND on Carraguard.

##### **Administrative Supplement for Comparative Effectiveness Research**

NIH/National Cancer Institute; 9/1/10-8/31/11

A one-year grant to develop infrastructure and training resources to promote comparative effectiveness research in cancer clinical trials, including patient reported outcomes.

##### **Education and Navigation to Support Participation in Cancer Research; The PRISM Program**

Susan G. Komen for the Cure Greater New York City; 4/1/11-3/31/13.

A major objective of PRISM is to promote awareness about and access to breast cancer clinical trials.

#### **Adebola A. Adedimeji, PhD, MPH, DLSHTM**

Dr. Adedimeji's research interests are focused on (i) health systems strengthening, (ii) improving population health and (iii) understanding the social epidemiology of communicable and non-communicable diseases of poverty and how these interact to determine health outcomes among disadvantaged population groups, including adolescents, women, ethnic minorities living in low and middle income countries of the world and among communities in transition (migrants crossing international borders). His current research is devoted to increasing access to resources for HIV prevention,



care and treatment among African immigrants living in Western Europe and increasing health literacy for cancer prevention in Nigeria. Dr. Adedimeji has programmatic interests in operations research, intervention design/implementation, and monitoring and evaluation.

#### **David W. Lounsbury, PhD**

##### **Improving Post-Treatment Resources for Latina Breast Cancer Survivors**

American Cancer Society; 7/1/12-6/30/16

This project will develop a program and resources to support sustained annual breast cancer screening among Latina breast cancer survivors. System dynamics modeling will be used to simulate effects of the program over an extended time horizon.

##### **Education and Navigation to Support Participation in Cancer Research: The PRISM Program**

Susan G. Komen for the Cure Greater New York City; 4/1/11-3/31/13

A major objective of PRISM is to promote awareness about and access to breast cancer clinical trials.

##### **Feasibility of Using Social Media for HIV Prevention in Young Men of Color who have Sex with Men**

Einstein Center for AIDS Research; 6/1/12-5/31/13

This study is intended to inform the development and implementation of HIV preventive services and programs by investigating the utility and feasibility of using social media (SM) to promote HIV prevention messages and to encourage routine HIV testing. Young men of color who have sex with men (YMCSM), ages 13 to 29. The study primarily targets YMCSM who reside in the Bronx, but is likely to effectively reach YMCSM in other parts of New York City and its neighboring communities.

##### **The Feasibility of Population Level Epidemiological Research on Prostate Cancer in Ibadan, Nigeria**

Global Health Center of the Albert Einstein College; 2/1/11-1/31/13

The goal of this study is to test the feasibility of conducting a large study of prostate cancer, as well as to assess knowledge, attitudes and beliefs about participating in clinical research and genetic studies in Nigeria.

#### **Cheryl Merzel, DrPH, MPH, MS**

Dr. Merzel is the Director of Public Health Educational Programs for Einstein's Center for Public Health Sciences, including the Master of Public Health (MPH) and public health certificate programs. The MPH program, which graduated its first class in June 2012, provides training in community-based research. The program incorporates an innovative service-learning approach involving student placements with community agencies to assist with agency research needs. Dr. Merzel's research interests include the design and evaluation of multilevel community-based health promotion programs, dissemination of evidence-based programs, and prevention of postpartum smoking relapse.

#### **Natania Wright Ostrovsky, PhD**

Dr. Wright is a clinical psychologist whose research interests include obesity, mood, and health behaviors. Dr. Ostrovsky is currently working with Dr. David Lounsbury and Dr. Bruce Rapkin on a pilot study funded by Komen-Greater NYC to provide educational and support services to low-income breast cancer patients receiving treatment at the Montefiore-Einstein Center for Cancer Care.

#### **Pamela Valera, MSW, PhD**

##### **Health Seeking among Men with Criminal Justice and Substance Abuse Histories**

NIH/National Cancer Institute Mentored Career Development Award; 9/21/10-7/13/15

The proposed study is to prepare the PI for a career in cancer-health disparities and

participatory health services research focused on socially-marginalized, at-risk groups, such as former prisoners.

#### **Elisa S. Weiss, PhD**

##### **CCT-Link: Enhancing Primary Care Physicians' Capacity to Improve Cancer Patients' Access to Therapeutic Clinical Trials**

NIH/National Cancer Institute; 9/1/08-8/31/11

This was a pilot grant to adapt and assess the efficacy of cancer clinical trials education and skill-building training for primary care physicians in New York City who treat underserved patients. The purpose of the training was to increase physicians' capacity and willingness to talk with patients about therapeutic cancer clinical trials, provide support to patients interested in learning more about clinical trials, and refer patients to oncology settings that conduct clinical trials, thereby increasing underrepresented patients' access to care. The pilot project provided the data needed to develop a larger intervention study involving primary care physicians and clinical trial providers, which will be designed to achieve increased patient access to and participation in cancer clinical trials.

## **DIVISION OF EPIDEMIOLOGY**

### **MISSION**

**Epidemiology plays a major role in elucidating disease etiology, and in bringing about changes in approaches to disease treatment and prevention. Our mission is the design and implementation of translational research in three areas/phases: translation of basic science discoveries to clinical studies; translation of clinical studies to population-based studies; translation of population-based findings to health services delivery applications and health policy issues. Members of the Division study the role of genetic factors, biomarkers, and their interactions with environmental and lifestyle variables to determine risk and protective factors for disease. The major areas of research activity encompass studies in cancer, cardiovascular disease, women's health, diabetes, nutrition and obesity, infectious diseases including HIV and HPV, adolescent health, as well as research aimed at elucidating and ultimately helping to reduce racial/ethnic and sex disparities in disease burden and health care access.**

### **PROGRAMS and FUNDED RESEARCH**

#### **Sylvia Wassertheil-Smoller, PhD, FAHA, Division Head**

##### **Hispanic Community Health Study (HCHS)**

NIH (multi-institute, primary National Heart, Lung, and Blood Institute); 9/30/06-3/31/13

HCHS is an NIH-initiated multi-center study of the health of Hispanic/Latino populations. The study includes 16,000 Hispanic adults, aged 18-74, to investigate the role of diet, health behaviors, clinical factors, genetics, and biomarkers on risk of cardiovascular disease, respiratory diseases including asthma and chronic obstructive pulmonary disease, diabetes, cognitive impairment, and sleep, hearing, dental, kidney, and liver disorders.

##### **Women's Health Initiative (WHI) Extension 2010-2015**

##### **The Women's Health Initiative Regional Field Center Program (WHI)**

NIH/National Heart, Lung, and Blood Institute – University of Buffalo; 10/1/10-9/30/15

This 2010-2015 extension study aims to use the WHI cohort to launch the next generation of critically important cardiovascular and cancer research projects that target older women. WHI, initiated in 1993, consists of a set of multi-center Clinical Trials and an Observational Study to address the health problems of post-menopausal



women. The Hormone Therapy Trials were randomized, placebo-controlled, double blind clinical trials to determine if hormone therapy prevents heart disease, osteoporosis and colorectal cancer, and if it increases risk of breast cancer. Objectives of the Dietary Modification Trial were to determine if a low fat, and high grain and fruit and vegetable intake lowers rates of breast cancer, heart disease, and colorectal cancer compared to usual diet. Objectives of the Calcium/Vitamin D Trial were to determine if this supplementation lowers osteoporotic fractures and colorectal cancer. The concurrent Observational Study is a long-term follow up study to identify and assess the impact of biological, genetic and lifestyle risk factors for these and other diseases. The 2010-2015 extension will study several important phenotypes in African American, Hispanic, and White women: heart failure, atrial fibrillation, venous thromboembolism (VTE), coronary heart disease, and stroke. The WHI serves as a platform for ancillary studies in cardiovascular disease, cancer and other diseases. The rich resources of data and specimens are being made widely available to the investigator community and for training young investigators.

**Women's Health Initiative Memory Study of Younger Women (WHIMS-Y)**

NIH/National Institute on Aging; 10/1/08-6/30/11

WHIMS-Y assessed the long-term impact of random assignment to postmenopausal hormone therapy among women who were aged 50-54 at the time of randomization into the WHI hormone trials and complemented the WHIMS, which examined hormone effects on women 65-74.

**The NINDS Stroke Genetics Network (SiGN) Study: A Genome-Wide Association Study of Ischemic Stroke**

NIH/National Institute of Neurological Disorders and Stroke; 7/1/10-6/30/15

The NINDS SiGN Study has been established as a consortium with 22 sites in the U.S. and in Europe with the overall goal of discovering ischemic stroke susceptibility genes and, ultimately, enabling the exploitation of these discoveries to reduce the burden of stroke.

**Iir Agalliu, MD, ScD**

**Insulin/IGF-axis and Aggressive Prostate Cancer**

American Cancer Society; 7/1/11-6/30/15

This study investigates the role of serum levels of insulin, total and free IGF-1, IGF-2, and IGFBP-3, tissue expression levels of insulin receptor (IR), IGF-1 receptor (IGF-1R), and P-IR/IGF-1R, as well as tissue expression levels of IGF-1, IGF-2, and IGFBP-3 proteins in aggressive prostate cancer, and examines associations between these serum and tissues markers with short-term prostate cancer recurrence/progression.

**Prospective Oral HPV and Subsequent Risk of Head and Neck Cancers**

NIH/National Cancer Institute; 4/1/11-3/31/13

The goal of this study is to test the hypothesis that detection of HPV in exfoliated cells collected in an oral rinse is a biomarker for head and neck cancers (HNSCC). HPV16, oncogenic HPV types and 'any HPV' in the oral rinse will be investigated in this study using mouthwash sample collected from participants in the American Cancer Society CPS-II Cohort and the Prostate Lung Colorectal and Ovarian Cancer Trial Cohort.

**The Feasibility of Population Level Epidemiological Research on Prostate Cancer in Ibadan, Nigeria**

Global Health Center of the Albert Einstein College; 2/1/11-1/31/13

The goal of this study is to test the feasibility of conducting a large study of prostate cancer, as well as to assess knowledge, attitudes and beliefs about participating in clinical research and genetic studies in Nigeria.

**LRRK2 Mutations and Cancers**

Michael J. Fox Foundation; 5/1/12-4/30/14

The goal of this study is to better understand the association between *LRRK2* mutations and non-skin cancers through meta-analysis of previously collected data at different sites. The goal is also to implement standardized measures for cancer collection across centers and better understand the biology of the presumed *LRRK2*-related effect through the determination of cancers in family history of first and second degree relatives of *LRRK2* carriers.

**Michael H. Alderman, MD**

**ACCORDION/Cardiovascular Disease & Diabetes**

NIH/National Heart, Lung, and Blood Institute (Columbia University); 5/1/11-10/31/14

A prospective, observational follow-up study of at least 8,000 participants who were treated and followed in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) Trial. Treatment in ACCORD ended in 2009 and ACCORDION is designed to further elucidate and clarify the long-term effects of the ACCORD treatment strategies and provide additional data on the long-term relationships among various cardiovascular and diabetic risk factors.

**Clinical Trial to Compare the Efficiency and Efficacy of a Renin-Angiotensin System Based vs. a Standard (JNC 7) Strategy for Antihypertensive Therapy**

Rudin Foundation and David Weill Foundation; 11/1/04-12/31/11

This study was designed to compare a system for antihypertensive drug selection based upon: (1) knowledge of the mechanism by which BP is maintained as reflected by the activity of the renin-angiotensin system; (2) the conventional treatment strategy recommended by JNC VII, using a strategy based upon understanding of how the nature of blood pressure control mechanisms at work in each patient provides a more effective and efficient approach to achieving blood pressure control. The primary hypothesis was that more hypertensive patients will achieve blood pressure control with a single drug in 6 months by the Laragh Method than by the JNC VII strategy.

**CANVAS (CANagliflozin Cardiovascular Assessment Study)**

Janssen Research & Development, LLC; 11/1/09-10/31/13

A randomized, multicenter, double-blind, parallel, placebo-controlled study of three effects of JNJ-28432754 on cardiovascular outcomes in adult subjects with Type 2 diabetes mellitus.

**Peer Review Journals**

Editor-in-Chief of the American Journal of Hypertension

**Janice M. Barnhart, MD, MS**

Dr. Barnhart mainly studies risk perception with a primary goal of expanding the use of the Coronary Risk Individual Perception (CRIP) scale and examining its relationship to health behaviors and a proxy measure for actual risk of developing coronary heart disease.

**Jeannette M. Beasley, PhD, MPH, RD**

**Evidence for Establishing Optimum Protein Intake in Older Adults**

NIH/National Institute of Aging; 9/30/10-8/31/14

This study nested within the Women's Health Initiative aims to refine optimal protein intake among older women by examining associations between biomarker-calibrated protein intake, renal function, and physical function.

**Hillel W. Cohen, MPH, DrPH, FAHA**

Dr. Cohen studies hypertension and other risk factors for cardiovascular disease. Recent work has examined associations of plasma renin activity and sodium intake with cardiovascular outcomes. He is also a Fellow of the American Heart Association in the



Council for High Blood Pressure Research.

#### **Peer Review Journals**

Co-Executive Editor of the American Journal of Hypertension

#### **David B. Hanna, PhD, MHS**

Dr. Hanna's work examines treatment initiation, disease progression, and related outcomes in large cohort studies and population-based databases of people with HIV infection. His research interests include using causal inference methods to answer questions of clinical and policy relevance and determining the role of geographic disparities in health outcomes. He is also interested in the use of public health surveillance data to complement research from cohort studies.

#### **Gloria Y. F. Ho, PhD, MPH**

##### **Pro- and Anti-Inflammatory Cytokines in Colorectal Cancer**

NIH/National Cancer Institute; 4/25/08-3/31/12

This ancillary study to the Women's Health Initiative examined whether imbalance of pro- and anti-inflammatory responses is a risk factor for colorectal cancer. Specifically, plasma levels of cytokines and soluble cytokine receptors (TNF-alpha, IL-6, IL-1Ra, IL-1R2, sgp130, sIL-6R, sTNF-R1, and sTNF-R2) as well as polymorphisms in genes involved in their signaling pathways were examined.

##### **Serum Levels of EGFR-Signaling-Network Activators/Inhibitor and Risk of Lung Cancer**

NIH/National Cancer Institute; 7/1/10-6/30/13

This case-control study nested within the Women's Health Initiative examines whether plasma levels of 6 activators/inhibitor of the EGFR-signaling-network, namely IGF-I, HGF, NGF, insulin, IL-6, and IGFBP-3, are associated with risk of lung cancer, and whether the associations vary depending on smoking status and histological subtype.

#### **Dean Hosgood, III, PhD, MPH**

Dr. Hosgood's research seeks to further our understanding of the mechanisms by which environmental exposures influence carcinogenesis, and in particular the ways genetic, epigenetic, and environmental factors may jointly contribute to cancer etiology. His work revealing mechanistic insights into the carcinogenic potential of established and emerging environmental exposures leads to the discovery of novel noninvasive biomarkers of exposure, disease, and susceptibility. Dr. Hosgood's primary interest is lung cancer among never smokers, with his research suggesting that it is etiologically, clinically, and genetically different from lung cancer attributed to tobacco smoking. Additional research explores the role of genetic and epigenetic factors in hematological malignancies, such as non-Hodgkin lymphoma and leukemia.

#### **Robert C. Kaplan, PhD**

##### **Hispanic Community Health Study, Bronx Field Center**

NIH/National Heart Lung and Blood Institute; 9/30/06-3/31/13

The overall goal of this project is to recruit 4,000 Hispanic/Latino adults 18-74 years of age in Bronx, NY and obtain long-term follow-up on CVD, asthma, COPD, diabetes, cancer, and other health outcomes, as part of the multicenter Hispanic Community Health Study.

##### **Genetic and Epidemiologic Predictors of Glucose Homeostasis Measures in Hispanics**

NIH/National Institute of Diabetes and Digestive and Kidney Diseases;  
7/1/10-6/30/15

The GUARDIAN Consortium (Genetics Underlying Diabetes in Hispanics) has the following goals: (1) to perform a GWAS to detect loci underlying variation in glucose

homeostasis traits in a multi-cohort pedigree-based set of 4,685 Hispanics; (2) to translate/extend these findings to the relevant clinical disease, T2DM, by testing for association in a set of ~3500 T2DM cases and ~5500 controls; and (3) to sequence up to 12 genetic loci from our GWAS in order to identify specific variants contributing to variation in glucose homeostasis traits and susceptibility to T2DM. This project uses data from the Hispanic Community Health Study.

##### **Epidemiology of IGF and Aging**

NIH/National Institute of Aging; 9/30/09-8/31/13

Using data from the Cardiovascular Health Study, a longitudinal cohort study of adults 65+ years and older, this protocol will address the hypothesis that among older adults, levels and trajectories of insulin-like growth factor-1 (IGF-I) and IGF binding proteins (IGFBPs) predict the likelihood of remaining alive and free of functional decline.

##### **Inflammatory and Immune Mechanisms of Atherosclerosis in HIV-Infected Women**

NIH/National Heart, Lung, and Blood Institute; 9/25/08-6/30/13

This investigation will examine immune, inflammatory, coagulation, and lipid disturbances as potential mediators of increased atherosclerosis in HIV-infected women participating in the Women's Interagency HIV Study (WIHS).

##### **Mechanisms of Atherosclerosis and CVD in HIV+ Women**

NIH/National Heart, Lung, and Blood Institute; 3/1/06-2/28/11

The overall goal of this project was to identify the mediators of accelerated atherosclerosis in HIV infection within the Women's Interagency HIV Study (WIHS) cohort.

#### **Mark H. Kuniholm, PhD**

Dr. Kuniholm's research focuses on understanding how polymorphisms in genes, important for the immune system, influence the pathogenesis of infectious diseases. Specifically, Dr. Kuniholm is studying how human leukocyte antigen (HLA), killer immunoglobulin-like receptor (KIR), and IL28B genetic variants influence HIV and hepatitis C virus disease progression.

#### **Nicolas F. Schlecht, PhD, MSc**

##### **Cervical, Anal, and Oral HPV Among Inner City Adolescents**

NIH/National Institute of Allergy and Infectious Diseases; 5/15/07-4/30/13

This prospective study examines the prevalence, incidence and persistence of anogenital and oral HPV in sexually active adolescent females following prophylactic vaccination for HPV.

##### **The Lifecourse Approach to Study the Etiology of Head and Neck Cancer: HeNCE Life Study**

Canadian Institutes of Health Research; 7/1/07-8/31/15

This continuation study investigates the relationship between social and psychosocial circumstances at different periods of people's life and the occurrence of mouth and throat cancers in Canada, and how these circumstances are related to genetic factors and HPV infection.

##### **Natural History of Oropharyngeal Cancer Precursors: A Pilot Study**

Canadian Institutes of Health Research; 7/1/09-3/31/13

This prospective study describes the role of HPV, methylation and gene expression in the natural history of precursor lesions of the oral cavity and oropharynx in Montréal, Canada.

##### **Estudio Piloto Sobre História das Lesões Precursoras do Câncer Oral e Orofaringeo**

Fundação de Amparo à Pesquisa do Estado de São Paulo ("Foundation for Research Support of the State of São Paulo"); 9/1/09-8/31/11

This prospective study described the role of HPV, methylation and gene expression



in the natural history of precursor lesions of the oral cavity and oropharynx in São Paulo, Brazil.

#### **Epigenetic Determinants of High-Grade Cervical Intraepithelial Neoplasia and Cancer in HIV-Infected and HIV-Uninfected Women**

Albert Einstein Cancer Center-Center for AIDS Research; 2/1/10-12/31/11

This study investigated the epigenetic differences that occur in progressive early cervical intraepithelial neoplasia (CIN), high-grade CIN and cancer, common in HIV-infected women.

#### **Quantitative and Pathway-Specific Assessment of Epigenetic Modulation in CIN and Cancer in HIV-Infected and Uninfected Women**

Albert Einstein Cancer Center-AIDS Malignancy Clinical Trials Consortium; 7/1/11-6/30/12

This was an expansion of a previously proposed AECC-CFAR project that built on our initial data in HIV-negative women to investigate the epigenetic differences that occur in progressive early cervical intraepithelial neoplasia (CIN), high-grade CIN and cancer, common in HIV-infected women.

#### **Oral HPV and Lesions in an HIV-Positive Population**

NIH/National Institute of Dental and Craniofacial Research; 8/1/11-7/30/13

This study investigates the associations between human papillomavirus, risk behavior and immune-related factors in an urban ethnic minority population of HIV-infected and uninfected patients with oral lesions.

#### **Howard D. Strickler, MD, MPH**

##### **HPV & Cervix Neoplasia in a Large, Long Term HIV+ Cohort**

NIH/National Cancer Institute; 6/22/10-4/30/15

This large prospective study based in the Women's Interagency HIV Study (WIHS) will examine: (i) the impact of menopause and aging on HPV/SIL in HIV+ and HIV- women; (ii) the levels of CD4+ and CD8+ T-cells by differentiation phenotype to determine the specific T-cell deficits that drive the HIV-HPV/SIL relationship; (iii) local immune cell levels in CIN-1 biopsies that predict progression to CIN-2+ versus regression, and whether following treatment the lesions rapidly recur; (iv) HLA/KIR and other immunogenetic risk factors for cervical pre-cancer.

##### **Role of the Insulin/IGF-axis in Incident CIN-2+**

NIH/National Cancer Institute; 5/10/09-5/9/11

This study examined the prospective associations of baseline serum C-peptide, IGF-I, IGF-II, and IGFBP-3 levels with risk of incident CIN-2+, using specimens and data in the Guanacaste Project, a large NCI/NIH cohort.

##### **Insulin-like Growth Factor Axis Influence on HIV Pathogenesis in Women**

NIH/National Institute of Allergy and Infectious Diseases; 7/1/08-6/30/11

This cohort investigation examined the association of circulating levels of total and free IGF-I, IGF-II, IGFBP-3, and C-peptide with HIV disease progression in women.

##### **Role of the Sex Hormone and Insulin/IGF Axes in Endometrial Cancer Recurrence**

NIH/National Cancer Institute; 7/1/09-6/30/13

This study is investigating the prognostic value of both serologic and tissue levels of sex hormones and insulin/IGF axis components in relation to endometrial cancer recurrence. The study is being conducted in a large (N=4,500), prospective cohort study of endometrial cancer patients (GOG-0210).

##### **The Insulin-Like Growth Factor (IGF) - Axis and Type 2 Diabetes**

NIH/National Institute of Diabetes and Digestive and Kidney Diseases; 7/1/08-5/31/13

The first large prospective study to evaluate the associations between fasting plasma levels of total IGF-I, free IGF-I, IGFBP-1, IGFBP-2 and IGFBP-3 at baseline and

risk of incident type 2 diabetes. The study builds upon an existing nested case-control investigation and the risk of type 2 diabetes (900 incident cases and 900 individually matched controls), within the Nurse's Health Study (NHS), a large cohort of women aged 30-55 years at recruitment.

##### **Influence of Fasting Status and Specimen Processing Time on Adipokine Levels**

NIH/National Cancer Institute; 12/1/10-11/30/12

This study examined the influence of fasting status (fasting then 1, 3, and 6 hours postprandially) and blood specimen processing time (immediate versus 24 or 48 hours) on levels of total and high molecular weight adiponectin, retinol-binding-protein-4, plasminogen activator inhibitor-1, and resistin.

#### **Mayris P. Webber, DrPH, MPH**

##### **Cohort Studies of Incident Cancer in the FDNY Responder Population**

NIH/National Institute of Occupational Safety and Health; 7/1/11-6/30/14

The main objective of this research contract is to analyze the cohorts of FDNY firefighters and EMS workers, both WTC-exposed and non-WTC exposed, to compare cancer incidence by WTC-exposure status during the early post-9/11 years. To achieve this objective, we are conducting active surveillance of cancer diagnoses in ~30,000 individuals.

#### **Rachel P. Wildman, PhD**

##### **The Epidemiology of Obesity Metabolism in the Menopausal Transition**

NIH/National Heart, Lung, and Blood Institute; 9/1/07-5/31/11

This study examined the longitudinal relationships between obesity phenotypes and their markers with CVD risk factors among menopausal women enrolled in the Study of Women's Health Across the Nation (SWAN). Ovarian aging is considered an effect modifier of the effects of obesity on CVD risk factors.

##### **Quantitative Epidemiologic Assessment of the Metabolic Syndrome Definition**

NIH/National Heart, Lung, and Blood Institute; 9/1/08-8/31/11

This study provided a quantitative assessment of the factors included in the metabolic syndrome definition, their optimal cutpoints, and possible performance differences of the metabolic syndrome definition across population subgroups.

##### **Study of Women across the Nation (SWAN), Quantitative and Qualitative Cohort Research Study**

NIH/National Institute on Aging; 5/1/09-4/30/14

A continuation of the original SWAN study, which seeks to describe the biopsychosocial changes that occur in women during the menopausal transition. This extension will continue to gather quantitative measures in the New Jersey site to estimate incident cases of type 2 diabetes, development of the metabolic syndrome and hypertension, and the burden of subclinical atherosclerosis among Hispanic women.

##### **Ectopic Fat, Adipocytokines, and Atherosclerosis in Postmenopausal Women**

NIH/National Heart, Lung, and Blood Institute; 9/30/09-7/31/11

This study examined the relationships between ectopic fat (in the liver, pericardium and epicardium) and adipokines (leptin, soluble leptin receptor, adiponectin, RBP4) with atherosclerosis progression in postmenopausal women participating in the Kronos Early Estrogen Prevention Study (KEEPS) clinical trial. An additional goal was to examine the impact of oral vs. transdermal menopausal hormone therapy on ectopic fat and adipokine measures.



## DIVISION OF HEALTH PROMOTION & NUTRITION RESEARCH

### MISSION

**Behavior and lifestyle play roles in disease prevention and control. Our mission is to advance understanding of how behavior and lifestyle affect indices of physical health, psychosocial wellbeing, and disease. Faculty research in the Division includes assessment of lifestyle and community environment, nutritional determinants of health-related biomarkers, investigation of psychological, behavioral and socio-cultural factors that improve health outcomes, evaluation of coping with acute illness and chronic disease, investigation of the precision of lifestyle assessment instruments, investigation of mind-body interventions, and assessment of the clinical and cost-effectiveness of behavioral interventions.**

### PROGRAMS and FUNDED RESEARCH

#### Judith Wylie-Rosett, EdD, RD, Division Head

##### **Comprehensive Family Weight Management Study**

NIH/National Institute of Diabetes and Digestive and Kidney Diseases;  
5/1/08-4/30/13

The study is evaluating a comprehensive family weight management program in a large municipal Bronx hospital primary care program of 7-12 year-old Bronx children who have a standardized BMI > 85<sup>th</sup> percentile. The multidimensional intervention framework focuses on the family and addresses the community environment. In a two-arm randomized controlled clinical trial, children and their families are being assigned to an Experimental (Intensive) Intervention or a Control (Minimal) Intervention. One-year endpoints include the child's BMI (z-score change), key biomarkers (fasting glucose and insulin levels, lipid profile, blood pressure, and liver enzymes), and lifestyle variables. Two-year weight changes will be used to determine the sustainability of the intervention effects. Intervention cost-effectiveness will be determined from the institutional perspective.

##### **Diet Quality and CVD Risk Factors in a Family-Based Weight Management Study**

NIH/National Heart, Lung, and Blood Institute (Sub-Contract from Tufts University);  
7/1/10-6/30/14

This study is designed to examine how the Family Weight Management study lifestyle intervention changes diet-related biomarkers - (1) biomarkers of diet quality in the children and a family member (parent/guardian), (2) metabolic parameters in the parent/guardian of the intervention children - and also to evaluate the level of concordance of these measures at baseline and post-intervention within child-parent/guardian pairs and across child-parent/guardian pairs.

##### **Reducing Diabetes Risk in Chinese Immigrants**

NIH/National Institute of Diabetes and Digestive and Kidney Diseases;  
4/1/11-3/31/13

This pilot project is designed to adapt the Diabetes Prevention Program (DPP) intervention for a Chinese immigrant population and test the feasibility of implementation in a larger scale trial.

##### **Diabetes Research and Training Center**

NIH/National Institute of Diabetes and Digestive and Kidney Diseases;  
4/1/10-3/31/15

Director of Behavioral Intervention and Evaluation Methods (BIEM) Unit  
The Center provides an administrative organization, a series of biomedical cores, a feasibility study program, and a Prevention & Control effort, which includes consultation services from the BIEM Unit.

#### Carmen R. Isasi, MD, PhD

##### **Nutrition, Activity, and Health Study**

NIH/National Institute of Child Health and Human Development; 9/17/07-8/31/11  
The goals of the study were to examine the association of self-control abilities with obesity, dietary behaviors, and physical activity in a school-based study of adolescents in the Bronx. The study also examines the interaction with school and neighborhood environment.

##### **Sociocultural Factors and CVD Risk/Prevalence in Hispanics**

NIH/National Heart, Lung, and Blood Institute; 9/30/09-7/31/12

The study examined associations among SES, socio-cultural risk and protective factors in relation to metabolic syndrome and CVD prevalence. The research was conducted in a sub-sample of participants from the Hispanic Community Health Study/Study of Latinos (HCHS/SOL), N = 5,280, from the four HCHS/SOL sites (Bronx, Chicago, Miami and San Diego).

##### **Hispanic Community Children's Health: Study of Latino Youth (SOL-Youth)**

NIH/National Heart, Lung, and Blood Institute; 12/1/10-11/30/14

This is a multicenter study examining a wide range of socio-cultural factors and biological markers associated with obesity and cardiometabolic risk in a sample of 1,600 Latino boys and girls aged 8-14 years old from 4 field centers (Bronx, Chicago, Miami, and San Diego).

#### Alyson B. Moadel, PhD

##### **Bronx Oncology Living Daily (BOLD Living) Program**

Avon Foundation for Women 1/1/12-12/31/13; Entertainment Industry Foundation;  
4/1/08-3/31/12

The *BOLD Living Program* was developed in response to a psychosocial needs assessment of Bronx cancer patients and family members who expressed interest in a variety of supportive services. To address these unmet needs, the *BOLD Program* offers culturally-tailored workshops and peer support designed to enhance social support and overall well-being of those affected by cancer. Workshop themes focus on health promotion, mind-body therapies, and creative arts, with new topics and refinements made regularly in response to participant feedback. The *BOLD Buddies Program* includes treatment companions and phone support services for isolated cancer patients.

##### **Translational Clinic in Psycho-oncology Research**

Einstein Cancer Prevention & Control Program; 1/1/09-ongoing

The Translational Clinic is a research team and infrastructure aimed at tailoring evidenced-based behavioral interventions shown to have efficacy in improving quality of life, adherence, and/or health outcomes among cancer patients/family members/staff to the diverse communities of the Bronx and Einstein/Montefiore. It utilizes community-based participatory research methods to address such topics as oncology staff burnout, cancer-related quality of life, and parental cancer, among others.

##### **Psychosocial Oncology Program (PSOP)**

Montefiore-Einstein Center for Cancer Care; 2006-ongoing

The PSOP is a clinical service program that offers no-cost counseling and support to anyone affected by cancer in the Bronx and surrounding areas. Services are delivered by psychology graduate students (interns/externs) who receive supervision from Dr. Moadel, a licensed health psychologist, towards their academic requirements. Training for oncology fellows is also provided to address communication skills and stress management during the first or second year of fellowship.

#### Yasmin Mossavar-Rahmani, PhD, RD

##### **Study of Latinos: Nutrition & Physical Activity Assessment Study (SOLNAS)**

NIH/National Heart, Lung, and Blood Institute; 4/25/10-3/30/14



This study is being conducted in the Hispanic Community Health Study/Study of Latinos (HCHS-SOL), an NIH-NHLBI funded study of Hispanics/Latinos in the Bronx, Chicago, Miami and San Diego. The principal aims of the proposed study are: 1) To compare energy and protein data from the 24 hr dietary recall to the gold standard biomarkers Doubly Labeled Water (DLW) for energy, and urinary nitrogen for protein in the HCHS-SOL study; to compare physical activity energy expenditure data from study questionnaires to the Actical (an accelerometer for measuring physical activity), DLW and indirect calorimetry. 2) To contrast measurement error properties of: (i) the 24 hr dietary recall; (ii) the 24 hr dietary recall with the addition of the Food Propensity Questionnaire (FPQ) (iii) SOL Physical Activity Questionnaire; (iv) the Tufts University Puerto Rican/Dominican Food Frequency Questionnaire (Bronx only); 3) To use the fitted measurement error model to produce calibrated intake and physical activity measures in the full HCHS/SOL cohort for use in analyses of clinical outcomes.

#### **Sueño Sleep Habits in the Hispanic Community Health Study**

NIH/National Heart, Lung, and Blood Institute; 7/1/10-6/30/14

The specific aims of this proposal are: 1. To define the prevalence of objectively assessed abnormal sleep habits in five domains (sleep duration, sleep continuity, circadian phase, variability in sleep patterns, and daytime napping) in a subset of the Hispanic Community Health Study and define differences in these across age, gender, and ethnic subgroups. 2. To identify predictors of sleep habits by assessing the association between measures of socioeconomic status, social networking, acculturation, and mood with sleep patterns. 3. To understand the effects of abnormal sleep habits on health by assessing the association between sleep patterns and both prevalent and incident cases of obesity, hypertension, diabetes, and cardiovascular disease.

#### **CJ Segal-Isaacson, EdD, RD**

Dr. Segal-Isaacson's research focuses on the metabolic effects of bariatric surgery. Currently she is exploring whether changes in bone density occur in the year following bariatric surgery when typically there is profound weight loss, as well as in subsequent years when weight tends to stabilize or increase. Dr. Segal-Isaacson and her collaborators are also exploring whether quantitative computed tomography provides more accurate results in obese individuals than DXA.

## **DIVISION OF RESEARCH AND TRAINING IN EDUCATION & BIOETHICS**

### **MISSION**

**The Mission of the Division of Research and Training in Education and Bioethics is to foster the training of clinical researchers for the Einstein-Montefiore Medical Center Community and to foster training in and the practice of bioethics.**

**In association with Einstein's Institute for Clinical and Translational Research (supported by the CTS Award), the educational programs include an MS-conferring Clinical Research Training Program and a PhD in Clinical Investigation, which is a scholarly track in Einstein's PhD and MD-PhD (MSTP) Graduate Division programs. There is also a Master's in Bioethics at Einstein/Montefiore. Another program fostered by the Division is a Training Program in Research Ethics in the Americas (located in Buenos Aires, Argentina), funded by a grant from the NIH Fogarty International Center.**

## **PROGRAMS AND FUNDED RESEARCH**

### **Ellie Schoenbaum, MD, Division Head**

Dr. Schoenbaum's focus is on promoting clinical research and expanding effective mentorship support for junior researchers. Dr. Schoenbaum is Director of the Clinical Research Training Program, a Master's-degree granting program that aims to train physician scientists. She founded and directs a PhD in Clinical Investigation which is part of Einstein's graduate division and accepts PhD and MD-PhD students. Recently she was appointed Director of Medical Student Research, for which she oversees the Scholarly Papers required of all Einstein students and is launching a new Scholarly Concentration Program, known as SOAR (Student Opportunities for Academic Research). Many of the Department's faculty teach and mentor the medical students and Scholars in Dr. Schoenbaum's programs.

### **Elizabeth Kitsis, MD, MBE**

#### **Social Media and Medical Professionalism: Perfect Match or Perfect Storm?**

Institute of Medicine as a Profession and the Josiah Macy, Jr. Foundation;  
7/1/12-6/30/14

To educate the Einstein faculty on the use and influence of social media on medical professionalism, and then incorporate this topic as a longitudinal educational theme throughout the four years of medical school.

### **Ruth Macklin, PhD**

#### **Program in Biomedical Ethics**

Trachtenberg and Frackman Family Endowment; 11/1/90-open

Dr. Ruth Macklin is the Trachtenberg Frackman Faculty Scholar, with responsibility for teaching and research in bioethics, organizing an annual lecture at Einstein by a distinguished scholar in the field, and for conducting an annual essay contest open to medical students throughout the United States and Canada. An award is given for the best essay on the physician-patient relationship.

#### **Training Program in Research Ethics in the Americas**

NIH/Fogarty International Center; 9/30/00-5/31/16

This is a training program in international research ethics, designed to educate individuals from developing countries who conduct research in the biomedical and social and behavioral sciences. The aim is to contribute to capacity building in research ethics in Latin America and foster ongoing collaborations in the Americas. The program is designed as a full collaboration between the Program Director in New York and the Co-director in Buenos Aires, Argentina. Trainees are from Latin American countries. Trainees spend four months in Buenos Aires and continue for another four months implementing a program in their home institutions. The program includes an annual intensive course open to anyone free of charge, and a distance-learning course required for the trainees and open to others throughout the region.

### **Aileen P. McGinn, PhD**

Dr. McGinn is the course leader for the statistical computing lab in the Clinical Research Training Program. Her research interests include educational research and investigating hormonal, inflammatory, and metabolic influences on risk of cardiovascular disease, and applying Geographic Information Systems (GIS) to health issues.

### **Tia Powell, MD**

Tia Powell is director of the Einstein-Cardozo Master's of Science in Bioethics. This innovative program is a collaboration between Yeshiva University's medical and law schools, reflecting the interdisciplinary nature of bioethics. Students may complete the program either part-time over a number of years or full-time in a single year; the program is designed for maximum flexibility in order to meet the needs of working



professionals as well as those just beginning their careers. Classes include the Certificate Program, a widely acclaimed year-long class covering a broad range of topics. Additional courses include Bioethics Consultation Skills, Bioethics Mediation, Global Medicine/Global Narratives, and Pharmaceutical Ethics. Additional information, can be found at: <http://www.einstein.yu.edu/masters-in-bioethics/home.aspx>.

## OFFICE OF THE DISTINGUISHED UNIVERSITY PROFESSOR

### **Victor W. Sidel, MD**

Dr. Sidel was appointed as Distinguished University Professor of Social Medicine in 1984. His appointment provides opportunities for contributions to teaching, research, and service in social medicine and public health at Montefiore Medical Center and the Albert Einstein College of Medicine, in the communities they serve, and at the national and international level.

### **Access to Medical Care**

Dr. Sidel works with the Physicians for a National Health Program and with its New York City affiliate, and with the Medical Care Section of the American Public Health Association, to examine health problems in the United States and to advocate for a non-profit medical care system for the United States based on public financing that provides universal access to high-quality medical care.

### **Human Rights and Health**

Dr. Sidel lectures frequently in the United States and in other countries on research ethics and on health and human rights. He is co-editor with Dr. Barry Levy of *Social Injustice and Public Health* which will be published in a second edition in 2013 by Oxford University Press in cooperation with APHA.

### **Prevention of War**

Dr. Sidel is past president of the International Physicians for the Prevention of Nuclear War (IPPNW), which received the 1985 Nobel Peace Prize, and past president and current member of the Board of Directors of Physicians for Social Responsibility, IPPNW's U.S. affiliate.

### **Social Medicine**

Dr. Sidel works with both the Department of Epidemiology and Population Health and the Department of Family and Social Medicine at Einstein on the development of social medicine and public health programs. He continues as a member of the Board of Directors of the Public Health Association of New York City and the Medical Care Section and the Peace Caucus of the American Public Health Association.

## OTHER NOTABLE FACULTY

### **Eran Bellin, MD, VP Clinical IT Research and Development**

Dr. Bellin is VP of Clinical IT Research and Development at Emerging Health Information Technology and at Montefiore Medical Center as the Director of Outcomes Analysis and Decision Support. Dr. Bellin is leading the development effort for Clinical Looking Glass, a user-friendly self-documenting software system that allows clinicians and administrators to define cohorts of patients and track their clinical outcomes across time. This novel software supports quality improvement projects, house staff education, and IRB approved research, and sets new standards of transparency and management by objectives in medical care delivery. A project with the Department of Defense Telemedicine and Advanced Technology Research (TATRC) is building a proof of concept with Military Health Data.

### **Paul R. Marantz, MD, MPH**

#### **Clinical and Translational Science Award (CTSA)**

NIH/National Center for Research Resources; 5/19/08-4/30/13

A national consortium of medical research institutions, funded through Clinical and Translational Science Awards (CTSAs), is working together and shares a common vision to improve the way that biomedical research is conducted across the country, reduce the time it takes for laboratory discoveries to become treatments for patients, engage communities in clinical research efforts, and train the next generation of clinical and translational researchers. There are currently 60 institutions funded under the CTSA. This grant supports the Einstein-Montefiore Institute for Clinical and Translational Research (ICTR).

#### **Strengthening Behavioral & Social Science in Medical School Education (R25)**

NIH/National Institute of Child Health & Human Development; 5/19/11-4/30/16

This program, funded by the NIH Office of Behavioral and Social Science Research, supports the development of medical school curricula in behavioral and social sciences. During the first funding period (2005-2011), Einstein developed new initiatives in communication skills and professionalism. The current grant period focuses on population health, and creates a new partnership with the Warren Alpert Medical School of Brown University, which is a partner in this grant. It also provides support toward the development of a 'scholarly concentrations' program for Einstein students.

## ADMINISTRATION

**Hector N. Jimenez, Unified Administrator**

**Kelba Sosa, Administrator, Einstein Campus**

**Elizabeth Abbate, Secretary, Einstein Campus**

**Celeste Broquadio, Assistant to the Chairman**

**Maureen DeLouise, Administrative Secretary, Einstein Campus**

**Connieann Delvecchio, Administrative Secretary, Einstein Campus**

**Yvonne Gonzalez, Office Coordinator, Montefiore Campus**

**Margie Salamone, Office Coordinator, Einstein Campus**

## EPIDEMIOLOGY INFORMATICS & STUDY MANAGEMENT UNIT

**Mindy Ginsberg, Resource Director**

**Gregory Aidinov, Applications Manager**

**Luis Bonilla, Data Analyst**

**Tom Cavuoto, Senior Systems Manager**

**Minerva Foglia, Statistical Clerk**

**Carlo S. Garcia, Senior Developer/ DBA**

**Luis Hernandez, Systems/Network Manager**

**Victor Kamensky, Statistical Programmer**

**Martin Packer, Project Manager/QA Officer**

**Gregory Rosenblatt, Software Architect**

**Jatin Solanki, Applications Developer**

**Leonid Strizhevskiy, Data Clerk**

**Daniel Tracy, Data Manager**



# 2011-2012 FACULTY

## OFFICE OF THE CHAIRMAN

Thomas E. Rohan, MD, PhD, Chairman  
Geoffrey C. Kabat, PhD, MS  
Olivier D. Loudig, PhD

## DIVISION OF BIOSTATISTICS

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