

21st annual celebration
November 21, 2016

**Eleanor and Miles Shore
50th Anniversary
Fellowship Program for
Scholars in Medicine**



HARVARD
MEDICAL SCHOOL



HARVARD
School of Dental Medicine

**Eleanor and Miles Shore 50th Anniversary
Fellowship Program for Scholars in Medicine
2016 Annual Reception**

4:00 p.m. **Arrival & Light Refreshments**

4:30 p.m. **Welcome**

Nancy J. Tarbell, MD
Dean for Academic & Clinical Affairs

Historical Perspective

Eleanor G. Shore, MD, MPH
Senior Consultant to the Office of
Academic & Clinical Affairs

Maureen T. Connelly, MD, MPH
Dean for Faculty Affairs

Presentation of Awards

Nancy J. Tarbell, MD
Dean for Academic & Clinical Affairs

Carol K. Bates, MD
Associate Dean for Faculty Affairs

5:15 p.m. **Reception**

The 50th Anniversary Fellowship Program for Scholars in Medicine was established in 1995 to celebrate the admission of women to Harvard Medical School, to acknowledge the important contributions that women have made to the School, and to enhance the quality and diversity of the Faculty of Medicine. The program was renamed in 2004 to honor the efforts of Dr. Eleanor Shore, former Dean for Faculty Affairs, and Dr. Miles Shore, Bullard Professor of Psychiatry, Emeritus, on behalf of the 50th Anniversary Program for Scholars in Medicine.

2016 RECIPIENTS

Maurice Albright, MD



Instructor in Orthopedic Surgery | Massachusetts General Hospital

Massachusetts General Hospital Orthopaedics Shore Fellowship

Project Title: Long-Arm Thumb Spica Cast Versus Long-Arm Cast Immobilization of Distal Radius Fractures in Children

Project Description: A significant number of distal radius fractures in children displace after treatment and then require closed reduction and pinning in the operating room. This prospective study aims to answer the question: should the thumb be immobilized in a long-arm thumb spica cast? All patients who present to our emergency department with displaced distal radius fractures undergoing closed reduction under conscious sedation will be asked to enter a prospective, randomized study comparing long-arm thumb spica casting versus long-arm casting with the thumb mobile. Fracture angulation will be determined from both AP and lateral radiographs at the time of injury, after initial treatment, and at subsequent visits.

Joseph F. Arboleda-Velasquez, MD, PhD



Assistant Professor of Ophthalmology | Massachusetts Eye and Ear

Alice J. Adler Fellowship of the Schepens Eye Research Institute

Mentor: Patricia A. D'Amore, PhD, MBA, Charles L. Schepens Professor of Ophthalmology, Professor of Pathology, Massachusetts Eye and Ear and Schepens Eye Research Institute

Project Title: Development of a Three-Dimensional In Vitro Model of the Neurovascular Unit

Project Description: Cellular self-organizing properties have been shown to drive the formation of an optic-cup-like structure in a three-dimensional (3D) culture of embryonic stem cell aggregates. The next big challenge for advancing towards the generation of an in vitro retina model requires the incorporation of a vasculature delivering oxygen to the developing tissue. In this project, we will use a novel, fully biomimetic bioreactor to generate a vasculature able to feed a neural developing tissue, such as a stem-cell-derived optic cup.

Aarti Asnani, MD



**Instructor in Medicine | Massachusetts General Hospital
Massachusetts General Hospital Department of Medicine
Fellowship**

Mentors: Randall T. Peterson, PhD, Charles Addison and Elizabeth Ann Sanders Associate Professor of Basic Science, Massachusetts General Hospital

Anthony Rosenzweig, MD, Evelyn and James Denk and Paul Dudley White Professor of Medicine in the Field of Cardiology, Massachusetts General Hospital

Project Title: Defining Mechanisms of Cell Type-Specific Protection against Doxorubicin Toxicity

Project Description: Anthracyclines such as doxorubicin are very effective chemotherapies used to treat a number of common types of cancer, including breast cancer, leukemia, and lymphoma. However, use of these medications is limited by cardiac side effects, and up to 9% of patients who receive anthracyclines develop a decline in heart function. We found that the plant derivative visnagin protects the heart against doxorubicin while preserving the tumor-killing properties of the chemotherapy. The goal of this study is to understand how visnagin may affect metabolism differently in heart cells versus tumor cells to allow for this tissue-specific protection.

Medha Barbhaiya, MD, MPH



**Instructor in Medicine | Brigham and Women's Hospital
Brigham and Women's Hospital Faculty Career Development
Award**

Mentor: Karen H. Costenbader, MD, MPH, Associate Professor of Medicine, Brigham and Women's Hospital

Project Title: Sociodemographic Variation in Cardiovascular Disease Events among Systemic Lupus Erythematosus Patients in Medicaid

Project Description: Systemic lupus erythematosus (SLE) is an autoimmune disease associated with high morbidity and mortality, which predominantly affects Blacks and women of childbearing age. SLE appears to be more severe among Blacks compared to Whites. Cardiovascular disease (CVD) is the leading cause of death in the US and a common cause of death among SLE patients. However, relatively little is known about whether CVD event and cardiac procedural rates among SLE patients across the United States vary by sociodemographic factors. I will investigate sociodemographic variation in rates of CVD events and surgical/medical procedures for CVD among SLE patients.

Vassilios Bezzerides, MD, PhD



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentors: Jane Newburger, MD, Commonwealth Professor of Pediatrics, Boston Children's Hospital

William T. Pu, MD, Professor of Pediatrics, Boston Children's Hospital

Project Title: Use of iPSCs and Optogenetics for Risk Stratification of Patients with CPVT

Project Description: The proper timing of the heart beat is critical for normal cardiac function. Certain mutations in key proteins can disrupt the normal synchronized pattern of rhythm in the heart, leading to life-threatening arrhythmias. These inherited forms of heart disease can strike unpredictably at any age but are particularly devastating when they occur in children. Catecholaminergic polymorphic ventricular tachycardia (CPVT) is a potentially life-threatening arrhythmia syndrome with unpredictable outcomes. We seek to capitalize on new advancements in stem cell biology, optogenetics, and biomaterials to improve our ability to predict clinical outcomes in patients with inherited arrhythmia syndromes.

Catherine A. Brownstein, ME, MPH, PhD



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentors: Alan H. Beggs, PhD, Sir Edwin and Lady Manton Professor of Pediatrics, Boston Children's Hospital

Christopher A. Walsh, PhD, MD, Bullard Professor of Pediatrics and Neurology, Boston Children's Hospital

Project Title: Genetic Basis of Rare Mendelian Disorders with Application to Sudden Unexplained Death in Pediatrics and Interstitial Cystitis

Project Description: This project aims to determine the genetic basis of rare conditions, focusing on the disorders referred to BCH's Manton Center for Orphan Disease Research. We will utilize a next generation sequencing and chromosomal microarray approach to determine the causative genetic variants, with functional validation whenever possible. We will also apply this approach and infrastructure to a large and previously inaccessible population base of infants who have died from SIDS, and then to a condition that is more common in the population, interstitial cystitis (prevalence 197 per 100,000 women and 41 per 100,000 men).

David Cantonwine, PhD



**Instructor in Obstetrics, Gynecology and Reproductive Biology | Brigham and Women's Hospital
Brigham and Women's Hospital Obstetrics and Gynecology Foundation Fellowship**

Project Title: Urinary Phenol and Paraben Levels in Relation to Risk of Developing Preeclampsia

Project Description: Preeclampsia represents a major cause of maternal mortality and morbidity worldwide. While it is known that the placenta plays a central role in development of preeclampsia, investigation into contribution of environmental toxicants to the risk of preeclampsia has been sparse. Recently, our research group showed a strong adverse relationship between preeclampsia and heightened exposure to two classes of pervasive non-persistent endocrine disrupting chemicals (EDCs) in our society, phthalates and BPA. In the present study we will expand upon this research by examining the relationship between preeclampsia and additional phenol compounds and parabens.

Ann Celi, MD, MPH



**Assistant Professor of Medicine | Brigham and Women's Hospital
Brigham and Women's Hospital Obstetrics and Gynecology Foundation Fellowship**

Mentor: Louise E. Wilkins-Haug, PhD, MD, Professor of Obstetrics, Gynecology and Reproductive Biology, Brigham and Women's Hospital

Project Title: Improving Postpartum Cardiometabolic Health: A Comprehensive, Interdisciplinary Project of Quality Improvement, Patient Safety, and Resident Education

Project Description: The Brigham and Women's Cardiometabolic Clinic in Maternal Fetal Medicine cares for high risk postpartum women after hypertensive pregnancies and deliveries. Since opening in 2011, we have cared for over 400 patients and worked on innovations to improve postpartum care and transition to better heart healthy lifestyles. We are using the Shore fellowship to develop, collect and analyze our patient data base. In addition, we are developing supportive educational materials and clinical practice suggestions for the obstetrics and gynecology residents and our primary provider colleagues. Our goal is to help optimize the care of postpartum hypertensive women for better lifelong health.

Grace Chan, MD, MPH, PhD



**Assistant Professor of Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

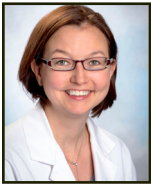
Mentors: Michael S. D. Agus, MD, Associate Professor of Pediatrics, Boston Children's Hospital

Christopher P. Duggan, MD, MPH, Professor of Pediatrics, Boston Children's Hospital

Project Title: Burden of Antibiotic Resistance on Neonates from Developing Societies (BARNARDS) in Ethiopia

Project Description: We are conducting a prospective cohort study of 5000 mother-newborn pairs in Addis Ababa, Ethiopia to identify the etiologies of neonatal sepsis, antibiotic resistance patterns, and estimate the association between maternal risk factors and neonatal sepsis. Newborns will be followed over the first 28 days of life; those with suspected signs and symptoms of sepsis will have blood cultures obtained. We will conduct antibiotic sensitivity testing among positive blood culture isolates. Results will be used to improve antibiotic treatment and management of sick newborns.

Julia Charles, MD, PhD



**Instructor in Medicine | Brigham and Women's Hospital
Brigham and Women's Hospital Faculty Career Development
Award**

Mentor: Peter Nigrovic, MD, Associate Professor of Medicine, Brigham and Women's Hospital

Project Title: Skeletal Alterations Induced by the Gut Microbiome: Serotonin and IGF1 Connect Bugs to Bones

Project Description: The microbiome is the collection of bacteria that normally live in the body. The normal gut microbiome affects skeletal growth and turnover but how the bacteria in the gut cause changes in the skeleton is unknown. Serotonin and IGF1 are molecules that are important for bone biology and we found that blood levels of these molecules increase when germfree mice, that don't have a microbiome, acquire one. In this project, we propose to test if serotonin and IGF1 are required to communicate between the gut microbiome and the skeleton.

David Chiu, MD, MPH



Instructor in Emergency Medicine | Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center Department of Emergency Medicine Fellowship

Mentors: Nathan I. Shapiro, MD, MPH, Associate Professor of Emergency Medicine, Beth Israel Deaconess Medical Center
Richard E. Wolfe, MD, Associate Professor of Emergency Medicine and Head of the Department of Emergency Medicine at Beth Israel Deaconess Medical Center

Project Title: Evaluation of Pulmonary Embolism and Acute Coronary Syndrome Pathways on Resource Utilization in the Emergency Department

Project Description: We aim to reduce resource utilization in the emergency department as well as standardize diagnostic plans for patients who are suspected of having either pulmonary embolism or acute coronary syndrome. By implementing a pulmonary embolism pathway, we hope to reduce CT scan utilization and thus reduce radiation and contrast exposure. By implementing an acute coronary syndrome pathway, we hope to reduce length of stay in the emergency department as well as stress testing, thereby reducing emergency department crowding. The pathways will feature risk stratification using a novel but validated method of attribute matching.

Julia Inpei Chu, MD, MPH



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentors: Sung-Yun Pai, MD, Associate Professor of Pediatrics, Dana-Farber Cancer Institute
David A. Williams, MD, Leland Fikes Professor of Pediatrics, Dana-Farber Cancer Institute/Boston Children's Hospital

Project Title: Development of a Gene Therapy Model for DOCK8 Deficiency

Project Description: Deducator of cytokines 8 (DOCK8) is a critical cytoskeletal intracellular protein identified as a cause of a primary immunodeficiency (PID). Prognosis for DOCK8 deficiency is dismal unless treated by hematopoietic stem cell transplantation (HSCT) which carries significant morbidity and mortality. Gene therapy (GT) has emerged as an attractive option for PIDs such as Wiskott-Aldrich Syndrome or X-linked Severe Combined Immunodeficiency. We are using a self-inactivating alpharetroviral vector expressing human DOCK8 to develop a GT model for DOCK8 deficiency both in vitro and in vivo (mice) which will hopefully lead to a clinical trial in the future.

Natalie Collins, MD, PhD



Instructor in Pediatrics | Boston Children's Hospital and Dana-Farber Cancer Institute

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: W. Nicholas Haining, MBBCh, Assistant Professor of Pediatrics, Dana-Farber Cancer Institute/Boston Children's Hospital

Project Title: Molecular Mechanisms of Immune Evasion

Project Description: Immune checkpoint blockade has changed the landscape of cancer therapy, but some patients fail to respond, and we do not know why or how to predict who will benefit. Tumors acquire beneficial mutations that result in propagation within the tumor. Given the importance of the immune system in cancer control, a subset of these tumor-acquired mutations likely cause immune evasion. I have tested all cancer-associated mutations for the ability to confer immune resistance and have identified mutations that, when present, confer resistance to immunotherapy. These mutations are targets for novel therapies and can serve as biomarkers of response to immunotherapy.

Nicole Dubosh, MD



Instructor in Emergency Medicine | Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center Department of Emergency Medicine Fellowship

Mentors: Edward Ullman, MD, Assistant Professor of Medicine, Beth Israel Deaconess Medical Center

Richard E. Wolfe, MD, Associate Professor of Emergency Medicine and Head of the Department of Emergency Medicine at Beth Israel Deaconess Medical Center

Project Title: A Patient-Centered Intervention to Improve Medical Student Communication and Interpersonal Skills in the Emergency Department

Project Description: With the increasing focus on development of interpersonal skills in medical education and data suggesting a correlation with higher patient satisfaction and health behaviors, it is important for educators to determine the best methods for teaching these skills. This study aims to examine the influence of a brief, patient-centric intervention on medical students' communication and interpersonal skills during an emergency medicine clerkship. The intervention, consisting of direct patient feedback coupled with an educational video from patient and attending physician experiences will be delivered mid-clerkship. We will compare patient ratings of these skills before and after the intervention.

Hawazin Elani, BDS, MSc, PhD, MMSc



**Instructor in Restorative Dentistry and Biomaterials Sciences |
Harvard School of Dental Medicine
Harvard School of Dental Medicine Fellowship in Honor of
Aina M. Auskaps, DMD**

Mentor: German O. Gallucci, DMD, PhD, Raymond J. and Elva Pomfret Nagle Associate Professor and Head of the Department of Restorative Dentistry and Biomaterials Sciences, Harvard School of Dental Medicine

Project Title: Consortium of Oral Health Inequalities: Contrasts, Trends and Population Health Impact

Project Description: Previous studies have documented a relation between social gradient and population health in different countries. It has been shown that people from less advantaged socioeconomic groups tend to have worse health. The goal of this project is to establish a consortium of oral health inequalities that coordinates research on oral health disparities from multiple international sites by sharing expertise, unifying efforts, and organizing analytical strategies. This consortium will serve as a platform to expand trans-national collaborations and to work cross-culturally to examine population-representative estimates of racial/ethnic and socioeconomic inequalities in oral health.

Dahlene Fusco, MD, PhD



**Instructor in Medicine | Massachusetts General Hospital
Claflin Distinguished Scholar Award**

Mentors: Ramnik Xavier MD, PhD, Kurt J. Isselbacher Professor of Medicine in the Field of Gastroenterology, Massachusetts General Hospital

Raymond Chung, MD, Associate Professor of Medicine, Massachusetts General Hospital

Project Title: Interferon Effectors as a Platform for Antiviral Design Against Flaviviridae

Project Description: We currently lack adequate treatment, vaccines, and vector control measures for flaviviral infections including dengue and Zika viruses. Current animal models for dengue and Zika viruses are highly immunocompromised, limiting relevance for studies of human pathology. Our work is focused on identification of host genes required for interferon, a human cytokine, to control flaviviral infections. Using RNAi to decrease gene expression, we identified 56 human genes that are required for interferon to suppress dengue, the dengue interferon effectors. We are now using a knockout mouse for the interferon effector HELZ2, to study dengue, then Zika, pathology in vivo.

Melissa B. Gilkey, PhD



Assistant Professor of Population Medicine | Harvard Pilgrim Health Care Institute

The Harvard Pilgrim Health Care Institute Department of Population Medicine Robert H. Ebert, MD Fellowship

Mentor: Grace Lee, MD, Associate Professor of Population Medicine, Harvard Pilgrim Health Care Institute and Harvard Medical School

Project Title: How Do Primary Care Providers Meet the HEDIS Goal for HPV Vaccine Delivery? A Positive Deviance Study

Project Description: Underuse of HPV vaccine is a persistent problem in the US, where only ~20% of adolescents complete the 3-dose series by age 13. In response, public health leaders have mobilized national quality-improvement initiatives, including the introduction of a new HEDIS measure to assess guideline-consistent HPV vaccine delivery. The proposed study will take a mixed-methods approach to investigating how healthcare providers meet the HEDIS goal. Using insurance claims data, we will first identify providers who are “positive deviants,” or high performers in the delivery of HPV vaccine. Through in-depth interviews with providers, we will then explore communication strategies underlying their success.

Kelly Graham, MD, MPH



Instructor in Medicine | Beth Israel Deaconess Medical Center Beth Israel Deaconess Medical Center Department of Medicine Fellowship

Mentor: Edward R. Marcantonio, MD, SM, Professor of Medicine, Beth Israel Deaconess Medical Center

Project Title: Preventability of Early vs. Late Readmissions: A Multicenter Study

Project Description: In “Preventability of Early vs Late Readmissions, A Multi-Center Study,” I aim to address the generalizability of my prior work at Beth Israel Deaconess Medical Center, using a multi-center dataset. In my prior work, I found that unplanned hospital readmissions within the first week after discharge were more likely to be preventable than those that occurred during days 8-30, questioning the validity of the 30-day readmission quality metric. This follow-up work will address this question outside of our institution, in an effort to improve the generalizability of our findings.

Vandana A. Gupta, PhD



**Instructor in Medicine | Brigham and Women's Hospital
Brigham and Women's Hospital Department of Medicine
Fellowship**

Mentor: Richard Maas, MD, PhD, Professor of Medicine, Brigham and Women's Hospital

Project Title: RNA-Mediated Processes in Neuromuscular Development and Diseases

Project Description: Neuromuscular diseases constitute the largest genetic group of diseases affecting children and adults for which no treatment is available. To identify the critical regulators of neuromuscular development, I performed a forward genetics screen in zebrafish resulting in identification of a novel RNA helicase. This study will investigate the roles of RNA helicases in regulation of RNA mediated processes in neuromuscular development and diseases by cellular and in vivo studies. The knowledge gained from this work will significantly contribute towards understanding neuromuscular disease and developing therapies.

Andrew Hong, MD



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentor: William C. Hahn, MD, PhD, Professor of Medicine, Dana-Farber Cancer Institute

Project Title: Elucidating Mechanisms Driving Renal Medullary Carcinomas to Deliver a Rational Approach to Cancer Directed Therapy

Project Description: Renal Medullary Carcinoma is a rare cancer that carries a very poor prognosis. This cancer occurs in adolescents/young adults and affects patients primarily with sickle cell trait. We developed one of the first patient derived models of this rare cancer. While we are exploring the biology of this disease, there is a clear need for new therapeutic approaches. We have applied functional genomics (e.g. suppression with RNAi and knockout with CRISPR-Cas9) with small-molecule screens to identify vulnerabilities of this cancer. When we integrated these orthogonal screens, we have identified several druggable pathways for which we plan to validate.

Anjali Kaimal, MD



**Assistant Professor of Obstetrics, Gynecology and Reproductive Biology | Massachusetts General Hospital
Dorothy Rackemann Fellowship established by the Vincent Memorial/Massachusetts General Hospital**

Project Title: PROCEED (The Prior Cesarean Decision Study)

Project Description: A primary driver of the rising cesarean rate is the decline in frequency with which eligible women elect a trial of labor after cesarean (TOLAC). Little is known about the extent to which patient preferences have contributed to this decrease. This study will address the gap in knowledge regarding the role of patient preferences in decision making regarding delivery approach after prior cesarean, and combine this information with a validated vaginal birth after cesarean risk calculator and state-of-the art mobile health technology to create an innovative decision tool for women who are facing the TOLAC decision.

Alisa Khan, MD, MPH



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentors: Christopher Paul Landrigan, MD, MPH, Associate Professor of Pediatrics and Associate Professor of Medicine, Brigham and Women's Hospital/Boston Children's Hospital
Mark Schuster, MD, PhD, William Berenberg Professor of Pediatrics, Boston Children's Hospital

Project Title: Family Engagement in Safety

Project Description: Between 44,000-440,000 patients die yearly in the US due to medical errors, making medical errors a leading cause of death. Dr. Khan's previous work showed that parents can be a valuable source of information about medical errors, but are not traditionally included in safety efforts. In this study, she seeks to better understand parent and provider perceptions of hospital safety culture and family engagement in safety efforts. She will also explore relationships between these outcomes and miscommunications, parent-reported errors, parent/provider experience, and parent activation. This work will inform future interventions to engage families in hospital safety reporting efforts.

Ahmad Kheirkhah, MD



**Instructor in Ophthalmology | Massachusetts Eye and Ear
Harvard Cornea Center of Excellence Fellowship**

Mentor: Reza Dana, MD, MSc, MPH, FARVO, Claes H. Dohlman
Professor of Ophthalmology, Massachusetts Eye and Ear

Project Title: Molecular Mechanisms of Interactions Between
Corneal Nerves and Endothelial Cells

Project Description: Corneal transparency is critical for normal vision. Corneal endothelial cells (CECs) are important structures responsible for keeping the cornea transparent; they form a monolayer of cells on the back surface of the cornea. Damage to these cells can result in corneal swelling and reduced vision. There is recent indirect evidence from our group that corneal nerves may be important in maintaining CECs. However, the exact interactions between corneal nerves and CECs have not been investigated. Therefore, we are proposing to study the molecular mechanism of corneal nerve-CEC interactions.

Gina Kruse, MD, MS, MPH



**Instructor in Medicine | Massachusetts General Hospital
Claflin Distinguished Scholar Award**

Mentor: Nancy Rigotti MD, Professor of Medicine and Professor of
Population Medicine, Massachusetts General Hospital

Project Title: A Text Messaging Program to Help Smokers Quit:
The GetReady2Quit Program

Project Description: Among US smokers, 52% try to quit each year but less than one-third use medication or counseling in their quit attempt. Text messaging shows promise as a way to address this treatment gap. Text messaging can supplement clinicians' efforts by offering assistance to smokers between office visits. For this research, we will first collect qualitative data from smokers in primary care in order to develop a motivational smoking cessation text messaging intervention. We will test the effectiveness of the intervention on smoking outcomes in a pilot randomized trial among primary care patients.

Julie Levison, MD, MPhil, MPH



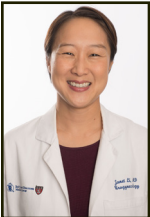
**Instructor in Medicine | Massachusetts General Hospital
Claflin Distinguished Scholar Award**

Mentor: Margarita Alegría, PhD, Professor of Psychiatry, Massachusetts General Hospital

Project Title: An Intervention to Overcome Obstacles to Retention in HIV Care for Hispanic Immigrants

Project Description: Immigrants comprise 40% of new HIV infections in U.S. Hispanics. Interventions to address early engagement and retention in HIV care are sparse, and have not been adequately studied in Hispanic immigrants, a growing and underserved population. I will develop and test a community health worker/*fotonovela* (drama-based story) intervention to improve consistent attendance in HIV primary care for Latino immigrants. The central hypothesis is that the culturally familiar format of the *fotonovela* in the context of the social support and health system navigation provided by the CHW can address key psychosocial, informational, and logistical barriers to HIV care in Latinos.

Janet Li, MD



Instructor in Obstetrics, Gynecology and Reproductive Biology | Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center Department of Obstetrics, Gynecology and Reproductive Biology Fellowship

Mentors: Hope Ricciotti, MD, Associate Professor of Obstetrics, Gynecology and Reproductive Biology and Head of the Department of Obstetrics, Gynecology and Reproductive Biology at Beth Israel Deaconess Medical Center

Akila N. Viswanathan, MD, MPH, Associate Professor of Radiation Oncology, Brigham and Women's Hospital

Project Title: Does the Use of Informational Audiovisual Presentations Improve Patient-Provider Communication in an Outpatient Setting?

Project Description: The aim of this study is to determine if the use of informational audiovisual presentations during an office visit improves patient-provider communication and enhances both patients' and providers' experience of the encounter. We will evaluate if patients' understanding of their diagnosis and treatment is improved with the addition of audiovisual presentations compared to routine face-to-face counseling in a urogynecology clinic and also assess patients' overall satisfaction with the encounter, length of time spent in face-to-face counseling, physicians' overall satisfaction with the encounter, and differences in the effectiveness of the two different audiovisual interventions.

Andrew Liss, PhD



**Instructor in Surgery | Massachusetts General Hospital
Massachusetts General Hospital Department of Surgery
Faculty Development Fellowship**

Mentor: David W. Rattner, MD, Professor of Surgery, Massachusetts General Hospital

Project Title: Contribution of Lgr5-expressing Cells to Pancreatic Tumorigenesis

Project Description: Pancreatitis is an inflammatory disease of the pancreas and is one of the major risk factors for pancreatic cancer. The inflammatory response to pancreatic injury plays a key role in both promoting tissue repair and tumorigenesis. We have recently discovered that during inflammatory injury non-immune cells, termed tuft cells, are also recruited to the pancreas. We have found that these tuft cells are derived from stem cells normally found in the small intestine. The experiments proposed in this application will examine the origin of pancreatic tuft cells and the contribution of their progenitor cells to pancreatic cancer.

Sara Looby, PhD



Assistant Professor of Medicine | Massachusetts General Hospital

Clafin Distinguished Scholar Award

Project Title: Cardiovascular Disease Risk in HIV-infected Women: Sex-Specific Mechanisms of Risk and Risk Reduction among REPRIEVE Trial Participants

Project Description: The REPRIEVE trial is a multisite, international randomized controlled trial testing whether statin therapy reduces the risk of cardiovascular disease (CVD) among 6500 men and women with HIV and low to moderate traditional CVD risk. My project, which is fully integrated into the main REPRIEVE trial, will determine whether immune activation contributes uniquely to CVD among HIV-infected women across the reproductive aging spectrum. A key component of the methodology entails launching an evidence-based education/awareness campaign to educate women on HIV and heart disease, and enhance clinical research participation among women with HIV in clinical trials like REPRIEVE.

Neil Martin, MD, MPH



Assistant Professor of Radiation Oncology | Brigham and Women's Hospital

The Peter Mauch Radiation Oncology Fellowship for Junior Faculty

Mentor: Daphne Haas-Kogan, MD, Professor of Radiation Oncology, Brigham and Women's Hospital, Boston Children's Hospital, and Dana-Farber Cancer Institute

Project Title: Improving Provider Use of Patient Reported Outcomes as Part of Routine Clinical Care

Project Description: The Department of Radiation Oncology at the Dana-Farber/Brigham and Women's Cancer Center currently collects patient-reported outcomes around symptoms related to treatment as part of routine clinical care. Limitations in the implementation make this challenging for clinical staff to fully embrace. This project aims to improve the usefulness of the collected PROM data to change clinical care by improving the availability of the data and creating triggers within the electronic medical record.

Heather Mason-Suares, PhD



Instructor in Pathology | Brigham and Women's Hospital

Brigham and Women's Hospital Department of Pathology Fellowship

Mentors: Heidi L. Rehm, PhD, FACMG, Associate Professor of Pathology, Brigham and Women's Hospital

Scott T. Weiss, MD, MS, Professor of Medicine, Brigham and Women's Hospital

Project Title: Prenatal Exome Sequencing

Project Description: Prenatal whole exome sequencing (WES), sequencing of the entire coding region of the genome, can detect many genetic disorders that would otherwise go undiagnosed until after birth. However, due to the limited amount of prenatal sample and need for rapid turnaround time, Prenatal WES is rarely pursued. I propose to develop a rapid prenatal WES assay with a three week turnaround time using a recently developed protocol that requires significantly less input DNA. Successful completion of this study would facilitate development of a rapid prenatal WES assay, with the eventual goal of routine diagnostics for pregnancies with abnormal ultrasound findings.

Ji Miao, PhD



**Assistant Professor of Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentors: Joseph Majzoub, MD, Thomas Morgan Rotch Professor of Pediatrics and Professor of Medicine, Boston Children's Hospital
Morris White, PhD, Professor of Pediatrics, Boston Children's Hospital

Project Title: Targeting Nuclear Receptor Co-Regulator for the Treatment of Metabolic Disorders

Project Description: The prevalence of metabolic syndrome-related disorders such as non-alcoholic fatty liver disease, hypertriglyceridemia, and obesity has reached over 30% among US adults. Nuclear hormone receptors and their co-regulators play an essential role in regulating all aspects of lipid metabolism, dysregulation of which underlies these metabolic disorders. Though previous studies have linked consumption of fructose to the development of these disorders, the underlying mechanisms are unclear. Based on our data, we propose a novel mechanism of regulation of lipid metabolism via autophagy through nuclear receptors and co-regulators, which will provide insights into the pathological development of metabolic disorders linked to fructose.

Jeannine M. Miranne, MD, MS



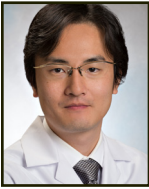
**Instructor in Obstetrics, Gynecology, and Reproductive
Biology | Brigham and Women's Hospital
Brigham and Women's Hospital Obstetrics and Gynecology
Foundation Fellowship**

Mentor: Vatche Arakel Minassian, MD, MPH, Associate Professor of Obstetrics, Gynecology, and Reproductive Biology, Brigham and Women's Hospital

Project Title: Cranberry Tablets Versus Antibiotic Prophylaxis for Urinary Tract Infection Prevention after Urogynecologic Surgery: A Randomized Controlled Trial

Project Description: Urinary tract infection (UTI) is one of the most common complications of pelvic reconstructive surgery. The purpose of this randomized clinical trial is to evaluate the effectiveness of cranberry tablet use compared with nitrofurantoin prophylaxis in the prevention of postoperative UTI after pelvic reconstructive surgery in women receiving transurethral catheterization. Participants undergoing pelvic reconstructive surgery will be randomized to one cranberry tablet or 100 mg of nitrofurantoin daily if they are discharged or hospitalized overnight with a transurethral catheter. The primary outcome will be clinically suspected or culture-proven UTI within 4 weeks of surgery.

Ryuji Morizane, MD, PhD



**Instructor in Medicine | Brigham and Women's Hospital
Brigham and Women's Hospital Faculty Career Development Award**

Mentor: Joseph V. Bonventre, MD, PhD, Samuel A. Devine
Professor of Medicine, Brigham and Women's Hospital

Project Title: Modeling Kidney Fibrosis in Kidney Organoids
derived from Human Pluripotent Stem Cells

Project Description: Loss of functional kidney cells and the development of tissue fibrosis contribute to the progression of chronic kidney disease (CKD), which cannot be reversed. Human induced pluripotent stem cells (hiPSCs) are attractive sources for the development of kidney regeneration therapies, disease modeling and drug discovery. We recently developed novel methods to create 3-dimensional kidney tissues from hiPSCs. These organoids contain functional kidney cells, glomeruli and proximal and distal tubules in anatomically appropriate context relative to each other. Our new approach allows for personalized disease, toxicity and therapeutic modeling. In addition, we developed a new model of human kidney fibrosis using the kidney organoids created from hiPSCs, which is ideally suited for mechanistic analyses and drug screening for CKD. With this new tool, we will explore the mechanisms of kidney fibrosis and establish new therapeutic approaches for CKD.

Anne Neilan, MD, MPH



**Instructor in Medicine | Massachusetts General Hospital
Harvard Medical School in Honor of Isaac Schiff, MD**

Mentors: Andrea L. Ciaranello, MD, MPH, Assistant Professor of
Medicine, Massachusetts General Hospital

Kenneth A. Freedberg, MD, MSc, Professor of Medicine,
Massachusetts General Hospital

Project Title: Preventing HIV-Infection in US Youth: Clinical Impact and Cost-effectiveness

Project Description: New HIV infections among youth ages 13-24 comprise 22% of all new HIV infections in the US. 60,000 youth are already living with HIV (YLWH) in the US, and new infections contribute substantially to HIV transmission. Daily oral tenofovir difumarate (TDF) for pre-exposure HIV prophylaxis (PrEP) has been successful in adults, and I will collaborate with researchers who are evaluating the feasibility and acceptability of PrEP in youth. Using a computer simulation health-policy model, I will evaluate the short- and long-term clinical outcomes, healthcare costs, and cost-effectiveness of strategies for the prevention of HIV in US youth.

Werner Neuhausser, MS, MD, PhD



Instructor in Obstetrics, Gynecology and Reproductive Biology | Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center Department of Obstetrics, Gynecology and Reproductive Biology Fellowship

Mentors: Kevin C. Eggan, PhD, Professor of Stem Cell and Regenerative Biology, Harvard Medical School

Hope Ricciotti, MD, Associate Professor of Obstetrics, Gynecology and Reproductive Biology and Head of the Department of Obstetrics, Gynecology and Reproductive Biology at Beth Israel Deaconess Medical Center

Project Title: Oocyte Regeneration-Differentiation of Germ Cells from Human Embryonic and Induced Pluripotent Stem Cells

Project Description: Regeneration of human eggs for in-vitro fertilization (IVF) could greatly enhance chances of success in infertile women with few remaining or 'poor quality' oocytes due to age or other factors. One potential avenue involves derivation of oocytes from pluripotent stem cells (PSCs) which are stem cells resembling the early human embryo. Early, immature germ cells can now be readily generated from PSCs. Our experiments will use discarded human ovarian tissue from aborted fetuses to provide a 'developmental niche' for early germ cells to undergo a germ cell specific cell division (meiosis) and mature into functional oocytes.

Heikki Nikkanen, MD



**Instructor in Emergency Medicine | Mount Auburn Hospital
Mount Auburn Hospital Department of Emergency Medicine
Faculty Development Fellowship**

Mentors: Gary Setnik MD, FACEP, Assistant Professor of Emergency Medicine, Mount Auburn Hospital

J. Stephen Bohan, MD, FACEP, Associate Professor of Emergency Medicine, Brigham and Women's Hospital

Project Title: Application of Operations Research in Improving Care of the Emergency Department Patient

Project Description: Research in the field of operations in medicine has burgeoned in the last decade, with analytic techniques previously only used in industry and clinical trials being applied to the movement of patients through hospital systems. I will attend an advanced course in ED operations. Using current literature and best practice as a framework, I will lead the department through a series of discrete improvement projects. I hope to add to the existing fund of knowledge by answering specific questions around the relationship between the flow of patients in the ED and the operations of related units in the hospital.

Michiya Nishino, MD, PhD



**Instructor in Pathology | Beth Israel Deaconess Medical Center
Beth Israel Deaconess Medical Center Department of
Pathology Fellowship**

Mentor: Jeffrey E. Saffitz, MD, PhD, Mallinckrodt Professor of Pathology and Head of the Department of Pathology at Beth Israel Deaconess Medical Center

Project Title: Evaluating the Performance of the Veracyte Afirma Gene Expression Classifier for Cytologically Indeterminate Thyroid Nodules

Project Description: Recent developments in molecular diagnostics have sparked the development of new tests for thyroid cytology specimens. In published validation studies, these tests have proven to refine the malignancy risk of cytologically indeterminate thyroid nodules. However, the performance and utility of these molecular tests in the real-world clinical setting are only starting to emerge. This project will analyze the BIDMC experience with the Afirma Gene Expression Classifier (Veracyte, Inc.), determine its performance characteristics, and develop ways to optimize the algorithm for selecting thyroid nodules for testing.

Brian O’Gara, MD



Instructor in Anaesthesia | Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center Department of Anesthesia, Critical Care and Pain Medicine John Hedley-Whyte Research Fellowship

Mentor: Alan Lisbon, MD, Associate Professor of Anaesthesia, Beth Israel Deaconess Medical Center

Project Title: Prevention of Early Postoperative Decline

Project Description: Prevention of Early Postoperative Decline is a randomized, assessor blinded pilot study looking to evaluate the ability of a customized neurocognitive training program to reduce the incidence of postoperative delirium and cognitive decline in elderly cardiac surgical patients. Patients in the intervention arm will be given a customized neurocognitive training program intended to improve cognitive function in the areas affected in the postoperative period. They will be expected to use the program in the preoperative period leading up to surgery and for another one month after surgery. Incidences of delirium and postoperative cognitive decline will be compared to usual care controls.

Elizabeth Olson, PhD



**Instructor in Psychology in the Department of Psychiatry |
McLean Hospital**

McLean Hospital Fellowship

Mentor: Isabelle Rosso, PhD, Assistant Professor in Psychology in the Department of Psychiatry, McLean Hospital

Project Title: Neuroeconomics of Social Withdrawal Following Trauma Exposure

Project Description: Growing evidence indicates that impairment in quality of life in posttraumatic stress disorder is strongly related to its effects on social functioning, including social withdrawal. Reward-related behavior plays a key role in shaping social interactions; abnormalities in neural circuits involved in motivational appraisal can result in social disturbances. This study uses a neuroeconomic exchange game, the trust task, to capture altered social reward valuation in trauma-exposed individuals, and relates this to reduced social network size. This project will produce pilot data for a future R-series application using neuroimaging to identify neural correlates of social anhedonia following trauma exposure.

Jodie Ouahed, MDCM, MMSc



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital Division of Gastroenterology and
Nutrition Fellowship**

Mentor: Scott B. Snapper, MD, PhD, Associate Professor of Medicine, Brigham and Women's Hospital and Boston Children's Hospital

Project Title: Genetics of Very Early Onset and Infantile Inflammatory Bowel Disease

Project Description: Inflammatory bowel diseases, or IBD are chronic inflammatory conditions of the gastrointestinal tract, including Crohn's and ulcerative colitis. The incidence of IBD is rising most robustly among patients under 10 years of age. Focused studies of the genetics in infants and young children with IBD identified novel causative genetic mutations, which have enabled curative interventions. My work focuses on analysis of next generation sequencing of such patients in order to identify additional novel monogenic etiologies of infantile and very early onset IBD. Thereafter, I perform extensive functional assays to better understand the role of these genetic variants in disease pathogenesis.

Kei Ouchi, MD, MPH



Instructor in Emergency Medicine | Brigham and Women's Hospital

Brigham and Women's Hospital Department of Emergency Medicine Faculty Development Fellowship

Mentors: James A. Tulsy, MD, Professor of Medicine Dana-Farber Cancer Institute, and Brigham and Women's Hospital

Susan D. Block, MD, Professor of Psychiatry and Professor of Medicine, Dana-Farber Cancer Institute and Brigham and Women's Hospital

Mara A. Schonberg, MD, MPH, Associate Professor of Medicine, Beth Israel Deaconess Medical Center

Jeremiah D. Schuur, MD, MHS, Assistant Professor of Emergency Medicine, Brigham and Women's Hospital

Project Title: Validating the Ability to Predict Mortality with the "Surprise Question"

Project Description: We propose to develop a practical method to identify older adults with limited life expectancy in the emergency department using a preexisting database. Asking physicians the "surprise question," worded as, "Would you be surprised if this patient died in the next 12 months?" has been shown to accurately predict 12-month mortality in patients on hemodialysis and patients with cancer in the outpatient setting. We will characterize its ability to predict near-term mortality when the question is asked of emergency medicine physicians in this setting.

Tetsu Oura, MD, PhD



Instructor in Surgery | Massachusetts General Hospital

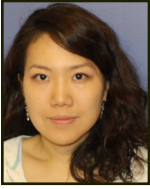
Massachusetts General Hospital Department of Surgery Faculty Development Fellowship

Mentor: Tatsuo Kawai, MD, PhD, Professor of Surgery, Massachusetts General Hospital

Project Title: Inhibition of BCL-2 for Induction of Mixed Chimerism and Allograft Tolerance

Project Description: We have developed a conditioning regimen that induces renal allograft tolerance in NHPs via mixed chimerism. This approach has been translated to HLA-mismatched kidney transplants. Although preclinical and clinical achievements are encouraging, wider clinical application has been hampered by the myelosuppressive therapy included in the current conditioning regimen. It would therefore be desirable to develop a reliable nontoxic conditioning regimen that permits allogeneic hematopoietic stem cell engraftment without nonselective myelosuppressive therapy. The major objective is to translate the novel strategy which depletes lymphocytes via apoptosis with Bcl-2 inhibition developed in the rodent study to NHP kidney and BM transplant model.

Sang Won Park, PhD



**Assistant Professor of Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentor: Joseph Majzoub, MD, Thomas Morgan Rotch Professor of Pediatrics and Professor of Medicine, Boston Children's Hospital

Project Title: BRD7's Role in the Development of Obesity and Type 2 Diabetes

Project Description: Obesity is associated with a number of serious medical complications, including insulin resistance and type 2 diabetes. We have discovered that the expression levels of a protein called bromodomain-containing protein 7 (BRD7) are significantly reduced in the liver of obese mice and acute restoration of BRD7 levels reverses type 2 diabetic features in severely obese and type 2 diabetic mouse models. This project seeks to determine whether reduced BRD7 level is a major contributor for the development of type 2 diabetes and asks whether targeting to upregulate BRD7 protein levels may constitute a therapeutic strategy to treat type 2 diabetes.

Gayle Pouliot, MD, PhD



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital OFD/BTREC/CTREC Faculty
Career Development Fellowship**

Mentors: Alejandro Gutierrez, MD, Associate Professor of Pediatrics, Boston Children's Hospital and Dana-Farber Cancer Institute

Stuart H. Orkin, MD, David G. Nathan Professor of Pediatrics, Dana-Farber Cancer Institute

David A. Williams, MD, Leland Fikes Professor of Pediatrics, Dana-Farber Cancer Institute and Boston Children's Hospital

Project Title: Investigating the Fanconi/BRCA Pathway in T-cell acute lymphoblastic leukemia (T-ALL)

Project Description: T-cell acute lymphoblastic leukemia (T-ALL) is an aggressive cancer with a peak incidence in adolescents that is in need of new therapies. Sequencing the DNA of a group of 40 patients with T ALL identified that ~22% had mutations in the Fanconi/BRCA1 DNA repair pathway. Recent studies show that heterozygous loss of this pathway may sensitize cells to replication-induced stress and in particular to replication inhibitors such as hydroxyurea. We will use animal models to study the role of this pathway in the formation of T-ALL and to assess whether Fanconi/BRCA mutant T-ALL is sensitive to replication inhibitors.

Olga Pozdnyakova, MD



Assistant Professor of Pathology | Brigham and Women's Hospital

Brigham and Women's Hospital Faculty Career Development Award

Mentor: Jon C. Aster, MD, PhD, Professor of Pathology, Brigham and Women's Hospital

Project Title: Delineating the role of the bone marrow inflammatory microenvironment in Philadelphia negative myeloproliferative neoplasms using a novel gene expression platform

Project Description: Philadelphia-negative myeloproliferative neoplasms (MPN) include three distinct entities - primary myelofibrosis, essential thrombocythemia and polycythemia vera. Despite sharing genetic mutations, these diseases show differences in their microscopic appearance, progression rate, treatment and treatment response. These disparities are poorly understood. Inflammation has been implicated as a trigger of MPN development; however, our understanding of its role has been limited by technical difficulties. We have surmounted this barrier by using Nanostring, a novel platform, which provides an inflammatory gene expression analysis directly in bone marrow biopsies, the place of disease initiation. This study will provide new insights into MPN pathogenesis and treatment.

David Preiss, MD, PhD



Assistant Professor of Anaesthesia | Brigham and Women's Hospital

Brigham and Women's Hospital Department of Anesthesiology, Perioperative and Pain Medicine Faculty Development Fellowship

Mentor: Richard D. Urman, MD, MBA, Associate Professor of Anaesthesia, Brigham and Women's Hospital

Project Title: Using Information Technology to Improve Perioperative Care Quality and Efficiency

Project Description: Since BWH went "live" with Epic last May, clinical and organizational data have been pouring into the hospital's servers that have the capacity to help our department improve patient care, quality and efficiency. I plan to organize and merge some of this data with that of the Partners entity to allow us to increase its power for scientific analysis and publication. Additionally, I plan to design small-scale applications to improve the day-to-day functioning of the Department of Anesthesia.

Christina Psaros, PhD



Assistant Professor of Psychiatry | Massachusetts General Hospital

Clafin Distinguished Scholar Award

Project Title: Treating depression and improving adherence to PMTCT among women in South Africa: A pilot study

Project Description: Large scale studies document rates of HIV as high as 40% in South African antenatal clinics. Targeting the health of HIV-infected pregnant women is important in its own right, but is also essential to minimize the risk of transmission of HIV from mother to infant. Depression is a robust predictor of non-adherence to antiretroviral therapy, an essential component of preventing mother-to-child transmission (PMTCT) of HIV protocols. PMTCT programs are effective, however, utilization is suboptimal. The proposed study seeks to develop a scalable depression and adherence intervention. In a setting where there is a dearth of mental health providers or antidepressant medication, identification of such an intervention is critical.

Aurora Naa-Afoley Quaye, MD



**Instructor in Anaesthesia | Massachusetts General Hospital
Massachusetts General Hospital Department of Anesthesia
Fellowship**

Mentor: Jeanine P. Wiener-Kronish, MD, Henry Isaiah Dorr Professor of Research and Teaching in Anaesthetics and Anaesthesia and Head of the Department of Anaesthesia and Critical Care, Massachusetts General Hospital

Project Title: Patient Controlled Epidural Analgesia Versus Intravenous Patient Controlled Opioid Analgesia for Non-Operative Small Bowel Obstructions

Project Description: Epidural analgesia provides superior pain relief than opioid analgesia in postoperative management of small bowel obstructions (SBO). Epidural anesthesia is also effective at reducing metabolic stress responses to surgical trauma- a factor contributing to ileus and adhesions formation. Research is limited on the utility of epidural analgesia in the non-operative management of SBO. I propose a prospective randomized study comparing epidural analgesia to opioid therapy in non-operative management of SBO. I hypothesize that patients treated with epidural analgesia will have lower pain scores, decreased nausea/vomiting and decreased need for surgery when compared to patients receiving opioid therapy.

Alicia M. Quesnel, MD



**Instructor in Otolaryngology | Massachusetts Eye and Ear
Massachusetts Eye and Ear Fellowship**

Mentors: M. Charles Liberman, PhD, Harold F. Schuknecht Professor of Otolaryngology, Massachusetts Eye and Ear
Joseph B. Nadol, Jr., MD, Professor of Otolaryngology, Massachusetts Eye and Ear
Michael McKenna, MD, Professor of Otolaryngology, Massachusetts Eye and Ear

Project Title: Investigation of Post-Cochlear Implantation Acoustic Hearing Loss through Immunostaining in Archival Implanted Human Temporal Bone Specimens

Project description: The biologic mechanism of the delayed loss of acoustic hearing after cochlear implantation is poorly understood, but is amenable to study through histopathologic examination of post-mortem specimens from patients who underwent cochlear implantation during life. Combining Nomarski microscopy and immunostaining techniques will enable more accurate assessment of cell types and reveal subcellular structures previously seen only by electron microscopy. This translational work ultimately seeks to improve cochlear implantation outcomes and expand hearing rehabilitation options for patients with sensorineural hearing loss.

Yakeel Quiroz, PhD



**Instructor in Psychology in the Department of Psychiatry |
Massachusetts General Hospital
Claflin Distinguished Scholar Award**

Mentor: Reisa A. Sperling, MD, Professor of Neurology, Massachusetts General Hospital

Project Title: Brain Pathology and Cognitive Decline in Autosomal-Dominant Alzheimer's Disease

Project Description: This project will use cognitive measures and molecular imaging with positron emission tomography (PET) to investigate the relationship between markers of brain pathology and cognitive decline in preclinical Alzheimer's disease (AD). In particular, this project will include the study of a genetic model of AD, in the world's largest cohort of a single early-onset AD-causing mutation (PSEN1 E280A), with a known, well characterized risk for clinical dementia. This research will provide new understanding of how amyloid and tau pathology impact cognitive function very early in the disease process, and their role in subsequent neuronal death.

Betzalel Reich, MD



Instructor in Emergency Medicine | Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center Department of Emergency Medicine Fellowship

Mentor: Richard E. Wolfe, MD, Associate Professor of Emergency Medicine and Head of the Department of Emergency Medicine at Beth Israel Deaconess Medical Center

Project Title: Mild Traumatic Brain Injury and Resource Utilization

Project Description: We recently created an Emergency Department clinical pathway for patients with mild Traumatic Brain Injury. In the past, these patients would typically be admitted to the hospital, but the majority of them would not undergo any intervention. Now these patients will be monitored in the Emergency Department, and after neurosurgical evaluation, sent home or to rehabilitation. We plan on studying the safety and efficiency of this pathway. Assuming that we can show this pathway works, we plan on implementing it throughout our network of hospitals via a tele-neurosurgery consultation that connects providers in the community to neurosurgeons at BIDMC.

Sari L. Reisner, ScD



Assistant Professor of Pediatrics | Boston Children's Hospital Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Mark Schuster, MD, PhD, William Berenberg Professor of Pediatrics, Boston Children's Hospital

Project Title: Advancing US Transgender Health Research

Project Description: Transgender people, who have a current gender identity or expression different from their assigned sex at birth, represent a highly stigmatized, traditionally marginalized, and underserved patient population in medicine and public health efforts. We aim to understand health disparities faced by transgender people and conduct epidemiologic research to improve evidence-based provision of clinical care to this patient group. Led by an openly transgender member of the Harvard Medical School faculty, this project will ultimately increase the visibility of transgender health needs and advance the field of transgender health by promoting gender diversity at Harvard Medical School and beyond.

Mary B. Rice, MD, MPH



Assistant Professor of Medicine | Beth Israel Deaconess Medical Center

Dr. Lynne Reid/Drs. Eleanor and Miles Shore Fellowship

Mentors: Murray A. Mittleman, MD, DrPH, Associate Professor of Medicine, Beth Israel Deaconess Medical Center

J. Woodrow Weiss, MD, Professor of Medicine, Beth Israel Deaconess Medical Center

Project Title: Ambient Temperature and Lung Function: Acute Effects and Interactions with Outdoor Pollutants

Project Description: The frequency of heat waves is increasing and this trend is forecasted to continue. While harmful respiratory effects of air pollution have been extensively studied, little is known about how extreme temperature and changes in temperature affect respiratory physiology. The proposed study will examine acute effects of temperature and temperature range on lung function, and the role of temperature in modifying respiratory effects of air pollution in a large population-based study of adults in the Northeastern US. This project will also assess if particular sub-groups of people, including those with asthma, may be more susceptible to respiratory effects of temperature.

Caitlin Kantrowitz Rollins, MD



**Instructor in Neurology | Boston Children's Hospital
Boston Children's Hospital Department of Neurology Faculty
Development Fellowship**

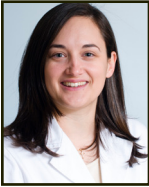
Mentors: Jane W. Newburger, MD, MPH, Commonwealth Professor of Pediatrics, Boston Children's Hospital

Simon K. Warfield, PhD, Professor of Radiology, Boston Children's Hospital

Project Title: Fetal Brain Development in Congenital Heart Disease

Project Description: Many survivors of surgery for congenital heart disease face life-long neurological sequelae ranging from subtle learning disabilities to more significant cognitive impairment. Recent research suggests that abnormalities in brain structure are present at birth, even before these children undergo surgery. This study will use fetal MRI to investigate brain abnormalities in utero. We will describe whether congenital heart disease affects specific brain regions more than others and determine the timing of onset during pregnancy. We will also examine whether fetal brain findings in this population relate to infant and toddler development.

Renee N. Salas, MD, MPH, MS



Instructor in Emergency Medicine | Massachusetts General Hospital

Massachusetts General Hospital Department of Emergency Medicine Fellowship

Mentor: David F. M. Brown, MD, FACEP, MGH Trustees Professor of Emergency Medicine and Head of the Department of Emergency Medicine at Massachusetts General Hospital

Project Title: The Association between High Altitude Pathology and Air Pollutants

Project Description: The Himalayan Rescue Association (HRA) operates clinics in remote high altitude regions of Nepal. Phase 1 will create the HRA Data Repository (HRADR) which will be the largest collection of high altitude (HA) patient visits to date for wilderness medicine. Phase 2 will utilize the HRADR to examine associations between HA pathology, such as high altitude pulmonary edema (HAPE), and air pollutant levels, such as ambient ozone. Phase 3, a clinical field study, will examine associations between physiologic surrogates of air pollutant exposure (i.e., biomarkers) and physiologic parameters of high altitude pathology (i.e., pulmonary function tests).

Mohd Shahid, PhD



Instructor in Dermatology | Massachusetts General Hospital
Massachusetts General Hospital Dermatology Service Faculty
Career Development Fellowship

Mentors: R. Rox Anderson, MD, Professor of Dermatology, Massachusetts General Hospital

Mei X. Wu, MD, PhD, Associate Professor of Dermatology and Member of the Affiliated Faculty of the Harvard-MIT Division of Health Sciences and Technology (HST), Massachusetts General Hospital

Project Title: IEX-1 Regulates Beige Fat Formation by Modulating Macrophage Phenotype

Project Description: Converting white adipocytes into brown (beiging) efficiently increases energy expenditure and inhibits obesity. The bonafide factors that are required for beige fat biogenesis remain poorly understood. IEX-1 is highly expressed in macrophages where it controls their phenotype. We propose that IEX-1 regulates beiging in white adipose tissue (WAT) via its action in adipose macrophages. We demonstrate that lack of IEX-1 remarkably protects mice against diet-induced obesity by inducing beige fat formation and increasing energy expenditure. Using genetic knockout mice and cell culture approaches, we will elucidate a specific role of macrophages in beiging and the lean phenotype in IEX-1 deficiency.

Eric G. Sheu, MD, PhD



**Instructor in Surgery | Brigham and Women's Hospital
Brigham and Women's Hospital Department of Surgery Junior
Fellowship in Honor of Robert T. Osteen, MD**

Mentors: Francis D. Moore, Jr., MD, Francis D. Moore Professor of Surgery, Brigham and Women's Hospital

Ali Tavakkoli, MBBS, Associate Professor of Surgery, Brigham and Women's Hospital

Project Title: Understanding the Role of Gastrointestinal Immunity in Diabetes

Project Description: The global epidemic of obesity has fueled a parallel rise in type 2 diabetes. Growing evidence suggest that the GI tract plays a critical role in the pathogenesis of diabetes. In particular, the gut mucosal immune system maintains homeostasis to resident microbiota and other enteric antigens. We hypothesize that diabetes alters GI immunity, leading to impaired intestinal metabolic and barrier function. We plan to study the impact of bariatric surgery and diabetes on GI immunity in both patients and animal models, with the hope of developing novel interventions for metabolic disease.

Atul B. Shinagare, MD



**Assistant Professor of Radiology | Dana-Farber Cancer
Institute and Brigham and Women's Hospital
Dana-Farber Cancer Institute Fellowship**

Mentor: Steven E. Seltzer, MD, FACR, Philip H. Cook Professor of Radiology and Head of the Department of Radiology at Brigham and Women's Hospital

Project Title: Tyrosine Kinase Inhibitor-Associated Pancreatic Atrophy: Novel Toxicity and a Prognostic Marker

Project Description: Tyrosine kinase inhibitors (TKI) are now routinely used for treatment of several common malignancies including lung cancer, ovarian cancer, renal cell carcinoma (RCC), hepatocellular carcinoma (HCC), gastrointestinal stromal tumor (GIST), pancreatic endocrine tumor and chronic myeloid leukemia. We have previously reported that sunitinib, a commonly utilized TKI, was associated with pancreatic atrophy in patients with GIST and higher rate of pancreatic atrophy was associated with shorter overall survival. The proposed research will attempt to validate these findings in patients with RCC. If validated, pancreatic atrophy would serve as a non-invasive prognostic biomarker for patients receiving TKI therapy.

Samir Softic, MD



**Instructor in Pediatrics | Boston Children's Hospital
Boston Children's Hospital Division of Gastroenterology and
Nutrition Fellowship**

Mentor: C. Ronald Kahn, MD, Mary K. Iacocca Professor of
Medicine, Joslin Diabetes Center

Project Title: The Role of Glucose and Fructose Metabolism in
NAFLD Development

Project Description: There is a worldwide epidemic of obesity, type 2 diabetes and metabolic syndrome. Non-alcoholic fatty liver disease (NAFLD) is a liver manifestation of metabolic syndrome and it is estimated to affect 1 billion individuals worldwide. Intake of sugar-sweetened beverages is emerging as an important risk factor in development of NAFLD. We found that fructose metabolism is more deleterious to health than glucose metabolism, as it leads to higher hepatic lipogenesis, decreased oxidation of free fatty acids and impaired insulin signaling, while inhibition of fructose metabolism leads to improvement in liver fat content.

Sai Chun Tang, PhD



**Assistant Professor of Radiology | Brigham and Women's
Hospital**

**Brigham and Women's Hospital Faculty Career Development
Award**

Mentor: Nathan J. McDannold, PhD, Associate Professor of
Radiology, Brigham and Women's Hospital

Project Title: A Wireless Implantable Nerve Ablation System for
the Treatment of Chronic Musculoskeletal Pain

Project Description: Radiofrequency lesioning (RFL) of peripheral nerves using a wired electrode inserted through the skin is a common procedure used to alleviate many pain syndromes afflicting millions of patients per year. Unfortunately, the lesioned nerves regenerate within months, causing patients to experience return of pain and to require repeat, invasive and costly RFL procedures. We are proposing a lower cost and much less invasive method using a wirelessly-powered implantable device for lesioning the pain-signaling nerves which eliminates electrode insertion through the skin in all subsequent procedures, offering patients sustained, on-demand pain relief.

Parsia A. Vagefi, MD



Assistant Professor of Surgery | Massachusetts General Hospital

Massachusetts General Hospital Department of Surgery Faculty Development Fellowship

Mentors: Keith D. Lillemoe, MD, W. Gerald Austen Professor of Surgery and Head of the Department of Surgery at Massachusetts General Hospital

David H. Sachs, MD, Paul S. Russell/Warner Lambert Professor, Emeritus, Massachusetts General Hospital

Project Title: The Role of Exogenous Coagulation Factors in Prolonging Survival Following Pig-to-Baboon Liver Xenotransplantation

Project Description: Clinical application of porcine xenogeneic livers remains an attractive option, either as a bridge to allotransplantation or, eventually, to address the current shortage of donor organs. However, until now, progress has been limited. Our lab has developed a novel approach utilizing the administration of exogenous human coagulation factors following pig-to-baboon liver xenotransplantation. With this modification we recently achieved 25-day survival, which represents a major advance towards clinical applicability, and the longest worldwide survival recorded to date. Ongoing studies directed toward determining the duration of exogenous support needed are critical for further assessment of the clinical potential of liver xenotransplantation.

Lauren Wisk, PhD



Instructor in Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentors: S. Jean Emans, MD, Mary Ellen Avery Professor of Pediatrics, Boston Children's Hospital

Elissa R. Weitzman, ScD, MSc, Associate Professor of Pediatrics, Boston Children's Hospital

Project Title: Building an Empirically-Derived Screen to Detect Vulnerability to High Health Care Burden for Youth with Chronic Medical Conditions

Project Description: This work seeks to empirically evaluate a model of vulnerability for youth with chronic medical conditions that includes individual psychosocial risk, parent/household stress, and financial burden associated with a child's chronic disease as key predictors of disease-specific health outcomes and youth self-care behaviors. The ultimate goal is to create a novel, brief screening tool that can be incorporated into a clinical dashboard/intake form and will facilitate the identification of youth who are most vulnerable to adverse outcomes and need intervention and psychosocial support beyond that provided in routine clinical care.

Matthew Ling-Yu Wong, MPH, MD



Instructor in Emergency Medicine | Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center Department of Emergency Medicine Fellowship

Mentors: Leon D. Sanchez, MD, MPH, Associate Professor of Emergency Medicine, Beth Israel Deaconess Medical Center

Richard E. Wolfe, MD, Associate Professor of Emergency Medicine

and Head of the Department of Emergency Medicine at Beth Israel Deaconess Medical Center

Project Title: The Quantitative Stress Study

Project Description: This is an observational study in which we measure stress in Emergency Medicine, OB-Gyn, and Pathology residents throughout their entire training, as well as Emergency Medicine attendings. Stress negatively impacts cognitive performance in doctors, and is a problem with career satisfaction and burn out. This study is first of its kind because it uses salivary cortisol measurements, heart rate variability monitoring, and psychometric assays. If first we can characterize when and how much stress doctors experience, in the future we can work on ways to help people mitigate it.

Jose Luis Zeballos, MD



**Instructor in Anaesthesia | Brigham and Women's Hospital
Brigham and Women's Hospital Department of Anesthesiology,
Perioperative and Pain Medicine Faculty Development
Fellowship**

Mentor: Darin J. Correll, MD, Assistant Professor of Anaesthesia, Brigham and Women's Hospital

Project Title: Multidisciplinary Multimodal Approach to Management of High Risk Rib Fracture Patients

Project Description: We would like to establish a multidisciplinary protocol for the timely and effective management of patients with rib fractures. Care is often dictated by the critical care/trauma team and can have significant inter-provider variability. There are no criteria for when the Postoperative Pain Service is consulted and this leads to variations in potential therapeutic interventions. The importance of adequate pain management is emphasized in both the anesthesiology and trauma surgery literature. By establishing a protocol we can decrease associated morbidity, mortality, and improve quality of care a patient receives.

2015 RECIPIENT NOT PREVIOUSLY RECOGNIZED



Laura Faden Garabedian, PhD, MPH

Assistant Professor of Population Medicine | Harvard Pilgrim Health Care Institute

**The Harvard Pilgrim Health Care Institute Department of Population Medicine
Robert H. Ebert, MD Fellowship**

Mentor: Dennis Ross-Degnan, Associate Professor of Population Medicine, Harvard Medical School and Harvard Pilgrim Health Care Institute

Project title: The Impact of a Diabetes Management Program with a Mobile Blood Glucose Meter

Project Description: Intensive disease management can significantly reduce the risk of diabetes complications and co-morbidities. MedWatch LLC, a Harvard Pilgrim Health Care company, launched an innovative program that couples nurse-led patient coaching with the first FDA-cleared mobile blood glucometer to communicate real-time information on patients' glucose levels via cellular networks. In this pilot project, we aim to address four study questions: What is the uptake of the MedWatch program? What are patient- and employer-level predictors of uptake? What is the enrolled patients' utilization of the mobile glucometer and nurse-led patient coaching? What are predictors of consistent, long-term self-monitoring with the mobile glucometer?

2016 RECIPIENTS IN THEIR 2ND YEAR OF FUNDING



David Bickham, PhD

Instructor in Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Michael Ogden Rich, MD, Associate Professor of Pediatrics, Boston Children's Hospital

Project Title: Investigating How Adolescents Use Electronic Media and Communication Technologies as a Strategy for Coping with Symptoms of Depression

Project Description: Young people suffering from symptoms of depression spend more time than their peers using electronic media and report that using media helps them cope with negative affect. Although consuming certain types of media has been indicated as contributing to depression, use that provides effective distraction, humor, and connection to peers could serve to help adolescents avoid depression and reduce its impact on their functioning. This research uses Ecological Momentary Sampling to investigate the media use patterns of young adolescents in response to negative affect and the impact of different types of use on immediate changes in experiences of depressive symptoms.

Ian Dunn, MD

**Associate Professor of Neurosurgery | Brigham and Women's Hospital
Brigham and Women's Hospital Department of Neurosurgery Fellowship**

Mentor: E. Antonio Chiocca, MD, PhD, FAANS, Harvey W. Cushing Professor of Neurosurgery, Brigham and Women's Hospital

Project Title: Circulating Tumor DNA in Brain Tumors

Project Description: Tumor DNA shed into the circulation may reflect the full spectrum of genomic changes in a tumor more accurately than tissue biopsies that sample only a portion of the heterogeneous whole. We aim to interrogate DNA shed into the circulation by cancer cells for non-invasive tumor evaluation. Specifically, characterization of circulating tumor DNA dynamics in high-grade gliomas and central nervous system metastases may elucidate changing tumor burden and portend emerging treatment resistance with chemoradiation exposure. We anticipate these efforts will lead to improved understanding of evolving tumor heterogeneity and minimally invasive methods of monitoring of tumor response to treatment.

Kamryn Eddy, PhD

**Associate Professor of Psychology in the Department of Psychiatry |
Massachusetts General Hospital**

Claflin Distinguished Scholar Award

Project Title: Inhibitory Control as a Latent Mechanism of Restricting versus Binge/Purge Type Eating Disorders

Project Description: Low weight eating disorders (EDs) develop during adolescence and can be associated with chronicity and premature mortality. While all individuals with low weight EDs restrict, half will "cross over" from primary restriction to bingeing and purging. Compared to pure restriction, concomitant bingeing/purging is associated with the poorest outcomes. The pathophysiology of restricting vs. binge/purge phenotypes is almost entirely unknown. My project examines inhibitory control and neural activation in frontostriatal circuits during a food motivation paradigm as candidate mechanisms that underlie restricting vs. bingeing/purging in adolescents with low weight EDs.

Vicki Fung, PhD

Assistant Professor of Medicine | Massachusetts General Hospital

Clafflin Distinguished Scholar Award

Mentor: John Hsu, MD, MBA, MSCE, Associate Professor of Medicine, Massachusetts General Hospital and Associate Professor of Health Care Policy, Harvard Medical School

Project: Real-World Evidence on Use of Complex Drug Regimens in Bipolar Disorder

Project Description: Many individuals with bipolar disorder are treated with complex drug regimens that include three or more drugs. There is lack of evidence on the effects of these complex regimens, however, and outcomes remain poor for many patients with bipolar disorder, highlighting the need for additional information to guide treatment decisions. This study will examine how often and which patients respond to treatment with complex drug regimens, as well as the effects of complex regimens on medication adherence.

Rachael Grace, MD

Assistant Professor of Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Ellis Neufeld, MD, PhD, Egan Family Foundation Professor of Transitional Medicine in the Department of Pediatrics, Boston Children's Hospital

Project Title: Biomarkers of Clinical Severity and Treatment Response in Pyruvate Kinase Deficiency

Project Description: Erythrocyte pyruvate kinase deficiency (PKD) is a congenital non-spherocytic hemolytic anemia caused by decreased production of erythrocyte ATP. The clinical features are highly variable in affected individuals, and the severity of anemia and erythrocyte PK activity level do not correlate. Currently, there are no established markers of disease severity. Through a robust international Natural History Study and a phase II drug trial, the aims of the proposed study are to identify biomarkers of disease severity and treatment response, which will significantly contribute to our understanding of the pathophysiology of PKD.

Kate Jeffrey, PhD

Assistant Professor of Medicine | Massachusetts General Hospital

Claffin Distinguished Scholar Award

Mentor: F. Nina Papavasiliou, PhD, Associate Professor and Head of the Laboratory of Lymphocyte Biology, The Rockefeller University

Project Title: Understanding the Role of Epigenetic Modulator SP140 in Crohn's Disease

Project Description: Crohn's disease (CD) is a chronic, relapsing-remitting form of inflammatory bowel disease thought to be driven by aberrant immune responses to intestinal bacteria. While genetic factors contribute to CD susceptibility, the environment and epigenetic factors clearly play a role. The immune-specific epigenetic regulator SP140 was recently identified to be associated with CD through genome wide association studies (GWAS). Here we will decipher how SP140 regulates bacteria-induced gene expression in innate immune cells. We will examine cells from CD patients carrying this risk mutation and understand how SP140 mis-expression could ultimately promote inflammation leading to CD.

Junne Kamihara, MD, PhD

Instructor in Pediatrics | Dana-Farber Cancer Institute and Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Judy E. Garber, MD, MPH, Professor of Medicine, Dana-Farber Cancer Institute

Project Title: Understanding the Genetic Predisposition of Pediatric Thyroid Cancer

Project Description: Why do some children develop cancer? The early onset among pediatric patients suggests that germline genetic factors may play a prominent role. We plan to understand genetic cancer predisposition by studying a cohort of children with thyroid cancer. We will collect family history and perform germline DNA sequencing of the exome and microRNA binding sites in a large cohort of pediatric thyroid cancer patients at high risk. Finding the genes that lead to hereditary cancer risk may lead to the identification of new syndromes, expand existing syndrome definitions, and will serve as a model for studying hereditary cancer predisposition.

Kristen Leeman, MD

Instructor in Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Carla Kim, PhD, Associate Professor of Genetics, Boston Children's Hospital

Project Title: Regulation of Lung Stem Cell Differentiation in Bronchopulmonary Dysplasia

Project Description: Bronchopulmonary dysplasia (BPD) is an important neonatal chronic lung disease leading to lifelong significant morbidities. While defective endogenous lung stem cells are likely at the root of BPD, this may occur as a consequence of defective signaling or structural support provided to stem cells by their microenvironment. I hypothesize that neonatal lung stem cell differentiation is regulated by cell autonomous and microenvironmental factors. This work will be the first to characterize neonatal lung stem cell functions before and after injury and to discover new factors that influence differentiation, leading to potential therapeutic opportunities via stimulation of endogenous progenitor cells.

Carrie Lubitz, MD, MPH

Assistant Professor of Surgery | Massachusetts General Hospital

Claflin Distinguished Scholar Award

Project Title: Clinical Utility and Cost-Effectiveness of a Novel Blood-Based Assay for Circulating BRAFV600E in Patients with Papillary Thyroid Carcinoma

Project Description: We aim to apply targeted molecular diagnostic testing to identify thyroid cancer patients who are likely to benefit from more aggressive interventions. The BRAF+ mutation is found in over 50% of papillary thyroid cancer patients and is associated with a poor prognosis. In preliminary data, our group has demonstrated the feasibility of utilizing a blood-BRAF assay in patients with thyroid disorders. A quantitative assay could enhance risk stratification to treatment, assessment of treatment response and improve surveillance following targeted therapies. A sensitive blood-based assay for tumor BRAF+ status may enable more targeted and efficient management of patients with PTC and ultimately lead to improved patient outcomes.

Enid Martinez, MD

Instructor in Anaesthesia | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Nilesh M. Mehta, MD, MBBS, Associate Professor of Anaesthesia, Boston Children's Hospital

Project Title: Optimizing Measures of Gastric Emptying in Mechanically Ventilated Children

Project Description: Delayed gastric emptying is associated with increased risk for aspiration, ventilator-associated pneumonia, and suboptimal enteral nutrition in mechanically ventilated children. Accurate bedside measures of gastric emptying are lacking in this cohort. Identifying accurate bedside measures of gastric emptying facilitate safe provision of optimal enteral nutrition, reduce the risk for respiratory complications, and may improve patient outcomes. In this prospective pilot study, we will compare gastric residual volume, the most common proxy measure for gastric emptying, to a gold-standard, the paracetamol absorption test in mechanically ventilated children. We will also examine the endocrine response to delayed gastric emptying in this cohort.

Collin May, MD

Instructor in Orthopedic Surgery | Boston Children's Hospital

Boston Children's Hospital Musculoskeletal Career Development Fellowship

Mentors: Daniel Hedequist, MD, Associate Professor of Orthopedic Surgery, Boston Children's Hospital

Benjamin Shore, MD, MPH, FRCSC, Assistant Professor of Orthopedic Surgery, Boston Children's Hospital

Project Title: Identifying Children at Risk for Development of Post-Traumatic Stress Disorder (PTSD) after Surgery for Musculoskeletal Trauma

Project Description: The purpose of this project is to test the psychometric properties and ability of the Child Stress Disorders Checklist, Short Form (CSDC-SF) to predict the development of Post-Traumatic Stress Disorder (PTSD) in children who have suffered accurately predicted PTSD risk. If true, the CSDC-SF could then be used to inform future intervention trials aimed at halting the development of PTSD in this vulnerable population. We additionally aim to evaluate the prevalence of PTSD in this population and the functional consequences of PTSD on recovery.

Maitreyi Mazumdar, MD, MPH

Assistant Professor of Neurology | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: David Christiani, MD, Professor of Medicine, Massachusetts General Hospital

Project Title: Why Does Environmental Arsenic Exposure Decrease the Effect of Folic Acid in Spina Bifida Prevention? Investigating Gene-Environment Interactions.

Project Description: To better understand the molecular mechanisms linking environmental arsenic exposure and spina bifida, we will examine the role that gene variants play in modifying the adverse effects of arsenic by considering gene-environment interactions. These studies will use data and samples collected in a recently completed epidemiological study in rural Bangladesh that demonstrated decreased effectiveness of folic acid in areas with high levels of arsenic exposure due to contaminated drinking water.

Caroline Mitchell, MD

Assistant Professor of Obstetrics, Gynecology and Reproductive Biology | Massachusetts General Hospital

Claflin Distinguished Scholar Award

Project Title: Identifying Vaginal Lactobacillus Species with Probiotic Potential

Project Description: Vaginal colonization with Lactobacillus has been associated with lower rates of recurrent bacterial vaginosis (BV), preterm birth, HIV-1 acquisition and higher rates of pregnancy during in vitro fertilization. However, trying to promote vaginal health with Lactobacillus probiotics has not been widely successful. We will use in vitro models to characterize the functional profile of Lactobacillus isolates that have been proven to be beneficial in vivo, to a) allow better selection of isolates to use as probiotics and b) identify the pathways through which lactobacilli promote reproductive health.

Yana Pikman, MD

Instructor in Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Kimberly Stegmaier, MD, Associate Professor of Pediatrics, Boston Children's Hospital

Project Title: Targeting Mitochondrial One-Carbon Folate Metabolism for Novel Acute Myeloid Leukemia Therapy

Project Description: To discover novel ways to induce acute myeloid leukemia (AML) differentiation as a potential therapy, we studied gene expression changes that are common among agents that induce AML differentiation. One-carbon folate metabolism emerged as a pathway suppressed with AML differentiation, with the mitochondrial enzyme MTHFD2 consistently repressed. Furthermore, suppression of MTHFD2 causes AML differentiation and decreases leukemia burden in a mouse model of AML. This proposal aims to examine the mechanistic role of MTHFD2 in AML and to develop and implement a screening assay for MTHFD2 inhibitors. The ultimate goal of the project is to develop novel therapies for AML.

Camilla Richmond, MD, MA

Instructor in Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: David T. Breault, PhD, MD, Assistant Professor of Pediatrics, Boston Children's Hospital

Project Title: The Regenerative Role of Intestinal Stem Cells in Inflammation

Project Description: The acute and chronic inflammation associated with inflammatory bowel disease (IBD) leads to intestinal architectural distortion, thought to be due to the activation of progenitor/stem cells in the intestinal epithelium, however few tools have existed to study this until now. Because dormant intestinal stem cells (dISCs) are highly resistant to injury, we hypothesize that these cells are also resistant to inflammation-induced damage and will play an essential role during the regenerative response. We further hypothesize that the molecular and cellular mechanisms responsible for dISC activation and regeneration in response to pathologic stress (inflammation) may be similar to those seen during physiologic stress (fasting), and therefore potentially universal.

Ruobing Wang, MD

Instructor in Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Craig Gerard, MD, PhD, Leila and Irving Perlmutter Professor of Pediatrics, Boston Children's Hospital

Norma Gerard, PhD, Professor of Medicine, Beth Israel Deaconess Medical Center

Project Title: Targeting Complement Anaphylatoxin C5a Receptor in Methicillin-Resistant Staphylococcus Aureus (MRSA) Pneumonia

Project Description: Methicillin-resistant Staphylococcus aureus strains (MRSA) have become a formidable cause of severe community-acquired pneumonia. The majority (90%) of the community acquired MRSA isolates carry the gene encoding Panton-Valentine leukocidin (PVL), a pore-forming toxin that lyses polymorphonuclear leukocytes. The role of PVL on pathogenicity of MRSA pneumonia is heavily debated. However, though human neutrophils are susceptible to PVL, the neutrophils of mice are resistant. Therefore, it is difficult to study the role of this toxin in staphylococcal pathogenesis without a well-characterized animal model. It was shown recently that human C5a receptors, C5aR and C5L2, are essential receptors for the PVL toxin. We have generated a human C5aR knock-in (hC5aR-KI) mouse strain to study the pathogenicity of PVL both in vitro and in vivo. My project studies the role of PVL in MRSA pneumonia, and evaluating the efficacy of a C5aR antagonist in ameliorating MRSA pneumonia severity.

Fan Zhang, PhD

Instructor in Pediatrics | Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Mentor: Richard Malley, MD, Professor of Pediatrics, Boston Children's Hospital

Project Title: Multiple Antigen Presenting System for Eliciting Optimal B- and T-cell Immunity Against Staphylococcus Aureus

Project Description: Staphylococcus aureus (SA) is an important human pathogen that causes a variety of diseases. Increased rate of multi-drug resistance further complicates the treatment of SA infection. Despite extensive effort, all previous clinical trials of SA vaccine have failed. There is an urgent need for novel vaccination strategy. Recent studies suggest an important role of T-cell immunity in protection against SA. We propose to design a multi-component SA vaccine using our novel multiple antigen presenting system which could elicit prominent antibody, Th1 and Th17 responses to the target antigens, and to evaluate its efficacy in various SA infection models.

2016 FELLOWSHIP RECIPIENTS BY INSTITUTION

** Denotes fellows in their second year of funding*



Beth Israel Deaconess Medical Center

Department of Anesthesia John Hedley-Whyte Research Fellowship

Brian O'Gara, MD

Department of Emergency Medicine Fellowship

David Chiu, MD, MPH

Nicole Dubosh, MD

Betzalel Reich, MD

Matthew Ling-Yu Wong, MPH, MD

Department of Medicine Fellowship

Kelly Graham, MD, MPH

Department of Obstetrics, Gynecology and Reproductive Biology Fellowship

Janet Li, MD

Werner Neuhausser, MD, MD, PhD

Department of Pathology Fellowship

Michiya Nishino, MD, PhD

Boston Children's Hospital

Boston Children's Hospital OFD/BTREC/CTREC Faculty Career Development Fellowship

Vassilios Bezzerides, MD, PhD

David Bickham, PhD*

Catherine A. Brownstein, ME, MPH, PhD

Grace Chan, MD, MPH, PhD

Julia Inpei Chu, MD, MPH

Natalie Collins, MD, PhD

Rachael Grace, MD*

Andrew Hong, MD

Alisa Khan, MD, MPH

Junne Kamihara, MD, PhD*

Kristen Leeman, MD*

Enid Martinez, MD*

Maitreyi Mazumdar, MD, MPH*

Ji Miao, PhD

Sang Won Park, PhD

Yana Pikman, MD*

Gayle Pouliot, MD, PhD

Sari L. Reisner, ScD

Camilla Richmond, MD, MA*

Ruobing Wang, MD*

Lauren Wisk, PhD

Fan Zhang, PhD*

Department of Neurology Faculty Development Fellowship

Caitlin Kantrowitz Rollins, MD

Division of Gastroenterology and Nutrition Fellowship

Jodie Ouahed, MDCM, MMSc

Samir Softic, MD

Musculoskeletal Career Development Fellowship

Collin May, MD*

Brigham and Women's Hospital

Brigham and Women's Hospital Faculty Career Development Award

Medha Barbhaiya, MD, MPH

Julia Charles, MD, PhD

Ryuji Morizane, MD, PhD

Olga Pozdnyakova, MD

Sai Chun Tang, PhD

Department of Anesthesiology, Perioperative and Pain Medicine Faculty Development Fellowship

David Preiss, MD, PhD

Jose Luis Zeballos, MD

Department of Emergency Medicine Faculty Development Fellowship

Kei Ouchi, MD, MPH

Department of Medicine Fellowship

Vandana A. Gupta, PhD

Department of Neurosurgery Fellowship

Ian Dunn, MD*

Department of Pathology Fellowship

Heather Mason-Suares, PhD

Department of Surgery Junior Fellowship in Honor of Robert T. Osteen, MD

Eric G. Sheu, MD, PhD

Obstetrics and Gynecology Foundation Fellowship

David Cantonwine, PhD

Ann Celi, MD, MPH

Jeannine M. Miranne, MD, MS

Dana-Farber/Brigham and Women's Cancer Center

The Peter Mauch Radiation Oncology Fellowship for Junior Faculty

Neil Martin, MD, MPH

Dana-Farber Cancer Institute

Dana-Farber Cancer Institute Fellowship

Atul B. Shinagare, MD

Harvard Medical School

Dr. Lynne Reid/Drs. Eleanor and Miles Shore Fellowship

Mary B. Rice, MD, MPH

Harvard Medical School Fellowship in Honor of Isaac Schiff, MD

Anne Neilan, MD, MPH

Harvard Pilgrim Health Care Institute

The Department of Population Medicine Robert H. Ebert, MD Fellowship

Melissa B. Gilkey, PhD

Harvard School of Dental Medicine

Fellowship in Honor of Aina M. Auskaps, DMD

Hawazin Elani, BDS, MSc, PhD, MMSc

Massachusetts Eye and Ear

Alice J. Adler Fellowship of the Schepens Eye Research Institute

Joseph F. Arboleda-Velasquez, MD, PhD

Harvard Cornea Center of Excellence Fellowship

Ahmad Kheirkhah, MD

Massachusetts Eye and Ear Fellowship

Alicia M. Quesnel, MD

Massachusetts General Hospital

Claflin Distinguished Scholar Award

Kamryn Eddy, PhD*

Vicki Fung, PhD*

Dahlene Fusco, MD, PhD

Kate Jeffrey, PhD*

Gina Kruse, MD, MS, MPH

Julie Levison, MD, MPhil, MPH

Sara Looby, PhD

Carrie Lubitz, MD*

Caroline Mitchell, MD*

Christina Psaros, PhD

Yakeel Quiroz, PhD

Department of Anesthesia Fellowship

Aurora Naa-Afoley Quaye, MD

Department of Emergency Medicine Fellowship

Renee N. Salas, MD, MPH, MS

Department of Medicine Fellowship

Aarti Asnani, MD

Department of Surgery Faculty Development Fellowship

Andrew Liss, PhD

Tetsu Oura, MD, PhD

Parsia A. Vagefi, MD

Dermatology Service Faculty Career Development Fellowship

Mohd Shahid, PhD

**Dorothy Rackemann Fellowship established by the Vincent Memorial/
Massachusetts General Hospital**

Anjali Kaimal, MD

Massachusetts General Hospital Orthopaedics Shore Fellowship

Maurice Albright, MD

McLean Hospital

McLean Hospital Fellowship

Elizabeth Olson, PhD

Mount Auburn Hospital

Department of Emergency Faculty Development Fellowship

Heikki Nikkanen, MD



SELECTION COMMITTEES

Thanks are due to these individuals for their service and assistance with the growth of the fellowship and the selection of fellowship recipients.

2016 Academic Promise Evaluation Committee

Carol K. Bates, MD, Associate Dean for Faculty Affairs, Harvard Medical School, and Associate Professor of Medicine, Beth Israel Deaconess Medical Center

Jack D. Burke, MD, MPH, Professor of Psychiatry and Head of the Department of Psychiatry, Cambridge Health Alliance

Emmanuel Buys, PhD, Associate Professor of Anaesthesia, Massachusetts General Hospital

Alasdair K.T. Conn, MBChB, Associate Professor of Emergency Medicine and Associate Professor of Surgery, Massachusetts General Hospital

Maureen T. Connelly, MD, MPH, Dean for Faculty Affairs and Assistant Professor of Population Medicine, Harvard Medical School

Dagmara Cotti, PhD, Program Director for Faculty Appointments, Office for Faculty Affairs, Harvard Medical School

S. Jean Emans, MD, Mary Ellen Avery Professor of Pediatrics and Faculty Director of the Office of Faculty Development, Boston Children's Hospital

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Allison Goldfine, PhD, Associate Professor of Medicine, Joslin Diabetes Center

Chenghua Gu, PhD, Associate Professor of Neurobiology, Harvard Medical School

Neena Haider, PhD, Associate Professor of Ophthalmology, Schepens Eye Research Institute, Massachusetts Eye and Ear

Margaret A. Kenna, MD, MPH, Professor of Otolaryngology, Boston Children's Hospital

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Mary Loeken, MS, PhD, Associate Professor of Medicine (Physiology), Joslin Diabetes Center

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Mary Francis Lopez, PhD, Assistant Professor of Pediatrics, Boston Children's Hospital

Rafael Luna, PhD, Program Director for Faculty Appointments, Office for Faculty Affairs, Harvard Medical School

Jonathan Matsui, PhD, Program Director for Faculty Appointments, Office for Faculty Affairs, Harvard Medical School

Emily Oken, MD, Professor of Population Medicine, Harvard Pilgrim Health Care Institute

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Sulpicio De Guzman Soriano, MS, MD, Professor of Anaesthesia, Boston Children's Hospital

Lawrence C. Tsen, MD, Associate Professor of Anaesthesia, Brigham and Women's Hospital

Nicole J. Ullrich, MD, PhD, Associate Professor of Neurology, Boston Children's Hospital

Bethany Westlund, PhD, Assistant Dean for Faculty Affairs, Harvard Medical School

Catherine Ju-Ying Wu, MD, Associate Professor of Medicine, Brigham and Women's Hospital

2016 Personal Need Evaluation Committee

Carol K. Bates, MD, Associate Dean for Faculty Affairs, Harvard Medical School, and Associate Professor of Medicine, Beth Israel Deaconess Medical Center

Maureen T. Connelly, MD, MPH, Dean for Faculty Affairs and Assistant Professor of Population Medicine, Harvard Medical School

Caroline Costello, Promotions Coordinator, Office for Faculty Affairs, Harvard Medical School

Dagmara Cotti, PhD, Program Director for Faculty Appointments, Office for Faculty Affairs, Harvard Medical School

Yvette Jusseaume, Director of Academic Appointments Data Management, Office for Faculty Affairs, Harvard Medical School

Margaret A. Kenna, MD, MPH, Professor of Otolaryngology, Boston Children's Hospital

Joelle Lomax, PhD, Program Director for Faculty Appointments, Office for Faculty Affairs, Harvard Medical School

Diana Longden, Administrative Coordinator for the Joint Committee on the Status of Women, Office for Faculty Affairs, Harvard Medical School

Damien Mahiet, Faculty Development Coordinator, Office for Faculty Affairs, Harvard Medical School

Gerline Maldonado, Faculty Promotions Coordinator, Office for Faculty Affairs, Harvard Medical School

Laurie O'Connor, Senior Administrative Coordinator, Office for Faculty Affairs, Harvard Medical School

Christine Power, Director, Office for Faculty Development, Dana-Farber Cancer Institute

Caren G. Solomon, MD, MPH, Associate Professor of Medicine, Brigham and Women's Hospital

Sarah Tekleab, Faculty Promotions Coordinator, Office for Faculty Affairs, Harvard Medical School

Gail Williams, Director of Administration, Office for Faculty Affairs, Harvard Medical School



FELLOWSHIP HONOREES

Alice J. Adler, PhD

Dr. Adler was a biochemist at Schepens Eye Research Institute from 1976 to 2001. In January of 1985 she was promoted to Senior Scientist and in 2001 she became Emeritus Senior Scientist/Scientific Advisor. Her work focused on components of the retina and mechanisms of vision. Dr. Adler was the first scientist to identify retinol binding that transports Vitamin A to the space between the photoreceptors, which is needed to create rhodopsin, the visual pigment. Retinal binding also transports Vitamin A to the retinal pigment epithelial cells that store retinol and convert it to a form that the photoreceptors can use. Dr. Adler further identified xanthophyll-binding proteins in the human retina and proposed that they bind to the same site on microtubules (the latter bind taxol, a compound used to treat breast cancer). Her work included studies of age-related macular degeneration and was critical to our understanding of retinal diseases.

Aina M. Auskaps, DMD

Dr. Auskaps was the first woman to earn the degree of DMD from Harvard School of Dental Medicine in 1955. Prior to coming to Harvard, Dr. Auskaps earned a DDS degree in her home country of Latvia. She requalified in Germany in 1945. Dr. Auskaps started at HSDM as a faculty member conducting research in the Department of Biochemistry and Nutrition. Once her DMD degree was completed she returned to the department once again as faculty. Dr. Auskaps also served as the first woman president of the HSDM Alumni Association and received the Distinguished Alumni Award in 1983. She maintained a private family practice for 45 years out of her home in Jamaica Plain, MA. An extensive interview of Dr. Auskaps is available at the Harvard Countway Archives for Women in Medicine.

Jane D. Clafin

Jane Clafin is an extraordinary benefactor and dedicated volunteer leader at Massachusetts General Hospital where she has served as trustee, fund-raiser, friend, and cheerleader. She is the force behind the MGH programs that support women in their professional careers and a major reason the MGH opened a backup child care center. The MGH met Jane Clafin in the late 1950s soon after she, her husband Morton Clafin, and their two sons moved to Boston. One of Mrs. Clafin's passions has been to ensure that the MGH is a welcoming, comfortable, friendly, and supportive place for women. In 1993, she helped create the Women in Academic Medicine Committee, serving as its chair. Her work led to the formation in 1997 of the Office for Women's Careers to support, recruit, and retain women faculty members. Mrs. Clafin focused attention on the difficulty women had in sustaining research productivity during their child-rearing years, which too often limited career advancement. The MGH's Executive Committee on Research responded to the call by establishing funding for junior women faculty to help them through this critical period. The awards were named the Clafin Distinguished Scholar Awards in honor of their greatest champion. In so many ways, MGH is a vastly richer place because of the unwavering loyalty and indomitable spirit of this dedicated volunteer and tireless crusader.

Robert H. Ebert, MD, DPhil, AM

As Dean of Harvard Medical School from 1965 to 1977, Dr. Ebert increased recruitment and enrollment of minority students, established affiliations between HMS teaching hospitals and neighborhood health centers, and created the Division of Health Sciences and Technology, a combined MD-PhD program run collaboratively by MIT and HMS. In 1969, he founded Harvard Community Health Plan, the nation's first academic health maintenance organization. After earning his medical degree from the University of Chicago, he served as a Marine Corps physician, and was one of the American doctors who went to Nagasaki to treat Japanese suffering from radiation sickness and related illnesses after the United States dropped an atomic bomb on that city. Upon his return from the war, Dr. Ebert taught at the University of Chicago. In 1964, he was recruited to Boston to serve as Chief of Medical Services at Massachusetts General Hospital. A year later, he was selected to lead Harvard Medical School. After stepping down as dean of HMS, Dr. Ebert became president of the Milbank Memorial Fund, a foundation that supports projects in medicine and health. In 1992, he helped establish the HMS/Harvard Community Health Plan Department of Ambulatory Care and Prevention as a joint project between the school and the HMO.

John Hedley-Whyte, MD, MBBCh

Dr. Hedley-Whyte is currently the David S. Sheridan Professor of Anaesthesia and Respiratory Therapy at the Boston VA Medical Center. He served on the faculty at Beth Israel Hospital from 1961 to 1988 and was Chair of the Department of Anaesthesia from 1967 to 1988. A pioneer in modern respiratory physiology and a member of the HMS community for more than 50 years, Hedley-Whyte contributed to the creation of an academic anaesthesia department at Beth Israel and an independent anaesthesia department separate from the surgical department at HMS. His most recent work has focused on patient safety.

Peter M. Mauch, MD

Dr. Mauch came to Harvard Medical School as a resident in radiation oncology in 1975 and has been a member of the Harvard Medical School Faculty for nearly 40 years. His lab work, the study of hematopoietic stem cells, was supported by NIH R01 funding for over 20 years and his clinical work in the treatment of patients with Hodgkin lymphoma began when he was a resident. He has published over 350 papers and is a co-editor of 6 books. Promoted to full professor in 1999, Dr. Mauch has mentored numerous medical students and residents. He has given educational sessions at annual meetings and served as the first chair of the American Society of Radiation Oncology (ASTRO) outcomes committee and chair of the ASTRO Educational Sessions for 6 years. He also served on the Radiation Study Section and contributed to both the oral and written boards for the American Board of Radiology. His current efforts include helping young faculty develop their careers in academic medicine.

Robert T. Osteen, MD

Dr. Osteen is Senior Surgeon, Associate Professor of Surgery, and Associate Chairman of the Department of Surgery at the Brigham and Women's Hospital. Dr. Osteen joined the faculty of Harvard Medical School in 1975 and has since received numerous prizes for excellence in teaching. At the Brigham and Women's Hospital, he oversees the Surgery department's education program, chairs the hospital's Cancer Committee, and acts as the Cancer Liaison Physician to the Commission on Cancer of the American College of Surgeons. He has contributed to the development of several clinical programs, including the Dana-Farber Cancer Institute's Autologous Bone Marrow Transplant Program, a program for breast conserving surgery, and techniques for implantation and chemotherapy administration through an intra-arterial infusion pump. Through the Commission on Cancer, he helped to develop a National Cancer Database that collects information from approximately 75% of the patients with cancer throughout the United States annually.

Lynne M. Reid, MD, MBBS

Dr. Lynne M. Reid is the S. Burt Wolbach Professor of Pathology, Emeritus at Harvard Medical School. After training in Australia, she moved to London and was the first person to serve as Dean of the Cardiothoracic Institute at London University. She came to Harvard in 1976 as Head of the Department of Pathology at Boston Children's Hospital. Her research interests included lung growth and how it is affected by childhood diseases including cystic fibrosis, scoliosis, and respiratory distress syndrome. She also studied chronic bronchitis, emphysema, and pediatric pulmonary and arterial hypertension. The Lynne M. Reid papers are at Countway Library in the Archives for Women in Medicine. Dr. Reid has generously made personal donations to the fellowship program on a nearly annual basis since the start of the program.

Dorothy Rackemann

At Harvard Medical School, Dorothy Rackemann (1918–1996) was the Administrative Assistant to the Dean from 1968 to 1978 and the Assistant Registrar from 1978 to 1991. She also held key roles in both the Vincent Memorial Hospital and The Vincent Club. The former, a free-standing hospital for women established in Boston in 1891, was the precursor of the Vincent Department of Obstetrics & Gynecology at Massachusetts General Hospital. The Vincent Club, founded a year later, remains the fundraising arm of the Vincent organization. Miss Rackemann, as she was known—and “Dodie” as she preferred—served as both President of The Vincent Club and President of the Vincent Memorial Hospital Board of Trustees. Active at the Vincent for more than 50 years, she was described as a “tremendous force in nurturing, clarifying and strengthening the ties between the Vincent and the Massachusetts General Hospital.”

Isaac Schiff, MD

Dr. Schiff is the Joe Vincent Meigs Distinguished Professor of Gynecology at Harvard Medical School. He did his Residency in Obstetrics and Gynecology at the Boston Hospital for Women (now Brigham and Women's Hospital) and a Fellowship in Reproductive Endocrinology at the same institution. He was the Director of Reproductive Endocrinology at Brigham and Women's Hospital before being selected to head the Vincent Obstetrics and Gynecology Service at Massachusetts General Hospital which he led from 1988 to 2015. He is past President of the North American Menopause Society and Editor-in-Chief of its journal, *Menopause*. In addition, he chairs the Medical Advisory Board for *Pause*, the consumer magazine for the American College of Obstetricians and Gynecologists.

Eleanor G. Shore, MD, MPH

Dr. Eleanor G. Shore served as the Dean for Faculty Affairs at Harvard Medical School from 1989 to 2005 and has since served as Senior Consultant to the Office of Academic and Clinical Affairs. She trained at Harvard Medical School during the postwar "experimental" era, between 1945 and 1955, when women were admitted on a trial basis. She worked as a primary care physician at the Harvard University Health Services for many years. She served as Assistant to the President of Harvard University for Health Affairs for 8 years during Derek Bok's term as president. Later she served as Deputy Director of the Harvard Medical School Center of Excellence in Women's Health. In 1995 in her role as Dean, she launched the 50th Anniversary Fellowship Program for Scholars in Medicine, which commemorates the admission of women to Harvard Medical School; the program was renamed to honor Drs. Eleanor and Miles Shore in 2004. In 2001, the Association of American Medical Colleges awarded Dr. Shore the History Maker Award for her work to make medical career structures more equitable. Dr. Shore has generously made personal donations to the fellowship program on a nearly annual basis since the start of the program.

Miles F. Shore, MD

Dr. Miles F. Shore, Bullard Professor of Psychiatry, Emeritus was Superintendent and Chief of the HMS Department of Psychiatry at the Massachusetts Mental Health Center from 1975 to 1993. In that role he was responsible for a comprehensive program of research, teaching, and patient care focusing on patients with serious mental illnesses cared for by the public sector. A system of care was developed featuring community programs to replace inpatient care in large institutions. Since 1993, he has been a Visiting Scholar at Harvard Kennedy School, teaching courses on the history of mental health policy, leadership, and health policy for physicians. For twelve years he chaired the Promotion and Review Board assessing the progress of HMS students in successfully completing the MD degree. He continues to write on issues of patient safety and disrespect in the culture of medicine. As a strong supporter of faculty development, he has personally contributed to the fellowship program on a nearly annual basis since the program began.



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