TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message from the Chief</td>
<td>1</td>
</tr>
<tr>
<td>Faculty Listing</td>
<td>5</td>
</tr>
<tr>
<td>Clinical Activities</td>
<td>7</td>
</tr>
<tr>
<td>Clinical Quality Improvements</td>
<td>12</td>
</tr>
<tr>
<td>Clinical Locations</td>
<td>13</td>
</tr>
<tr>
<td>Research and Other Scholarly Activities</td>
<td>15</td>
</tr>
<tr>
<td>Teaching Activities</td>
<td>37</td>
</tr>
<tr>
<td>Three-Year Bibliography</td>
<td>44</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>59</td>
</tr>
</tbody>
</table>
The mission of the Division of Endocrinology and Metabolism is to promote health and to combat disease in endocrinology, diabetes, and metabolism through exceptional clinical care, research, and education. The Division has a long history of excellence across all academic areas, and this success continued through the current year. We continue to advance the research mission through ongoing recruitment of the most innovative scientists, investment in research infrastructure, growth of the Center for Metabolism and Mitochondria Medicine and associated metabolic phenotyping cores, restructuring and renovation of the Translational Research Center, and support of new multidisciplinary research programs. We continue to advance the clinical mission by implementing new, forward-thinking, value-based models of care and by leveraging clinical analytics and population management approaches. We continue to advance the educational mission by training the next generation of endocrinologists to adapt to the increasing demand for endocrine and diabetes care. These advancements continue to invigorate the Division’s already strong commitment to excellence in the field of endocrinology, diabetes, and metabolism. This excellence is
reflected the U.S. News & World Report rankings, in which UPMC is honored as one of the top programs in the country for endocrinology, diabetes, and metabolism.

**Highlights of Our Year**

The Division recruited several new research faculty:

- **Sadeesh Ramakrishnan, DVM, PhD,** was recruited from the Department of Integrated and Molecular Physiology at the University of Michigan as a tenure-stream Assistant Professor of Medicine. His research program focuses on the role of cellular hypoxia signaling and transcriptional regulation in normal metabolism and disease. He joined the Division of Endocrinology in August 2018.

- **Bokai Zhu, PhD,** was recruited from the Department of Molecular and Cellular Biology at Baylor College of Medicine as a tenure-stream Assistant Professor of Medicine. His research program focuses on understanding the molecular mechanisms underlying circadian and non-circadian biological clocks that influence metabolism and aging. He joined the UPMC Aging Institute and the Division of Endocrinology in September 2018.

- **Yusuke Sekine, PhD,** was recruited from the Center for Molecular Medicine of the National Heart Lung and Blood Institute (NHLBI) of the National Institutes of Health (NIH). He is currently a tenure-stream Assistant Professor of Medicine. His research program focuses on understanding the molecular and cellular responses to biological stressors (oxidative, endoplasmic reticulum, metabolic) and the impact of these stressors/stress responses on metabolic health and aging. He joined the UPMC Aging Institute in September 2017 and the...

- **Alison Kohan, PhD,** was recruited from the Department of Nutritional Sciences at the University of Connecticut as a tenure-stream Associate Professor of Medicine. Her research program focuses on understanding the role of lipids, lipoproteins, and apolipoproteins in normal metabolism and disease. She...
will join the Division of Endocrinology in September 2019.

Several new clinical faculty were recruited to the Division:

- **Milay Luis Lam, MD**, was recruited from State University of New York (SUNY) Downstate as a Clinical Assistant Professor of Medicine. In addition to endocrinology, diabetes, and metabolism, Dr. Luis Lam is certified in Obesity Medicine by the American Board of Obesity Medicine. Her scholarly work focuses on prevention and treatment of obesity and its complication. Dr. Luis Lam joined the Division of Endocrinology in March 2019.

- **Diana (Dee) Pinkhasova, MD**, was retained from the UPMC Fellowship Program in Endocrinology, Diabetes, and Metabolism as a Clinical Assistant Professor of Medicine. Her scholarly work focuses on improving the quality of care and education of patients, particularly in the inpatient setting and after hospital discharge. In addition to her clinical role, she will serve as the Division’s Wellness Representative. Dr. Pinkhasova will join the Division of Endocrinology in August 2019.

- **Charity Kwamanakweenda, MD**, was recruited from the University of Virginia as a Clinical Assistant Professor of Medicine. Her scholarly work focuses on application of telehealth strategies for health education and medical care delivery. Dr. Kwamanakweenda will join the Division of Endocrinology in September 2019.

- **Pouneh Fazeli, MD**, was recruited from Massachusetts General Hospital and Harvard Medical School as an Associate Professor of Medicine. She is both a clinician and a researcher. Clinically, she will serve as the Director of Neuroendocrinology and member of the Pituitary Center of Excellence. Her research program focuses on the neuroendocrine and metabolic responses to undernutrition. Dr. Fazeli will join the Division of Endocrinology in September 2019.

In addition to the new recruits above, several Division faculty received promotions and/or expanded their academic roles:

- **Ersa Karslioglu-French, MD**, was promoted to the rank of Clinical Associate Professor of Medicine. In addition to her promotion, her role as Medical Director of the Center for Diabetes and Endocrinology was expanded to Global Clinical Chief of Endocrinology.

- **Jason Ng, MD**, was promoted to the rank of Clinical Associate Professor of Medicine. In addition to his promotion, his role as Clinical Lead for Diabetes Technology was expanded to include Clinical Lead for the Diabetes Medical Home.

- **Dave Rometo, MD**, Clinical Lead of the Endocrine Obesity Unit, has expanded his leadership role to a Weight Management Network across UPMC.

Several Division faculty received recognition for their academic excellence:

- **Helena Levitt, MD**, Mary Korytkowski, MD, Sue Challinor, MD, and Susan Greenspan, MD, were honored as *Pittsburgh Magazine* “Best Doctors” in the field of endocrinology, diabetes, and metabolism.

- **Sann Mon, MD**, was awarded the UPMC McKeesport Resident Teaching Award for the fourth consecutive year. Her McKeesport Endocrinology Team was acknowledged with a UPMC Excellence in Patient Experience Award. Dr. Mon was also elected as a Fellow of the American College of Endocrinology.

- **Alexandra Clark, MD**, received the Fred DeRubertis Golden Apple Teaching Award for excellence in teaching for the Clinical Fellowship Program in Endocrinology, Diabetes, and Metabolism.
• **Jagdeesh Ullal, MD, MS**, received a University of Pittsburgh School of Medicine Professionalism Accolade as a Medical Educator. He also received an “EnVision CF: Emerging Leaders in CF Endocrinology II Program Award” from the Cystic Fibrosis Foundation (CFF).

• **Hussain Mahmud, MD**, and **Sann Mon, MD**, Clinical Assistant Professors of Medicine, became certified in Obesity Medicine by the American Board of Obesity Medicine.

• **Pooja Manroa, MD**, Clinical Assistant Professor of Medicine, received Endocrine Certification in Neck Ultrasound (ECNU).

• **Mary Korytkowski, MD**, Professor of Medicine, was elected as a member of the Non-Tenured Faculty Promotions & Appointments (NTFPA) Committee at the University of Pittsburgh.

Several Division faculty received notable funding to support their scholarly work (see also Research section):

• **Erin Kershaw, MD**, and **Maja Stefanovic-Racic, MD, PhD**, are contributing investigators to the NIH “Molecular Transducers of Physical Activity Consortium (MoTrPAC)” (2016-2021).

• **Erin Kershaw, MD**, and **Vijay Yechoor, MD**, are contributing investigators to the NIH UG3 “Human microphysiology systems disease model of type 2 diabetes starting with liver and pancreatic islets” (2018-2023).

Several Division members contributed to national meetings and or national academic service:

• **Archana Bandi, MD**, and **Maja Stefanovic-Racic, MD, PhD**, both attended and/or presented at the 2019 Annual Meeting of the Endocrine Society (ENDO2019).

• The following faculty attended and/or presented at the 2019 Annual Meeting of the American Diabetes Association (ADA): **Vijay Bahl, MD; Michael Jurczak, PhD; Esra Karslioglu-French, MD; Erin Kershaw, MD; Mary Korytkowski, MD; Linda Siminerio, PhD, RN; Sandra Sobel, MD;** and **Fred Toledo, MD**.

• The following faculty served on study sections for the National Institutes of Health, the American Diabetes Association, the Department of Defense, and/or other organizations: **Erin E. Kershaw, MD; Rob O’Doherty, PhD; Vijay Yechoor, MD; Michael Jurczak, PhD; and Linda Siminerio, RN, PhD**.

Other Notable Highlights:

• The UPMC Division of Endocrinology held its 3rd Annual Reception for alumni and other endocrinology colleagues at the 2019 Annual Sessions of the American Diabetes Association (ADA) in San Francisco, California. University of Pittsburgh faculty, **Erin E. Kershaw, MD**, and Ingrid Libman DeGordon, MD/PhD, co-hosted the reception.
FACULTY

Erin E. Kershaw, MD
Division Chief and Associate Professor of Medicine, Division of Endocrinology and Metabolism
Endowed Chair for Obesity and Diabetes Research

Munira S. Abbasi, MD*
Clinical Assistant Professor of Medicine

Michael J. Jurczak, PhD
Assistant Professor of Medicine
Director of Rodent Phenotyping, Center for Metabolism and Mitochondrial Medicine

Esra Karslioglu-French, MD
Clinical Associate Professor of Medicine
Medical Director, UPMC Center for Diabetes and Endocrinology

Mary T. Korytkowski, MD
Professor of Medicine
Director, Quality Improvement, Division of Endocrinology and Metabolism

Shane O. LeBeau, MD*
Clinical Associate Professor of Medicine

Jeongkyung Lee, PhD
Assistant Professor of Medicine

Robert M. O’Doherty, PhD
Professor of Medicine, Biochemistry, and Molecular Genetics
Director, T32 Diabetes and Endocrinology Training Program
Co-Director, Center for Metabolic and Mitochondrial Medicine (C3M)

Alexandria A. Opata, MD
Clinical Assistant Professor of Medicine

Sadeesh Ramakrishnan, DVM, PhD
Assistant Professor of Medicine

R. Harsha H. Rao, MD
Professor of Medicine
Endocrinology Division Chief, VAPHS

David A. Rometo, MD
Clinical Assistant Professor of Medicine
Clinical Lead, Endocrine Obesity Unit and Weight Management Program

Yusuke Sekine, PhD
Assistant Professor of Medicine
Principal Investigator, Aging Institute

Karen L. Selk, DO
Clinical Assistant Professor of Medicine

Linda M. Siminerio, RN, PhD
Professor of Medicine
Executive Director, University of Pittsburgh Diabetes Institute

Sandra I. Sobel, MD
Clinical Assistant Professor of Medicine
Clinical Chief of Endocrinology, UPMC Mercy

Maja Stefanovic-Racic, MD, PhD
Assistant Professor of Medicine
Director, EDM Fellowship Training Program

Frederico G. S. Toledo, MD
Associate Professor of Medicine
Director of Clinical Research, Center for Metabolic and Mitochondrial Medicine

Jagdeesh Ullal, MD, MS
Clinical Associate Professor of Medicine
Clinic Lead, Inpatient and Subspecialty Diabetes

Yunjiao Wang, MD
Clinical Assistant Professor of Medicine

Lauren A. Willard, DO
Clinical Assistant Professor of Medicine

Vijay K. Yechoor, MD
Visiting Professor of Medicine
Director, Diabetes and Beta Cell Biology Center

Bokai Zhu, PhD
Assistant Professor of Medicine
Principal Investigator, Aging Institute

* These faculty left the division over the course of FY 2019.
Sann Yu Mon, MD  
Clinical Assistant Professor of Medicine  
Endocrinology Division Chief, UPMC McKeensport

Elena M. Morariu, MD  
Clinical Assistant Professor of Medicine

Jason M. Ng, MD  
Clinical Associate Professor of Medicine  
Chairperson, Diabetes Task Force  
Clinical Lead, Diabetes Technology and Medical Home Unit

Robert M. O’Doherty, PhD  
Professor of Medicine, Biochemistry, and Molecular Genetics  
Director, T32 Diabetes and Endocrinology Training Program  
Co-Director, Center for Metabolic and Mitochondrial Medicine (C3M)

Alexandria A. Opata, MD  
Clinical Assistant Professor of Medicine

Sadeesh Ramakrishnan, DVM, PhD  
Assistant Professor of Medicine

R. Harsha H. Rao, MD  
Professor of Medicine  
Endocrinology Division Chief, VAPHS

David A. Rometo, MD  
Clinical Assistant Professor of Medicine  
Clinical Lead, Endocrine Obesity Unit and Weight Management Program

Yusuke Sekine, PhD  
Assistant Professor of Medicine  
Principal Investigator, Aging Institute

Karen L. Selk, DO  
Clinical Assistant Professor of Medicine

Linda M. Siminerio, RN, PhD  
Professor of Medicine  
Executive Director, University of Pittsburgh Diabetes Institute

Sandra I. Sobel, MD  
Clinical Assistant Professor of Medicine  
Clinical Chief of Endocrinology, UPMC Mercy

Maja Stefanovic-Racic, MD, PhD  
Assistant Professor of Medicine  
Director, EDM Fellowship Training Program

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Associate Professor of Medicine  
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Clinical Assistant Professor of Medicine

Lauren A. Willard, DO  
Clinical Assistant Professor of Medicine

Vijay K. Yechoor, MD  
Visiting Professor of Medicine  
Director, Diabetes and Beta Cell Biology Center

Bokai Zhu, PhD  
Assistant Professor of Medicine  
Principal Investigator, Aging Institute

* These faculty left the division over the course of FY 2019.
The clinical mission of the Division of Endocrinology is to provide comprehensive clinical care across the full spectrum of endocrine and metabolic disorders, including diabetes, obesity, lipid disorders, thyroid and parathyroid disease, bone and mineral disorders, neuroendocrine/pituitary/adrenal disorders, reproductive/ovarian disorders, andrology/male hormonal disorders, endocrine neoplasia, and other hormonal/metabolic conditions and needs. Due to continued increases in the prevalence of these disorders, the demand for endocrinologists is also increasing in the western Pennsylvanian region and across the nation. To address these demands, the Division continues to expand and improve patient access in our region by increasing provider availability in established areas, expanding current services, and developing new services. Currently, the Division of Endocrinology includes multiple clinical faculty that provide outpatient and/or inpatient services in endocrinology, diabetes, and metabolism. Patient care is further enhanced by comprehensive, collaborative team-based care models that include advanced practice providers (PAs, CRNPs), certified diabetes educators, registered dieticians, nurse coordinators, licensed practical nurses, medical assistants, and numerous subspecialty and community partners. In the last year, the Division welcomed several new providers. In addition, several faculty members were honored as Pittsburgh’s “Best Doctors” in Endocrinology, Diabetes, and Metabolism. The Division’s endocrine faculty and staff consistently provide high quality outpatient and inpatient care in accordance with published guidelines, best practices, and evidence-based recommendations for care. Compliance with standards of care as recognized by the Endocrine Society and the American Diabetes Association exceed national averages. The Division of Endocrinology also has a strong culture of continuous quality improvement and patient safety, as noted in the “Clinical Quality Improvement Initiatives” section below.

**Outpatient Services**
The Division provides outpatient services for endocrinology, diabetes, and metabolism at the Center for Diabetes and Endocrinology at Falk Clinic in Oakland and community-based sites in Monroeville in the East, and...
Mt. Lebanon in the South, Wexford in the North, as well as at UPMC Mercy, UPMC McKeesport, and the Veterans Administration Pittsburgh Health System. In addition, outpatient telehealth services are provided for diabetes and/or general endocrinology at UPMC Northwest, UPMC Bedford, and remote sites affiliated with the VAPHS. The Division also offers same-day clinical appointments and dedicated urgent care clinics to address urgent endocrine needs and to improve access. Outpatient services cover the full spectrum of endocrine disorders with an emphasis on endocrine issues that are best managed in the outpatient setting. A major Division goal is to work closely with our primary care and sub-specialty colleagues to provide value-based, integrated/coordinate, multidisciplinary care. Overall, outpatient clinic visits comprise approximately 50% diabetes and related disorders, 30% thyroid-related disorders, and 20% other endocrine disorders.

**Inpatient Services**

The Division provides inpatient services for endocrinology, diabetes, and metabolism at UPMC Presbyterian-Shadyside campuses in Oakland and Shadyside (including Magee Womens Hospital and Western Psychiatric Hospital), UPMC Mercy, UPMC McKeesport, and the Veterans Administration Pittsburgh Health System. Additionally, inpatient telehealth services are provided for diabetes and/or general endocrinology at UPMC Susquehanna. Inpatient services cover the full spectrum of endocrine disorders with an emphasis on those that have increased prevalence and/or severity in the hospital setting. A critical component of these services includes management of diabetes, particularly in ensuring patient safety across all UPMC-affiliated hospitals. Jagdeesh Ullal, MD, MS, serves as the Clinical Lead for Inpatient and Subspecialty Diabetes (including serving on the TPIAP team, Total Pancreatectomy Auto Islet Transplant). Dr. Ullal, in collaboration with Esra Karslioglu-French, MD, Mary Korytkowski, MD, and Amy Donihi, PharmD, co-lead the UPMC Inpatient Diabetes Patient Safety Committee. This committee is dedicated to implementing system-wide initiatives for evidence-based, rational, goal-directed processes to improve glycemic management and patient outcomes, minimize risk for hypoglycemia and other adverse events, and reduce lengths of stay and hospital readmissions. (See also Clinical Quality Improvement Initiatives section.)

**Community Services**

The Division is committed to improving care of diabetes, endocrinology, and metabolism in surrounding communities through local, regional, and national efforts. The University of Pittsburgh Diabetes Institute and the Diabetes Prevention Support Center at the University of Pittsburgh have been leaders in national efforts to improve diabetes self-management education and support for decades. Together, they have organized one of the largest networks of American Diabetes Association-recognized diabetes self-management education and support programs in the United States. There are 54 established sites in a variety of clinical settings where patients receive these educational sessions. These include all UPMC hospitals, primary care practices, and community-based clinics. Working with the University of Pittsburgh Diabetes Institute Registry and ADA-Certified Diabetes Education Network, the Division of Endocrinology has launched large-scale quality improvement initiatives across the UPMC system and the UPMC Health Plan. A national self-
management program database called Chronicle (http://www.chronlicatediabetes.com/) has been developed and is being used as a national repository for the ADA Self-Management Education Recognition Program. Linda Siminerio, RN, CDE, PhD, served on the National Standards for Diabetes Self-Management Standards Committee, which recently published its 2017 National Standards for Diabetes Self-Management Education and Support (Diabetes Care, 2017 Oct;40(10):1409-1419). With Jodie Krall, PhD, Dr. Siminerio also leads the Division’s Community Outreach and Diabetes Education Unit, which focuses on integrating these broader national efforts to improve diabetes self-management education and support and to enhance collaboration among UPMC clinical practices.

Notable clinical accomplishments over the past year include:

- Collaboration between the University of Pittsburgh Diabetes Institute and the Diabetes Prevention Support Center to develop training support tools (DVDs, online programs, structured educational program materials) via their role as active leaders in the National Diabetes Prevention Program under the direction of the Centers for Disease Control. These validated programs and materials have been used to train more than 1,000 health care providers in diabetes management and primary prevention.

- Collaboration with Francis Solano, MD, President of UPMC Community Medicine Incorporated, and its network of primary care physicians to leverage diabetes self-management education and support in an effort to improve diabetes outcomes in the primary care setting.

- Collaboration with the UPMC Health Plan to leverage diabetes self-management education and support to improve diabetes outcomes in its members across western Pennsylvania and beyond.

- Collaboration with adult and pediatric endocrinology and other key stakeholders at UPMC Presbyterian Shadyside Hospitals and the Children’s Hospital of Pittsburgh to improve diabetes outcomes in youth transitioning from pediatric to adult care.

- Collaboration with UPMC Clinical Informatics and the UPMC Wolff Center for Quality, Safety, and Innovation to develop more efficient methods for tracking and managing diabetes quality measures and outcomes in patients with diabetes using clinical analytics platforms; the development and validation of a database of more than 185,000 patients with diabetes who receive care in UPMC hospitals or associated outpatient facilities and clinics.

- Collaboration with the Diabetes Technology Unit of the Division of Endocrinology (below) to explore new models of care and a “diabetes medical home” model to improve quality and value of diabetes care delivery.

- Collaboration with the Division’s Telehealth Unit to promote access to diabetes self-management education and support within and beyond the UPMC Health System and the VAPHS.

**Clinical Units**

The Division continues to focus on enhancing its clinical leadership and team-based approaches to clinical care with an emphasis on improving existing successful models of care and developing new, innovative, value-based models of care. To achieve these goals, the Division is organized into clinical units that highlight these efforts.

The **Thyroid Unit**, under the clinical leadership of **Pooja Manroa, MD**, continues to run a very successful Multidisciplinary Thyroid Center in collaboration with other subspecialty partners. These partners include
endocrine surgeons, otorhinolaryngologists, ophthalmologists, radiologists, pathologists, radiation oncologists, oncologist, molecular medicine specialists, and others. The Thyroid Unit is known for its well-established, full-service clinic for comprehensive evaluation of thyroid nodules (clinical evaluation by both endocrinologist and endocrine surgeons, diagnostic ultrasound by endocrinologists and radiologists, fine needle aspiration with on-site cytopathology, etc.) and for its use of molecular genetic analysis of thyroid nodule aspirates for clinical decision-making. Indeed, UPMC is the leader in the development and use of molecular diagnostics (ThyroSeq®) for Precision Medicine for thyroid neoplasia, led by Yuri Nikiforov, PhD, from the Division of Pathology. Notable accomplishments include increasing the number of physicians with Endocrine Certification in Neck Ultrasound, expanding diagnostic ultrasound by endocrinologists at both central and peripheral UPMC locations, and implementation an electronic telehealth (“e-visit”) service for low-risk thyroid disease.

The Obesity and Weight Management Unit, under the leadership of David Rometo, MD, continues to provide clinical care to promote health and treat/prevent disease related to overweight or obesity. Activities include programs on reversing diabetes and other metabolic complications of obesity (i.e., the Disease Remission in Obesity Program or “DROP”), a medically-supervised very low-calorie diet (OPTIFAST) program, meal replacement for weight maintenance (OPTIMIZE) program, a Mediterranean diet (MD) program, and a post-bariatric surgery diabetes and weight management program. To achieve these goals, the Obesity and Weight Management Unit has partnered with the expanding network of American Board of Obesity Medicine (ABOM)-certified physicians in the UPMC network to leverage the full spectrum of weight and health management resources at UPMC. Notable accomplishments include 1) increasing the number of ABOM-certified physicians in the UPMC network, 2) expanding existing programs (listed above), 3) adding new programs, 4) expanding shared medical appointments for nutrition/weight management and lifestyle intervention, 5) further developing partnerships with insurance providers to improve availability of therapeutic options for overweight and obesity, and 6) developing and expanding a clinical research team of physicians, registered dieters, advance practice providers, fellows, residents, and medical students to continuously analyze, improve, and communicate the outcomes of the above processes and programs.

The Diabetes Technology Unit, under the leadership of Jason Ng, MD, continues to provide cutting-edge clinical care that optimizes the use of rapidly evolving technologies (i.e., insulin pumps, continuous glucose monitoring or “CGM,” etc.) for the clinical care of patients with diabetes. Dr. Ng and the diabetes team, which includes Sandra Sobel, MD, and Patrick McCarthy, CDE, run a very effective multidisciplinary glycemic management clinic in collaboration with the Division’s outstanding team of certified diabetes educators and registered dieticians. Notable accomplishments include: 1) reorganizing and expanding a “diabetes medical home” model for more comprehensive and value-based population management of diabetes, 2) developing more efficient methods for tracking and managing diabetes patients using clinical analytics platforms, 3) improving the tracking of diabetes quality measures and coordinating these efforts with primary care, 4) rapidly and effectively adapting to evolving diabetes technologies, and 5) establishing collaborative partnerships with other UPMC entities to study processes for improving diabetic clinical care.

The Neuroendocrine and Adrenal Unit, under the leadership of Sue Challinor, MD, operates a very successful Multidisciplinary Neuroendocrinology and Adrenal Center in collaboration with other subspecialty partners. These partners include neurosurgeons, endocrine surgeons, neurologists, otorhinolaryngologists, ophthalmologists, radiologists, interventional radiologists, pathologists, radiation oncologists, oncologists, and others. Dr. Challinor has one of the largest practices of patients diagnosed with neuroendocrine and
adrenal disorders in the region. Notable accomplishments include: 1) working with neurosurgery and the UPMC Health Plan to establish a neurosurgery to establish a Pituitary Center of Excellence, and 2) recruiting a new Neuroendocrinologist, Pouneh Fazeli, MD, to join the Neuroendocrine Unit.

The Lipid Unit, under the leadership of Erin Kershaw, MD, continues to provide clinical care for patients suffering from dyslipidemia with an emphasis on diabetic dyslipidemia, rare/severe dyslipidemias, and/or adipose tissue disorders. Notable accomplishments include continued efforts to improve quality of life and clinical outcomes in patients suffering from severe hypertriglyceridemia who are at increased risk for pancreatitis.

The Telemedicine Unit, under the leadership of Lauren Willard, DO (Clinical Leader, UPMC), and Archana Bandi, MD (Clinical Co-leader, VAPHS), continues to provide outpatient and inpatient endocrine services across the full spectrum of telehealth platforms. The telehealth programs at UPMC currently includes diabetes-focused clinics at UPMC Northwest and UPMC Bedford, aided by an onsite certified diabetes educator. Notable accomplishments include: 1) adding and expanding outpatient general endocrinology consultations for UPMC Northwest, 2) continuing to participate in the physician-to-physician consult model with Empower 3 to provide support and real-time clinical assessments for both diabetes and general endocrinology consultations, 3) expanding the inpatient endocrinology consult telehealth service with UPMC Susquehanna, 4) expanding outpatient endocrinology telehealth services to UPMC Jameson/Mercer County, and 5) initiating video e-visit for simple thyroid disease. Telehealth is continuing to grow rapidly with the goal of providing care in areas where there is limited accessibility to quality endocrine care.

The Bone Unit, under the leadership of Mara Horwitz, MD, in collaboration with Susan Greenspan, MD, from the Division of Geriatrics, continues to provide clinical care for patients suffering from disorders of bone and mineral metabolism including osteoporosis. Established programs include the annual intensive training in clinical assessment of bone health, using bone densitometry as well as monthly meetings to review clinical and research advances in the field of bone and mineral metabolism. Notable accomplishments include the continuation of these highly successful programs such as the Fracture Liaison Service.

The Endocrine Genetics Unit, led by Helena Levitt, MD, continues to provide risk assessment and clinical care for patients with both suspected and diagnosed endocrine genetic syndromes. The established program includes a multi-disciplinary endocrine genetics consensus conference that brings together adult and pediatric endocrinologists, endocrine surgeons, and a certified genetic counselor. The conference is a lively educational discussion of clinical management issues related to endocrine genetic diagnoses. Notable accomplishments for include improving recommendations for genetic testing and comprehensive disease management for a diverse set of endocrine genetic conditions.

The Transgender Unit, under the leadership of Ronald Codario, Jr., MD (VAPHS), and Mahmud Hussain, MD (UPMC), continues to provide clinical care for patients seeking gender-affirming treatment and services. The established program includes coordinated care by multidisciplinary transgender treatment teams at VAPHS and UPMC. Notable accomplishments include: 1) expanding the Transgender and Gender Care Coordination Consult Service at the VAPHS, 2) engaging in outreach efforts that include PrideFest, Veterans Leisure Expo, and Armed Forces Day, 3) leading and/or participating in educational efforts to improve awareness, and 4) expanding collaboration of primary care providers to create a transgender treatment network at UPMC to improve gender affirming care in the primary care setting.

The Community Outreach and Diabetes Education Unit, led by Linda Siminerio, RN, PhD, and Jodi Krall,
PhD, continues its mission to improve diabetes self-management and education in individuals with diabetes across the lifespan. (See also Community Services above.)

**CLINICAL QUALITY IMPROVEMENT INITIATIVES**

The Division of Endocrinology's quality mission is to promote the highest quality of care and to ensure patient safety. The Division has a long tradition of excellence in these areas. *Pooja Manroa, MD,* served as a Clinical Co-Leader of the Endocrinology Quality and Value Program as well a Co-Associate Program Director for Quality for the Clinical Endocrinology Fellowship Program. *Esra Karslioglu-French, MD,* served as a Clinical Co-Leader of the Endocrinology Quality and Value Program and the Inpatient Diabetes Safety Committee. *Jagdeesh Ullal, MD, MS,* served as a Clinical Co-Leader of the Inpatient Diabetes Safety Committee. These activities were further enriched by efforts at the VA Pittsburg Health System, led by *R. Harsha Rao, MD,* Chief of Endocrinology at the VAPHS. Together, these programs create a culture of quality and value that permeates all aspects of the Division.

Notable quality initiatives for FY19 include:

- All members of the Division continue to work to improve the use of technology and electronic communication with patients using MyUPMC and other platforms and to develop new models of care to improve clinic access and efficiency.

- **Jason Ng, MD,** and the Diabetes Technology Unit implement Tidepool and other diabetes technologies to simplify glycemic reporting and tracking. This Diabetes Technology Unit also collaborated with UPMC Clinic Analytics to generate predictive models to identify patients most in need of endocrine subspecialty care.

- **David Rometo, MD,** and the Obesity Unit continued to improve programs to address health outcomes in patients with obesity and diabetes. Notably, they developed a collaboration the UPMC Health Plan to leverage the Prescription for Wellness Program and medically supervised weight loss to promote more-evidence-based and cost-effective use of obesity medications.

- **Esra Karslioglu-French, MD,** and the Diabetes Unit expanded the use of retinal cameras to improve rates of retinal screening in diabetic patients.

- **Archana Bandi, MD,** and her team and the VAPHS evaluated and implemented processes for reducing fracture risk in veteran receiving hormonal modulators for prostate cancer and other conditions.

- **Linda Siminerio, RN, PhD,** and her team continue to work to improve systems for diabetes self-management and education in the primary care setting as well as in youth with diabetes transitioning from pediatric to adult endocrine care.

- **Mary Korytkowski, MD,** and her team evaluated and implemented processes for improving diabetes discharge instructions to reduce rates of hospital re-admissions.

- In addition to these specific projects, members of the Division of Endocrinology (*Mary Korytkowski, MD; Esra Karslioglu-French, MD; and Jagdeesh Ullal, MD, MS*) co-chair the UPMC Diabetes Patient Safety Committee with Amy Donihi, PharmD. This committee has been actively engaged in promoting appropriate goal-directed inpatient glycemic management of patients with diabetes and newly recognized hyperglycemia as well as the safe transition of these patients to the outpatient setting at time of hospital discharge.
CLINICAL LOCATIONS

UPMC Endocrinology and Diabetes Center—Oakland
Falk Medical Building
3601 Fifth Avenue, Suite 3B
Pittsburgh (Oakland), PA 15213

UPMC Endocrinology and Diabetes Center—UPMC Mercy Ambulatory Center
1400 Locust Street, Suite 5120
Pittsburgh, PA 15219

UPMC Endocrinology and Diabetes Center—UPMC Monroeville
400 Oxford Drive, Suite 100
Monroeville, PA 15146

UPMC Endocrinology and Diabetes Center—South Hills
733 Washington Road, Suite 204
Mt. Lebanon, PA 15228

UPMC Endocrinology and Diabetes Center—UPMC McKeesport
500 Hospital Way, Painter Building, Suite 401
McKeesport, PA 15132

UPMC Endocrinology—Wexford
117 VIP Drive, Suite 120
Wexford, PA 15090
1. **UPMC Endocrinology and Diabetes Center—Oakland**  
Falk Medical Building  
3601 Fifth Avenue, Suite 3B  
Pittsburgh (Oakland), PA 15213

2. **UPMC Endocrinology and Diabetes Center—UPMC Mercy Ambulatory Center**  
1400 Locust Street, Suite 5120  
Pittsburgh, PA 15219

3. **UPMC Endocrinology and Diabetes Center—UPMC Monroeville**  
400 Oxford Drive, Suite 100  
Monroeville, PA 15146

4. **UPMC Endocrinology and Diabetes Center—South Hills**  
733 Washington Road, Suite 204  
Mt. Lebanon, PA 15228

5. **UPMC Endocrinology and Diabetes Center—UPMC McKeesport**  
500 Hospital Way, Painter Building, Suite 401  
McKeesport, PA 15132

6. **UPMC Endocrinology—Wexford**  
117 VIP Drive, Suite 120  
Wexford, PA 15090
RESEARCH AND OTHER SCHOLARLY ACTIVITIES

The Division of Endocrinology’s research mission is to improve the understanding and treatment of diseases in the field of endocrinology, diabetes, and metabolism. The Division includes research faculty that span the full spectrum of scientific investigation, ranging from very basic to more clinical/translational research. Areas of basic research excellence include obesity, insulin resistance, diabetes, lipid metabolism, mitochondrial biology, beta cell biology, and thyroid molecular diagnostics. Areas of clinical/translational research excellence include diabetes, obesity, calcium metabolism, osteoporosis, and thyroid cancer. Research faculty conduct their scholarly work in several locations, including the 10th floor of the Biomedical Science Tower, the Translational Research Center in Montefiore Hospital, the Center for Metabolism and Mitochondrial Medicine (C3M), and the UPMC Aging Institute at Bridgeside Point. Research is supported by faculty research grants, an NIH-funded T32 Training Grant, and by the NIH-funded CTSA Clinical Translational Research Center. Outstanding facilities for gene expression profiling, DNA and protein synthesis and sequencing, animal care, proteomics, cellular imaging, clinical informatics, and bioinformatics / biostatistics are available. Overall, the Division of Endocrinology at the University of Pittsburgh is a strong environment for innovative and transformational research.

Members of the Division of Endocrinology are funded by external grant support from the National Institutes of Health, the American Diabetes Association or other private foundations, industry sponsors, and other sources. The Division recently received a substantial investment to expand its basic, translational, and clinical research. This investment includes resources to recruit several new investigators, expand and remodel research space, acquire state-of-the-art capital equipment, and invest in innovative new research programs. In the last fiscal year, progress was made toward renovating and reorganization the translational research space in Montefiore Hospital (a traditionally strong Endocrine Metabolic Research Center). This exciting growth of the Division’s research infrastructure complements existing research strengths in the Department of Medicine (currently ranked in the top 10 in the nation for NIH funding) and the University of Pittsburgh (currently ranked 3rd in the nation for NIH funding). Thus, the Division’s research operations are undergoing strategic expansion and transformation to keep pace with rapidly evolving advances in science and technology in the field of endocrinology, diabetes, and metabolism.

New Research Initiatives
The research activities of the Division of Endocrinology are highly collaborative. Given the important role of metabolism in all cellular and systemic processes, the Division is well positioned to contribute to research and
scholarly work across fields. One notable example is the Center for Metabolism and Mitochondrial Medicine (C3M: http://www.vmi.pitt.edu/c3m/), which includes investigators from the Division of Endocrinology, the Division of Cardiology/Heart and Vascular Institute, the Vascular Medicine Institute, the Department of Pharmacology, and other Division/Departments across the University. C3M provides expertise and services related to cellular bioenergetics and mitochondrial biology (co-directed by Sruti Shiva, PhD, of the Department of Pharmacology), animal physiology (co-directed by Robert O’Doherty, PhD, and Michael Jurczak, PhD, of the Division of Endocrinology) and human physiology and metabolism (co-Directed by Fred Toledo, MD, of the Division of Endocrinology). This initiative provides a hub for metabolic investigations throughout the University.

Additional new research initiatives and grant funding include the following:

**NIH and Foundation Funding**

- Jurczak (PI): “Obesity-associated mitophagy resistance,” NIH R01, 2018-2023
- Jurczak (Co-I): “Role of Ca entry through the mitochondrial uniporter in regulating cardiac metabolism and physiology,” NIH R01, 2018-2023
- Kershaw/Yechoor (Co-Is): “Human microphysiology systems disease model of type 2 diabetes starting with liver and pancreatic islets,” NIH UG3, 2018-2023
- O’Doherty (Co-I): “Mechanisms of MI-induced insulin resistance,” NIH R01, 2018-2023
- Ramakrishnan (PI): “Intestinal hypoxia signaling in glucose homeostasis,” NIH R00, 2018-2020
- Toledo (Co-I): “Phase II metformin PH in HFPEF,” NIH R01, 2018-2022
- Ullal (PI): “EnVision CF: Emerging Leaders in CF Endocrinology II Program Award,” Cystic Fibrosis Foundation (CFF), 2019-2021
- Kershaw (co-PI)/Yechoor (co-PI): “Overcoming insulin deficiency and resistance to reduce diabetes risk,” Pittsburgh Foundation Award, 2018-2019

**Pilot and Bridge Funding**

- Ramakrishnan: “Role of zonal dysregulation of hypoxia signaling in NAFLD,” Pittsburgh Liver
Ongoing and Planned Collaborations

There are numerous ongoing collaborative efforts among faculty within the Division, the Department of Medicine, the broader University of Pittsburgh, and outside the University. For instance, Michael Jurczak, PhD, has collaborations with Dr. Yuan Liu and Dr. Bill Chen (PACCM, Aging Institute) to explore the potential to treat NAFLD with a novel small molecule AMPK activator that inhibits Fbox-mediated ubiquitination and proteasomal degradation of phosphorylated AMPK; with Iain Scott (Cardiology) on a project funded through an Innovative Basic Science Award from the American Diabetes Association titled “Regulation of hepatic mitochondrial homeostasis and fuel metabolism by acetylation” and another project to explore how the peptide adropin regulates cardiac metabolism; with Toren Finkel (Cardiology, Aging Institute) on an NIH/NHLBI-funded project titled “The role of mitochondrial calcium”; and with Gary Thomas (Microbiology and Molecular Genetics) on an NIH/NIDDK-funded project titled, “Allosteric regulation of SIRT1 by a PACS2 and DBC1 regulatory hub.”

Likewise, Erin E. Kershaw, MD, also has several collaborations, including ongoing research with investigators at the University of Graz in Austria, University of Alberta in Canada, Dalhousie University in Canada, Charité Hospital in Germany, University of Heidelberg in Germany, University of Utah, Johns Hopkins University, and other institutions to understand the impact of triacylglycerol hydrolysis on multiple physiological and pathophysiological processes; with investigators at the University of Pittsburgh (Human Genetics, Pharmacology, PACCM, Endocrinology), Brown University, Yale University, University of Guelph in Canada, and other institutions on studies funded by the NIH and the American Diabetes Association to understand the mechanisms by which an novel obesity/diabetes-risk variant influences energy and metabolic homeostasis; with investigators at multiple institutions across the country in the NIH-funded Molecular Transducers of Physical Activity Consortium (MoTrPAC)—a large multicenter collaborative initiative to understand the molecular basis for the health benefits of physical activity (see https://motrpac.org/ or https://commonfund.nih.gov/moleculartransducers/overview); with Lans Taylor (Drug Discovery institute) as a Co-Investigator on a UG3/UH3 NIDDK grant for developing microphysiological systems to replicate human physiology and model T2D; and with Dr. David Whitcomb (GI) on a multicenter industry-sponsored clinical trial to improve outcomes and treatment of patients with severe hypertriglyceridemia who are at risk for pancreatitis.
Mary Korytkowski, MD, collaborates with Dr. John Jakicic (Health and Physical Activity) on the NIH-funded multicenter Look AHEAD (Action for Health in Diabetes) Study to understand the long-term outcomes of lifestyle intervention for weight loss; with Dr. Hussain Mahmud (Endocrinology) and Dr. Vicki Helgeson (Carnegie Mellon University) on a NIH-funded study to understand the contribution of support from spouses and significant relationships on clinical and psychological outcomes in people with diabetes; and with Dr. Eileen Chases (Nursing, Health and Community Systems) on an NIH-funded study to examine the effect of a program of diabetes education with real or sham CPAP on diabetes self-care behaviors and outcomes in people with type 2 diabetes and newly diagnosed obstructive sleep apnea.

Working with Dr. John Jones (University of Coimbra, Coimbra, Portugal), Robert O’Doherty, PhD, is studying intermediary metabolism in the liver. Dr. O’Doherty is also working with Dr. Eric Kelley (West Virginia University Medical School) on the role of Xanthine oxidase in the regulation of oxidative and metabolic homeostasis; with Dr. Don Scott (Icahn School of Medicine, Mount Sinai) on gene methylation pattern alterations in the obese liver; with Dr. Adrian Morelli (Surgery,) on extracellular vesicle signaling in the liver; with Dr. Gary Thomas (Microbiology and Molecular Genetics) on SIRT1 action in the liver; Dr. Partha Dutta (Cardiology/VMI) on bone marrow progenitor cell effects on inflammation and metabolic regulation; Dr. Allan Tsung (Surgery) on neutrophil traps and fatty acid metabolism; Dr. Tim Kensler (Pharmacology) on Nrf1 and metabolic dysregulation; and with Dr. Lisa Borghesi (Immunology) on bone marrow progenitor function in obesity.

Linda M. Siminerio, RN, PhD, also has several collaborations with investigators throughout the United States to develop, implement, and evaluate programs for diabetes self-management education and support; with multiple faculty across divisions and departments at the University of Pittsburgh and the UPMC Health Plan to develop a diabetes medical home model; with faculty at the Children’s Hospital of Pittsburgh to implement and evaluate a pediatric-to-adult diabetes care transition program (funded by a Cochrane Weber Award); with the UPMC Health Plan to improve care of high-risk diabetics across the health system; with faculty at the VAPHS on a study to promote “Mindfulness and diabetes self-management with veterans.”

In an ongoing collaboration with Dr. Mark Simon (Cardiology), Fred Toledo, MD, is currently studying the effects of nitrates on metabolism in the context of heart failure. He is also working with other Cardiology investigators on metformin studies; with Dr. Trevor Orchard (Epidemiology) to study bone density in diabetes; with Dr. Yadav and Dr. Rabinovitz (GI) to study bone disease in GI disorders; and with Children’s Hospital of Pittsburgh to study mitochondrial diseases in children. Extramurally, Fred Toledo is a member of the Steering and Executive Committee of a multi-center trial to study a new therapy to prevent type 1 diabetes. He is a site PI for an ongoing multi-center clinical study funded by the NIH to determine the long-term effects of bariatric surgery on diabetes. He also has ongoing collaborations with the Mayo Clinic and the Florida Hospital on several studies of human insulin resistance. Locally, he is collaborating with Allegheny Health Network as a site PI for a clinical trial of a new medication for type 2 diabetes and with the Veterans Affairs Hospital on energy metabolism studies.

Vijay Yezhoor, MD, has similarly worked with many investigators across the country, with many collaborations resulting in grant submissions to the NIH, DOD, or AHA. Some of these partnerships include research with Dr. Ke Ma (City of Hope, Duarte, CA) on circadian clock regulation of metabolism in skeletal muscle, fat, liver, heart and islets; with Dr. Ben Shih (City of Hope, Duarte, CA) on Tead1 regulation of pancreatic progenitors; with Dr. Antoni Paul (Albany Medical Center, Albany, NY) on circadian regulation of atherosclerosis; with Dr. Mariana Figuero (RPI, Troy, NY) on circadian regulation of metabolism; with Dr. Lans Taylor (Drug Discovery
institute) as a Co-Investigator on a UG3/UH3 NIDDK grant for developing microphysiological systems to replicate human physiology and model T2D; with Dr. Peter Rubin and Dr. Lauren Kokai (Plastic Surgery) to study the role of Tead1 in human adipocyte biology; with Dr. Mousumi Moulik (Pediatric Cardiology) on the role of Tead1 in heart function and adaptation; with Dr. Randall Brand (GI) to study pancreatic cancer biology.

**Faculty Research Interests and Activities**

Erin E. Kershaw, MD  Division Chief

Dr. Kershaw’s research interests focus on advancing the understanding and treatment of obesity and related metabolic disorders by combining basic and translational research with clinical expertise. Obesity is a global public health threat that is frequently associated with additional metabolic abnormalities, including insulin resistance, glucose intolerance, dyslipidemia, and hypertension (the metabolic syndrome). Together, these abnormalities contribute to diseases affecting virtually every organ system. Dr. Kershaw’s laboratory focuses on defining the mechanisms by which intracellular lipid metabolism (synthesis, storage, hydrolysis, and oxidation) contributes to obesity and associated metabolic disorders. Most recently, Dr. Kershaw’s research efforts have centered on pathways of triacylglycerol hydrolysis (lipolysis)—arguably one of the most fundamental processes in metabolism. Dr. Kershaw is working to define how tissue-specific triacylglycerol hydrolysis contributes to metabolic phenotypes, not only in the metabolic syndrome, but also in variety of other diseases ranging from infertility to cancer. Another major focus of her laboratory is to identify and characterize additional proteins and pathways that contribute to metabolic disease. These efforts fall into two main areas: 1) characterizing novel adipocyte-secreted factors (adipokines) and their relationship to metabolic disease in humans, and 2) characterizing novel genes/loci linked to metabolic disease in humans. Dr. Kershaw’s laboratory uses a combination of molecular, cellular, physiological, and translational approaches. The ultimate goal is to develop more effective strategies for prevention and treatment of obesity and associated metabolic disorders.

**Study Sections**

- Standing Member, NIH DDK-B Study Section, 2017-present
- Ad Hoc Reviewer, NIH Special Emphasis Panel ZRG1 CADO-B (90) S, 2017

**Advisory Committee Memberships and Leadership Positions**

- Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2008-present
- Interviewer, Internal Medicine Residency Program, 2008-present
- Associate Program Director for Research, Clinical Fellowship in Endocrinology and Metabolism, 2013-present
- Member, Clinical Competency Committee, Clinical Fellowship in Endocrinology and Metabolism, 2013-present
- Member, Training and Oversight Committee, T32 Training Program in Endocrinology and Metabolism, 2013-present
- Organizer, Research in Progress for Division of Endocrinology, 2013-present
- Member, Data Safety Monitoring Board, NIH/NCATS 1UH3TR001372-01, 2015-present
- Member, Session Planning Committee, American Diabetes Association Scientific Sessions, 2016-2018
- Endocrine Clinical Champion, Path Towards a Learning Health System (PaTH) Network, component of PCORI Clinical Data Research Networks (CDRNs), 2016-present
approaches. The ultimate goal is to develop more effective strategies for prevention and treatment of metabolic disease in humans, and 2) characterizing novel genes/loci linked to metabolic disease in humans. These efforts fall into other diseases ranging from infertility to cancer. Another major focus of her laboratory is to identify and characterize additional proteins and pathways that contribute to metabolic disease. These efforts have centered on pathways of triacylglycerol hydrolysis (lipolysis)—arguably one of the most abnormalities contribute to diseases affecting virtually every organ system. Dr. Kershaw's laboratory focuses on defining the mechanisms by which intracellular lipid metabolism (synthesis, storage, hydrolysis, and resistance, glucose intolerance, dyslipidemia, and hypertension (the metabolic syndrome). Together, these are a public health threat that is frequently associated with additional metabolic abnormalities, including insulin resistance, obesity, and type 2 diabetes. Dr. Kershaw's research interests focus on advancing the understanding and treatment of obesity and related diseases.

Erin E. Kershaw, MD
Faculty Research Interests and Activities

- Clinical Leader, Lipid Unit, Division of Endocrinology, UPMC, 2016-present
- Representative for Diabetes/Endocrinology, UPMC Clinical Genomic Initiative Working Group, 2016-present
- Search Committee Member, MWRI Ovarian Biology, Pittsburgh PA, 2017-2018
- Member, Internal Scientific, Enrichment, and Outreach Committee, Healthy Lifestyles Institute, University of Pittsburgh, 2017-present
- External Advisory Board Member, Austrian Science Foundation (FWF) Special Research Programs (SFB), 2019-2024

Professional Affiliations and Society Memberships

- Member, Pittsburgh Lipid Club, 2016-present
- Participant, UPMC Physician Leadership Essentials Course, University of Pittsburgh Medical Center, 2018-2019

Editorships


Major Lectureships and Seminars

- Invited Speaker, MSTP Research Symposium, University of Pittsburgh, 2018
- Invited Speaker, Obesity and Diabetes Seminar Series, Touchstone Diabetes Institute, University of Texas, 2018
- Invited Speaker, Endocrinology Grand Rounds, Division of Endocrinology, University of Texas Southwestern, 2018
- Invited Speaker, Jeff Flier Aventures in Metabolism Symposium, Beth Israel Deaconess Medical Center and Harvard Medical School, 2018

Archana Bandi, MD

Dr. Bandi is interested in the use of telehealth clinical care delivery models, particularly for the delivery of diabetes care, within the Veterans Administration Healthcare System. She has successfully implemented numerous telehealth programs for veterans and their families across Western Pennsylvania. To determine the programs’ overall effectiveness, Dr. Bandi assesses clinical outcomes, quality measures, and patient satisfaction related to the use of these telehealth models. In addition to continuously improving telehealth services, Dr. Bandi contributes to the training of future generations of endocrinologists in the use of telehealth clinical care delivery models.

Advisory Committee Memberships and Leadership Positions

- Director, Telehealth Services, Veterans Administration Healthcare System, 2018-2019
- Panel Member, UPMC Multidisciplinary Thyroid Cancer Symposium, 2018

Sue M. Challinor, MD

Dr. Challinor seeks to improve the understanding and treatment of neuroendocrine and adrenal disorders. To address these complex problems, she collaborates with members of the multidisciplinary neuro-
endocrinology and adrenal centers, which include neuroendocrinologists, neurosurgeons, otolaryngologists, endocrine surgeons, radiologists, radiation oncologists, ophthalmologists, and pathologists. Her scholarly work has included: 1) the analysis of outcomes following endonasal surgery for pituitary disease (i.e., Cushing’s disease, acromegaly, other pituitary tumors), 2) improving the use and diagnostic accuracy of bilateral adrenal venous sampling to distinguish among different causes of Cushing’s syndrome (i.e., ACTH-independent bilateral macronodular adrenal hyperplasia versus unilateral functioning adenoma in patients with bilateral adrenal masses), and 3) characterizing genetic influences on the natural history and treatment of endocrine neoplasia. Dr. Challinor also contributes to the education of medical trainees at all levels.

**Advisory Committee Memberships and Leadership Positions**
- Clinical Leader, Neuroendocrine Unit, Division of Endocrinology, UPMC, 2016-2019
- Director, Pituitary Unit/Program, Division of Endocrinology, UPMC, 2014-2019
- Interviewer, Internal Medicine Residency Program, 2018-2019

**Honors and Awards**
- Honoree, Best Doctors in America, 2015-present
- Named, Best Doctor Honoree (Endocrinology), Pittsburgh Best Doctors, *Pittsburgh Magazine*, 2019

**Alexandra N. Clark, MD**
Dr. Clark’s research interests focus on improving the understanding and treatment of endocrine disorders, particularly those that impact veterans and their families within the Veterans Administration Healthcare System. To address these important issues, Dr. Clark uses the rich data repository and unique features of the Veterans Administration Healthcare System to assess clinical outcomes, quality measures, and patient satisfaction resulting from different healthcare delivery models and medical approaches. Dr. Clark’s scholarly work has included evaluation of the diagnosis and treatment of hypogonadism and how to standardize those practices and the impact of testosterone prescribing practices on cardiovascular outcomes. She also serves as a scholarly project mentor for trainees in the field of endocrinology and metabolism.

**Professional Affiliations and Society Memberships**
- Member, Veterans Administraton Pittsburgh Health System Grant, 2017-present
- Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019

**Major Lectureships and Seminars**
- Invited Speaker, SNMA and LMSA Event, University of Pittsburgh School of Medicine, 2018

**Ronald A. Codario, Jr., MD**
Dr. Codario’s scholarly work has included evaluation of 1) the clinical effectiveness of U-500 insulin in the inpatient and outpatient setting, 2) the impact of testosterone prescribing practices on cardiovascular outcomes, and 3) the benefits of an inpatient IV bisphosphate therapy protocol for patient with hip fracture. Dr. Codario also serves as a scholarly project mentor for trainees in the field of endocrinology and metabolism.

**Professional Affiliations and Society Memberships**
- Member, VA Pittsburgh Veterans Research Foundation, Medical Education and Patient Safety Grant, 2017-present
• Member, Clinical Competency Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019

Major Lectureships and Seminars
• Lecturer, VAPHS Primary Care Teleconference, 2018
• Lecturer, UPMC Internal Medicine Residency Noon Conference, 2018
• Lecturer, VAPHS Primary Care Noon Conference, 2018
• Invited Speaker, UPMC Department of Medicine Grand Rounds, 2018
• Invited Speaker, VA Pittsburgh Healthcare System Women’s Health Spring Update, 2019

Frederick R. DeRubertis, MD
Dr. DeRubertis’s academic/scholarly interests focus on medical education. Dr. DeRubertis taught medical students, medical residents, endocrine fellows, and practicing physicians via multiple venues. For more than 30 years, he co-directed the Endocrine Disorder Course for second-year medical students at the University of Pittsburgh School of Medicine. His excellence in teaching has been recognized by the Endocrine Fellows who selected him as teacher of the year for nine consecutive years. He has co-directed for more than 20 years the annual Update in Internal Medicine Course, which is the Department of Medicine’s flagship Continuing Medical Education course for practicing physicians. He directed the twice-monthly Chief of Medicine Conference at VAPHS, a case-based grand rounds type of didactic sessions attended by medical students, residents, and staff physicians.

Advisory Committee Memberships
• Chairman, Committee for Promotion and Appointments, Department of Medicine, University of Pittsburgh, 1990-present

Honors and Awards
• Fellow, American College of Physicians, 1973-present

Krystle A. Frahm, PhD
Dr. Frahm researches how endogenous and exogenous factors disrupt hypothalamic function resulting in physiological and behavioral consequences. Current studies are primarily focused on a novel human obesity risk variant and determining how it regulates energy homeostasis and stress responses in a sex-specific manner.

Advisory Committee Memberships and Leadership Positions
• Abstract Reviewer, American Diabetes Association Scientific Sessions, 2018

Honors and Awards
• Recipient, Early Investigator Award, The Endocrine Society, 2018

Mara Horwitz, MD
Dr. Horwitz focuses on metabolic bone disease with a primary interest in the interaction of parathyroid hormone (PTH) and parathyroid hormone-related peptide (PTHrP) on mineral homeostasis, the skeleton, and vitamin D metabolism. This work has evolved to include NIH-sponsored clinical studies in osteoporosis, humoral hypercalcemia of malignancy, and hyperparathyroidism, as well as lactation and its calcitropic/skeletal biology in both Caucasians and African Americans. Dr. Horwitz has also collaborated on numerous osteoporosis and epidemiology studies with epidemiologists at the University of Pittsburgh Graduate School of Public Health.
Michael J. Jurczak, PhD

Dr. Jurczak’s research interests focus on the relationship between nutrient excess, mitochondrial overload and the pathogenesis of metabolic diseases, such as fatty liver, insulin resistance and type 2 diabetes. Mitochondrial dysfunction and ectopic lipid accumulation in liver are both associated with insulin resistance in human subjects, but the cause and effect nature of these associations remain unclear. Dr. Jurczak’s lab focuses specifically on a mitochondrial repair mechanism called mitophagy that regulates the selective removal of damaged mitochondria via the autophagosomal pathway. Because autophagy is suppressed in mouse models of obesity and fatty liver disease, it is likely that mitophagy is similarly impaired and may contribute to the decline in mitochondrial function seen in human patients. Interestingly, a key component of the mitophagy pathway, a ubiquitin E3 ligase called Parkin, is upregulated in liver of obese mice. This change may represent a compensatory response to remove damaged mitochondria from hepatocytes or result directly from the loss of autophagy. Dr. Jurczak’s group is using a genetic approach to test whether the loss of Parkin-mediated mitophagy in liver predisposes mice to mitochondrial dysfunction, ectopic lipid accumulation and insulin resistance. The lab utilizes in vivo and ex vivo approaches in transgenic mouse models and specializes in using radioactive and stable metabolic isotopes to measure substrate turnover and flux.

Study Sections
Dr. Michael Jurczak's research focuses on mitochondrial dysfunction and mitophagy. The key component of the mitophagy pathway, a ubiquitin E3 ligase called Parkin, is upregulated in liver of obese mice models and specializes in using radioactive and stable metabolic isotopes to measure substrate flux and ectopic lipid accumulation and insulin resistance. The lab utilizes in vivo and ex vivo approaches in transgenic hepatocytes or result directly from the loss of autophagy. Dr. Jurczak's group is using a genetic approach to study the relationship between nutrient excess, mitochondrial overload and the pathogenesis of metabolic diseases, such as fatty liver, insulin resistance and type 2 diabetes. Mitochondrial dysfunction and impaired and may contribute to the decline in mitochondrial function seen in human patients. Interestingly, a similar association remains unclear. Dr. Jurczak's lab focuses specifically on a mitochondrial repair mechanism, the autophagosomal pathway. Because autophagy is necessary for the selective removal of damaged mitochondria via the mitophagy process, the cause and effect nature of these associations remains unclear.

**Advisory Committee Memberships and Leadership Positions**

- Co-Director, Animal Physiology Core, Center for Metabolism and Mitochondrial Medicine (C3M), 2015-present
- Member, Ad Hoc Programmatic Review Panel, Peer-Reviewed Medical Research Program, Department of Defense, 2016-2018
- Abstract Reviewer, Judge, Department of Medicine Research Day, 2016-present
- Director, Rodent Phenotyping, Center for Metabolism and Mitochondrial Medicine (C3M), 2018-present
- Member, Session Planning Sub-Committee, Insulin Action/Molecular Metabolism, American Diabetes Association Scientific Sessions, 2018-2019
- Session Chair, American Diabetes Association Scientific Sessions, San Francisco, CA, 2019
- Abstract Reviewer, American Diabetes Association Scientific Sessions, San Francisco, CA, 2019

**Editorships**


**Major Lectureships and Seminars**

- Invited Speaker, Division of Endocrinology, Yale University School of Medicine, New Haven, CT, 2019
- Invited Speaker, Keystone Symposium, Mitochondrial Biology in Heart and Skeletal Muscle, Keystone, CO, 2019
- Invited Speaker, Center for Metabolism and Mitochondrial Medicine Whiteboard Series, University of Pittsburgh, 2019

**Honors and Awards**

- Recipient, Pittsburgh Liver Research Center Pilot Award, University of Pittsburgh, Pittsburgh, PA, 2018

**Esra Karslioglu-French, MD**

Early in her career, Dr. Karslioglu-French's research focused on the fundamental cellular mechanisms controlling beta cell function and proliferation under the mentorship of Dr. Andrew Stewart. She simultaneously developed protocols for improving glycemic management in the hospital. More recently, she has expanded her scholarly work related to diabetes care by improving care protocols and medication use via her role on the Diabetes Patient Safety committee. She has also been instrumental in developing and evaluating electronic, telehealth, and other modern strategies for delivery of endocrine care.

**Advisory Committee Memberships and Leadership Positions**

- Medical Director, UPMC Center for Diabetes and Endocrinology, 2017-present
- Co-Leader, UPMC Inpatient Diabetes Safety Committee, 2017-present
- Co-Leader, Endocrinology Quality and Value Program, 2017-present
- Organizer, Multidisciplinary Thyroid Cancer Conference, 2017-present
- Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019
Mary T. Korytkowski, MD

Dr. Korytkowski’s research interests focus on improving inpatient and outpatient care and outcomes of people with diabetes. In the outpatient and hospital settings, Dr. Korytkowski serves as co-investigator and study physician for the NIH-sponsored Look AHEAD Study, which is examining long-term cardiovascular outcomes in individuals with type 2 diabetes who are randomly assigned to intensive versus conventional lifestyle intervention. She is co-investigator on an NIH-funded clinical trial investigating the efficacy of CPAP therapy for obstructive sleep apnea on outcomes in people with type 2 diabetes. She is also a co-investigator on studies being pursued collaboratively with Dr. Helgeson at Carnegie Mellon University that explore relationship dynamics in couples affected by diabetes. In the inpatient setting, Dr. Korytkowski has focused on initiatives that investigate specific glycemic management strategies in hospitalized patients with diabetes, such as those admitted with DKA. Recent studies have focused on investigating impaired hypoglycemia awareness in hospitalized patients as a risk for severe hypoglycemia, and on factors that may increase risk for early hospital readmission in patients with diabetes.

Advisory Committee Memberships and Leadership Positions

- Chair, UPMC Diabetes Patient Safety Committee, 2001-present
- Member, Subspecialty Board Committee for Endocrinology and Metabolism, American Board of Internal Medicine, 2014-present
- Clinical Leader, Quality/Value Program, Division of Endocrinology, UPMC, 2016-present
- Member, UPMC Leadership Council, 2016-present
- Member, Training and Oversight Committee, T32 Training Program in Endocrinology and Metabolism, 2016-present
- Associate Program Director for Quality, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019
- Member, Clinical Competency Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019
- Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019

Professional Affiliations and Society Memberships

- Affiliated Faculty, Pitt Healthy Lifestyle Institute, 2018

Editorships

- Ad Hoc Reviewer, Multiple journals (Journal of the American Medical Association, Annals of Internal Medicine, Diabetes, Diabetes Care, Journal of Clinical Endocrinology, Metabolism, Mayo Clinic Proceedings, New England Journal of Medicine), 2016-present

Major Lectureships and Seminars

- Invited Speaker, UPMC Multidisciplinary Thyroid Cancer Conference, 2018
• Invited Speaker, National American College of Physicians Meeting, 2019
• Invited Speaker, American Diabetes Association Clinical Conference, 2019

Honors and Awards
• Named, Best Doctor Honoree, Best Doctors in America, 2009-2018
• Named, Top Doctor Honoree (Endocrinology), Castle Connolly’s America’s Top Doctors, 2005-2018
• Named, Best Doctor Honoree (Endocrinology), Pittsburgh Best Doctors, Pittsburgh Magazine, 2000-present

Jeongkyung Lee, PhD
Dr. Lee is interested in improving the understanding and treatment of diabetes with an emphasis on how biological clock disruption influences metabolism and pancreatic islet function.

Shane Otto LeBeau, MD
Dr. LeBeau’s research interests focus on thyroid, parathyroid, pituitary, and adrenal disorders. He serves as the Co-Director of the UPMC/UPCI Multidisciplinary Thyroid Center, which provides patients access to streamlined care from specialists in endocrinology, surgery, radiology, and pathology during a single visit. He is an active member of the Endocrine Society, as well as the American Thyroid Association. He has been recognized as one of "Pittsburgh's Best Doctors" and has been listed among America's "Best Doctors" annually since 2007.

Advisory Committee Memberships and Leadership Positions
• Member, Fellow Evaluations Review Committee, Clinical Fellowship in Endocrinology and Metabolism, 2011-2018
• Clinical Leader, Thyroid Unit, Division of Endocrinology, UPMC, 2016-2018
• Director, University of Pittsburgh Medical Student III/IV Inpatient Clinical Elective, 2017-2019

Honors and Awards
• Named, Best Doctor Honoree, Best Doctors in America, 2007-2018
• Named, Best Doctor Honoree (Endocrinology), Pittsburgh Best Doctors, Pittsburgh Magazine, 2007-2018

Helena E. Levitt, MD
Dr. Levitt’s scholarly interests focus on clinical endocrine genetics. She is an expert in the evaluation and management of patients with endocrine disorders due to rare and common genetic mutations. She leads the multidisciplinary endocrine genetics clinic and supervises teaching activities in this area.

Advisory Committee Memberships and Leadership Positions
• Member, UPMC Health Plan Pharmacy and Therapeutics Committee, UPMC, 2012-present
• Program Director, Endocrine Clinical Genetics Program, 2016-present

Honors and Awards
• Named, Best Doctor Honoree (Endocrinology), Pittsburgh Best Doctors, Pittsburgh Magazine, 2019

Ruya Liu, MD, PhD
Dr. Liu’s research interests focus on understanding the role of the HIPPO pathway in the etiology of
endocrine and metabolic diseases, with a current emphasis on cardiac muscle and pancreatic beta-cells.

**Editorships**
- Ad Hoc Reviewer, Multiple journals (Acta Oto-Laryngologica, Medicine (Baltimore), Apoptosis, Cellular and Molecular Biology, Cellular Physiology and Biochemistry), 2015-present

**Milay Luis Lam, MD**
Dr. Luis Lam focuses on the evaluation and management of obesity and its complications.

**Hussain Mahmud, MD**
Dr. Mahmud serves as the Associate Program Director of the endocrinology fellowship program and is actively involved in the division’s educational activities and clinical training of endocrinology fellows and internal medicine residents. He also gives lectures to medical students as part of the Endocrine Disorders Course.

**Major Lectureships and Seminars**
- Invited Speaker, UPMC Shadyside Internal Medicine Grand Rounds, 2018
- Invited Speaker, Social Medicine Study Group, University of Pittsburgh School of Medicine, 2018
- Invited Speaker, UPMC Mercy Grand Rounds, 2018

**Honors and Awards**
- Diplomate, American Board of Obesity Medicine, 2019

**Pooja Manroa, MD**
Dr. Manroa’s research interests focus on thyroid disease and thyroid cancer.

**Advisory Committee Memberships and Leadership Positions**
- Associate Program Director, Quality Program, Division of Endocrinology, University of Pittsburgh, 2017-present
- Co-Leader, Quality/Value Program, Division of Endocrinology, 2017-present
- Panel Participant, UPMC Thyroid Cancer Symposium, 2018

**Sann Yu Mon, MD**
Dr. Mon’s scholarly work focuses on the general medical and endocrine care of patients in underserved communities.

**Advisory Committee Memberships and Leadership Positions**
- Chief, Division of Endocrinology and Metabolism, UPMC McKeesport Hospital, 2018-present

**Major Lectureships and Seminars**
- Invited Speaker, Internal Medicine Grand Rounds, UPMC McKeesport, 2018
- Invited Speaker, UPMC McKeesport Family Medicine Residence Conference, 2018
- Invited Speaker, Family Medicine Refresher Course, UPMC McKeesport, 2019

**Honors and Awards**
- Diplomate, American Board of Obesity Medicine, 2018
- Elected, Fellow of American College of Endocrinology, 2019

**Elena M. Morariu, MD**
Dr. Morariu focuses on endocrinopathies secondary to other medical disorders. She has been involved in
the Diabetes Sleep Treatment Trial at University of Pittsburgh and the VAPHS investigating the impact of CPAP treatment on glycemic control in patients with type 2 diabetes and obstructive sleep apnea.

Advisory Committee Memberships and Leadership Positions
- Course Director, Multidisciplinary Thyroid Cancer Conference, 2017-present

Major Lectureships and Seminars
- Invited Speaker, UPMC Thyroid Cancer Symposium, 2018

Jason M. Ng, MD
Dr. Ng's research interests focus on the improvement of care delivery and multidisciplinary models in diabetes mellitus management, as well as understanding the pathophysiology underlying insulin resistance in skeletal muscle and adipose tissue.

Advisory Committee Memberships and Leadership Positions
- Director, Multidisciplinary Diabetes Clinic, Division of Endocrinology, UPMC, 2013-present
- Clinical Leader, Diabetes Technology and Diabetes Medical Home, Division of Endocrinology, UPMC, 2016-present
- Member and Chair, Diabetes Task Force, Division of Endocrinology, UPMC, 2016-present

Major Lectureships and Seminars
- Invited Speaker, Department of Medicine Update in Internal Medicine, 2018
- Invited Speaker, Department of Medicine Clinical Leadership Meeting, UPMC, 2018
- Invited Speaker, UPMC Health Plan Leadership Meeting, UPMC Health Plan, 2018
- Invited Expert Interviewee, Diabetes and Pre-Diabetes, Reader's Digest, 2018
- Invited Expert Interviewee, Halloween Glucose Fluctuations, NBC News Today Show, 2018
- Invited Speaker, UPMC Shadyside Medicine Grand Rounds, 2019
- Invited Expert Interviewee, Experimental Phone Apps with Insulin Pumps, Reuters, 2019

Honors and Awards
- Recipient, NACCME Grant (Samiel Dagogo-Jack, MD), Endocrine Grand Rounds, 2019

Robert M. O'Doherty, PhD
For nearly 25 years, Dr. O'Doherty has focused on the association between states of over-nutrition and resulting metabolic disturbances, most notably obesity, NAFLD, and type 2 diabetes. In this arena, he utilizes metabolic, physiological, biochemical, molecular, and immunological approaches in a range of models, notably the mouse and rat, as well as primary tissue culture and immortal cell lines. The main focus of his current research is immunometabolism, or the immune system's role in regulating metabolism.

Study Sections
- Ad Hoc Reviewer, NIH Study Section (Various), 2004-present

Advisory Committee Memberships and Leadership Positions
- Director, T32 Training Program in Endocrinology and Metabolism, 2013-present
- Co-Director, Center for Metabolism and Mitochondrial Medicine, 2014-present
- Member, Department of Medicine PhD Task Force, 2015-present
- Member, T32 External Advisory Board, Mayo Clinic, 2016-present
- Reviewer, Portuguese Diabetes Association Annual Meeting, 2017-2018
- Member, External Advisory Board, European Training Network FOIE GRAS Project (NAFLD), 2017-2018
Sadeesh Ramakrishnan, DVM, PhD
Dr. Ramakrishnan is investigating how temporal expression of HIF regulates numerous pathways involved in physiological adaptive response required to survival under low oxygen conditions (the same mechanism can be detrimental if activated chronically). This interesting biology of HIF signaling in the pathophysiology of various disease made him choose his research area in investigating the role of HIF in NAFLD. Dr. Ramakrishnan has demonstrated that chronic activation of hepatic hypoxia signaling induces dyslipidemia leading to steatohepatitis with a particular interest in the zonal steatosis in the pathogenesis of NAFLD. Moreover, activation of HIF in the intestine improves glucose homeostasis in a GLP-1 dependent manner. Dr. Ramakrishnan is currently investigating how intestinal HIF signaling regulates enteroendocrine cells in the intestine. The overarching goal of his research program is to determine the therapeutic value of targeting HIF in a tissue-specific manner in promoting metabolic health.

Study Sections
- Grant Reviewer, CTSI Pilot Program, University of Pittsburgh, 2018-2019

Advisory Committee Memberships and Leadership Positions
- Judge, Department of Medicine Research Day, University of Pittsburgh, 2019
- Judge, BGSA Symposium, University of Pittsburgh, 2019

Editorships
- Ad Hoc Reviewer, Digestive Diseases and Sciences, 2018-2019
- Ad Hoc Reviewer, Journal of Cellular Biochemistry, 2018-2019

R. Harsha H. Rao, MD
Dr. Rao’s research interests focus on improving the understanding and treatment of endocrine disorders, particularly those that impact veterans and their families within the VAPHS. His scholarly work has included evaluation of 1) the clinical effectiveness of U-500 insulin in the inpatient and outpatient setting, 2) the impact of testosterone prescribing practices on cardiovascular outcomes, and 3) the benefits of an inpatient IV bisphosphonate therapy protocol for patients with hip fracture. Dr. Rao also serves as a scholarly project mentor for trainees in the field of endocrinology and metabolism.

Advisory Committee Memberships and Leadership Positions
• Chief, Division of Endocrinology, Veterans Administration Healthcare System, Pittsburgh PA, 2000-present

David A. Rometo, MD
With an emphasis on generating effective programs for the "real world" clinical setting, Dr. Rometo seeks to improve the understanding and treatment of obesity and related metabolic disorders. He is currently the Clinical Leader for the Medically-Supervised Weight Loss and Obesity Medicine Program in the Division of Endocrinology. In this role, he has developed several innovative clinical programs intended to promote health and prevent disease in overweight or obese patients. Among these initiatives are a program focused on reversing diabetes and other metabolic complications of obesity (i.e., the Disease Remission in Obesity Program or "DROP"); a medically supervised very low calorie diet program, (i.e., Opti-fast Program); and a post-bariatric surgery diabetes and weight management program. To determine the overall effectiveness of these clinical care models, he assesses clinical outcomes, quality measures, cost effectiveness, and patient satisfaction. In addition, he has a significant role in training in the field of obesity medicine at UPMC.

Advisory Committee Memberships and Leadership Positions
• Clinical Leader, Obesity Medicine and Weight Management Unit, Division of Endocrinology, UPMC, 2016-present
• Member, Board of Directors, Greater Pittsburgh Diabetes Club, 2017-present

Major Lectureships and Seminars
• Lecturer, UPMC Mercy Medical Grand Rounds, 2018
• Lecturer, PA Academy of Family Physicians, 2018
• Lecturer, ASMBS (Obesity Week) Meeting, 2018
• Invited Speaker, Pitt Student Health, University of Pittsburgh, 2018-2019
• Invited Speaker, UPMC Presbyterian Resident Lecture Series, 2018-2019
• Invited Speaker, UPMC Shadyside Resident Lecture Series, 2018-2019
• Invited Speaker, VA Pittsburgh Healthcare System Resident Lecture Series, 2018-2019

Yusuke Sekine, PhD
Dr. Sekine’s research interests focus on understanding molecular mechanisms that underlie cellular responses to a variety of stresses, including oxidative, endoplasmic, and metabolic stresses. Using biochemical and cell genetic approaches, his lab is studying acetyl-CoA fluctuation-dependent functional changes of organelles (including nucleoli, mitochondria, and lysosomes) and the activation of organelle-associated signaling pathways. His team is working to understand the sensing mechanisms of metabolite fluctuations in mammalian cells and to reveal their relevance to human diseases and aging.

Professional Affiliations and Society Memberships
• Member, The Molecular Biology Society of Japan, 2004-present
• Member, The Japanese Biochemical Society, 2005-present

Karen L. Selk, DO
Dr. Selk is researching how to improve the understanding and treatment of dyslipidemias. She is currently involved in industry-sponsored research to evaluate new therapies for severe hypertriglyceridemia in patients at high risk for pancreatitis.

Advisory Committee Memberships and Leadership Positions
Linda M. Siminerio, RN, PhD

Dr. Siminerio’s research interests focus on the translation of evidence-based practice into clinical and community settings with a concentration on improving access and quality to diabetes self-management and care. Projects have spanned a broad array of initiatives that include, but are not limited to: (1) evaluating care models in primary care; (2) implementing telemedicine to deliver diabetes specialty care to underserved communities; (3) using technological approaches to enhance shared decision making; (4) developing initiatives to improve the care and education of the hospitalized patient with diabetes; and (5) interventions that address the behavioral and psychosocial needs associated with chronic disease management. Additionally, Dr. Siminerio has collaborated with other faculty to develop and validate diabetes databases, including a national registry to monitor diabetes behavioral and education outcomes for the American Diabetes Association. As a nationally-recognized expert on self-management education and care delivery models in both pediatric and adult populations, she serves as the Principal Investigator on numerous studies that have garnered the attention of both governmental and non-governmental organizations, nationally and internationally. Knowledge gained from this line of study has led to the implementation of diabetes quality efforts in underserved global communities and the U.S. military as well as policy changes affecting reimbursement practices.

Study Sections

- Grant Reviewer, NIDDK Study Section for R-34 Diabetes, 2018-2019

Advisory Committee Memberships and Leadership Positions

- Member, UPMC Mercy Diabetes Patient Safety Committee, 2018-present
- Co-Chair, Type 1 Diabetes Program for Endocrine Fellows, Endocrine Society Annual Meeting, Chicago, IL, 2013-present
- Member, Leadership Group, DPP State-wide Coordinating Collaborative, Health Promotion Council’s PA Community Clinical Integration Initiative, 2016-present
- Member, Emeritus Council, American Diabetes Association, 2017-present
- Member, Heritage Council, American Diabetes Association, 2017-present
- Member, Promotions Committee, Department of Medicine, University of Pittsburgh, 2017-present
- Member, Advisory Board, American Diabetes Association, National Diabetes Prevention Program, 2018-2019
- Committee Member, Consensus Statement on Diabetes Self-Management Education, American Diabetes Association, 2019

Editorships

- Associate Editor, Clinical Diabetes and Endocrinology, 2014-present

Major Lectureships and Seminars

- Invited Speaker, PA American Association of Diabetes Educators (PA-AADE) State Meeting,
Bedford, PA, 2018

- Invited Speaker, Endocrine Society Annual Meeting, Chicago, IL, 2018
- Invited Speaker, American Association of Diabetes Educators, Indianapolis, IN, 2018-2019
- Invited Keynote Speaker, California Diabetes Foundation, 2019
- Invited Speaker, Principles and Practical Guides for Transitions of Care, Type 1 Diabetes Program for Endocrine Fellows, Endocrine Society Annual Meeting, New Orleans, LA, 2019
- Invited Speaker, American Diabetes Association Scientific Sessions, San Francisco, CA, 2019

**Honors and Awards**

- Recipient, Pittsburgh Innovative Challenge (PINCH) Award, 2017-present

**Sandra I. Sobel, MD**

Dr. Sobel focuses on quality improvement through the use of diabetes technology, such as insulin pumps and continuous glucose monitoring devices. As part of a multidisciplinary team at the University of Pittsburgh, it was found that a peri-operative glycemic management protocol developed for same-day surgery procedures for individuals with insulin pumps was safe and effective for procedures less than 120 minutes long. In the outpatient setting, she is conducting a quality improvement study to see if a seven-day use of a continuous glucose monitoring device helps improve glycemic control in individuals with uncontrolled diabetes and reduce hypoglycemia in individuals with frequent hypoglycemia or hypoglycemic unawareness. In addition, she provides mentorship to several Internal Medicine residents and supports their interest in quality improvement initiatives, including the proper use of DKA protocol to utilization of the Certified Diabetes Educators in outpatient clinics.

**Advisory Committee Memberships and Leadership Positions**

- Member, UPMC Diabetes Patient Safety Committee, 2003-present
- Chief, Clinical Endocrinology, UPMC Mercy Hospital, 2014-present
- Member, Quality Improvement Committee, UPMC Mercy, 2016-present
- Member, Selection Committee, Updates in Internal Medicine, Department of Medicine, University of Pittsburgh, 2016-present
- Member, DSMB for ONTx Study, 2016-present
- Chair, UPMC Mercy Bylaws Committee, 2018-present
- Member, UPMC Mercy Medical Executive Committee, 2018-present
- Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019
- Course Co-Director, UPMC Updates in Internal Medicine, 2019

**Editorships**

- Peer Reviewer, *Journal of Diabetes Science and Technology*, 2016-present
- Invited Author, *Diabetes Technology: Science and Practice* (American Diabetes Association), 2018

**Major Lectureships and Seminars**

- Invited Speaker, Endocrine Society Fellows Conference, Orlando, FL, 2015-present

**Honors and Awards**

- Recipient, Pittsburgh Innovative Challenge (PINCH) Award, 2017-2019

**Maja Stefanovic-Racic, MD, PhD**

Dr. Stefanovic's investigates the mechanisms involved in the development of non-alcoholic fatty liver disease
(NAFLD), which is associated with obesity, insulin resistance and type 2 diabetes. More specifically, she has been focusing on the role of immune system, both innate and adaptive, in transitioning from simple liver steatosis (fatty liver) to liver inflammation (nonalcoholic steatohepatitis, or NASH). Results of experiments performed in animal models of obesity showed that one type of immune cell, called dendritic cells, plays a particularly important role in liver inflammation. The most intriguing question related to this finding is whether manipulation of dendritic cells could reduce inflammation in the liver and other tissues in obesity, thereby reducing the risk of developing insulin resistance and diabetes.

**Advisory Committee Memberships and Leadership Positions**
- Member, UPMC Diabetes Patient Safety Committee, 2003-present
- Program Director, Clinical Fellowship in Endocrinology and Metabolism, 2015-present
- Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2015-present
- Member, Clinical Competency Committee, Clinical Fellowship in Endocrinology and Metabolism, 2015-present

**Editorships**
- Ad Hoc Reviewer, Multiple journals (PLoS ONE, Biochemical Pharmacology, Postgraduate Medicine, Clinical Therapeutic, Pharmacology Journal, Diabetes), 2017-present

**Frederico G. Toledo, MD**
Dr. Toledo’s research interests focus on pathophysiology and treatment of insulin resistance and diabetes in humans. His clinical-translational lab employs state-of-the-art methods to measure metabolism in vivo in humans, such as clamps, IVGTTs, stable-isotope tracers, indirect calorimetry, controlled exercise testing, and tissue biopsies. His research program has been investigating the interplay between mitochondria, fuel metabolism, and insulin resistance in the context of diabetes and aging. Dr. Toledo pioneered studies that demonstrated for the first time that mitochondria change in response to lifestyle modifications in obesity and type 2 diabetes. He also researches novel treatments for diabetes and led an NIH-funded clinical study that demonstrated substantial beneficial effects of hydroxychloroquine on insulin resistance and beta cell function. His clinical research experience also includes agents such as rimonabant, vildagliptin, and AZD9668. He was a co-investigator in the TrialNet study consortium, and he participated in studies of type 1 diabetes prevention using immunomodulators.

**Study Sections**
- Grant Reviewer, Department of Defense PRMRP Research Program Study Section, 2018-2019

**Advisory Committee Memberships and Leadership Positions**
- Member, TrialNet NIH Consortium, 2004-present
- Director, Endocrinology and Metabolism Research Unit, 2013-present
- Director, Clinical Research, Center for Metabolism and Mitochondrial Medicine (C3M), 2014-present
- Member, Steering and Planning Committee, TrialNet Multi-Center Study, 2017-present
- External Scientific Consultant, NIH Consortium: TODAY (Treatment Options for Type 2 Diabetes in Adolescents and Youth) Study, 2018-2019
- External Scientific Advisor, Sanofi-Aventis, 2018-2019
- Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019
• Member, Clinical Competency Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019
• Member, Training and Oversight Committee, T32 Training Program in Endocrinology and Metabolism, 2018-2019
• Member, Subspecialty Education Committee, Internal Medicine Residency Program, 2018-2019
• Interviewer, Internal Medicine Residency Program, 2018-2019

Editorships
• Ad Hoc Reviewer, Multiple journals (Journal of Clinical Investigation, Nature Reviews, Diabetes, Diabetes Care, Diabetologia, Endocrine Reviews, Endocrinology, JCEM, FASEB J), 2017-present
• Editorial Board, Physiological Reports (Amer Phys Society), 2018-present

Major Lectureships and Seminars
• Invited Speaker, Metabolism Obesity and Diabetes Club, University of Pittsburgh, 2018-2019
• Invited Speaker, German Diabetes Center, University of Düsseldorf, Germany, 2018-2019

Jagdeesh Ullal, MD, MS
Dr. Ullal is interested in the mechanisms of microvascular dysfunction in diabetic neuropathy and microvascular complication in diabetes. He examined the effects of nitric oxide and cyclic GMP on microvascular flow in diabetes. As the clinical director of diabetes inpatient services at UPMC, he has turned his attention to researching electronic management of diabetes in the hospital and various related inpatient diabetes programs. He is also interested in the use of diabetes technology, glycemic management programs, and system-wide glycemic management on diabetes outcomes.

Advisory Committee Memberships and Leadership Positions
• Clinical Leader, Inpatient and Subspecialty Diabetes, Division of Endocrinology and Metabolism / UPMC, 2018-present

Major Lectureships and Seminars
• Lecturer, Department of Medicine Grand Rounds, 2018
• Lecturer, Reproductive Endocrinology Conference, 2019

Lauren A. Willard, DO
Dr. Willard's researches the use of telehealth clinical care delivery models for endocrine disorders, such as diabetes and thyroid disease. As the Clinical Leader of the UPMC Endocrinology Telehealth Unit, she has successfully implemented telehealth programs across Western Pennsylvania. She has also contributed to the development of new models of care that utilize telehealth resources and new technology. To determine these models' overall effectiveness, Dr. Willard assesses their clinical outcomes, quality measures, cost effectiveness, and patient satisfaction. She also is active in training future generations of endocrinologists in the use of telehealth clinical care delivery models.

Advisory Committee Memberships and Leadership Positions
• Clinical Leader, Telehealth Unit, Division of Endocrinology, UPMC, 2017-present

Major Lectureships and Seminars
• Lecturer, UPMC Mercy Resident Lecture Series, 2016-present
• Clinic Lead, Telehealth Unit, UPMC / Division of Endocrinology, 2017-present
• Invited Speaker, UPMC Susquehanna Visiting Professor Program, 2018
• Invited Speaker, 8th Annual Pennsylvania AADE Diabetes Conference, 2019
Vijay K. Yechoor, MD
Dr. Yechoor’s research interests focus on developing therapies that target beta cell mass and function in the pathogenesis of diabetes. He has a long record of external funding from the National Institutes of Health, the Veterans Administration, Juvenile Diabetes Research Foundation, and the American Diabetes Association. His currently funded projects include 1) the role of the circadian clock in beta cell stress adaptation, and 2) the role of Tead1 in the transcriptional regulation of quiescence and proliferation of beta cells. More recently, he has extended his research into adipose tissue and cardiac muscle biology.

Study Sections
• Standing Member, NIH CADO Study Section, 2017-present

Advisory Committee Memberships and Leadership Positions
• Abstract Reviewer and Judge, Department of Medicine Research Day, 2016-present
• Director, Diabetes and Beta Cell Biology Center, Division of Endocrinology and Metabolism, University of Pittsburgh, 2017-present
• Member, Fellow Selection Committee, Clinical Fellowship in Endocrinology and Metabolism, 2018-2019
• Abstract Reviewer, American Diabetes Association Scientific Sessions, San Francisco, CA, 2019

Editorships

Major Lectureships and Seminars
• Session Speaker, American Diabetes Association Scientific Sessions, San Francisco, CA, 2019
• Invited Speaker, Diabetes, Metabolism Research Center Grand Rounds, City of Hope, Duarte, CA, 2019
• Invited Speaker, Light Research Center, Rensselaer Polytechnic Institute, Troy, NY, 2019
• Invited Speaker, Division of Pediatric Endocrinology, Childrens Hospital of Pittsburgh, Pittsburgh, PA, 2019

Bokai Zhu, PhD
Dr Zhu’s lab discovered a cell-autonomous mammalian 12h-clock that runs independently from the circadian clock to regulate 12h oscillations of gene expression and metabolism. Dr. Zhu’s lab is currently investigating the regulation, as well as the physiological/pathological functions, of the 12h-clock, with an emphasis on its roles in maintaining hepatic metabolic homeostasis and preventing aging-associated diseases.

Professional Affiliations and Society Memberships
• Member, American Diabetes Association, 2018-present

Editorships
• Ad hoc reviewer, Journal of Toxicological Science, 2018-2019
• Ad Hoc Reviewer, Journal of Cell Reports, 2018-2019

Major Lectureships and Seminars
• Invited speaker, Carnegie Mellon University/University of Pittsburgh Computational Biology (CPCB), 2018
• Invited speaker, Bridgeside Point Research Forum, University of Pittsburgh, 2018
• Invited speaker, Pittsburgh Institute for Neurodegenerative Diseases, 2019
• Invited speaker, 12at12 Senior Vice Chancellor Research Seminar Series, University of Pittsburgh, 2019
• Invited speaker, Keynote, University of Pittsburgh Center for Sleep and Circadian Science Retreat, 2019

Honors and Awards
• Recipient, American Diabetes Association Junior Faculty Development Award, 2018-2021
TEACHING ACTIVITIES

The educational mission of the Division of Endocrinology is to 1) disseminate knowledge and provide training that will promote health and combat disease in endocrinology, diabetes, and metabolism, and 2) train the next generation of leaders in the field of endocrinology, diabetes, and metabolism. To achieve these goals, Division faculty contribute to teaching and mentoring of trainees at all levels, both locally and nationally.

The Division is dedicated to training the next generation of leaders in the field and, to achieve this goal, it has well-established clinical and research fellowship programs in endocrinology and metabolism. The clinical training program supports five fellows per year, selected from a pool of more than 200 highly qualified applicants annually via the National Resident Matching Program. Recent clinical fellowship graduates have secured positions at top medical centers and private practices across the country, and many have been recruited to remain at UPMC. The research training program, led by Robert O’Doherty, PhD, supports four MD or PhD fellows per year through an NIH T32, funded since 1975 and now in its 45th year. This program supports in-depth research training in the field of endocrinology and metabolism by mentors who are within or outside the Division. Division faculty also provide additional teaching and career training opportunities for these fellows, including Research in Progress conferences, grant writing workshops, summer lecture series, journal clubs, and more.

Local educational activities include formal and informal teaching and mentoring at numerous locations throughout UPMC and the University of Pittsburgh. Many of these activities focus on undergraduate students, graduate and medical students, residents, and fellows. One of the Division’s flagship courses is the Endocrine Disorders Course (MED 5222) for second-year medical students, which is co-directed by Fred DeRubertis, MD, and Mary Korytkowski, MD. The majority of Division faculty contribute to this course, which covers the physiology and pathophysiology of endocrinology, diabetes, and metabolism. As in prior years, the course was very well received, as reflected by outstanding evaluations from the students. Other medical and graduate courses involving contribution from Division faculty included Fuel Metabolism, Integrated Systems Biology–Bench to Bedside, Research Basis of Medical Knowledge, Behavioral Medicine, Developmental Mechanisms of Human Disease, Cardiovascular Epidemiology, Clinical Pharmacology, Advanced Physical Examination, and others. Educational activities for residents included clinical precepting in the inpatient and outpatient setting, participating in a variety of resident lecture series, serving as subspecialty experts at intern/resident report, and other activities.
Divisional faculty also mentored the trainees in the laboratory setting as part of the University of Pittsburgh Summer Undergraduate Research Program (Pitt SURP), the Pitt-Med Research Experience for Prematriculants Program (PREP), the Dean’s Summer Research Program, the Resident Leadership and Discovery (LEAD) Program, and the Physician Scientist Training Program (PSTP). Endocrine trainees were also supported by several extramural funding opportunities from the American Diabetes Association, the Endocrine Society, the American Heart Association, The Howard Hughes Medical Institute, the National Institutes of Health (T32), and more.

Additionally, the Division continues to build the Fred DeRubertis Educational Fund to promote education and training in the field of endocrinology, diabetes, and metabolism. The fund honors the exceptional academic contributions of Dr. DeRubertis, an outstanding clinician educator and academic leader who served the University of Pittsburgh, UPMC, and VA Healthcare System community for over four decades.

Notable educational highlights from this past year include:

**Undergraduate**

- **Erin Kershaw, MD**, served as a research mentor for Andin Fosam and Akeem Williams, who received American Diabetes Minority Undergraduate Internship Awards in 2018 and 2019, respectively.
- **Erin Kershaw, MD**, served as a research mentor for Anna Meyer, who received an Endocrine Society Summer Research Award (2019).
- **Michael Jurczak, PhD**, served as a research mentor for Moira Anderson, who received an American Heart Association Summer Undergraduate Research Award (2019).

**Medical School**

- Numerous divisional faculty contributed to courses in the School of Medicine. The Endocrine Disorders Course (MED 5222, MS2) was co-taught by Archana Bandi, MD; Heather Brooks, MD; Alexandra Clark, MD; Ronald Codario, MD; Fred DeRubertis, MD; Susan Greenspan, MD; Esra Karsioglou-French, MD; Mara Horwitz, MD; Mary Korytkowski, MD; Helena Levitt, MD; Hussain Mahmud, MD; Pooja Manroa, MD; Elena Morariu, MD; Jason Ng, MD; Harsha Rao, MD; David Rometo, MD; Sandra Sobel, MD; Maja Stefanovic-Racic, MD, PhD; and Jagdeesh Ullal, MD, MS. For the Advanced Physical Exam Course (MED5233, MS2), six divisional faculty—Alex Opata, MD; Pooja Manroa, MD; Elena Morariu, MD; Frederico Toledo, MD; and Jagdeesh Ullal, MD, MS—collaboratively taught medical students.
- **Erin Kershaw, MD**, and **Michael Jurczak, PhD**, served as research mentors in the summers of 2018 and 2019, respectively, for Anjana Murali, a medical student in the Physician Scientist Training Program at the University of Pittsburgh.
- **Vijay Yechoor, MD**, served as a research mentor for a newly matriculated MD candidate as part of the Pitt-Med Research Experience for Prematriculants Program (PREP) in the summer of 2018.
• In the summer of 2018, David Rometo, MD, served as a research mentor for MD candidate Evan Keller, who was funded by the T35 in Renal, GI, Endocrine, and Epithelial Biology to study the effectiveness of weight loss programs in the clinical setting. In the summer of 2019, Dr. Jurczak served as a research mentor for MD candidates Gillian Ahrendt and Mackenzie Moon via the above T35 mechanism to study mitochondrial biology.

• Erin Kershaw, MD, served as research mentor for Aneta Kowalski, a medical student in the Physician Scientist Training Program at the University of Pittsburgh. Under Dr. Kershaw’s mentorship, Aneta received a Howard Hughes Medical Student Research Fellowship in 2018 and again in 2019 for her project titled “Role of CREBRF and its metabolic-risk variant in cardiac metabolism and function.”

• Erin Kershaw, MD, served as research mentor for the University of Pittsburgh Scholarly Project of medical student Matt Swatski.

Postdoctoral

• Erin Kershaw, MD, served as a research mentor for Elizabeth Oczypok, MD, PhD, a resident in the Clinical Scientist Track at UPMC who was working on a project to understand the role of circulation Wnt modulators and other biomarkers in body composition and metabolic disease.

• UPMC Mercy and UPMC McKeesport faculty (Sandra Sobel, MD; Lauren Willard, DO; Munira Abbasi, MD; and Sann Mon, MD) continue to provide outstanding resident teaching at these hospitals through preceptorships, lectures, and mentoring. Dr. Mon received the Outstanding Teaching Award from the Internal Medicine Residency Program at UPMC McKeesport in recognition of her substantial contributions to education and training.

Other Notable Teaching Activities

• Maja Stefanovic-Racic, MD, PhD, continues to serve as the Program Director for the Clinical Fellowship Program in Endocrinology and Metabolism. Hussain Mahmud, MD, continues to serve as the Associate Program Director for the Clinical Fellowship Program. Pooja Manroa, MD, serves as the (Interim) Director for Quality in 2018-2019. Erin Kershaw, MD, continues to serve as the Associate Program Director for Research.

• Robert O’Doherty, PhD, continues to serve as the Principal Investigator and Director of the Research Training (T32) Program in Endocrinology and Metabolism.

• Fred Toledo, MD, continues to serve on the Subspecialty Education Committee for the Internal Medicine Residency Program, where he coordinates endocrine-specific educational activities for internal medicine residents.

• Alexandra Clark, MD, received the Dr. Frederick DeRubertis Division of Endocrinology Golden Apple Teaching Award. This award recognizes the faculty who provided exceptional teaching to clinical endocrine fellows.

• Sann Yu Mon, MD, received the Outstanding Teaching Award from the Internal Medicine Residency Program at UPMC McKeesport in December 2018

Trainee Funding

• Fosam/Kershaw: ADA-Minority Undergraduate Internship (2018)
• Kowalski/Kershaw: HHMI Med Student Research Award (2018-2020)
Clinical Fellows, FY2019

Current Fellows

Hammam Alquadan, MD
Medical School: Jordan University of Science and Technology Faculty of Medicine, Jordan
Residency: University of Arizona College of Medicine, Tucson, AZ

Sindhura Ravindra, MD
Medical School: Kasturba Medical College Manipal, India
Residency: University of Illinois College of Medicine, Champaign, IL

Vrushali Shah, MD
Medical School: Pramukhswami Medical College, India
Residency: University of Tennessee College of Medicine, Chattanooga, TN

Ramya Undamatla, MD
Medical School: Kasturba Medical College Manipal, India
Residency: Rutgers New Jersey Medical School, Newark, NJ

Margaret Zupa, MD
Medical School: Jacobs School of Medicine, Buffalo, NY
Residency: University of Pittsburgh, Pittsburgh, PA

Departing Fellows

Samina Afreen, MD
Medical School: Calcutta Medical College, India
Residency: Howard University Hospital, Washington, D.C.
Current Position: AHN Affiliated Community Endocrine Practice, Erie, PA

Mihaela Oprea, MD
Medical School: American University of Antigua, Antigua
Residency: NY Presbyterian/Queens, Weill Cornell Medical College Affiliate

Diana Pinkhasova, MD
Medical School: St. George's University, Antigua
Residency: UPMC Mercy, Pittsburgh, PA  
Current Position: Endocrinologist, UPMC Mercy, Pittsburgh, PA

Frederick Roepcke, MD  
Medical School: University of Toledo, Toledo, OH  
Residency: University of Pittsburgh, Pittsburgh, PA  
Current Position: VAPHS Hospitalist Service and Academic Endocrine Practice, Pittsburgh, PA

Shreya Subramaniam, MD  
Medical School: M.S. Ramaiah Medical College, Bangalore, India  
Residency: Lincoln Medical and Mental Health Center, Bronx, NY  
Current Position: Endocrinologist, Mather Memorial Hospital, Port Jefferson, NY

Fellow Activities

Samina Afreen, MD  
Awards  
- Obesity Medicine Travel Grant, Obesity Week 2018, Nashville, TN, August 2018  
- Certified Clinical Densitometrist, International Society for Clinical Densitometry, Pittsburgh, PA, January 2019

Mihaela Oprea, MD  
Presentations and Abstracts  
- “Assessment of Bone Health Status in Veterans Requiring Androgen-Deprivation Therapy for Prostate Cancer,” Endocrine Society Annual Meeting, New Orleans, LA, March 2019  
- “Efficacy and Safety of Pramlintide as an adjunct to Insulin U500 Therapy in Veterans with Severe Insulin Resistance,” Endocrine Society Annual Meeting, New Orleans, LA, March 2019

Awards  
- Presidential Poster Competition Award, “Erdheim-Chester Disease: A Challenging Diagnosis in a Patient with Ataxia, Osteosclerotic Bone Lesions, and a very Long-Standing History of Central Diabetes Insipidus,” Endocrine Society Annual Meeting, New Orleans, LA, March 2019

Diana Pinkhasova, MD  
Presentations and Abstracts  
- “A Rare Case of Adrenal Corticomedullary Adenoma: Coexistence of Cushing’s Syndrome and Elevated Catecholamines in a Patient with an Incidental Adrenal Mass,” Endocrine Society Annual Meeting, New Orleans, LA, March 2019
• “Glycemic Measures Preceding Hospital Discharge and 30-day Hospital Readmission in Patients with Diabetes,” American Diabetes Association Scientific Sessions, San Francisco, CA, June 2019
• “Gender Differences in Glycemic Control, Microvascular and Macrovascular Complications in Hospitalized Patients with Diabetes,” American Diabetes Association Scientific Sessions, San Francisco, CA, June 2019

Frederick Roepcke, MD

Presentations and Abstracts

• “Metformin Utilization at VAPHS: An Exploratory Study,” Department of Medicine Research Day, Pittsburgh, PA, April 2019

Shreya Subramaniam, MD

Presentations and Abstracts

• “The Importance of Screening for Prostate Cancer with PSA Surveillance during Testosterone Replacement Therapy,” Endocrine Society Annual Meeting, New Orleans, LA, March 2019
• “Novel use of Thromboelastography (TEG) to Investigate the Prothrombotic Effects of Testosterone Replacement Therapy for Androgen Deficiency established with Diagnostic Rigor,” Endocrine Society Annual Meeting, New Orleans, LA, March 2019
• “The Importance of Screening for Prostate Cancer with PSA Surveillance during Testosterone Replacement Therapy,” Department of Medicine Research Day, Pittsburgh, PA, April 2019

Awards

• Travel Award, Endocrine Fellow Series: Type 1 Diabetes Care and Management, Endocrine Society Annual Meeting, New Orleans, LA, June 2019

Postdoctoral Fellows, FY2019

Hira Ali, PhD
Mentor: Iva Miljkovic, MD, PhD
Dr. Ali’s research focuses on identifying novel biomarkers of obesity and insulin resistance in humans.

Debjani Chakraborty, PhD
Mentor: Robert M. O’Doherty, PhD
Dr. Chakraborty’s research focuses on understanding the role of free fatty acids in hepatic metabolic function, particularly in the context of obesity and non-alcoholic fatty liver disease.

Brittany G. Durgin, PhD
Mentor: Adam Straub, PhD
Dr. Durgin’s research focuses on CYB5R3 function in vascular smooth muscle cells in the context of systemic hypertension.

Lia R. Edmunds, PhD
Mentor: Michael Jurczak, PhD
Dr. Edmund’s research is focused on understanding how changes in mitochondrial quality control by
mitophagy contribute to obesity-associated hepatic steatosis and insulin resistance, as well as to understanding the mechanistic basis for reduced rates of mitophagy in fatty liver.

Daniel B. Harmon, PhD  
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Dr. Harmon’s research focuses on understanding the signals that regulate immune cell function in the liver and how they are altered in states of over-nutrition.

Jitendra S. Kanshana, PhD  
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Dr. Kanshana’s research focuses on understanding the mechanisms by which a novel human obesity risk variant contributes to metabolic disease.

Joon Young Kim, PhD  
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Dr. Kim’s research focuses on the identification of physiological and molecular mechanisms underlying the differences in pathophysiology of insulin resistance between youth and adults.

Feng Li, MD, PhD  
**Mentor:** Vijay K. Yechoor, MD  
Dr. Li’s research focuses on the Tead and novel cofactors and their function in different kinds of cells, including pancreatic beta and alpha cells, and pancreatic tumor cells.

Vinny Negi, PhD  
**Mentor:** Vijay K. Yechoor, MD  
Dr. Negi’s research is focused on exploring the molecular mechanism of bromodomain containing protein (Brd2/4) in beta cell proliferation and insulin secretion.

Ping Yang, MD  
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Dr. Yang’s research is focused on establishing a human iPS in vitro differentiation model for generating beta cells from fibroblast/blood mono-nuclear cells from patients and study underlying mechanisms to optimize them.
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