

A photograph of the Baylor St. Luke's Medical Center building, a large glass skyscraper reflecting the sky and clouds. The building is the central focus of the image. In the top left corner, there is a dark blue rectangular box containing the text 'Baylor College of Medicine'. At the bottom of the image, there is a teal horizontal band containing the text '2022 ANNUAL REPORT'.

Baylor
College of
Medicine

Baylor St. Luke's
Medical Center

DEPARTMENT OF MEDICINE

2022 ANNUAL REPORT

The Margaret M. and Albert B. Alkek
DEPARTMENT OF MEDICINE
ACADEMIC ANNUAL REPORT 2022

Baylor College of Medicine

CHAIR'S MESSAGE

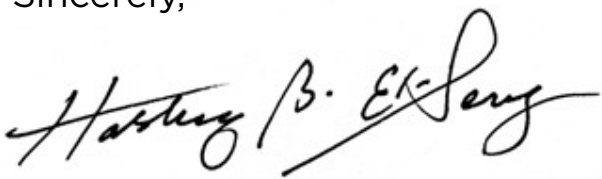
Dear Colleagues:

It is my pleasure to present to you the Department of Medicine's annual report for the year 2022. I am proud to say that we have achieved many significant milestones in the past year.

In the past year, we have made strategic investments in research, clinical care programs, medical education and training. These investments have allowed us to expand our capabilities and improve our offerings, which has resulted in a stronger competitive position for our patients, trainees and workers.

Looking ahead, we are optimistic about the future and are confident in our ability to continue delivering value to our patients and shareholders. We remain committed to innovation, integrity and excellence in our business practices and we are excited about the opportunities that lie ahead.

Sincerely,

A handwritten signature in black ink, reading "Hashem B. El-Serag". The signature is fluid and cursive, with the first name "Hashem" and last name "El-Serag" being the most prominent parts.

Hashem B. El-Serag, M.D., M.P.H.



Hashem B. El-Serag
M.D., M.P.H.

2022 ORGANIZATIONAL OVERVIEW

CHAIR

Hashem B. El-Serag, M.D., M.P.H.

OFFICE OF THE CHAIR

Vice Chair for Clinical Affairs

Vice Chair for Education

Vice Chair for Faculty and Staff Development

Vice Chair for Harris Health System/Ben Taub Hospital

Vice Chair for Quality Improvement and Innovation

Vice Chair for Research

Vice Chair for Veterans Affairs

Mandeep Bajaj, M.B.B.S.

Richard J. Hamill, M.D.

Sandra Haudek, Ph.D.

Hemant Roy, M.D.

Kyler Godwin, Ph.D.

Rolando Rumbaut, M.D., Ph.D.

Biykem Bozkurt, M.D., Ph.D.

SECTIONS

Cardiology

Cardiovascular Research

Endocrinology, Diabetes, and Metabolism

Epidemiology and Population Sciences

Gastroenterology and Hepatology

General Internal Medicine

Geriatrics and Palliative Medicine

Health Services Research

Hematology and Oncology

Immunology, Allergy, and Rheumatology

Infectious Diseases

Nephrology

Pulmonary, Critical Care and Sleep Medicine

Transition Medicine

Chief of Section

Christie Ballantyne, M.D.

Christie Ballantyne, M.D.

Mark Herman, M.D.

Christopher Amos, Ph.D.

Fasiha Kanwal, M.D., M.S.H.S.

Joslyn Fisher, M.D., M.P.H.

Aimee Garcia, M.D.

Laura Petersen, M.D., M.P.H., F.A.C.P.

Martha Mims, M.D.

Rashmi Maganti, M.D.

Thomas Giordano, M.D., M.P.H.

Wolfgang Winkelmayer, M.D., Sc.D.

Ivan Rosas, M.D.

Cynthia Peacock, M.D.

The Department of Medicine at Baylor College of Medicine is the professional home to over 1,800 professionals distributed across 14 sections. We have campus sites at Baylor St. Luke's Medical Center, the McNair Campus, Michael E DeBakey VA Medical Center, Harris Health System, Texas Children's Hospital, and the Pavilion for Women. We also have strong associations with numerous centers, programs, and organized research units. Our team is thrilled to celebrate our departmental achievements in research, patient care, and medical education and training.

THE DEPARTMENT OF MEDICINE

RESEARCH

In 2022, the research efforts of our department faculty were supported by \$120.3M in total extramural research funding including:

- \$77.2M from the NIH
- \$8.5M from the Veteran's Administration
- \$12.2M from other federal agencies
- \$17.7M from state and other non-federal sources
- \$4.7M from industry support

Two of our sections have NIH T32 grants to support research training in the fields of gastroenterology and infectious diseases.

CLINICAL CARE

Our physicians practice in Baylor St. Luke's Medical Center, the McNair Campus, Ben Taub Hospital, Michael E. DeBakey VA Medical Center and Houston Methodist Hospital. Many specialty and subspecialty services provided at these locations are nationally recognized as sites of premier clinical quality.

Patients receive state-of-the-art consultations, diagnoses and compassionate care from our world-renowned clinical staff. Our doctors specialize in diagnosing and treating various diseases ranging from heart disease, diabetes and allergies to breast cancer and cystic fibrosis. Teens with developmental disabilities transitioning into adult care receive personalized, quality care and social services through our unique Transition Medicine group.

EDUCATION

The Department of Medicine's education efforts train the next generation of leaders in medicine through medical school, graduate medical training, fellowships and internships. The Department of Medicine provides undergraduate medical education (UME) students a balance of training, exposure, and experience, which prepares them for graduate programs. Our faculty teaches two-thirds of the UME courses. Students first attend foundational sciences curriculum courses and then their clinical curriculum courses. Students choose one sub-internship, seven core clerkships and five or six clinical electives.

Students within the Internal Medicine sub-internship develop skills required for their internship. During these rotations, medical students experience increased autonomy, acting as interns supervised directly by senior residents and the attending physician. Students hone in on their history and physical skills, write orders and independently develop diagnostic and therapeutic plans. They expand their medical knowledge by using experiential and self-directed learning.

Our residencies are authorized by the Accreditation Council for Graduate Medical Education and its respective Residency Review Committees. We enroll highly competitive applicants each year and continue to match outstanding residents. Our graduates become leaders in Internal Medicine and its specialties, both academically and in clinical practice.

Beyond residency training, the Department of Medicine offers fellowships for two to four years of training in each major subspecialty, such as gastroenterology, cardiovascular disease, etc. This experience allows physicians to learn unique concepts, information and procedures for a particular subspecialty, with an opportunity to research if desired. Our department has more than 220 residents and more than 150 fellows.

Affiliations with leading research and healthcare institutions in the Texas Medical Center provide access to diverse people and resources. Our students and trainees can access numerous patients during these clerkships in various settings through our affiliation with eight leading healthcare institutions—all located in the world's largest medical center.

SECTION OF NEPHROLOGY

SECTION ACCOMPLISHMENTS

The 2022 Academic Year brought continued growth to the Section of Nephrology. This year we successfully executed several leadership transitions: Dr. Jose Perez became Clinical Service Chief at Harris Health, taking over from Dr. David Sheikh-Hamad, who capably directed this service for two decades. Dr. Kevin Erickson assumed the Medical Director role for the Riverside Dialysis Unit of Harris Health. Dr. Venkat Ramanathan became Deputy Chief of Staff at the Michael E. DeBakey VA Medical Center, which led to two additional changes: Dr. Sankar Navaneethan followed Dr. Ramanathan as Chief of the Renal Section at the VA, whereas Dr. Nidhi Aggarwal assumed the Medical Director role for the MEDVAMC Kidney Transplant Program. My deepest gratitude goes to the outgoing clinical leaders for their exemplary services. All services are considerably stronger than when they started their respective positions. In addition, Dr. Maulin Shah became Fellowship Program Director, and Dr. Sehrish Ali became Associate Program Director, important transitions in our key educational activities. In December 2021, we recruited an unprecedented seven clinical fellows into the incoming class of 2024.

All clinical pavilions far exceeded their productivity targets, which opened opportunities for new recruits to join our Section. Our faculty excelled in knowledge generation publishing >100 manuscripts and book chapters and garnering several large grants from federal funders and foundations. We had six clinical fellows graduate and are excited to have matched seven excellent candidates into our next fellowship class.

Funds were raised for two important and lasting endowed initiatives:

- Completed fundraising for the Garabed Eknayan, M.D., Endowed Professorship in Nephrology
 - » Named Dr. Sankar Navaneethan inaugural as the Garabed Eknayan Endowed Professor in May
- Launched fundraising for the William E. Mitch, M.D., Endowed Fund, which is aimed at supporting research trainees in nephrology (raised >\$125,000)
- Belatedly, we held the 2020 Garabed Eknayan, M.D., Lectureship in Nephrology in person
- Productivity gain (>10%) in Baylor Medicine, due to the establishment of a joint transplant & hepato-nephrology service at BSLMC, and new Texas Medical Center consult service
- Completed key recruitments: Drs. Akshta Pai (Assistant Professor, previously UT Houston), Elizabeth Lorenz (Associate Professor, formerly Mayo Clinic), Parth Worah (graduating fellow, BCM), and Alexandra Grant (graduating fellow, Duke University)



SECTION CHIEF
Wolfgang C. Winkelmayr,
M.D., M.P.H., Sc.D.

FACULTY

Section Leadership

- Wolfgang C. Winkelmayer, M.D., M.P.H., Sc.D., Section Chief

Clinical Leadership

- Sankar D. Navaneethan, M.D., Michael E. DeBakey VA Medical Center (MEDVAMC)
- Sai K. Saridey, M.D., TCH Pavilion for Women
- Jose J. Perez, M.D., Harris Health
- Jingyin Yan, M.D., Ph.D., Baylor Medicine and BSLMC
- Bhamidipati V.R. Murthy, M.D., BSLMC Kidney Transplant Medical Director
- Jingyin Yan, M.D., Ph.D., Medical Director, ACE DaVita Dialysis Center
- Samaya J. Anumudu, M.D., Medical Director, DaVita Home at the Museum Dialysis Center
- Medha Airy, M.D., M.P.H., Medical Director, US Renal Care Scott Street Dialysis Center
- Kevin F. Erickson, M.D., M.Sc., Medical Director, Riverside Dialysis Center
- Nila Alvaro, BSLMC McNair Campus, Kidney Health Clinic Manager

Clinical Fellowship Leadership

- Maulin K. Shah, M.D., Program Director
- Sehrish Ali, D.O., Associate Program Director
- Linda Johnston, Program Coordinator

FACULTY

Professor

- George Dolson, M.D.
- Paul E. Klotman, M.D.
- Bhamidipati V. Murthy, M.D.
- Sankar D. Navaneethan, M.D.
- Venkat Ramanathan, M.D.
- David Sheikh-Hamad, M.D.

Distinguished Professor Emeritus

- Horacio J. Adrogué, M.D.
- Garabed Eknoyan, M.D.
- William E. Mitch, M.D.

Associate Professor

- Jizhong Cheng, M.D.
- Kevin F. Erickson, M.D.
- Zhaoyong Hu, M.D.
- Jingbo Niu, M.D.
- Jenny Szu-Chin Pan, M.D.

- Jose J. Perez, M.D.
- Sai K. Saridey, M.D.
- Carl P. Walther, M.D.
- Jingyin Yan, M.D., Ph.D.

Assistant Professor

- Nidhi Aggarwal, M.D.
- Medha Airy, M.D.
- Muhammad Suleman Ajmal, M.D.
- Sehrish Ali, D.O.
- Siloe M. Alvarado, M.D.
- Samaya J. Anumudu, M.D.
- Ahmed Arslan Yousuf Awan, M.D.
- L. Parker Gregg, M.D.
- Michael W. Holliday, Jr., M.D., Ph.D.
- Deborah P. Hyink, Ph.D.
- Pascale Khairallah, M.D.
- Qingtian Li, Ph.D.
- Akshta Pai, M.D.

- Maulin K. Shah, M.D.
- Sandhya S. Thomas, M.D.
- Bryan M. Tucker, D.O.
- Chandan Vangala, M.D.

HONORS AND ACHIEVEMENTS

Nidhi Aggarwal, M.D.

- Recipient, Early Career Faculty Award for Excellence in Patient Care Award, 2022

Siloe Alvarado, M.D.

- Director, Associate Renal Course
- Director, Renal Elective

Samaya Anumudu, M.D.

- Keynote speaker, 2nd Annual Texas Gulf Coast Division Research Symposium

Sehrish Ali, D.O.

- Associate Program Director, Nephrology Fellowship Program
- Recipient, Department of Medicine - Wellness Initiative Supporting Health (WISH) Grant Award (Fall 2021, Spring 2022)
- Fellow, American Society of Nephrology, January 2022
- Participant, Houston VA LGBTQ+ Champion Training

Ahmed A. Awan, M.D.

- BSLMC Representative, BCM Faculty Senate

Kevin F. Erickson, M.D.

- Invited Expert, "Kidney Disease Improving Global Outcomes (KDIGO) Symptom-Based Complications in Dialysis Conference," Berlin, Germany.
- Senior Author, "Best of ASN Journals" presentation, 2021 National ASN Kidney Week
- Reviewer, Health Services Quality and Effectiveness (HSQE) Study Section, NIH
- Member, American Society of Nephrology Quality Committee

L. Parker Gregg, M.D.

- Editorial Fellow, JASN, 2022-2024

Michael W. Holliday, M.D., Ph.D.

- Recipient, Distinguished Leadership in Nephrology Section Award, 2022

Sankar D. Navaneethan, M.D.

- Garabed Eknoyan, M.D., Endowed Professor, Nephrology
- Member, KEDD study section, NIH
- Associate Editor, American Journal of Kidney Diseases (reappointed for a second five-year term)
- Member, KDIGO Diabetes and CKD Clinical Practice Guideline, 2022
- Kidney Diseases Representative and Member, EPI Statistics Committee of the Council on Epidemiology and Prevention, American Heart Association

Jenny Pan, M.D.

- Recipient, Featured New Investigator Award, Translational Research, The Journal of Laboratory and Clinical Medicine, and the Council of the Central Society of Clinical and Translational Research, CSCTR
- Promotion to Associate Professor
- Voting Member, MEDVAMC Subcommittee on Research Safety

Sai Saridey, M.D.

- Recipient, Distinguished Leadership in Nephrology Section Award, 2022

Maulin Shah, M.D.

- Top Doctor, *Houstonia Magazine*

Bryan Tucker, D.O.

- Distinguished Educator, Nephrology Section Award, 2022

Carl Walther, M.D.

- Recipient, Baylor College of Medicine Datathon Award 2022 - Most Creative Use of Tools for the project "Anticipating in-hospital kidney injury and electrolyte derangements using recurrent neural networks"

Wolfgang C. Winkelmayr, M.D., ScD

- Co-Chair, Kidney Disease: Improving Global Outcomes, KDIGO
- Associate Editor, JAMA, The Journal of the American Medical Association

Jingyin Yan, M.D., Ph.D.

- Top Doctor, *Houstonia Magazine*
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RESEARCH ACTIVITIES

New Grants Awarded

Jizhong Cheng, M.D.

- HHS – NIH; Biodegradable radiopaque polymeric scaffolds loaded with mesenchymal stem cells for image-guided arteriovenous fistulae maturation and long-term patency; \$412,305

L. Parker Gregg, M.D.

- MEDVAMC; Association of Diuretics with change in extracellular volume, natriuretic peptides, symptoms, and cardiovascular outcomes in CKD

Jenny Pan, M.D.

- UAB-UCSD O'Brien Center Cores Award; Sex differences in AKI; \$5,000
- MEDVAMC; Sex differences in mitochondrial sirtuins and kidney disease; \$50,000

Sankar D. Navaneethan, M.D.

- HHS – NIH; Mentored Patient-Oriented Research Towards Optimizing Cardiovascular Outcomes in CKD; \$118,200

Sandhya Thomas, M.D.

- Mike Hogg Fund; Chronic Kidney Disease-Induced Cardiomyopathy Exacerbated by SIRP α ; \$25,000
- Carl W. Gottschalk Research Scholar Grant-American Society of Nephrology; SIRP α Mediates Insulin/IGF1 Receptor Signaling in CKD-Induced Cardiomyopathy; \$100,000

Publications (36)

- American Heart Journal (IF **4.749**): 2
- American Journal of Kidney Diseases (IF **6.653**): 4
- American Journal of Respiratory and Critical Care Medicine (IF **30.528**): 1
- American Journal of Transplantation (IF **7.163**)
- Annals of Internal Medicine (IF **25.391**)
- Cardiovascular Research (IF **8.168**)
- Cell Reports Medicine (IF **16.988**): 1
- Circulation (IF **23.603**): 2
- Clinical Journal of the American Society of Nephrology (IF **6.628**): 7
- Clinical Kidney Journal (IF **4.452**)
- Critical Care Medicine (IF **7.598**): 2
- Current Opinion in Nephrology and Hypertension (IF **4.8**): 1
- Diabetes Care (IF **19.11**): 1
- Diabetes Research and Clinical Practice (IF **5.602**)
- European Heart Journal (IF **22.673**)
- European Radiology (IF **4.101**)
- Hypertension (IF **7.017**)
- Intensive Care Medicine (IF **17.679**): 1
- JCI Insight (IF **8.315**)
- Journal of Bone and Mineral Research (IF **6.741**)
- Journal of the American Medical Association (IF **56.272**): 2
- Journal of the American Heart Association (IF **5.501**)
- Journal of the American Society of Nephrology (IF **10.121**): 3
- Journal of Cachexia, Sarcopenia and Muscle (IF **12.91**): 1
- Kidney International (IF **8.395**)
- Kidney International Reports (IF **4.164**): 1
- Lab Investigation (IF **5.662**): 2
- Mayo Clinic Proceedings (IF **6.942**)
- Modern Pathology (IF **6.365**)
- Nature Reviews Nephrology (IF **19.68**)
- Nephrology Dialysis Transplantation (IF **4.085**): 2
- Obesity (IF **5.002**): 1
- The BMJ (IF **39.890**): 1
- The New England Journal of Medicine (IF **74.699**)
- Scientific Reports (IF **4.379**)
- Translational Research (IF **5.411**): 1

Books and Book Chapters

Nidhi Aggarwal, M.D.

- Diabetes and Kidney Disease: A Review of the Clinical Practice Guidelines. In: *Diabetes and Kidney Disease*

Sehrish Ali, D.O.

- Sexuality and Sexual Dysfunction in the Renal Patient. In: *Psycho-nephrology: A Guide to Principles and Practice*
- Contrast Induced Nephropathy. In: *Issues in Kidney Disease-Acute Kidney Injury*

George Dolson, M.D.

- Acute Interstitial Nephritis. In: *Issues in Kidney Disease-Acute Kidney Injury*

Jenny Pan, M.D.

- Approach to Diagnosis of AKI. In: *Issues in Kidney Disease-Acute Kidney Injury*
- Long-term Care of the Kidney Transplant Recipient. In: *Issues in Kidney Disease-Acute Kidney Injury*

ADDITIONAL HIGHLIGHTS



Dr. Bryan Tucker discussed salt intake in the setting of chronic kidney disease on the Kidney Commute Podcast episode “Salt Intake and CKD.”

Kidney Commute | National Kidney Foundation



Dr. Samaya Anumudu gave the keynote address for the 2nd annual Texas Gulf Coast Division Research Symposium.



Dr. Sandhya Thomas and Research Associate, Jiao Wu were featured in “Meet the First Authors” in Circulation Research for their article titled “FMO2 (Flavin Containing Monooxygenase 2) Prevents Cardiac Fibrosis via CYP2J3-SMURF2 Axis.”

Meet the First Authors | Circulation Research

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