

# WELCH CENTER

2022 REPORT



EXCEPTIONAL TEAMS,  
EXCEPTIONAL IMPACT

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## OUR MISSION

Improve population health by conducting rigorous research that integrates clinical medicine with public health expertise

Train the next generation of interdisciplinary researchers and scholars

## OUR RESEARCH

Understand the etiology of chronic disease and disability

Develop and evaluate strategies that promote health and prevent disease

Translate discoveries into clinical practice and health policy

## OUR CORE VALUES

INTEGRITY	DIVERSITY	COLLEGIALITY
EXCELLENCE	INCLUSION	INNOVATION
LEADERSHIP	COLLABORATION	MENTORING
	RESPECT	

# FAST FACTS

## CORE FACULTY

### 2020

**\$37 million in funding for research**

**400+ published articles  
40+ in high impact journals**

### 2021

**\$45 million in funding for research**

**350+ published articles  
30+ in high impact journals**

### 23%

**Underrepresented Minority**

### 37%

**Male**

### 63%

**Female**



Despite the enormous challenges and disruptions related to the COVID-19 pandemic, the Welch Center has flourished. Since its inception in 1989, it remains a vibrant, intellectually stimulating, and extraordinarily productive academic unit bridging the Schools of Medicine and Public Health at Johns Hopkins. The Welch Center has a well-deserved international reputation for its academic rigor, collaborative environment, and interdisciplinary approach to its twin missions of conducting high quality research and educating trainees.

Over the past few years, Welch Core faculty members have:

- Led an impressive portfolio of research across the spectrum of epidemiologic, clinical, and translational research, including several major programs:
  - the Chronic Kidney Disease Prognosis Consortium
  - the Johns Hopkins Center for Health Equity
  - the Resolve to Save Lives initiative to prevent and control hypertension globally
  - the Alacrity Center for Health and Longevity in Mental Illness
  - the Baltimore Metropolitan Diabetes Regional Partnership
- Translated our research into practice through new clinical programs and community-based initiatives
- Pivoted from our primary focus on chronic diseases to conduct research on the co-occurring pandemics of COVID-19 and structural racism
- Maintained our scholarly productivity, publishing over 350 peer-reviewed articles and receiving > \$35 million in research funding in 2020 and again in 2021
- Directed or co-directed ~30 courses, and trained over 100 students each year in the School of Medicine and the Bloomberg School of Public Health
- Produced numerous leaders in academic medicine and public health
- Promoted diversity and inclusion across several dimensions, including race-ethnicity, gender, and scientific disciplines
- Contributed substantively to major NIH-supported, institutional initiatives, including the Institute for Clinical and Translational Research (ICTR), the Patient-Centered Clinical Research Network (PCORnet), and the Trial Innovation Network (TIN).
- Sustained large community-based research programs in the community [ProHealth in West Baltimore and the George W. Comstock Center in Hagerstown]

Notwithstanding our success, we have also experienced great sadness. On December 31, 2021, Dr. Carlton Haywood, Jr, a Core Faculty member of the Welch Center, passed away at the age of 45. Carlton was an expert on health services research related to sickle cell disease, a condition to which he ultimately succumbed.

Looking ahead, I remain optimistic. The Welch Center remains a model interdisciplinary unit at Hopkins with a cadre of highly collegial, extraordinarily productive faculty and amazingly bright, energetic trainees. My goal is to sustain its preeminence.

Lawrence J Appel, MD, MPH

C. David Molina Professor of Medicine with Joint Appointments in Epidemiology,  
International Health and Nursing

Director, Welch Center for Prevention, Epidemiology and Clinical Research

Director, ProHealth Clinical Research Unit

## REMEMBERING

*Carlton Haywood Jr*

**Dr. Carlton Haywood, Jr.**, Core Faculty member of the Welch Center and an Assistant Professor in both the Berman Institute of Bioethics and the Division of Hematology in the School of Medicine, passed away at the age of 45. Carlton conducted empirical bioethics and health services research related to sickle cell disease and was interested in the articulation of African American perspectives of bioethics. Carlton was a true pillar of the Baltimore and Johns Hopkins communities. Carlton will be remembered for his talent, creativity, and selflessness.



*A friend and beloved colleague*

# CENTERS & PROGRAMS

## BRANCATI CENTER

The mission of the **Johns Hopkins Brancati Center for the Advancement of Community Care** is to improve the health of communities by developing, evaluating, and disseminating new models of healthcare that leverage the skills of a diverse range of healthcare providers. Established in 2014 by a philanthropic gift from Walgreens, the Center is endowed in the name and vision of Dr. Fredrick Brancati, a highly regarded clinician, researcher, and mentor who died at the age of 53 from amyotrophic lateral sclerosis (ALS). In partnership with community organizations, the Brancati Center has established programs focused on diabetes prevention, diabetes self-management, smoking cessation, health screening, and a youth pipeline program. Welch Center faculty include **Drs. Jeanne Clark**, Executive Director; **Tanjala Purnell**, Education Director (October 2021-present); **Racquel Greer** (through September 2021); **Nisa Maruthur**, Community Program Implementation Director; and **Maya Venkataramani**, Associate Community Program Implementation Director.



## AMERICAN HEART ASSOCIATION OBESITY CENTER

### Hopkins AHA Obesity Center

#### Time Restricted Feeding



**Dr. Jeanne Clark** is the Director of this American Heart Association funded Center which aims to investigate the effects of time-restricted feeding on obesity and cardiometabolic outcomes by conducting basic, clinical, and population-based research; training a cadre of translational researchers focused on obesity and cardiovascular disease; and participating in the **American Heart Association's Strategically Focused Research Networks Program** with the goal of developing robust new collaborations across already funded Centers, including with the Hopkins Go Red for Women Center. Besides Dr. Clark, Welch Center faculty include **Lawrence Appel**; **Wendy Bennett**, Principal Investigator, Population Project; **Janelle Coughlin**; **Eliseo Guallar**; **Nisa Maruthur**, Principal Investigator, Clinical Research Project; **Edgar R. Miller III**, Education Director; **Di Zhao**; and **Scott Pilla**.

## THE ALACRITY CENTER FOR HEALTH & LONGEVITY IN MENTAL ILLNESS



The **ALACRITY Center for Health and Longevity in Mental Illness at Johns Hopkins** is funded as part of the National Institute of Mental Health Advanced Laboratories for Accelerating the Reach and Impact of Treatments for Youth and Adults with Mental Illness (ALACRITY) P50 Centers Program. This Center uses cutting-edge transdisciplinary methods to advance short- and long-term strategies to reduce premature mortality in the population with serious mental illness. People with serious mental illness currently die 10-20 years earlier than the overall population. Early death in people with serious mental illness is driven by high rates of cardiovascular disease and other physical health conditions. Interventions shown to improve physical health among people with serious mental illness in clinical trials have not been widely adopted in community mental health programs. Through research, training, and community partnerships, the Johns Hopkins ALACRITY Center seeks to speed translation of effective interventions to improve physical health and reduce premature mortality among people with serious mental illness into everyday practice. **Dr. Gail Daumit** is the center's Director. Welch Center faculty involved include **Drs. Lawrence Appel, Tammy Brady, Lisa Cooper, Kimberly Gudzone, Nae-Yuh Wang, Arlene Dalcin, Scott Zeger, Daniel Ford, Edgar R. Miller III, Rosa Crum, and Jeanne Charleston.**

## THE PROHEALTH CLINICAL RESEARCH UNIT



This 15,000 square foot facility that has been the site for several landmark studies including Dietary Approaches to Stop Hypertension (DASH), the Diabetes Prevention Program (DPP), the African-American Study of Hypertension and Kidney Disease (AASK), and so many more. **Dr. Lawrence Appel** serves as Director.

## THE GEORGE W. COMSTOCK CENTER FOR PUBLIC HEALTH RESEARCH AND PREVENTION



This facility houses research staff focused on the prevention of disease, particularly heart disease, cancer, and stroke, and also serves as a resource for the Washington County Health Department in the areas of public health surveillance and assessment. The **Comstock Center** is involved in several multi-site epidemiologic studies including the Atherosclerosis Risk in the Community (ARIC). **Dr. Josef Coresh** serves as the center's Director.

# HEALTH EQUITY AT JOHNS HOPKINS

## CENTER FOR HEALTH EQUITY

The **Johns Hopkins Center for Health Equity** was established in 2010 with a program project grant from the National Heart, Lung and Blood Institute. The Center promotes equity in health and healthcare for socially at-risk populations through advancing scientific knowledge, educating and training scholars, engaging and partnering with communities, raising public awareness of health inequities, and advocating for changes in clinical practice and policy. **Dr. Lisa Cooper**, Director, leads the Center which includes approximately 46 faculty (18 from the Welch Center) and 25 staff. **Dr. Deidra Crews** serves as the Deputy Director.

## URBAN HEALTH INSTITUTE

The **Urban Health Institute (UHI)** serves as a bridge between Johns Hopkins and the Baltimore community. Together with its community partners, the UHI explores ways that the research, teaching, and clinical expertise of the University can be better harnessed for the benefit of the residents of Baltimore. UHI's overarching goal is to advance health and equity in Baltimore through various collaborations, mobilization of resources, and enhancement of overall understanding through greater dialogue. **Dr. Lisa Cooper** serves as the Director of UHI.

## MID-ATLANTIC CENTER FOR CARDIOMETABOLIC HEALTH EQUITY

**Drs. Lisa Cooper and Deidra Crews** lead the **Mid-Atlantic Center for Cardiometabolic Health Equity (MACCHE)** which is a National Institutes of Health-funded center for addressing hypertension, obesity, diabetes, heart failure and kidney disease. MACCHE is a product of a Health Equity Action Network partnership between the Johns Hopkins Center for Health Equity, the University of Maryland Baltimore, and Morgan State University. The goal of MACCHE is to test the effectiveness of comprehensive, integrated, and multi-level evidence-based strategies on improving cardiometabolic health outcomes among socially disadvantaged populations in Maryland by using community-based participatory research and patient-centered outcomes research principles, and ultimately translating them into clinical and public health practice and policy.



## FIVE PLUS NUTS AND BEANS FOR KIDNEYS



Black Americans are disproportionately affected by hypertension and kidney disease. Potential reasons for these disparities include poor access to healthy foods and knowledge gaps about healthy eating. In this trial, 150 Black adults with hypertension and chronic kidney disease were randomized to a Self-Shopping Dietary Approaches to Stop Hypertension (S-DASH) diet with a \$30/week grocery allowance for 4 months but no guidance on purchases, followed by no grocery allowance for 8 months or to a Coaching (C-DASH) diet advice group with a \$30/week food allowance and assistance in purchasing high potassium foods for 4 months, followed by coaching without food allowance for 8 months. Partners included Klein's ShopRite stores of Maryland (local grocer) and a Community Advisory Board inclusive of people with kidney disease. Results from this study should inform efforts to change health and social policies. The study is funded by the National Institute for Minority Health and Health Disparities; **Drs. Deidra C. Crews** and **Edgar R. Miller III** are the Co-Principal Investigators. Additional Welch Core and Associate Faculty involved in the study are **Lawrence Appel, Jeanne Charleston, Lisa A. Cooper, Jessica Yeh, Arlene Dalcin, Kathryn A. Carson, Bernard Jaar, and Casey Rebholz.**

## HEALTHY FOR TWO



This pragmatic randomized trial tests the effects of a behavioral intervention to promote weight loss, integrated into prenatal care practices in Baltimore. The intervention will also be implemented into early home visiting programs that serve vulnerable families through the Mid-Atlantic Center for Cardiometabolic Health Equity grant, using a Hybrid 1 Effectiveness-Implementation trial. The intervention focuses on high-risk Black and Latinx women. Welch Center investigators include **Drs. Wendy Bennett, Principal Investigator, Lawrence Appel and Janelle W. Coughlin.**

## ASPIRE



A behavioral weight loss study to design, implement, and evaluate a real-world, lifestyle-based, support for cancer survivors with overweight or obesity in both urban and rural areas of Maryland. Participants are required to have regular access to electronic mail, a smartphone or internet for personal use. Aspire allows participants to select their preferred weight loss program. Program options include self-directed weight loss or coach-directed weight loss. The intervention is aimed at encouraging a lifestyle change to achieve and maintain a healthy weight for cancer survivors. Welch Center investigators include **Drs. Jessica Yeh, Lawrence Appel, Nae-Yuh Wang, Jeanne Charleston and Arlene Dalcin.**



## RESOLVE TO SAVE LIVES

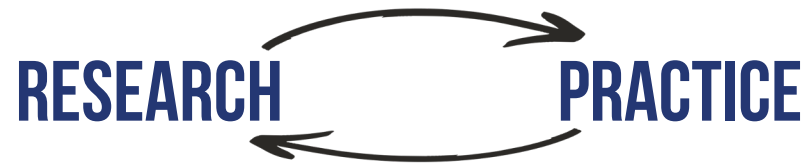
**Resolve to Save Lives** is a major global initiative to prevent cardiovascular disease in low- and middle-income countries. This 10-year project (2017-2026), with a goal of saving 100 million lives, is sponsored by Bloomberg Philanthropies, the Bill & Melinda Gates Foundation and Gates Philanthropy Partners, which is funded with support from the Chan Zuckerberg Foundation. Tom Frieden is the Chief Executive Officer of this initiative. A team of scientists based in the Welch Center provide guidance on scientific and technical matters, training program evaluation, and capacity building for two components of this initiative: sodium reduction and hypertension control. Participating Welch Center faculty include **Drs. Lawrence Appel, Director; Kunihiro Matsushita, Co-Director; Tammy Brady, Edgar R. Miller III, Junichi Ishigami, Megan Henry, Dinesh Neupane, Di Zhao, Jeanne Charleston, Matti Marklund, and Yvonne Commodore-Mensah.**

## KANGBUK SAMSUNG HEALTH STUDY

The **Kangbuk Samsung Health Study** is a longitudinal cohort study of Korean men and women 18 years of age or older who underwent comprehensive annual or biennial screening health examinations at the two Kangbuk Samsung Hospital Health Screening Centers in Seoul and Suwon, South Korea. The objective of the study is to examine the associations of novel risk factors with disease outcomes (e.g., cardiovascular disease and increased intraocular pressure) in a large sample of Korean adults. **Drs. Eliseo Guallar** is the local Principal Investigator and **Di Zhao** is a Co-Investigator.

## CHRONIC KIDNEY DISEASE PROGNOSIS CONSORTIUM

The **Chronic Kidney Disease Prognosis Consortium** is a research group composed of investigators representing >100 cohorts with >30 million participants from around the world. Its mission is to compile the best available data and conduct sophisticated meta-analyses to inform chronic kidney disease clinical guidelines and improve chronic kidney disease clinical practice and research. **Drs. Joe Coresh and Morgan Grams** are Co-Principal Investigators; **Kunihiro Matsushita** is the Director of the Data Coordinating Center; **Shoshana Ballew** serves as the Assistant Program Director; and **Yingying Sang** serves as an Analyst.



## WELCH CENTER LAUNCHED EVIDENCE-BASED CLINICAL PROGRAMS BASED ON THEIR RESEARCH

### OBESITY HYPERTENSION CLINIC: REVERSING THE NEGATIVE CARDIOVASCULAR EFFECTS OF WEIGHT

The **Reversing the Negative Cardiovascular Effects of Weight (ReNEW) Clinic** is a multidisciplinary pediatric obesity hypertension clinic spearheaded by **Dr. Tammy Brady**. With the help of a diverse team of medical professionals of varied disciplines, the clinic assesses the progress of patients with obesity-related hypertension as well as screen for respective co-morbidities. Consecutive patients are enrolled in a patient registry that serves as a rich longitudinal database for clinical research.



### HEALTHFUL EATING, ACTIVITY & WEIGHT PROGRAM

The **Johns Hopkins Healthful Eating, Activity & Weight Program** focuses on working with patients to make long-term changes to improve their health by preventing or managing chronic disease. We combine scientifically proven strategies with a compassionate

and supportive approach to deliver high-quality care for women and men. Our program uses a variety of evidence-based tools to help achieve these goals including group and one-on-one counseling to promote a healthful lifestyle; meal replacements; and evaluation for bariatric procedures including surgery. Medication management, including the prescription of anti-obesity or other medications, may also be a part of the treatment plan. Patients have the opportunity to work with a team of specialty physicians and other staff. The Director of this program is **Dr. Kimberly Gudzone**.

### BALTIMORE METROPOLITAN DIABETES REGIONAL PARTNERSHIP

The **Baltimore Metropolitan Diabetes Regional Partnership (BMDRP)** is a joint venture of Johns Hopkins Health System and the University of Maryland Medical Center to address diabetes prevention and management in Baltimore City. The target population is comprised of residents in 17 zipcodes within Baltimore City who receive the Centers for Disease Control and Prevention-approved National Diabetes Prevention Program (DPP) based on their risk factors for incident diabetes and the challenges they face due to social determinants of health. In addition to DPP, the BMDRP implements American Diabetes Association approved diabetes self-management training (DSMT) activities in a total of 37 zip codes representing partner hospital service areas in Baltimore City, Howard County, and Montgomery County. DSMT services will address the disproportionate diabetes burden among racial/ethnic minorities in each of these geographic regions, including higher diabetes prevalence, ED visits, and mortality rates due to diabetes.

## HOW WOULD YOU DESCRIBE THE WELCH CENTER?\*

collaborative  
 erudite  
 invested  
 transdisciplinary  
 people  
 collaborative  
 friendly  
 community  
 flagship of clinical  
 collegial  
 research  
 opera of knowledge  
 passionate

\*descriptions from trainees and faculty

# TRAINING & EDUCATION

The Welch Center serves as a home to a broad spectrum of trainees, including high school and undergraduate students, masters' and doctoral degree candidates, medical students, post-doctoral fellows, and junior faculty. Our training exposes trainees to rigorous, interdisciplinary research and allows them to develop skills needed to design and conduct their own studies. Our graduates hold faculty positions at prestigious institutions, government agencies, non-government organizations, and with industry.

No matter their career goals, we instill in our trainees a highly collaborative, interdisciplinary, and intensive work ethic, preparing them for future success.

Welch Center faculty serve as leaders on six training grants funded by the National Institutes of Health. Through various training grants, Welch Center faculty identify and invest in new talent by providing them with the guidance, mentorship, and resources to succeed:

- Johns Hopkins Clinical Research Scholars Program (KL2)
- Predoctoral Clinical Research (TL1)
- Clinical and Cardiovascular Disease Epidemiology (T32)
- Renal Disease Epidemiology (T32)
- Clinical Research and Epidemiology in Diabetes and Endocrinology (T32)
- Behavioral Aspects of Heart and Vascular Diseases (T32)

In the School of Medicine, our faculty direct several courses for medical students, including: Scholarly Concentration, Clinical Epidemiology, Introduction to Clinical Research, Nutrition TIME course, Renal Pathophysiology, Healthcare Disparities and



Cultural Competency, and Health Care Disparities - Horizontal Strand.

In the Bloomberg School of Public Health, Welch Center faculty direct three academic concentrations: Clinical and Cardiovascular Disease Epidemiology, Environmental Epidemiology, and Epidemiological and Biostatistical Methods for Public Health and Clinical Research. Moreover, faculty direct or co-direct more than 15 courses.

The Welch Center also host eight seminars, journal clubs, and interest groups. Through these interactions, faculty and trainees present and discuss emerging scientific findings and brainstorm new research opportunities:

- Clinical Epidemiology Research in Progress
- Cardiovascular Disease and Clinical Epidemiology Journal Club
- Welch Center Clinical Research Grand Rounds
- Diabetes and Obesity Interest Group
- Health Equity Research Jam Sessions
- Renal Disease Interest Group
- Methods and Ideas in Cardiovascular Epidemiology Interest Group
- Nutrition and Non-Communicable Diseases Interest Group



## JHU Welch Center @JHUWelchCenter #WelchWOW Trainees!



**Frances Wang**

Incredible - the Welch Center is a unique place to grow and learn, from peers to faculty and to staff, with world-class resources to produce science and become stronger scientists. It's rare to be in a place with so many talented, passionate, and successful yet humble people - chat with people in the halls, in journal club, and any chance you get.



**Deidra Crews**

My Welch Center training afforded me the opportunity to gain foundational skills in epidemiology, biostatistics and clinical trials in a tremendously supportive and collegial environment—the real 'magic' of the Welch Center. Much of my skill-building occurred due to peer-to-peer mentorship, as we were all learning together. One of my fondest memories during my time as a trainee was doing a '**submission** dance' each time one of us submitted a manuscript!



**Josef Coresh**

I came to the Welch Center as a kid and stayed. Mentors at the Welch Center gave me the guidance, support and friendships to enjoy doing cool science.



**Mingyu Zhang**

My experience as a trainee at the Welch Center was beyond wonderful. I worked with mentors and faculty members who were extremely knowledgeable and deeply rooted in my success; colleagues who were intelligent, collaborative, and fun to work with; and staff members who were kind, supportive, and always trying to create a better environment in the Welch Center.





# LEADERSHIP INCUBATOR

## DEANS

**Paul Whelton**  
(Tulane University School of Public Health)

**Linda Fried\***  
(Columbia University School of Public Health)

**Michael Klag**  
(Johns Hopkins Bloomberg School of Public Health)

**Cheryl Anderson\***  
(University of California San Diego School of Public Health)

**Ebony Boulware\***  
(Wake Forest University School of Medicine)

## LEADERSHIP BEYOND HOPKINS

**Neil Powe\***  
(Vice-Chair of Medicine at University of California San Francisco)

**Sue Furth\***  
(Chief Scientific Officer and Executive Vice President at Children's Hospital of Philadelphia)

**Tariq Shafi\***  
(Director, Adult Nephrology at University of Mississippi)

**Rebecca Gottesman\***  
(Chief of Stroke Branch, National Institute of Neurological Disorders and Stroke)

**Felicia Hill-Briggs\***  
(Vice President for Prevention at Northwell Health)

**Rulan Parekh\***  
(Vice President Academics, Division Director, Adult Nephrology, Women's College Hospital)

**Jiang He\***  
(Joseph S. Copes Chair and Professor of Epidemiology & Director of Tulane University Translational Science Institute)

## LEADERSHIP AT HOPKINS

**Michael Klag**  
**Daniel Ford**  
**Gail Daumit\***  
(Vice Deans for Clinical Investigation)

**Sherita H. Golden\***  
(Vice President & Chief Diversity Officer of Medicine)

**Lisa Cooper\***  
(Director of Urban Health Institute)

**Tammy Brady\***  
(Vice Chair for Clinical Research, Pediatrics)

**Deidra C. Crews**  
(Associate Vice-Chair for Diversity and Inclusion)

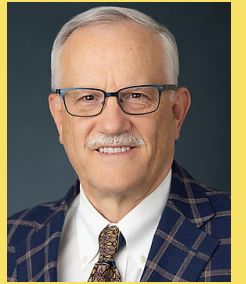
**Fred Brancati**  
**Jeanne Clark\***  
(Director, General Internal Medicine)

*\*Currently Holds Position*

# WELCH CENTER LEADERSHIP

**Lawrence J. Appel, MD, MPH**  
Director, Welch Center  
C. David Molina Professor of Medicine  
Director, ProHealth Clinical Research Unit

**Research Interests:** prevention and control of elevated blood pressure and its cardiovascular and kidney disease consequences; lifestyle modification and behavior change



**Tammy Brady, MD, PhD**  
Associate Director (2022-present), Welch Center  
Vice Chair for Clinical Research, Department of Pediatrics  
Associate Professor of Pediatrics, Division of Pediatric Nephrology

**Research Interests:** pediatric hypertension, cardiovascular disease, chronic kidney disease in children, obesity, blood pressure measurement



**Kimberly Gudzone, MD, MPH**  
Associate Director (2021-2022), Welch Center  
Associate Professor of Medicine

**Research Interests:** influence of obesity on the healthcare experience; lifestyle modification and health behavior among populations at risk for cardiovascular disease and obesity; translation of behavioral interventions into clinical practice and community settings



**Hsin-Chieh "Jessica" Yeh, PhD**  
Associate Director (2016-2020), Welch Center  
Associate Professor of Medicine

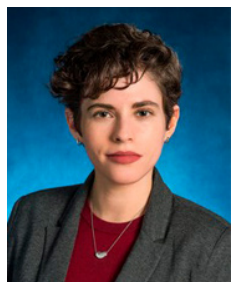
**Research Interests:** clinical trials of lifestyle intervention; epidemiology of obesity and diabetes, and their relationship with cancer



# WELCH CENTER CORE FACULTY

**Shoshana H. Ballew, PhD**  
Associate Scientist, Department of Epidemiology

**Research Interests:** chronic kidney disease, cardiovascular disease, aging



**Mary Catherine Beach, MD, MPH**  
Professor of Medicine  
Core Faculty, Berman Institute of Bioethics  
Core Faculty, Center for Health Equity

**Research Interests:** health care equity for underserved populations; patient-clinician communication; sickle-cell disease; HIV and substance abuse; bioethics; respect





**Wendy Bennett, MD, MPH**

Associate Professor of Medicine  
Director of Research, Johns Hopkins Community Physicians  
Co-Director, The Johns Hopkins Center for Women’s Health, Sex & Gender Research  
**Research Interests:** lifestyle and health behavior change in pregnancy to promote healthy weight gain, and prevent adverse pregnancy outcomes and future chronic disease



**Kathryn A. Carson, ScM**

Senior Research Associate, Department of Epidemiology  
Associate Director, Methods & Shared Resources Center for Health Equity  
**Research Interests:** design and analysis of clinical trials; disparities research; cardiovascular disease and hypertension



**Jeanne M. Clark, MD, MPH**

“Frederick L. Brancati, MD” Professor of Medicine  
Director, Division of General Internal Medicine  
Executive Director, Johns Hopkins Brancati Center for the Advancement of Community Care  
**Research Interests:** obesity; diabetes mellitus; nonalcoholic fatty liver disease



**Lisa A. Cooper, MD, MPH**

Professor of Medicine  
James F. Fries Professor of Medicine  
Bloomberg Distinguished Professor, Equity in Health & Healthcare  
Director, Johns Hopkins Center for Health Equity  
**Research Interests:** patient-centered, community-engaged interventions to reduce health disparities and improve health outcomes among socially disadvantaged populations



**Josef Coresh, MD, MPH**

Professor of Epidemiology  
George W. Comstock Professor  
Director, George W. Comstock Center for Public Health Research & Prevention  
**Research Interests:** vascular disease in the heart, brain and kidney using cohort studies to understand risk factors and biomarkers that can guide prevention of cardiovascular disease and kidney disease



**Deidra C. Crews, MD, ScM**

Professor of Medicine  
Deputy Director, Johns Hopkins Center for Health Equity  
**Research Interests:** kidney disease; hypertension; health equity; social determinants of health; nutrition; older adults

**Rosa Crum, MD, MHS**

Professor of Epidemiology and Medicine  
Associate Director, Johns Hopkins Clinical Research Scholars Program  
**Research Interests:** psychiatric disorders; mental illness; alcohol and substance use disorders



**Gail L. Daumit, MD, MHS**

Samsung Professor of Medicine  
Vice Dean, Clinical Investigation  
Director, Johns Hopkins ALACRITY Center for Health & Longevity in Mental Illness  
**Research Interests:** cardiovascular disease risk and premature mortality in persons with mental illness; lifestyle and health behavior interventions, health services research, implementation science, patient safety



**Daniel Ford, MD, MPH**

David M. Levine Professor of Medicine  
Director, Johns Hopkins Institute for Clinical & Translational Research  
**Research Interests:** pragmatic clinical trials; clinical research informatics; smoking cessation; improving efficiency and quality of clinical trials



**Sherita H. Golden, MD, MHS**

Professor of Medicine  
Hugh P. McCormick Family Professor of Endocrinology & Metabolism  
Vice President and Chief Diversity Office, Johns Hopkins Medicine  
**Research Interests:** diabetes mellitus; cardiovascular disease and endocrine epidemiology; inpatient diabetes health services research; mental health complications of diabetes; health disparities



**Rebecca F. Gottesman, MD, PhD**

Professor of Neurology  
*[current position: Stroke Branch Chief, National Institute of Neurological Disorders and Stroke Intramural Research Program]*  
**Research Interests:** vascular contributions to cognitive impairment and dementia; cognitive consequences of stroke; cognitive deficits in congestive heart failure and other cardiac diseases



**Morgan Grams, MD, PhD**

Professor of Medicine  
*[current position: Susan and Morris Mark Professor of Medicine & Co-Director, Division of Precision Medicine, New York University]*  
**Research Interests:** kidney disease; integrative omics; precision pathology; pharmacoepidemiology risk; risk estimation





**Racquel C. Greer, MD, MHS**

Associate Professor of Medicine

[current position: Program Director, Division of Kidney, Urologic & Hematologic Diseases, NIDDK] Education Director, Johns Hopkins Brancati Center for the Advancement of Community Care

**Research Interests:** health care quality and health equity among persons with chronic kidney disease and chronic kidney disease risk factors, including hypertension and diabetes; patient-physician communication; care coordination



**Eliseo Guallar, MD, DrPH**

Professor of Epidemiology

Director, Environmental Epidemiology Track

Co-Director, PhD Program in Epidemiology

Adjunct Professor, Department of Clinical Research Design & Evaluation, Samsung Advanced Institute for Health Sciences & Technology (SAIHST), Sungkyunkwan University

Deputy Editor, Statistics, Annals of Internal Medicine

**Research Interests:** cardiovascular disease and chronic disease epidemiology; environmental risk factors for chronic diseases; nutritional epidemiology



**Felicia Hill-Briggs, PhD**

Professor of Medicine

[current position: Vice President, Prevention, and Simons Distinguished Chair in Clinical Research, Northwell Health]

Senior Director, Population Health Research & Development, Johns Hopkins HealthCare

**Research Interests:** prevention and self-management of diabetes, cardiovascular disease, chronic kidney disease; health equity; population health improvement and management; global health



**Junichi Ishigami, MD**

Assistant Scientist, Department of Epidemiology

**Research Interests:** chronic kidney disease; cardiovascular disease; cardiorenal syndrome; infectious disease; vaccination



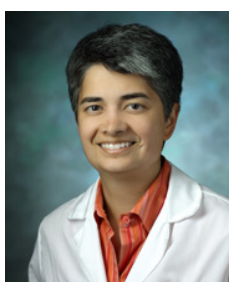
**Michael J. Klag, MD, MPH**

Dean Emeritus, Johns Hopkins Bloomberg School of Public Health

Second Century Distinguished Professor

Professor of Epidemiology

**Research Interests:** hypertension; renal failure; precursors study; kidney disease; cardiovascular; epidemiology; genetic markers; health policy and management



**Nisa M. Maruthur, MD, MHS**

Associate Professor of Medicine

Director, General Internal Medicine Fellowship Program

Director of Community Program Implementation, Johns Hopkins Brancati Center for the Advancement of Community Care

**Research Interests:** diabetes prevention; type 2 diabetes; obesity; clinical trials

**Kunihiro Matsushita, MD, PhD**

Professor of Epidemiology

**Research Interests:** peripheral vascular disease, cardiovascular disease, kidney disease, hypertension, obesity and diabetes



**Edgar R. Miller III, MD, PhD**

Professor of Medicine

Deputy Director, Johns Hopkins Institute for Clinical & Translational Science

Director, Clinical Research Scholars Program (KL-2)

**Research Interests:** hypertension; kidney disease; nutrition



**Noel Mueller, PhD**

Associate Professor of Epidemiology

**Research Interests:** microbiome, nutrition, life-course and environmental epidemiology; pregnancy outcomes; placenta; prevention of obesity, non-alcoholic fatty liver disease, diabetes mellitus, hypertension and cardiovascular disease



**Scott J. Pilla, MD, MHS**

Assistant Professor of Medicine

**Research Interests:** diabetes; hypoglycemia prevention; patient-physician communication; clinical trials



**Craig Pollack, MD, MHS**

Katey Ayers Endowed Professor of Health Policy & Management

Associate Chair, Department of Health Policy & Management

**Research Interests:** social determinants of health with a focus on housing policy and neighborhood context; cancer health services research



**Tanjala S. Purnell, PhD, MPH**

Assistant Professor of Epidemiology

Director, Community & Stakeholder Engagement for the Epidemiology Research Group in Organ Transplantation

**Research Interests:** epidemiology and health services research related to kidney disease transplantation; health equity; cardiovascular disease; hypertension; obesity; and diabetes





**Casey Rebholz, PhD, MS, MNSP, MPH**

Associate Professor of Epidemiology

**Research Interests:** cardiovascular disease and hypertension; kidney disease biomarkers; omics; nutrition



**Elizabeth Selvin, PhD, MPH**

Professor of Epidemiology

Director, Cardiovascular & Clinical Epidemiology Track

**Research Interests:** type 2 diabetes and cardiovascular disease; diagnostics and biomarkers for screening and diagnosis of diabetes and cardiovascular disease; optimizing approaches to screening and management of prediabetes; interface of epidemiology and clinical and public health policy; wearable devices; continuous glucose monitoring



**Jung-Im Shin, MD, PhD**

Assistant Professor of Epidemiology

**Research Interests:** pharmacoepidemiology; diabetes mellitus; chronic kidney disease; health disparities; cardiovascular disease



**Eva Tseng, MD, MPH**

Assistant Professor of Medicine

**Research Interests:** prevention and treatment of diabetes, obesity, and related conditions; translation of evidence-based care into clinical practice through pragmatic intervention studies

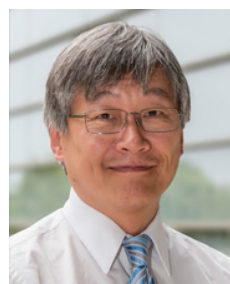


**Maya Venkataramani, MD, MPH**

Assistant Professor of Medicine

Associate Director, Community Program Implementation, Johns Hopkins Brancati Center for the Advancement of Community Care

**Research Interests:** improving the delivery of primary care and preventive services to underserved and low-income communities through family-oriented, community-based approaches and studying the impacts of health-related policies across generations



**Nae-Yuh Wang, PhD, MS**

Associate Professor of Medicine

Director, Childhood Development After Cochlear Implantation Study Data Coordinating Center

**Research Interests:** childhood development after pediatric cochlear implantation; improving health in people with mental illness; preventing postoperative delirium in surgical patients; evaluation of vestibular implantation for Bilateral Vestibular Hypofunction; lifestyle and health behavior interventions for proper body weight in pregnancy and among cancer survivors



Hanan J. Aboumatar, MD, MPH

Michael J. Blaha, MD, MPH

Todd T. Brown, MD, MPH

Jeanne Charleston, PhD

Teresa K. Chen, MD, MHS

Yvonne Commodore-Mensah, PhD, MHS, RN

Janelle W. Coughlin, PhD

Arlene T. Dalcin, MS, RDN, LD

Jennifer A. Deal, MHS, PhD

Jennifer L. Dodson, MD

Justin B. Echouffo Tcheugui, MD, MPhil, PhD

Jeffrey J. Fadrowski, MD, MHS

Michael Fang, PhD

Joseph Gallo, MD

Allan C. Gelber, MD, MPH, PhD

John Groopman, PhD

Alden L. Gross, PhD

Marc K. Halushka, MD, PhD

Megan Henry, PhD

Caitlin Hicks, MD, MS

Daniel Hindman, MD, MPH

Chidinma A. Ibe, PhD

Bernard G. Jaar, MD

Michelle C. Johansen, MD

Rita R. Kalyani, MD, MHS

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Yingying Sang, MS

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A. Richey Sharrett, MD

Alfred Sommer, MD, MHS

Aditya L. Surapaneni, PhD

Stephen Sozio, MD, MHS

Moyses Szklo MD, MPH

Rachel J. Thornton, MD, PhD

Keenan A. Walker, PhD

Mark Woodward, PhD

Jeffery Hunter Young, MD, MHS

Scott L Zeger, PhD

Di Zhao, PhD

# IMPACTFUL SCIENCE

Welch Center faculty are extraordinarily productive. Below is a sample of some our most impactful publications, drawn from over 700 papers published in 2020 and 2021. For each paper, we only indicate Welch Center co-authors and identify lead and senior Welch Center co-authors with an asterisk (\*).

Global, Regional, and National Burden of Chronic Kidney Diseases, 1990-2017: A Systematic Analysis for the Global Burden of Disease Study 2017 || *The Lancet*  
Shoshana H. Ballew, Josef Coresh PMID: 32061315

New Creatine- and Cystation C-based equations to Estimate GGFR without Race  
*New England Journal of Medicine*  
Josef Coresh, Deidra C. Crews, Morgan E. Grams, Elizabeth Selvin PMID: 34554658

Heart Disease and Stroke Statistics - 2020 Update: A Report From the American Heart Association  
*Circulation*  
Kunihiro Matsushita PMID: 31992061

Prospective Study of Outcomes in Adults with Nonalcoholic Fatty Liver Disease  
*New England Journal of Medicine*  
Jeanne Clark PMID: 34670043

COVID-19 and Health Equity - A New Kind of "Herd Immunity"  
*Journal of the American Medical Association*  
Lisa Cooper\* PMID: 32391852

Trends in Diabetes Treatment and Control in U.S. Adults, 1999-2018  
*New England Journal of Medicine*  
Michael Fang\*, Josef Coresh, Elizabeth Selvin\* PMID: 34107181

Effect of a Comprehensive Cardiovascular Risk Reduction Intervention in Persons with Serious Mental Illness: A Randomized Clinical Trial || *JAMA Network Open*  
Gail L. Daumit\*, Arlene T. Dalcin, Edgar R. Miller III, Jeanne B. Charleston, Rosa M. Crum, Lawrence J. Appel, Nae-Yuh Wang\* PMID: 32530472

Temporal Trends in Stroke Thrombolysis in the US by Race and Ethnicity, 2009-2018  
*Journal of the American Medical Association*  
Nae-Yuh Wang, Rebecca F. Gottesman PMID: 34633406

Trends in Obesity Prevalence Among Adults Aged 18 through 25 Years, 1976-2018  
*Journal of the American Medical Association*  
Kimberly Gudzone\* PMID: 34812876

Vadadustat in Patients with Anemia and Non-Dialysis-Dependent CKD  
*New England Journal of Medicine*  
Kunihiro Matsushita PMID: 33913637

Effects of the Dietary Approaches to Stop Hypertension Diet and Sodium Reduction on Blood Pressure in Persons with Diabetes || *Hypertension*  
Eva Tseng\*, Lawrence J. Appel, Jessica Yeh, Scott J. Pilla, Edgar R. Miller, III, Nisa M. Maruthur\* PMID: 33342238

Undocumented U.S. Immigrants and COVID-19  
*New England Journal of Medicine*  
Maya Venkataramani PMID: 32220207

Metformin Affects Gut Microbiome Composition and Function and Circulating Short-Chain Fatty Acids: A Randomized Trial || *Diabetes Care*  
Noel T. Mueller\*, Nisa M. Maruthur, Edgar R. Miller, III, Lawrence J. Appel, Jessica Yeh\* PMID: 34006565

Intensive Weight Loss Intervention and Cancer Risk in Adults with Type 2 Diabetes: Analysis of the Look AHEAD Randomized Clinical Trial || *Obesity*  
Jessica Yeh\*, Jeanne M. Clark PMID: 32841523

Higher Ultra-Processed Food Consumption is Associated with Increased Risk of Incident Coronary Artery Disease in the Atherosclerosis Risk in Communities Study || *Journal of Nutrition*  
Hyunju Kim, Casey M. Rebholz\* PMID: 34494108

2021 Dietary Guidance to Improve Cardiovascular Health: A Scientific Statement From the American Heart Association || *Circulation*  
Lawrence J. Appel\*, Casey M. Rebholz PMID: 34724806

# PANDEMIC RESPONSE: COVID & RACISM

In 2020, the Welch Center faculty pivoted to address the COVID pandemic, which exacerbated longstanding health disparities that plague our community and country. Below is a sample of publications on these topics, both original research and opinion pieces. For each paper, we only indicate Welch Center co-authors and identify lead and senior Welch Center co-authors with an asterisk (\*).

**The Relationship of COVID-19 Severity with Cardiovascular Disease and its Traditional Risk Factors: A Systematic Review and Meta-Analysis** || *Global Heart*  
Kunihiro Matsushita\*, Junichi Ishigami, Lawrence J. Appel\* PMID: 33150129

**The Riyadh Declaration: The Role of Digital Health in Fighting Pandemics**  
*The Lancet*  
Michael Klag PMID: 32976771

**ACE2 (Angiotensin-Converting Enzyme 2), COVID-19, and ACE Inhibitor and Ang II (Angiotensin II) Receptor Blocker Use During the Pandemic: The Pediatric Perspective**  
*Hypertension*  
Tammy Brady PMID: 32367746

**Excess Deaths from COVID-19, Community Bereavement, and Restorative Justice for Communities of Color** || *Journal of the American Medical Association*  
Lisa Cooper\* PMID: 33044518

**COVID-19, Racism, and Racial Disparities in Kidney Disease: Galvanizing the Kidney Community Response** || *Journal of the American Society of Nephrology*  
Deidra C. Crews\*, Tanjala S. Purnell\* PMID: 32660968

**The Contribution of Structural Racism to Metabolic Health Disparities in the USA**  
*The Lancet Diabetes and Endocrinology*  
Sherita H. Golden\* PMID: 34216542

**Systemic Kidney Transplant Inequities for Black Individuals: Examining the Contribution of Racialized Kidney Function Estimating Equations** || *JAMA Network Open*  
Tanjala S. Purnell PMID: 33443577

**At the Heart of the Matter: Unmasking and Addressing the Toll of COVID-19 on Diverse Populations** || *Circulation*  
Lisa Cooper PMID: 32364762

**Association Between Housing Insecurity, Psychological Distress, and Self-Rated Health Among US Adults During the COVID-19 Pandemic** || *JAMA Network Open*  
Craig E. Pollack\* PMID: 34591109

**Messages to Increase COVID-19 Knowledge in Communities of Color: What Matters Most?**  
*Annals of Internal Medicine*  
Lisa Cooper\* PMID: 33347319

**Variation in State-Level Eviction Moratorium Protections and Mental Health Among US Adults During the COVID-19 Pandemic** || *JAMA Network Open*  
Craig E. Pollack PMID: 34919134

**Reversing the Tide of Racial and Ethnic Disparities in Excess Deaths During the COVID-19 Pandemic** || *Annals of Internal Medicine*  
Yvonne Commodore-Mensah\*, Lisa A. Cooper\* PMID: 34606318

**The Importance of Offering Vaccine Choice in the Fight Against COVID-19**  
*Proceedings of the National Academy of Sciences of the United States of America*  
Sherita H. Golden PMID: 34670839

**Associations Between Governor Political Affiliation and COVID-19 Cases, Deaths, and Testing in the U.S.** || *American Journal of Preventive Medicine*  
Noel T. Mueller PMID: 33775513

**To Solve Racial and Ethnic Disparities in COVID-19 Outcomes, Look Upstream for Solutions**  
*Circulation*  
Yvonne Commodore-Mensah\*, Deidra C. Crews\* PMID: 34125561

**Approaching the COVID-19 Pandemic in Response with a Health Equity Lens: A Framework for Academic Health Systems** || *Academic Medicine*  
Sherita H. Golden\*, Felicia Hill-Briggs\* PMID: 34705750

**The Role of Masks in Mitigating the SARS-CoV-2 Pandemic: Another Piece of the Puzzle**  
*Annals of Internal Medicine*  
Eliseo Guallar\* PMID: 33205993

# KUDOS

**Lawrence Appel**

Web of Science Most Highly Cited Researchers  
Acknowledgement for Excellence in Teaching at the  
Johns Hopkins Bloomberg School of Public Health

**Mary Catherine Beach**

Elected Fellow in the Hastings Center for Bioethics

**Tammy Brady**

Appointed Vice Chair for Clinical Research in the  
Department of Pediatrics at Johns Hopkins  
Scholarly Concentration Excellence in Mentoring Award

**Lisa Cooper**

Appointed Director of Johns Hopkins Urban Health  
Institute  
Appointed by the President of the United States  
to serve on the President's Council of Advisors on  
Science and Technology (PCAST)

**Josef Coresh**

Belding H. Scribner Lifetime Achievement Award  
from the American Society of Nephrology  
Web of Science Most Highly Cited Researchers

**Deidra Crews**

Promoted to Professor at Johns Hopkins School of  
Medicine  
Elected to the American Society for Clinical  
Investigation

**Gail Daumit**

Appointed Vice Dean for Clinical Investigation at the  
Johns Hopkins School of Medicine  
Scientific Research Award from the National Alliance  
for Mental Illness

**Sherita Golden**

Elected to National Academy of Medicine

**Morgan Grams**

Susan and Morris Mark Endowed Professorship at  
NYU  
Co-Director, Division of Precision Medicine at NYU

**Eliseo Guallar**

Acknowledgement for Excellence in Teaching at the  
Johns Hopkins Bloomberg School of Public Health

**Kimberly Gudzone**

Appointed Medical Director of American Board of  
Obesity Medicine

**Felicia Hill-Briggs**

Simons Distinguished Chair in Clinical Research,  
Donald and Barbara Zucker School of Medicine

**Kunihiro Matsushita**

World Heart Federation Award for Best Heart Paper  
Appointed Associate Editor of the American Journal  
of Kidney Diseases

**Edgar R. Miller III**

Acknowledgement for Excellence in Teaching at the  
Johns Hopkins Bloomberg School of Public Health

**Noel Mueller**

Promoted to Associate Professor at the Johns Hopkins  
Bloomberg School of Public Health

**Scott Pilla**

Acknowledgement for Excellence in Teaching at the  
Johns Hopkins Bloomberg School of Public Health

**Craig Pollack**

Acknowledgement for Excellence in Teaching at the  
Johns Hopkins Bloomberg School of Public Health  
Promoted to Professor at the Johns Hopkins School of  
Medicine

**Tanjala Purnell**

Award for Inclusion Research from Google Research

**Casey Rebholz**

Promoted to Associate Professor at the Johns Hopkins  
Bloomberg School of Public Health

**Elizabeth Selvin**

Kelly West Award for Outstanding Achievement  
in Epidemiology from the American Diabetes  
Association  
Appointed Deputy Editor of Diabetes Care

**Maya Venkataramani**

Finalist, Top Oral Abstract in Health Equity, Society  
of General Internal Medicine 2021 Annual Meeting  
Society of General Internal Medicine Mid-Atlantic  
Region Award for Excellence in Clinical Investigation

**Jessica Yeh**

Acknowledgement for Excellence in Teaching at the  
Johns Hopkins Bloomberg School of Public Health

# THANK YOU

to the faculty, staff and students  
who walk through our doors every day



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# WELCH CENTER REPORT



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