

Department of Medicine

2018-2019 Annual Report



The GW Medical
Faculty Associates





Alan G. Wasserman, M.D.
Department of Medicine

DEPARTMENT ANNUAL REPORT

There are no shortage of challenges facing our Department and our Country. Being in Washington, DC we have the honor of being in the epicenter of chaos. However, we must continue to meet and overcome these challenges.

We have the obligation to continue to innovate in areas of education, research and clinical practice. The Department has played a major role in establishing and maintaining the new Medical School curriculum but we need to continue to explore unique ways to educate the physicians of the future. With the explosion of knowledge, what are the basics that a student must master to prepare themselves? How do we foster an atmosphere that encourages life-long learning? How do we lead by example to make sure that students never become complacent or stop asking questions? It is gratifying to see how many of our faculty are involved with student education and how innovative they have become.

Moving on to our Residency and Fellowship programs the challenges are similar but more acute. Are we doing the best we can to train physicians to excel in all areas of medicine? Are we developing physicians with inquisitive minds who will never stop exploring for answers to improve patient care? And most importantly have we established an atmosphere that has reduced medical errors?

We have made it a priority to increase the diversity of our house staff to reflect the community which we serve. This has to be more than lip service to an ideal but real work needs to be done to encourage underrepresentative minority and LGBT physicians to see the benefit of training and working at our Institution.

Our research efforts continue to expand into areas not imagined just a few short years ago while we continue to emphasize the human spirit in our work. From stem cells to spirituality we have created a workplace that has room for all.

The following pages will highlight some of our departmental, divisional and individual achievements. We will honor those former Chiefs and Emeritus faculty who have given so much over the years to bring us to where we are today. It is an Honor to be Chairman of such an outstanding group of physicians, researchers, trainees and administrators. I hope that my pride in our accomplishments shines through.



Alan G. Wasserman, MD, FACC, MACP
Eugene Meyer Professor
Chairman, Department of Medicine

2018-2019 ANNUAL REPORT

THE GW MEDICAL FACULTY ASSOCIATES
DEPARTMENT OF MEDICINE

Faculty and Leadership



Alan G. Wasserman, MD, FACC, MACP
Chairman of the Department of Medicine
Eugene Meyer Professor of Medicine



Gary Simon, MD, PhD, MACP
Vice Chairman, Department of Medicine
Walter G. Ross Professor of Medicine and of
Microbiology & Tropical Medicine
Director of the Division of Infectious Diseases



Delores Jewell, RN, MSN
Associate Chair for Finance and Operations

DIVISION DIRECTORS

ALLERGY

Daniel Ein, MD

Clinical Professor of Medicine
Director of the Allergy & Sinus Center

CARDIOLOGY

Richard Katz, MD

Bloedorn Professor of Cardiology
Director, Division of Cardiology
Director, Cardiovascular Institute

ENDOCRINOLOGY

Joshua Cohen, MD

Professor of Medicine
Interim Director, Division of Endocrinology
Director, Diabetes Center; Director, Thyroid Center

GENERAL INTERNAL MEDICINE

April Barbour, MD, MPH, FACP

Associate Professor of Medicine
Director, Division of General Internal Medicine
Director, Primary Care Residency Program

GASTROENTEROLOGY

Marie Borum, MD, EdD, MPH

Professor of Medicine
Director, Division of Gastroenterology

GERIATRICS/PALLIATIVE CARE

Katalin Roth, MD, JD

Associate Professor of Medicine
Director of the Division of Geriatrics and Palliative Medicine

HEMATOLOGY/ONCOLOGY

Eduardo Sotomayor, MD

Professor of Medicine
Associate Director for Clinical Investigations, GW Cancer Center
Director of the Division of Hematology/Oncology

HOSPITAL MEDICINE

James Gehring, MD

Assistant Professor of Medicine
Interim Director, Division of Hospital Medicine

UNITED MEDICAL CENTER (UMC) HOSPITALIST

Juan Reyes, MD, MPH

Assistant Professor of Medicine, UMC Site Director

PODIATRY

Michael Stempel, MD, FACFAS

Chief, Division of Podiatry
Assistant Professor of Medicine, Assistant Professor of Surgery
Director of Podiatry Center

PULMONARY

Guillermo Gutierrez, MD, PhD

Professor of Medicine, Anesthesiology and Engineering and Applied Sciences
Division of Pulmonary, Critical Care and Sleep Disorders

RENAL AND HYPERTENSION

Dominic Raj, MD, DM, DNB, FASN, FACP

Professor of Medicine and of Epidemiology and Biostatistics and of Biochemistry and Molecular Biology
Director of the Division of Renal Disease and Hypertension

RHEUMATOLOGY

Victoria Shanmugam, MD, MRCP

Director, Division of Rheumatology
Associate Professor of Medicine

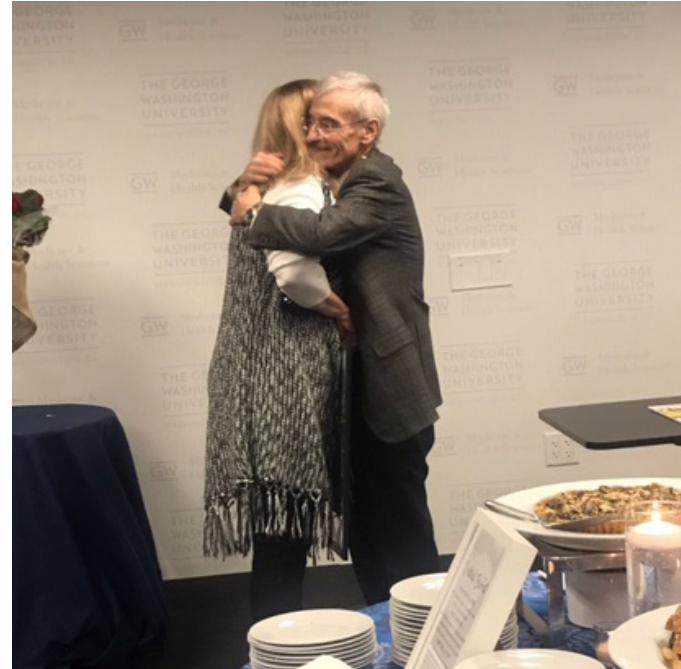
DELORES JEWELL RETIREMENT

Delores first arrived at GW with her white hat and nurse's uniform in 1981 it took her only 6 years to advance to the next position of Nurse Administrator for the Department of Medicine. Then a short 5 years later she became the Department Administrator and combined the two

We are a Department with \$168 million in charges, with 180 faculty and 300 staff, with 4 floors of clinics at 2150 and an additional 2 at M St. We have 105 Interns and Residents as well as 75 or so fellows. Delores was responsible for the Finances, the Administration and the Clinical operation of this large department. And just for good measure, this year we added UMC to her portfolio to keep her from being bored.

On behalf of the Department and the MFA, Thank you, Delores! Thank you for making me and our Department a success. Whether anyone else knows, I know what she has done and I am in awe most every day.

It is hard to believe that I will be coming into work and she won't be there as she has been for the last 20 years. I think it will take a while to get accustomed to not seeing her there. She will always have my respect and admiration. And for all of this she finally gets a HUG.



Delores Jewell's Retirement party took place on December 17, 2018 at the Weingold Conference Center.

MANAGERS

Melanie Bossi, MPA

Assistant Director of Clinical Research

Cristina Burgos

Executive Associate

Jocelyn Hutchinson

Accounting Specialist

Nicole Dornbush, PharmD

Senior Director of Oncology and Pharmacy Services

Royette Leatham, MBA, LLB

Faculty Affairs Administrator

Delphine McDowell

Revenue Cycle Manager

Maureen McMahon

Proposal Specialist

Lara Mounir, MHSA

Special Projects Coordinator

Amy Mower, MHA, CMPE

Senior Director for Ambulatory Operations, Specialty Services

Erwin Osborn, MHSA

Senior Director for Ambulatory Operations, Primary Care

Faland Villard, MBA *Departed February 2019

Finance Manager

UNDERGRADUATE MEDICAL EDUCATION LEADERSHIP

Dr. Chavon Onumah

3rd year Primary Care Clerkship Director

Dr. Amirala Pasha

Assistant Primary Care Clerkship Director and Longitudinal Primary Care Clerkship Coordinator

Dr. Sara Wikstrom

3rd year Medicine Clerkship Director

Dr. Shant Ayanian

Assistant Medicine Clerkship Director

Dr. Farida Millwala Izzi

4th year Medicine Acting Internship Director

Dr. Lisa Martin

Clinical Apprenticeship Program Director

Dr. Chad Henson

Clinical Skills & Reasoning Theme Director

Dr. Jim Blatt

Professional Development Theme Director

Dr. Katalin Roth

Ethics Theme Director

Dr. David Popiel

Public Health Theme Director

Dr. Richard Simons

Senior Associate Dean for MD Programs

Dr. Robert Jablonover

Assistant Dean, Pre-Clinical Education

Dr. Katherine Chretien

Assistant Dean for Student Affairs

Dr. Lalit Narayan

Co-Course Director for Patients, Populations and Systems Course Director

Dr. Christina Prather

Geriatrics Theme Director

Dr. Adam Hodes

Evidence Based Medicine Theme Director

Dr. Scott Cohen

Intercession Co-Director
Clinical Leads (double column this)

Marc Siegel

Infectious Diseases

Gurusher Panjra

Cardiology

Jalil Ahari

Pulmonary

Scott Cohen

Renal

Anita Kumar

Gastroenterology

Victoria Shanmugam

Rheumatology

Michael Irwig

Endocrinology

GRADUATE MEDICAL EDUCATION LEADERSHIP

Dr. Jillian Catalanotti

Director of Internal Medicine Residency Programs

Dr. April Barbour

Director, Primary Care Residency; Associate Program Director of Internal Medicine

Dr. Michael Czarnecki

Associate Program Director of Internal Medicine/ Fellowship Programs

Dr. Sheena P. Khurana

Associate Program Director/ Resident Outpatient Clinic

Dr. Jalil Ahari

Associate Program Director of Internal Medicine/ Morning Report

Dr. Courtney Paul

Associate Program Director of Internal Medicine/ Quality Improvement



VA ACADEMIC LEADERSHIP

Many thanks to our VA faculty on their leadership

Charles Faselis
Chief of Staff

Pamela Karasik, MD
Chief, Medical Service

Samantha McIntosh
Site Director for Medicine Residents

Jessica Logan, MD
Medicine Clerkship Site Co-director

Matthew Tuck, MD
Associate Site Program Director

Dr. Matthew Tuck was highlighted by the Society for Hospitalist Medicine in their newsletter for his leadership skills at the Washington, VA.

3RD YEAR RESIDENTS



RESIDENCY PROGRAM

Training Program Successes

The number of applicants to our residency program continues to be among the highest in the country - consistently exceeding 5,500 applications. As a department, we successfully interviewed 450 applicants - what a team effort!

This year, our training program had a 100% board pass rate, and our rolling three year board pass rate is now at 96% (national average 89%). Eight of our most recent graduates have taken jobs in Hospital medicine and four in Primary Care. In addition, we continue to have a very high fellowship placement rate (21/21 applicants this past year). Our residents continue to represent us well at national conferences, with 26 presentations this year alone! We also started an annual alumni newsletter to keep our alums connected to GWIMRes.

Special Training offered by the Residency program

The Internal Medicine Residency program continues its longstanding **Primary Care program** (with Program Director Dr. April Barbour) for 5 residents per year, in which residents have 12 consecutive months of outpatient medicine including taking pager call with our attending General Internal Medicine practice. **The Underserved Medicine and Public Health Concentration** (UMPH, co-directed by Dr. David Popiel and Dr. Jillian Catalanotti) is now in its seventh year, and consists of longitudinal clinic placements at local community health centers, an evening seminar series and a practicum project for 3-6 residents per year. We also continue to offer the HIV in **Internal Medicine Pathway** (HIP, co-directed by Dr. Chad Henson and Dr. Chavon Onumah) for 2 residents per year, including longitudinal clinic placement at Whitman Walker Health to manage a panel of HIV+ patients as well as didactic training to be eligible for Certification in HIV Medicine.

Quality Improvement

Dr. Courtney Paul continues at the helm of our unique longitudinal Quality Improvement curriculum. All residents participate in this curriculum, which trains them to design and implement their own QI projects and features a PGY3 capstone project of presenting at our department's Patient Safety Conference. (Formally called M&M - You're invited and we'd love to see you there!) PGY2 residents also submit their work on original QI projects for poster presentation at GW Research Day, and the top 3 QI projects are selected for special presentation at the department's Grand Rounds, most recently on May 30.

Fighting Opioid Epidemic

This year, we blazed an important trail in fighting the opioid epidemic. Dr. Meredith Trubitt (PGY3) designed an interactive workshop on harm reduction and naloxone prescribing for patients who use opioids which she delivered to IM residents, DGIM and hospitalist attendings, MFA medical assistants, EMed residents and attendings, and hospital nurses. Dr. Yavar Moghimi (GWMed Alum!) generously gave of his time to provide half of the buprenorphine waiver-qualifying training to all of our residents. Some attendings participated in the sessions as well, and any who do can couple it with four hours of online training for a full buprenorphine waiver.

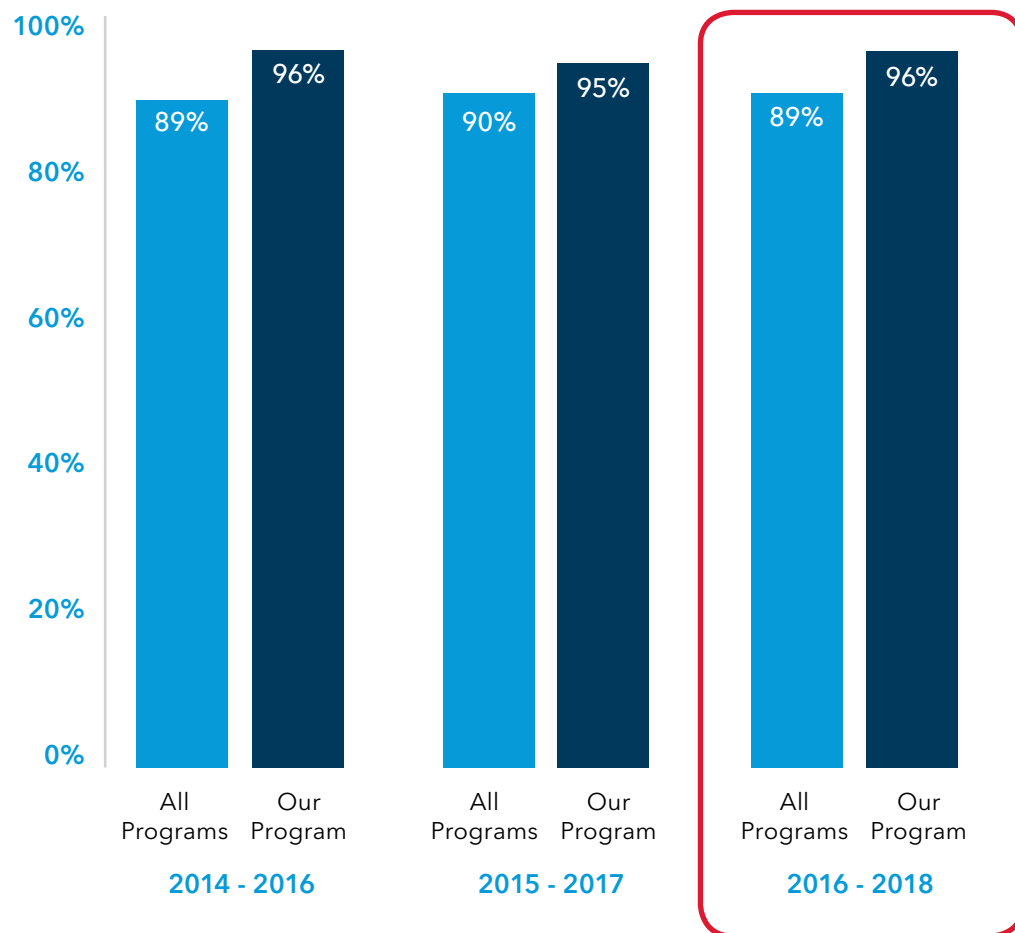
Diversity in the Internal Medicine Residency Program

Dr. Chavon Onumah continues to lead our Diversity Task Force with this year's co-chair Dr. Pedro Covas (PGY2). This committee of faculty and residents seeks to improve recruitment and retention of house staff from underrepresented minority backgrounds. We are excited to support this group's work, which includes outreach to medical students, recruitment efforts, and support and retention.

In this year's recruitment, we matched 12 residents from backgrounds underrepresented in medicine. We hope to match more applicants from underrepresented backgrounds to better reflect our patient population, with particular emphasis on our medical school's priority groups: those who identify Hispanic/Latino, Black/African American, and LGBT.

INTERNAL MEDICINE CERTIFICATION BOARD

ABIM: 3 Year Rolling Pass Rate



NATIONAL SCHOLARLY ACTIVITY

- American College of Physicians (ACP): 3 posters
- Society of General Internal Medicine (SGIM): 5 posters
- Society of Hospital Medicine (SHM): 5 posters
- American Thoracic Society: 1 poster; American College of Cardiology: 3 posters; Digestive Disease Week: 1 poster; Chromes and Colitis Conference: 3 posters; Infectious Disease Week: 1 poster
- American Heart Association QCOR: 2 posters, 1 oral presentation
 - Nominated for Young Investigator Abstract Award
- SGIM MidAtlantic: 1 poster; GW Research Day: 7 posters (6 QI)
- 24 national posters + 1 national oral presentation

CHIEF MEDICAL RESIDENTS 1997-2019

1997-1998:

Matthew Mintz
Alex Mechaber
Richard Weber

1998-1999:

Kate Goodrich
Samir Patel
Robert Geise

1999-2000:

Elizabeth Anderson
Steven Kang
Thomas Yackel

2000-2001:

Carla Aamodt
Rochelle Brown
Amy Stone
Keith Damsker (VA)

2001-2002:

Nelofar Anwr (Holy Cross)
Tara DiMino
Shari Rosenbaum
Archana Shyamsunder (VA)

2002-2003:

Linda Assatourians (Holy Cross)
Benjamin Keidan
Jennifer Kerns
Jeremias Tan (VA)

2003-2004:

Danielle Doberman (Holy Cross)
Tarun Kapoor
Raymond Martins
Michelle Salvat (VA)

2004-2005:

Neeral Shah (Holy Cross/GW)
Samantha McIntosh
Dipsu Patel (Holy Cross/GW)
Leelie Selassie (VA)

2005-2006:

Danielle Davison
Matthew Chandler
Zohray Talib
Alex Asser (VA)
Jessica Adam (Fairfax)

2006-2007:

Melissa Blakeman
Sindu Stephen
Brendan DeMarco
Nissrin Ezmerli (VA)
Chin Hee Kim (Fairfax)

2007-2008:

Juan Reyes
Justin Belcher
Rachel Seaman
David Luse (VA)
Patrick Gill (Fairfax)

2008-2009:

Katrina Hawkins
Guillermo Ballarino
Anne Lesburg
Katherine Garland (VA)
Dan Zandberg (Fairfax)

2009-2010:

Ashte Collins
Vicki Britton
Mary Reyes
Matthew Tuck (VA)
Dost Sarpel (Fairfax)

2010-2011:

Megan Terek
David Popiel
Jeannie Yu
Nihar Patel (VA)
Lena Furmark (VA)
Shari Maletsky-Smith (Fairfax)

2011-2012:

Sarah Wikstrom
Anne Cioletti
Nitin Sardana
Natanyah Siegel (Fairfax)
Amr Mohsen (VA)
Aditya Sharma (VA)

2012-2013:

Amy Doran
Ju Kim
Sarah Thomas
Alex Cho (VA)
Jessica Logan (VA)
Gurpreet Sodhi (Fairfax)

2013-14:

Shant Ayanian
Sylvia Gonsahn Bollie
Andrew Roberts
Faysal Haroun (VA)
Ribka (Mimi) Ayana (VA)
Nancy Maaty (Fairfax)

2014-15:

Wesley Fiser
Jeffrey Zweig
Chad Henson Martins
Laura Perry Fernandez (VA)
Ashley Charter Pan (VA)
Rebecca Witt (Fairfax)

2015-16:

Courtney Paul
Erin Vipler
Jessica Davis
Yevgeniy Vayntrub (VA)
Adam Kittai (VA)
Mortada (Reda) Shams (Fairfax)

2016-17:

Leonard Genovese
Raza Yunus
Erica McBride
Mitali Mehta (VA)
Kelli Gilmer (VA)
James Howard (Fairfax)

2017-18:

Vani Pyda
Lei Lynn
Joseph Delio
Kanika Gupta (VA)
Dianne Thompson (VA)

2018-19:

Kusha Davar
Talia Bernal
Sam Ober
Tanuka Datta (VA)
Alex Aldrich (VA)



For the first time in 22 years Dr. Wasserman organized a Happy Hour with local chief residents. The turnout was great with about 35 former chiefs in attendance.

FELLOWSHIP PROGRAM DIRECTORS

CARDIOLOGY

Allen Solomon, MD

General Cardiology Fellowship

Ramesh Mazhari, MD

Interventional Cardiology Fellowship

Cynthia Tracy, MD

Electrophysiology Fellowship

ENDOCRINOLOGY

Jill Paulson, MD

GASTROENTEROLOGY

Matthew Chandler, MD

GERIATRICS

Elizabeth Cobbs, MD

Geriatrics

Karen Blackstone, MD

Hospice/Palliative Care

HEMATOLOGY/ONCOLOGY

Holly Dushkin, MD

INFECTIOUS DISEASES

Afsoon Roberts, MD

PULMONARY

Jalil Ahari, MD

RENAL

Scott Cohen, MD

RHEUMATOLOGY

Rodolfo Curiel, MD

EMERITUS FACULTY

Special Thanks to those who have given so much to the Department of Medicine over the Years!

Charles Abrams, MD

Associate Clinical Professor Emeritus

James Ahlgren, MD

Professor Emeritus of Medicine

Rochelle Bader, MD

Adjunct Associate Professor Emeritus

Kenneth Becker, MD

Professor Emeritus

Philip Birnbaum, MD

Professor Emeritus

Warren Brill, MD

Clinical Professor Emeritus

Paul Chang, MD

Clinical Professor Emeritus

James Cooper, MD

Clinical Professor Emeritus

Allen Ginsberg, MD

Professor Emeritus

Howard S. Goldstein, MD

Clinical Professor Emeritus of Medicine

Kenneth Goldstein, MD

Clinical Professor Emeritus

David Goodman, MD

Clinical Professor Emeritus

Sands Irani, MD

Clinical Professor Emeritus

Richard Kaufman, MD

Clinical Professor Emeritus

Prudence P. Kline, MD

Clinical Professor Emeritus of Medicine

Arnold Lear, MD

Clinical Professor Emeritus

Allen Mondzac, MD

Clinical Professor Emeritus

Frederick Meyers, MD

Associate Clinical Professor

Gail J. Povar, MD

Emeritus Status effective: 7/1/2019

Frederick Rickles, MD

Clinical Professor Emeritus

Jorge Rios, MD

Professor Emeritus

Allan Ross, MD

Professor Emeritus

Geraldine Schechter, MD

Professor Emeritus

Paul Schlein, MD

Clinical Professor Emeritus

W. Scott Schroth, MD

Associate Professor Emeritus

Omega Silva, MD

Clinical Professor Emeritus

David Simon, MD

Clinical Professor Emeritus

Samuel V. Spagnolo, MD

Professor Emeritus of Medicine

Stanley Talpers, MD

Associate Clinical Professor Emeritus

Carmelita Tuazon, MD

Professor Emeritus of Medicine

P. Jacob Varghese, MD

Professor Emeritus

Manuel Velasquez, MD

Clinical Professor Emeritus

Lowell Weiss, MD

Clinical Professor Emeritus

Patience White, MD

Professor Emeritus

Robert Wilkinson, MD

Professor Emeritus

OBSERVED HISTORY & PHYSICALS

We want to give our extreme appreciation and thanks to a special group of retired faculty who have been running the Observed History and Physical Examination. The Observed H & P Examination is a hallmark of the internal medicine rotation for third-year students at SMHS since the early 1990s, students have the opportunity to work one-on-one with a retired GW faculty member who helps them improve aspects of performing a physical exam and complete history-taking.

The group of retired faculty members who serve as preceptors for this invaluable program is led by Bob Wilkinson, MD, Professor Emeritus; Dr. Stanley Talpers was the program's founder. It includes:

- **Dr. Bob Wilkinson**
- **Dr. Audrey Corson**
- **Dr. Stefan Dosa**
- **Dr. Albert Grollman**
- **Dr. David Simon**
- **Dr. Richard Kaufman**
- **Dr. Lowell Weiss**
- **Dr. Laurie Duncan**
- **Dr. Charles Abrams**
- **Dr. Joel Gorfinkel**
- **Dr. James Cooper**

ENDOWED GRAND ROUND LECTURES

SEPTEMBER 6, 2018

Stuart Kassin Endowed Lecture in Rheumatology
"Genetics and the Environment in Rheumatoid Arthritis"

Michael Holers, MD

Smyth Professor of Medicine-Rheumatology
Division Chief, Rheumatology
University of Colorado School of Medicine

JANUARY 10, 2019

Understein Lecture

"The Future of Cardiovascular Care: Advanced Technologies, Affordable Care, and the Academic Medical System"

Marvin Konstam, MD

Professor of Medicine
Tufts University School of Medicine
Chief Physician Executive
The Cardiovascular Center
Tufts Medical Center

MAY 2, 2019

Zimmerman Lecture

"Gene Therapy & Liver Diseases"

Bruce Luxon, MD, PhD

Anton and Margaret Fuisz Professor of Medicine
Division of Gastroenterology
Department of Medicine
Chair, Department of Medicine
Georgetown University- Medstar

MAY 23, 2019

Ottenberg Endowed Lecture

"We Fellow Mortals: Reaching Across Living and Dying"

Rita Charon, MD

Professor of Medicine
Founder and Executive Director, Narrative Medicine Program
Columbia University

JUNE 20, 2019

Whiplinger Memorial Lecture

Resident Chairman's Rounds

"Health Disparities in the Navajo Nation"

Dr. Elora Majumder

"Buprenorphine"

Dr. Meredith Trubitt

PROMOTIONS

Congratulations to the following Department of Medicine Faculty on their academic promotions effective July 1, 2018.

PROFESSOR OF MEDICINE

Brian Choi, MD

Katherine Chretien, MD

Marco Mercarder, MD

ASSOCIATE PROFESSOR

Cherinne Arundel, MD

Gurusher Panjra, MD

LIMITED SERVICE MEDICINE FACULTY ON THEIR PROMOTIONS

Letitia Carlson, MD

Clinical Professor of Medicine

Joel Gorfinkel, MD

Clinical Professor of Medicine

Pamela Karasik, MD

Clinical Professor of Medicine

Anthony Arcenas, MD

Associate Clinical Professor of Medicine

Navjit Goraya, MD

Associate Clinical Professor of Medicine

Christopher Unger, MD

Associate Clinical Professor of Medicine

James Yang, MD

Assistant Clinical Professor of Medicine

EMERITUS STATUS

James Ahlgren, MD

Professor Emeritus of Medicine

Howard S. Goldstein, MD

Clinical Professor Emeritus of Medicine

Prudence P. Kline, MD

Clinical Professor Emeritus of Medicine

Samuel V. Spagnolo, MD

Professor Emeritus of Medicine

Carmelita Tuazon, MD

Professor Emeritus of Medicine

**EMERITUS STATUS EFFECTIVE:
7/1/2019**

Gail J. Povar, MD

MASTER TEACHER LEADERSHIP DEVELOPMENT PROGRAM GRADUATION

June 12th- Ross Hall - Weingold Conference Center

Offered by the George Washington University's Graduate School of Education and Human Development in partnership with the GW School of Medicine and Health Sciences, the Master Teacher Leadership Development Program (MTLDP) has three main purposes:

1. To Enhance teaching skills;
2. To develop educational leadership potential, and
3. To promote scholarship in education.

Department of Medicine Graduates 2018-2019

Jalil Ahari, MD- Pulmonary Division

Caitlin Mingey, MD- Internal Medicine



END OF YEAR 2019 AWARDS

DEPARTMENT OF MEDICINE FACULTY OF THE YEAR

Nabil Fallouh, MD

NON CLINICAL DEPARTMENT OF MEDICINE FACULTY MEMBER OF THE YEAR

Laura Abate, M.S.L.S.

CLINIC ATTENDING OF THE YEAR

David Popiel, MD

VA ATTENDING OF THE YEAR

Jesse Theisen-Toupal, MD

FELLOW OF THE YEAR

Joseph Delio, MD

JORGE RIOS RESIDENT OF THE YEAR

Marcella Katsnelson, DO

VA RESIDENT OF THE YEAR

Matthew L. Bernetich, DO

"ICU" RESIDENT OF THE YEAR

James Mitchell, IV, MD

INTERN OF THE YEAR

Tran Nguyen, MD

PRELIMINARY INTERN OF THE YEAR

Blair S. Allais, MD

ANNUAL SUSAN HASSELQUIST AWARD

*Presented to a 2nd year resident who exemplifies
compassionate care combined with clinical and diagnostic excellence*

Brian P. Epling, MD

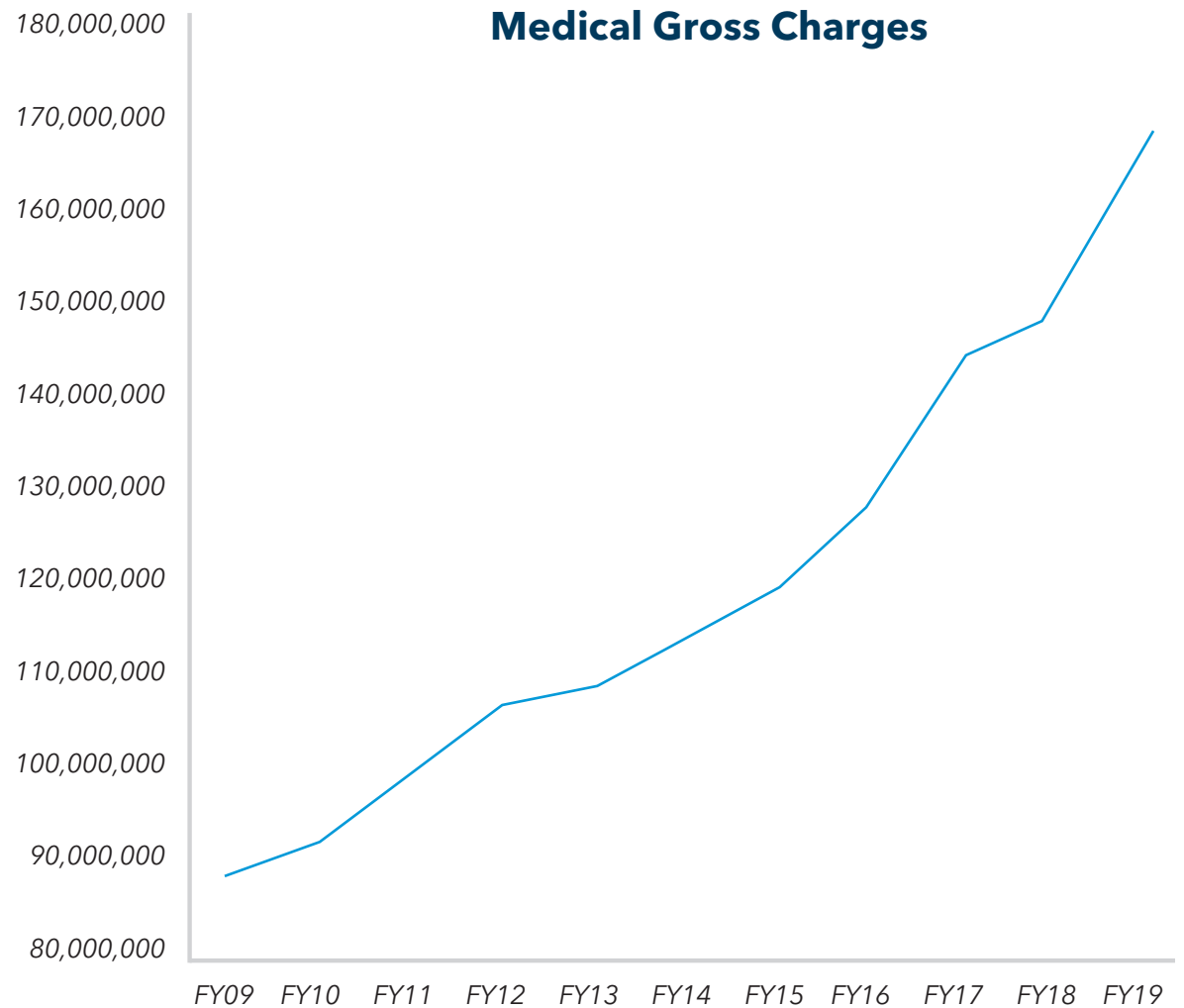
Jonathan Mamber Czeresnia, MD

GORDON MOSHMAN, MD ('78) PRIMARY CARE RESIDENT AWARD

Elora M. Negose, MD

DEPARTMENT OF MEDICINE: GROSS CHARGES (LAST 10 YEARS)

FY	Medicine Gross Charges
FY09	88,571,487.00
FY10	91,639,232.00
FY11	99,076,600.00
FY12	106,413,170.00
FY13	108,329,287.00
FY14	112,921,447.00
FY15	119,132,027.00
FY16	127,227,102.00
FY17	144,277,361.00
FY18	146,907,628.00
FY19	168,476,360.00



CHAIRMAN'S ROUNDS FY '19

Every third year a resident presents a 30 minute didactic discussion of a topic of their choosing. Two are selected to be presented at medical grand rounds for the Whiplinger Memorial Lecture.

Bedoor Alabbas

Social Media in Medicine

Sarah Alsamarai

Global Antimicrobial Resistance

Seemal Awan

Nonmedical Vaccine Exemptions

Matthew Bernetich

Infections with Biologic Agents

David Burstein

To a Caring Health System

Keri Dodds

Weight Loss Medications

Ariel Faiwyszewski

Cardiac Rehabilitation

Lauren Glikes

Methadone in the Inpatient Setting

Jonathan Gwizdala

Delirium

Mayce Haj Ali

Fad Diets and Intermittent Fasting

Barrett Holen

Wellness in Medicine

Chase Houghton

Artificial Intelligence and Big Data for Healthcare

Katie Humes

US Health Policy for the Internist

Marcella Katsnelson

In Flight Medical Emergencies

Connell Knight

Hormone Therapy in Transgender Patients

Jeffrey Lankowsky

Telemedicine

Katherine Le

Effect of Pharmaceutical Gift Giving on Physician Prescribing Behavior

Elora Majumder

Health Disparities in the Navajo Nation

Linwood (Ralph) Millett

Finances in Residency, Fellowship, and Beyond

Mitch Mitchell

How to Miss a Diagnosis - Heuristics

Nathaniel Nguyen

Depression in Primary Care

Amanda Nizam

Immunotherapy-Related Adverse Events

Abdulah Nuqali

Mechanical Circulatory Support

Benjamin Plotz

Resident Compensation

Andrew Shelton

Neutrophil Extracellular Traps (NETs)

Michael Simon

Health Impacts of Climate Change

Meredith Trubitt

Buprenorphine

Sirisha Tummala

Medical Marijuana

Huixia Wei

Traditional Chinese Medicine

SPECIAL HIGHLIGHTS

Cuentos

AOA

ACP

Top Docs

Rodham

CUENTOS

Cuentos is the humanities magazine produced annually by the internal medicine residents at The GW School of Medicine and Health Sciences and The GW Medical Faculty Associates. Dr. Anokhi Shah and Dr. Katalin Roth took over editorship this year.



Cuentos 2019

Cuentos 2018



Cuentos 2015



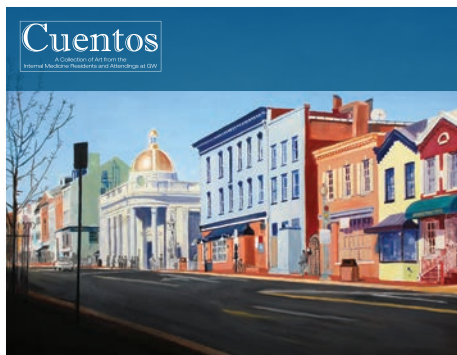
Cuentos 2014



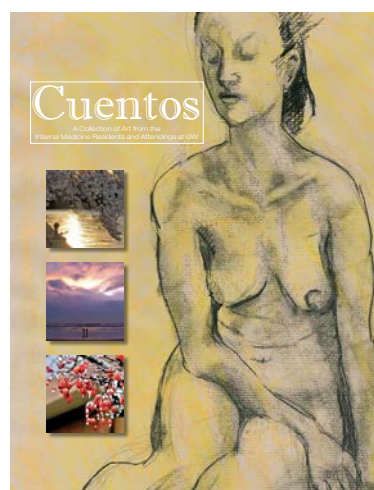
Cuentos 2017



Cuentos 2016



Cuentos 2013



Cuentos 2012



Cuentos 2011

AOA INDUCTION

Alpha Omega Alpha Medical Honor Society

- Dr. Alan Wasserman, Councilor
- Dr. Angelike Liappis, Secretary-Treasurer

The AOA induction dinner on May 16th was moderated by Alan Wasserman, M.D., M.A.C.P., Councilor of the GW Alpha Chapter of AOA and the event was organized by Angelike Liappis, M.D., secretary-treasure of the GW chapter of AOA, associate professor of Medicine at SMHS.

Dr. Mona Siddiqui was the 12th AOA Visiting Professor. The student led invitation was inspired by Dr. Siddiqui's distinguished career in government service and her leadership in healthcare innovation and delivery. It is a point of pride that Dr. Siddiqui is a graduate of the GWU Internal Medicine Residency Program. She graduated from residency in 2008. Dr. Siddiqui currently serves as the Chief Data Officer, Immediate Office of the Secretary, US Department of Health and Human Services.



Dr. Randi Abramson, was our 2019 Volunteer Clinical Faculty Award Recipient. A graduate of the GW Primary Care residency program, Dr. Abramson is an Associate Clinical Professor of Medicine at GWU. She serves as the Chief Medical Officer for Bread for the City.

Dr. Cynthia Tracy was inducted as a GW faculty member with AOA. She serves as the director of electrophysiology, associate director of cardiology, and professor with the George Washington University School of Medicine & Health Sciences. She has participated in and chaired writing committees for the development of Practice Guidelines that set the standards for the EP community. One of her major interests at this time is in the area of public service providing advanced care to indigent patients in Honduras.

AMERICAN COLLEGE OF PHYSICIANS

Congratulations... to the **GW National ACP Doctors Dilemma Team: Drs. Danielle Engskow, Jigar Patel, and Tran Nguyen**, for an outstanding job representing us with their poster presentations and in the jeopardy contest. **Dr. Danielle Engskow** was selected as top ten clinical vignette poster winner!

THE FOLLOWING RECEIVED A MASTERSHIP AWARD:

Dr. Marie Borum – Professor of Medicine, Director, Division of Gastroenterology

Dr. Helen Burstin – Clinical Professor of Medicine, General Internal Medicine

Masters shall be Fellows who have been selected because of "integrity, positions of honor, eminence in practice or in medical research, or other attainments in science or in the art of medicine." Masters must be highly accomplished persons demonstrating eminence in practice, leadership, or in medical research. Evidence of their achievements can come from many types of endeavors such as renown within their field and/or ACP chapter, research, education, health care initiatives, volunteerism, and administrative positions. The Master must be distinguished by the excellence and significance of his or her contributions to the field of medicine.

THE FOLLOWING RECEIVED MAJOR NATIONAL ACP AWARDS:

Dr. Hind Rafei – Joseph E. Johnson Leadership Award

The award recognizes a Resident/Fellow Member of the College who has demonstrated qualities that exemplify the College's mission "to enhance the quality and effectiveness of health care by fostering excellence and professionalism in the practice of medicine."

Dr. Jillian Catalanotti – Walter J. McDonald Award for Early Career Physicians
The award recognizes outstanding achievement by a physician member who is within 16 years of graduating medical school and who is not an ACP Medical Student Member or Resident/Fellow Member.

Dr. Lawrence Deyton (Bopper) – James D. Bruce Memorial Award for Distinguished Contributions in Preventative Medicine
This award is bestowed for distinguished contributions in preventive medicine. Preventive medicine shall be interpreted to include any subject bearing on the prevention of disease.



ACP Internal Medicine Meeting 2019



ACP picture Dr. Jillian Catalanotti and Dr. Hindi Rafei

TOP DOCS

Congratulations to all the physicians below from the Department of Medicine for being selected to Washingtonian's Top Docs 2018:

ALLERGY

Daniel Ein, MD
Janine Van Lancker, MD
Anjeni Keswani, MD

CARDIOLOGY

Richard Katz, MD
Jonathan Reiner, MD
Allen Solomon, MD
Cynthia Tracy, MD
Ramesh Mazhari, MD

ENDOCRINOLOGY

Nicole Ehrhardt, MD
Michael Irwig, MD
Jill Paulson, MD

GENERAL INTERNAL MEDICINE

April Barbour, MD
Elizabeth Bluhm, MD
Jehan (Gigi) El-Bayoumi, MD
Robert Jablonover, MD
Brad Moore, MD
David Popiel
Gail Povar, MD

GASTROENTEROLOGY

Marie Borum, MD
Antoinette Saddler, MD

GERIATRICS

Tania Alchalabi, MD
Elizabeth Cobbs, MD
Christina Prather, MD
Christina Puchalski, MD
Katalin Roth, MD

INFECTIOUS DISEASES

David Parenti, MD
Afsoon Roberts, MD
Gary Simon, MD

HEMATOLOGY/ONCOLOGY

Robert Siegel, MD

PULMONARY

Jalil Ahari, MD
Morgan Delaney, MD
Guillermo Gutierrez, MD



RODHAM INSTITUTE 6TH ANNUAL SUMMIT

Rodham Institute Celebrates the Art of Medicine and the Science of the Soul at 6th Annual Summit

For most people, the link between the arts and health is a crooked line, but take a closer look and you can find many examples of the arts playing a role in health and wellbeing. This idea, "Incorporating the Arts to Improve the Health and Wellbeing of Washington, D.C." is what brought out community leaders and clinicians to the 6th Annual Rodham Institute Summit.

Throughout the years, the summit has addressed many of the topics that impact community health, including health equity and access to care, obesity, mental health, and support of youth in underserved communities.

"One of the reasons we decided to choose 'Incorporating the Arts to Improve the Health and Wellbeing of Washington, D.C.,' as the theme of this year's summit is that the arts have really been the glue that binds our society together. The arts are really who we are as human beings," explained Jehan "Gigi" El-Bayoumi, MD, RESD '88, professor of medicine at the George Washington University School of Medicine and Health Sciences and founding director of the Rodham Institute.

This year's event was held in the Southeast Tennis and Learning Center and live-streamed by online health resource publication BlackDoctor.org. More than a dozen members of local organizations kicked off the day-long summit, with each giving brief presentations or performances on how they are incorporating music, dance, art, and storytelling into their community health and engagement efforts.

"I am thrilled as I look at the program, you've had such a terrific lineup of people," said the day's featured guest, former Secretary of State Hillary Rodham Clinton. "The fact that you're holding this event at the Southeast Tennis and Learning Center says so much about what the Rodham Institute stands for and what you are hoping to achieve. Cora started this with a firm belief that bringing services to the community would attract young people, and those services would help them to achieve their God-given potential. Last night and today I met some of those young people that have been influenced by this center, and I am thrilled."

Clinton, in describing her own efforts to incorporate the arts into wellness programming, told El-Bayoumi about a program offered through the Clinton Foundation called Too Small to Fail, aimed at promoting early childhood interaction and its impact on development. "We recommend talking, singing, and reading to infants, babies, and toddlers," said Clinton. "There is research that shows that when a baby is being stimulated by someone talking, reading, or singing, the brain lights up. There is evidence that it helps to build neural connections; it literally helps to create a better foundation for learning."

Deborah Rutter, president of the Kennedy Center for the Performing Arts (Kennedy Center), and Thomas Cheever, PhD, program director for Sound Health at the National Institutes of Health (NIH), presented the summit's keynote. The pair described the partnership between the NIH and the Kennedy Center in association with the National Endowment for the Arts, which supports research into the impact of music on the brain, cognitive development, and health.


One project, Cheever said, involved a young jazz musician, Matthew Whitaker, and Charles Limb, MD, a neuroscientist at the University of California, San Francisco. Together they explored what happens in the brain under the influence of music. The study found that listening and playing music triggers vast areas of both hemispheres of the brain, rather than the smaller regions the lecture activated.

Cheever went on to describe another research project involving rhythmic auditory stimulation on Parkinson's patients. Researchers, he said, have discovered that by listening to a steady rhythm while walking, the tremors and halting gait common in the neurodegenerative disorder were reduced. "It's really a dynamic change from what is really a simple intervention. ... This is just one example of the promise of using music as an additional way to treat diseases that we currently aren't able to fully treat with conventional measures."

Researchers, he added, are trying to explore whether stimulating the brain with music might have even greater therapeutic effects on some of these brain circuits. "Our brains are really capable of responding to music and creating it in amazing ways, and all of those reasons are why the NIH is so excited to be involved with this project."

The link between the therapeutic use of arts programming – particularly the influence of music, visual arts therapy, movement-based programs, and creative writing and expression – and positive health outcomes well established, said El-Bayoumi. She added, "The Rodham Institute seeks to expose and connect communities in Wards 7 and 8 to evidence-based programming and the great work happening in the arts in Southeast D.C. and across the city."

The evening before the summit, the Rodham Institute held its second annual fundraiser, during which El-Bayoumi presented the institute's Beacon of Light in the Community award to Cora Masters Barry. The institute debuted a video honoring the numerous contributions the former first lady has made to Washington, D.C. Since moving to D.C. in the early 1970s, Barry has served as a civic leader and a political science professor at the University of the District of Columbia. However, it's her roles as the founder and CEO of the Recreation Wish List Committee and the founder of the Southeast Tennis and Learning Center, where she has had her biggest impact.



"Where we're sitting now, in this beautiful facility with all of these wonderful people, this is what an idea, and somebody who wants to make a difference, looks like," El-Bayoumi said of Barry. "She saw a need, and was a persistent visionary. She used tennis as a hook to engage kids in education."

"The Southeast Tennis and Learning Center is dedicated to changing the trajectory of the lives of the children it serves," said Barry. "We use whatever we can to get them here. Tennis is the hook, but education is the key."

Since the center opened its doors in 2001, Barry added, thousands have benefitted from its athletic and academic resources, and more than 100 area children have gone on to earn full college scholarships. "In many of those cases, I'm not sure the kids would have gone on to college at all."

The evening also offered an opportunity to recognize Tracie Bass, director of workforce pipeline programs at the Rodham Institute, for her contributions to the Rodham Institute, including her efforts as founder and driving force of the Health Education Leadership Program (HELP).

"HELP exposes middle and high school students from Title I schools to health careers as well as engaging them in community service, teaching them to be health champions as well as future leaders," said El-Bayoumi. "It's really the centerpiece of the institute's youth education programming."

In addition, Bass created the See the City You Serve initiative, an annual orientation program introducing incoming GW residents and interns to some of the city's most under-served communities in Wards 7 and 8. Entering its fifth year, 1,000 GW interns have had an opportunity experience the program. "This program has been so successful in teaching incoming interns about the health disparities facing members of the DC community that it's been adopted by several other residency programs across the country," El-Bayoumi explained.

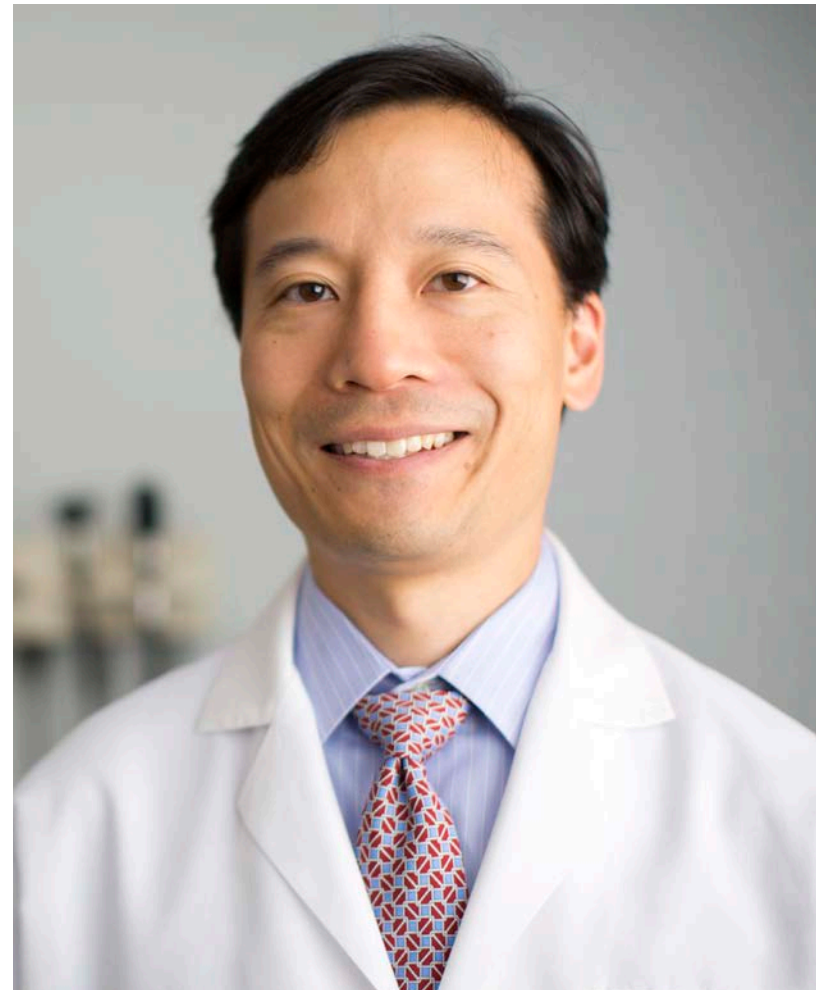


TWO CARDIOLOGIST TAKE DIFFERENT PATHS

Chief Medical Information Officer (CMIO)

Dr. Brian Choi is Professor of Medicine (Cardiology) and Radiology at the George Washington University and co-Director of Advanced Cardiac Imaging at the George Washington University Medical Center. In 2015, as the GW Medical Faculty Associates was considering potential changes to its electronic health record (EHR) systems, he was asked to become its first Chief Medical Information Officer (CMIO) after having participated in the MFA's Electronic Records Physician Advisory Group, chaired the MFA's Care Coordination Committee, and served on its Care Enhancement Workgroup. As CMIO, he has led multiple electronic medical record implementations and championed new technologies to improve provider communication. He serves on the clinical committee of the District of Columbia's leading health information exchange (HIE) and has served as a member of the American College of Cardiology's Informatics and Health IT Task Force and as a Director of RAD-AID International, a non-profit dedicated to medical imaging and radiology in poor and developing regions. He is also a managing member of the GW Health Network Accountable Care Organization. Dr. Choi has over 75 peer-reviewed publications, and his most recent research has evaluated interventions designed to enhance medical adherence using smartphone-based applications. He has been an invited speaker to the Society for Imaging Informatics in Medicine (SIIM), Healthcare Information and Management Systems Society (HIMSS), the Association of Medical Directors of Information Systems (AMDIS), eHealth Initiative, and the American College of Surgeons Quality Alliance.

Dr. Choi received his undergraduate degree from Yale University, a Masters in Business Administration from the Wharton School of the University of Pennsylvania, and medical degree from the University of Pennsylvania School of Medicine. He received his postgraduate training in Internal Medicine and Cardiovascular Disease at the Mount Sinai Hospital in New York City.



Chief Quality and Population Health Officer

Dr. William Borden is an Associate Professor of Medicine (Cardiology) and also the Chief Quality and Population Health Officer here at the GW MFA. Starting in his medicine internship year, he became interested in systems of care to achieve the best outcomes for our patients. He initially worked in quality improvement for hospitalized patients with acute myocardial infarction and congestive heart failure, at about the same time that Medicare was beginning to measure, publicly report, and reimburse based on these measures. In his first several years practicing as a faculty cardiologist, he studied the impact of these Medicare programs on socioeconomically disadvantaged hospitals. His research led to an opportunity to serve as a Senior Advisor as the U.S. Department of Health and Human Services working on high-value care aspects of the Affordable Care Act. While working to optimize these policies, he realized that perhaps the greater impact that he could have would be in helping an academic health system succeed in delivering high-value care through these new models. In 2014, the MFA joined a Medicare accountable care organization (ACO) and Dr. Borden joined the MFA to practice cardiology and lead those initiatives to deliver high-quality, coordinated and appropriate care for patients. With the hard work of the physicians, advanced practitioners and staff at the MFA, that ACO achieved high quality scores throughout and succeeded with shared savings in its final year. Over the last five years, his role has evolved into his current position as Chief Quality and Population Health Officer, where he leads quality, safety and population health for the MFA, including our new ACO in partnership with GW Hospital. He has seen steady progress and finds it a true honor to work with MFA colleagues who have such a strong commitment to providing the best care for our patients.



ALLERGY

*Daniel Ein, MD
Clinical Professor of Medicine
Division Director*



ALLERGY

FACULTY:

Lawrence Dubuske, MD, Clinical Professor of Medicine

Jennifer Kannan, MD, Assistant Professor of Medicine

Anjeni Keswani, MD, Assistant Professor of Medicine

Richard Nicklas, MD, Clinical Professor of Medicine

Janine Van Lancker, MD, Assistant Professor of Medicine

VA FACULTY:

Raghava Charya, MD, Assistant Professor of Medicine

Dipa Sheth, MD, Assistant Professor of Medicine

The Division of Allergy has had continued growth in clinic visits this year with close to 18,000 visits.

It is now only one of two academic Allergy clinics in the Washington metropolitan area and is increasingly a tertiary care center for the region. Plans are underway to expand the services it provides in the coming year, especially in the area of drug allergies and the use of biologics in treating asthma and other atopic diseases. Outreach efforts continue to inform hospital-based services about our ability to help diagnose and manage inpatients.

We have also provided education for more medical students, residents and fellows with lectures to other divisions and departments, noon conferences and mentoring. We give the orientation lectures on everyday allergic diseases (asthma, allergic rhinitis, urticaria, etc) to first-year NIAID Fellows who get their major clinical experience in the Allergy Center. Drs. Anjeni Keswani and Jennifer Kannan have led initiatives to enhance their experience by giving a series of ongoing lectures and reading lists throughout their rotations.

RESEARCH

Three years ago, Dr. Ein founded a multicenter group to systematically study drug allergies, including mechanistic, epidemiological and genetic studies. The main goal of the research has been to validate in vivo and in vitro drug allergy tests, data which currently exists only for penicillin and cis-platin. The group has a pending NIAID grant application.

Dr. Keswani is collaborating with Dr. Amit Singh in starting a joint program in chronic rhinosinusitis to study new treatments and pursuing basic research on pathogenesis. She is an investigator in clinical trials for nasal polyps and also has pending grant applications.

Dr. Lawrence DuBuske also continues his collaboration with numerous investigators in Eastern Europe doing mechanistic studies in a variety of allergic diseases. (See his publications and abstracts below.)

Dr. Richard Nicklas served as co-chair of the Joint Task Force on Practice Parameters for the Allergy specialty for twenty years and retired from that position in November 2016. He has received numerous awards for his service, including the Distinguished Service Award of the American Academy of Allergy, Asthma and Immunology.

Our faculty have presented posters and talks at various national and international meetings this year. For example, Dr. Keswani gave a talk on Chronic Rhinosinusitis from the Allergist and Otolaryngologist's Perspective at the AAAAI Annual Meeting, Atlanta, GA, and March 5, 2017. Dr. DuBuske was elected President of INTERASMA, the Global Asthma Association for 2017-2018. Dr. Ein serves on the World Allergy Organization Publications Committee.

ALLERGY

PUBLICATIONS/ACTIVITIES:

Daniel Ein, MD

- Drug Research Grant Acceptance
- Khan,D, Castells M, Ein D, et al. Cephalosporin Allergy: a Review. JACI In Practice. Accepted for publication.

Lawrence Dubuske, MD

- Belarus Allergy Society, Vitebsk June 2019: Lecture: "Eosinophilic Asthma"
- President: INTERASMA- the Global Asthma Association: January 2017- December 2019
- Immediate Past President INTERASMA: current
- Treasurer: American Association of Certified Allergists
- Publication: "Seasonal Variability of Exacerbations of Severe Uncontrolled Eosinophilic Asthma and Clinical Benefits of Benralizumab; DuBuske L, Newbold P, Wu Y and Trudio F; Allergy and Asthma proceedings Sept 4, 2018 39(5) : 345-349
- Publication: "IgE Allergy Diagnostics and other Relevant Tests in Allergy: A Position Paper of the World Allergy Organization"; Journal of the World Allergy Organization; 2019; L DuBuske co-author; accepted
- Publication: "Beliefs and Preferences Regarding Biologic Treatments for Severe Asthma" INES Collaborative Group- L DuBuske co-author; Journal of the World Allergy Organization; 2019; accepted

CARDIOLOGY

Richard Katz, MD
Bloedorn Professor of Medicine
Division Director

Cynthia Tracy, MD
Professor of Medicine
Associate Director



CARDIOLOGY

FACULTY

William Borden, MD, Associate Professor of Medicine; Director of Healthcare Transformation

Andrew Choi, MD, Assistant Professor of Medicine and Radiology; Co-Director, Cardiac CT and MRI

Brian Choi, MD, Professor of Medicine and Radiology; Co-Director, Advanced Cardiac Imaging

Steven Farmer, MD, Clinical Associate Professor of Medicine, Senior Advisor and Senior Medical Officer for CMS/CMMI

Mardi Gombberg-Maitland, MD, Professor of Medicine, Director of Pulmonary Hypertension

Joseph Krepp, MD, Assistant Professor of Medicine

Jannet Lewis, MD, Professor of Medicine; Director, Non-Invasive Cardiology; Director, GW Women's Heart Center

Lisa Martin, MD, Associate Professor of Medicine; Director, Lipid Clinic

Ramesh Mazhari, MD, Associate Professor of Medicine, Director, Interventional Cardiology Fellowship

Marco Mercader, MD, Professor of Medicine, Director, Electrophysiology Research

Christian Nagy, MD, Assistant Professor of Medicine

Gurusher Panj Rath, MD, Associate Professor of Medicine; Director, Heart Failure and Mechanical Circulatory Support Program

Jonathan Reiner, MD, Professor of Medicine; Director, Cardiac Catheterization Laboratories

Allen Solomon, MD, Professor of Medicine; Director, Cardiology Fellowship; Director, CCU

Alan Wasserman, MD, Eugene Meyer Professor of Medicine, Chairman, Department of Medicine

William Weglicki, MD, Professor of Medicine; Professor of Biochemistry and Molecular Biology

PAS/NP/RDS

Kay Arnsberger, PA

Karen Barr, NP

Linda Bostrom, NP

Monique Nylund-Alm, NP

Kelli Metzger, RD

CARDIOLOGY

Clinically the GW Cardiology Division has expanded services including Electrophysiology, Advanced Heart Failure, Structural Heart Disease, Pulmonary Hypertension, Echocardiography/Stress Testing/Nuclear Cardiology, Multimodality (CT and MRI) Imaging, Adult Congenital Heart Disease, and Preventive Cardiology/Lipids. Under the leadership of Dr. Gurusher Panjraht, the Advanced Heart Failure team now offers Left Ventricular Assist Devices. Drs. Joseph Krepp and Panjraht have combined imaging and heart failure expertise offering new diagnostic and treatment options for patients with amyloidosis. This year we launched a Pulmonary Hypertension Center of Excellence directed by our newest faculty member, Dr. Mardi Gomberg. The structural heart team, comprised of Drs. Nagy, Reiner, and Mazhari, has increased case volume completing over 250 TAVRS and adding MitraClip and Watchman procedures. Dr. Andrew Choi expanded multimodality cardiac imaging and started an elective rotation for fellows. Drs. Panjraht and Katz and our Heart Failure NP supervise our innovative community health worker program serving our inner city patients and reducing rehospitalizations.

Educationally, the Division faculty supervised our 12 cardiology fellows in addition to teaching medical residents, GW medical students and physician assistants. Drs. Mercader and Panjraht organized our weekly Cardiology Grand Rounds inviting a wide range of national experts, including hosting 8 visiting professors.

Our faculty and fellows have produced a record number papers and presentations. Between July 2018 and June 2019 the GW Cardiology faculty published 47 manuscripts and presented 41 abstracts. Faculty, fellows, residents, and GW medical students presented their work at the American Heart Association, American College of Cardiology, American Society of Echocardiography, Society for Cardiovascular Angiography and Interventions, International Society for Heart and Lung Transplantation, American College of Physicians, TransCatheter Therapeutics (TCT), Society of Cardiovascular CT, Heart Failure Society of America and the Heart Rhythm Society national meetings. In addition, our faculty were invited speakers providing 41 presentations at national and regional scientific meetings.

This year our cardiologists have been selected to leadership roles on 32 national committees and journals. Dr. Panjraht chairs heart failure committees for the American College of Cardiology and is a member of the VAD Journal editorial board. Dr. Tracy serves a senior role for the Heart Rhythm Society, AHA, and ACC and is a member of the editorial board of the Journal of Interventional Electrophysiology. Dr. William Borden is Associate Editor for Circulation Quality Outcomes. Dr. Andrew Choi is an editorial board member for the JACC Cardiovascular Imaging journal and an expert on utilizing Twitter to reach medical professionals. Dr. Gomberg serves on the editorial boards of Chest, European Respiratory Journal, and JACC, and Dr. Katz on the British Journal of Cardiology.

The GW cardiology faculty has unique expertise as national experts on health care policy. Dr. Borden advises the ACC and AHA on policy issues and Dr. Farmer extended his role as Senior Advisor and Senior Medical Officer for CMS/CMMI.

The GW Heart and Vascular Institute (HVI) continued support of a wide range of educational, research, and community service programs. Drs. Tracy and Mercader conducted the 9th Honduras Mission treating over 200 patients and implanting 50 pacemakers and ICDs. This annual event has inserted a total of 321 devices totaling over \$5 million donated medical equipment. Our faculty and fellows provided health screening at churches and high school athletic screening as well as volunteering at Food and Friends. The HVI hosted events at the GW and Textile Museum.

CARDIOLOGY

NEW PULMONARY HYPERTENSION PROGRAM



*Mardi Gomberg, MD, Professor of Medicine and Director of the GW Advanced Pulmonary Hypertension Program, Pictured left
Jalil Ahari, MD, Associate Professor of Medicine, Pictured Right*

CARDIAC ELECTROPHYSIOLOGISTS



Pictured above (Left to Right): Drs. Marco Mercader, Allen Solomon, and Cynthia Tracy.

CARDIOLOGY

ABSTRACTS

- **Choi AD, Nagy C, Reiner J**, Earls J, Zeman R, Javan R, Cardiac CT and 3D Printing in Planning Structural Heart Disease: An Emerging Approach, Journal of Cardiovascular Computed Tomography, 2019 Jun, Abstract for Society of Cardiovascular Computed Tomography 2018 Scientific Sessions
- Walker T, Zeman R, Earls JP, Lichtenberger J, Pocock E, Najam F, Young H, **Reiner J, Nagy C, Choi AD**, What are the Implications of Non-Cardiac Findings in Patients Undergoing Evaluation for TAVR?, Journal of the American College of Cardiology, 2019 Mar, 73 (9): Supplement 1,
- Covas P (Medical resident), Forgione J, Yunus R, Gordezky R, **Panjrath G, Solomon A, Choi AD**, A Case of Acute Fulminant Heart Failure Abated by the Heart Team, Journal of the American College of Cardiology, 2019 Mar, FIT Case Abstract. 73 (9): Supplement 1, 1312-148. 1202-039
- Aksentijevich M, Teague H, Playford M, Dey A, Reddy A, Elnabawi Y, Goyal A, Chaturvedi A, Choi H, Khalil N, Argueta-Amaya J, Shukla P, Rodante J, Keel A, Sandfort V, Chen MY, Bluemke D, **Choi AD, Mazhari R**, Gelfand, J, Mehta N, Coronary Plaque Burden Is Associated with Cholesterol Efflux Capacity Partially Mediated by the Hematopoietic System in Psoriasis, Journal of the American College of Cardiology, 2019 Mar, 73 (9): Supplement 1, 1125-327, March 2019.
- Yunus R, Alzahrani T, McCaffrey J, Ismail H, **Lewis J, Solomon A, Choi BG, Krepp J, Nagy C, Choi AD, Reiner J**, Predictors of Early Left Ventricular Ejection Fraction Recovery in Patients Following TAVR, Mid-Atlantic American College of Cardiology Abstract Session, 2018 Nov, Mid-Atlantic American College of Cardiology Symposium, November 2018
- M Zhang, J Earls, BG Choi, RK Zeman, AD Choi, The evolving use of cardiac CT to inform defining quality in imaging, American Heart Association QCOR Scientific Sessions, 2018 Apr
- R Yunus, T Alzahrani, J McCaffrey, H Ismail, **J Lewis, A Solomon, B Choi, J Krepp, C Nagy, A Choi, J Reiner**, Predictors of early left ventricular ejection fraction recovery in patients following transcatheter aortic valve replacement, American Heart Association Quality of Care & Outcomes Research, 2019
- **Panjrath G**, Alzahrani T, Witkin L, **Katz R**, A pilot program to tackle food insecurity in an underserved and poorly controlled diabetic population, JACC, 2019 Mar
- Desormeaux K, Kamara S, Bostrom L, **Katz R, Panjrath G**, Integrating community health workers into home based heart failure care, Unity 2019 Community Health Worker Conference, 2019 Apr28.
- **Panjrath G**, Bostrom L, Witkin L, **Katz R**, Moving mobile health forward: Combining mHealth with community health workers bolsters heart failure care, Heart Failure Society of America 22nd Annual Scientific Meeting, 2019
- Pedro Covas, MD, Rachel Voke, MD, Dorys Chavez, MD, **Marco Mercader, MD and Cynthia Tracy, MD**, Peripartum- Discovered Congenital Complete Heart Block in Honduras., American College of Cardiology 2019, ACC 2019, 2019 Mar
- Tran Nguyen, Talal Alzahrani, James McCaffery, Raza Yunus, Adebayo Atanda, **Marco Mercader and Allen Solomon**, Angiotensin Converting Enzyme Inhibitor Reduces the Incidence of Atrial Fibrillation in Heart Failure with Preserved Ejection Fraction Patients: A Retrospective Cohort Study from the Treatment of Preserved Cardiac Function Heart Failure with an Aldosterone Antagonist. Aldosterone Antagonist Trial. American Journal of Cardiology 2019, ACC 2019, Mar
- Taher Tayeb, Talal Alzahrani, **Marco Mercader**, Does a Higher Level of Education Translate Into a Lower Prevalence of Cardiovascular Disease., Hospital Medicine 2019., DC area, 2019 Mar
- James McCaffrey, Talal Alzahrani, **Marco Mercader, Allen Solomon, Cynthia Tracy, MD**, Rate versus rhythm control in patients with atrial fibrillation and normal to mild left atrial enlargement: Insights from the AFFIRM Trial., European Society of Cardiology 2018., Europe, 2018 Aug,
- Raza Yunus, Talal Alzahrani, Joseph Forgione, James McCaffrey, Adebayo Atanda, **Joseph Krepp, Ramesh Mazhari, Christian Nagy and Jonathan Reiner**. ACC 2019, Transcatheter Aortic Valve Replacement Outcomes: Insight From the National Cardiovascular Data Registry., ACC 2019, 2019
- Jain, R, **Krepp, J**, Wessler, J, Khalique, O, Hahn, RT, Moses JW, Improvement in Myocardial Strain after Percutaneous Coronary Intervention in Patients with Ischemic Cardiomyopathy, The Society for Angiography and Interventions, 2019 May
- Yunus, R, Alzahrani, T, McCaffrey JD, **Krepp J, Choi, AD, Nagy C, Mazhari R, Reiner J**, Predictors of Early Left Ventricular Ejection Fraction Recovery in Patients Following Transcatheter Aortic Valve Replacement, American Heart Association Quality of Care and Outcomes Research Scientific Session, 2019 Apr
- Yunus R, Alzahrani T, Forgione J, McCaffrey JD, Atanda A, **Krepp J, Mazhari R, Nagy C, Reiner J**, Transcatheter Aortic Valve Replacement Outcomes: Insight from The National Cardiovascular Data Registry, American College of Cardiology Scientific Sessions, 2019 Mar
- Zhang X, Tu W, Manson JE, Tinker L, Liu S, Cauley JA, Qi L, Mouton C, **Martin LW**, Hou L, Song Y, Racial/Ethnic Differences in 25-Hydroxy Vitamin D and Parathyroid Hormone Levels and Cardiovascular Disease Risk Among Postmenopausal Women., Journal of the American Heart Association, 2019 Feb, 8

CARDIOLOGY

ABSTRACTS

- Raza Yunus, Talal Alzahrani, Joseph Forgione, James McCaffrey, Adebayo Atanda, **Joseph Krepp, Ramesh Mazhari, Christian Nagy and Jonathan Reiner**, Predictors of Early Left Ventricular Ejection Fraction Recovery in Patients Following Transcatheter Aortic Valve Replacement., Quality of Care and Outcome Research, 2019
- Walker T, Zeman R, Earls JP, Lichtenberger J, Pocock E, Najam F, Young H, **Reiner J, Nagy C, Choi AD**, What are the Implications of Non-Cardiac Findings in Patients Undergoing Evaluation for TAVR?, ACC Scientific Sessions, New Orleans, 2019 Mar
- Raza Yunus, Talal Alzahrani, Joseph Forgione, James McCaffrey, Adebayo Atanda, **Joseph Krepp, Ramesh Mazhari, Christian Nagy and Jonathan Reiner**, Transcatheter Aortic Valve Replacement Outcomes: Insight from the National Cardiovascular Data Registry, JACC 2019 Vol. 73 (9) Suppl 1
- Talal Alzahrani, Tran Nguyen, Angela Ryan, Ahmad Dwairy, James McCaffrey, Raza Yunus, Joseph Forgione, **Joseph Krepp, Christian Nagy, Ramesh Mazhari, Jonathan Reiner**, Cardiovascular Disease Risk Factors and Myocardial Infarction in Transgender Population, AHA QCOR, Arlington, VA, 2019, Finalist at Young Investigator Award
- Talal Alzahrani, Tran Nguyen, Angela Ryan, Ahmad Dwairy, James McCaffrey, Raza Yunus, Joseph Forgione, **Joseph Krepp, Christian Nagy, Ramesh Mazhari, Jonathan Reiner**, Mitral Leaflet Clip Procedure Outcomes: Analysis from the National Cardiovascular Data Registry, AHA QCOR, Arlington, VA, 2019
- Faraien Bahri, Talal Alzahrani, Gupreet Sodhi, Maziar Sadri, **Christian Nagy, Jonathan Reiner, and Ramesh Mazhari**, Catheter Access Site and Acute Kidney Injury. AHA, Chicago, 2018, Nov
- Lee KB, Trachiotis GD, **Reiner JS, Nagy CD**, Simultaneous Valve-in-Valve Transcatheter Aortic and Valve Replacements for Failed Bioprosthetic Aortic and Tricuspid Valve Stenosis, TCT 2018 - The Challenging Case Sessions, San Diego, 2018 Sep
- **Panjrath G**, Alzahrani T, Witkin L, **Katz R**, A pilot program to tackle food insecurity in an underserved and poorly controlled diabetic population, JACC, 2019 Mar
- Desormeaux K, Kamara S, Bostrom L, **Katz R, Panjrath G.**, Integrating community health workers into home based heart failure care, Unity 2019 Community Health Worker Conference, 2019 Apr28
- Nigel Amankwah, Talal Alzahrani, **Ramesh Mazhari**, James McCaffrey, **Christian Nagy**, and **Jonathan Reiner**, Transcatheter Mitral Replacement Outcomes: Insight from the National Cardiovascular Data Registry, Circulation 2018;138 Suppl (1):A11586, 2018
- Tsimploulis A, Faselis C, Kanonidis I, Rashba E, Singh S, Deedwania P, **Panjrath G**, Allman R, Fonarow G, Ahmed A., Association of Atrial Fibrillation and Outcomes in Older Patients With Heart Failure With Preserved and Reduced Ejection Fraction (HFpEF and HFrEF), Journal of American College of Cardiology, 2019 Mar
- Nazari M, Gill GS, Malik A, Tummala L, Arundel C, **Panjrath G**, Singh S, Allman RM, Faselis C, Fonarow GC, Ahmed A., Outcomes in Hospitalized Older African American Patients With Heart Failure With Preserved Ejection Fraction (HFpEF), Journal of American College of Cardiology, 2019 Mar
- Gill GS, Malik A, Nazari M, Arundel C, Singh S, **Panjrath G**, Deedwania P, Kanonidis I, Faselis C, Fonarow GC, Ahmed A., Admission-to-Discharge Weight Change and 30-Day Post-Discharge Outcomes in Older Patients With Heart Failure With Preserved and Reduced Ejection Fraction (HFpEF and HFrEF), Journal of American College of Cardiology, 2019 Mar
- Alzahrani T, Faiwizewski, **Solomon A**, Ahmed A, **Panjrath GS.**, The Effect of Heart Rate Reduction in Patients With Heart Failure and Preserved Ejection Fraction ACC 2019, Journal of American College of Cardiology, 2019 Mar
- Alzahrani T, Liu J, **Solomon A, Panjrath G.**, Angiotensin-Converting-Enzyme Inhibition in Stable Coronary Artery Disease and Cardiomyopathy With Mid-range Ejection Fraction: Insights From the PEACE Trial., Circulation: Cardiovascular Quality and Outcomes., 2018
- Rasla S, Lin X, El Meligy A, Roberts MB, Laddu D, Allison MA, Shadyab AH, Liu S, Martin LW, Manson J, Chlebowski R, **Panjrath GS**, LaMonte MJ, Eaton CB., Association of Walking Pace, Walking Frequency and Duration and Joint Effects on the Risk of Heart Failure in Post-Menopausal Women., Journal of American College of Cardiology, 2018
- Aldrich A, Bradley A, **Choi A, Panjrath G**, The Great Masquerader: Cardiac Sarcoidosis Mimicking Arrhythmogenic Right Ventricular Dysplasia, Journal of American College of Cardiology, 2018
- Bradley A, **Panjrath G**, Finding the Elusive Connection, Journal of American College of Cardiology, 2018
- Simon M, **Gomberg-Maitland M**, Oudiz R, Rischard F, Elinoff JM, Grigorian B, Schmid A, Hoe S, Desai N, Gladwin M. Patients with severe pulmonary arterial hypertension treated with ABI-009, nab-Sirolimus, an mTOR inhibitor: Interim results from a phase 1 clinical trial. American College of Cardiology, 2019, New Orleans, LA, poster presentation.
- Psotka MA, Thomeas-McEwing V, Gamazon ER, Hirota T, Friedman PN, Konkashbaev A, Kubo M, Nakamura Y, Ratain MJ, Benza RL, Cox NJ, **Gomberg-Maitland M**, Maitland ML. Two polymorphic gene loci associated with treprostinil dose in pulmonary arterial hypertension. International Society of Heart and Lung Transplant, 2019, Orlando, FL, oral presentation.

CARDIOLOGY

ABSTRACTS

- Simon M, **Gomberg-Maitland M**, Oudiz R, Rischard F, Elinoff JM, Grigorian B, Schmid A, Hoe S, Desai N, Gladwin M. Patients with severe pulmonary arterial hypertension treated with ABI-009, nab-Sirolimus, an mTOR inhibitor: Interim results from a phase 1 clinical trial. International Society of Heart and Lung Transplant, 2019, Orlando, FL, oral presentation.
- Jain, R, **Krepp, J**, Wessler, J, Khalique, O, Hahn, RT, Moses JW. "Improvement in Myocardial Strain after Percutaneous Coronary Intervention in Patients with Ischemic Cardiomyopathy." Society for Cardiovascular Angiography and Interventions, Las Vegas, NV May 2019

PUBLICATIONS

- Wang DD, Geske JB, **Choi AD**, Lee JC, Khalique OK, Gafoor S, Atianzar K, Blanke P, Little SH, Sorajja P, O'Neill WW & Cavalcante JL, Interventional Imaging for Structural Heart Disease: Challenges and New Frontiers of an Emerging Multi-disciplinary Field, Structural Heart, 2019 May, Published online 22 Apr 2019
- Faza NN, Wang DD, Cavalcante J, **Choi AD**, Geske JB, Little SH., Interventional Imagers: The Conductors of the Heart Team Orchestra., Diagnostic and Interventional Cardiology., 2019 Apr
- Parwani P, **Choi AD**, Lopez-Mattei J, Raza S, Chen T, Narang A, Michos ED, Erwin JP 3rd, Mamas MA, Gulati M., Understanding Social Media: Opportunities for Cardiovascular Medicine, Journal of the American College of Cardiology, 2019 Mar, 2019 Mar 12;73(9): 1089-93.
- **Choi AD**, Parwani P, Geske J, et al., Cardiac Imaging at ACC.19: A Sneak Peek, American College of Cardiology Imaging Section, acc.org/imaging, 2019 Mar
- **Choi AD**, Leifer ES, Yu JH, Datta T, Bronson KC, Rollison SF, Schuzer JL, Steveson C, Shanbhag SM, Chen MY, Reduced radiation dose with model based iterative reconstruction coronary artery calcium scoring, European Journal of Radiology, 2019 Feb, 2019 Feb; 111:1-5.
- Alzahrani T, Tashkandi A, Sarkar A, Smuclovsky C, Earls JP, **Choi AD**, Practical Clinical Application of Cardiac Computed Tomography-Derived Fractional Flow Reserve, Cardiovascular Innovations and Applications., 2019 Feb
- Brunetti R, **Choi A**, App Review Series: Cardiac Imaging Planes 1-2-3, Journal of Digital Imaging, 2018 Dec, 2018 Dec; 31(6): 765-767.
- Wang DD, Geske J, **Choi AD**, Khalique O, Lee J, Atianzar K, Wu I, Blanke P, Gafoor S, Cavalcante JL., Navigating a Career in Structural Heart Disease: Interventional Imaging, Journal of the American College of Cardiology: Cardiovascular Imaging, 2018 Dec, 2018 Dec;11(12): 1928-30
- Ramsey BC, Fentanes E, **Choi AD**, Branch KR, Thomas DM., Myocardial Assessment with Cardiac CT: Ischemic Heart Disease and Beyond, Current Cardiovascular Imaging Reports, 2018 Nov, 2018; 11(7): 16
- Weir-McCall JR, Madan N, Villines TC, Shaw LJ, Abbata S, Ferencik M, Nieman K, Blankstein R, Ghoshhajra BB, **Choi AD**, Nicol E., Highlights of the thirteenth annual scientific meeting of the Society of Cardiovascular Computed Tomography, Journal of Cardiovascular Computed Tomography, 2018 Nov, 2018 Nov-Dec; 12(6): 523-528
- Parwani P, Lopez-Mattei J, **Choi AD**, Building Bridges in Cardiology and Radiology: Why Collaboration is the Future of Cardiovascular Imaging, Journal of the American College of Cardiology: Cardiovascular Imaging, 2018 Nov, 2018 Nov; 11(11): 1713-1717
- Parwani P, Lopez-Mattei J, **Choi AD**, Building Bridges in Cardiology and Radiology: Why Collaboration is the Future of Cardiovascular Imaging, Journal of the American College of Cardiology, 2018 Nov, 2018 Nov 13;72(20): 2534-2538
- **Choi AD**, Villines TC., The Future of the ACC Imaging Section: A Discussion with Todd C. Villines, MD, FACC., American College of Cardiology Imaging Section, acc.org/imaging., 2018 Oct
- Bradley AJ, **Lewis JF**, **Choi AD**, Evaluation of an incidental cardiac finding in a patient with bronchitis, Heart, 2018 Sep, 2018 Sep; 104(17): 1469-70. (Case Report)
- N Amankwah, M Park, A Gu, **BG Choi**, Trends in authorship demographics for manuscripts published in the American Journal of Cardiology, American Journal of Cardiology, 2018 Oct, 122(7):1255-9
- KC Michelis, DL Narotsky, **BG Choi**, Cardiovascular Imaging in Global Health, Radiology in Global Health : Strategies, Implementation, and Applications, 2nd edition, : DJ Mollura et al, editors, Springer Publishing, 2019
- **BG Choi**, T Dhawan, K Metzger, L Marshall, A Akbar, T Jain, HA Young, **RJ Katz**, Image-based mobile system for dietary management in an American cardiology population: a pilot randomized controlled trial to assess the efficacy of dietary coaching delivered via smartphone app versus traditional counseling, 2019, JMIR mHealth and uHealth
- Alzahrani T, Tiu J, **Panjrath G**, **Solomon A**, The effect of angiotensin-converting enzyme inhibitors on clinical outcomes in patients with ischemic cardiomyopathy and midrange ejection fraction: a post hoc subgroup analysis from the PEACE trial., Ther Adv Cardiovasc Dis, 2018 Dec
- Talal Alzahrani, James McCaffrey, **Marco Mercader** and **Allen Solomon**, Rate Versus Rhythm Control in Patients with Normal to Mild Left Atrial Enlargement: Insights from the Affirm Trial, Journal of Atrial Fibrillation, 2018 Oct
- Critique and Review: **Borden WB**, Making Health Policy More Accessible, Circulation: Cardiovascular Quality and Outcomes, 2018 Dec

CARDIOLOGY

PUBLICATIONS

- Critique and Review: **Borden WB**, Optimizing Transparency to Empower Patients, *Circulation: Cardiovascular Quality and Outcomes*, 2018 May
- **Lewis JF**, Zeger SL, Li X, Mann NC, Newgard CD, Haynes S, Wood S, Dai M, Simon AE, McCarthy ML., Gender differences in the Quality of EMS Care Nationwide for Chest Pain and Out-of- Hospital Cardiac Arrest., *Women Health Issues*, 2019 Apr, *Womens Health Issues* 2019;29:116-124
- Bradley AJ, **Lewis JF**, **Choi AD**, Evaluation of an incidental cardiac finding in a patient with bronchitis, *British Medical Journal*, 2018
- **Lewis JF**, Zeger SI, Li X, McCarthy ML., Gender differences in the quality of EMS care nationwide for chest pain and out-of-hospital cardiac arrest, *Women Health Issues*, 2018
- Talal Alzahrani, Tran Nguyen, Angela Ryan, Ahmad Dwairy, James McCaffrey, Raza Yunus, Joseph Forgione, **Joseph Krepp**, **Christian Nagy**, **Ramesh Mazhari**, **Jonathan Reiner**, Cardiovascular Disease Risk Factors and Myocardial Infarction in the Transgender Population, *Circulation: Cardiovascular Quality and Outcomes*, 2019 Apr, Volume 12, Issue 4. Pages 1-7
- Saquib N, Brunner R, Desai M, Kroenke C, **Martin LW**, Daviglus M, Allen NB, Robinson J, Tindle H, Stefanick ML, Changes in physical and mental health are associated with cardiovascular disease incidence in postmenopausal women, *Aging*, 2019 May
- Awosika O, Eleryan MG, Rengifo-Pardo M, Doherty L, **Martin LW**, Ehrlich A, A Case-control Study to Evaluate the Prevalence of Nonalcoholic Fatty Liver Disease Among Patients with Moderate-to-severe Psoriasis., *The Journal of Clinical and Aesthetic Dermatology*, 2018 Jun, 11, 33-37
- Liang J, Le TH, Velez Edwards DR, Tayo BO, Gaulton KJ, Smith JA, Lu Y, Jensen RA, Chen G, Yanek LR, Schwander K, Tajuddin SM, Sofer T, Kim W, Kayima J, McKenzie CA, Fox E, Nalls MA, Young JH, Sun YV, Lane JM, Cechova S, Zhou J, Tang H, Fornage M, Musani SK, Wang H, Lee J, Adeyemo A, Dreisbach AW, Forrester T, Chu PL, Cappola A, Evans MK, Morrison AC, **Martin LW**, et al. Correction: Single-trait and multi-trait genome-wide association analyses identify novel loci for blood pressure in African-ancestry populations., *PLoS genetics*, 2018 May, 14
- Brethett K, Leng I, Foraker RE, Abraham WT, Coker L, Whitfield KE, Shumaker S, Manson JE, Eaton CB, Howard BV, Ijioma N, Cene CW, **Martin LW**, Johnson KC, Klein L, Risk Factor Burden, Heart Failure, and Survival in Women of Different Ethnic Groups: Insights From the Women's Health Initiative., *Circulation. Heart failure*, 2018 May, 11
- Desai P, Wallace R, Anderson ML, Howard BV, Ray R, Wu C, Safford M, **Martin LW**, Schlecht N, Liu S, Cirillo D, Jay A, Manson JE, Simon MS, An analysis of the effect of statins on the risk of Non-Hodgkin's Lymphoma in the Women's Health Initiative cohort., *Cancer medicine*, 2018 May, 7, 2121-2130
- Franceschini N, Kopp JB, Barac A, **Martin LW**, Li Y, Qian H, Reiner AP, Pollak M, Wallace RB, Rosamond WD, Winkler CA., APOL1 is associated with heart failure with preserved ejection fraction in African-American postmenopausal women, *JAMA Cardiology*, 2018 May
- Samia Mora, MD, MHS,1 Nanette K. Wenger, MD,2 Nancy R. Cook, ScD,1,3 Jingmin Liu, MS,4 Barbara V. Howard, PhD,5 Marian C. Limacher, MD,6 Simin Liu, MD,7 ScD, Karen L. Margolis, MD, MPH,8 **Lisa W. Martin**, et. al. Evaluation of the Pooled Cohort Risk Equations for Cardiovascular Risk Prediction in a Multiethnic Cohort of Women: The Women's Health Initiative, *JAMA Internal Medicine*, 2018 May
- Liang J, Le TH, Velez Edwards DR, Tayo BO, Gaulton KJ, Smith JA, Lu Y, Jensen RA, Chen G, Yanek LR, Schwander K, Tajuddin SM, Sofer T, Kim W, Kayima J, McKenzie CA, Fox E, Nalls MA, Young JH, Sun YV, Lane JM, Cechova S, Zhou J, Tang H, Fornage M, Musani SK, Wang H, Lee J, Adeyemo A, Dreisbach AW, Forrester T, Chu PL, Cappola A, Evans MK, Morrison AC, **Martin LW**, et al. Single-trait and multi-trait genome-wide association analyses identify novel loci for blood pressure in African-ancestry populations., *PLoS genetics*, 2018 May, 14
- Zhang X, Tu W, Manson JE, Tinker L, Liu S, Cauley JA, Qi L, Mouton C, **Martin LW**, Hou L, Song Y, Racial/Ethnic Differences in 25-Hydroxy Vitamin D and Parathyroid Hormone Levels and Cardiovascular Disease Risk Among Postmenopausal Women., *Journal of the American Heart Association*, 2019 Feb, 8, e011021
- McCaffrey JA, Alzahrani T, Datta T, **Solomon AJ**, **Mercader M**, **Mazhari R**, **Nagy C**, **Reiner JS**, **Tracy CM**., Outcomes of Acute Conduction Abnormalities Following Transcatheter Aortic Valve Implantation With a Balloon Expandable Valve and Predictors of Delayed Conduction System Abnormalities in Follow-up., *American Journal of Cardiology*, 2019 Jun, 123, 1845-1852
- Guglin M, Zucker MJ, Bazan VM, Bozkurt B, El Banayosy A, Estep JD, Gurley J, Nelson K, Malyala R, **Panjrath GS**, Zwischenberger JB, Pinney SP, . Venoarterial ECMO for Adults: JACC Scientific Expert Panel. *J Am Coll Cardiol*. 2019 Feb 19;73(6):698-716, *Journal of American College of Cardiology*, 2019 Feb
- Gabr RE, El-Sharkawy AM, Schär M, **Panjrath GS**, Gerstenblith G, Weiss RG, Bottomley PA., Cardiac work is related to creatine kinase energy supply in human heart failure: a cardiovascular magnetic resonance spectroscopy study., *J Cardiovasc Magn Reson.*, 2018 Dec
- Aggarwal M, Bozurt B, **Panjrath G**, Aggarwal B, Ostfeld R, Barnard ND, Gaggin H, Freeman AM, Allen K, Madan S, Massera D, Litwin SE., Lifestyle Modifications as Potential Approaches for Prevention and Treatment of Heart Failure., *Journal of American College of Cardiology*, 2018 Nov

CARDIOLOGY

PUBLICATIONS

- Kleiner Shochat M, Fudim M, Shotan A, Blondheim DS, Kazatsker M, Dahan I, Asif A, Rozenman Y, Kleiner I, Weinstein JM, **Panjrath G**, Sobotka PA, Meisel SR., Prediction of readmissions and mortality in patients with heart failure: lessons from the IMPEDANCE-HF extended trial. ESC Heart Fail. 2018 Oct;5(5):788-799., ESC Heart Fail., 2018 Oct
- Alzahrani T, Nguyen T, Ryan A, Dwairy A, McCaffrey J, Yunus R, Forgione J, **Krepp J, Nagy C, Mazhari R, Reiner J.**, Cardiovascular Disease Risk Factors and Myocardial Infarction in the Transgender Population., Circulation Cardiovascular Quality and Outcomes, 2019 Apr, Circ Cardiovasc Qual Outcomes. 2019 Apr;12(4)
- Lee KB, Trachiotis GD, **Reiner JS, Nagy CD**, Double Valve-in-Valve Transcatheter Valve Replacements for Failed Surgical Bioprosthetic Aortic and Tricuspid Valves., Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery, 2019 Mar, Innovations (Phila). 2019 Mar 14
- January CT, Wann LS, Calkins H, Field ME, Chen LY, Furie KL, Cigarroa JE, Heidenreich PA, Cleveland JC Jr, Murray KT, Ellinor PT, Shea JB, Ezekowitz MD, **Tracy CM**, Yancy CW., 2019 AHA/ACC/HRS Focused Update of the 2014 AHA/ACC/HRS Guideline for the Management of Patients With Atrial Fibrillation: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society., Heart Rhythm, 2019 Jan, Heart Rhythm. 2019 Jan 28. pii: S1547-5271(
- **Tracy CM**, Crossley GH, Bunch TJ, Chow GV, Leiserowitz A, Indik JH, Kusumoto F, Mendes LA, Munger TM, Murali S, Patton KK, Russo AM, Scheinman M, Schoenhard, 2017 ACC/HRS lifelong learning statement for clinical cardiac electrophysiology specialists: A report of the ACC Competency Management Committee, Heart Rhythm, 2018 Feb, Heart Rhythm. 2018 Feb;15(2):e17-e34.
- Sitbon O, **Gomberg-Maitland M**, Granton J, Lewis MI, Mathai SC, Rainisio M, Stockbridge NL, Wilkins MR, Zamanian RT, Rubin LJ. Clinical trial design and new therapies for pulmonary arterial hypertension. Eur Resp J. 2019 Jan 24;53(1) pii:1801908. Dec. 13. (epub) PMID: 30545975
- Benza RL, **Gomberg-Maitland M**, Elliott G, Farber HWA, Foreman AJ, Frost AE, McGoon MD, Pasta DJ, Selej M, Burger C, Frantz RP. An update of the risk score calculator in pulmonary arterial hypertension patients from the registry to evaluate early and long-term PAH disease management (REVEAL). Chest. 2019 Feb 14 (epub)
- Parikh KS, Sharma K, Fiuzat M, Surks HK, George JT, Hoarpour N, Depre C, Desvigne-Nickens P, Nkulikiyinka R, Lewis GD, **Gomberg-Maitland M**, O'Conner CM, Sockbridge N, Califf RM, Konstam MA, Januzzi JL Jr, Solomon

SD, Borlaug BA, Shah SJ, Medfield MM, Felker GM. Heart failure with preserved ejection fraction expert panel report: Current controversies and implications for clinical trials. Jacc Heart Fail. 2018 Aug;6(8):619-632. PMID: 30071950

- **Gomberg-Maitland M**, Souza R. Uncovering small secrets in big data sets: How math can identify biology in rare conditions (pediatric pulmonary hypertension). Circ Res. 2017 Aug 4; 121(4):317-319.

NATIONAL AND REGIONAL PRESENTATIONS

- Nagy C, Interventions at the VA Cases: Protected PCI, CRT 2019 - Washington DC, 2019 Mar
- Nagy C, Plenary Speaker] MitraClip in the VA: Time to Take Off, CRT 2019 - Washington DC, 2019 Mar
- Nagy C, Structural Interventions at the VA, CRT 2019 - Washington DC, 2019 Mar
- Nagy C, Heart Valve Workshop, Washington DC Veterans Affairs Medical Center Valve Workshop, 2019 Mar
- Panjrath G, Guidelines to Clinical Practice in Heart Failure, Peruvian Society of Cardiology Annual Scientific Sessions, Lima, Peru, 2019 May
- Panjrath G, Comorbidities in HF: What You Need to Know in 2019, Peruvian Society of Cardiology Annual Scientific Sessions, Lima, Peru, 2019 May
- Panjrath G, Highlights from ACC 2019, Peruvian Society of Cardiology Annual Scientific Sessions, Lima, Peru, 2019 May
- Panjrath C, Heart Failure Section Highlight Sessions, ACC Scientific Sessions, 2019 Mar
- Panjrath G, Top 3 Clinical studies, ACC Highlight Sessions, 2019 Mar
- Panjrath G, OSA Versus CSA - Diagnosis and Treatment Strategies, ACC Scientific Session, 2019 Mar
- Panjrath G, Iron Deficiency in Heart Failure, Cardio Metabolic Health Congress, Boston, 2018 Oct
- Panjrath G, Guideline to Clinical Practice in Heart Failure., International Heart Failure Congress, Shenzhen, China, 2018 Jul
- Panjrath G, Inotropes and Vasodilators in Acute Heart Failure,, Inter American Congress of Heart Failure, Panama City, Panama, 2018 Jul
- Panjrath G, Evaluation and Management of Cardiogenic Shock, Inter American Congress of Heart Failure, Panama City, Panama, 2018 Jul
- Panjrath G, Heart Failure Guideline to Practice Update, Walter Reed Medical Center Medicine Grand Rounds, Bethesda, 2018 Feb
- Solomon A, Arrhythmias in Athletes, Heart Rhythm Society Annual Session, 2018 May

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NATIONAL AND REGIONAL PRESENTATIONS

- Tracy C, Ablation Should Be Performed in All Patients With Brugada Syndrome, Heart Rhythm Society Annual Scientific Sessions, 2019 May
- Tracy C, Global Disparities in Cardiac Pacemaker Therapy, Heart Rhythm Society Annual Scientific Sessions, 2019 May
- Tracy C, What Are Atypical Clinical Paths Really Like?, Heart Rhythm Society Annual Scientific Sessions, 2019 May
- Tracy C, Novel Ways to Look at Risks of Atrial Fibrillation, American Heart Association Annual Scientific Sessions, 2018 Nov
- Borden WB, Policy to Payment to Practice, American Heart Association Quality of Care and Outcomes Research Scientific Sessions 2019, 2019 Apr
- Borden WB, Alternate Payment Model Panel - what other payment models other than "fee-for-service" is viable?, ACT IAC Health Innovation Day, 2019 Apr
- Borden WB, Operating successfully in Medicare Shared Savings Plan ACO, American College of Cardiology Scientific Sessions 2019, 2019 Mar
- Borden WB, ACO Executive Roundtable for ACOs in New York, McKinsey & Company, 2019 Feb
- Borden WB, Renal denervation, the Circulatory System Devices Panel of the Medical Devices Advisory Committee for the Food and Drug Administration, 2018 Dec
- Borden WB, Telehealth Innovations to Promote Person-Centered Care in DC, Telehealth Innovations to Promote Person-Centered Care in DC, 2018 Nov
- Borden WB, U.S. Health Policy at the Crossroads: What Cardiovascular Clinicians Need to Know, American Heart Association Scientific Sessions 2018, 2018 Nov
- Borden WB, MIPS/APM Pathway, American College of Cardiology Legislative Conference, 2018 Oct
- Borden WB, Telehealth Quality Measure Development Multi-Stakeholder Roundtable, Discern Health, 2018 Jul
- Borden WB, Patient Cohort Management and Clinical Standard Delivery, American College of Cardiology Health Systems Conference, 2018 Jun
- Mazhari R, Taking the high road: Trans-radial management of ischemic leg following TAVR, Fellows complication course, 2019 Jun
- Choi AD. American College of Cardiology 2019 Imaging Highlights Session: The #ACCIImaging Social Media Response, March 2019
- Choi AD. Invited Lecture: Recent advances and the future of Cardiac CT, The editors speak: Social Media and Cardiac CT, Society of Cardiovascular CT 2018 Annual Scientific Sessions, July 2018
- Choi AD. Speaker, Finding your Niche in Academic Cardiology: An Imager's Perspective. American College of Cardiology Mid-Atlantic Cardiology Symposium, November 2018, Washington, DC
- Choi AD. Basics of Coronary CT Angiography. SCCT Chicago: Cardiac CT for the Practitioner - Invited Lecturer, March 30-31, 2019, Chicago, IL
- Choi AD. CT Angiography for Structural: TAVR, Valve in Valve, TMVR. SCCT Chicago: Cardiac CT for the Practitioner - Invited Lecturer, March 30-31, 2019, Chicago, IL
- Choi AD. Coronary Cases. SCCT Chicago: Cardiac CT for the Practitioner - Invited Lecturer, March 30-31, 2019, Chicago, IL
- Choi AD. Structural Cases. SCCT Chicago: Cardiac CT for the Practitioner - Invited Lecturer, March 30-31, 2019, Chicago, IL
- Choi AD. Invited online lecture: Introduction to Cardiac CT Tweakorial. American College of Cardiology Fellows-in-Training Social Media Bootcamp Series, August 2018.
- Gombert-Maitland M, American College of Cardiology, Co-Chair, Highlighted original research: Pulmonary hypertension and venous thromboembolic disease and the year in review. New Orleans, LA. March 2019.
- Gombert-Maitland M, International Society of Heart and Lung Transplant, speaker, "The drugs don't (or might not) work anymore! Implications for treatments in PAH with the new hemodynamic definition." Session entitled, "Changes in the world of pulmonary hypertension: Nice or not Nice." Orlando, FL. April 2019.

EDITORIAL BOARDS/NATIONAL COMMITTEES

- Gombert-Maitland, M. European Respiratory Journal; Associate Editor
- Gombert-Maitland M. CHEST; Associate Editor
- Gombert-Maitland M. Journal of the American College of Cardiology: Section Editor Pulmonary Hypertension
- Gombert-Maitland M. Member, Pulmonary Hypertension Association Scientific Leadership Council
- Gombert-Maitland M. Chair, Pulmonary Hypertension Association Scientific Leadership Council Education Committee
- Katz R. British Journal of Cardiology; Editorial Board
- Choi A. Journal of the American College of Cardiology: Cardiovascular Imaging; Editorial Board (Social Media)
- Choi A. Journal of Cardiovascular Computed Tomography; Editorial Board (Social Media)
- Choi A. Society of Cardiovascular CT; Annual Scientific Meeting Committee
- Borden B. Vice Chair, American Heart Association Council on Quality of Care and Outcomes Research

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EDITORIAL BOARDS/NATIONAL COMMITTEES

- Borden B. Member, American Heart Association National Advocacy Coordinating Committee
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- Borden B. Associate Editor, Circulation: Cardiovascular Quality and Outcomes
- Borden B. Member, American College of Cardiology Population Health Management Task Force
- Borden B. Associate Editor, Circulation: Cardiovascular Quality and Outcomes
- Choi B. American College of Cardiology Informatics and Health IT Task Force
- Choi B. RAD-AID International, Senior Member, 2015 May-None, Director
- Lewis J. American College of Cardiology Governor for the District of Columbia.
- Panjra G. Member, American College of Cardiology Heart Failure and Transplant Section Leadership Council
- Panjra G. World Heart Federation Heart Failure Roadmap. Heart Failure Writing Group
- Panjra G. Heart Failure Society of America, Annual Scientific Session Planning Committee
- Panjra G. American College of Cardiology Academic Cardiology Council, Member
- Panjra G. American College of Cardiology Heart Failure and Transplant Section leadership, Member
- Panjra G. Editorial Board, ACC.org,
- Panjra G. Editorial Board, VAD Journal
- Solomon A. American College of Cardiology, Writing committee Electrophysiology In service exam
- Tracy C. Accreditation Council for Graduate Medical Education: Board of Appeals for Internal Medicine- Electrophysiology
- Tracy C. CCEP Program Directors Subcommittee, Heart Rhythm Society
- Tracy C. Co-Chair EP Advanced Training Life Long Learning Statement. American College of Cardiology
- Tracy C. Heart Rhythm Society 2017-2018 Scientific Sessions Program Committee Member
- Tracy C. AHA AF Clinical/Population Program Grants Peer Review
- Tracy C. ACC/AHA Practice Guidelines- Peer Review
- Tracy C. ACC EP Performance Question Committee- Member
- Tracy C. Editorial Board, Journal of Interventional Electrophysiology

ENDOCRINOLOGY

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Sonia Bahroo, PA

RESEARCH

The Endocrine Division faculty and fellows have continued their research programs with focuses on: diabetes and obesity, vascular biology, stem cells, telemedicine and mobile health, male hypogonadism and transgender care. The fellows and faculty had abstracts presented at the annual meetings of the Endocrine Society, the American Diabetes Association and the American Thyroid Association. Dr. Munaza Akunjee, a second year Endocrine Fellow, was awarded Presidential Poster recognition at the Endocrine Society Annual Meeting for her presentation *"Immune checkpoint inhibitor nivolumab in advanced or recurrent adrenocortical carcinoma."*

Dr. Nicole Ehrhardt, Assistant Professor of Medicine, has continued her research on family-centered approaches for treatment of obesity and diabetes. Dr. Ehrhardt and Dr. Richard Katz, Division of Cardiology, in partnership with La Clínica del Pueblo, a non-profit health center serving the Hispanic community in Washington DC, are continuing a 5 year project, supported by a Merck Disparities of Health Care Grant, to improve diabetes care provided to Hispanic patients and to train providers in D.C and Maryland taking care of patients with diabetes. This year, supported by this grant, she launched the first GW ECHO project which will provide telementoring for community providers for complex diabetes management. In collaboration with Dr. Neal Sika, Department of Emergency Medicine, and supported by a grant from the CareFirst Foundation, Dr. Ehrhardt has continued a telemedicine program to provide clinical care for diabetes through a video link to the Anacostia Unity Health Clinic. This year Dr. Ehrhardt obtained new grant support from Dexcom for a research project to evaluate the role of continuous glucose monitoring as an aid in weight management in obese individuals with pre-diabetes or diabetes. This year, supported by this grant, she launched the first GW ECHO project which will provide telementoring for community providers for complex diabetes management. In collaboration with Dr. Neal Sika, Department of Emergency Medicine, and supported by a grant from the CareFirst Foundation, Dr. Ehrhardt has continued a telemedicine program to provide clinical care for diabetes through a video link to the Anacostia Unity Health Clinic. This year Dr. Ehrhardt obtained new grant support from Dexcom for a research project to evaluate the role of continuous glucose monitoring as an aid in weight management in obese individuals with pre-diabetes or diabetes.

ENDOCRINOLOGY

RESEARCH

Dr. Sabyasachi Sen, Associate Professor of Medicine and of Anatomy and Regenerative Medicine, has continued his research program in vascular biology and endothelial and mesenchymal stem cells. He is investigating how stem cells can be used as biomarkers in patients with diabetes and other conditions with high cardiovascular risk, such as sleep apnea and HIV, to help move patient care towards individualized and personalized medicine. This year, Dr. Sen received a provisional patent for *"Method of treating a mammal with diabetes associated kidney disease using local administration of stem cells with transiently reduced p53."* Also, he has a patent pending for *"Genetic modification of human mesenchymal stem cells helps to reduce adiposity and improve glucose tolerance in an obese diabetic mouse model."* In addition to studies conducted in his own laboratory and in collaboration with researchers in the Department of Pharmacology and Physiology, Dr. Sen also has active collaborations with researchers at the NIH, the Milken School of Public Health and at the Washington DC Veterans Affairs Medical Center.

Dr. Sen was the recipient of new investigator-initiated grant awards from Novo Nordisk Pharmaceuticals, *"Impact of semaglutide on peripheral blood derived CD34+ endothelial progenitor cells (EPCs) and subcutaneous fat derived mesenchymal stromal cells (MSCs) in type 2 diabetes subjects,"* from DC-CFAR *"The impact of current HIV medication regimens on endothelial dysfunction"* and from the GW - Children's Hospital CTSI program *"Reducing oxidative stress and systemic inflammation improves fatty liver disease in diabetes."* He had oral presentations at the Endocrine Society and American Diabetes Association Annual Meetings and published three peer-reviewed manuscripts on stem cells and diabetes.

Dr. Joshua L. Cohen, Professor of Medicine, continues his collaboration with Dr. Vesna Zderic, Department of Biomedical Engineering, evaluating the potential of ultrasound-stimulated secretion of insulin for the treatment of diabetes. This year they presented initial findings on ultrasound stimulation of insulin secretion in an *in vivo* mouse model.

Dr. Michael Irwig, Associate Professor of Medicine, published a study on potential conflicts of interest among members of the panels that write Endocrine Society treatment guidelines.

MEDICAL EDUCATION

Endocrine Division faculty members have had an active role in many components of undergraduate medical education at GW. Division faculty serve as instructors in the Clinical Skills and Reasoning course and the Professional Development program. They also mentor CAP students. The Endocrinology and Reproductive Medicine module for second year medical students continues to receive very strong positive feedback from the medical students. This curriculum module incorporates real-time student responses, patient panels, hands-on workshops and team learning exercises to encourage active student involvement throughout. Medical students and Physician Assistant students rotate on the Endocrine Service as a clinical elective. In addition to GW students, the Clinical Endocrinology elective also attracted visiting students from other U.S. medical schools as well as international students from Austria, Ireland, Lebanon and Saudi Arabia.

Endocrine faculty are also active in Graduate and Post-Graduate Medical Education. The Division has 5 clinical endocrinology fellows in the 2 year Endocrinology, Diabetes and Metabolism Training Program.

CLINICAL ACTIVITIES

The division has consolidated its downtown clinical operations at 2300 M Street and maintains a satellite office in Bethesda, Maryland. Patient volume continues to increase. There has been a 7.4% increase in patients arriving for appointments compared to the previous year including a 12.8% increase in new patient appointments (through May 2019).

The Endocrine Division continues to provide comprehensive care for patients with diabetes, including diabetes and nutritional education, diabetes care in pregnancy, insulin pump therapy and continuous glucose monitor utilization. Also, analysis of thyroid fine needle aspiration samples has expanded to include next-generation gene sequencing and/or gene expression analysis where clinically appropriate.

ENDOCRINOLOGY

DIABETES EDUCATION

Diabetes Education

Our patients with diabetes must make treatment decisions for themselves every day, including diet choices, exercise activities and, for some patients, insulin dosing. The purpose of Diabetes Education is to assure that patients have the skills and knowledge they need for diabetes self-management. Tamara Swigert RN, CDE is the Program Coordinator of our Diabetes Education programs. The diabetes education team also includes an additional Registered Nurse and a Registered Dietitian/CDE.

Following extensive program development and a thorough review, the GWU MFA Diabetes Education Program was recognized by the American Diabetes Association in 2018. This accreditation is an acknowledgement of the overall quality of our comprehensive diabetes education programs and enables MFA to use Medicare G codes to bill for diabetes education services. Our diabetes education services currently include:

- Individual diabetes self-management visits to address many diabetes focus areas including self-management of insulin pump therapy.
- Group diabetes self-management classes. This series of 4 classes is appropriate for all newly diagnosed patients as well as those who need a refresher or update on current approaches to diabetes self-management.
- Gestational Diabetes classes, for women diagnosed with diabetes during pregnancy. These classes are offered weekly
- Individual Medical Nutrition Therapy for all patients who want a deeper understanding of the role of nutrition and diet in diabetes self-care.

FACULTY AND STAFF

The Endocrine Division was very happy to welcome Dr. Rohit Jain as the most recent addition to our faculty. Dr. Jain obtained his MBBS from Medical College Calcutta, India. He then came to the United States where he completed his Internal Medicine Residency and Endocrinology Fellowship at State University New York, Upstate Medical University, Syracuse NY. Dr. Jain is certified in Internal Medicine and in Endocrinology, Diabetes and Metabolism. His clinical areas of interest include diabetes, obesity, thyroid diseases, adrenal disorders and metabolic bone disease. The Division also welcomed back Sonia Bahroo PA-C who has returned to her position as Physician Assistant.

Dr. Michael Irwig was appointed Vice-Chair of the American Association of Clinical Endocrinologists Disease State Network Oversight Committee. Dr. Irwig was also appointed to the Editorial Board of the journal Endocrine Practice. Dr. Irwig was an invited speaker at the 18th International Congress of Endocrinology held in Cape Town, South Africa and at the 33rd Brazilian Congress of Endocrinology & Metabolism, Belo Horizonte, Brazil.

Dr. Sabyasachi Sen was elected a Fellow of the Royal College of Physicians, London UK. Dr. Sen was a Visiting Professor in the Department of Medicine and Endocrinology at the All India Institute of Medical Sciences, Rishikesh, India and an invited speaker at Diabetes India 2019, held in Jaipur, India where he spoke on stem cells and diabetes, and at the Korean Diabetes Association Annual Meeting in Seoul, Korea.

Dr Nicole Ehrhardt continues in her commitment to the Washington community. This year she organized diabetes screening programs and diabetes prevention teaching at 3 health fairs: ENDOCares 2019 a partnership with The Endocrine Society, as part of the GW NBC4 Health Expo and at the GWU Hospital Stroke and Cardiovascular Disease Awareness Health Fair. She was an invited speaker at the Peruvian Endocrine Society Congress, Lima, Peru and was featured on the news discussing over-the-counter-insulins. Dr. Ehrhardt recently appeared in Washington Life Magazine as a "DC Power Mom."

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PEER-REVIEWED PUBLICATIONS

- **Ehrhardt N, Al Zaghal E.** Behavior modification in prediabetes and diabetes: potential use of real-time continuous glucose monitoring. *J Diabetes Sci Technol.* 2019;13(2):271-275.
- **Irwig MS,** Kyinn M, Shefa MC. Financial conflicts of interest among authors of Endocrine Society clinical practice guidelines. *J Clinical Endocrinol Metab.* 2018; 103:4333-4338.
- **Irwig MS.** Cardiovascular health in transgender people. *Reviews in Endocrine and Metabolic Disorders.* 2018; 19:243-251.
- Lynn L, Kay D, Younes N, **Sen S,** Jain V. Accuracy and the proper use of the point-of-care analysis in hemoglobin A1C measurement. *Metab Syndr Relat Disord.* 2018.
- **Kundu N, Domingues CC, Nysten ES,** Paal E, Kokkinos P, **Sen S.** Endothelium-derived factors influence differentiation of fat-derived stromal cells post-exercise in subjects with prediabetes. *Metab Syndr Relat Disord.* 2019.
- **Domingues CC,** Dore FJ, Cho A, **Ahmadi N, Kropotova Y, Kundu N,** Younes N, Jain V, **Sen S.** Effect of continuous positive airway pressure on arterial stiffness and endothelial progenitor cells. *Stem Cell Research and Therapy.* 2019
- Singh T, Suarez-Castellanos I, Chatterjee Bhowmick D, **Cohen J,** Jeremic A, Zderic V. Therapeutic ultrasound-induced insulin release *in vivo.* 2019. Submitted
- **Ehrhardt N, Fazeli S,** Roa S, Amdur R. Use of premixed insulin, metformin and glucagon-like peptide-1 receptor agonist as a therapeutic approach for uncontrolled type 2 diabetes mellitus. Submitted
- **Kundu N, Domingues CC, Ahmadi N,** Patel J, Aljishi M, Sylvestsky AC, Abel BS, Skarulis MC, Rother KI, **Sen S.** Non-nutritive Sweeteners Promote Metabolic Dysregulation. Submitted
- **Domingues CC, Kundu N, Ahmadi N, Kropotova Y, Sen S:** Antioxidant upregulated human mesenchymal stromal cells (MSCs) Improve glucose homeostasis and fatty liver disease in diet induced obese (DIO) diabetic mouse model. Submitted

BOOK CHAPTERS

- Tannock LR, Boelaert K, Carranza Leon, BG, Chang AY, Clement S, Diab DL, Freel M, **Irwig MS,** Jonklas J, Magill SB, Reddy D, Salvatori R, Sidhaye A, Subramanian S, Vaidya A, Weber TJ. ESAP 2019: *Endocrine Self-Assessment Program.* Washington, DC: Endocrine Society; 2019.
- **Kundu N, Domingues CC, Sen S.** Effect of exercise on adult stem cells. P. Kokkinos, P. Narayan (eds.), *Cardiorespiratory Fitness in Cardiometabolic Diseases,* Springer Nature Publications.

INVITED PRESENTATIONS

- **Ehrhardt N:** Use of CGM in Type 2 Diabetes. Peruvian Endocrine Society Congress. Lima, Peru 2018.
- **Irwig, M.** Female to male transgender symposium. 18th International Congress of Endocrinology. Cape Town, South Africa 2018.
- **Irwig M.** Treatment of male hypogonadism without testosterone and clinical dilemmas in the management of transgender men. Brazilian Congress of Endocrinology & Metabolism. Belo Horizonte, Brazil 2018.
- **Irwig M,** Bancos I. Post-finasteride syndrome & disease state network "Year in Review."
- 28th Annual Congress of the American Association of Clinical Endocrinologists. 2019.
- **Irwig M.** Transgender symposium: hormonal care of transgender patients. The Endocrine Society Annual Meeting. 2019.
- **Irwig M.** Non-testosterone treatment of male hypogonadism. Mid-Atlantic AACE Chapter Annual Meeting. 2018
- **Sen S.** Stem cells as a biomarker for diabetes medications. Diabetes India. Jaipur, India 2019.
- **Sen S.** Stem cell therapy in fatty liver disease. Obesity Society Annual Sessions. 2018
- **Sen S.** Invited Faculty, American Heart Association Annual Scientific Sessions. 2018.
- **Sen S.** Stem cells as a biomarker in type 2 diabetes. All India Institute of Medical Sciences. New Delhi, India 2019.

ABSTRACT PRESENTATIONS

- **Akunjee M, Adler S.** Immune checkpoint inhibitor nivolumab in advanced or recurrent adrenocortical carcinoma. The Endocrine Society Annual Meeting. 2019
- **Akunjee M, Cohen J.** Controlling the uncontrollable: a case of cybertoxicosis presenting as pulmonary embolism, American Thyroid Association Annual Meeting. 2018
- **Elagi D, Akunjee M, Cohen J.** Moyamoya and autoimmune Graves' disease. The Endocrine Society Annual Meeting. 2019
- **Fazeli S, MD, Rao S, Amdur RL, Ehrhardt NM.** Use of metformin, premixed insulin, and glucagon-like peptide-1 receptor agonist as a therapeutic approach for uncontrolled type 2 diabetes mellitus. The Endocrine Society Annual Meeting. 2019
- Catalanotti J, **Paulson J,** Bernal T, Corvalan D. Sponsored IMG's and education diplomacy: moving from apprehension to understanding and making informed choices for your program. Alliance for Academic Internal Medicine Spring Meeting. 2019

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ABSTRACT PRESENTATIONS

- **Domingues CC, Kundu N, Ahmadi N, Kropotova Y, Sen S.** Modified human mesenchymal stromal cells (MSCs) improve glucose homeostasis and fatty liver disease in diet induced obese (DIO) diabetic mouse model, American Diabetes Association Scientific Sessions. 2018
- **Kundu N, Domingues C, Nylen E, Kokkinos P, Sen S.** Fat derived stromal cells can act as useful biomarker to monitor metabolism and cell differentiation, post exercise. *Molecular Therapy*. 2019; 27:287.
- **Kundu N, Domingues CC, Kokkinos P, Nylen ES, Sen S.** Endothelium derived factors influence differentiation of fat derived stromal cells. Endocrine Society Annual Meeting, 2019
- **Kundu N, Asico L, Domingues CC, Banerjee J, Jose P, Sen S.** Modified endothelial progenitor cell (EPC) transplantation may improve diabetic kidney disease (DKD). American Diabetes Association Scientific Sessions; 2019.
- **Domingues CC, Kundu N, Kropotova Y, Ahmadi N, Sen S.** Antioxidant upregulated mesenchymal stromal cells help to treat complications in obese diabetic mice. *2 Circulation*. 2018; 138 (Suppl_1): A16225
- **Kundu N, Asico L, Domingues C, Jose P, Sen S.** Apoptosis resistant modified endothelial progenitor cell (EPC) transplantation improves diabetic kidney disease (DKD). *Diabetologia*. 2018; 61:S502
- **Sen S, Kundu N, Kropotova Y, Ahmadi N, Domingues C,** Modified mesenchymal stromal cells: a novel and safe therapy in type 2 diabetes and its complications. *Diabetologia*. 2018; 61:S588
- **Sen S, Kundu N, Asico L, Domingues C, Jose P.** Modified endothelial progenitor cell (EPC) transplantation improves diabetic kidney disease. *Circulation Res*. 2018; 123 (Suppl_1):A211
- **Kundu N, Asico LD, Domingues CC, Ahmadi N, Sen S.** Transplantation of p53-silenced endothelial progenitor cells (EPCs) under renal capsule—a potential treatment for diabetic kidney disease (DKD). *Diabetes*. 2018; 67 (Supplement 1):493
- **Domingues CC, Kundu N, Kropotova Y, Ahmadi N, Sen S,** Modified mesenchymal stromal cells promote multiple metabolic benefits in obese diabetic mice, *Diabetes*. 2019; 67 (Supplement 1): 287
- **Ahmadi N, Sen S.** Effect of metformin on lymphoid cancer cells. *Diabetes*. 2018; 67 (Supplement 1):1213

GRANTS

Novo-Nordisk Investigator Award,

Sabyasachi Sen, Principal Investigator

Title: Impact of semaglutide on peripheral blood derived CD34+ endothelial progenitor cells (EPCs) and subcutaneous fat derived mesenchymal stromal cells (MSCs) in type 2 diabetes subjects.

American Heart Association- Post-Doctoral Fellowship Grant

Nabanita Kundo, Fellow; Sabyasachi Sen, Mentor

Title: Modified endothelial progenitor cells help to treat diabetic kidney disease.

DC-CFAR Pilot Study, Parent Granting Institution: NIAAD

Sabyasachi Sen, Principal Investigator

Title: The impact of current HIV medication regimens on endothelial dysfunction.

CTSI-CN Voucher Program

Sabyasachi Sen, Principal Investigator

Title: Reducing oxidative stress and systemic inflammation improves fatty liver disease in diabetes

City of Hope Foundation Grant

Sabyasachi Sen, Co-Principal Investigator

Title: Role of epigenetic modifications in stem cells in subjects with diabetes

Janssen Investigator Award

Sabyasachi Sen, Principal Investigator

Title: Role of canagliflozin on gene expression and function of CD34+ endothelial progenitor cells in patients with type 2 diabetes and mild chronic kidney disease

Astra-Zeneca Investigator Award

Sabyasachi Sen, Principal Investigator

Title: The protective effect of saxagliptin and dapagliflozin combination on endothelial progenitor cells (EPCs) and renal function in patients with type 2 diabetes.

Dexcom Investigator Award

Nicole Ehrhardt, Principal Investigator

Title: Use of real-time continuous glucose monitoring (RT-CGM) as a tool for weight loss/behavior modification in patients with prediabetes and diabetes

Merck Foundation Award

Nicole Ehrhardt, Co-Principal Investigator

Title: Bridging the Gap: Reducing Disparities in Diabetes Care

Carefirst Award

Nicole Ehrhardt, Co-Investigator

Improving specialty care access via telemedicine

ENDOCRINOLOGY

COMMUNITY PROGRAMS

- **Ehrhardt N.** ENDOcares diabetes screening program held at the Mexican and Peruvian Embassies. 2018
- **Ehrhardt N.** Diabetes screening and prevention education. GWU NBC4 Health Fair. 2019
- **Ehrhardt N.** Diabetes screening. George Washington University Hospital Stroke and Cardiovascular Disease Awareness Program. 2019
- **Irwig M.** Transgender medicine. Office of Health Services, Peace Corps, Washington DC. 2018
- **Paulson J.** Update on thyroid cancer. Hope Connections for Cancer Support. 2018
- **Paulson J.** Thyroid Cancer Survivors' Workshop. 2019
- **Sen S, Swigert T.** Diabetes Trends and Treatment. Indian Embassy, Washington DC 2018
- **Swigert T.** Diabetes Prevention and Management. U.S. Department of Justice. 2018
- **Swigert T.** Diabetes Prevention and Management. U.S. Department of Transportation. 2018

GASTROENTEROLOGY

Marie Borum, MD, MACP, EdD, MPH
Professor of Medicine
Division Director



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FACULTY

Satyanisth T. Agrawal, DO, Assistant Professor of Medicine

Waseem Aziz, MD, Assistant Professor of Medicine

Matthew Chandler, MD, Assistant Professor of Medicine

Samuel Kallus, MD, Assistant Professor of Medicine

Anita Kumar, MD, Assistant Professor of Medicine

Patricia Latham, MD, Professor of Pathology and Medicine (Hepatology)

Antoinette Saddler, MD, Assistant Professor of Medicine

Steven Zeddun, MD, Assistant Professor of Medicine

VA FACULTY

Michael Yao, MD, Associate Professor of Medicine

NP

Fitore Vula, NP

CLINICAL INNOVATION AND COLLABORATION

The division has continued to advance endoscopic capabilities. Acquisition of specialized endoscopic technology has included narrow band imaging (NBI) for enhanced detection of dysplasia in Barrett's epithelium, pre-malignant colonic lesions and assessment of dysplasia in inflammatory bowel disease. Expertise in endoscopic ultrasonography has increased diagnostic and therapeutic options. There has been expansion of capabilities for emergency management of foreign bodies and gastrointestinal bleeding that has failed standard therapy.

As one of the few institutions that offers Peroral Endoscopic Myotomy (POEM), the division with the Department of Surgery, has been able to gain regional prominence and recognized expertise in natural orifice procedures for the treatment of achalasia. This technique has also been applied to other disorders, with regional and national presentations about application of this endoscopic technique and outstanding institutional outcomes.

Collaboration with Department of Surgery also includes focused activity on hepatobiliary disorders, organized clinical intervention for management of gastrointestinal bleeding in patients with left ventricular assist devices (LVAD) and continued coordination with surgeons for management of GI malignancies.

The division has expanded their collaboration with the Cancer Prevention Program established by the Division of Hematology and Oncology of the GW Cancer Institute. There is dedicated gastroenterology involvement in the GI malignancy risk assessment and clinical prevention services. Additionally, state-of-the-art inflammatory bowel disease management has included incorporation of newly introduced biologic treatments into therapeutic armamentarium.

GASTROENTEROLOGY

EDUCATION

There have been continued effort to enhance the educational programs for the medical students, internal medicine residents and gastroenterology fellows. There have been curricular revisions which have enhanced the quality and incorporated novel teaching techniques. The division has been recognized at nationally for the unique utilization of autonomous learning theory into the educational program.

Medical Students

The gastroenterology curriculum was revised to increase the clinical focus and case-based teaching. Faculty have longitudinal commitments to small group education of pre-clinical students, have supervised CAP students throughout the year and involved senior medical students in research projects. Students were co-authors of 6 manuscripts, 15 abstracts, 10 book chapters and 5 published management algorithms. Senior medical students had 18 presentations (4 oral presentations, 14 poster presentations) at national medical conferences.

Internal Medicine Residents

Revisions were incorporated into the curriculum for internal medicine residents which emphasized educational goals and enhancement of clinical experience during gastroenterology rotations. Residents were involved in research projects. Internal medicine residents were co-authors of 5 abstracts, 14 book chapters and a published management algorithm. Internal medicine residents had 5 presentations at national conferences.

International Research Fellows

The division mentored 3 research fellows in collaboration with the GW International Program. The fellows were active participants in research projects and were co-authors of 8 abstracts and 6 book chapters. The international research fellows had 12 presentations at national conferences.

Surgical Residents

The division continues to collaborate with the Department of Surgery in endoscopic education of surgical residents.

Physician Assistant Students

The division developed the gastroenterology didactic curriculum for the Physician Assistant Program. The divisional faculty deliver the lectures on gastrointestinal and hepatobiliary disorders in the Physician Assistant program. In addition, the division serves as a clinical site for gastroenterology rotation for physician assistant students.

Gastroenterology Fellows

The division has 6 gastroenterology fellows. The gastroenterology fellowship curriculum revisions included enhancement of didactic sessions, multidisciplinary seminars, ambulatory clinical experience and endoscopic education. The gastroenterology fellows were involved in research, co-authoring 1 manuscript, 9 abstracts and 7 book chapters. The fellows had 12 presentations at national conferences.

RESEARCH

The Division of Gastroenterology and Liver Diseases continues to have a broad range of clinical research activity involving medical students, internal medicine residents, international research fellows and gastroenterology fellows. This year the research generated 56 publications that included manuscripts, abstracts, book chapters and management algorithms. The research has focused on inflammatory bowel disease, celiac disease / gluten sensitivity and health care disparities. There was collaborative research with the Department of Emergency Medicine, Department of Anesthesia and Department of Pathology. Oral and poster presentations were made at the American College of Gastroenterology, Association of Academic Minority Physicians, Advances in Inflammatory Bowel Diseases, Crohn's and Colitis Conference, Society of General Internal Medicine and Digestive Disease Week.

GASTROENTEROLOGY

DEPARTMENTAL, HOSPITAL AND UNIVERSITY SERVICE

All of the divisional faculty have been actively involved in departmental, hospital and university service. Faculty are involved in mentorship of gastroenterology fellows and have served on the gastroenterology clinical competency committee and gastroenterology program evaluation committee. Additional highlights of the faculty member service to GW include:

- Dr. Aziz as a member of the advanced interventional endoscopy team and member of the divisional clinical competency committee.
- Dr. Agrawal as a member of the advanced interventional endoscopy team and member of the divisional clinical competency committee. He has been Grand Rounds speaker for the Department of Medicine.
- Dr. Borum as an advisor to the program for the international research fellows, active involvement in the hospital and ambulatory surgery center endoscopy units, member of the hospital peer review committee, member of the departmental APT committee, member of the divisional clinical competency committee, and chair of the Medical Student Evaluation Committee.
- Dr. Chandler serves as the Director of the Gastroenterology fellowship program, Chair of the Fellowship Program Evaluation Committee and divisional clinical competency committee and member of the Graduate Medical Education Committee. He has been Grand Rounds speaker for the Department of Obstetrics and Gynecology.
- Dr. Kallus is a mentor to internal medicine residents, member of the departmental clinical competency committee and member of the divisional clinical competency committee. He has been Grand Rounds speaker for the Department of Medicine.
- Dr. Kumar as member of the university pre-clinical educational subcommittee, coordinator of the pre-clinical gastroenterology component of medical school education, member of the divisional clinical competency committee and member of the Center for Faculty Excellence.
- Dr. Zeddun is director of interventional endoscopy, serves on the GW Operating Room Committee, member of the endoscopy committee, has pivotal role in the operation of the hospital and ambulatory surgery center endoscopy units, member of the divisional clinical competency committee. He has been Grand Rounds speaker for the Department of Medicine.

NATIONAL LEADERSHIP

Members of the division have been in leadership positions in national organizations. Additional highlights of the faculty member national service include:

- Dr. Chandler has serves as on the Physician Advisory Committee of the Crohn's and Colitis Foundation of America.
- Dr. Borum was awarded a Mastership in the American College of Physicians. She has been a member of the Women's Committee of the American Gastroenterology Association, a member of the GI Women's Coalition committee, participated in the planning committees for programs for Digestive Disease Week (the world's premier GI meeting), selected as a member of the internal medicine committee of the National Medical Association, co-Chair of the Gastroenterology section of the National Medical Association and served on the planning committee for the National Medical Association's CME program. She has been a visiting professor and grand round speaker at universities, moderator at symposium at Digestive Disease week, moderator at symposium at the annual conference of the National Medical Association, invited speaker at the National Medical Association. She was an investigator of an NIH R13 Early Career Investigators Program focused on Reducing Health Disparities in Internal Medicine for the National Medical Association.
- Dr. Zeddun participated in the ASGE Quality and Safety program for Endoscopic units as part of the Endoscopy Unity Recognition Program.

COMMUNITY SERVICE

Dr. Borum has participated in community service by assisting in the establishment of libraries and book collections at homeless shelters, transitional housing units, domestic violence safe houses, community learning centers and transitional housing for women transitioning from incarceration into the community. She has volunteered at centers focused on homelessness and housing insecurity.

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DIVISION HONORS

Gastroenterology Fellows

The George Washington University gastroenterology fellows were one of four regional programs to participate in the American Liver Foundation Academic Debates during the spring. The fellows participating in the debates were Dr. Brandon Rieders and Dr. Matthew Tick.

Dr. Aung Myint, Dr. Brandon Rieders and Dr. Mohamed Tashkandi were the primary authors on a featured article discussing gastroparesis published in the Gastroenterology & Hepatology journal.

"Current and Emerging Therapeutic Options for Gastroparesis", Gastroenterology & Hepatology, Volume 14, Issue 11 November 2018, 639-645

Faculty

National Leadership positions:

- Dr. Waseem Aziz served as the Chair of the CME of the Association of Pakistani Physicians in North America annual meeting.
- Dr. Marie Borum is the co-chair of the gastroenterology section of the National Medical Association

Plenary Session speakers at national meetings

Dr. Marie Borum and Dr. Antoinette Saddler were invited keynote speakers at a plenary session for the American Gastroenterological Association at the annual Digestive Disease Week (DDW) conference.

DDW is the world's largest gathering of physicians, researchers and industry in the fields of gastroenterology, hepatology, endoscopy and gastrointestinal surgery.

Dr. Saddler was a keynote speaker at a plenary session at the National Medical Association annual conference.

The NMA is a leading force for the parity in medicine, elimination of health disparities and promotion of optimal health.

Recognitions and Awards

Dr. Marie Borum and Dr. Antoinette Saddler were selected as one of Washington, D.C.s top gastroenterologists by the Washingtonian Magazine.

Dr. Marie Borum was received her Mastership in the American College of Physicians.

Masters shall be Fellows who have been selected because of "integrity, positions of honor, eminence in practice or in medical research, or other attainments in science or in the art of medicine." Masters must be highly accomplished persons demonstrating eminence in practice, leadership, or in medical research. Evidence of their achievements can come from many types of endeavors such as renown within their field and/or ACP chapter, research, education, health care initiatives, volunteerism, and administrative positions. The Master must be distinguished by the excellence and significance of his or her contributions to the field of medicine.

PUBLICATIONS

Manuscripts

- Lambdin J, **Borum ML**. Cervical Cancer Screening in Patients with Inflammatory Bowel Disease. Inflammatory Bowel Diseases, volume 25, issue 2, 10 January 2019, pages e12, published: 31 July 2018. DOI:10.1093/ibd/izy169/
- Lambdin J, **Borum ML**. Toxic Injury to the Gastrointestinal Tract after Ipilimumab Therapy. The Journal of the American Osteopathic Association 118 (8): 506, August 2018
- Szvarca D, **Borum, ML**. (2018) Don't Be Late on Latent TB: Inconsistent Tuberculosis Screening in IBD Patients on Biologics (Letter to the Editor) *Journal of Crohn's and Colitis* 2018 Sep 22. doi: 10.1093/ecco-jcc/jjy141. [Epub ahead of print] No abstract available. PMID 30247658.
- Greenfest A, Szvarca D, Clarke L, Tabbara N, **Borum, ML** (2018) New Vaccine, New Guidelines, Same Problem: The Rates of Herpes Zoster Infection and Vaccination in IBD Patients (Letter to the Editor) *Inflammatory Bowel Diseases* 2018 Sept 27. Doi: 10.1093/ibd/izy314. [Epub ahead of print] PMID 30265300
- Szvarca D, Greenfest A, **Borum ML** (2018) WebIBD: How Much Can We Trust Medical Information Online? (Letter to the Editor) *Journal of Crohn's and Colitis* 2019 Jan 1; 13 (1): 138. doi: 10.1093/ecco-jcc/jjy137. PMID
- Clarke L, Corinaldi M, **Borum, ML**. Undisclosed Gluten in Pediatric Multivitamins May Impact Response to a Gluten-free Diet (Letter to the Editor). *Journal of Pediatric Gastroenterology and Nutrition*. 2019 Jan;68(1):e18-e19. doi: 10.1097, PMID 30247427
- Myint AS, Rieders B, Tashkandi M, **Borum ML**, Koh JM, Stephen S, Doman DB. Current and Emerging Therapeutic Options for Gastroparesis. *Gastroenterology & Hepatology (NY)* 2018 Nov; 14, (11): 639-645. PMID 30538604

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PUBLICATIONS

Abstracts

- Clarke L, Szvarca D, Davison D, Alabbas B, **Borum ML**. Acute Liver Failure: A Rare Primary Sequela of Exertional Heat Stroke. *American Journal of Gastroenterology*, 113: S1277, October 2018
- Lee V, Tabbara N, **Borum ML**. A Head-Scratcher: Humira Causing Enthesitis of the Skull in a Patient with Crohn's? *American Journal of Gastroenterology*, 113: S1179, October 2018.
- Lee V, Tabbara N, **Borum ML**. Clarity on Clear Cell Hepatocellular Carcinoma: A Rare Occurrence in an Individual with Chronic Hepatitis C without Cirrhosis. *American Journal of Gastroenterology*, 113: S1296-1297, October 2018
- **Kumar A**, Clarke L, Szvarca D, Alabbas B, Aldhaheeri R, **Borum ML**. Esophageal Arteriovenous Malformation: A Rare Finding in the Evaluation of Gastrointestinal Bleeding. *American Journal of Gastroenterology*, 113: S1647, October 2018
- **Kumar A**, Lee V, Tabbara N, **Borum ML**. Hepatitis C: Culprit for Cholangiocarcinoma. *American Journal of Gastroenterology*, 113: S1331, October 2018.
- Tabbara N, Lee V, Szvarca D, Clarke L, Aldhaheeri R, **Borum ML**. #Trending: Intermittent Fasting is a Global Discussion on Twitter. *American Journal of Gastroenterology*, 113: S590, October 2018
- Khan A, **Borum ML**. Legionella and the Liver: Severe Hepatic Injury with Legionella-Associated Rhabdomyolysis. *American Journal of Gastroenterology*, 113: S1242, October 2018.
- Szvarca D, Clarke L, Doria N, **Borum ML**. Online Information on Probiotics and IBD: Variability in Readability and Support Evidence. *American Journal of Gastroenterology*, 113, S1562, October 2018
- Tabbara N, Lee V, Szvarca D, Clarke L, Aldhaheeri R, **Borum ML**. Non-Celiac Gluten Sensitivity Internet Information Reflects a Need for Shared Decision Making. *American Journal of Gastroenterology*, 113: S1594, October 2018
- Aldhaheeri R, Zeddun S, Tabbar S, **Borum ML**. Gastric Glomus Tumor: A Rare Incidental Finding. *American Journal of Gastroenterology*, 113, S1515, October 2018.
- Lee V, Tabbara N, Clarke L, Szvarca D, Aldhaheeri R, **Borum ML**. Reading between the Lines: Assessing the Quality, Readability and Reliability of Online Information Regarding Non-Celiac Gluten Sensitivity. *American Journal of Gastroenterology*, 113, S1179, October 2018.
- Khan A, Alabbas B, **Borum ML**. Severe Acute Hepatitis with Adult Onset Still's Disease. *American Journal of Gastroenterology*, 113, S1242, October 2018.
- Masur J, Greenfest A, Clarke L, Tabbara N, Szvarca D, Lee V, Aldhaheeri R., Turki S., **Borum ML**. Weeding Out Misinformation: An Analysis of the Online Infor-

mation Available to Patients on Medical Marijuana Use in IBD. *Gastroenterology Consultant*. December 2018.

- **Chandler M**, Stachura A, Clarke LM, Theisen B, **Borum ML**. Cyclosporine Induced Kaposi Sarcoma in an IBD Patient: A Downward Spindle. *Gastroenterology*, Volume 156, Issue 3, S42, February 2019
- Szvarca D, Tabbara N, Masur J, Greenfest A, Clarke LM, **Borum ML**. Unregulated: Medical Companies Use Social Media to Sell Alternative Treatments for Inflammatory Bowel Disease. *Gastroenterology*, Volume 156, Issue 3, S11, February 2019
- Khan A, Dodds KL, Alabbas B, Szvarca D, Clarke LM, Tabbara N, **Borum ML**. Age of Initial Complaint of Sexual Dysfunction among Inflammatory Bowel Disease Patients. *Gastroenterology*, Volume 156, Issue 3, S14, February 2019
- Szvarca D, Clarke LM, Tabbara N, Greenfest A, Aldhaheeri R, Turki S, Boortalary T, **Borum ML**. A Viral Trend: Herpes Zoster Erupting at a Younger Age in IBD Patients. *Gastroenterology*, Volume 156, Issue 3, S45-46, February 2019.
- Greenfest A, Szvarca D, Clarke LM, Tabbara N, Boortalary T, Turki S, Aldhaheeri R, **Borum ML**. Who You Are May Define How Doctors Treat You: Gender and Racial Disparities in IBD Management. *Gastroenterology*, Volume 156, Issue 3, S12, February 2019

Chapters

- Testa S, **Borum ML**. Chronic Diarrhea, in *The 5-Minute Clinical Consult* Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Tick M, **Borum ML**. Salmonella Infection, in *The 5-Minute Clinical Consult* Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Piech G, **Borum ML**. Acute Peritonitis, in *The 5-Minute Clinical Consult* Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Dodds K, **Borum ML**. Peutz-Jeghers, in *The 5-Minute Clinical Consult* Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Dodds K, Zeddun S, **Borum ML**. Intussusception, in *The 5-Minute Clinical Consult* Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Testa S, **Borum ML**. Acute Diarrhea, in *The 5-Minute Clinical Consult* Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.

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PUBLICATIONS

Chapters

- Silverman AL, Adhatamsoontra P, **Borum ML**. Pruritus Ani, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Almedimigh A, Silverman AL, **Borum ML**. Sideroblastic Anemia, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Adhatamsoontra P, Doria NA, **Borum ML**. Ischemic Colitis, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Doria NA, Silverman A, **Borum ML**. Fecal Impaction, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Tick M, **Borum ML**. Gastric Polyps, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Alsulaimi N, Rowe A, **Borum ML**. Porphyria Cutanea Tarda, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Piech G, **Borum ML**. Angiodysplasia, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- Khan A, **Borum ML**. Choledocholithiasis, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2019.
- **Kumar A**, Le Saux M, Meltzer AC. What Medications are Helpful in Treating GIB? Gastrointestinal Emergencies, Springer, Cham, 978-3-319-98343-1, 2019 Feb.
- **Kumar A**, Le Saux M, Meltzer AC. When to Suspect an Aortoenteric Fistulae, Springer 978-3-319-98343, 2019 Feb.
- Khan A, **Borum ML**. Choledocholithiasis, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Aldhaheeri R, Testa S, **Borum ML**. Acute Diarrhea, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Masur J, Tick M, **Borum ML**. Gastric Polyps, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Turki S, Testa S, **Borum ML**. Chronic Diarrhea, in The 5-Minute Clinical Consult

Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).

- Aldhaheeri R, Tick M, **Borum ML**. Salmonella Infection, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Tabbara N, **Borum ML**. Acute Peritonitis, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Silverman AL, Lee V, **Borum ML**. Pruritus Ani, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Alamoudi U, Greenfest A, **Borum ML**. Hepatitis A, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Greenfest A, **Borum ML**. Rectal Cancer, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).

Algorithms

- Turki S, **Borum ML**. Ascites Algorithm, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Clarke L, **Borum ML**. Hemochromatosis Algorithm, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Tabbara N, **Borum ML**. Rectal Pain Algorithm, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Szvarca D, **Borum ML**. Hepatomegaly Algorithm, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Szvarca D, Alhatamsoontra P, **Borum ML**. Upper Abdominal Pain Algorithm, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).
- Masur J, **Borum ML**. Chronic Diarrhea Algorithm, in The 5-Minute Clinical Consult Eds. Domino F, Baldor R, Golding J, Frimes JA, Taylor JS, Philadelphia: Lippincott Williams & Wilkins, 2020 (*scheduled*).

GASTROENTEROLOGY

PRESENTATIONS

- Szvarca D, Clarke L, Tabbara N, Boortalary T, Aldhaheer R, Turki S, **Borum, ML** (2018) The Hidden Danger of Probiotics in Inflammatory Bowel Disease: Are Patients Being Warned? (Oral Presentation) Association of Academic Minority Physicians Annual Meeting; Oct 5-7, 2018 - Alexandria, Virginia
- Szvarca D, Tabbara N, Corinaldi M, Turki S, Aldhaheer R, Pavle A, Khan A, Myint A, **Borum, ML** (2018) Colorectal Cancer: Awareness, Screening and the Need for Improvement Among at Risk Populations (Selected for Oral Presentation) Association of Academic Minority Physicians Annual Meeting; Oct 5-7, 2018 - Alexandria, Virginia
- Tabbara N, Szvarca D, Clarke L, Lee V, Boortalary T, Turki S, Aldhaheer R, **Borum, ML** (2018) Where do Non-Celiac Gluten Sensitivity Patients Turn? (Selected for Oral Presentation) Association of Academic Minority Physicians Annual Meeting; Oct 5-7, 2018 - Alexandria, Virginia
- Aldhaheer R, Turki S, Szvarca D, Corinaldi M, **Borum, ML** (2018) Health Literacy: Are Physicians and Patients on the Same Page? (Selected for Oral Presentation) Association of Academic Minority Physicians Annual Meeting; Oct 5-7, 2018 - Alexandria, Virginia
- Clarke L, Szvarca D, Davison D., Alabbas B, **Borum ML**. (2018). Acute Liver Failure: A Rare Primary Sequela of Exertional Heat Stroke. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Lee V, Tabbara N, **Borum ML**. A Head-Scratcher: Humira Causing Enthesitis of the Skull in a Patient with Crohn's? American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Lee V, Tabbara N, **Borum ML**. Clarity on Clear Cell Hepatocellular Carcinoma: A Rare Occurrence in an Individual with Chronic Hepatitis C without Cirrhosis. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- **Kumar A**, Lee V, Tabbara N, **Borum ML**. Hepatitis C: Culprit for Cholangiocarcinoma. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Tabbara N, Lee V, Szvarca D, Clarke L, Aldhaheer R, **Borum ML**. #Trending: Intermittent Fasting is a Global Discussion on Twitter. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Khan A, **Borum ML**. Legionella and the Liver: Severe Hepatic Injury with Legionella-Associated Rhabdomyolysis. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Aldhaheer R, Zeddun S, Tabbara S, **Borum ML**. Gastric Glomus Tumor: A Rare Incidental Finding. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Lee V, Tabbara N, Clarke L, Szvarca D, Aldhaheer R, **Borum ML**. Reading between the Lines: Assessing the Quality, Readability and Reliability of Online Information Regarding Non-Celiac Gluten Sensitivity. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Khan A, Alabbas B, **Borum ML**. Severe Acute Hepatitis with Adult Onset Still's Disease. American College of Gastroenterology Annual Scientific Meeting; October 5-10, 2018; Philadelphia, Pennsylvania.
- Tabbara N, Greenfest A, Szvarca D, Clarke L, Boortalary T, Aldhaheer R, Turki S, **Borum ML**. One Shingle at a Time: Improving Zoster Vaccination Rates in the IBD Population (Poster Presentation); Advances in Inflammatory Bowel Diseases Conference, December 13-15, 2018, Orlando, Florida
- Greenfest A, Szvarca D, Clarke L, Tabbara N, Boortalary T, Turki S, Aldhaheer R, **Borum ML**. The Gender and Ethnicity of Patients Influence Health Maintenance in Inflammatory Bowel Disease (Poster Presentation) Advances in Inflammatory Bowel Diseases Conference, December 13-15, 2018, Orlando, Florida
- Masur J, Greenfest A, Clarke L, Tabbara N, Szvarca D, Lee V, Aldhaheer R, Turki S, **Borum ML**. Weeding Out Misinformation: An Analysis of the Online Information Available to Patients on Medical Marijuana Use in IBD (Poster) Advances in Inflammatory Bowel Diseases Conference, December 13-15, 2018, Orlando, Florida.
- **Kallus SJ**, Aboelsoud M, Volberg F, Charabaty A. The Utility of Contrast-Enhanced Trans-Abdominal Ultrasound (CEUS) in the Assessment of Ileal Crohn's Disease (Poster). *Advances in Inflammatory Bowel Diseases Conference*, December 13-15, 2018, Orlando, Florida.
- Szvarca D, Clarke L, Tabbara N, Greenfest A, Boortalary T, Turki S, Aldhaheer R, **Borum ML**. A Viral Trend: Herpes Zoster Erupting at a Younger Age in IBD Patients (Poster) Crohn's and Colitis Congress; February 7-9, 2019, Las Vegas, Nevada.
- Clarke L, Tabbara N, Greenfest A, Szvarca D, Boortalary T, Aldhaheer R, Turki S, **Borum ML**. The Gender of Providers Affects the Management of Inflammatory Bowel Disease Patients (Poster) Crohn's and Colitis Congress; February 7-9, 2019, Las Vegas, Nevada.
- Szvarca D, Tabbara N, Masur J, Greenfest A, Clarke L, **Borum ML**. Unregulated: Medical Companies Use Social media to Sell Alternative Treatments for Inflammatory Bowel Disease (Poster). Crohn's and Colitis Congress; February 7-9, 2019, Las Vegas, Nevada.
- Khan A, Stachura A, Dave J, Alabbas B, Adhatamsoontra A, Al-Asad A, Muthiah A, Szvarca D, Chawla K, Tabbara N, Boortalary T, Garza A, **Borum ML**. Hepatitis C Screening May be Inadequately Performed in Adults Seeking Preventive Health Care: Non-African Americans are Less Frequently Tested than African Americans. Society of Internal Medicine, National Harbor, Maryland, May 2019
- Khan A, Boortalary T, Naik K, Imasuen E, Raddaoui L, **Borum ML**. Patient-initiated Electronic Messaging with Physicians is Less Frequent among Older and African American IBD Patients. Digestive Disease Week, San Diego, California, San Diego, California, May 2019.

GENERAL INTERNAL MEDICINE

*April Barbour, MD
Associate Professor of Medicine
Division Director*



GENERAL INTERNAL MEDICINE

MISSION STATEMENT

Provide safe, high quality, cost conscious and patient centered care to every person seen in our clinics.

2150 PENNSYLVANIA AVENUE FACULTY

Maram Alkhatib, MD, Assistant Clinical Professor of Medicine
Kaylan Baban, MD, Assistant Professor of Medicine
Benjamin Blatt, MD, Professor of Medicine
Letitia Carlson, MD, MPH, FACP, Associate Clinical Professor of Medicine
Jillian Catalanotti, MD, MPH, Associate Professor of Medicine
Aileen Chang, MD, Assistant Professor of Medicine
Loren Chen, MD, FACP, Assistant Professor of Medicine
Michael Czarnecki, DO, Associate Professor of Medicine
Jehan (Gigi) El-Bayoumi, MD, FACP, FACC, Professor of Medicine
Marijane Hynes, MD, Clinical Professor of Medicine
Adam Hodes, DO, Assistant Professor of Medicine
Robert Jablonover, MD, Assistant Professor of Medicine
Vimala Jayanthi, MD, FACP, Assistant Professor of Medicine
Seema Kakar, MD, Associate Clinical Professor of Medicine
P. Sheena Khurana, MD, MRCP (UK), FACP, Assistant Professor of Medicine
Michael Knight, MD, MHSP, Assistant Professor of Medicine
Mia Marcus, MD, Associate Clinical Professor of Medicine
Chad Henson, MD, Assistant Professor of Medicine
Brad Moore, MD, MPH, FACP, Associate Professor of Medicine
Lalit Narayan, MBBS, MA, Assistant Professor of Medicine
Kevin O'Connor, DO, Associate Professor of Medicine
Chavon Onumah, MD, MPH, FACP, Assistant Professor of Medicine
Amirala Pasha, DO, MS, FACP, Assistant Professor of Medicine
Mihir Patel, MD, MS, FACP, Assistant Professor of Medicine

David Popiel, MD, MPH, Assistant Professor of Medicine
Paul Silver, MD, FACP, Associate Professor of Medicine
Richard Simons, MD, Professor of Medicine
Amy Stone, MD, Assistant Professor of Medicine
Ginger Winston, MD, Associate Professor of Medicine

2300 M STREET INTERNAL MEDICINE PHYSICIANS

Elizabeth Bluhm, MD, MPH, FACP, Assistant Clinical Professor of Medicine
Prudence Kline, MD, Clinical Professor of Medicine
Robert Kruger, MD, FACP, FCCP, Associate Clinical Professor of Medicine
Emily Lo, MD, Clinical Assistant Professor of Medicine
Anokhi Shah, MD, Clinical Assistant Professor of Medicine

NPS/PAS

Elizabeth Kirby, NP
Jane Wu, PA-C
Kristina Jabaut, PA-C
Matthew Mancini, PA-C
Lauren Leatherman, LICSW
Shannon Vanderhoff, NP

DOM CHIEFS FY '19

Sam Ober
Alex Aldrich (VA)
Tanuka Datta (VA)
Kusha Davar
Talia Bernal

GENERAL INTERNAL MEDICINE

VA FACULTY

Charles Faselis, MD, Professor of Medicine

Cherinne Arundel, MD, Associate Professor of Medicine

Ribka Ayana, MD, Assistant Professor of Medicine

Natalie Branagan, MD, Assistant Professor of Medicine

Daniel Chen, MD, Assistant Professor of Medicine

Katherine Chretien, MD, Assistant Professor of Medicine

James Croffoot, MD, Assistant Professor of Medicine

Shruti Gandhi, MD, Assistant Professor of Medicine

Jennifer Kerns, MD, Assistant Professor of Medicine

Jessica Logan, MD, Assistant Professor of Medicine

Samantha McIntosh, MD, Assistant Professor of Medicine

Dragica Mrkoci, MD, Assistant Professor of Medicine

Robin Peck, MD, Assistant Professor of Medicine

Nazia Qazi, MD, Assistant Professor of Medicine

Joanna Rosen, MD, Assistant Professor of Medicine

Shaman Singh, MD, Assistant Professor of Medicine

Elizabeth Trimble, MD, Assistant Professor of Medicine

Matthew Tuck, MD, Assistant Professor of Medicine

Victor Wu, MD, Assistant Professor of Medicine

2018-2019 HOLIDAY PARTY



Can you spot Dr. Jalil Ahari ?

GENERAL INTERNAL MEDICINE

THE DIVISION OF GENERAL MEDICINE REMAINS COMMITTED TO EXCELLENT PATIENT CARE, TEACHING AND SCHOLARSHIP.

A highlight of the year was reaching a major milestone in receiving Patient-Centered Medical Home (PCMH) certification from the National Committee for Quality Assurance (NCQA). This distinction celebrates practices that deploy a model of care that is patient-centric and develops better relationships between the patient and their clinical care teams. GW MFA and DGIM are now among 13,000 practices and 67 thousand clinicians recognized by NCQA with the PCMH designation.

Being tapped to the NCQA's PCMH recognition program follows a nine-month process for the MFA led by David Popiel, MD, MPH. To be certified by an outside, objective national organization validates our belief that we, at MFA, are providing high value care for our patients--high quality, cost conscious care. It is national recognition of the hard work we do every day to offer the absolute best care to every patient that walks through our doors.

The process involved being certified in six major areas with core competencies to meet in each:

- Performance Measures & Quality Improvement
- Patient-Centered Access & Continuity
- Care Coordination & Care Transitions
- Knowing and Managing your Patients
- Team Based Care and Practice
- Care Management and Support

Team members who devoted their time and energy to getting the certification include:

Anna Abel, Michael Czarnecki, DO, Michael Knight, MD, Sabina Williams, RN, Brad Moore, MD, Mary Claire Marconi, Mihir Patel, MD, Amir Pasha, DO, Erwin Osborne, Manesh Ponnu, Jane Wu, PA, Loren Chen, MD, and Terri Cherry.

Another highlight as a broadening of our commitment to patient care and provider experience for the entire MFA Organization is that we had another successful Medicare Quality Performance for 2018 with Loren Chen, MD as our lead physician in the Quality Payment Program.

- Preliminary results estimate an improved MIPS score from 91.97% in 2017 to \approx 100% for 2018
- MFA improved in 12 out of 14 quality measures
- MFA performance averaged 60-70th percentile nationally across 14 quality measures

- 100% score on the Electronic Health Records (EHR) measures (Promoting Interoperability)
- Excellent physician, advanced practitioner and staff engagement, with 83% of all MFA providers meeting the EHR measures
- Expectation of avoiding penalties and hopeful for another increase in Medicare reimbursement to the MFA for 2020

Leadership

- Michael Knight, MD, MSHP, Patient Safety Officer, The GW Medical Faculty Associates
- Loren Chen, MD, FACP, Chief Quality Officer, The GW Medical Faculty Associates

EDUCATION/TEACHING

Undergraduate

Preclinical: Many of our faculty continue to teach in the longitudinal Practice of Medicine (POM) course. POM is an intensive small group discussion based course that meets weekly. Faculty facilitate discussions, manage learning sessions, directly observe physical exam and communication skills and provide ongoing feedback and instruction over the course of 16 months. Additionally, several faculty teach in the Professional Development course (which is also a longitudinal small group, discussion based course) that focuses on helping medical students develop their professional identities.

Clinical: DGIM faculty at M street and 2150 precept students during one or more of their clinics throughout the 4 week- primary care clerkship. In addition many more faculty, mentor students in the Longitudinal Primary Care Curriculum, which is a yearlong commitment to work with a medical student in clinic ½ a week to develop communication, physical exam and clinical reasoning skills.

Leadership: Our faculty run several electives, participate in curricular development and sit on many of the educational committee for the School of Medicine and Health Sciences. Notably,

- Dr. Alkhatib is a course director for Practice of Medicine.
- Dr. Onumah is the Course Director for the Primary Care Clerkship.
- Dr. Narayan is the course director for Populations, Patients and Systems and is the Faculty Advisor for the Social Justice Interest Group.
- Dr. Baban is the chair of the SMHS Wellness Advisory Council and Chief Wellness Officer for One GW.
- Dr. Jablonover is the Assistant Dean for Pre-Clinical Education.

GENERAL INTERNAL MEDICINE

Graduate Medical Education

Clinical Competency Committees: Five faculty serve on one of the three CCCs. These faculty are responsible for reviewing the evaluations of their assigned residents (5-6) and presenting them to the committee. They also meet with each of their residents twice yearly to review their progress and set individual goals. Clinic Preceptors: Faculty precept in resident clinic 1-3 times a week. They are responsible for directly observing their residents and providing immediate feedback in clinic. They also provide summative evaluations twice yearly. They all participate in weekly didactics on a rotating schedule.

Leadership:

- Dr. Catalanotti, Program Director
- Dr. Michael Czarnecki, APD, Fellowship Programs
- Dr. Sheena Khurana, APD Medical Clinic
- Dr. April Barbour, Program Director, Primary Care Residency

Ambulatory Curriculum: overseen by Dr. Barbour

Recurring didactic content:

- Primary Care Journal Club, Dr. Barbour, Dr. Khurana and Dr. Burstin, weekly
- Medical Education Series, Dr. Barbour and Dr. Tuck, 2 workshops each year
- Physical Diagnosis Series, Dr. Silver, 2 workshops each year.
- Community Health Curriculum, Dr. Catalanotti, 1 -2 workshops a year
- HIV in Primary Care Curriculum, Dr. Onumah. 2-3 workshops each year
- Geriatrics in Primary Care, Dr. Prather and Dr. Roth, 1-2 workshops a year

DGIM SPECIALTY CLINICS

Hospital Follow up Clinic: Weekly resident run clinic staffed by Dr. Czarnecki. This clinic is available to all DGIM patients who are recently discharged from the hospital or emergency department. The curricular component for the residents focuses on good transitions and safe discharges.

Pre-op Clinic: Weekly resident clinic staffed by Dr. Patel. This clinic focuses on peri-operative management and pre-operative risk stratification and testing and is open for all DGIM patients.

Weight Management Clinic: Dr. Hynes is the clinic director and Drs. Winston, Patel and Knight are part of a dedicated team whose mission is to help our patients lose weight. All physicians are board certified in Obesity Medicine. In addition to individual appointments, they also have a group class devoted to help with breast

cancer patients who want to lose weight, and another general weight loss group class for those who want peer support. They work to achieve medical weight reduction through an individualized approach that may include nutrition, physical activity, behavior change, or medications.

Lifestyle Medicine Clinic: Dr. Baban and Dr. Moore now have 5 clinics a week focusing on evidence based strategies for stress management, smoking cessation, lifestyle and dietary interventions to manage chronic diseases and maintain good health. At The GW Medical Faculty Associates, we believe that health is more than the absence of disease, and that prevention is a key part of a personalized, holistic wellness plan.

CUENTOS

Cuentos is the humanities magazine produced annually by the internal medicine residents at the GW School of Medicine and Health Sciences and the GW Medical Faculty Associates. **Dr. Maram Alkhatib** was the editor for the 2017-18 edition and **Dr. Anohki Shah** is the current editor.

PATIENT ASSISTANCE FUND

The Division of Internal Medicine Patient Assistance Fund assists patients in need, primarily with food, medications, visit co-pays, and transportation to and/or from their medical appointments. While we try our best to assist patients with locating resources, there are some situations where the resources are not available as promptly as needed or unavailable altogether. Addressing some critical "obstacles to care" can assist our patients for example with keeping appointments or picking up vital medications. This fund is solely made through donations from our annual fundraiser and special donations from our generous staff and providers.

During the past year we have spent over \$800 through this fund to assist our patients. We were able to provide 10 patients with transportation to and/or home from their medical appointment, 3 patients with medications, 1 patient with a gait belt and 1 patient with a pair of shoes. This fund was also used to obtain and provide food gift cards to Safeway and Giant as well as CVS gift cards and pill boxes. We have assisted over 25 patients with gift cards for either food or medication assistance.

GENERAL INTERNAL MEDICINE

PUBLICATIONS

- A Centralized, primary care medical home survivorship model at GW Cancer Center. Hatcher, E, Walcott, F, Ha, C, **Barbour, A.** Journal of Clinical Oncology March 2018
- Adult cancer survivorship referrals for hereditary cancer genetic testing. Walcott, F, Kaltman, R, Hatcher, E, Biagi, T, Stark, E, McHenry, A, **Barbour, A.** Journal of Clinical Oncology March 2018
- Azathioprine-induced pancytopenia with normal TPMT activity presenting with HSV oral ulcers. *BMJ Case Reports.* Jul 11, 2018. Jensen CH, Tiu J, **Catalanotti JS.**
- Preservation of renal perfusion by hepatorenal and splenorenal bypasses before explantation of an infected abdominal aortic endograft. *Journal of Vascular Surgery Cases and Innovative Techniques* 5(2): 139-142. June 2019. Brandon Neil Glousman, Robyn Macsata, **Jillian Catalanotti**, Shawn Sarin, Anton Sidawy, Bao-Ngoc Nguyen
- Reply to Comments on the "Frequency of Chronic Joint Pain following Chikungunya Infection: A Colombian Cohort Study", the Brazilian Experience. *Arthritis and Rheumatology.* 70: 1166-1167. doi:10.1002/art.40474 **Chang, A.Y.,** Encinales, L., Bethony, J.M., and Simon, G.L. (2018).
- Case Report: Second-Trimester Ultrasound and Neuropathological Findings in Congenital Zika Virus Infection. *The Pediatric Infectious Disease Journal.* Ho, C.Y., Castillo, N., Encinales, L., Porras, A., Mendoza, A.R., Tolosa, R.G., Lynch, R., Nemirovsky, A., Mantus, G., DeBiasi, R.L., Bethony, J.M., Simon, G.L., and **Chang, A.Y.** (2018).
- Reply to Comment on "Chikungunya Arthritis Mechanisms in the Americas: A Cross-Sectional Analysis of Chikungunya Arthritis Patients Twenty-Two Months After Infection Demonstrating No Detectable Viral Persistence In Synovial Fluid", Autoimmunity and Lesser Virulence of Asian Lineage of Chikungunya Virus? *Arthritis and Rheumatology,* 70: 1893-1893. PMID: 30003684 **Chang A.Y.,** Reid, P., Encinales, L., Bethony, J.M., Simon, G.L. and Firestein, G.S. (2018)
- Reply to Comments on "The frequency of Chronic Joint Pain Following Chikungunya Virus Infection A Colombian Cohort Study". *Arthritis and Rheumatology,* 70:1891-1892. **Chang A.Y.,** Encinales, L., Firestein, G.S., Simon, G.L. and Bethony, J.M. (2018)
- Long-term clinical outcomes of Zika associated Guillain-Barré syndrome (2018). *Emerging Microbes and Infections,* 7(1), 148. **Chang A.Y.,** Lynch, R. and Martins, K.O. et al.
- Augmented Zika and dengue neutralizing antibodies are associated with Guillain-Barré syndrome. (2018). *J Infect Dis.* PMID: 30113672 Lynch, R.M, Mantus, G., Encinales, L., Pacheco, N., Li, G. Porras, A., Mendoza, A.R., Peng, J., Rengifo-Pardo, M., Cruz, M.M., Harris, E., Bethony, J.M., Simon, G.L., and **Chang, A.Y.**
- Community Health Workers, Access to Care, and Service Utilization Among Florida Latinos: A Randomized Controlled Trial. *American Journal of Public Health,* 108(9), 1249-1251. PMID: 30024805 <https://www.ncbi.nlm.nih.gov/pubmed/30024805> **Chang, A.Y.,** Patberg, E., Cueto, V., Li, H., Singh, B., Kenya, S., Alonzo, Y., and Carrasquillo, O. (2018).
- The cytokine profile in acute chikungunya infection is predictive of chronic arthritis 20 months post infection. *Diseases,* 6(4), 95. PMID: 30347791 **Chang, A.Y.,** Tritsch, S., Reid, S.P., Martins, K., Encinales, L., Pacheco, N., Amdur, R.L., Porras-Ramirez, A., Rico-Mendoza, A., Li, G., Peng, G., Firestein, G.S., Simon, G.L., and Bethony, J.M. (2018).
- Treatment of chronic chikungunya with methotrexate. *Journal of Clinical Rheumatology.* PMID: 30720703 Poon, A., Simon, G., and **Chang, A.Y.** (2019).
- Co-circulation of dengue, chikungunya, and Zika virus in Colombia". Accepted for publication, *Revista Panamericana de Salud Pública/Pan American Journal of Public Health.* Porras, A., Encinales, L., **Chang, A.,** Rico-Mendoza, A.
- Chronic joint pain 3 years after chikungunya virus infection largely characterized by relapsing-remitting symptoms. *Journal of Clinical Rheumatology* under revisions. Tritsch, S.R., Encinales, L., Pacheco N., Cadena, A., Cure C., McMahon E., Watson H., Porras Ramirez, A., Rico Mendoza, A., Li, G., Khurana, K., Jaller, J.J., Mejia Castillo, S., Barrios Taborda, O., Jaller Char, A., Avendaño, L., Jimenez, D., Gonzalez Coba, A., Alarcon Gomez, M., Ariza Orozco, D., Bravo, E., Martinez, V., Guerra, B., Simon, G., Firestein, G.S., and **Chang, A.Y.**
- Physical activity goals among patients in a primary care setting. *TBM* 2019. Dodge T, Joshi D, Abaalkhail S, **Moore B.** [published online 3 May 2019. Doi:101093/tbm/ibz061.
- Addressing social determinants of health in an ambulatory setting: quasi-experimental controlled study of a curricular intervention for residents. Hassan I, Mansour M, **Narayan L,** Browder C, Patel V V, LeFrancois D, et al. *Journal of General Internal Medicine.* Published online April 13, 2018
- Engaging Children to Support Parental Weight Loss: A Randomized Trial, **Ginger Winston,** Munjireen Sifat, Erica Phillips, William Dietz, Emily Wikner, Maya Barrow, Kunal Khurana, Mary Charlson, *Health Education and Behavior,* 2019 May, In Press

GENERAL INTERNAL MEDICINE

GRANTS

- Effectiveness of a vascular/podiatry/wound care curriculum for medical students and residents in promoting awareness and management strategy for patients with peripheral arterial disease to prevent adverse cardiovascular events and major amputations. *The George Washington University SMHS Educational Research Grant*. Awarded 2/2019 for implementation 2019-20 academic year. PI: Bao-Ngoc Nguyen. Co-authors: Anton Sidawy, Juliet Lee, Robyn Macsata, Salim Lala, **Jillian Catalanotti**, Michael Stempel, Kara Couch, Richard Amdur
- African American Cardiovascular pharmacogenetics Consortium (ACCOuNT) Ongoing investigation of the pharmacogenomics of various cardiovascular drugs in African Americans. 7.5 million dollar U54MD010723 grant funded by the National Institute on Minority Health and Health Disparities. Role: **April Barbour, MD**, Site Investigator, 9/1/16 - present
- KL2 Scholar, Zika Induced Guillain-Barre Syndrome: Elucidating the Role of Antibodies, **Aileen Chang, MD**, 10/16-5/19
- The role of IL-2 therapy for Relapsing-Remitting Chikungunya Arthritis (Pharma Foundation). **Aileen Chang, MD**

NATIONAL PRESENTATIONS

- Controversies in High Value Preoperative Testing- Talking with Specialists and Teaching Residents. Society of General Internal Medicine, Northeast Regional Conference, Boston MA, March 2018. Katz M, **Patel M**, Logio L.
- Preoperative Testing. Architecture of High Value Healthcare 2018 National Conference. Baltimore, MD. September 2018 Stonemetz J, Katz M, **Patel M**, Peden C
- Complex Cases in Obesity Medicine. Obesity Medicine Association, Overcoming Obesity Fall National Conference, Washington DC, Sept 2018 **Marijane Hynes, MD, Michael Knight, MD, Mihir Patel, MD, Natalie Mufarrij**
- Alliance for Academic Internal Medicine - Creating and Navigating Effective Change Workshop, April 2019, **Chavon Onumah, MD, MPH**
- Society of General Internal Medicine, Workshop titled "Holes in the Safety Net: The impact of safety net hospital reorganization or closures on clinical care for the underserved and residency training." May 2019, **Jill Catalanotti, MD, MPH, Gigi El-Bayoumi, MD, Chavon Onumah, MD, MPH**
- Welcome Aboard! Creating orientation curricula to address gaps in skills, knowledge and experience among incoming IMG interns: Two programs' perspectives. Workshop. Association of Program Directors in Internal Medicine Spring Meeting. Philadelphia, PA. April 2019 **Jillian Catalanotti**, Deborah Corvalan, Grace Kajita
- IMGs and Education Diplomacy: Moving from apprehension to under-

standing and making informed choices for your program. Workshop. Association of Program Directors

- Overcoming Obesity: Prevention, Assessment, and Comprehensive Care, Internal Medicine Conference 2018, Cleveland Clinic Abu Dhabi, UAE, March 2018, **Michael Knight, MD, MSHP**
- Fundamentals of Weight Management in Primary Care, Internal Medicine Conference 2018, Cleveland Clinic Abu Dhabi, UAE, March 2018, **Michael Knight, MD, MSHP**
- Overcoming Obesity: Prevention, Assessment, and Comprehensive Care, NMA Region II Conference, Baltimore, MD, April 2018, **Michael Knight, MD, MSHP**
- Building a Culture of Quality and Patient Safety, Physician Executive Section, NMA Annual Convention, August 2018, **Michael Knight, MD, MSHP**
- Obesity in the African American Community, Panelist; NMA Professional Development Series, CBC ALC, Washington, DC September 2018, **Michael Knight, MD, MSHP**
- Wellness of the Community: Perspectives Across the Spectrum of Care, Panelist, NMA Region II Conference, Williamsburg, VA, April 2019, **Michael Knight, MD, MSHP**
- Building a Culture of Patient Safety, Student National Medical Association, Annual Medical Education Conference, April 2019, **Michael Knight, MD, MSHP**
- Internal Medicine Spring Meeting. Philadelphia, PA. April 2019 **Jillian Catalanotti**, Jill Paulson, Talia Bernal, Deborah Corvalan. Sponsored
- Get me a lawyer STAT! Using Medical-Legal Partnership to tackle patients' complex social needs. Workshop. Society of General Internal Medicine National Meeting. Washington, DC. May 2019 **Jillian Catalanotti**, Joanna Theiss, Colleen Lane.
- Shapiro Institute, Millennium Conference on Self-Directed Learning, **Robert Jablonover, MD**, 2019 May
- Speaking from the Heart: Addressing The Language Learning Needs of Multilingual Medical Students, **Lalit Narayan, MBBS, MA**, The Canadian Conference on Medical Education, Niagara, Canada 2019

COURSES TAUGHT

- American College of Lifestyle Medicine & American College of Preventive Medicine, Lifestyle Medicine Core Curriculum core faculty - Mind Body course director (3 hours), **Kaylan Baban, MD**
- GW Department of Integrative Medicine & Health Provider Wellness online course - course director, approved Spring 2019 for Fall 2019, **Kaylan Baban, MD**

GENERAL INTERNAL MEDICINE

ABSTRACTS/POSTERS

- Sweet Care: Improving Diabetes Outpatient Quality Measurements with Implementation of EMR Based “Macros” Awan, S., Mitchell, J, Lankowsky, J, Beatty, D, Loreck, A, Singh, K, **Barbour, A.** presented at GW Research Day 2018, 2019
- Society of General Internal Medicine Annual Meeting, Medical Education Scholarship Poster Walk and Talk finalist, “A Transformative Approach: Motivational Interviewing Curriculum Improves Patients’ Healthy Behaviors While Enhancing Learning”, May 2019, **Chavon Onumah, MD, MPH, Mihir Patel, MD**
- Society of General Internal Medicine Annual Meeting, Innovation in Medical Education Poster Session, “You can do it: Using a MI curriculum to enhance student learning, engage patients, and promote healthy behaviors” May 2019, **Chavon Onumah, MD, MPH, Mihir Patel, MD**
- APDIM Survey Committee Innovation: Changing the Submission of Survey Questions. Poster presentation. APDIM Spring Meeting. Philadelphia, PA. April 2019. Denise Dupras, Kathlyn Fletcher, Kathleen Finn, **Jillian Catalanotti, Lisa Willett.**
- National Survey of Internal Medicine Residents: Perception of Supervision at Night. Society of General Internal Medicine. Washington, DC. May 2019. Kathlyn Fletcher, **Jillian Catalanotti, Alec O’Connor.**
- Medical Student Patient Navigators: Connecting Hospitalized Homeless Patients to Outpatient Care. Research Poster presentation. The George Washington University Research Day. Washington, DC. April 2019. Samantha Sobelman, **Jillian Catalanotti.**
- Reducing Administrative Burden of Radiology-Guided Procedures: An interdisciplinary Intervention. Quality improvement poster presentation. The George Washington University Research Day. Washington, DC. April 2019. Leigh Anne Dickinson, Emily Bilger, Taher Tayeb, Ghazal Kango, Alberto Batarseh, Evan Ciarloni, Timothy Liu, Amanda Moyer, Joshua Slocum, **Jillian Catalanotti, Michael Knight**
- Platelet mRNA Splicing Landscape and Its effect on Platelet Activity. K.N. Garofano, A. Horvath, A. Harralson, **A. Barbour,** P.N. Friedman, M. Perera, T. O’Brien, N.H. Lee American Society for Pharmacology and Therapeutics, annual meeting 2019
- Phenotypic Variability in Antiplatelet and Anticoagulant Therapy in African American: An Account Consortium Study. P. Friedman, C. Alarcon, M. Nooruddin, L. Gong, A. Harrison, T. O’Brien, **A. Barbour,** E. Nutescu, M. Tuck, D. Meltzer, M.A. Perera American Society for Pharmacology and Therapeutics, annual meeting 2019
- Racial differences in reasons for stopping and starting physical activity. Vaylay, S., Dodge, T. Alharbi, M., Joshi, D., & Moore, B. (2019, March) Poster presented at: Society for Behavioral Medicine Annual Meeting. Washington, DC. And GW Research Day
- Physical activity goals and motivations among patients in primary care setting. Dodge, T., Joshi, D., Vaylay, S., Alharbi, M., & Moore, B. (2019, March). Poster presented at: Society for Behavioral Medicine Annual Meeting. Washington, DC. And GW Research Day.
- Levels of intrinsic motivation as a function of physical activity goals in a primary care setting. Ruggiero, A., Joshi, D., Dodge, T., Vaylay, S., Alharbi, M., & Moore, B. (2019, April). Poster presented at: GW Research Days. Washington, DC.

BOOK CHAPTERS

- **Knight, MG.** “Second Victim”. Health Care Claims and Litigation Playbook. Ed John C. West. American Society for Health Care Risk Management. 2018. 124-125. Print.

AWARDS

- American College of Physicians Mastership Award, 2019, **Helen Burstin, MD, MPH**
- American College of Physicians Walter J. McDonald Award for Young Physicians, 2019, **Jillian Catalanotti, MD, MPH**
- American College of Physicians – DC Sol Katz Teaching Award, 2018, **Chavon Onumah, MD, MPH**
- Xavier University of Louisiana 40 under 40 Distinguished Alumni Award, 2018, **Chavon Onumah, MD, MPH**
- Society of General Internal Medicine (SGIM) Unified Leadership Training for Diversity Program Award, 2018, **Chavon Onumah, MD, MPH**
- American College of Physicians Fellowship Award, 2019, **Michael Knight, MD, MSHP**

GENERAL INTERNAL MEDICINE

INVITED SPEAKERS

- Should We be Teaching Language in Medical School? Medical Grand Round, George Washington University, November 2018, **Lalit Narayan, MBBS, MA**
- Complex Cases in Obesity, Medical Grand Round, George Washington University, March 2019, **Marijane Hynes, MD, Michael Knight, MD, Mihir Patel, MD**
- Orthopedics Grand Rounds – Resident & Faculty Wellness May 2019, **Kaylan Baban, MD**
- Mount Sinai Preventive Medicine Grand Rounds – June 2019, **Kaylan Baban, MD**

Brem Foundation – Lifestyle in Breast Cancer – May 2019, **Kaylan Baban, MD**

Orriant Health – Mind Body Medicine (3 part series), **Kaylan Baban, MD**

Building the Next Generation of Academic Physicians Regional Conference, 2018, **Michael Knight, MD, MSHP, Ginger Winston, MD, Jillian Catalanotti, MD, MPH, Gigi El-Bayoumi, MD, Chavon Onumah, MD, MPH**

National Patient Advocacy Foundation Policy Consortium, Cost Conversations. November 2018. Invited Panelist, **April Barbour, MD, MPH**

NEW CERTIFICATIONS

- American Board of Lifestyle Medicine, 2018- **Kaylan Baban, MD**
- American Board of Obesity Medicine, 2017, 2018- **Ginger Winston, MD, Michael Knight, MD and Mihir Patel, MD, Marijane Hynes, MD**

Association of Chiefs and Leaders of General Internal Medicine (ACLGIM) LEAD Certificate, 2019, **Chavon Onumah, MD, MPH**

POSITIONS

- Alliance for Academic Internal Medicine Insight, At-Large Member; 2015-present- **Jillian Catalanotti, MD, MPH**
- Internal Medicine News, Editorial Board 2016-present- **April Barbour, MD, MPH**
- Reviewer, Journal of General Internal Medicine, 2018-present- **April Barbour, MD, MPH**
- American College of Lifestyle Medicine, Physician Wellness Committee, founding member and core faculty, **Kaylan Baban, MD**
- Reviewer, Women's Health Journal, 2018-present, **Gigi El Bayoumi, MD**
- American Journal of Medicine, Reviewer, 2018 – present, **Chavon Onumah, MD, MPH**
- Society of General Internal Medicine Health Equity Commission, Member, 2018 – present, **Chavon Onumah, MD, MPH**
- Reviewer, Ethnicity and Disease, 2015-present, **Mihir Patel, MD**

- Reviewer, Journal of Immigrant and Minority Health, 2016-present, **Mihir Patel, MD**
- Reviewer, Ethnicity and Health, 2017-present, **Mihir Patel, MD**
- American College of Physicians, DC Chapter, Governor's Advisory Council, 2017-Present, **April Barbour, MD, MPH, Michael Knight, MD, MSHP**
- American College of Physicians, DC Chapter, Health Policy Committee, 2018-Present, **Michael Knight, MD, MSHP**
- American Medical Association, Young Physician Section, DC Delegate, 2018-Present, **Michael Knight, MD, MSHP**
- American Medical Association, Minority Affairs Section, Governing Council Member, 2019-Present, **Michael Knight, MD, MSHP**
- Medico-Chirurgical Society of the District of Columbia, Corresponding Secretary, 2018-Present, **Michael Knight, MD, MSHP**
- National Medical Association, Board of Trustees, Member, 2017-Present, **Michael Knight, MD, MSHP**
- National Medical Association, Region II Chairperson, 2017-Present, **Michael Knight, MD, MSHP**
- Obesity Medicine Association, Marketing and Outreach Committee, Member, 2018-Present, **Michael Knight, MD, MSHP**

MEDIA

- CBS 9 Evening News – Vaccinations, **Kaylan Baban, MD**
- WAMU Kojo Nnamdi Show – Indoor Air Pollution, **Kaylan Baban, MD**
- Al Arabiya – Health Effects of Fasting, **Kaylan Baban, MD**
- GW Medicine + Health – Wellness in at Clinical Public Health Summit 4, **Kaylan Baban, MD**
- NBC4 News 4 Your Sunday – Holiday Health, **Michael Knight, MD, MSHP**
- WAMU/NPR – Health Effects of Mold, **Michael Knight, MD, MSHP**

GERIATRICS & PALLIATIVE CARE

*Katalin Roth, MD, JD
Professor of Medicine
Division Director*



GERIATRICS & PALLIATIVE CARE

FACULTY

Tania Alchalabi, MD, Assistant Professor of Medicine

Robert Jayes, MD, Associate Professor of Medicine; Medical Director, House Call Program

Mikhail Kogan, MD, Assistant Professor of Medicine; Medical Director, GW Center for Integrative Medicine

Tahira Lodhi, MD, Assistant Professor of Medicine

Christina Prather, MD, Assistant Professor of Medicine

Christina Puchalski, MD, Professor of Medicine; Director, GW Institute for Spirituality and Health

Erica Schokett, MD, Assistant Professor of Medicine

VA FACULTY

Elizabeth Cobbs, MD, Professor of Medicine; VA Chair of Geriatrics

Ali Ahmed, MD, Professor of Medicine

Karen Blackstone, MD, Assistant Professor of Medicine

Anca Dinescu, MD, Assistant Professor of Medicine

Nadine Dubowitz, MD, Assistant Professor of Medicine

Robert Kaiser, MD, Associate Professor of Medicine

Raya Kheirbek, MD, Associate Professor of Medicine

Nickie Lepcha, MD, Assistant Professor of Medicine

Sonika Pandey, MD, Assistant Professor of Medicine

NPS/PAS

Laurie Wilson, NP

Trish Olin, PA

GERIATRICS & PALLIATIVE CARE

ACADEMIC ACCOMPLISHMENTS

Academic Accomplishments for the Division of Geriatrics and Palliative Medicine (DGPM) include:

Publications: Book chapters, articles, presentations at national meetings (posters, abstracts and workshops), and invited lectures, as well as educational innovations at our school. The VA faculty continue to lead the division in mentoring fellows in academic work, particularly posters for national meetings. Drs. Puchalski and Kogan edited books in their fields, and many division members contributed chapters.

Education: Fellowship education in both Geriatrics and Palliative Medicine continue to be strong. The Center for Integrative Medicine has expanded its fellowship in Complementary and Alternative Medicine. DGPM faculty are very involved in preclinical and clinical curriculum development and teaching in the School of Medicine and the PA program. Dr. Prather is now a Themes director for the theme of aging.

Dr. Katalin Roth has been promoted to Professor. The George Washington Institute on Spirituality and Health (GWISH) under the dynamic leadership of Dr. Christina Puchalski continues to attract advanced learners from all over the world to its two institute retreats in Washington DC and Assisi Italy.

Research: The IDEAS study has closed. Dr. Prather is developing relationships with investigators at the medical school and school of public health to study dementia and aging.

Clinical Accomplishment: In terms of clinical achievement we are also proud to report a seamless transition in the Palliative Consultation inpatient service line at the Hospital and the introduction of geriatric fellows into the Geriatric Consultation service at the Hospital. An outpatient Palliative consultation service continues to develop.

Some publication highlights, by individual faculty members:

Dr. Christina Puchalski has delivered invited lectures all over the world on the topic of Spirituality and Palliative Care, including Brussels, Geneva. The Vatican, Santiago Chile and Mexico City, Mexico. She is involved in setting international standards through the World Health Organization and the international Charter for Compassion. She is the coeditor of the upcoming Oxford University Press Handbook of Palliative and Supportive Care.

VA faculty has been very active in publications and in mentoring abstracts and posters for the fellows. Among their academic contributions include: Dr. Robert Kaiser has published "The Insiders as Outsiders: Professionals Caring for An Aging Parent", *Gerontologist* 2017 Feb 57(1)46-53 and several book chapters, including chapters co-authored with Dr. Robert Jayes, Dr. Niki Lepcha also coauthored "Transmission of Methicillin Resistant Staph Aureus in Veterans Affairs nursing homes" in the *American Journal of Infection Control* (2017) and Drs. Lepcha, Cobbs and Dard authored a chapter on residential care for a geriatrics textbook in press. Dr. Anca Dinescu has authored book chapters on Advance Care Planning in Geriatrics Oncology and a chapter on falls in Dr. Kogan's Integrative Geriatrics handbook described below.

Dr. Mikhail Kogan is the editor of the Oxford University Press Handbook on Geriatrics and Integrative Medicine, in press. Several of our division faculty--Drs. Tahira Lodhi, Christina Prather, Katalin Roth, Robert Jayes, and Robert Kaiser ... contributed to this volume.

Dr. Katalin Roth codirected workshops at the regional and national meetings of the Society for General Internal Medicine and also at the National Conference on Refugee Health in Toronto on Resilience and Burnout Among Health Care Providers for Refugees and Asylum Seekers. She published an editorial in this subject area in the *Journal of General Internal Medicine* (JGIM)

Dr. Robert Jayes participated in the Updates in Geriatrics and Updates in Palliative Medicine for SGIM. He and Dr. Roth are both active as journal article reviewers for JGIM.

Dr. Christina Prather has directed a revision of the Geriatrics Medical School curriculum and the division is proud to have presented, under Dr. Prather's direction, a full curriculum in Geriatrics for the PA program for the second consecutive year. Drs. Roth, Prather and Cobbs continue to teach monthly to the medical students in the medicine and primary care clerkships. Dr. Roth directs the curriculum theme of professionalism and medical ethics.

GERIATRICS & PALLIATIVE CARE

CLINICAL ACTIVITIES

DGPM continues to run two robust inpatient consultation services, one in Geriatrics and the other in Palliative Medicine. Palliative Medicine needs to be staffed by two physician providers, and we did have Dr. Margaret Gloria working with us for one year but since she left in January we have not been able to replace her. Recruitment remains a challenge. We also need to increase our staffing for Geriatrics, especially in the inpatient setting and for outpatient memory clinic—we have submitted a request to recruit a new physician. We are also recruiting for an NP for the House Calls Program. Outpatient palliative is slowly growing, with Drs. Puchalski and Roth working with Dr. Smith in the cancer center, Dr. Schockett working with the LVAD team and Dr. Roth working with Dr. Bayat and the ALS service team.



Photo of the Annual international mission in the Dominican Republic

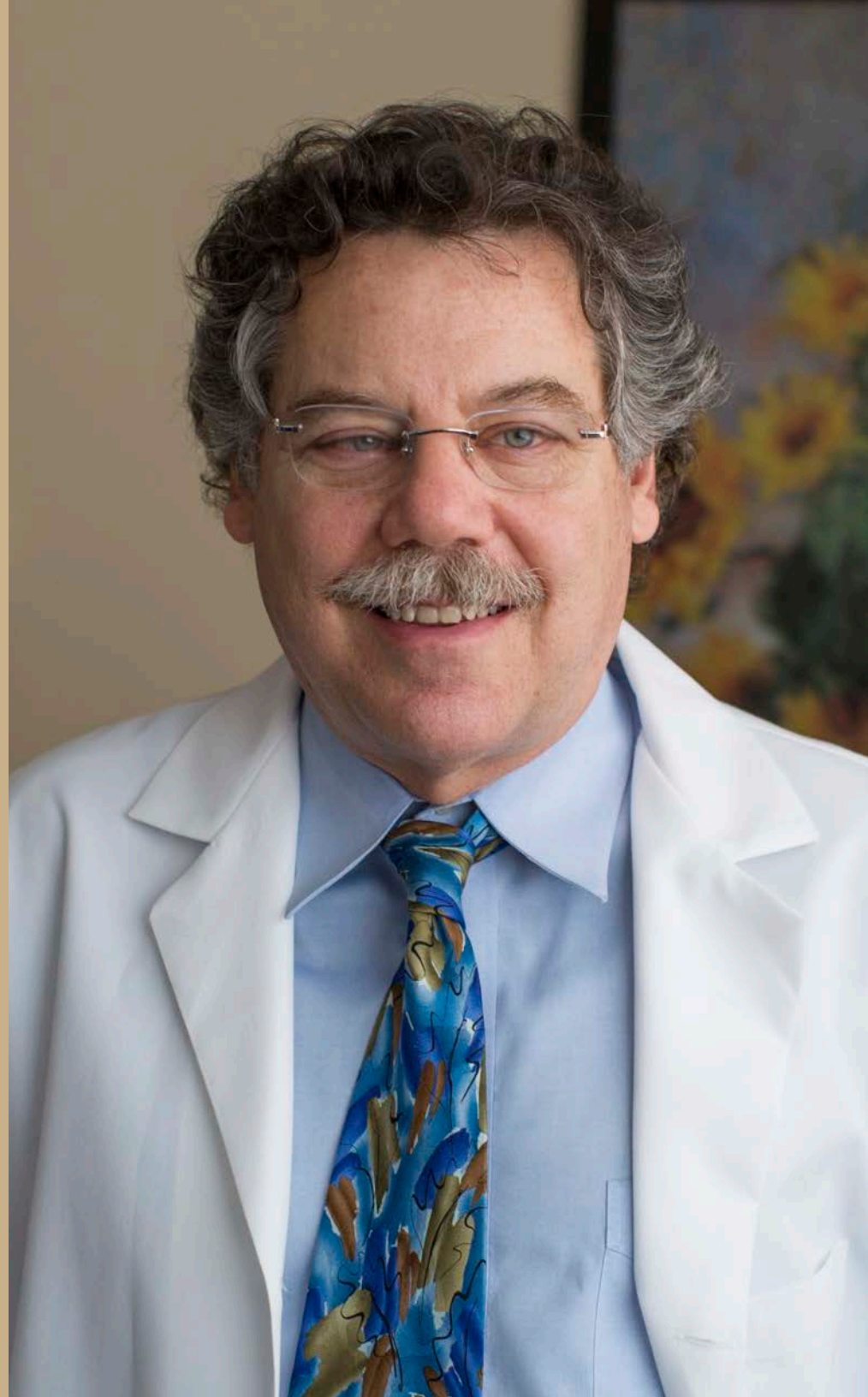
HEMATOLOGY & ONCOLOGY GW CANCER CENTER

Mitchell R. Smith, MD, PhD

*Director, Division of Hematology and
Oncology*

Professor of Medicine

*Associate Center Director of Clinical
Investigations, GW Cancer Center*



HEMATOLOGY & ONCOLOGY / GW CANCER CENTER

FACULTY

Najeebah Bade, MD, Assistant Professor of Medicine (as of August 2018)

John Barrett, MD, Professor of Medicine; Director, Stem Cell Transplantation and Cell Therapy (as of March 1, 2018)

Kieron Dunleavy, MD, Professor of Medicine

Holly Dushkin, MD, Associate Professor of Medicine; Fellowship Director

Faysal Haroun, MD, Assistant Professor of Medicine

Rebecca Kaltman, MD, Assistant Professor of Medicine

George Kim, MD, Associate Professor of Medicine, Program Director GI Malignancy (as of November 2018)

Jianqing Lin, MD, PhD, Associate Professor of Medicine, Program Director GU Malignancy

Lauren Mauro, MD, Assistant Professor of Medicine (through 2/28/19)

Frederick Rickles, MD, Clinical Professor of Medicine

Robert Siegel, MD, Professor of Medicine, Associate Center Director of Education and Outreach, GW Cancer Center

Eduardo M. Sotomayor, MD, Professor of Medicine. Director, GW Cancer Center

Imad Tabbara, MD, Professor of Medicine, Director, Autologous Stem Cell Program

Eric Yvon, PhD, Associate Professor of Medicine, Director Cell Therapies Laboratories, GW Cancer Center

VA FACULTY

Joao Ascensao, MD, Director and Professor of Medicine

Anita Aggarwal, MD, Associate Professor of Medicine

Maneesh Jain, MD, Assistant Professor of Medicine

Dalia Mobarek, MD, Assistant Professor of Medicine

Emiliano Mugnaini, MD, Assistant Professor of Medicine

NPS

Margaret Cuthbert, NP (as of May, 2019)

PAS

Megan Slocum, PA (as of December, 2018)

HEMATOLOGY & ONCOLOGY / GW CANCER CENTER

Since the establishment of the GW Cancer Center on July 1st, 2015, the Division of Hematology and Oncology in the Department of Medicine has undergone significant changes to align itself with the vision and goals of the GW Cancer Center, “to drive innovative research, personalized patient care and cancer policy in the nation’s Capital”. As such, we are expanding the prior emphasis of the Division on excellence in clinical care and education into state-of-the-art clinical/translational cancer research. To accomplish this goal, the Division has continued recruitment of clinical investigators with disease-focused areas of expertise, with the aim of establishing a broad portfolio of cancer clinical trials. This will align our Division with the ultimate goal of the Cancer Center to seek NCI-designation in the near future. Since the commitment of the MFA, GWU and GW Hospital to jointly develop the GW Cancer Center in 2015, there has been significant progress with the recruitment of the following clinical/translational investigators:

- Eduardo Sotomayor, MD (Moffitt Cancer Center) as the GW Cancer Center Director, expertise in Lymphoma
- Mitchell Smith, MD, PhD., (Cleveland Clinic) as Associate Center Director of Clinical Investigations at GW Cancer Center and Director, Division of Hematology/Oncology, Department of Medicine. Expertise in hematologic malignancies.
- Jianqing Lin, MD, (Thomas Jefferson University), Co-Leader of Genito-Urinary (GU) Malignancies Program
- Kieron Dunleavy, MD (National Cancer Institute), Leader, Lymphoma Program
- Holly Dushkin, MD (Cleveland Clinic), Breast cancer and gastrointestinal malignancies; Director, Hematology/Oncology Fellowship Training Program.
- Faysal Haroun, MD (GW Hematology/Oncology Fellowship Training Program). To develop thoracic oncology, molecular oncology, T-cell based therapies
- Eric Yvon, Ph.D (MD Anderson Cancer Center), Leader Cell Therapy Laboratories, to build our Stem Cell and Immune-Cell Therapy Program, including T-cell therapies such as chimeric-antigen receptor (CAR) T-cells and tumor-antigen specific T-cells
- John Barrett, MD (National Institutes of Health), Director, Stem Cell Transplantation and Cell Therapy

In addition, we are in the process of recruiting a Clinical Leader for a state-of-the-art Stem Cell and Immune Cell Transplant Program. Similarly, we have launched a national search for Leader of the Breast Cancer Program.

We are building several multidisciplinary Disease oriented translational research groups. These groups include basic scientist, translational and clinical investigators and the clinicians from various specialties. These are designed to facilitate translational research from bench to bedside and back again. Active groups include those in breast cancer, ovarian cancer, gastrointestinal cancer, head and neck cancer and hematologic malignancy with a focus on lymphoma.

CLINICAL ACCOMPLISHMENTS:

We opened newly renovated clinic space on the ground floor of the ACC in June 2018. This bright new area triples the number of rooms available to see patients, reducing waiting times. The design includes two patient consultation rooms. Spreading our patients and their families over two waiting areas has created a calmer, quieter ambience. The Gynecologic Oncology group now uses this clinic space. This expansion has also started to be filled with multi-disciplinary team clinics where surgeons, radiation oncologists and medical oncologists, along with patient navigators, social workers and dieticians, can see patients together for comprehensive evaluations and oncologic care. This care will be under the direction of disease-oriented teams. Survivorship care and symptom management programs are now incorporated under the auspices of the Division of Hematology and Oncology in this space as well.

Collaborations are strengthening between our Division and investigators at Children’s National Medical Center to develop an Immune cell-based therapy translational/clinical research group. Further, the CNMC-MFA collaboration now includes an Adolescent-Young Adult (AYA) lymphoma group to care for patients ages 15-40 with lymphoid malignancies.

The Onco-Dermatology Clinic in collaboration with the Department of Dermatology continues to expand, with the addition of MOHS surgery. A unique clinic focused on hematologic problems associated with pregnancy will open July 2019.

HEMATOLOGY & ONCOLOGY / GW CANCER CENTER

EDUCATION ACCOMPLISHMENTS

- Training 7 current hematology/oncology fellows
- Continued education of medical students, residents and Hematology/Oncology fellows.
- Mentoring of Junior Faculty by senior members of the Division and the GW Cancer Center
- Nationally recognized Hematology/Oncology Best Practices Course lead by Dr. Robert Siegel
- Increased attendance by community physicians and practitioners to "Update" state-of the art review courses in Hematology post-ASH meeting and Medical Oncology post-ASCO meeting, as well as regional consortium meetings sponsored by the Division of Hematology/Oncology
- Monthly forums to educate patients and their caregivers about specific cancers, long-term side effects and survivorship
- First International Scientific Research Summit GW – Spanish Consortium, Puerta de Hierro University Hospital, Madrid, Spain, November 2017

RESEARCH ACCOMPLISHMENTS

Grants Awarded:

- Lymphoma Research Foundation (LRF) Mantle Cell Lymphoma Therapeutic Studies Grant (M. Smith, S. Dave (Duke) co-investigators). Identification of biomarkers predicting clinical behavior and therapy response in mantle cell lymphoma 2018-2020.
- Cancer Research Pilot Grant Program Disease Targeted Collaboration Award (R. Kaltman, H Arem co-investigators) Comparative Effectiveness Feasibility Trial for Insomnia among Breast Cancer Survivors
- George Washington University Cross-Disciplinary Research Fund (H. Dushkin, K. Griffith co-investigators) Chemotherapy-Induced Peripheral Neuropathy and Central Nervous System Toxicities: Evaluating Common Associations
- Cancer Research Pilot Grant Award (R. Kaltman) Cancer Telegenetics for Underserved Women in the D.C. Area: An Innovative Approach to Address Health Disparities
- Sure, Inc. (R. Kaltman PI) Assessing the sensitivity of "SureTouch™" in identifying clinically significant masses in women undergoing diagnostic and screening mammography
- NIH-R01CA223606-01A1 (R. Kaltman co-Investigator). "Facilitated Education and Testing In BRCA Positive Families" 7/1/18-6/30/23
- Syndax Pharmaceuticals (J. Lin, PI) EECARP1: A Phase I Study of Entinostat in combination with Enzalutamide for Treatment of Patients with Castration-Resistant Prostate Cancer.
- NIH-1R01CA179062-01 (E.M. Sotomayor/J.Tao). "Role of specific HDACs in Mantle Cell Lymphoma Immunobiology and Therapy" 7/2016 – 6/2021

- NIH-1R01CA20648-01 (D. Nixon/E.M. Sotomayor). "HIV induced anti-cancer HERV immunity in prostate, breast and colon cancers" 7/2016 – 6/2021

ORAL PRESENTATIONS AT NATIONAL/INTERNATIONAL MEETINGS

- Dr. Siegel presented at ASCO 2018: "Phase II Study: Induction Chemotherapy & Transoral Surgery as Definitive Treatment (Tx) for Locally Advanced Oropharyngeal Squamous Cell Carcinoma (OPSCC): a Novel Approach". With co-authors: Robert S. Siegel, Hind Rafei, Arjun Joshi, M Reza Taheri, Naja Fousheé, and Nader Sadeghi
- At AACR 2018, Dr. Dunleavy presented: "Recent advances in the biology and management of EBV-associated lymphomas", and Dr. Chen from Dr. Sotomayor's lab presented "HDAC11 function as a transcriptional regulator in immature myeloid cells to myeloid-derived suppressor cells transition."

INVITED PRESENTATIONS

Dr. Sotomayor has been an invited speaker at various National and International conferences, including:

- 10th Annual Multidisciplinary Oncology Symposium, Madrid, Spain; AACR New Horizons in Cancer Research in Shenzhen China; 12th Annual GOTEL Lymphoma Conference Seville, Spain; Winter Cancer Conference, San Juan PR; the 15th iNHL Meeting in Vancouver, CA and 16th iwNHL Meeting in Nice, France; 13th Annual NOLA Summer Cancer Meeting, New Orleans. LA.
- He has presented Grand Rounds at the Perlmutter Cancer Center of NYU, Columbia University Medical Center in NYC, and Hospital Vall D'Hebron in Barcelona, Spain

In 2018, Dr. Dunleavy presented:

- "Double-Hit lymphoma" at the 16th iwNHL Meeting in Nice, France
- "BTK and PI3 kinase inhibition in lymphomas", at the European School of Hematology Meeting in Dublin, Ireland
- "Novel-Novel Combinations in Lymphoma" at the Pan-Pacific Lymphoma Meeting in Hawaii
- "High-Risk DLBCL" at the Nordic Meeting on the Microenvironment
- "What Is the Optimal Therapeutic Approach to NHL in Adolescents and Young Adults?: A Discussion from the Pediatric and Adult Perspectives" at the Inaugural AACR Lymphoma Meeting
- "Biology of Primary Mediastinal Lymphoma and Diffuse Large B-Cell Lymphoma" at the Lymphoma Research Foundation AYA Meeting, Chicago, IL.
- "Biology and Treatment of EBV lymphomas" at the Amer Assoc Cancer Res
- "Recent Advances in Aggressive Lymphoma" at the Sao Paulo Lymphoma Meeting, Sao Paulo, Brazil

HEMATOLOGY & ONCOLOGY / GW CANCER CENTER

INVITED PRESENTATIONS

Dr. Smith presented "Advances in CAR T-cell Immunotherapy in hematologic malignancies and solid tumors" at the SEOM Immunotherapy Symposium Malaga, Spain, "Second generation BTK inhibitors: ACP-196 (Acalabrutinib) and others" at the 15th iwNHL Meeting in Vancouver, CA, and "New Approaches to Indolent Lymphoma" at Grand Rounds at Rush Medical Center, Chicago, IL

Dr. Kaltman's group in the Ruth Paul Cancer Genetics and Prevention Service presented their work on "Evaluating racial disparities in breast cancer referrals for hereditary risk assessment", co-authored by Pepin A, Peterson J, Thomas R, Johnson K, Stark E, Biagi T, Kaltman R, in a Spotlight Session on Quality of Life and Survivorship at the San Antonio Breast Cancer Symposium 2018.

POSTER PRESENTATIONS

GU ASCO 2019:

Rodriguez, S, Zhou H, Sparks AD, Amdur RL, Lin J. Racial disparities in late-stage prostate cancer: A SEER database analysis 2005-2015.

Hemostasis &Thrombosis Research Society 2019:

Bade NA, Amdur R, Ahmadzia HA, Blood Type Association with Bleeding Outcomes at Delivery in a Large Multi-Center Study

AACR 2018:

- Dual functions of miR-200b in triple-negative breast cancer metastasis and chemoimmuno-resistance. X. Tan, S. Ren, W. Lee, X. Wu, K. Rezaei, Y-G. Man, P. Latham, R. S. Siegel, R. F. Brem, Z. Li, X. Chang, S. W. Fu.
- Targeting HDAC6 to reduce the aggressiveness of metastatic breast cancer in immunotherapy D. Banik, M. Hadley, E. Palmer, V. Gallub, E. Sotomayor, A. Kozikowski, A. Villagra
- The HDAC6 inhibitor Nexturastat A improves in vivo PD-1 immune blockade T. Knox, E. Sahakian, D. Banik, M. Hadley, E. Palmer, J. Kim, J. Powers, S. Shah, A. Lowe, J. Pinilla, E. Sotomayor, N. Lee, A. Kozikowski, A. V. Villagra.
- Targeting HDAC6 to reduce the aggressiveness of metastatic breast cancer in immunotherapy D. Banik, M. Hadley, E. Palmer, V. Gallub, E. Sotomayor, A. Kozikowski, A. Villagra

San Antonio Breast Cancer Symposium 2018:

- Evaluating racial disparities in breast cancer referrals for hereditary risk assessment. Pepin A, Peterson J, Thomas R, Johnson K, Stark E, Biagi T, Kaltman R.
- A phase II study of a priming dose of cyclophosphamide prior to pembrolizumab to treat metastatic triple negative breast cancer (mTNBC).

Anders CK, Moore D, Sambade M, Cuaboy L, Garrett A, Woodcock M, McKinnon K, Cowens K, Bortone D, Calhoun B, Carey L, Dees C, Jolly T, Muss H, Reeder-Hayes K, Kaltman R, Jankowitz R, Gudena V, Olajide O, Perou C, Vincent B, Serody J.

ASH 2018:

Dr. Dunleavy was part of a presentation on "Circulating Tumor DNA Dynamics during Therapy Predict Outcomes in Mantle Cell Lymphoma"

PUBLICATIONS

BCL2 Amplicon Loss and Transcriptional Remodeling Drives ABT-199 Resistance in B Cell Lymphoma Models.

Zhao X, Ren Y, Lawlor M, Shah BD, Park PMC, Lwin T, Wang X, Liu K, Wang M, Gao J, Li T, Xu M, Silva AS, Lee K, Zhang T, Koomen JM, Jiang H, Sudalagunta PR, Meads MB, Cheng F, Bi C, Fu K, Fan H, Dalton WS, Moscinski LC, Shain KH, Sotomayor EM, Wang GG, Gray NS, Cleveland JL, Qi J, Tao J.

Cancer Cell. 2019 May 13;35(5):752-766.e9. doi: 10.1016/j.ccell.2019.04.005

Recent advances and future directions in mantle cell lymphoma research: report of the 2018 mantle cell lymphoma consortium workshop.

Kahl BS, Dreyling M, Gordon LI, Martin P, Quintanilla-Martinez L, Sotomayor EM. Leuk Lymphoma. 2019 Jan 30;1-13. doi: 10.1080/10428194.2019.1571205

Silencing of HDAC6 as a therapeutic target in chronic lymphocytic leukemia.

Maharaj K, Powers JJ, Achille A, Deng S, Fonseca R, Pabon-Saldana M, Quayle SN, Jones SS, Villagra A, Sotomayor EM, Sahakian E, Pinilla-Ibarz J. Blood Adv. 2018 Nov 13;2(21):3012-3024. doi: 10.1182/bloodadvances.2018020065.

EBV-positive diffuse large B-cell lymphoma, not otherwise specified: 2018 update on diagnosis, risk-stratification and management.

Castillo JJ, Beltran BE, Miranda RN, Young KH, Chavez JC, Sotomayor EM. Am J Hematol. 2018;93:953-962. doi: 10.1002/ajh.25112

The neutrophil-lymphocyte ratio is prognostic in patients with early stage aggressive peripheral T cell lymphoma.

Beltran BE, Castro D, De La Cruz-Vargas JA, Cotrina E, Gallo A, Sotomayor EM, Castillo JJ.

Br J Haematol. 2018; doi: 10.1111/bjh.15141. [Epub ahead of print]

HEMATOLOGY & ONCOLOGY / GW CANCER CENTER

PUBLICATIONS

The impact of the neutrophil:lymphocyte ratio in response and survival of patients with de novo diffuse large B-cell lymphoma.

Beltrán BE, Paredes S, Cotrina E, Sotomayor EM, Castillo JJ.
Leuk Res. 2018; 67:82-85. doi: 10.1016/j.leukres.2018.02.011.

Response and survival benefit with chemoimmunotherapy in Epstein-Barr virus-positive diffuse large B-cell lymphoma.

Beltran BE, Quiñones P, Morales D, Malaga JM, Chavez JC, Sotomayor EM, Castillo JJ.
Hematol Oncol. 2018;36(1):93-97. doi: 10.1002/hon.2449.

Byrd, J.C., Ruppert, A.S., Heerema, N., Halvorson, A., Hoke, E., Smith, M.R., Godwin, J., Couban, S., Fehniger, T.A., Thirman, M.J., Tallman, M.S., Appelbaum, F., Stone, R.M., Robinson, K.S., Chang, J.E., Mandrekar, S., Larson, R.A. Lenalidomide consolidation benefits patients with CLL receiving chemo-immunotherapy: results for CALGB 10404 (Alliance). Blood Advances, 2018. 2:1705-1718. doi: 10.1182/bloodadvances.2017015396.

Smith, M.R., Weiss, R. Optimal Use of Novel Agents in Chronic Lymphocytic Leukemia. Leukemia Res. 2018; 70:37-40 doi: 10.1016/j.leukres.2018.05.001.

Hayakawa K, Formica AM, Nakao Y, Ichikawa D, Shinton SA, Brill-Dashoff J, Smith MR, Morse HC 3rd, Hardy RR. Early Generated B-1-Derived B Cells Have the Capacity To Progress To Become Mantle Cell Lymphoma-like Neoplasia in Aged Mice. J Immunol. 2018;201:804-813. doi: 10.4049/jimmunol.1800400.

Hill, B.T., Smith, M.R., Shelley, M., Jagadeesh, D., Dean, R., Pohlman, B., Sweetenham, J.W., Bolwell, B., Smith, S.D. A Phase I Trial of Bortezomib in Combination with Everolimus for Treatment of Relapsed/Refractory Non-Hodgkin Lymphoma. Leukemia & Lymphoma 2018; 59:690-694.

Winter, A.M., Rybicki, L.; Shah, S.N.; Jagadeesh, D.; Gerds, A.T.; Hamilton, B.K.; Liu, H.; Dean, R.; Sobecks, R.; Pohlman, B.; Smith, M.R.; Kalaycio, M.E.; Bolwell, B.; Majhail, N.S.; Hill, B.T. Prognostic Value of Pre-Transplant PET/CT in Patients with Diffuse Large B-Cell Lymphoma Undergoing Autologous Stem Cell Transplantation. Leukemia & Lymphoma. 2018; 59:1195-1201. doi: 10.1080/10428194

Neelapu, S.S., Locke, F.L., Bartlett, N.L., Lekakis, L.J., Miklos, D.B., Jacobson, C.A., Braunschweig, I., Oluwole, O.O., Siddiqi, T., Lin, Y., Timmerman, J.M., Stiff, P.J., Friedberg, J.W., Flinn, I.W., Goy, A., Hill, B.T., Smith, M.R., Deol, A., Farooq, U., McSweeney, P., Munoz, J., Avivi, I., Castro, J.E., Westin, J.R., Chavez, J.C., Ghobadi, A., Komanduri, K.V., Levy, R., Jacobsen, E.D., Witzig, T.E., Reagan, P., Bot, A., Rossi,

J., Navale, L., Jiang, Y., Aycok, J., Elias, M., Chang, D., Wieszorek, J., Go, W.Y. Axicabtagene Ciloleucel CAR T-Cell Therapy in Refractory Large B-Cell Lymphoma. N Engl J Med. 2017; 377:2531-2544. doi:10.1056/NEJMoa1707447.

Allen, J., Ruano Mendez, A.L., Rybicki, L., Sawalha, Y., Jagadeesh, D., Dean, R., Pohlman, B., Smith, M.R., Hsi, E.D., Hill, B.T. Co-expression of MYC and BCL2 predicts poorer outcomes for relapsed/refractory diffuse large B-cell lymphoma with R-ICE and intent to transplant. Ther Adv Hematol. 2018; 9:81-87. doi: 10.1177/2040620718759249

Ben-Yakov, G, Alao, H., Haydek, JP, Fryzek, N., Cho, MH., Hemmati, M., Samala, V., Shovlin, M., Dunleavy, K., Wilson, W., Jones, EC., Rotman, Y. Development of Hepatic Steatosis After Chemotherapy for Non-Hodgkin Lymphoma. Hepatol Commun. 2018; 3:220-6. doi: 10.1002/hep4.1304

Dunleavy K, Fanale MA, Abramson JS, Noy A, Caimi PF, Pittaluga S, Parekh S, Lacasce A, Hayslip JW, Jagadeesh D, Nagpal S, Lechowicz MJ, Gaur R, Lucas A, Melani C, Roschewski M, Steinberg SM, Jaffe ES, Kahl B, Friedberg JW, Little RF, Bartlett NL, Wilson WH. Dose-adjusted EPOCH-R (etoposide, prednisone, vincristine, cyclophosphamide, doxorubicin, and rituximab) in untreated aggressive diffuse large B-cell lymphoma with MYC rearrangement: a prospective, multicentre, single-arm phase 2 study. Lancet Haematol. 2018; 5:e609-e617. doi: 10.1016/S2352-3026(18)30177-7

Dunleavy K. Approach to the Diagnosis and Treatment of Adult Burkitt's Lymphoma. J Oncol Pract. 2018;14:665-671. doi: 10.1200/JOP.18.00148.

Dunleavy K, Gross TG. Management of aggressive B-cell NHLs in the AYA population: an adult vs pediatric perspective. Blood. 2018; 132:369-375. doi: 10.1182/blood-2018-02-778480.

Melani C, Advani R, Roschewski M, Walters KM, Chen CC, Baratto L, Ahlman MA, Miljkovic MD, Steinberg SM, Lam J, Shovlin M, Dunleavy K, Pittaluga S, Jaffe ES, Wilson WH. End-of-treatment and serial PET imaging in primary mediastinal B-cell lymphoma following dose-adjusted EPOCH-R: a paradigm shift in clinical decision making. Haematologica. 2018;103:1337-1344. doi: 10.3324/haematol.2018.192492

Dunleavy K, Erdmann T, Lenz G. Targeting the B-cell receptor pathway in diffuse large B-cell lymphoma. Cancer Treat Rev. 2018 ;65:41-46

Lai C, Roschewski M, Melani C, Pittaluga S, Shovlin M, Steinberg SM, Dunleavy K, Pack S, Jaffe ES, Wilson WH. MYC gene rearrangement in diffuse large B-cell lymphoma does not confer a worse prognosis following dose-adjusted EPOCH-R. Leuk Lymphoma. 2018; 59:505-508.

HEMATOLOGY & ONCOLOGY / GW CANCER CENTER

PUBLICATIONS

[Book Chapter] Dunleavy K, Chumuleau M, Burkitt lymphoma, Aggressive Lymphoma, Martin Dreyling (ed), Springer, 2019

[Book Chapter] Roth L, Dunleavy K. Primary Mediastinal B-cell Lymphoma, Non-Hodgkin Lymphoma in Childhood and Adolescence, Springer, 2018

Stephanie R, Sparks AD, Zhou H, Amdur RL, Lin J. Racial disparities in late-stage prostate cancer: A SEER analysis 2005-2015, Canadian Journal of Urology, 2019

Elkon JM, Millett RL, Millado KF, Lin J. Abiraterone is effective and should be considered for the treatment of Metastatic castrate-naïve Prostate Cancer., Expert Opinion On Pharmacotherapy, 2018

Anari F, O'Neill J, Choi W, Chen DYT, Haseebuddin M, Kutikov A, Dulaimi E, Alpaugh RK, Devarajan K, Greenberg RE, Bilusic M, Wong Y-N, Viterbo R, Hoffman-Censits JH, Lallas CD, Trabulsi EJ, Smaldone M, Geynisman DM, Zibelman M, Lin J, Kelly WK, Uzzo R, McConkey D, Plimack ER, Neoadjuvant Dose Dense Gemcitabine and Cisplatin in Muscle Invasive Bladder Cancer, Results of a Phase II Trial, European Urology Oncology, 2018; 1:54-60

Marlow CF, Babar F, Lin J, Sharma S. Severe Hypocalcemia and Hypomagnesemia with Denosumab in Advanced Chronic Kidney Disease: Case Report and Literature Review, Case Reports in Oncological Medicine, 2018

Casasanta N, Stark E, McHenry A, Biagi T, Kaltman R. The Perils of Single-Site Genetic Testing for Hereditary Cancer Syndromes in the Era of Next-Generation Sequencing. Oncologist. 2018; 23:393-396.

Frost AS, Toaff M, Biagi T, Stark E, McHenry A, Kaltman R. Effects of Cancer Genetic Panel Testing on at-Risk Individuals. Obstet Gynecol. 2018; 131:1103-1110

Nassereddine S, Lap CJ, Tabbara IA. Evaluating ivosidenib for the treatment of relapsed/refractory AML: design, development, and place in therapy. Onco Targets Ther. 2018;12:303-308. doi: 10.2147/OTT.S182443.

Rafei H, Haroun F, Tabbara IA. Novel Immunotherapeutic Agents for the Treatment of Multiple Myeloma. Am J Clin Oncol. 2019;42:317-329

Millett RL, Elkon JM, Tabbara IA. Directed Therapies in Anaplastic Lymphoma Kinase-rearranged Non-small Cell Lung Cancer. Anticancer Res. 2018;38:4969-4975. doi: 10.21873/anticancer.12815

Nassereddine S, Alsubait S, Tabbara I. Sinusoidal Obstruction Syndrome (Veno-

occlusive Disease) Following Hematopoietic Stem Cell Transplant: Insights and Therapeutic Advances. Anticancer Res. 2018 May;38(5):2597-2605

Nassereddine S, Alsubait S, Tabbara I. Sinusoidal Obstruction Syndrome (Veno-occlusive Disease) Following Hematopoietic Stem Cell Transplant: Insights and Therapeutic Advances. Anticancer Res. 2018; 38:2597-2605.

Mascarenhas J, Virtgym E, Stal M, Blacklock H, Gerds AT, Mesa R, Ganly P, Snyder D, Tabbara I, Tremblay D, Moshier E. Outcomes of patients with myelofibrosis treated with compassionate use pacritinib: a sponsor-independent international study. Ann Hematol. 2018; 97:1369-1374.

Bade NA, Lu C, Patzke C, Baer MR, Duong VH, Law JY, Lee ST, Sausville EA, Zimrin AB, Duffy AP, Lawson J, Emadi A. Optimizing pegylated asparaginase use: An institutional guideline for dosing, monitoring, and management. J Oncol Pharm Pract. 2019;1078155219838316. doi: 10.1177/1078155219838316.

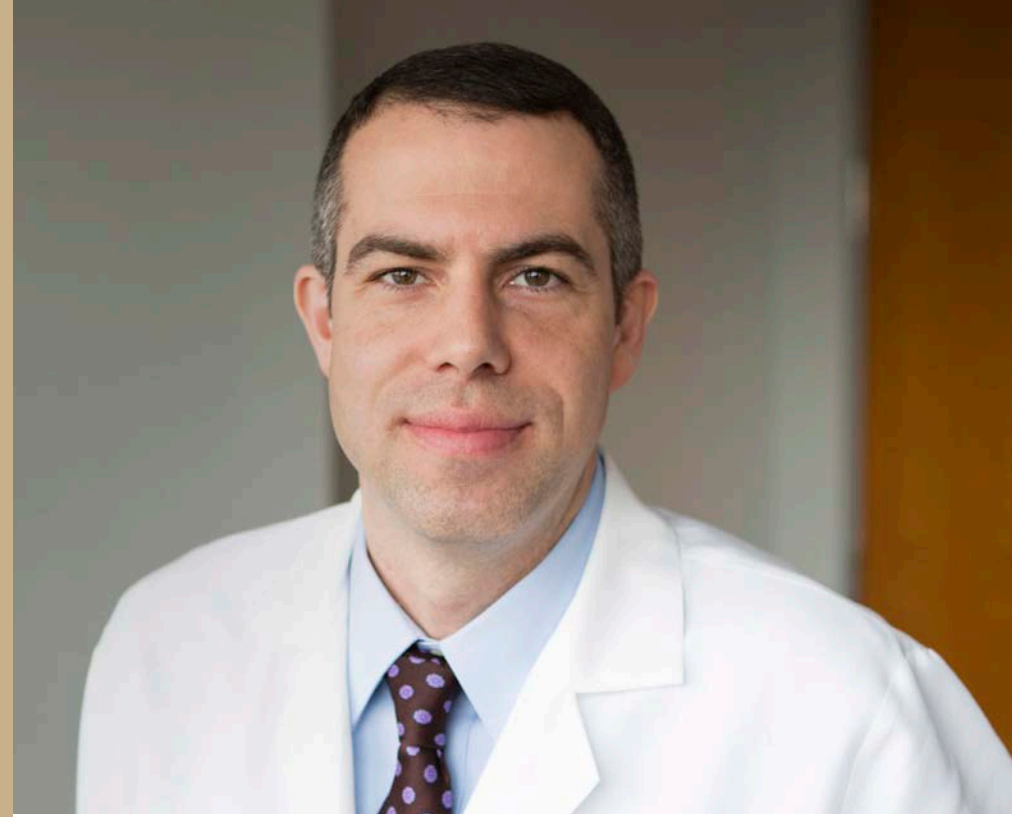
Bade NA, Giffi VS, Baer MR, Zimrin AB, Law JY. Thrombotic Microangiopathy in the Setting of Human

Immunodeficiency Virus Infection: High Incidence of Severe Thrombocytopenia, J Clinical Apheresis, 2018, PMID29377224

HOSPITAL MEDICINE

James Gehring, MD
Assistant Professor of Medicine
Division Director

Juan Reyes, MD, MPH
Assistant Professor of Medicine
UMC Site Director



HOSPITAL MEDICINE

FACULTY

Shant Ayanian, MD, Assistant Professor of Medicine

Suzanne Chang, MD, Assistant Professor of Medicine

Nabil Fallouh, MD, Assistant Professor of Medicine

Katherine Goodrich, MD, Clinical Professor of Medicine

Anne Lesburg, MD, Assistant Professor of Medicine

Linda Lesky, MD, Associate Professor of Medicine

Lei Lynn, MD, Assistant Professor of Medicine

Aditi Mallick, MD, Clinical Assistant Professor of Medicine

Nupur Mehta, MD, Clinical Assistant Professor of Medicine

Farida Millwala Izzi, MD, Assistant Professor of Medicine

Courtney Paul, MD, Assistant Professor of Medicine

Adrienne Poon, MD, Assistant Professor of Medicine

Jason Prior, MD, Assistant Professor of Medicine

Sumugdha Rayamajhi, MD, Assistant Professor of Medicine

Juan Reyes, MD, Assistant Professor of Medicine

Karolyn Teufel, MD, Assistant Professor of Medicine

Sara Wikstrom, MD, Assistant Professor of Medicine

VA FACULTY

Dragica Mrkoci, MD, Assistant Professor of Medicine

Jesse Theisen-Toupal, MD, Assistant Professor of Medicine

UMC FACULTY

Dianne Thompson, MD, Assistant Professor of Medicine

Natalie Giles, MD, Clinical Assistant Professor of Medicine

Michael Elliott, MD, Clinical Assistant Professor of Medicine

Eskinder Hadgu, MD, Clinical Assistant Professor of Medicine

Haimanot Haile, MD, Clinical Assistant Professor of Medicine

Jancy Mathew, MD, Clinical Assistant Professor of Medicine

Aseem Balhara, MD, Clinical Assistant Professor of Medicine

Richard Lapin, MD, Clinical Assistant Professor of Medicine

Caitlin Mingey, MD, Clinical Assistant Professor of Medicine

Cedric Edwards, MD, Clinical Assistant Professor of Medicine *Pending appointment

Diedre Hilliard, MD, Clinical Assistant Professor of Medicine

NPS/PAS

Folashade Brown, NP

Vabah Kotee-Harris, PA

Shalini Gehani, NP

Mohamed Koroma, NP

Gedeon Longtchi, NP

Alfonsine Mofor, NP

Amina Osman, NP

Melanie Scott Bowling, PA

Clinically the division continues to see majority of inpatients on a medicine service at the George Washington Hospital. Other clinical responsibilities include committee membership and chairing committees. Linda Lesky co-chairs the Peer Review committee. James Gehring chairs the medical records committee. Juan Reyes will be taking over as the Division Director of Hospital Medicine and serves on the Medical Executive Committee. Sara Wikstrom serves as the Third Year Internal Medicine Clerkship director, which will be transitioning to Anne Lesburg. Farida Izzi serves as the Fourth Year Internal Medicine clerkship director. Courtney Paul serves as the Associate Program Director for the Internal Medicine Residency program. The members of the division remain active in teaching both medical students and residents. The division also includes a midlevel service of 9 PA/NPs.

HOSPITAL MEDICINE

The division helped develop and is overseeing the new inpatient program at United Medical Center with a team of 14 full-time hospitalists and physician extenders, as well as a nocturnist program. Haimanot Haile chairs the Pharmacy/Therapeutics committee, with support from Michael Elliott as an active member. Dianne Thompson chairs the Education Committee. Additional members of the committee include Caitlin Mingey and Natalie Giles. Michael Elliott and Eskinder Hadgu both serve as members of the Peer Review Committee. Our hospitalists have been active participants in patient safety conferences and supervising PA students on the wards over the past year. The division is advancing the academic mission with plans to become a new clerkship site for the GW SOM Medicine Clerkship for the upcoming academic year. Juan Reyes has been serving as the site director for this location, and Nabil Fallouh will be taking over this position with the assistance of Michael Elliott.

PUBLICATIONS

- Ayanian, S., Gehring, J, Paul, C., Reyes, J.; Using Machine Learning to Generate a Predictive Model for Timely Hospital Discharges; Podium Presentation, American College of Physicians, 2018
- Patel, J; Millett, R; Humes, K; Angela, H; Krupnikova, S; Yue, L; Gehring, J; Improving the One-Call Inter-Hospital Transfer System to Improve Patient Safety and Efficiency of Care. 2018
- Poon AN, Han L, Li Z, Zhou C, Li Y, Huang L, Liao M, Shepard C, Bult-erys M, Acceptability and willingness of HIV pre-exposure prophylaxis amongst female sex workers in China., AIDS care, 2019 May, 1-10,
- Poon AN, Simon GL, Chang AY, Treatment of Chronic Chikungunya With Methotrexate., Journal of clinical rheumatology: practical reports on rheumatic & musculoskeletal diseases, 2019 Feb, 10.
- Chan KY, Li X, Chen W, Song P, Wong NWK, Poon AN, Jian W, Soyiri IN, Cousens S, Adeloje D, Sheikh A, Campbell H, Rudan I, Prevalence of chronic obstructive pulmonary disease (COPD) in China in 1990 and 2010., Journal of global health, 2017 Dec, 7,
- Song P, Liu Y, Yu X, Wu J, Poon AN, Demaio A, Wang W, Rudan I, Chan KY, Prevalence of epilepsy in China between 1990 and 2015: A systematic review and meta-analysis., Journal of global health, 2017 Dec, 7,
- Covas P, Aldrich A, Poon AN, Tricuspid Pseudomonas Endocarditis with Rare Sequelae of Left-Sided Endocarditis: Subarachnoid Hemorrhage, Society for General Internal Medicine Meeting 42nd Annual Meeting, 2019 May
- Covas P, Aldrich A, Poon AN, Tricuspid Pseudomonas Endocarditis with Rare Sequelae of Left-Sided Endocarditis: Subarachnoid Hemorrhage, American College of Physicians DC Regional Chapter Meeting, 2018 May
- Covas P, Aldrich A, Poon AN, Tricuspid Pseudomonas Endocarditis with Rare Sequelae of Left-Sided Endocarditis: Subarachnoid Hemorrhage, The George Washington University Research Day, 2018 Apr
- Elshikh, A, Patel J, Fu, K, Izzi, F, Cohen, S., C1q nephropathy with a positive Kalkat P, Dickinson LA and Lesky L, Case Presentation of Fusobacterium necrophorum Infection without Lemierre's Disease, DC Chapter of American College of Physicians Spring Meeting, 2019 May
- Engskow DG, Akselrod H, Tefft J and Lesky L, Castleman disease: a rare cause of lymphadenopathy and neutropenic fever in a patient with AIDS, Annual Meeting of the American College of Physicians, 2019 Apr
- Lei Lynn M.D., Dana Kay, DO, Naji Younes, PhD, RD, CSO, Sabyasachi Sen MD, FRCP, Vivek Jain M.D., Accuracy and the Proper Use of Point-of-Care Analysis in Hemoglobin A1C Measurement, Metabolic Syndrome and Related Disorders, 2018 Apr, 2018 Apr; 16(3):117-121.
- Gillian Mohny and Lei Lynn M.D., Blood Clot Removal Could Help More Stroke Victims, Study Finds, ABC News-Health, 2016 Sep, ABC News Online Publication
- Lei Lynn M.D., Joseph Delio M.D., Courtney Paul M.D., Jillian Catala-notti M.D., MPH, Welcome Aboard: A Novel Curriculum to Prepare International Medical Graduates for Internship, Academic Internal Medicine Week 2018. Alliance for Academic Internal Medicine. National Conference, 2018 Mar
- Marko K, Paul C, Cioletti A, Ganju N, Acadia M, Berger J, The Implementation of a Novel Institutional Quality Improvement Platform, Integrating Quality Conference June 2018, 2018 Jun

AWARDS

- **Sumgdha Rayamajhi:** Master Teacher Leadership Development 2017-2018
- **Caitlin Mingey:** Master Teacher Leadership Development Program 2018-2019
- **Linda Lesky:** Medicine Attending of the Year 2017-2018
- **Nabil Fallouh:** Medicine Attending of the Year 2018-2019

INFECTIOUS DISEASES

Gary Simon, MD, PhD, MACP

*Walter G. Ross Professor of Medicine and of
Biochemistry and Molecular Medicine and
of Microbiology, Immunology and Tropical
Medicine*

Vice Chairman, Department of Medicine



INFECTIOUS DISEASES

FACULTY

Hana Akselrod, MD, Clinical Instructor of Medicine

David Parenti, MD, MTMH, Professor of Medicine; Director, Traveler's Clinic

Afsoon Roberts, MD, Associate Professor of Medicine

Marc Siegel, MD, Associate Professor of Medicine

Carmelita Tuazon, MD, Professor Emeritus of Medicine

Henry Masur, MD, Clinical Professor of Medicine, NIH

VA FACULTY

Debra Benator, MD, Professor of Medicine

Cynthia Gibert, MD, Professor of Medicine

Virginia Kan, MD, Professor of Medicine

Angelike Liappis, MD, Associate Professor of Medicine

Amy Weintrob, MD, Associate Professor of Medicine

PAS AND RESEARCH STAFF

Melanie Bossi, Research Administrator

Aimee Desrosiers, PA

Jennifer Eyrich-Ferranti, RN

Maureen McMahon, Proposal Specialist

Marc Peters, Fiscal Research Manager

Nicole Swanson, Senior Research Coordinator

Chelsea Ware, Research Coordinator

CLINICAL

Clinical activities of the Division of Infectious Disease encompass both inpatient and outpatient activities. The inpatient service averages 120-140 consultations per month and provides such consultative services throughout the hospital. The outpatient clinics meet on Mondays, Tuesdays, Wednesdays and Fridays and see a variety of patients with infectious disease issues. Roughly 50% of the patients have HIV infection and are being followed for viral control. Approximately 85% of our HIV-infected patients have no detectable virus by standard assays. The infectious disease clinics are located in close proximity to the research clinics and many patients participate in clinical trials as well as are available to provide samples for basic science investigators who are collaborating with ID physicians, especially in the CFAR and the BELIEVE studies.

TEACHING

Members of the infectious disease division continue to teach in all four years of medical school. The student elective tends to be most heavily populated during the first half of the 4th year. There are 5 fellows in the division under the directorship of Dr. Afsoon Roberts, Infectious Diseases Program Director. Each of the fellows are involved in research projects.

RESEARCH

The division continues to be very active in research.

1. HIV continues to be a major area of investigation for the ID division. Funding for HIV research includes the NIH as well as pharmaceutical companies. In addition, there are close collaborations with faculty in the Department of Microbiology, Immunology and Tropical Medicine in the area of HIV. We are also active collaborators with faculty from the Department of Epidemiology and Biostatistics on various epidemiologic investigations.
2. Among the various clinical trials, we are active in the HIV Prevention Trials Network (HPTN). These studies are currently led by Dr. Seigel in collaboration with SPHHS faculty. We are also actively studying changed in HIV associated with aging, notably changes in cognition.
3. Arbovirus research collaboration with Dr. Aileen Chang we have been involved in immune studies of chikungunya and Zika and have begun negotiations on dengue vaccine trials. A recent proposal to study methotrexate for chronic chikungunya infection has been initiated.

CFAR

The Washington DC Center for AIDS Research is currently in its third year of funding. It continues to generate pilot funding for AIDS investigators. The Simon is co-director of the CFAR with Dr. Alan Greenberg from the Department of Epidemiology and Biostatistics

INFECTIOUS DISEASES

PUBLICATIONS

- Chang AY, Encinales L, Porras A, Pacheco N, Reid StP, Martins K, Pacheco, S, Bravo E, Nararno M, Rico-Mendoza A, Amdur R, Kamalpathy P, Firestein G, Bethony J, Simon G. Frequency of Chronic Joint Pain following Chikungunya Infection. A Colombian Cohort Study. *Arthritis Rheumatol*. 70: 578-584, 2018. Doi: 10.1002/art.40384. PMID 29266783.
- Chang AY, Martins AO, Encinales L, Reid SR, Acuña M, Encinales C, Matranga CB, Pacheco N, Cure C, Shukla B, Teofilo RA, Amdur R, Cazares LH, Gregory M, Ward MD, Porras A, Alejandro RM, Dong L, Kenny T, Brueggemann E, Downey LG, Kamalpathy P, Lichtenberger P, Falls O, Simon GL, Chikungunya Arthritis Mechanisms in the Americas (CAMA): A Cross-Sectional Analysis of Chikungunya Arthritis Patients Twenty-Two Months After Infection Demonstrating No Detectable Viral Persistence in Synovial Fluid.. *Arthritis Rheumatol* 70:585-593, 2018. doi: 10.1002/art.40383. PMID 29266856.
- Cheng-Ying Ho1*, Nicolas Castillo2, Liliana Encinales2, Alexandra Porras3, Raul Garcia Tolosa4, Rebecca Lynch5, Amy Nemirovsky1, Jeffrey M. Bethony5, Roberta DeBiasi6, Adre Duplessi6, Gary L. Simon7, and Aileen Y. Chang7* Second-Trimester Ultrasound and Neuropathological Findings in Congenital Zika Virus Infection: *Pediatric Infectious Diseases Journal*. 37:1290-93, 2018
- Lynch RM, Mantus G, Encinales L, Pacheco N, Li G, Porras A, Mendoza AR, Peng J, Rengifo-Pardo M, Harris E, Bethony JM, Simon GL, Chang AY. Augmented zika and dengue neutralizing antibodies are associated with Guillain-Barré syndrome. *J. Inf. Dis*. 219:26-30, 2019.
- Barraza PP, Hernández DJ, González Coba A, De La Hoz Mendoza K, Bethony JM, Simon GL. Long-term clinical outcomes of Zika-induced Guillain-Barré syndrome. *Emerging Microbes & Infections*. 7:148-51, 2018. DOI: 10.1038/s41426-018-0151-9.
- Chang, AY, Encinales L, Firestein G, Simon GL, Bethony JM. Letter. Reply to Comments on "The frequency of Chronic Joint Pain Following Chikungunya Virus Infection A Colombian Cohort Study" *Arthritis Rheumatol*. 70:1167-68, 2018. <https://doi.org/10.1002/art.40474>
- Chang AY, Reid SP, Encinales L, Bethony JM, Simon, GL, Firestein, GS. Letter. Reply to Comment on "Chikungunya Arthritis Mechanisms in the Americas: A Cross-Sectional Analysis of Chikungunya Arthritis Patients Twenty-Two Months After Infection Demonstrating No Detectable Viral Persistence In Synovial Fluid." *Arthritis Rheumatol*. 70:1893, 2018. <https://doi.org/s10.1002/art40664>
- Chang, AY, Tritsch S, Reid St P, Martins K, Encinales L, Pacheco, Amdur R, Porras-Ramirez A, Rico-Mendoza A, Guangzhaor L, Ping J Firestein G, Simon GL, Bethony JM.. Cytokine profile in acute chikungunya infection is predictive of chronic arthritis 20-months post-infection. *Diseases*. 367528. 2018. <https://doi:10.3390/diseases6040095>.

VA FACULTY PUBLICATIONS

- Utay NS, Roque A, Timmer JK, Morcock DR, DeLeage C, Somasunderam A, Weintrob AC, Agan BK, Estes JD, Crum-Cianflone NF, Douek DC. MRSA Infections in HIV-Infected People Are Associated with Decreased MRSA-Specific Th1 Immunity. *PLoS Pathog*. 2016 Apr 19;12(4):e1005580. PMID: 27093273.
- Freiberg MS, Chang CH, Skanderson M, Patterson OV, DuVall SL, Brandt CA, So-Armah KA, Vasani RS, Oursler KA, Gottdiener J, Gottlieb S, Leaf D, Rodriguez-Barradas M, Tracy RP, Gibert CL, Rimland D, Bedimo RJ, Brown ST, Goetz MB, Warner A, Crothers K, Tindle HA, Alcorn C, Bachmann JM, Justice AC, Butt AA.

DIVISIONAL GRANTS

David Parenti

- Development of a City-Wide Cohort of HIV-Infected Persons in Care in the District of Columbia: The DC Cohort (2010)(CDC/NIAID)(site PI, active) study implementation, personnel supervision, patient recruitment, data analysis
- Strategic Timing of AntiRetroviral Therapy (START). (2010)(Insight/NIH)(site PI, active) study implementation, personnel supervision, patient recruitment, AE monitoring
- A Phase III Multicenter, Open-Label, Randomized Study to Evaluate a Switch to MK-1439A in HIV-1-Infected Subjects Virologically Suppressed on a Regimen of a Ritonavir-boosted Protease Inhibitor and Two Nucleoside Reverse Transcriptase Inhibitors (NRTIs) (024)(2015)
- A Double Blind, Randomized, Placebo Controlled, Multicenter Study to Evaluate Safety, Tolerability, and Efficacy on LDL-C of Evolocumab (AMG 145) in Subjects with HIV and with Hyperlipidemia and/or Mixed Dyslipidemia (Amgen)(2017)

Afsoon Roberts

- A phase 3b, randomized, double-blind study to evaluate switching from a regimen consisting of efavirenz/emtricitabine/tenofovir disoproxil fumarate (EFV/FTC/TDF) fixed-dose combination (FDC) to emtricitabine/rilpivirine/tenofovir alafenamide (FTC/RPV/TAF) FDC in virologically suppressed, HIV-1 infected subjects GS-US-366-1160, 4/14 ongoing, Principal Investigator
- A phase 3b, randomized, double-blind switch study to evaluate the safety and efficacy of emtricitabine/rilpivirine/tenofovir alafenamide (FTC/RPV/TAF) fixed dose combination (FDC) in HIV-1 positive subjects who are virologically suppressed on emtricitabine/rilpivirine.tenofovir disoproxil fumarate (FTC/RPV/TDF) GS-US-366-1216, 4/14-ongoing, Principal Investigator
- A phase 3, randomized, double-blind study to evaluate the safety and efficacy of GS-9883/emtricitabine/tenofovir alafenamide, versus abacavir/dolutegravir/lamivudine in HIV-1 infected, antiretroviral-naïve adults. GS-US-380-1489, 2/9/16-ongoing

INFECTIOUS DISEASES

Marc Siegel

- AIDS Research Award: The Effect of Social Media Support and Financial Incentives on Adherence to HIV Pre-exposure Prophylaxis in young MSM of color in Washington, DC. (DC-CFAR). \$200,000, September 2016. Principal Investigator, 10% effort

Gary Simon

- Title: The District of Columbia Center for AIDS Research (D-CFAR). The purpose of this grant is to advance HIV research in Washington, DC. Role: Co-Director
- Title: BELIEVE: Bench to Bed Enhanced Lymphocyte Infusions to Engineer Viral Eradication. The major goal is to develop new approaches for the cure of HIV. [The Martin Delaney Colaboratory for the Cure of HIV]
- Title: A Phase I Study to Evaluate the Safety, Immunologic, and Virologic Responses of HIV spe-cific T-cells with non-escaped epitope targeting (HST-NEETs) as a Therapeutic Strategy in HIV-Infected Individuals on Antiretroviral Therapy During Acute And Chronic Infection (RESIST). Co-Principal Investigator
- Title: Clinical and Translational Science Award. This grant, like the CFAR, is designed to advance translational research through various methods of pilot funding. Role: MFA Principal Investiga-tor
- Title: Pre-Exposure Prophylaxis (PrEP) Initiation and Adherence among Black Men who have Sex with Men (BMSM) in Three U.S. Cities. Co-investigator
- Title: Phase II Randomized, Double-Blind, Study of the Safety and Tolerability of Maraviroc, Maraviroc + Emtricitabine, or Tenofovir or Tenofovir + Emtricitabine For Pre-Exposure Prophylaxis (PrEP) To Prevent HIV Transmission in At-Risk Men Who Have Sex with Men and in at-risk Women.
- Title: A Phase 2b/3 Double Blind Safety and Efficacy Study of Injectable Cabotegravir Compared to Daily Oral Tenofovir Disoproxil Fumarate/Emtricitabine (TDF/FTC), For Pre-Exposure Prophylaxis in HIV-Uninfected Cisgender Men and Transgender Women who have Sex with Men. Co-investigator
- Title: A phase 2b study to evaluate the safety and efficacy of VRCO1 broadly neutralizing mono-clonal antibody in reducing acquisition of HIV-1 infection. Co-investigator
- Title: Understanding Mucosal Immune Responses in the Reproductive Tract of Post-Menopausal Women: Impact of sexual violence and HIV status. Co-investigator
- Title: A Multi-Center Trial of Lorcaserin for the Treatment of Cocaine Use Disorder. Co-investigator
- Title: The Effect of Social Media Support and Financial Incentives on Adherence to HIV Pre-exposure Prophylaxis in young MSM of color in Washington, DC Co-investigator
- Title: Zika-induced Guillain-Barre Syndrome: Elucidating the role of antibodies Role: Mentor and Co-Investigator. Co-investigator
- Department of Defense through CDRMP
- Title: Impact of Cross-Reactive Flavivirus Antibody and Identification of Biomarkers Associated with Zika Virus Disease Severity. Co-investigator
- Title: A Phase III, randomized, multicenter, parallel-group, non-inferiority, open-label study evaluating the efficacy, safety, and tolerability of switching to long-acting cabotegravir plus long-acting rilpivirine from current INI- NNRTI-, or PI-based antiretroviral regimen in HIV-1-infected adults who are virologically stable.
- Title: A Phase III, randomized, double-blind, multicentre, parallel-group, non-inferiority study evaluating the efficacy, safety, and tolerability of dolutegravir plus lamivudine compared to do-lutegravir plus tenofovir/emtricitabine in HIV-1-infected treatment-naïve adults
- Title: Double blind, randomized, placebo controlled multi-center study to evaluate safety, tol-erability & efficacy of evolocumab in subjects with stable HIV infection and hypercholesterole-mia and/or mixed dyslipidemia.
- Title: A Phase 3, Randomized, Double-Blind Study to Evaluate the Safety and Efficacy of Switch-ing from a Regimen of Dolutegravir and Either Emtricitabine/ Tenofovir Alafenamide or Emtricitabine/Tenofovir Disoproxil Fumarate to a Fixed Dose Combination of Bict-egravir/Emtricitabine/Tenofovir Alafenamide in HIV-1 Infected Subjects who are Virologically Suppressed
- Title: A Phase 3, Randomized, Double-Blind Study to Evaluate the Safety and Efficacy of GS-9883/ Emtricitabine/ Tenofovir Alafenamide Versus Abacavir/ Dolutegravir/ Lamivudine in HIV-1 Infected, Antiretroviral Treatment-Naïve Adults
- Title: A Phase 3, Randomized, Double-Blind Study to Evaluate the Safety and Efficacy of GS-98831 Emtricitabine/ Tenofovir Alafenamide Versus Dolutegravir + Emtricitabine/ Tenofovir Ala-fenamide in HIV-1 Infected, Antiretroviral Treatment-Naïve Adults
- Title: A Phase 3, Randomized, Open Label Study to Evaluate the Safety and Efficacy of Switching to a Fixed Dose Combination (FDC) of GS-9883/ Emtricitabine/Tenofovir Alafenamide (GS-98831F/TAF) from Elvitegravir/ Cobicistat/Emtricitabine/Tenofovir Alafenamide (E/C/F/TAF), Elvitegravir/ Cobicistat/ Emtricitabine/Tenofovir Disoproxil Fumarate (E/C/F/TDF) or Atazanavir + Ritonavir + Emtricitabine/ Tenofovir Disoproxil Fumarate (ATV+RTV+FTC/TDF) in Virologically Suppressed HIV-1 Infected Women
- Title: A Phase IIa Multicenter, Open-Label Clinical Trial to Evaluate the Safety and Efficacy of MK-1439A in Treatment-Naïve HIV-1 Infected Subjects with Selected Non-Nucleoside Reverse Tran-scriptase Inhibitor (NNRTI) Transmitted Resistance Mutations.

INFECTIOUS DISEASES

Marc Siegel (continued)

- Title: A Phase III Multicenter, Open-Label, Randomized Study to Evaluate a Switch to MK-1439A in HIV-1-Infected Subjects Virologically Suppressed on a Regimen of a Ritonavir-boosted Protease Inhibitor and Two Nucleoside Reverse Transcriptase Inhibitors (NRTIs).
- Title: A Phase III Multicenter, Double-Blind, Randomized, Active Comparator-Controlled Clinical Trial to Evaluate the Safety and Efficacy of MK-1439A Once-Daily Versus Atripla Once-Daily in Treatment-Naïve HIV-1 Infected Subjects

VA

Benator

- Tuberculosis Trials Consortium, 1994-2004, 2004-2010, 2010 - 2019, CDC/VA Memorandum of Agreement with Dr. Fred Gordin, Mike Vjecha. CDC-75-09-04-02, approximately \$2.5 million annually.
- Lead for Collaboration with Stellenbosch University, Cape Town, South Africa with Anneke Hesselning MD / Andreas Diacon MD / Marc Cotton MD 2010-2019. Coinvestigator
- DC Cohort, DEVELOPMENT OF A CITY-WIDE COHORT OF HIV-INFECTED PERSONS IN CARE IN THE DISTRICT OF COLUMBIA. Co-Principal Investigator.
- Palliative Care in People Living With AIDS: RFA-NR-12-004 (R01). Co-investigator

Gibert

- U01: Observation Study: Optimizing Treatment in HIV and HCV: ART, Alcohol and Polypharmacy
- Using rich longitudinal data from the Veterans Aging Cohort Study (VACS) this study will compare the impact of polypharmacy, potentially inappropriate medications, and pharmacologic treatment for alcohol use disorder and hepatitis C among those aging with and without HIV infection. Co-investigator
- Integrated stepped care for unhealthy alcohol use in HIV
- The goals of this five site randomized clinical trial is to determine the effectiveness of integrated stepped for unhealthy alcohol use in HIV. Co-investigator

PULMONARY

Guillermo Gutierrez, MD, PhD

*Professor of Medicine, Anesthesiology and
Engineering and Applied Sciences*

Division Director



PULMONARY

FACULTY

Jalil Ahari, MD, Associate Professor of Medicine

Daniel Baram, MD, Associate Professor of Medicine

Morgan Delaney, MD, Associate Professor of Medicine and Pharmacology and Physiology

Vivek Jain, MD, Associate Professor of Medicine; Director, GW Sleep Disorders Center

Anna McLean, MD, Assistant Professor of Medicine

Jeffrey William, MD, Assistant Professor of Medicine

VA FACULTY

Robert Maximos, MD, Assistant Professor of Medicine

Rahul Khosla, MD, Associate Professor of Medicine

NP

Anne Hunley, NP

UPCOMING FACULTY

Ivana Milojevic, MD

The Pulmonary, Critical Care and Sleep Medicine Division provides excellent clinical services to our patients, produce high quality research and teach medical students, residents and Pulmonary Fellows.

The Division is composed of six physicians and one nurse practitioner. In September 2018, one of our faculty members (Dr. Anna McLean) left to join private practice. We have been fortunate to recruit Dr. Ivana Milojevic, who will join the Division as Assistant Professor in the Fall 2019.

In spite of being short one physician FTE, the Division continues to show a healthy profit for the MFA. As of the end of April 2019, we had revenues of \$2.4 million and expenditures of \$1.8 million, resulting in a positive margin \$202,000 or 8.4%, figures similar to those of last year.

PULMONARY

CLINICAL ACTIVITIES

The clinical load of the Division is substantial, as we provide both inpatient and outpatient care. During the past year, the Division was responsible for inpatient rounding in the GWUH Blue Team, inpatient Pulmonary Consultation service and ICU rounding.

We staff very busy outpatient clinics where we treat patients with pulmonary and sleep disorders. As of May 2019, the total number of new and return patients seen by our Division for FY19 was 11,974. This number represents an increase of 7% over last year, and places the Pulmonary, Critical Care and Sleep Medicine Division third in the number of outpatients seen among the specialty clinics, behind Cardiology and Hematology/Oncology.

Members of the Division are also responsible for the management of the Pulmonary Function Laboratory and the Sleep Disorders Laboratory. Among our clinical responsibilities are:

1. **Blue Team rounding.** We have assumed the role of "Pulmonary hospitalist", in charge of supervising what is perhaps the busiest hospital-based house staff team. The Blue Team specializes in high acuity patient care, treating patients with acute exacerbations of asthma and COPD, acute pulmonary emboli, severe pneumonia and patients with acute-on-chronic respiratory failure. The latter are treated with non-invasive mechanical ventilation. ***The Blue Team census often reaches the maximum allowed load of 18 patients. Members of our faculty round in the Blue Team seven days a week throughout the year.***
2. **Intensive care unit.** Last year we did 18 weeks of rounding in the combined Medical-Surgical ICU and Cardio-thoracic ICU. During those weeks our faculty rounds seven days weekly.
3. **Inpatient consults.** We provide hospital-wide consultation service in the field of pulmonary medicine. Our faculty rounds 7 days a week during the year.
4. **Bronchoscopies and other pulmonary procedures:** Dr. Daniel Baram has been responsible for developing a vibrant Interventional Pulmonary program at GWUH. In addition to bronchoscopies with broncho-alveolar lavage and trans-bronchial biopsies, our physicians perform highly complex bronchoscopic procedures including endobronchial ultrasound trans-bronchial needle aspiration (EBUS-TBNA) for the diagnosis and staging of lung cancer. Among the exciting developments this year:
 - a. Use of state of the art video bronchoscopy, improved linear endobronchial ultrasound (EBUS) and radial EBUS. Linear EBUS allows visualization and biopsy of lymph nodes, mediastinal lesions and central pulmonary lesions. Radial EBUS visualizes the parenchyma in the more distal airways which has been shown to be helpful prior to biopsy.
 - b. An electro-navigation system has been purchased by the GWU hospital and we are awaiting delivery and installation. This system will significantly improve our yield in accessing peripheral lesions. This system is described as a "GPS system for the lung". It works in tandem with the radial EBUS; navigation gets us into the right subsegment of the lung and then radial EBUS allows fine-tuning and confirmation.
 - c. We have been granted a block of OR time. This has significantly streamlined bronchoscopy hopefully allowing easy and rapid scheduling of elective outpatients who require a bronchoscopic procedure. However, access to the
 - d. We offer our patients argon coagulation for endobronchial lesions, a treatment modality useful for bleeding or obstructing endobronchial lesions. We also are able to perform balloon bronchoplasty and stenting for obstructing lesions. Endobronchial valve placement is currently approved by the FDA for compassionate use in the treatment of persistent bronchopleural air leaks; this modality is under evaluation in regards to improving functional status in patients with severe emphysema.
5. **Pulmonary clinics:** As mentioned above, our outpatient clinics remain very busy. The loss of Dr. McLean has resulted in a significant increase in waiting times for new patients, sometimes approaching three months for most of our faculty members. We are hoping to ameliorate this problem when Dr. Milojevic joins our Division in the Fall. In addition to providing patient care, our faculty teaches and mentors medical students, residents and Pulmonary fellows during clinic time.
6. **Sleep Center Clinics:** As the prevalence of obesity apnea continues to increase in the general population, our Sleep Center Clinics have remained extremely busy. Our faculty treats patients with a variety of sleep disorders, in addition to obstructive sleep apnea. Thanks to the work of Dr. Vivek Jain, the Sleep Center Medical Director, and Anne Hunley, NP, Sleep clinic volume continues to grow, with a FY 2019 census that surpassed that of FY 2018, the highest in the Sleep Center program history.

PULMONARY

CLINICAL ACTIVITIES

7. **Sleep Center Laboratory:** The Division is charged with supervising and running an eight-bed Sleep Center Laboratory. Our faculty interprets approximately 50 polysomnograms studies per week. The sleep laboratory function 7 days a week.

The Sleep Center underwent a reaccreditation survey by the American Academy of Sleep Medicine (AASM) in August of 2017. The AASM is recognized as the gold standard for excellence in the field of Sleep Medicine. The survey included a complete evaluation of all sleep center activities including policies, procedures, quality indicators, and staff/faculty participation. Also included was an assessment of clinic volumes and outcomes compared to national norms. New accreditation standards were applied to our home sleep testing program. **The Center was found to be in complete compliance with all practice standards with zero findings and was commended as a standard-bearer among its 10,000 accredited member centers.** The accreditation is effective until August, 2022.

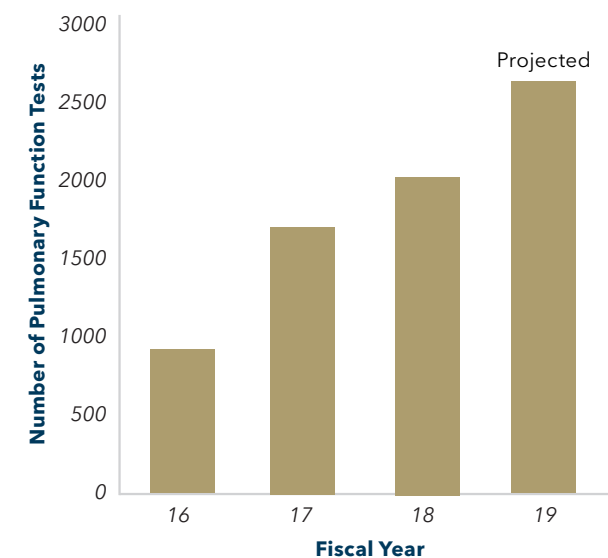
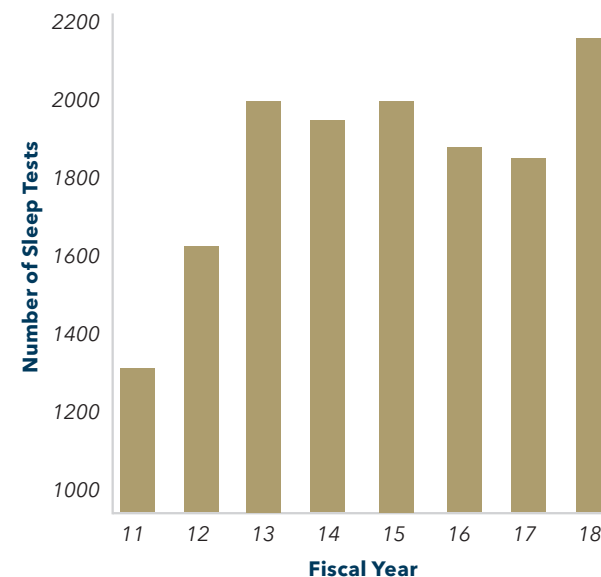
Sleep Center testing is currently tracking above FY 2018 totals and it is expected to continue to increase for the remainder of the year. Home sleep testing has become an integral part of the program since it is now being required by some insurance companies. Our center is outperforming national standards for percentages of patients requiring home sleep tests as a result of increased provider efforts toward in-center testing.

Among the challenges faced by the Sleep Center Laboratory are noise considerations due to ongoing construction in and around 2021 K Street NW. Sleep testing volumes could be increased by the acquisition of PCO2 monitoring devices. We have recently had to send patients to competing sleep centers because we do not have them. The purchase of one PCO2 monitor has been approved and we are hopeful to be able to provide this service to our patients sometime this year.

8. **Pulmonary Function Test Laboratory:** Is a fully equipped laboratory capable of performing pulmonary mechanics, lung volume and diffusion tests. We also perform six-minute walk test, pulse-oximetry and high-altitude oxygen requirement determinations. Ours is the only laboratory in the D.C. region that performs cardiopulmonary exercise tests on a regular basis. The laboratory is CLIA certified and equipped with instruments to measure arterial blood gases and hemoglobin concentration. The laboratory is under the direction of Dr. Guillermo Gutierrez and is supervised by Mr. Kamaludin Omar.

During the past year we have acquired an additional set of pulmonary testing equipment, as well as being able to recruit a second PFT technician, Mr. Abdalla Mursal. These initiatives have improved substantially the waiting time required for scheduling a test and we are now able to perform these tests while our patient seen in the Pulmonary clinics. As shown in the graph, the volume of tests has increased substantially, with revenues for FY19 being 28% above those of last year.

Among the activities for this year, we are also planning an outreach campaign to increase the ordering of PFTs by the various Internal Medicine Divisions, other MFA Departments and community physicians. We also are in the process of fully computerizing the analysis of PFTs with full integration into the Touchworks EHR.



PULMONARY

EDUCATIONAL ACTIVITIES

The Pulmonary, Critical Care training program is fully accredited by the ECGME with training for nine fellows. The program was formally reviewed last time in January 15, 2016 and again was fully accredited in 2019. Presently we have nine fellows in the Program.

Training of fellows takes place at GWU Hospital, the Medical Faculty Associates outpatient clinics, the Washington Veterans Administration Hospital and at the Pulmonary Transplant Service of INOVA Fairfax Hospital. The three-year fellowship prepares our fellows take the ABIM boards in Pulmonary Diseases and in Critical Care Medicine. Our fellows' first time passing rate for both Boards has been 100% for the past 5 years and 98% for the past 15 years.

The Division, in collaboration with the Department of Neurology, is also responsible for the Sleep Fellowship program. Training takes place both at the MFA Sleep Disorders Center clinic and laboratory and at the Washington Veterans Hospital. Currently there are 3 sleep medicine fellows. Passing board rate for the past three years has been 100%.

Our faculty teaches third and fourth year medical students, as well as internal medicine residents, during daily didactic rounding in the Blue Team, the Intensive Care Unit, the Pulmonary Consult Service and the outpatient clinics. Residents and fellows from other clinical departments, including anesthesiology, surgery and OB/GYN, also are taught during ICU during didactic rounds.

The Pulmonary, CC and Sleep Medicine Division faculty is also responsible for didactic teaching during the yearly cardiovascular, pulmonary and renal organ systems (CPR) block session given to first year medical student at the George Washington University School of Medicine under the new curriculum. We also teach the pulmonary section of the Physician Assistant curriculum.

Conferences: The Division holds several weekly didactic conferences:

- a. Clinical case presentation
- b. Journal club (VA Hospital).
- c. Research conference
- d. Pulmonary/CCM/Sleep grand rounds
- e. Cardio-Thoracic conference (VA Hospital).

RESEARCH

The Division continue to produce high quality research, with several peer reviewed publications and poster presentations in regional and national meetings. The thrust of the research has been in the areas of intensive care medicine and sleep medicine. **Among the recent publications from the Division are:**

- Williams J, Alrawaf S, Alsaggaf M, McLean AW, AlShathri Z, Ahari J, Gutierrez G. Sarcoidosis Progression. Am J Respir Crit Care Med 2017;195:A5377.
- Casey AM, Copeland C, Nizambad N, Roberts CE, Thorpe A, Zara J, Gutierrez G. Development of a Practical Monitor of Patient-Ventilator Asynchrony. Am J Respir Crit Care Med 2017; 195:A3765.
- McLean AW, Alrawaf S, Alsaggaf M, Seeni R, Delaney M, Williams J, Gutierrez G. Probability of Emphysema in Patients with No Obstruction and Reduced DLCO. 2017 Am J Respir Crit Care Med;195:A4996
- Jain V, Marbach J, Kimbro S, Andrade DC, Jain A, Capozzi E, Mele K, Del Rio R, Kay M, Mendelowitz D. Benefits of Oxytocin Administration in Obstructive Sleep Apnea Am J Physiol Lung Cell Mol Physiol. 2017 Nov 1;313(5):L825-L833. PMID: 28798255.
- Jain V, MD, Marbach J, Jain A, Capozzi E, Mele K, Kimbro S, Kay M, Mendelowitz D. Oxytocin Decreases the Durations of Hypopneas in Patients with Obstructive Sleep Apnea A2588 Proceedings of the American Thoracic Society 2017.
- Jain V, MD, Marbach J, Jain A, Capozzi E, Mele K, Kimbro S, Kay M, Mendelowitz D. Benefits of Oxytocin in Obstructive Sleep Apnea SLEEP 2017 (presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2017)
- Bove C, Younes N, Hynes M, Jain V. Sleepiness in Patients with Obstructive Sleep Apnea is Associated with Unhealthy Diet SLEEP 2017 (presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2017)
- Bove C, Younes N, Hynes M, Jain V. Diet as a Risk Factor in Obstructive Sleep Apnea SLEEP 2017 (presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2017)
- Dore FJ, Cho A, Domingues CC, Ahmadi N, Kundu N, Kropotova Y, Yang M, Hunley A, Younes N, Sen S, Jain V. Continuous Positive Airway Pressure Improves Arterial Stiffness and Endothelial Progenitor Cells (CD34+ cells) SLEEP 2017 Presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2017.
- Aldahi M, Puri S, Jain V, Herrick JE. Functional Aerobic Capacity in Adults with Obstructive Sleep Apnea SLEEP 2018 Presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2018.

PULMONARY

RESEARCH

- Puri S, Aldahi M, Chin LMK, Jain V, Herrick JE. Characterization of Oxygen Uptake On- and Off- Kinetics in Patients with Obstructive Sleep Apnea. SLEEP 2018 Presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2018.
- Cho AH, Goulart H, Ober S, Hunley A, Jain V. Discrepancies in Epworth Sleepiness Scale after treatment of OSA according to race and patient characteristics. SLEEP 2018. Presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2018.
- Raveendran J, Hynes M, Hunley A, Younes N, Jain, V. Continuous Positive Airway Pressure Treatment Alters Dietary Habits in Patients with Obstructive Sleep Apnea. SLEEP 2018. to be presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2018.
- Georges Al-Helou, Arun Jose, Anna Mclean, Kerian Dodds, Jalil Ahari, M.D, Guillermo Gutierrez. Diffuse Large B-Cell Lymphoma Presenting as Diffuse Alveolar Hemorrhage. ATS Annual Meeting. San Diego 2018.
- A. Jose, G. Al-Helou, A. Mclean, K. Omar, G. Gutierrez. The Association Between Forced Expiratory Flow at 25-75% and Obstructive Pulmonary Disease in Obese Patients. ATS Annual Meeting. San Diego 2018.
- Georges Al-Helou, Christopher Copeland, Arun Jose, Anna Mclean, Ahmad Alwassia, Jalil Ahari, Jeffrey Williams, Guillermo Gutierrez. Rate Variability in Mechanically Ventilated Patients is associated with Sedative Use and Consciousness Levels. ATS Annual Meeting. San Diego 2018.
- Reihani A, Jain V, Bingenheimer J. Evaluating the effect of Obstructive Sleep Apnea (OSA) Treatment with CPAP on Quality of Life (QOL) among menopausal women (presented at APHA's 2018 Annual Meeting & Expo Nov 2018).
- Herrick JE, Puri S, Jain V, Chin LMK, Aldhahi M. Skeletal muscle oxygen kinetics during exercise in adults with obstructive sleep apnea. ACSM 2019 (presented at the America College of Sports Medicine National Meeting 2019).
- Al Shabeeb R, Dowling NM, Krause M, Cho MJ, Hunley A, Jain V. Does Sleep Disturbance Mediate the Relationship between Concussion Symptoms and Cognition in mild TBI Adults? SLEEP 2019 (presented at the annual meeting of Associated Professional Sleep Society's meeting in June, 2019).
- Williams J, McLean A, Ahari J, Jose A, Al-Helou G, Ibi I, Najam Md F, Gutierrez G. Decreases in Mixed Venous Blood O2 Saturation in Cardiac Surgery Patients Following Extubation. J Intensive Care Med. 2017 Jan 1;885066617741435. doi: 10.1177/0885066617741435. PubMed PMID: 29141527.
- Glass LN, Sumon M, Goulart H, Ahari J. Disappearing nodules: spontaneously regressing pulmonary amyloidosis. BMJ Case Rep. 2019 May 19;12(5). pii: e229718. doi: 10.1136/bcr-2019-229718.
- Gutierrez, G. Central and mixed venous O2 saturation: A physiological reappraisal. In: Monitoring Tissue Perfusion in Shock: From Physiology to the Bedside. Pinto Lima A and Silva E (Eds) Springer, Dordrecht 2018, pp 93-120.
- Domingues CC, Dore FJ, Cho A, Ahmadi N, Kropotova Y, Kundu N, Younes N, Jain V, Sen S. Reassessing the effects of continuous positive airway pressure (CPAP) on arterial stiffness and peripheral blood derived CD34+ progenitor cells in subjects with sleep apnea. Stem Cell Res Ther. 2019 May 21;10(1):147. PMID: 31113468.
- G. Gutierrez 2, I. Milojevic 3, K. Lemma 3, D. Lee 1 Application of Machine Learning Techniques to Mechanical Ventilation. American Journal of Respiratory and Critical Care Medicine 2019;199:A2744.
- I. Milojevic 1, K. Lemma 1, D. Lee 3, G. Gutierrez 2, The Association of Propofol and Patient-Ventilator Asynchrony. American Journal of Respiratory and Critical Care Medicine 2019;199:A1649.
- K. Lemma 2, I. Milojevic 2, G. Gutierrez 1, D. Lee 3, Longitudinal Evaluation of Patient-Ventilator Asynchrony. American Journal of Respiratory and Critical Care Medicine 2019;199:A1644
- Jeffrey Williams , Saud Alrawaf , Mohammed Alsaggaf , Anna W. McLean , Ziyad AlShathri , Jalil Ahari , Guillermo Gutierrez Sarcoidosis Progression. American Journal of Respiratory and Critical Care Medicine 2017;195:A5377

Ongoing research:

- The Sleep Center continues research activities including studying the benefits of oxytocin in patients with Obstructive Sleep Apnea in collaboration with in the GW School of Medicine, George Mason University and the GWU School of Engineering and Applied Sciences. Research is also being conducted in cooperation with the ENT Department regarding the accuracy of sleep testing apps such as those on Smart Phones or watch type devices. To date, more than 400 patients are enrolled in this research.
- Respiratory rate variability and obstructive sleep apnea. Application of frequency spectrum analysis to whole-night polysomnograms that included over 600 studies.
- A large study on the effect of sedative use in mechanically ventilated patients is underway at the George Washington University Hospital Intensive Care Unit.
- Development of an intelligent monitor of patient-ventilator asynchrony using machine learning artificial intelligence techniques. This project is a collaboration the Division with the GWU Department of Biomedical Engineering, GWU School of Engineering and Applied Sciences.
- Monitoring of asynchrony during non-invasive mechanical ventilation.
- Studies on the development of the respiratory control center in neonates in collaboration with Neo-natal Intensive Care Unit faculty.

PULMONARY

FACULTY HONORS AND AWARDS

- Dr. Jalil Ahari was promoted to Associate Professor. He also was awarded a certificate of completion in the Master Teacher Leadership Development Program.
- Dr. Guillermo Gutierrez was elected to Fellowship both in the American Thoracic Society and in the American Physiological Society. He also was awarded a prestigious Fulbright Scholar position to further his research in artificial intelligence at the Free University of Brussels, Erasme Hospital Medical Center from January through June 2020.

KIDNEY DISEASES AND HYPERTENSION

Dominic Raj, MD

*Professor of Medicine and of Epidemiology
and Biostatistics and of Biochemistry and
Molecular Biology*

Division Director



KIDNEY DISEASES AND HYPERTENSION

FACULTY

Patricia Centron Vinales, MD, Assistant Professor of Medicine
Scott Cohen, MD, Associate Professor of Medicine
Ashte Collins, MD, Assistant Professor of Medicine
Pedro A. Jose, MD, PhD, Professor of Medicine and Pharmacology-Physiology
Susie Lew, MD, Professor of Medicine
Ehsan Nobhakt, MD, Assistant Professor of Medicine
Renu Regunathan-Shenk, MD, Assistant Professor of Medicine
Shailendra Sharma, MD, Assistant Professor of Medicine
Manuel Velasquez, MD, Professor Emeritus of Medicine

TRANSPLANT MEDICINE FACULTY

Muralidharan Jagadeesan, MD, Director, Transplant Medicine, Associate Professor of Medicine
Rohan Paul, MD, Assistant Professor of Medicine

RESEARCH FACULTY

Ines Armando, PhD, Associate Research Professor
Laureano Asico, PhD, Assistant Research Professor
Prasad Konkalmatt, PhD, Assistant Research Professor
Ali Ramezani, PhD, Assistant Research Professor
Van Villar, MD, PhD, Assistant Research Professor
Xiaoyan Wang, MD, PhD, Assistant Research Professor

VA FACULTY

Samir Patel, MD, Associate Professor of Medicine, Division Director
Sholey Argani, MD, Assistant Clinical Professor of Medicine
Sharon Bennett, MD, Assistant Clinical Professor of Medicine
Ping Li, MD, Associate Professor of Medicine
Samir Patel, MD, Associate Professor of Medicine, Division chief

INOVA FACULTY

Ravinder Wali, MD, Clinical Professor of Medicine

NURSE PRACTITIONERS

Ellen McCormick NP
Nancy Uhland, NP
Marylynn Aminrazavi, NP

RESEARCH COORDINATORS

Badryah Omar MS
Sarah C Andrews BS

KIDNEY DISEASES AND HYPERTENSION

SOME NOTABLE ACCOMPLISHMENTS

- The division of kidney diseases and hypertension was recognized by the US News and World report as “High performing” a distinction held by the top ten percent of nephrology divisions in the country
- The Fellows and faculty won the “NephMadness”, an international competition that test their perception and knowledge in nephrology and hypertension.
- The division will host the inaugural Global Innovations in Patient-Centered Kidney Care Summit in partnership with the American Association of Kidney Patients.
- The division will participate in the APOL1 long-term kidney transplantation outcome network (APOLLO) study
- The division is expanding clinical operations to Virginia

FACULTY

The division welcomed two new faculty members. Dr. Rohan Paul MD, in the section of transplant medicine. He did his general nephrology at University of Pittsburgh and transplant nephrology fellowship at UCSF. Dr. Renu Regunathan-Shenk MD joined the division after completing general nephrology and glomerular diseases fellowship at Columbia University. She established the Onconeurology service and is actively involved in several research projects.

Carlos Palant MD retired from the VAMC. Samir Patel MD assumed responsibility as the chief of nephrology at the VAMC. He has initiated and completed several educational initiatives and research protocols in a short span of time.

The distinguished faculty members from the division have been recognized for their research, clinical expertise and health care policy experience in national and international platforms. They participated in grant review for Pathobiology of Kidney Study section, Kidney Nutrition, Obesity and Diabetes study section, Project Kidney X, Special NIH study sections and Poland National Science Center, 2018. They were invited to present and chair in national and international venues.

- Presentations in International Venues- 9
- Presentations in National Conferences 13
- Medicine Medicine/nephrology Grand Rounds -10
- National symposium organized/Chaired- 2
- Visiting Professorships- 6

Dr. Regunathan serves as the Scientific Committee Co-chair for the Global Innovations in Patient-Centered Kidney Care Summit.

Nancy Uhland NP serves in the D.C. Board of Nursing, the current President of the Nurse Practitioner Association of D.C and a member on the American Association

of Kidney Patient Meeting Planning Committee. She is currently pursuing a Doctor of Nursing with the thesis on “The Impact of a Standardized Education Class on a Person Diagnosed with Chronic Kidney Disease, Stage IV.”

Dr. Lew serves in the Data Safety Monitoring Board of the NIH Kidney Precision Medicine Project, participated in the nephrologist roundtable on home dialysis organized by the Center for Medicare & Medicaid Innovation and serves in the American Society of Nephrology: Quality Committee.

Pedro Jose MD PhD was named the Most Outstanding Professional of Dingras and received the Pamana ng Pilipino (Republic of the Philippines Award) and Albert Nelson Marquis Lifetime Achievement Award. He also served in the American Heart Association Committee for Scientific Sessions Programming.

Dr. Raj is the 2019 American Society of Nephrology Annual Meeting Abstract committee chair. He also serves as the Organizing committee Co-chair for the Global Innovations in Patient-Centered Kidney Care Summit. He was recognized and featured as an “Innovator in nephrology” by the American Association of Kidney Patient (AAKP).

CLINICAL

The division offers “total kidney care” that spans from kidney protection to management of chronic kidney disease, renal replacement therapies and kidney transplantation. The wide spectrum of expertise and the reputation of the clinicians has led to rapid expansion of our services. The division offers special nephrology clinics including Transplant medicine clinic, Kidney protection clinic, CKD education clinic, Glomerular diseases clinic and Hypertension Dr. Regunathan-Shenk established the Onconeurology service in collaboration with Hematology and oncology. Dr. Centron initiated the first Kidney Wellness Clinic, a group clinic in MFA that encourages patients to assume healthy lifestyle.

Our physicians provide coverage for 18 outpatient dialysis units and four hospitals across Washington DC and Maryland. We serve as medical directors for two chronic dialysis units and a center for Center for home dialysis.

The division has expanded its presence into Virginia, partnering with Somatus. Dr. Nobackht is the medical director for the Fairfax dialysis unit. We have executed a new agreement to serve as the medical director for a unit at Hyattsville with Fresenius Medical Care, which is expected to open by June 2019. The outreach service in Greenbelt Maryland continue to thrive with the total dedication of Drs. Collins and Nobakht and Nancy Uhland.

KIDNEY DISEASES AND HYPERTENSION

The peritoneal dialysis program led by Dr. Lew is the largest one in DC, Maryland Virginia region.

In the inpatient setting, we provide consult service for a spectrum of disorders ranging from acute kidney injury, resistant hypertension, immunological diseases, acid base disorders and complex electrolyte disturbances. We offer a wide range of extracorporeal therapies besides conventional hemodialysis and peritoneal dialysis, including continuous renal replacement therapies, ultrafiltration, plasmapheresis, leukapheresis and exchange transfusion. As the director of clinical services, Dr. Susie Lew continues to coordinate the clinical services for the division. Dr. Sharma has done an outstanding job. He effectively coordinates and directs the continuous renal replacement therapies that serves the critically ill patients in medical, cardiothoracic and surgical intensive care units. Ellen McCormick NP joined the division to help the division provide quality care to the growing inpatient service.

Dr. Lew is pursuing her passion in Telemedicine with providing care to patients from Unity Clinic for hypertension and CKD remotely.

The transplant program has shown a steady increase in volume under the leadership of Drs. Jagadeesan and Paul. With help from Dr. Paul and support from the department of medicine and the Hospital, we have established a transplant medicine inpatient service.

The staff members Ms. Kaiser and Babb are integral part of the growth and success of the division in every effort.

EDUCATION

We currently have 5 fellows and will expand to 6 fellows in 2019, with the addition of an international fellow. We hope to start a transplant nephrology fellowship in 2020. Dr. Patel is establishing curriculum for point of care ultrasound training for our fellows. Fellowship training occurs at GWU, VAMC and Inova Fairfax. The patient population and clinical problems in these institutions are very different and thus provide an intense, yet broad training that prepares them for the real-world practice. Dr. Cohen has revamped the curriculum and they receive world class training at GW nephrology fellowship program.

The faculty members of the VAMC and Inova Fairfax have contribute significantly to the fellowship training. Our nephrology fellowship offers a unique opportunity to be trained in kidney ultrasound, kidney biopsy and temporary vascular access placement. For interested fellows, there is opportunity to be involved in laboratory-based or clinical-translational research.

The division excels in educating the medical student, residents and fellows. Besides the regular case-based renal grand rounds, we offer regular thematic lectures delivered by faculty members and well-organized journal clubs. Fellows receive board preparation using NephSap-based questions and their knowledge tested by "knowledge bowl". Dr. Cohen has been highly innovative in his teaching methods. The division hosts eminent researchers and clinicians as visiting professors to enable faculty development and also for broadening their knowledge base.

RESEARCH

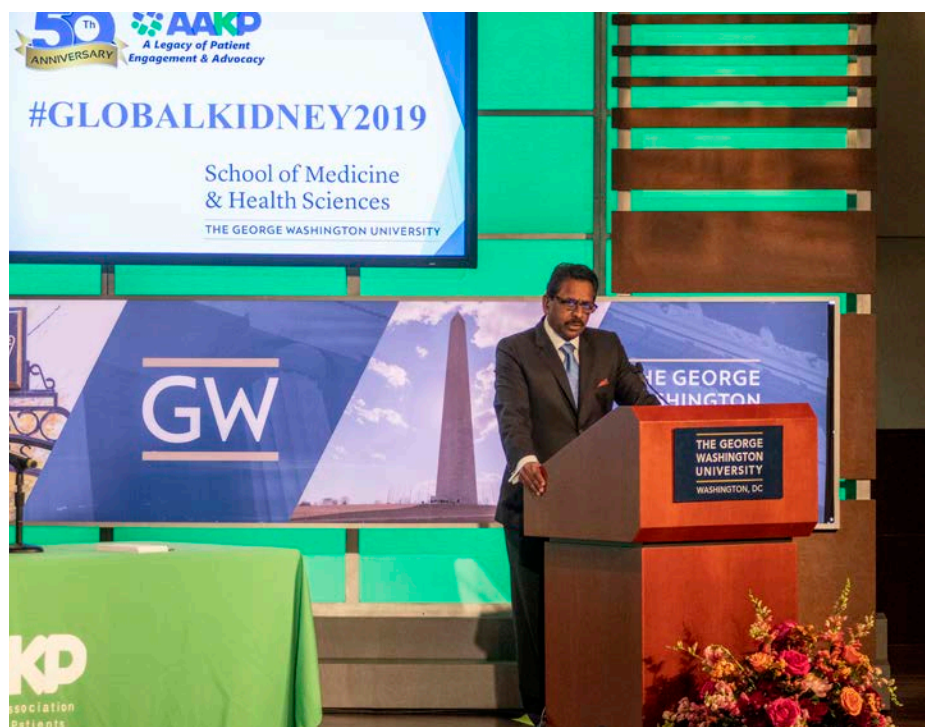
The faculty members published 44 manuscripts in peer reviewed journals and 27 abstracts in national meetings.

The Laboratory for Hypertension Research under the direction of Dr. Pedro A. Jose continues to be productive and supported by several grants that are examining the gut-kidney connection in hypertension and pharmacogenomics of hypertension. He has been invited across the world as visiting professor. He exemplifies preeminence in hypertension research. Dr. Selim Rozyyev is a postdoctoral research fellow from Russia.

Dr. Dominic Raj's research group is involved in projects ranging from clinical, to basic science and clinical translational. We completed the following NIH funded studies (a) Safety and Cardiovascular Efficacy of Spironolactone in Dialysis Dependent ESRD Trial (Spin-D), (b) The CKD Optimal Management With Binders and Nicotinamide (COMBINE) Study, (c) Bicarbonate Administration to Stabilize Estimated glomerular filtration rate (BASE) study, (d) Targeting microbiome in ESRD (TarGut ESRD) study and (e) Targeting microbiome in CKD (TarGut CKD) Study. Ongoing NIH funded studies include The Anti-Cytokine Therapy for Hemodialysis Inflammation (ACTION) and Cardiac Arrhythmia Monitoring and Related Outcomes in Hemodialysis (CAMARO HD).

Dr. Ali Ramezani received the Young Investigator Award from the National Kidney Foundation to explore a microbiome-based treatment for atherosclerosis.

The research coordinators, Sarah C Andrews BS and Badryah A. Omar, M.S have been commended by NIH for recruitment and flawless execution of the studies. Sarah will join University of Buffalo School of Medicine this Fall.



Global Kidney Summit Engages Patients, Recognizes Dominic Raj, MD, as Innovator in Nephrology

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GRANTS AND AWARDS

- Urine single cell transcriptomics to characterize podocyte disease. GW Office of Research and NIH Intramural. PI Regunathan
- Uremic Toxin Depletion by Methanogenic Archaea. Young Investigator Award from NKF. PI Ali Ramezani
- Renal G Protein-Coupled Receptor 37L1 Regulates Blood Pressure. NIH R56DK116828, PI: Prasad Konkalmatt
- A peripheral dopamine hydroxylase inhibitor and treatment of pulmonary arterial hypertension. PI, BIAL, Inc, Porto, Portugal, 2019-202; PI: Pedro A. Jose
- G-protein coupled receptor kinase 4 inhibitor, National International Cooperation Base for Cardiovascular Diseases" Collaborator, PI, Chunyu Zeng, Third Military Medical University, Chongqing, China, 2017-2019, Collaborator: Pedro A. Jose
- Renal Dopamine-1 Receptor Defect in Hypertension, 5R01 DK039308, 1991-2020, PI: Pedro A. Jose
- Animal Models of Salt Sensitivity: Roles of GRK4 and Sodium Transporters on Salt Sensitivity, 5P01 HL074940, 2004-2021, PI Pedro A. Jose, Director, Project 3,
- Calcium transport in kidney proximal tubule and calcium phosphate stone formation, 1R01 DK102043, 2015-2020, Consultant- Pedro A. Jose
- Anti-inflammatory therapy in diabetic CKD. NIH U01DK099914. PI Dominic Raj
- Gut microbiota and atherosclerosis in ESRD. NIH U01DK099924. PI Dominic Raj
- SPRINT-Electronic Health Record (SPRINT-EHR). NIH R01HL136679-01A1-Site-PI: Dominic Raj Site PI
- Cardiac Arrhythmia Monitoring and Related Outcomes in Hemodialysis (CAMARO HD). R01HL132372. Site-PI Dominic Raj
- The effects of Patiromer on serum potassium level and gut microbiome of ESRD patients with hyperkalemia. Investigator Initiated Study funded by Relypsa. PI Dominic Raj
- IL-6 pathway genes associated renal, cardiovascular and hematological phenotypes in CKD: Findings from the CRIC study. I Investigator Initiated Study, funded by Carvedia. PI Dominic Raj
- Profiling microbiome in CKD. Investigator Initiated Study funded by Kaleido. PI Dominic Raj
- An observational study to investigate the immunopathophysiology of diabetic kidney disease. Co-developed and funded by Medimmune. PI Dominic Raj
- MicroRNA and progression of atherosclerosis. GW Office of Research. PI Dominic Raj
- APOL1 Long-term Kidney Transplantation Outcomes Network (APOLLO) (APOLLO). NIH PI. Jagadeesan/Raj

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PUBLICATIONS

- Paul R, Raj DS. Metabolic Synergy to Uremic Toxicity: A Tale of Symbiosis and Dysbiosis in CKD. *NephSap Editorial* (In press)
- Regunathan-Shenk R, Avasare RS, Ahn W, Canetta PA, Cohen DJ, Appel GB, Bombback AS. Kidney Transplantation in C3 Glomerulopathy: A Case Series. *Am J Kidney Dis*. 2019;73:316-323.
- CureGN Consortium including Renu Regunathan-shenk. Clinical Characteristics and Treatment Patterns of Children and Adults With IgA Nephropathy or IgA Vasculitis: Findings From the CureGN Study. *Kidney Int Rep*. 2018;3:1373-1384.
- CureGN Consortium including Renu Regunathan-shenk. CureGN Study Rationale, Design, and Methods: Establishing a Large Prospective Observational Study of Glomerular Disease.. *Am J Kidney Dis*. 2019;73:218-229.
- Zheng X, Asico LD, Ma X, Konkalmatt PR. G protein-coupled receptor 37L1 regulates renal sodium transport and blood pressure. *Am J Physiol Renal Physiol*. 2019 Mar 1;316(3):F506-F516.
- Li P, Nader M, Lessey, G, and Papademetriou V. Device-Based Therapy for Treatment -Resistant Hypertension: Recent updates. *EC Cardiology* 6(5):429-443; 2019
- Bayoumi E, Lam PH, Dooley DJ, Singh S, Faselis C, Morgan CJ, Patel S, Sheriff HM, Mohammed SF, Palant CE, Pitt B, Fonarow GC, Ahmed A. Spironolactone and Outcomes in Older Patients with Heart Failure and Reduced Ejection Fraction. *Am J Med*. 2019;132:71-80.
- Palant CE, Patel SS, Chawla LS. Acute Kidney Injury Recovery. *Contrib Nephrol*. 2018;193:35-44.
- Armando I, Jose PA, Soares-da-Silva P. Antihypertensive effect of etamicastat in dopamine D2 receptor deficient mice. *Hypertens Res*. 41(7):489-498, 2018.
- Yang X, Yue R, Zhang J, Zhang X, Liu Y, Chen C, Wang X, Luo H, Wang WE, Chen X, Wang HJ, Jose PA, Wang H, Zeng. Gastrin Protects Against Myocardial Ischemia/Reperfusion Injury via Activation of RISK (Reperfusion Injury Salvage Kinase) and SAFE (Survivor Activating Factor Enhancement) Pathways. *J Am Heart Assoc*. 7(14). pii: e005171, 2018.
- Jiang X, Liu J, Xing, Liu X, Wang W, Wang Z, Hu Y, Zhang Y, Zhang Y, Jose PA, Wei Q, Yang Z. Over-expression of a cardiac-specific human dopamine D5 receptor mutation in mice causes a dilated cardiomyopathy through ROS over-generation by NADPH oxidase activation and Nrf2 degradation. *Redox Biol*. 2018;19:134-146.
- Luo H, Chen CY, Guo L, Xu ZC, Peng XY, Wang XQ, Wang JL, Wang N, Li CW, Luo XL, Wang HY, Jose PA, Fu CJ, Huang Y, Shi WB, Zeng CY. Exposure to maternal diabetes mellitus causes renal dopamine D-1 receptor dysfunction and hypertension in adult rat offspring. *Hypertension*. 2018; 72:962-970
- Wang J, Deng Y, Zou X, Luo H, Jose PA, Fu C, Yang J, Zeng C. Long-term low salt diet increases blood pressure by activation of the renin-angiotensin and sympathetic nervous systems. *Clin Exp Hypertens*. 2018;18:1-8.
- Amosco MD, Tavera GR, Villar VAM, Naniong JMA, David-Bustamente LMG, Williams SM, Jose PA, Palmes-Saloma CP. Non-additive effects of ACVR2A in preeclampsia, in a Philippine population. *BMC Pregnancy Childbirth*. 2019; 19:11. PMC6323705
- Wang S, Tan X, Chen P, Zheng S, Ren H, Cai J, Zhou L, Jose PA, Yang J, Zeng C. Role of thioredoxin 1 in impaired sodium excretion of hD5RF173L transgenic mice. *J Am Heart Assoc J Am Heart Assoc*. 2019; 8(8):e012192.
- Rao X, Asico LD, Zanos P, Mahabeleshwar GH, Singh Gangwar R, Xia C, Duan L, Cisse YM, Rengasamy P, Jose PA, Gould TD, Nelson R, Biswal S, Chen LC, Zhong J, Rajagopalan S. Alpha2B-Adrenergic Receptor Overexpression in the Brain Potentiate Air Pollution-induced Behavior and Blood Pressure Changes. *Toxicol Sci*. 2019 Jan 25. pii: kfz025.
- Ibeh CL, Yiu AJ, Kanaras YL, Paal E, Birnbaumer L, Jose PA, Bandyopadhyay BC. Evidence for a regulated Ca2+ entry in proximal tubular cells and its implication in calcium stone formation. *J Cell Sci*. 2019 Mar 25. pii: jcs.225268.
- Wu G, Jose PA, Zeng C. Noncoding RNAs in the regulatory network of hypertension. *Hypertension*. 2018; 72(5):1047-1059
- Yang J, Villar VM, Rozyyev S, Jose PA. The emerging role of sorting nexins in cardiovascular diseases. *SClin Sci (Lond)*. 2019; 133:723-737
- Cuevas S, Villar VAM, Jose PA. Genetic polymorphisms associated with reactive oxygen species and blood pressure regulation. *Pharmacogenomics J*. 2019 Feb 6. doi: 10.1038/s41397-019-0082-4.
- Mehrotra R, Cukor D, Unruh M, Rue T, Heagerty P, Cohen SD, Dember LM, Diaz-Linhart Y, Dubovsky A, Greene T, Grote N, Kutner N, Trivedi MH, Quinn DK, Ver Halen N, Weisbord SD, Young BA, Kimmel PL, Hedayati SS. Comparative efficacy of therapies for treatment of depression for patients undergoing maintenance hemodialysis: a randomized clinical trial. *Ann Intern Med*. 2019 Feb 26. [Epub ahead of print]
- Babar F, Cohen SD. Thrombotic microangiopathies with rheumatologic involvement.
- *Rheum Dis Clin North Am* 2018; 44: 635-649
- Cohen SD, Kimmel PL. Management of nonadherence in ESKD patients. *Clin J Am Soc Nephrol* 2018; 13: 1080-1082
- Lew SQ. Peritoneal dialysis immediately after abdominal surgery. *Perit Dial Int* 2018;38:5-8.

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PUBLICATIONS

- Lew SQ, Sikka N. Telehealth and peritoneal dialysis in the US: outcomes in practice. *J Kidney Care* 2018;3(3):156-160.
- Emami S, Lew SQ. Candida glabrata PD-associated peritonitis: A case report. *Perit Dial Int* 2018;38(5): 391-392.
- Lew SQ. Maintaining peritoneal dialysis adequacy: The process of incremental prescription. *Adv Perit Dial* 2018;34:10-14.
- Lew SQ. Telehealth in peritoneal dialysis: Review of patient management. *Adv Perit Dial* 2018;34:32-37.
- Lew SQ, Sikka N, Thompson C, Magnus M. Impact of remote biometric monitoring on cost and hospitalization outcomes in peritoneal dialysis. *J Telemed Telecare* 2018 Jan 1 epub ahead of print
- Lew SQ, Sikka N. Operationalizing telehealth for home dialysis patients in the United States. *Am J Kidney Dis.* 2019 Mar 18[Epub ahead of print]
- Montgomery LD, Montgomery RW, Gerth WA, Lew SQ, Velasquez MT, Stewart JM, Medow MS, Klein MM. Monitoring intracellular (Vc), interstitial (Vi) and intravascular (Vb) volume changes during dialysis (HD) in a chronic unit (CU) compared to an acute unit (AU) setting. *J Nephrol Kidney Dis.* 2019;3(1): 1019
- Ix JH, Isakova T, Larive B, Raphael KL, Raj DS, Cheung AK, Sprague SM, Fried L, Gassman JJ, Middleton J, Flessner M, Block G, Wolf M. Effects of Nicotinamide and Lanthanum Carbonate on Serum Phosphate and Fibroblast Growth Factor-23 in Chronic Kidney Disease: The COMBINE Trial. *J Am Soc Nephrol* 2019; In Press.
- Bansal N, Zelnick L, Bhat Z, Dobre M, He J, Lash J, Jaar B, Mehta R, Raj DS, Rincon-Choles H, Saunders M, Schrauben S, Weir M, Wright J, Go A. Burden and outcomes associated with heart failure hospitalizations in adults with CKD: the CRIC Study. *J Am Col Cardiol* (In press)
- Shah NB, Allegretti AS, Nigwekar SU, Kalim S, Zhao S, Lelouvier B, Servant F, Serena G, Thadhani RI, Raj DS, Fasano A. Blood Microbiome Profile in Chronic Kidney Disease: A Pilot study. *C J Am Soc Nephrol.* 2019, 4, :692-701.
- Barrows IR, Ramezani A, Raj DS. Inflammation, Immunity and Oxidative Stress in Hypertension- Partners in Crime? *Adv CKD.* 2019, 26:122-130.
- Amdur RL, Feldman HI, Dominic EA, Anderson AH, Beddhu S, Rahman M, Wolf M, Reilly M, Ojo A, Townsend RR, Go AS, He J, Xie D, Thompson S, Budoff M, Kasner S, Kimmel PL, Kusek JW, Raj DS. Use of inflammation and measures of kidney function combined with pooled cohort equation risk estimates in prediction of atherosclerotic vascular disease Events and death for patients with CKD. *Am J Kidney Dis.* 2019, 73, 344-353
- Ramezani A, Nolin T, Barrows I, Serrano MG, Buck G, West RE III, Latham PS, Amdur R, Raj DS. Effect of Gut Colonization with Methanogenic Archaea on Plasma TMAO Concentrations and Atherosclerosis in Apolipoprotein e-/- Mice. *Nature Scientific Reports*, volume 8, Article number: 14752 (2018)
- Supiano MA, Lovato L, Ambrosius WT, Bates J, Beddhu S, Drawz P, Dwyer JP, Hamburg NM, Kitzman D, Lash J, Lustigova E, Miracle CM, Oparil S, Raj DS, Weiner DE, Taylor A, Vita JA, Yunis R, Chertow GM, Chonchol M. Pulse wave velocity and central aortic pressure in systolic blood pressure intervention trial participants. *PLoS One.* 2018 Sep 26;13(9):e0203305. doi: 10.1371/journal.pone.0203305. eCollection 2018.
- Charytan DA, Himmelfarb J, Ikizler TA, Raj DS, Hsu JY, Landis JR, Anderson AH, Hung AM, Mehrotra R, Sharma S, Weiner DE, Williams M, DiCarli M, Skali H, Kimmel PL, Klinger AS, Dember LM. For the Hemodialysis Novel Therapies Consortium. Safety and Cardiovascular Efficacy of Spironolactone in Dialysis-Dependent ESRD (SPin-D): A Randomized, Placebo-Controlled, Multiple Dosage Trial. *Kidney Int.* 2019;95: 973-982
- Qiu C, Hanson RL, Fufaa C, Kobes S, Gluck C, Huang J, Chen Y, Raj DS, Nelson RG, Knowler WC, Susztak K. Cytosine methylation predicts renal function decline in American Indians. *Kidney Int.* 2018;93:1417-1431.
- Prasad PV, Wei Li, Raj DS, Carr J, Carr M, Thacker J, Lu-Ping Li, Chi Wang, Sprague SM, Ix JH, Chonchol M, Block G, Cheung AK, Raphael K, Gassman J, Wolf M, Fried LF, Isakova T, CKD Optimal Management with Binders and Nicotinamide (COMBINE) Study Group. Multi-center Study Evaluating Intra-renal Oxygenation and Fibrosis using MRI in Individuals with Advanced CKD. *Kidney Int Reports DOI: <https://doi.org/10.1016/j.ekir.2018.07.006>*
- Velasquez MT, Centron P, Barrows I, Dwivedi R, Raj DS. Gut Microbiota and Cardiovascular Uremic Toxicities. *Toxin*, 2018 <http://www.mdpi.com/2072-6651/10/7/287>
- Yang S, Ambrosius WT, Fine LJ, Bress AP, Cushman WC, Raj DS, Rehman S, Tamariz L. A New Modeling and Inference Approach for the SPRINT Trial Outcomes. *Journal of the Society for Clinical Trials* 2018 Jun;15(3):305-312.
- Roumelioti ME, Glew RH, Khitan ZJ, Rondon-Berrios H, Argyropoulos CP, Malhotra D, Raj DS, Agaba EI, Rohrscheib M, Murata GH, Shapiro JL, Tzamaloukas AH: Fluid balance concepts in medicine: Principles and practice. *World J Nephrol* 7:1-28, 2018

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ABSTRACTS

- Chung A and Li P, IV iron Therapy Induced Acute Hypophosphatemia in CKD patients. FR-PO602, ASN 2018.
- Raphael KL, Isakova T, Ix JH, Raj DS, Wolf M, Fried LF, Gassman JJ, Larive B, Abbott KC, Mendley SR, Block GA, Li P, Middleton JP, Sprague SM, Wesson DE, Cheung AK. CKD Polit studies consortium. A Multicenter, Randomized Pilot Study of oral Sodium Bicarbonate Supplementation in non- to mildly Acidotic CKD: BASE Pilot Study. SA-OR036, ASN, 2018.
- Nader MA, Campos RA, Hassan O, Cervantes CE, Correa R, Sharma P, Shafique R, Hamze O, Vo HQ, Gordon J, Li P. The Impact of gender on inpatient mortality of hypertensive Latino patients across CKD stage 3 to ESRD in the United States. TH-PO1045, ASN 2018.
- Nader MA, Campos RA, Hassan O, Cervantes CE, Correa R, Sharma P, Shafique R, Vo HQ, Hamze O, Li P, and Gordon J. The Impact of Gender in inpatient mortality of hypertensive patients with CKD 3 to ESRD in the US. TH=PO 1106, ASN 2018.
- Expanding Medicare Coverage to Include Lifetime Immunosuppression Drugs for Renal Transplant Recipients. Center for Health Policy and Media Engagement of George Washington University School of Nursing
- Tiu AC, Asico LD, Konkalmatt P, Zheng X, Cuevas S, Wang X, Mazhar M, Jose PA, Villar AM. Sorting nexin 19: A novel and key player in renal dopamine D1R regulation. Abstract 047. Oral presentation 2018 AHA Council on Hypertension. Judged to be among the top 10 percent of the accepted abstracts presented at the AHA Council on Hypertension. Invited to be a poster presentation at the 2018 AHA Scientific Sessions in a Session titled "Best AHA Specialty Conferences: Hypertension 2018. Tiu AC received the Young Investigator Award, Chicago, IL.
- Kumar M, Asico L, Konkalmatt P, Freyberg Z, Jose PA, Armando I. Role of dopamine D2 receptors in the regulation of cell proliferation in renal injury. Abstract 052. Oral presentation 2018 AHA Council on Hypertension, Chicago, IL.
- De Miguel C, Saludes M, Asico LD, Latham PS, Offen D, Jose PA, Cuevas S. ND-13, a DJ-1-derived peptide, protects against the renal fibrosis and inflammation associated with unilateral ureter obstruction. Abstract 055. Oral presentation 2018 AHA Council on Hypertension, Chicago, IL.
- Cuevas S, Asico LD, Jose PA, Konkalmatt P. Renal hydrogen peroxide prevents salt-sensitive hypertension. Abstract 062. Oral presentation 2018 AHA Council on Hypertension, Chicago, IL.
- Asico LD, Villar VM, Bishop M, Gomes G, Mazhar M, Jose PA. NPFF receptors NPFF-R1 and NPFF-R2 in the kidney: A target for the negative control of sodium transport and blood pressure. Abstract 087. Oral presentation 2018 AHA Council on Hypertension, Chicago, IL.
- Zheng X, Konkalmatt P, Asico L, Jose PA, Armando I. Salt resistance and renal Gpr83 function. Abstract 093. Oral presentation 2018 AHA Council on Hypertension, Chicago, IL.
- Rozyyev S, Konkalmatt P, Asico L, Kumar M, Hunt J, Jose PA, Armando I. Renal-specific expression of human GRK4 R65L in mice lacking Grk4 increases blood pressure. Abstract 115. Oral presentation 2018 AHA Council on Hypertension, Chicago, IL.
- Daley MG, Gildea JJ, Xu P, Schiermeyer KA, Yue W, Marshall SG, Jose PA, Felder RA. Development of an automated high throughput screen for GRK4 as potential novel therapeutics for treatment of hypertension and/or salt sensitivity. Abstract P256. Poster presentation 2018 AHA Council on Hypertension, Chicago, IL.
- Xu P, Gildea JJ, Yue W, Jose PA, Felder RA. Renal proximal tubule cells from inverse salt sensitive individuals have lower basal but higher sodium stimulated ENaC compared to salt resistant individuals. Abstract P263. Poster presentation 2018 AHA Council on Hypertension, Chicago, IL.
- Haile H, Kumar M, Armando I, Jose PA. Differential histone deacetylase expression in human renal proximal tubule cells carrying GRK4 65yL and SLC4A5 variants. STEP-UP Undergraduate Summer Research Symposium, NIDDK, Jul 29-August 2, 2018, 2018 Annual Biomedical Research Conference for Minority Students (ABRCMS), Nov 14-17, 2018, Indianapolis, IN.
- Wang X, Ma C, Asico LD, Jose PA. Increased renal protein expressions of SLC4A4 and SLC4A5 in salt-sensitive C57Bl/6J mice, 2018 Kidney Week. Abstract PO323. 2018 Kidney Week, San Diego, CA.
- Villar VA, Asico LD, Wang X, Konkalmatt P, Yang J, Gomes J, Rozyyev S, Tiu AC, Cuevas S, Armando I, Jose PA. Salt Sensing & Salt Response of Renal Neuropeptide FF Receptor 2. Abstract D182 - 569.12, EB Meeting April 7, 2019, Orlando, FL.
- Rozyyev S, Konkalmatt P, Villar VA, Asico LD, Kumar M, Hunt J, Jose PA, Armando I. Molecular mechanisms underlying the GRK4 65L-mediated hypertension in mice. Abstract E706 - 597.2, EB Meeting April 7, 2019, Orlando, FL.
- Zhu G, Yu GT, Ren S, Asico LD, Jose PA, Wang X. The salt-sensitivity in C57Bl/6J mice is linked to increased renal protein expressions of SLC4A4 and SLC4A5. C344 - 533.11, EB Meeting April 7, 2019, Orlando, FL.
- Asico LD, Hunt J, Wang X, Armando I, Wank SA, Yagnesh TH. Wang TC, Raj D, Jose PA. Minocycline Normalizes the Hypertension in Gastrin-/- Mice. Abstract C563 - 724.6 EB Meeting April 8, 2019, Orlando, FL.

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ABSTRACTS

- Konkalmatt PR, Asico LD, Villar VA, Cuevas S, Armando I, and Jose PA. Gastrin Enhances the Sodium induced GLP-1 secretion in the L-Cells. Abstract C295 - 692.4EB Meeting April 8, 2019, Orlando, FL.
- Zheng X, Asico LD, Armando I, Jose PA, and Konkalmatt PR. GPR37L1 Regulates the Expression and Function of NHE3 in Renal Proximal Tubule Cells. Abstract C295 -692.4EB Meeting April 9, 2019, Orlando, FL.
- Kumar M, Konkalmatt P, Asico LD, Hunt J, Latham PS, Jose PA and Armando I. Differential Effects of Specific Deletion of the Dopamine D2 Receptor in Renal Proximal Tubules of Male and Female Mice. Abstract D60 - 864.10, EB Meeting April 9, 2019, Orlando, FL.
- Rozzyev S, Crusan AP, Tiu AC, Jurgens JA, Quion JMB, Asico LD, Felder RA, Jose PA, and Villar VA. Tandem Requirement for Renal D1R and D5R Functionality. Abstract D16 - 862.18, EB Meeting April 9, 2019, Orlando, FL.
- Nader MA, Campos RA, Hassan O, Cervantes CE, Correa R, Sharma P, Shafique R, Vo HQ, Hamze O, Gordon J, and Li P. The Impact of Debility on Inpatient Mortality and Hospital costs of ESRD patients in the Unites State: a nationwide Study. TH-PO280, ASN 2018.
- Lisa Prince, Brian Y'Barbo, Jeffrey Mikita, Anna Howle, Scott Cohen, Oliver Lenz,
- Laura Maursetter, Sharon Maynard, Stephen Sozio, Amy Sussman, Christina Yuan
- Breaking Bad News: A 2 Year, Multi-Center Simulation Exercise Assessing Renal
- Replacement Therapy and Kidney Biopsy Communication Skills. American Society of Nephrology Renal Week 2018, San Diego
- Rajnish Mehrotra, Daniel Cukor, Mark L Unruh, Tessa Rue, Patrick J Heagerty, Scott D Cohen, Laura Dember, Yaminette Diaz-Linhart, Amelia Dubovsky, Tom Greene, Nancy K Grote, Nancy G Kutner, Madhukar Trivedi, Davin Quinn, Nisha ver Halen, Steven D. Weisbord, Bessie A. Young, Paul L. Kimmel, S, Susan Hedayati. Comparative Efficacy of Therapies for Depression for Patients Undergoing Hemodialysis: A Trial of Sertraline vs. CBT for End Stage Renal Disease Patients with Depression (ASCEND). American Society of Nephrology Renal Week 2018, San Diego, Abstract selected for Late Breaking Clinical Trials Oral Session
- J.K.Melancon,K.Mahendran, M.Jagadeesan,R.Ranga,N.Koizumi. ABO incompatible deceased donor kidney transplantation -Time to remove the barrierAmerican Society Of Transplant Surgeons - Winter Symposium,2018.
- J.K.Melancon,K.Mahendran, M.Jagadeesan,R.Ranga,N.Koizumi. ABO incompatible deceased donor kidney transplantation -Time to remove the barrier. American Transplant Congress, Annual meeting 2018. Society of Black Academic Surgeons
- J.K.Melancon,K.Mahendran, M.Jagadeesan,R.Ranga,N.Koizumi. . Bortezimab

based induction decreases delayed graft function in high risk kidney transplantation. . Society of Black Academic Surgeons,New York,2018 - Oral Presentation.

- ,K.Mahendran, M.Jagadeesan,R.Ranga,N.Koizumi. ABO incompatible deceased donor kidney transplantation -Time to remove the barrier . Society of Black Academic Surgeons, Birmingham,Alabama,2018
- J.K.Melancon,K.Mahendran, M.Jagadeesan,R.Ranga,N.Koizumi. Bortezimab based induction decreases delayed graft function in high risk kidney transplantation. American Society Of Transplant Surgeons - Winter Symposium,2018
- J.K.Melancon,K.Mahendran, M.Jagadeesan,R.Ranga,N.Koizumi. . Bortezimab based induction decreases delayed graft function in high risk kidney transplantation. Oral Presentation at the American Transplant Congress, Boston, June 2019

BOOK CHAPTERS

- Ping Li, Annise Chung, Samir Patel and Vasilios Papademetriou. Hypertension Management in African Americans. book chapter of Hypertension Management: Current Practice and Applications of Landmark Trials. Edited by Vasilios Papademetriou, Emmanuel A Andradis, and Charalampia Geladari, 2018. Springer, ISBN-13:978-3319929453.
- Regunathan-Shenk R, Nobakht E, Cohen SD, Management of Non-Nephrotic Proteinuria, Invited Book Chapter, in Chronic Renal Disease, Kimmel PL and Rosenberg M, 2nd ed, in press
- Cohen SD, Appel GB. Approach to the Patient with Chronic Glomerular Diseases.Invited Book Chapter, in Chronic Renal Disease, Kimmel PL and Rosenberg M, 2nd ed,in press
- Cohen SD, Davison SN, Kimmel PL. Pain and Chronic Renal Disease, Invited Book Chapter, in Chronic Renal Disease, Kimmel PL and Rosenberg M, 2nd ed, in press
- Cohen SD, Kopp JB, Cathro H, Kimmel PL. Human Immunodeficiency Virus Infection and Chronic Renal Disease, Invited Book Chapter, in Chronic Renal Disease, Kimmel PL and Rosenberg M, 2nd ed, in press
- Raj DS, Roberto Pecoits-Filho, Paul L Kimmel. Inflammation in CKD. Chronic Renal failure, edited by Paul Kimmel (2nd Edition)
- Manuel Velasquez, Sarah C Andrews, Raj DS. Protein energy metabolism in CKD. Chronic Renal failure, edited by Paul Kimmel (2nd Edition)

RHEUMATOLOGY

Victoria Shanmugam, MD
Associate Professor of Medicine
Division Director



RHEUMATOLOGY

FACULTY

Gelareh Atefi, MD, Clinical Instructor of Medicine

Saira Bilal, MD, Assistant Professor of Medicine

Rodolfo Curiel, MD, Associate Professor of Medicine; Director, Myositis Center

Olcay Jones, MD, Associate Clinical Professor of Medicine and Anatomy and Regenerative Biology

Nadine Mybui, MD, Assistant Professor of Medicine

Marc Phillipotts, MD, Assistant Professor of Medicine

Lisa Rider, MD, Clinical Professor of Medicine

Patience White, MD, Professor of Medicine and Pediatrics, Emeritus

Gulnara Mamyrova, MD, PhD, Assistant Research Professor

NP

Catherine Hood, NP

These are exciting times for GW Rheumatology. The division continues to grow and expand clinical operations, while we focus on our mission to advance clinical care, education and research in the field of rheumatology.

Philanthropic support has been incredibly important for our growth. The inaugural Stuart S. Kassan, MD '72, Endowed Lecture in Rheumatology, allows us to start of a new tradition at GW, and through this annual lecture, we hope to educate our students and colleagues about our exciting field. Other philanthropic donations have been used to support faculty development and research.

Rheumatologic disease remains the number one cause of disability in the United States and by educating the future, advancing research and excelling in clinical care we hope to improve outcomes for our patients.

RHEUMATOLOGY

CLINICAL SERVICE

GW Rheumatology has focused on improving access for new patient appointments. Our faculty has specialist interests in Myositis, Scleroderma, Lupus, Gout, Osteoarthritis, Rheumatoid Arthritis and Osteoporosis. We have a strong musculoskeletal ultrasound program for patients with inflammatory arthritis.

FOCUS ON NEW FACULTY

Dr. Marc Phillipotts

A graduate of our own GW Rheumatology Fellowship Program, we were delighted to promote Dr. Marc Phillipotts to Assistant Professor of Medicine. He is actively engaged in teaching our fellows, residents and medical students and has a special interest in seronegative spondyloarthritis and inflammatory eye disease.

Dr. Nadine Mbuyi

Dr. Mbuyi joins GW Rheumatology from Brown University. She has completed the Ultrasound School of North American Rheumatologists (USSONAR) training and is developing a research interest in gout and the crystalline arthropathies.

Dr. Adam Kilian

Dr. Kilian will be joining GW Rheumatology in August after graduating from the University of Michigan Rheumatology Fellowship Program. Dr. Kilian has a strong interest in Workforce and Training issues pertaining to the Rheumatology Workforce and novel educational methodologies.

EDUCATION

The GW Division of Rheumatology educates School of Medicine and Health Sciences students throughout all four years of medical school. Our faculty currently mentors 1st and 2nd year students through the Clinical Skills and Reasoning Course and the Clinical Apprenticeship Program. The curriculum for the 2nd year medical students in the Musculoskeletal Block has been completely redesigned incorporating new teaching methodologies. We run a Joint Injection Workshop for 4th year medical students prior to graduation. For 3rd and 4th year students we provide bedside teaching through MED451 Rheumatology Elective for medical students interested in pursuing a career in rheumatology. Many of these go on to present at Research Day and some have published manuscripts with the faculty.

Our team also teaches in the Health Sciences curriculum providing didactic teaching to Physician Assistant students and assisting with mentorship of

undergraduates. Locally at GW we mentor junior faculty, undergraduates, medical students, residents and fellows in research and education. Nationally, our faculty provides continuing medical education to rheumatologists around the world through our leadership roles in the American College of Rheumatology.

The Stuart Kassan, MD '72, Endowed Lecture in Rheumatology

The Inaugural Stuart Kassan, MD '72, Endowed Lecture in Rheumatology featured Dr. V. Michael Hollers presenting on Genetics and the Environment in Rheumatoid Arthritis. Through his generosity and support, Dr. Kassan established this endowed fund to further education and awareness into the field of Rheumatology.

"My GW medical training basically changed my life, and launched my career in Rheumatology. Funding this endowed lecture series in rheumatology is the perfect way for me to give back. Dr. Shanmugam has created an outstanding Division of Rheumatology at GW, I am thrilled to support their work and to promote and enhance this important discipline at GW. As a graduate of the George Washington University School of Medicine and Health Sciences, and as a Rheumatologist, I could not think of a better way to promote and enhance this important discipline for patient care and teaching than by funding the endowed lecture series in Rheumatology at GW". – Stuart S. Kassan, MD'72



RHEUMATOLOGY

Philanthropy advancing Research

Philanthropic donations to the Rheumatology Research Fund support investigations into autoimmune disease, educational research and faculty development. Many of these donations come from grateful patients, whose lives have been changed by our work.

"When we give to Dr. Shanmugam and her research team we know exactly how our contribution is being used and its importance to helping others who live with Lupus and other autoimmune diseases. Research funding is so important. Because of cutting-edge research my doctors have been able to develop a treatment plan. My husband and I strongly believe in funding Lupus research, not just because it helps me and my family, but because it benefits so many others who have autoimmune issues. We give to the GW program because we believe this research will be life changing for many"

Ceci and Dennis Wraase, MS'75

RESEARCH

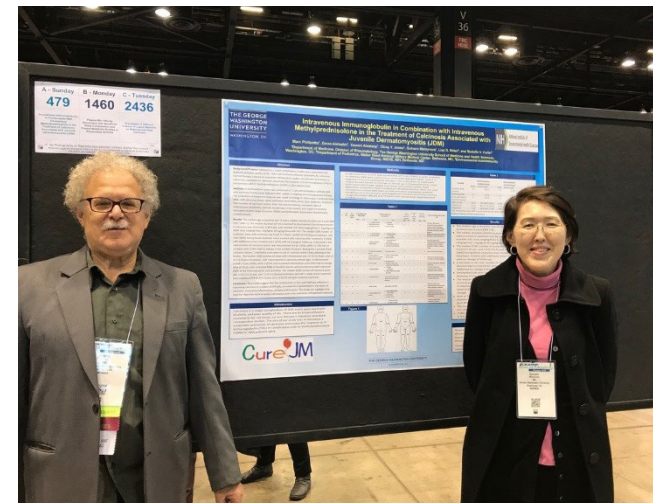


Supported by a grant from the CureJM foundation the GW Myositis Center focuses on providing multidisciplinary care for patients with inflammatory myositis. The GW Myositis Center is a national referral site, and in collaboration with the team from the National Institute of Health they provide comprehensive and multidisciplinary consultations on the management of myositis patients.

The team has an ongoing clinical trial investigating the use of Abatacept in the treatment of refractory Juvenile Dermatomyositis. They are also collaborating with the international MYOGEN study to investigate genetic risk and protective factors of myositis.

Dr. Gulnara Mamyrova presented research from the CureJM study at the 62nd Annual General Assembly and Scientific Meeting of the Japanese College of Rheumatology. Her presentation was entitled: Distinguishing Features of Clinically Hypomyopathic and Amyopathic Juvenile Dermatomyositis.

In 2018 the CureJM team hosted the Annual Patient Education Conference at GW and the conference drew almost 100 participants and experts from the US and Canada.



RHEUMATOLOGY

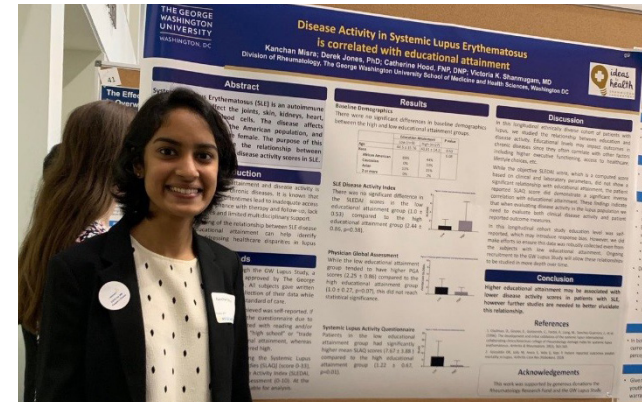
RESEARCH

THE GW LUPUS STUDY

THE GEORGE WASHINGTON LUPUS STUDY

The GW Lupus Study is funded by donations from our grateful patients, and supports investigations into the longitudinal management of lupus and markers of lupus disease activity.

Undergraduate student Kanchan Misra received first prize for her research day presentation on data from the GW Lupus Study (pictured).



WE-HEAL

THE WOUND ETIOLOGY AND HEALING STUDY

The WE-HEAL study is a longitudinal study investigating the interplay of the host immune response and the microbiome in chronic wounds and Hidradenitis suppurativa. Data from the WE-HEAL study was a plenary presentation at the Wound Healing Society Meeting and at the International Symposium on Hidradenitis Suppurativa Advances. The team recently published work demonstrating differential gene expression in Hidradenitis Suppurativa lesions and highlighting the antimicrobial peptide Dermcidin as being significantly downregulated in diseased tissue.

STOP SCLERODERMA

THE SCLERODERMA BIOREPOSITORY AND PATHOGENESIS STUDY

The STOP Scleroderma study is funded by donations from our grateful patients and focuses on harnessing genomics and biomarkers of disease to improve outcomes for patients with scleroderma. Our team is currently collaborating with several national and international studies investigating genetic and molecular markers of scleroderma and biomarkers of disease progression.

RHEUMATOLOGY

AWARDS

- Fellows **Dr. Ishita Aggarwal** and **Dr. Erica McBride** had their research abstracts selected for podium presentations at the DC Rheumatism Society Fellows Forum and both won Podium Awards (pictured).
- **Dr. Saira Bilal** recently received the coveted American College of Rheumatology Musculoskeletal Ultrasound Certification (RhMSUS). Dr. Bilal is an Assistant Professor of Medicine at the George Washington University School of Medicine and Health Sciences, she is engaged in teaching in the Clinical Skills and Reasoning Course and focuses her clinical and research interests on musculoskeletal ultrasound in the diagnosis and management of rheumatoid arthritis, seronegative arthritis, gout and osteoarthritis.
- **Dr. Victoria Shanmugam** will serve as President of the Rheumatism Society of the District of Columbia for the 2019-2020 year. She continues to serve as American College of Rheumatology Annual Meeting Planning Committee Chair and serves on the Committee on Education.
- **Dr. Rodolfo Curiel** is serving as a member of the meeting committee for the International Myositis Assessment and Clinical Studies Group (IMACS).



PUBLICATIONS

- **Aggarwal I**, Li J, Trupin L, Gaynon L, Katz PP, Lanata C, Criswell L, Murphy LB, Dall'Era M, Yazdany J. Quality of Care for the Screening, Diagnosis and Management of Lupus Nephritis across Multiple Healthcare Settings. *Arthritis Care Research*, 2019, May 6
- Patterson S, Schmajuk G, Evans M, **Aggarwal I**, Izadi Z, Gianfrancesco M, Yazdany J. Gaps in Ambulatory Patient Safety for Immunosuppressive Specialty Medications. *Jt Comm J Qual Patient Saf* 2019, May; 45(5):348-357
- Sciascia S, Yazdany J, Dall'Era M, Fenoglio R, Radin M, **Aggarwal I**, Cuadrado MJ, Schreiber K, Barreca A, Papotti M, Roccatello D. Anticoagulation in patients with concomitant lupus nephritis and thrombotic microangiopathy: A multi-center Cohort Study. *Ann Rheum Dis* 78(7):1004-1006
- **Mamyrova G**, Kishi T, Targoff IN, Ehrlich A, **Curiel RV**, **Rider LG** with the Childhood Myositis Heterogeneity Study Group. Features Distinguishing Clinically

Amyopathic Juvenile Dermatomyositis (CAJDM) from Juvenile Dermatomyositis (JDM). *Rheumatology* 57(11):1956-1963.

- Uribe JA, **Aggarwal I**, Withayaweerarak J, Liao YJ, Sab UK, Weyand CM. Refractory Giant Cell Arteritis Complicated by Vision Loss from Optic Atrophy and Maculopathy associated with Pachymeningitis. *J. Neuroophthalmol.* 2018 Mar, 38(1):17-23
- Hitchcock MM, **Aggarwal I**, Chang A, Weiel J, Szumowski JD. A 36-year-old woman from West Africa with Newly Diagnosed AIDS and a Spinal Cord Mass, *Clinical Infectious Diseases* 66(7): 1148-49
- **Shanmugam VK**, Mulani S, McNish S, Harris S, Buescher T, Amdur R. Longitudinal observational study of hidradenitis suppurativa: impact of surgical intervention with adjunctive biologic therapy. *Int. J Dermatol.* 2018; 57(1):62-9. Epub 2017/11/14. doi: 10.1111/ijd.13798. PubMed PMID: 29130482; PMCID: PMC5760437.
- Sabbagh S, Ronis T, **White PH** Pediatric Rheumatology: Addressing the transition to adult-oriented healthcare. *Open Access Rheumatol.* 2018 10: 83-95
- Spencer D, McManus M, Call K, Turner J, Harwood C, **White P**, Alarcon G. Healthcare coverage and access among children, adolescents and young adults 2012-2015: Implications for future health reforms. *Journal of Adolescent Health* 62: 667-673
- Lestishock L, Daley AM, **White P**. Pediatric nurse practitioner's perspectives on health care transition from pediatric to adult care. *Journal of Pediatric Health Care.* 2018. 32 (3): 263-272
- Hickam T, **White P**, Modrin A, McManus M, Cox K. Implementing a nationally recognized pediatric to adult transitional care approach in a major children's hospital. *Health and Social Work.* 2018; 43(1):3-5
- **White P**, Schmidt A, McManus M, Irwin C. Incorporating Health Care Transition Services into Preventative Care for Adolescents and Young Adults: A Toolkit for Clinicians. Washington DC GotTransition. May 2018
- McManus M, **White P**, Schmidt A, Moltini R, Kantor D, Salus T. 2018 Coding and Reimbursement Tip Sheet for Transition from Pediatric to Adult Health Care, Washington DC GotTransition. May 2018
- Hudack M, Helm M, **White P**, and committee on Child Health Financing. Principles of Child Health Care Financing. *Pediatrics* 2017; 140(3):1-8
- **Mamyrova G**, **Rider LG**, Ehrlich A, **Jones OY**, Miller FW, Katz JD Environmental Factors Associated with Disease Flare in Juvenile and Adult Dermatomyositis. *Rheumatology* 1;56(8):1342-1347.
- Kishi T, Bayat N, Ward MM, Huber AM, Wu L, **Mamyrova G**, Targoff IN, Warren-Hicks WJ, Miller FW, **Rider LG** with the Childhood Myositis Heterogeneity Study Group. Medications received by patients with Juvenile Dermatomyositis. *Semin Arthritis Rheum.* 2018 Mar 28. pii: S0049-0172(17)30753-9.

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PUBLICATIONS

- Morgan ND, Shah AA, Mayes MD, Domsic RT, Medsger TA, Jr., Steen VD, Varga J, Carns M, Ramos PS, Silver RM, Schioppa E, Khanna D, Hsu V, Gordon JK, Gladue H, Saketkoo LA, Criswell LA, Derk CT, Trojanowski MA, **Shanmugam VK**, Chung L, Valenzuela A, Jan R, Goldberg A, Remmers EF, Kastner DL, Wigley FM, Gourh P, Boin F. Clinical and serological features of systemic sclerosis in a multicenter African American cohort: Analysis of the genome research in African American scleroderma patients clinical database. *Medicine (Baltimore)*. 2017;96(51):e8980. Epub 2018/02/03. doi: 10.1097/md.00000000000008980. PubMed PMID: 29390428; PMCID: PMC5758130.
- Boortally T, Misra K, McNish S, Jones D, **Shanmugam VK**. Prevalence of positive QuantiFERON gold in-tube testing in hidradenitis suppurativa. *The Journal of Dermatological Treatment*. 2018:1-4. Epub 2018/01/13. doi: 10.1080/09546634.2018.1425360. PubMed PMID: 29325465.
- Mulani S, McNish S, Jones D, **Shanmugam VK**. Prevalence of antinuclear antibodies in hidradenitis suppurativa. *Int J Rheum Dis*. 2018;21(5):1018-22. Epub 2018/06/08. doi: 10.1111/1756-185x.13312. PubMed PMID: 29878616.
- Gourh P, Remmers EF, Boyden SE, Alexander T, Morgan ND, Shah AA, Mayes MD, Doumately A, Bentley AR, Shriner D, Domsic RT, Medsger TA, Jr., Steen VD, Ramos PS, Silver RM, Korman B, Varga J, Schioppa E, Khanna D, Hsu V, Gordon JK, Saketkoo LA, Gladue H, Kron B, Criswell LA, Derk CT, Bridges SL, Jr., **Shanmugam VK**, Kolstad KD, Chung L, Jan R, Bernstein EJ, Goldberg A, Trojanowski M, Kafaja S, Maksimowicz-McKinnon KM, Mullikin JC, Adeyemo A, Rotimi C, Boin F, Kastner DL, Wigley FM. Whole-Exome Sequencing to Identify Rare Variants and Gene Networks that Increase Susceptibility to Scleroderma in African Americans. *Arthritis Rheumatol*. 2018. Epub 2018/05/08. doi: 10.1002/art.40541. PubMed PMID: 29732714
- Choi Y, Banerjee A, McNish S, Couch KS, Torralba MG, Lucas S, Tovchigrechko A, Madupu R, Yooseph S, Nelson KE, **Shanmugam VK**, Chan AP. Co-occurrence of Anaerobes in Human Chronic Wounds. *Microbial Ecology*. 2018. Epub 2018/08/25. doi: 10.1007/s00248-018-1231-z. PubMed PMID: 30141127
- Silinsky Krupnikova S, Brady T, Sheppard MN, LaCombe A, Jones D, **Shanmugam VK**. Impact of a Student-Led Rheumatology Interest Group on Medical Student Interest in Rheumatology. *International Journal of Rheumatology*, vol. 2019, doi: 10.1155/2019/4892707
- **Shanmugam VK**, Jones D, McNish S, Bendall ML, Crandall KA. Transcriptome Patterns in Hidradenitis Suppurativa: Support for the Role of Antimicrobial Peptides and Interferon Pathways in Disease Pathogenesis. *Clin Exp Dermatol*. 2019. Epub 2019/03/05. doi: 10.1111/ced.13959. PubMed PMID: 30828847.

BOOK CHAPTERS

- **Curriel R, Rider LG**. Distinguishing Disease Activity and Damage in Myositis. In *Managing Myositis: A Practical Guide* ISBN 978-3-030-15819-4
- **Shanmugam VK**. Vasculitis and Other Uncommon Arteriopathies. In *Rutherford's Vascular Surgery and Endovascular Therapy 9th Edition*, Editors Anton N. Sidawy and Bruce A. Perler, Elsevier
- **White P**, McManus M. Historical perspectives, current priorities, and health care transition evidence and measurement. In: Hergenroeder A, Wiemann C, eds. *Health Care Transition for Adolescents and Young Adults with Chronic Illness and Disability*. Switzerland: Springer International Publishing, pgs. 233-238. 2018
- McManus M, **White P**. Payment for transition services. In: Hergenroeder A, Wiemann C, eds. *Health Care Transition for Adolescents and Young Adults with Chronic Illness and Disability*. Switzerland: Springer International Publishing, pgs. 233-238. 2018

CHIEF MEDICAL RESIDENTS 2018-2019



Chief Medical Residents (left to right):

DOM CHIEFS FY 19:

Sam Ober
Alex Aldrich (VA)
Tanuka Datta (VA)
Kusha Davar
Talia Bernal



Department of Medicine



The GW Medical
Faculty Associates