

Ricardo Azziz, M.D., M.P.H., M.B.A.
Chief Officer, Department of Academic Health and Hospital Affairs
State University of New York, Albany, New York

Research Interest

Dr. Azziz's biomedical research focuses on the study of reproductive endocrinology and androgen excess disorders, including the epidemiology, genetics, and pathophysiology of polycystic ovary syndrome (PCOS); the non-classic adrenal hyperplasias (NCAH); the role of the adrenal in hyperandrogenic disorders, the genetics of hyperandrogenic disorders, the physiology treatment of hirsutism; and the regulation and physiology of adrenal androgens. He has published over 500 original peer-reviewed articles, book chapters, and reviews, and is consistently ranked one of America's Top Doctors. For his research achievements Dr. Azziz has received, among other recognition, the 2000 President's Achievement Award of the Society for Gynecologic Investigation, and was elected member of the Association of American Physicians in 2014. Dr. Azziz is a recognized thought leader in the arenas of higher education and academic healthcare, and his scholarship in these areas focuses on the study of leadership and faculty development, diversity & inclusion, change management, and mergers and consolidations.

Biography

Ricardo Azziz is an internationally recognized physician, scientist, and executive who currently serves as Chief Officer, Academic Health & Hospital Affairs, the State University of New York (SUNY), the largest university system in the nation, where he provides strategic guidance to, and advocacy for, the academic health and academic medical centers portfolio of the SUNY system.

Dr. Azziz previously also served as president of Georgia Health Sciences University and then founding president of Georgia Regents University (now Augusta University), one of Georgia's four comprehensive research-level universities. He also served as founding CEO of the Georgia Regents Health System (now Augusta University Health System), the state's only public academic health center.

He also previously served as Deputy Director of the Clinical & Translational Sciences Institute and Assistant Dean for Clinical and Translational Sciences, and Vice Chair, Dept. of Ob/Gyn, at UCLA; and Director of the Center for Androgen-Related Disorders, acting Director of the General Clinical Research Center, and Chair of Ob/Gyn, at Cedars-Sinai Medical Center, Los Angeles. He is the founder and Senior Executive Director of the Androgen Excess & PCOS Society. Among other advisory capacities, he served on multiple NIH committees, chaired the US FDA Advisory Board on Reproductive Health Drugs, and served on the oversight committee for the California Institute for Regenerative Medicine.

Additionally, Dr. Azziz is an internationally recognized clinical translational researcher, developing over the past 25 years an important program in androgen excess disorders research, and an accomplished visual artist.

Randall Basaraba, D.V.M., Ph.D.
Professor of Mycobacterial Research Laboratory
Department of Microbiology, Immunology and Pathology
College of Veterinary Medicine and Biomedical Sciences
Colorado State University, Fort Collins, CO

Research Interest

My professional medical training was as a Doctor of Veterinary Medicine and subsequently a residency in anatomic pathology. I completed a combine pathology residency and PhD graduate training at Washington State University. I was board certified by the American College of Veterinary Pathologists in 1992. I served as a faculty member at Kansas State University prior to accepting my current position at Colorado State University. I am currently a professor with tenure within the Microbiology Immunology and Pathology Department and Head of the Metabolism of Infectious Diseases Laboratory. I have extensive training and experience in the pathogenesis of chronic infectious diseases using animal models of human tuberculosis as the model system. More recently we have developed a small animal model of diabetes / TB comorbidity to better understand this rapidly emerging comorbidity as well as to investigate host-directed therapies to treat diabetes and TB. I currently have 5 graduate students and am funded through NIAID and have had previous American Diabetes Association funding.

Biography

My professional medical training was as a Doctor of Veterinary Medicine and subsequently a residency in anatomic pathology. I completed a combine pathology residency and PhD graduate training at Washington State University. I was board certified by the American College of Veterinary Pathologists in 1992. I served as a faculty member at Kansas State University prior to accepting my current position at Colorado State University. I am currently a professor with tenure within the Microbiology Immunology and Pathology Department and Head of the Metabolism of Infectious Diseases Laboratory. I have extensive training and experience in the pathogenesis of chronic infectious diseases using animal models of human tuberculosis as the model system. More recently we have developed a small animal model of diabetes / TB comorbidity to better understand this rapidly emerging comorbidity as well as to investigate host-directed therapies to treat diabetes and TB. I currently have 5 graduate students and am funded through NIAID and have had previous American Diabetes Association funding.

Tiffany Beckman, M.D., M.P.H.
Endocrinologist and Assistant Professor of Medicine
Department of Medicine, Division of Diabetes, Endocrinology and Metabolism
University of Minnesota, Minneapolis, MN

Research Interest

Dr. Beckman's research interests include: (1) using brain functional magnetic resonance imaging (fMRI) to define the neural correlates of obesity; (2) using a rodent model to study the neurobiology of eating behavior; (3) investigating satiety and changes in gut hormones with protein diet supplementation before and after gastric bypass surgery; (4) using community-based research methods to examine the effects of improved food availability on incident rates of diabetes and obesity in American Indians; (5) using holistic methods such as traditional Indian medicine, cross-cultural healing methods, and story-telling to improve health disparities in American Indians.

Biography

As an enrolled member of the Leech Lake Band of Ojibwe, Dr. Tiffany R. Beckman is the first American Indian adult Endocrinologist in the nation. She is an Assistant Professor of Medicine in the Division of Diabetes, Endocrinology, and Metabolism at the University of Minnesota. Dr. Beckman is board certified in both Endocrinology and Internal Medicine. She is also a Research Associate at the Department of Veterans Affairs Medical Center in Minneapolis.

Dr. Beckman received her M.D. degree from the University of Minnesota Medical School. She received her M.P.H. (Master's Degree in Public Health in Epidemiology, Maternal & Child Health) from the University of Minnesota School of Public Health. She completed her residency in Internal Medicine at Hennepin County Medical Center. She completed an Indian Health Policy fellowship at the Center for American Indian and Minority Health at the University of Minnesota. Dr. Beckman also completed a medical subspecialty fellowship in Diabetes, Endocrinology, and Metabolism at the University of Minnesota. She is a graduate of the Native Americans in Philanthropy Circles of Leadership program. Dr. Beckman is a member of the Board of Directors for the Indian Health Board of Minneapolis.

Dr. Beckman is the Principal Investigator on a 5 year National Institutes of Health research grant for her study, "Neural Correlates of Food Reward in American Indian Women." She was a past participant in the National Institutes of Health funded Native Investigator Development program. She is also a co-Investigator on a Robert Wood Johnson Healthy Food Healthy Lives research grant, "Good Heart Grocery and Eat Right Deli Community Assessment & Strategic Plan," a feasibility study designed to help people living on Yankton reservation to have access to healthy low cost foods.

Shawn Bediako, Ph.D.
Associate Professor of Psychology
Department of Psychology
University of Maryland, Baltimore County

Research Interest

My research is broadly concerned with investigating psychosocial aspects of the sickle cell disease experience. As a social/health psychologist, I am particularly interested in the ways that psychological and social factors influence a range of physiological outcomes. My current program of research, supported by NHLBI, examines clinical implications of sickle cell disease stigma. I have published seminal findings that underscore the multidimensional nature of stigma among adults with sickle cell. I am also developing a series of studies that explore potential mechanisms through which stigma is related to dietary behavior and nutrient intake among sickle cell patients. While biomedical advances have significantly improved treatment options and resulted in an increased life expectancy of adults with sickle cell, data also suggests a concomitant increase in obesity and overweight in this population. Very little research addresses this problem and I am well-positioned to make a significant scholarly contribution to this area. Thus, I am interested in becoming a member of the NMRI in order to: (1) learn more about state-of-the-art research in the stated areas of interest; (2) build upon my expertise in hematologic diseases; and (3) develop high-impact collaborations with researchers whose interests and expertise complement mine.

Biography

Shawn M. Bediako is an associate professor in the department of psychology at the University of Maryland, Baltimore County, where he directs the community and applied social psychology program. Dr. Bediako's program of research is concerned with sociocultural aspects of the adult experience of sickle cell disease. His current research examines: (a) social psychological processes that influence public attitudes towards individuals with sickle cell; and (b) the effects of sickle cell disease stigma on pain, health care utilization, and psychosocial adjustment.

As one of the few social and community health psychologists conducting research on sickle cell disease, he is producing a unique body of work that utilizes multiple research methodologies and interdisciplinary approaches to enhance our understanding of the complexities of adult adjustment to the condition. Dr. Bediako completed a bachelor's degree in psychology at the University of Central Arkansas and received a master's degree in community psychology from Florida A&M University. He earned a doctorate in social and health psychology from Stony Brook University and was a Carolina Postdoctoral Fellow for Faculty Diversity at the University of North Carolina at Chapel Hill from 2001-2003.

Rhonda Bentley-Lewis, M.D., M.B.A., M.S.
Assistant Professor of Medicine, Harvard Medical School
Assistant Professor of Medicine, Diabetes Unit, Massachusetts General Hospital
Boston, MA

Research Interest

My research involves patient-oriented investigations of hormonal mechanisms underlying cardio-vascular disease risk; specifically, the role that diabetes in pregnancy plays in mediating maternal cardiovascular disease risk and the associated racial/ethnic disparities. This work has been funded by the Robert Wood Johnson Foundation Harold Amos Medical Faculty Development Program Award and the NIH/NIDDK.

Biography

Rhonda Bentley-Lewis earned her Bachelor's degree at Harvard and Radcliffe Colleges. She went on to the University of Pennsylvania where she earned her Doctorate in Medicine at the School of Medicine and a Master's in Business Administration at the Wharton School, focusing on healthcare management. She completed both her Internal Medicine residency and Endocrinology Fellowship at Brigham and Women's Hospital in Boston, MA. During this time, she earned a Master's in Medical Science from Harvard Medical School (HMS) focusing on clinical investigation. She is currently an Assistant Professor of Medicine at Harvard Medical School and an Assistant in Medicine in the Diabetes Unit at Massachusetts General Hospital (MGH). Her clinical practice is focused on diabetes management and prevention, as well as the management of diabetes in pregnancy. She conducts patient-oriented research focused on investigating how diabetes in pregnancy may promote subsequent maternal cardiovascular disease risk and she is funded by the NIH/NIDDK, the Robert Wood Johnson Foundation Harold Amos Medical Faculty Development Program Award, and the MGH Physician Scientist Development Award, to conduct these studies.

Dr. Bentley-Lewis is actively involved with medical students and trainees through her work as the Faculty Advisor for the Women of Color in Medicine and Dentistry at HMS. She is also dedicated to promoting the success of women in academia and was elected to serve as the 2012-2013 Faculty Chair of the Harvard Medical School/Harvard School of Dental Medicine Joint Committee on the Status of Women.

Ernesto Bernal-Mizrachi, M.D.
Professor of Medicine
Chief of Division of Endocrinology, Diabetes and Metabolism
Department of Medicine and Deputy Director of Beta Cell Biology and Signal Transduction at
the Diabetes Research Institute
University of Miami, Miami, FL

Research Interest

The long-term goal of the research program in Bernal-Mizrachi laboratory is delineating the signaling pathways that regulate the development, growth and death of islet β -cells. This work established Akt signaling as a major regulator of β -cell mass, growth and function. Further experiments have delineated critical Akt downstream targets by identifying Tsc2/mTOR signaling as an important component in modulation of cyclin D2, proliferation, β -cells mass and carbohydrate metabolism in vivo. Current projects on this area are focused on understanding how mTOR signaling modulates short- and long-term responses in β -cells. In addition, his laboratory explores the significance of mTOR signaling in β -cell development with particular interest in determining how fetal nutrient supply regulates the susceptibility to develop diabetes later in life. Finally, the initial studies related to the role of Akt in β -cells have evolve to explore the role of this signaling pathway on regulation of plasticity with especial focus on how this pathway could be used to convert acinar or ductal cells to functional β -cells. These studies positively affect treatment of human diabetes, because they uncover potential targets to develop new pharmacologic agents designed to augment survival and proliferation of β -cells in vivo and in vitro.

Biography

Dr. Bernal-Mizrachi received his medical degree in 1989 from the Universidad del Valle Medical School in Cali, Colombia, and completed a residency in internal medicine there. He came to the United States in 1993 for additional residency training in internal medicine at the University of Miami, followed by a three-year fellowship in endocrinology and metabolism at Washington University in St. Louis. He joined Washington University faculty in 1999 and held the academic titles of assistant professor of medicine and assistant professor of cell biology from 2004 until he came to Michigan in 2009 to assume the Soderquist Professorship. Dr. Bernal-Mizrachi was also elected a member of the American Society for Clinical Investigation (ASCI). Most recently he moved to the University of Miami as Chief of the Division of Endocrinology, Metabolism and Diabetes and Deputy Director of Islet signal Transduction at the Diabetes Research Institute. He is also Staff physician at the Miami Veterans Administration Hospital.

*April Carson, Ph.D., M.S.P.H.
Associate Professor
Department of Epidemiology
University of Alabama at Birmingham, Birmingham, AL*

Research Interest

My research interests are directed towards understanding 1) the role of glycemic markers in the development of diabetes complications, 2) racial/ethnic differences in glycemic markers, and 3) the development and evaluation of risk prediction models for diabetes and its complications.

Biography

I am an Associate Professor of Epidemiology at the University of Alabama at Birmingham. I completed my BS in Microbiology at the University of Georgia and my MSPH and PhD in Epidemiology at the University of North Carolina at Chapel Hill. I have extensive experience with large epidemiologic studies and I am currently an investigator with the Coronary Artery Risk Development in Young Adults (CARDIA) Study. I have published research on a range of social, clinical, and lifestyle factors related to cardiovascular disease and diabetes.

Glenn M. Chertow, M.D., M.P.H.
Professor of Medicine, Division of Nephrology
Stanford University School of Medicine, Palo Alto, CA

Research Interest

Dr. Glenn M. Chertow conducts clinical epidemiology, health services research, decision sciences and clinical trials in acute and chronic kidney disease.

Biography

Dr. Glenn M. Chertow is Professor of Medicine and Chief, Division of Nephrology at Stanford University School of Medicine. Prior to joining the faculty at Stanford, Dr. Chertow served with distinction on the faculties at Brigham and Women's Hospital and Harvard Medical School (1995-98) and the University of California San Francisco (UCSF) (1998-2007). Dr. Chertow has established a successful career as a clinical investigator and continues to maintain a productive research program focused on improving care for persons with acute and chronic kidney disease (CKD). Recent projects include several NIDDK-sponsored initiatives: Acute Renal Failure Trials Network (ATN) Study, the United States Renal Data System (USRDS) Special Studies Center in Nutrition, the Chronic Renal Insufficiency Cohort (CRIC) study and the Frequent Hemodialysis Network (FHN) study.

Dr. Chertow was elected to the American Society of Clinical Investigation in 2004 and appointed to the Scientific Advisory Board of the National Kidney Foundation in 2007. He was Vice Chair and member of two workgroups for the Kidney Disease Quality Outcomes Initiative (K/DOQI) and Associate Editor of the Journal of the American Society of Nephrology.

He will be among the five Co-Editors of the 9th edition of Brenner & Rector's The Kidney. Dr. Chertow also received the 2007 National Torchbearer Award from the American Kidney Fund for his career-long contributions toward improving the lives of persons with kidney disease.

Deidra Crews, M.D.
Associate Professor of Medicine
Associate Vice Chair for Diversity and Inclusion, Department of Medicine
Johns Hopkins University School of Medicine, Baltimore, MD

Research Interest

My research interests include chronic kidney disease epidemiology, comparative effectiveness of treatment strategies for chronic kidney disease and end stage renal disease, and racial and socioeconomic disparities in chronic kidney disease. I have a particular interest in the mechanisms through which socioeconomic, lifestyle and behavioral factors might exert an effect on racial disparities in chronic kidney disease.

Biography

Dr. Crews is a nephrologist and epidemiologist. Born in southern Virginia, she received her undergraduate education at the University of Virginia. Subsequently, she spent 3 years working for the United Network for Organ Sharing, the national organ procurement and transplantation network, prior to matriculating as a medical student at Saint Louis University. Dr. Crews completed internal medicine residency in the Osler Medical Training Program of Johns Hopkins Hospital. She subsequently completed nephrology fellowship at the Johns Hopkins Hospital in 2009, and earned a Master of Science degree in Clinical Epidemiology from the Johns Hopkins Bloomberg School of Public Health that same year. Thereafter, she joined the Johns Hopkins University School of Medicine faculty. Her research interests include chronic kidney disease epidemiology, the timing and location of dialysis initiation, and racial disparities in chronic kidney disease. She has a particular interest in the mechanisms through which socioeconomic, lifestyle and behavioral factors might exert an effect on racial disparities in chronic kidney disease. Dr. Crews serves as a member of the Centers for Disease Control and Prevention Chronic Kidney Disease Surveillance Team and the American Society of Nephrology Chronic Kidney Disease Advisory Group. She is a fellow of the American Society of Nephrology, and a former scholar of the Harold Amos Medical Faculty Development Program of the Robert Wood Johnson Foundation. Dr. Crews' work in chronic kidney disease disparities has led to multiple awards including, the inaugural President's Research Recognition Award of the Johns Hopkins Urban Health Institute and the 2013 Ernest Everett Just Award in Medical and Public Health Research on African American Health and Quality of Life.

Daisy DeLeon, Ph.D., M.S.
Professor
Basic Sciences, Division of Physiology, School of Medicine
Loma Linda University, Loma Linda, CA

Research Interest

Dr. Daisy De Leon's main research interest is the role of IGF-2 in breast cancer and diabetes on health disparities among African American Women (AA). Her laboratory has published on IGF-II actions in the development, progression, and metastasis of breast cancer among AA. Current studies in her laboratory are identifying the signaling pathways and the cellular and molecular mechanisms associated with IGF-II ability to promote breast cancer development and metastasis without the requirement of estrogen in the NUDE/SCID mouse models. Of interest to her team is how dietary supplements and anti-inflammatory drugs regulate IGF-II to prevent cancer. The research team in Dr. De Leon's laboratory integrates the cellular and molecular studies performed in established breast cancer cell lines with animal models and tumor tissues analysis to advance the translational significance of the research.

A current emphasis in Dr. De Leon's research laboratory is to determine the mechanisms that link IGF-II, diabetes and the breast cancer survival disparity observed among African American women. The original observation, published recently, linked IGF-II, diabetes and breast cancer in a series of studies that integrated in vivo cell analysis with breast cancer tissues from AA women. At present, our main research studies are focused on the mechanisms of IGF-II regulation of the mitochondria, the organelle at the intersection of breast cancer and diabetes.

Biography

Dr. De Leon completed a bachelor's and a master's degree in science at the University of Puerto Rico. In 1987 she received a PhD in endocrinology from the University of California at Davis (UCD). Her doctoral studies were funded by an award from NIH and a UCD Distinguished student fellowship. During the three years as a postdoctoral fellow at Stanford University, Dr. De Leon's interest focused on IGFs in breast cancer. Her postdoctoral work was funded by awards from the Ford Foundation, American Cancer Society, and the Bernard Cohen postdoctoral fellowship. From 1990 to 1993 Dr. De Leon pursued further postdoctoral studies in breast cancer as a senior staff fellow in the National Cancer Institute at the NIH, Bethesda, MD.

In August 1993, Dr De Leon accepted a position as assistant professor in the Department of Physiology at Loma Linda University School of Medicine. She successfully established the Breast Cancer Laboratory and in 1994 received the Pfizer Award for her research presentation at the American Society of Cell Biology. Her current research work in breast cancer has been funded by NIH and grants from the California Breast Cancer Research program, the Susan G. Komen breast cancer program, and private Foundations such as The Orser Foundation and VONS Cancer Program.

At the National level, Dr. De Leon is a member of The Endocrine Society, American Society for Cell Biology, American Society for Cancer Research, and the IGF International Society. She served as member and later led as Chair of the Minority Affairs Committee for the Endocrine Society. In this role, she was the co-PI for the NIGMS grant entitled "Endocrine Short courses," a program that partners with historically black colleges and Hispanic-serving institutions to develop endocrinologists, scientists, and clinicians from underrepresented groups. In 2004 Dr. De Leon was elected council member for the Endocrine Society. Dr. De Leon has also served as a grant review panelist for NCI, NIDDK, NSF, NRC, and the DOD. In addition, Dr. De Leon is a member of SACNAS, a nationally recognized scientific society for the development of minority students and is also a member of the NMRI, an NIDDK network for the development of a national minority scientists network.

Dr. Daisy De Leon has also been involved in developing programs and activities geared to increase the participation of underrepresented students in science and medicine including the establishment of the Office for Minority Student Development at LLU and the Center for Health Disparities and Molecular Medicine. Dr. De Leon received the LLU "Outstanding Leadership of Minority Students Award" in 1996 and 1999. She was also recognized with the SDA Year of the Woman Hispanic Award (1995). Who's Who noted her as an "Outstanding Young Women of America" (1997). Loma Linda University has recognized Dr. De Leon with both the "Loma Linda University Hispanic Alumni Award for Contributions Leading to Hispanic Empowerment" (2003), and the 'Loma Linda University Diversity Leadership Award' (2006). In 2013, Dr. De Leon received the "Distinguished SDA Hispanic Woman Award" for her commitment to women health education in the Hispanic community in Southern California.

Dr. De Leon is the Director of the Research Core for the EXPORT program at the LLU Center for Health Disparities and Molecular Medicine. As assistant to the Dean for Diversity, she also coordinates research and educational programs for underrepresented minority students from junior high school, high school, and undergraduate students from local schools interested in a career in medicine and biomedical research.

Ayotunde Dokun, M.D., Ph.D.
Associate Professor, Department of Medicine
University of Tennessee Health Science Center, Memphis, TN

Research Interest

Peripheral arterial disease (PAD) of the lower extremities is the result of atherosclerotic blockage of blood vessels and its severity varies even among people with similar occlusions, suggesting a possible role for genetics in its severity. Individuals with diabetes are more likely to develop PAD and when people have PAD and diabetes, the disease is more severe resulting in higher risk of amputation and death. Therefore studies in our laboratory currently seek to understand how the metabolic environment in diabetes interacts with genetics and contribute to the poor PAD outcomes seen in individuals with diabetes.

Biography

Dr Dokun is an Associate Professor of Medicine and Endocrinology, Chief of Endocrine Services, Regional One Health, University of Tennessee Health Sciences Center, Memphis TN. Dr Dokun received his Bachelor's Degree in Biological Sciences from the State University of New York College at Old Westbury, Long Island, NY. He subsequently trained in the National Institute of Health (NIH) sponsored Medical Scientist Training Program (MSTP) at the Mt Sinai Graduate School of Biological Sciences and the Mt Sinai School of Medicine (now Icahn School of Medicine), New York, NY where he earned his MD and PhD degree. After completion of his graduate training, Dr Dokun entered residency in Internal Medicine and Fellowship training in Endocrinology and Metabolism at Duke University Medical Center, Durham, NC. Dr Dokun is an alumnus of the prestigious Robert Wood Johnson Foundation (RWJF), Amos Medical Faculty Development Program (AMFDP). He currently runs a R01 funded translational research lab with a focus on understanding the molecular mechanisms of vascular complications in diabetes. He is well published, including publications in high profile Journals such as Science, Nature Immunology, Circulation and Circulation Research. He has received a number of awards for his scientific contributions, including the Jay D. Coffman Early Career Investigator Award from the American Heart Association (AHA). Dr Dokun currently serves on the board of non-for profit organizations and on the editorial board of several scientific journals.

Patricia Heyn, Ph.D.
Associate Professor
Department of Physical Medicine and Rehabilitation
University of Colorado, Anschutz Medical Campus, Arvada, CO

Research Interest

My research is on the effects of aging and lifestyle behavior on selected metabolic, functional, and health outcomes of individuals with complex/chronic health conditions. I have a particular interest in understanding the effects of physical activity on cognitive function and its association to metabolic function. My investigations include the associations between lifestyle behavior, sex hormone, diabetes, obesity, disability on cognitive function. I have extensive experience in evaluating cognitive and physical function in older adults with cognitive impairments, including individuals with Alzheimer's disease, stroke, and intellectual disabilities.

Biography

Dr. Patricia C. Heyn has a PhD in Applied Exercise Physiology/Gerontology followed by two post-doctoral fellowships in 1) neurologic and cognitive rehabilitation supported by the National Institute of Disability and Rehabilitation Research, and 2) geriatric medicine research with emphasis in clinical trial design supported by the National Institute on Aging (NIH). She joined the faculty of the University of Colorado Anschutz Medical Campus in 2004 where she is currently an Associate Professor in the Department of Physical Medicine and Rehabilitation. During her Rehabilitation Research Fellowship Program at the University of Texas Medical Branch at Galveston mentored by Dr Kenneth Ottenbacher, she studied the effects of physical and cognitive-behavioral therapies on brain injury and stroke individuals as well as on Alzheimer's disease. During her second fellowship supported by the National Institute on Aging (NIH), she designed clinical trials (exercise and Androgel) for hypogonadal older men and trials (exercise and Pioglitazone) for older individuals with metabolic syndrome and mild cognitive impairment.

Marja Hurley, M.D.
Professor of Medicine, Division of Endocrinology and Metabolism
Professor of Orthopaedics, New England Musculoskeletal Institute
UConn Health, Farmington, CT

Research Interest

Dr. Hurley is an internationally recognized expert in the field of bone biology, particularly in the area of anabolic growth factors and their impact on bone growth and metabolism. She is a physician scientist who is recognized nationally and internationally as the expert in the role of fibroblast growth factor-2 (FGF2) in bone. She has made seminal observations on the importance of FGF2 in maintaining bone mass in mice as demonstrated by her publication in the premier Journal of Clinical Investigation on the bone phenotype in Fgf2 null mice and subsequent publications in the Journal of Biological Chemistry, Endocrinology and the Journal of Bone and Mineral Research. She has also co-authored papers in the Proceedings of the National Academy of Sciences and Nature Medicine. She has also demonstrated that FGF2 is highly regulated by bone morphogenetic protein (BMP-2) an agent approved by the FDA for fracture repair in humans. In addition, her laboratory was the first to demonstrate that FGF2 expression in bone cells is increased by parathyroid hormone (PTH); the only anabolic agent approved by the FDA for osteoporosis treatment in the United States and further demonstrated that the anabolic response to PTH is impaired in Fgf2 null mice. Of potential/translational/clinical relevance, Dr. Hurley published a seminal paper demonstrating that the anabolic effect of PTH in humans is associated with increased serum levels of FGF2.

More recently, Dr Hurley has demonstrated a novel role for the nuclear isoforms of FGF2 in phosphate homeostasis and was recently awarded a grant from the National Institute of Diabetes and Digestive and Kidney Disorders to study the potential role of these isoforms in human disorder X-Linked Hypophosphatemic Rickets. Her outstanding research contributions, including seminal work on the role of FGF-2 in bone, have resulted in funding by the National Institutes of Health for well over twenty years. This has resulted in a profusion of high-quality publications that includes papers in the Journal of Bone and Mineral Research, Endocrinology, the Journal of Biological Chemistry and the Journal of Clinical Investigation, among other leading journals. She has developed a number of new genetic murine models that have greatly advanced our understanding of the complex effects that multiple FGF-2 isoforms exert on osteoblast commitment, differentiation and function.

Biography

Dr. Hurley is a research scientist, educator, clinician, and administrator at UCONN Health. In addition to serving as Associate Dean for the Health Career Opportunity Programs, Dr. Hurley has held major leadership positions at UCONN Health, serving in the following capacities; member, Senior Administrative Group, advisory to the Vice President for Health Affairs, Senior Associate Dean for Education (Interim) UCONN Health School of Medicine during which she successfully developed, submitted and implemented an "Action Plan" to the Liaison Committee Medical Education (LCME) for reaccreditation of the UCONN Health School of Medicine. Dr

Hurley also served as Liaison to the Academic Affairs Subcommittee of the Board of Directors; Chairman, Education Council; Chairman Committee on Undergraduate Medical Education (CUME) and implemented a new governance structure for medical student education in the School of Medicine; Specifically working with faculty, deans, department chairs and center directors of the School of Medicine, she developed and implemented new educational governance and established chair and vice chair positions for all subcommittees of CUME. Dr. Hurley also served as a member of the Dean's Council, the Research Council as well as a member of Compensation and Merit Plan Executive Committee UCONN Health School of Medicine. Dr. Hurley was recently appointed as a voting member of the Academic Affairs Subcommittee of the UCONN Health Board of Directors.

Dr. Hurley is a tenured professor of Medicine and Orthopedic Surgery at the UCONN Health School of Medicine. She is a physician scientist who is recognized nationally and internationally as the expert in the role of fibroblast growth factor-2 (FGF2) in skeletal biology and maintains an active National Institute of Health (NIH) funded basic research laboratory that focuses on the molecular mechanisms of osteoporosis and the role of FGF2 in bone and phosphate homeostasis. A novel area of research recently begun in her laboratory seeks to determine the molecular mechanism(s) of bone loss using Sickle Cell Disease and Sickle Cell Trait transgenic mouse models. Dr. Hurley's outstanding research productivity is demonstrated by her 162 peer reviewed publications including 67 manuscripts, 10 invited reviews and book chapters and 85 abstracts as well as NIH and Foundation research funding since 1989.

Dr. Hurley has been highly sought to serve on NIH scientific review panels and has served as a permanent member of several NIH Institutes. Dr. Hurley also served as a reviewer of research proposals for the National Science Foundation. Dr. Hurley serves as a reviewer for a number of scientific journals in the field of bone research. She also served on the Editorial Board of Gene and currently serves on the Editorial Board of the Journal of Racial and Ethnic Health Disparities.

Dr. Hurley is dedicated to the training and mentoring of the next generation of biomedical scientists. She is a member of the UConn graduate faculty for the Skeletal Biology and Regeneration as well as the Cell Biology areas of concentration in the Biomedical Sciences. She has supervised more than forty students in research including women and underrepresented students many of whom have gone on to outstanding careers in academic medicine or biomedical research. Dr. Hurley has received a number of awards for her accomplishments in research. These include the University of Connecticut first Martin Luther King Award for Achievement in Science and she was recognized as one of the outstanding women in 100 years at the University of Connecticut. She is the recipient of the University of Connecticut Health Center Board of Directors Faculty Recognition Award, the University of Connecticut Neag Medal of Honor, and the Connecticut Technology Council 2010 Women of Innovation and Leadership Award. Dr Hurley was inducted into the Connecticut Academy of Science and Engineering in 2012.

Cheedy Jaja, Ph.D., M.P.H., M.S.N.
Associate Professor
College of Nursing, Academic Health Center
University of Cincinnati, Cincinnati, OH

Research Interest

Analgesic pharmacogenetics of sickle cell disease. My current study attempts to bridge the concept of pharmacogenetic variability as a determinant of interindividual response to analgesic drug therapy in SCD patients.

Biography

Dr. Jaja is an early stage nurse research investigator. He has training in translational research with special regard to pharmacogenetics. He was the inaugural pharmacogenetics, ethics and public policy postdoctoral fellow at Indiana University. Dr. Jaja recently participated in laboratory and didactic training in the genomics of blood disorder as a mentee in the NHLBI sponsored SIPID program. Dr. Jaja's current NIH KO1 Career Award funded research grant study examines the role of CYP450 metabolizing enzymes (CYP2C9, CYP2C19 and CYP2D6) in analgesic prescribing in pediatric and adult sickle cell disease (SCD) cohorts. This current study epitomizes Dr. Jaja's commitment to identifying SCD patients whose psychosocial health warrant configuring patient-specific treatment plans with varying emphasis on narcotic-based treatments and behavioral therapies.

Myra Kleinpeter, M.D., M.P.H.
Associate Professor of Clinical Medicine
Department of Medicine/Nephrology
Tulane University School of Medicine, New Orleans, LA

Research Interest

Dr. Kleinpeter has interests in chronic disease management, continuing education, quality improvement and providing healthcare to underserved populations. Research activities include assessing the impact of cardiovascular disease risk factors in chronic kidney disease patients, health literacy assessment and outcomes on disease, impact of modifying patient education programs on health outcomes and modified clinical visits effect on health outcomes and access to healthcare.

Biography

Myra A. Kleinpeter, Associate Professor of Clinical Medicine at Tulane University School of Medicine in New Orleans, serves Director of the Peritoneal Dialysis Program for Tulane/Dialysis Clinics, Inc. and director of the Tulane Nephrology Clinic at the Medical Center of Louisiana, formerly known as Charity Hospital. She formerly served as Director of the Ambulatory Clinics at the Medical Center of Louisiana at New Orleans 1999-2005. She serves as a commissioner for Hospital District A, Parish of Orleans in re-developing a community hospital in New Orleans East.

With interests in chronic disease management, continuing education, quality improvement and providing healthcare to underserved populations, she has done research and many presentations in these areas. Research activities include assessing the impact of cardiovascular disease risk factors in chronic kidney disease patients, health literacy assessment and outcomes on disease, impact of modifying patient education programs on health outcomes and modified clinical visits effect on health outcomes and healthcare access. In 2013, she was awarded the Physician Award for Community Service from the Louisiana State Medical Society. She received her undergraduate education from Southern University in Baton Rouge, Louisiana and her graduate training with a Medical Doctorate and Masters in Public Health from Tulane University School of Medicine and School of Public Health, respectively. She completed residency in Internal Medicine and fellowship training in Nephrology and Hypertension at Tulane. She is recognized as a Hypertension Specialist through the American Society of Hypertension.

Mark Lawson, Ph.D.
Professor
Department of Reproductive Medicine
University of California, San Diego, La Jolla, CA

Research Interest

Maintenance of proper health depends on the proper regulation of the complex physiological systems that control energy balance, metabolism, growth, and reproduction. Of these, reproduction is unique in that it depends on other systems to operate properly and changes dramatically throughout life. Puberty, menstrual cycling, menopause and ageing are all unique reproductive stages that are a result of complex interactions between the reproductive and other systems. Because fertility depends on overall health, it is sensitive to proper physiological balance. Although the consequences of physiological imbalance result in reproductive problems such as infertility, difficulty of conception and reproductive problems in both sexes, very little is known of the sensing mechanisms that impact the reproductive system. The reproductive hormones that control fertility are produced in the brain, pituitary gland, and the ovary or testis. The neuropeptide hormone Gonadotropin-Releasing Hormone (GnRH) is released in pulses from the hypothalamus and stimulates the pituitary to produce Luteinizing Hormone (LH) and follicle-stimulating hormone (FSH). LH and FSH in turn stimulate the ovary or testis to produce the gonadal steroids and other hormones that act as either positive or negative feedback regulators of GnRH and LH or FSH synthesis and release. The production of GnRH by the brain and LH or FSH by the pituitary is also influenced by other hormones such as insulin, activin, inhibin and others. Our work is focused on the communication between the brain and pituitary gland via GnRH, and how this communication is altered by input from other hormone signaling systems or by metabolic status. Research topics in our laboratory include 1) the study of pulsatile GnRH signaling and its consequences on gene expression, 2) GnRH regulation of protein synthesis and the role of the Unfolded Protein Response in maintaining pituitary cell health, 3) the role of insulin as a regulator of pituitary sensitivity to GnRH, 4) the impact of fatty acids and inflammatory signals on the ability of the pituitary to respond to GnRH, and 5) the role of bone morphogenetic proteins and related hormones in the regulation of GnRH neurons.

Biography

I have a broad training background in Virology, Neuroscience, and Endocrinology. I earned my B.S. in Microbiology at San Diego State University, my Ph.D. in Biological Sciences at University of California, Irvine, and I conducted postdoctoral work at The Salk Institute and at University of California, San Diego. In addition to my academic training, I also worked in the biotech industry before returning to academia as a member of the faculty in the School of Medicine at the University of California, San Diego. In addition to my academic work, I have focused my university service in the area of increasing diversity in academia at all levels.

I have been a member of the NIDDK Network of Minority Research Investigators since its inception in 2002 and have participated as a session leader, panelist and participant regularly. I have also served as the Southern California Regional Liaison for the Ford Foundation/NAS Postdoctoral fellowship program since 2005, and have been a reviewer, panelist, and mentor in

the University of California President's Fellowship Program since 2003 and was appointed Director in 2015. I was also appointed Faculty Director of Postdoctoral and Visiting Scholar Training and Education. I have also served on the Endocrine Society's Minority Affairs committee as well as chaired the Trainee and Career Development Committee for the past three years.

Through my activities with The Endocrine Society, I have developed the current Early Career Forum, a career development course held annually prior to the national meeting. I also serve as a steering committee member of the NIDDK-funded FLARE program, a leadership training course targeting postdoctoral trainees and early career faculty. All of these activities are focused on training at the postdoctoral level and I have developed multiple programs providing career development training at this level. My own trainees have progressed to both traditional academic positions, industry, or other areas closely allied with basic science.

At the undergraduate level, I am Co-Director of the Endocrine Network for Undergraduate Research Opportunity and Career Development. This program is focused on bringing research experience and career mentoring to students at minority-serving institutions. This is a unique program that not only brings opportunity to undergraduate students, but also employs a controlled evaluation component that critically examines the effectiveness of intervention programs using a hypothesis-driven research approach to evaluate program components and overall outcomes.

Tesfaye Mersha, Ph.D.
Assistant Professor
Department of Pediatrics
University of Cincinnati, Cincinnati Children's Hospital Medical Center

Research Interest

My overall research interest and goal includes the use of population genomics, and quantitative and statistical genetics methods to understand human genome variation and utilize this information to dissect complex diseases, particularly allergy disorders, through approaches and methods ranging from linkage, association, admixture mapping, and transcriptional profiling analysis. Complementary to statistical analysis, I also frequently apply biological pathways and functional commonalities analysis to uncover co-regulation of gene expression across the genome, data mining, and bioinformatics techniques for candidate genes prioritization procedures from linkage and expression studies. My long-term goals are to reduce childhood morbidity and mortality associated with metabolic and allergic disorders, and to eliminate the significant racial disparities in asthma and asthma-related outcomes. To enhance my analytical skills for verifying statistical properties of biological problems as applied to admixed populations such as ancestry inference, disease gene localization, evolutionary relationship, patterns of molecular diversities, and population structure in disease genetics, I will be actively involved in the NMRI program.

Biography

I am junior faculty member at the Cincinnati Children's Hospital Medical Center. I am a quantitative geneticist. My background includes an early exposure to the many facets of biology and statistics and interested in cross-line disciplines to understand and solve complex genetic problems. During my post-doctoral fellowship program in statistical and human genetics, I worked on statistical genetics methodologies and applied genetical data analysis to localize disease genes. Particularly, I focused on genetic analyses of metabolic disorders using linkage, association and admixture mapping approach. He developed genome-wide ancestry informative markers (AIMs) panel by mining databases including HapMap, Affymetrix and Illumina. The AIM markers are useful in ancestry inference, admixture mapping and structured association testing. He used million SNPs data and developed approaches of chromosomal based finer population genetic structure characterization, localization of private SNPs and associated genes and pathways that could have pharmacogenomics implication. In addition, I am working on gene regulatory networks, gene ontology enrichment analysis and molecular profiling using various biologic and bioinformatic methodology for prioritizing metabolic and asthma candidate genes. My overall research interest and goal includes the use of population genomics, quantitative genetics, statistical genetics as well as proteomics and biological profiling and pathway methods to understand and dissect common complex diseases.

Manuel Miranda-Arango, Ph.D.
Associate Professor, Department of Biological Sciences
University of Texas, El Paso, TX

Research Interest

The Miranda's laboratory studies neurotransmitter transporters and their role in diseases. We investigate the role of endocytosis and posttranslational modifications in the regulation of activity of the transporters for dopamine and glycine. We also investigate the effects of the psychostimulant methamphetamine in the stability of the dopamine transporter and receptors in the brain, utilizing a rodent model. In addition, our latest research focus has been on the role glycine transporters in pharmacological interventions and disease. The neuronal glycine transporters coordinate a variety of motor and sensory functions and mutation at those results in impair motor or sensory control. For these transporters, we investigate the location and function of glycinergic neurons in the rodent brain containing either or both of two transporters, GlyT1 and GlyT2 utilizing a variety of biochemical approaches and microscopy imaging techniques. Throughout my career at Yale University, I have gained extensive experience in the analysis of the structure-function relationships of primary and secondary transporters in yeast and mammalian cells. During my postdoctoral training at the University of Colorado, I expanded my research skills to include the cell biology of the dopamine transporter. During that time, I discovered that Protein Kinase C (PKC)-dependent endocytosis and further downregulation of DAT are triggered by ubiquitination. This training accounts for more than 15 year experience studying transporters.

Biography

I was born in Mexico City, Mexico on May 20th, 1967; 1 of 10 siblings from a low-income family (8 males and 2 females). I got my education in Mexico City, where I attended college and graduate school. I graduated with honors and continue my posdoctoral training at Yale University. A fellowship from the Fogarty International Center allowed me to get training at Yale Medical School, where I continued my training on structure-function of ion transporters. After this time, I continued my training as a senior scientist at the University of Colorado on neurotransmitter transporters to later join the University of Texas at El Paso as an assistant professor. To date, I was promoted to Associate professor with tenure and continue to secure extramural funding.

Nihal Mohamed, Ph.D.
Assistant Professor, Department of Urology
Icahn School of Medicine, New York, NY

Research Interest

I have a solid program of research on prostate and bladder cancer (\$1 Million as Principal Investigator; \$1.1 Million as a Co-Investigator) funded by the National Institute of Health (NIH), The Department of Defense (DoD), and the American Cancer Society (ACS). Below I have provided an overview of my areas of expertise and prior research support.

In 1998, after receiving my Bachelor's (Honor) and Master's degrees in educational psychology, I joined the department of psychology at Khartoum University in Sudan as a lecturer. During this time I taught several undergraduate courses and supervised undergraduate research required for the completion of Bachelor and Diploma degrees in Psychology at the University of Khartoum including Introduction to Statistics and Research Methodology, Physiological Psychology, and Cognitive Psychology . I also supervised undergraduate research that addressed different topics including coping with cancer and treatment side effects. Supervising undergraduate research in cancer increased my interests in psychosocial and behavioral issues involved in cancer prevention and health care. Because academic resources were very limited at the Department of Psychology, Khartoum University, I applied for The German Academic Exchange Program (DAAD) and received a 4-year scholarship to obtain a Ph.D. in health psychology at the Free University of Berlin, Germany. I received my Ph.D. degree (Magna Cum Laude) in October 2004. My dissertation research focused on examining the role of personal and social resources, and coping for finding meaning in cancer. I was particularly interested in examining the mediation effects of coping strategies in the relationships among personal and social resources and finding meaning in cancer. During this time, I improved my skills in recruitment of newly diagnosed cancer patients, data entry and organization, and quantitative data analyses using SPSS.

In 2006, I joined the department of urology at Mount Sinai School of Medicine to continue my post-doctoral training. As a post-doctoral research associate and a senior project manager at Mount Sinai School of Medicine (2006-2009) I developed strong expertise in developing and evaluating multimedia intervention to enhance quality of life and improve symptom management among prostate cancer survivors (funded by NCI and DOD). In 2010, I was appointed Research Assistant Professor and a faculty member of the department of urology, Mount Sinai School of Medicine, New York. Although I did my post-doctoral training at Mount Sinai on prostate cancer, I have moved on to independent status with my own research and lab space (2010). I am currently a PI or a Co-I on several previous funded grants (NIH, DoD, and ACS).

Biography

I have over 10 years of cancer research. I have broad background in health psychology with specific training in key research areas of this application (e.g., the patient's emotional adjustment and wellbeing following cancer diagnosis and treatment, coping with cancer treatment, social support, and finding meaning in cancer). As a post-doctoral research associate and a senior project manager at Mount Sinai School of Medicine (2006-2009), I developed strong expertise in designing and evaluating multimedia interventions to enhance quality of life and improve symptom management among prostate cancer survivors (funded by NCI and DOD). Although I did my post-doctoral training at Mount Sinai on prostate cancer, I have moved on to independent status with my own research and lab space (2010). I am PI or a Co-I on several previously funded grants (The NCI (R03, K01 declined because of an overlap with existing grants), American Cancer Society (ACS); and the Bladder Cancer Advocacy Network (BCAN); and Department of Defense (DOD). I have also extensive experience in managing multi-centered prostate and bladder cancer research programs, patients' interviews and focus groups, and data analyses and interpretations using advanced software programs including Atlas.ti, SPSS, AMOS, and MPLUS. I have a demonstrated record of successful and productive research projects in an area of high relevance for our aging population, and my expertise and experience have prepared me to lead several cancer-focused studies on bladder and prostate cancer populations.

*Susanne Nicholas, M.D., Ph.D., M.P.H.
Associate Professor of Medicine
Department of Medicine and Nephrology
David Geffen School of Medicine
University of California Los Angeles, Los Angeles, CA*

Research Interest

My research goals are to: understand and identify key factors that promote the pathogenesis of diabetic kidney disease (DKD); uncover and validate novel biomarkers that may predict DKD progression; and to quantify renal structural changes associated with DKD in response to novel therapeutics, using stereology principles. To support these objectives, my primary appointment at UCLA in the division of Nephrology, and secondary appointment in the division of Endocrinology, Diabetes and Hypertension allow me to pursue translational (bench to bedside) studies involving cell culture, rodent models of human DKD and clinical studies in humans. My training in stereology, renal morphometry and diplomas from the International Society of Stereology allowed me to dedicate the past 6 years to create and establish a core laboratory at the Charles R. Drew University of Medicine and Science (CDU) where I served as Co-director of the Technology Core of the NIH/NIMHD-funded Accelerating Excellence in Translational Science (AXIS) program related to health disparities. As former PI of the UCLA site of the NIH/NIDDK-funded, multi-institutional Family Investigation of Nephropathy and Diabetes (FIND) genetic study of type 2 DKD, I have access to stored biological samples from 1155 Mexican-Americans to conduct translational studies. The focus of my current studies stemmed from my early discovery of osteopontin (OPN) as a modulator of oxidative stress and inflammation in the development of hypertensive renal fibrosis, and my subsequent discovery of OPN as a critical factor in the progression of DKD. This was proven by genetic studies in which OPN-null mice were bred onto type 1 and type 2 diabetic mice in which the characteristic features of DKD were prevented, and in cell culture studies in which antibody blockade of OPN prevented angiotensin II-mediated effects. This published work has prompted further investigation to uncover the mechanisms by which OPN may regulate and control the pathologic balance between extracellular matrix production and accumulation in DKD.

Biography

Dr. Nicholas completed her undergraduate degree in Biochemistry at the University of Southern California and received a full scholarship to the Harvard Health Professions Program at Harvard University, which was instrumental in supporting her journey to medical school. In 1989, she graduated from the University of California, San Diego School of Medicine with an M.D. and from San Diego State University with an M.P.H. She completed her residency in Internal Medicine; and Nephrology clinical fellowship training at the David Geffen School of Medicine at University of California, Los Angeles (UCLA).

She received awards from the Robert Wood Johnson Foundation, and the UNCF Merck Postdoctoral Science Research Fellowship and was in the first graduating class of the UCLA, Scientific Training and Academic Research (STAR) Fellowship with a Ph.D. in Physiology. She received the first Pfizer Scholars Grant for New Faculty at UCLA and was nominated to the

Western Association of Physicians, and Sigma Xi Scientific Research Honor Society. She was the recipient of the 2010 Minority Access, Inc. National Role Model Faculty Researcher Award. She is an active member of the NIH-funded, Network of the Minority Research Investigators where she serves as mentor to junior minority faculty.

Dr. Nicholas is a tenured Associate Professor of Medicine at UCLA and a board certified Nephrologist and Clinical Hypertension Specialist. She has a joint appointment in the Division of Nephrology, where she maintains her clinical responsibilities, and the Division of Endocrinology, Diabetes and Hypertension, where she conducts her research. She established a Technology core laboratory at Charles R. Drew University of Medicine and Science, funded by NIH/NIMHD. Dr. Nicholas currently investigates the pathogenic mechanisms of diabetic kidney disease and hypertension and their molecular and morphometric bases. Her work has led to the identification of a novel biomarker of diabetic kidney disease, which is being validated in clinical studies. She was a PI of the multi-institutional NIH/NIDDK funded study for susceptibility genes for diabetes and the linkage relationships to nephropathy and retinopathy in Mexican Americans and African Americans. She has established collaborations locally, nationally and internationally, is well published and has served on several grant review committees.

Ariana Raquel Pichardo-Lowden, M.D.
Assistant Professor of Medicine, Hershey Medical Center
Penn State University, Hershey, PA

Research Interest

The overarching theme of my research work is improving quality of care and the outcome of patient with diabetes mellitus through medical education and implementation of best practices. As is widely known, diabetes mellitus is a growing problem of worldwide magnitude affecting a large proportion of the United States population. Diabetes care poses a large national economic burden in the inpatient and outpatient settings. Hyperglycemia is common in hospitalized patients and a number of studies show that poor glycemic control in hospitalized patients is associated with increased morbidity and mortality. Improved glycemia in hospitalized patients has a positive impact in clinical outcomes. In the past decade, our knowledge about the impact of inpatient dysglycemia has increased exponentially prompting diabetes leading societies to call hospitals to action. Among the recommended interventions are continuing education programs for providers. Furthermore, inpatient glycemic management represent a hospital quality measure. Perception of the relevance of the problems related to hospital glycemic care among faculty and providers in training is not uniform. Studies suggest that knowledge, attitudinal and clinical decision making deficits may influence provider's performance and consequently patient care.

My research interests is in optimizing patient care through optimizing clinical practice. One of my current projects consist on a needs assessment study to determine knowledge, attitudes, and decision making of trainees and faculty in the subject of inpatient glycemic management and its possible association with glycemic control, as well as the identification of barriers to deliver optimal inpatient glycemic management. I envision the development of educational programs and system process improvements aiming to address the areas of deficit identified from this needs assessment study. My research work aligns with the vision of leading diabetes societies in optimizing the care of patients with diabetes and hyperglycemia in the hospital, and with the ever stronger vision of integrating education and quality of patient care. This will constitute the main focus of my first few years of academic work.

Biography

I was born and raised in Santiago, Dominican Republic where I attended medical school and graduated Magna cum Laude in 1999 from the Pontificia Universidad Catolica Madre y Maestra. I pursued further training as an internist at Mount Carmel Health System in Columbus, Ohio. Subsequently, I joined The Pennsylvania State University, Milton S. Hershey Medical Center for endocrinology fellowship training where I currently function as a Junior Faculty since 2010. I am passionate about all aspects of endocrinology and diabetes and I feel committed to the intellectual and professional growth of trainees. It is my vision that providers with strong abilities in different domains enhance patient care.

I am active in clinical, teaching and investigative pursuits and have been consistently working towards the acquisition of stronger skills as an investigator. To strengthen my preparedness as an investigator with a foundation in medical education, I participate in various activities and

programs such as the Junior Faculty Development Program through the office of Professional Development at Hershey Medical Center (2011-2012), the 2012 American Association of Medical Colleges Minority Faculty Development Seminar. I also attend to pertinent activities as the opportunity arises such as data management workshops, grant writing workshops, active learning interest groups among other faculty development workshops. I am currently enrolled in the Penn State Program in Adult Education with a goal towards a Master Degree in Medical Education.

The scholarly work that I have been pursuing over the past years dates since the beginning of my fellowship in 2008 when I started to critically review the literature pertaining to inpatient glycemic management and worked in quality improvement initiatives which led to publications and other scholarly activities. I am privileged and honored to receive invitations to review articles in the field and I am consistently active on scholarly pursuits and I enjoy the dissemination of knowledge that is so vital to the medical scientific field.

Marina Ramirez-Alvarado, Ph.D.
Associate Professor of Biochemistry and Molecular Biology
Mayo Clinic, Rochester, MN

Research Interest

Molecular mechanisms of protein misfolding, in particular light chain amyloidosis utilizing biochemical and biophysical tools. Molecular mechanisms of organ damage and toxicity in light chain amyloidosis role of urinary exosomes in organ damage and pathophysiology in light chain amyloidosis

Biography

Marina Ramirez-Alvarado was born in Mexico City. She obtained her Bachelors and Master's degrees from the National and Autonomous University of Mexico (UNAM) in Biochemistry and Biotechnology. She received her PhD degree from the European Molecular Biology Laboratory in Heidelberg Germany studying protein folding and protein design and then went to Yale University for her postdoctoral training. She has been at the Mayo Clinic as an independent investigator since 2002. She achieved tenure in 2012 and is currently an associate professor in Biochemistry and Molecular Biology. She is interested in rare hematologic systemic diseases such as light chain amyloidosis. In addition, she is currently a member of the editorial board of the journal Amyloid and the Biophysical Chemistry journal and serves as a regular member for the NIH Biophysics of Neural Systems study section. She is also one of the national coaches for the Director's Pathfinder Award to Promote Diversity in the Scientific Workforce Biomedical Research Community - NIH/NIGMS (1 DP4 GM0968070, PI, R. McGee), Chicago, Illinois Northwestern University.

Jose Romero, Ph.D.
Associate Physiologist, Brigham and Women's Hospital
Assistant Professor of Medicine, Harvard Medical School
Co-Director, Translational Research Summer Program

Research Interest

My main interest is in cation transport dysregulation in cardiovascular diseases, including hypertension, sickle cell, and diabetes. These studies have focused our research on two problems relevant to patients with diabetes mellitus: (1) the role of cellular magnesium in the pathophysiology of cardiovascular disease, and (2) the role of acute aldosterone responses in vascular inflammation. My group has led the discovery of a novel mechanism for the rapid/non-genomic effects of aldosterone in vascular tissue using both in vivo and in vitro approaches. These studies show a prominent role for striatin, a caveolin-1 binding protein, in aldosterone-mediated oxidant stress and inflammation and have formed the basis for our most recent NIH R01 grant award entitled, "Aldosterone, Intracellular Leukocyte Magnesium and Inflammation in Diabetes" from the National Heart, Lung, and Blood Institute, an ancillary clinical trial. A significant part of my professional activities is also devoted to mentoring junior faculty, fellows, and students at local, national, and international levels; I also am a consultant for medical research and training institutes in Puerto Rico, Portugal, and Mexico. For these contributions, I was honored to receive the A. Clifford Barger Excellence in Mentoring Award at Harvard Medical School. I also direct a translational research summer program for medical students and a recent medical graduate interested in minority health research and was humbled to receive the Harold Amos Faculty Diversity Award at Harvard Medical School.

Biography

Dr. Jose R. Romero is an Associate Physiologist at the Brigham and Women's Hospital, Assistant Professor of Medicine at Harvard Medical School [HMS] and Co-Director of the Translational Research Summer Program for medical students and recent medical graduates interested in minority health research in the Division of Endocrinology Diabetes and Hypertension. He graduated from the Boston University School of Medicine and did his PhD doctoral thesis work under the guidance of the late Prof Mitzy Canessa at HMS and has been at Harvard since. He is a Cellular Physiologist by training with translational research experience in cardiovascular diseases, including hypertension, sickle cell disease and diabetes; studies that have been continuously funded by the NIH for over 17 years. His work on disordered sodium and calcium regulation in hypertension has been recognized and honored by awards from the American Heart Association, the American Society of Hypertension and the Pfizer Award from the International Society of Hypertension. In addition to his scientific accomplishments, Dr. Romero devotes a significant part of his efforts to mentoring and coaching junior faculty, fellows and students at local, national, and international levels and is a consultant for medical research and training institutes in the US, Mexico and Portugal and until recently held a Visiting Faculty appointment at the Albert Einstein College of Medicine in New York. For his achievements in teaching, promoting and mentoring students, fellows and junior faculty within and outside of the Harvard community, Dr. Romero was honored by Harvard University with the A. Clifford Barger Excellence in Mentoring Award and the Harold Amos Faculty Diversity and Mentoring Award at Harvard University. These recognitions among the over 11,000 thousand HMS faculty have led to his most recent appointment as a member of The Academy at HMS, an institution established to advance excellence in education of physicians and scientists throughout Harvard.

Sylvia Rosas, M.D., M.S.
Associate Professor of Medicine, Harvard Medical School
Director, Latino Kidney at the Joslin Diabetes Center
Staff Physician, Kidney and Hypertension Section and Beth Israel Deaconess Medical Center

Research Interest

Dr. Rosas performs epidemiological research in the setting of chronic kidney disease (CKD) with a particular emphasis in cardiovascular and metabolic complications. She has been site PI of multiple clinical trials in individuals with chronic kidney disease and end-stage renal disease. She is the ancillary investigator for the carotid ultrasound core in Chronic Renal Insufficiency Cohort (CRIC) Study, the largest prospective study of individuals with chronic kidney disease. She is a coinvestigator in the Prevention of Early Renal Loss (PERL) study, a randomized control study of allopurinol in patients with Type 1 diabetes. She has contributed to our understanding of natural history and risk factors associated with vascular calcification progression in the setting of CKD.

Biography

Sylvia E. Rosas, MD, MSCE is a staff physician at the Joslin Diabetes Center and Beth Israel Deaconess Medical Center. She completed Internal Medicine training at Michael Reese Hospital/University of Illinois at Chicago. She completed her nephrology and epidemiology training at the University of Pennsylvania. Dr. Rosas performs clinical research related to cardiovascular epidemiology in the setting of chronic kidney disease. Her research has been funded by the NIH, AHA and the Department of Veterans Affairs. She currently directs the Latino Kidney Clinic at the Joslin Diabetes Center.

***Glenn Rowe, Ph.D.
Assistant Professor
Department of Medicine
University of Alabama, Birmingham, AL***

Research Interest

The research interest of the laboratory focuses on understanding the molecular pathways that influence mitochondrial metabolism in response to diet and exercise, in order to improve mitochondrial function and reduce the deleterious effects of the metabolic syndrome. Specifically, the lab studies the PGC-1 family of transcriptional coactivators and the molecular pathways they regulate in striated muscle to maintain normal mitochondrial function (including biogenesis, oxidative capacity and dynamics) and normal metabolic function. The laboratory utilizes a variety of molecular techniques, cell-based assays as well as genetically modified mouse models to understand the molecular mechanisms which control mitochondrial function. Projects in the lab revolve around the following areas 1.) the study of mitochondrial dynamics in response to exercise, 2.) the effect of exercise on angiogenesis and mitochondrial metabolism, 3.) the characterization of new regulators of mitochondrial metabolism in striated muscle and 4.) contribution of mitochondrial function to whole body energy homeostasis.

Biography

Dr. Glenn C. Rowe received his B.S. in Biology from Brandeis University and his Ph.D. in Molecular, Cellular and Developmental Biology from Yale University where he studied the transcriptional regulation of factors that control bone and adipose tissue homeostasis. He completed his post-doctoral training at the Beth Israel Deaconess Medical Center, where his work focused on the role of transcriptional coactivators in regulating mitochondrial metabolism. He is currently an Assistant Professor in Medicine at the University of Alabama at Birmingham where his research interest focuses on understanding the cellular and molecular mechanisms underlying metabolism in the cardiovascular and musculoskeletal system.

*Virginia Sarapura, M.D.
Associate Professor of Medicine
School of Medicine, Endocrinology, Metabolism and Diabetes
University of Colorado, Anschutz Medical Campus, Aurora, CO*

Research Interest

I have been collaborating with other investigators in studies of the genetic and epigenetic factors that predispose to the development of thyroid autoimmune disorders. I have a particular interest in the determinants that factor into racial differences in the prevalence of these disorders.

Biography

My research has focused on several areas. As a trainee, I learned the basic tools of molecular biology research and began to investigate the mechanism of expression of the alpha-subunit of the pituitary glycoprotein hormones under the guidance of Dr. E. Chester Ridgway and his Ph.D. associates, Drs. William Wood and David Gordon. I collaborated on other projects within the laboratory, including the regulation of thyrotrope cell growth by thyroid hormone. I also have explored other areas of investigation, including the expression of the glycoprotein hormone alpha-subunit gene in solid tumors, specifically lung cancer, and the genetic and epigenetic factors that predispose to the development of autoimmune thyroid disorders. Currently my work is focused on academic clinical practice and teaching endocrinology to our second year medical students, and a research collaboration with our Immunology Department, to investigate the immune processes leading to the development of autoimmune disease.

Jacqueline Tanaka, Ph.D.
Associate Professor of Biology
Director, Temple University MARC U*STAR program
College of Science and Technology
Temple University, Philadelphia, PA

Research Interest

I am interested in ion channels and how their structure accounts for the diversity of their functional roles in the nervous system as well as signaling in other cell types. Most recently, I have focused on cyclic nucleotide-gated channels in rod and cone photoreceptors. I study channel function using patch clamp electrophysiology and then use structural modeling with molecular dynamics simulations to hypothesize how the structure accounts for the function. The channels are activated by the binding of cGMP or cAMP in a cytoplasmic domain of each subunit of a tetrameric channel. How is information about the binding communicated to the gating regions of the channel that regulates ion flow across the membrane?

We collaborate with veterinary ophthalmologists who identified mutations in CNG channel subunits in dogs that result in day-blindness, an inherited condition similar to achromatopsia in humans. My lab focuses on understanding the molecular pathophysiology of the canine disease in order to provide insights about achromatopsia.

Biography

I earned my PhD from University of Illinois Urbana in Physiology. My graduate work was on voltage-gated Na channels and I continued working on Na channels as a postdoc at U. Penn with Robert Barchi. I did a 2nd postdoc with Paul Mueller and at that time I switched my interest to CNG channels. I spent almost 20 years as a research faculty member at Penn in the Biochemistry and Molecular Biophysics department. I wanted to teach undergraduates and in 2000, I moved to the biology department of Temple University.

Currently, I teach courses in the biology department and am the director of an NIH MARC U-STAR program. We have 16 students in the program which provides research experience and mentoring as preparation for students entering competitive PhD programs in biomedical science. Students are from underrepresented groups including racial minorities, first-generation, low income and disabled. The program was recently re-funded for 5 years and we currently have students at Penn, Harvard, Columbia, U MD, W Wis, and others with students this year entering U. Chicago (biophysics), Johns Hopkins (chem), Einstein (Mol bio and genomics), and one entering NIH postbac program.

Heather Tarleton, Ph.D., M.S.
Assistant Professor, Department of Health and Human Sciences
Loyola Marymount University, Los Angeles, CA

Research Interest

My research focuses on cancer survivorship. Within cancer survivorship, my research interests are in prevalent comorbidity among cancer survivors and behavioral interventions for chronic disease management. Currently, I am conducting a study titled “IMPAACT: Improving Physical Activity After Cancer Treatment”. The IMPAACT study is a collaborative effort with my colleagues in the Department of Health and Human Sciences and is also a research training opportunity for upperclassmen preparing to enter the Allied Health professions.

The study connects epidemiology, exercise physiology, nutrition, and rehabilitation science and recruits participants from the racially and ethnically diverse cities within Los Angeles County. The study was designed to examine the effects of a combined aerobic exercise and resistance training program on the body composition of cancer survivors and on reducing the risk of diabetes, cardiovascular disease, and osteoporosis among cancer survivors. The study also aims to improve cancer survivors’ overall capacity to engage in physical activity by addressing fatigue, balance, muscle health, cardiorespiratory fitness, neuropathy and psychosocial barriers to motivation.

In addition to my focus on cancer epidemiology and cancer survivorship research, I am also heavily invested in drawing undergraduates from underrepresented backgrounds and underserved communities into STEM research. I am a faculty mentor for the McNair Scholars Program at Loyola Marymount University and a Councilor for the Health Sciences Division of the Council on Undergraduate Research (CUR).

Biography

Dr. Heather Tarleton is an Assistant Professor of Health and Human Sciences at the Seaver College of Science and Engineering, Loyola Marymount University and Affiliate Faculty at The Bioethics Institute, Loyola Marymount University. She is formally trained as a molecular biologist (Ph.D. in Molecular Biology, Princeton University) and cancer epidemiologist (M.S. in Epidemiology, University of California, Los Angeles).

Currently, she is the Principal Investigator of a study titled IMPAACT: Improving Physical Activity After Cancer Treatment. The IMPAACT study examines the effects of a combined aerobic exercise and resistance training program on reducing the risk of diabetes, cardiovascular disease, and osteoporosis among cancer survivors. The study aims to improve cancer survivors overall capacity to engage in physical activity by addressing fatigue, balance, musculoskeletal health and strength, cardiorespiratory fitness, neuropathy and psychosocial barriers to exercise participation.

Dr. Tarleton is also a faculty mentor for the McNair Scholars Program at Loyola Marymount University and a Councilor for the Health Sciences Division of the Council on Undergraduate Research (CUR).

Francisco Villarreal, M.D., Ph.D.
Professor of Medicine
Divisions of Cardiology and Endocrinology, Department of Medicine
University of California, San Diego, La Jolla, CA

Research Interest

A. Diabetes mellitus is the fastest growing pathology in the USA. By 2050 up to 30% of the USA population may suffer from this disease. We have continued to pursue research efforts jointly with Dr. Wolfgang Dillmann, Head of the Department of Medicine at UCSD to examine the effects that diabetes has on cardiac structure/function. Efforts focus on alterations, which arise in both cardiac myocytes and fibroblasts. Several manuscripts have been published on the subject with past awards obtained from the NIH.

B. Our laboratory has identified a unique capacity of cacao flavanols to stimulate mitochondrial biogenesis. Such effects can be evidenced in multiple cell types and tissues. There is also a unique stereoisomer biology for flavanols that appears to correlate with the ability of the compounds to exert various levels of potency via what in principle appear to be cell surface receptors (a novel finding). Such work is being supported by past and current NIH R01 (NIDDK and NCCAM) supported grants.

C. Our laboratory continues to aggressively pursue several projects related to the characterization of the therapeutic potential of cocoa flavanols (in particular epicatechin). Ongoing projects include the use of animal models of exercise performance, diabetes, steroid-induced diabetes, myocardial infarction and muscular dystrophy. Pilot studies were initially performed in patients with type 2 diabetes and heart failure using specially formulated chocolate from Hershey with highly promising results where 3 studies were published. New studies have been implemented in subjects with hypertriglyceridemia with vary favorable results (average drop in triglyceride levels of 75 mg/dL). In collaboration with UCD clinician scientists a recent study was completed in Becker muscular dystrophy patients being treated with epicatechin where very favorable results were observed, several manuscripts are to be submitted soon on the subject.

Biography

Dr. Villarreal is a Professor of Medicine in the Division of Cardiology at the University of California, San Diego (UCSD). He trained as a Medical Doctor in the Universidad Autonoma de Baja California, Mexico and graduated in 1984. He pursued doctoral (Ph.D. in Physiology and Pharmacology, 1989) and postdoctoral studies at UCSD. Major areas of research interest include cardiac pathophysiology and cardioprotection. Over the years Dr. Villarreal has published more than 80 manuscripts in peer review journals. The early focus of this work related to understanding the pathophysiology of cardiac remodeling and fibrosis with an emphasis on cardiac mechanics approaches. Later work focused on pharmacological strategies to protect the heart from ischemic injury. Most recently his work has evolved to examine the cardioprotective effects of the cacao flavanol (-)-epicatechin. A series of pre-clinical and clinical studies has yielded encouraging results leading this area to be the major focus of his current work.

Cynthia Warrick, Ph.D., M.S.
Senior Fellow, Research & Evaluation, Thurgood Marshall College Fund
President /Society for Diversity in the Biomedical Sciences, Houston, TX

Research Interest

Having served as an Administrator (Chair, Dean, President) of Historically Black Colleges and Universities (HBCUs), I have witnessed significant funding cuts in higher education accompanied by a decrease in research involvement by faculty and students. My research interest is currently focused on the development of models and programs to enhance HBCU faculty and students' interest, involvement, and success in research and toward advanced degrees in the biomedical sciences. This work is critical to the success of African American and Hispanic students' exposure and development as future biomedical scientists.

Because of my father's medical history with chronic kidney disease and my work as a pharmacist, I am very interest in developing successful pharmacist intervention models to assist patients with diabetes and hypertension to prevent chronic kidney disease and dialysis. I'm interested in developing a study to look at the spatial relationships between dialysis centers, race and socioeconomic conditions.

Biography

Dr. Cynthia Warrick has 20 years of higher education experience as faculty, researcher, educator, and administrator. A pharmacist by profession and native of San Antonio, Texas, Dr. Warrick received a Bachelor of Science degree in Pharmacy from Howard University; a Master of Science degree in Public Policy from the Georgia Institute of Technology; and the PhD in Environmental Science and Public Policy from George Mason University. Most recently, she served as Interim President of Grambling State University. Prior to that appointment, Dr. Warrick served as Interim President of South Carolina State University, Senior Fellow in the Center for Minority Health Services Research at Howard University, Dean and Tenured Professor of Pharmacy, in the School of Mathematics, Science and Technology at Elizabeth City State University and its Chief Research Officer; Associate Professor and Director of Environmental & Occupational Health at Florida A&M University, and Assistant Professor of Management, Policy & Community Health at the University of Texas Houston Health Science Center.

Dr. Warrick's interest in higher education administration began with her election to the Alamo Community College District Board of Trustees; where she served as vice chair of the Budget & Finance Committee and a member of the Policy & Planning Committee. An expert on Environmental Justice and community-based research, Dr. Warrick has worked with numerous organizations to facilitate mutually beneficial solutions between the community, state and federal agencies, and industry. Her research has been funded by foundations and multiple federal agencies including: NRC, NIH, DOD, EPA, and USGS. Dr. Warrick's expertise has been recognized through her selection to the Board of Scientific Counselors of the CDC National Center for Environmental Health / Agency for Toxic Substances & Disease Registry, and her selection to research review panels for the Agency for Health Research and Quality, the Centers

for Disease Control, the US Department of Education, the Nuclear Regulatory Council and the National Institutes of Health.

Dr. Warrick's collaborative leadership style is focused on student outcomes. She stresses academic excellence and believes that the accomplishments by institutions' graduates determines its status. Dr. Warrick's current academic activities focus on building International academic partnerships for student and faculty research and exchange; and the promotion of diversity in Biomedical Research and Science, Technology, Engineering and Mathematics (STEM).

Studies have encompassed examining the effects of (-)-epicatechin on cardiac ischemic injury, exercise capacity and metabolism/bioenergetics. Studies have been performed in animal models (normal and disease) and in normal subjects and heart failure, type 2 diabetes mellitus patients. Support for this work is provided by USA federal funding agencies (NIH) and private entities. Current responsibilities include research activities, teaching and administrative duties such as coordinating multiple clinical trials.

Bessie Young, M.D.
Professor
Department of Medicine
University of Washington, Seattle, WA

Research Interest

Health disparities continue to be important determinants of adverse health outcomes in the United States. My research interests focus on investigating the epidemiology of racial and ethnic differences in chronic kidney disease incidence and progression and kidney replacement modality selection for end stage renal disease (ESRD). My specific research projects include three main areas: the evaluation of the epidemiology, disease progression, and disease management of chronic kidney disease in systems where equal access to care is available; 2. racial and ethnic barriers to renal transplantation and home dialysis modalities among patients with late stage CKD; and 3. determination of novel risk factors for development of chronic kidney disease and chronic kidney disease progression amongst African Americans. My current research project involves evaluation of novel risk factors for kidney disease and kidney disease-related cardiovascular outcomes amongst enrollees of the Jackson Heart Study. My research program is currently funded through the NIH NIDDK program.

Biography

Dr. Bessie Young is a staff nephrologist at the Seattle VA Puget Sound Health Care System and an Associate Professor at the University of Washington. She completed her Internal Medicine and Nephrology training at the University of Washington and received her MPH in epidemiology at the University of Washington. She also completed a Veterans Affairs Health Services Research and Development Fellowship in General Internal Medicine. She received an American Diabetes Association Career Development Award to study racial and ethnic differences in diabetic kidney disease and a Robert Wood Johnson Harold Amos Faculty Development Award as well. She currently conducts research on racial and ethnic differences in chronic kidney disease, end stage renal disease (ESRD), and transplantation. Prior funding included evaluation and development of new educational tools to increase awareness of transplantation among African Americans with chronic kidney disease who are in the process of choosing modalities for kidney replacement therapy through the Increasing Kidney Awareness Network (IKAN). Currently she is funded to develop a chronic kidney disease working group with the Jackson Heart Study, and will novel risk factors for incident and progression of chronic kidney disease and kidney disease associated risk factors for cardiovascular outcomes amongst Jackson Heart Study participants