

Chief, Division of Nephrology



Department of Medicine

Duke University School of Medicine

Overview

The Duke Division of Nephrology is a leading center for kidney care, research, and education. For more than 60 years, our distinguished faculty members have been at the forefront of kidney disease care and research, translating innovations from the bench to the bedside. The programs in the division are structured to address the most pressing needs facing patients with kidney disease. Areas of emphasis include end-stage kidney disease, transplantation, hypertension, cardiovascular disease, glomerular disease, and bone/mineral metabolism. The Division Chief provides strategic leadership across all mission areas and is responsible for developing and supporting 63 faculty, 8 APPs, 32 staff members, and 11 fellows.

Our Mission

Working Together to Move Medicine Forward

The mission of the Duke Division of Nephrology is to combine the delivery of outstanding clinical services with world-class research and teaching. The Division of Nephrology is committed to supporting a culture of inclusiveness, diversity, and equity. Through our collaborative community of faculty, staff, and trainees, our recruitment practices, and the respectful care of our patients, we strive to uphold this commitment constantly.



The Division of Nephrology aims to **1)** provide world-class equitable healthcare for those with kidney disease; **2)** train Nephrology physicians, leaders, and mentors of the future across a broad range of clinical settings, including a world-renowned hospital and Veterans Affairs Health System and **3)** innovate in medical discovery and applied research to transform kidney care.

Faculty Facts & Figures:

- ◆ 63 Faculty
- ◆ 9 faculty with tenure
- ◆ 43% Female (n=27)
- ◆ 8 APPs

Breakdown by Rank:

- ◆ 19 Assistant Professors
- ◆ 11 Associate Professors
- ◆ 16 Professors

As a division within the Department of Medicine at Duke University, we strive for excellence and equity by providing compassionate health care for all individuals, creating an inclusive environment to train the next generation of healthcare providers and leaders, and driving new knowledge to improve the health of our population locally and globally. We offer disease-based specialty care of the highest quality in various settings, including Duke University Hospital, Duke Raleigh Hospital, the Durham VA Medical Center, and independent dialysis centers. We have a large research footprint comprising 12 labs, several large translational research programs, and a robust clinical trial infrastructure.

Clinical Mission:

The Division provides clinical services across Duke University Health System (DUHS), the Durham VA Health Care System (DVAHCS), and independent dialysis centers that span the spectrum of kidney disease.

- ◆ The Division provides comprehensive inpatient and ambulatory care for Duke University Health System, including Duke University Hospital and Duke Raleigh Hospital. Duke University Hospital has 1,062 inpatient beds and is consistently ranked one of the best hospitals in the United States. Duke Raleigh Hospital has 204 inpatient beds and has served Wake County for more than 35 years. The Nephrology division completed over 4,500 inpatient consults in FY24 across both hospitals, and care was provided to over 3,000 unique patients. The Division completed over 16,500 outpatient visits across 6 clinic locations in FY24 with over 3,000 visits representing new patients, and care provided to over 9,500 unique patients. Additionally, the division has a substantial outpatient dialysis program serving Durham, Raleigh, and surrounding counties at 16 dialysis unit locations.
- ◆ Duke has been a pioneer in organ transplantation since 1965 when we established one of the nation's first kidney transplant programs. Since then, our delivery of expert care and our ability to perform transplant procedures not offered by other centers has made us one of the top transplant centers in the United States. In 2024, Duke is poised to perform 220 transplants involving a kidney and/or pancreas, with a projected annual growth rate of 10% over the next 5 years. The transplant center is actively expanding its focus on living donor transplantation and aims to complete 65 living donor transplants in 2024. Transplant Nephrology receives around 2,000 referrals annually. Among these referrals, approximately 50% undergo evaluation, and 25% are placed on the waitlist. Duke has consistently demonstrated excellent transplant outcomes with one of the highest conditional 1-year patient and graft survival rates in the nation. The Nephrology transplant team consists of 9 physicians and 2 advanced practice providers.

A Snapshot of Clinical Mission:

18.5
cFTE (billable)

25.4M
in Charges

9.3M
in Receipts

174,850
wRVUs

A Snapshot of Research Mission:

18

PIs with active awards
(1.2M average in active awards per PI)

\$21M

in active awards

85%

of active award funding is federal

56%

of active awards funding has human subjects

8

'R' federal awards

2

'U' federal awards

6

Career Development Awards, including:

3

'K' federal awards

- ◆ The Durham VA nephrology section has one clinical inpatient service that provides 24/7 support for the 151-bed medical center and 100-bed attached community living center. The Durham VA system operates a hospital-based dialysis unit (14-chair dialysis unit; provides in-center outpatient and inpatient hemodialysis as well as CRRT) and a free-standing hemodialysis unit in Raleigh NC (12-chair unit for outpatient in-center hemodialysis). In addition, the nephrology section has a peritoneal dialysis program, a nephrology kidney transplant program (for pre-transplant evaluations and post-transplant care) and provides outpatient in-person and telemedicine services for Veterans within the 27 county-catchment of the Durham VA which includes a glomerulonephritis clinic, an onconephrology clinic, and expertise in genetics. The section provides e-consultations and nephrology support to Veterans referred to the Durham VA from other VA healthcare systems regionally. The section consists of 5.88 FTEE physicians (all are part-time Duke and part-time VA; many of them conduct robust research activities), 5 APPs, and dialysis staff.

Research Mission:

The Division maintains a multidisciplinary research portfolio with contributions from clinical, translational, and laboratory-based investigations. Division faculty currently have 8 R-level awards, 3 K-level career development awards, and 2 U-level awards.

Basic research:

The Division of Nephrology has active basic research programs focused on diabetic kidney disease, transplantation, calcium homeostasis and bone metabolism, inflammatory diseases of the kidney, and genetic mechanisms of hypertension. Areas of focus within these research programs include:

- ◆ Addressing issues relevant to disorders such as hypertension, diabetic nephropathy, transplant rejection, and autoimmune diseases.
- ◆ Exploring the contribution of the immune system and inflammatory mediators to the progression of target organ damage in the setting of cardiovascular disease.
- ◆ Defining the molecular underpinnings of podocyte injury and dysfunction in nephrotic syndrome (NS) with a primary focus on focal segmental glomerulosclerosis (FSGS).
- ◆ Understanding the immunological underpinnings of transplant rejection.
- ◆ Understanding how molecular and biophysical cues can function synergistically or independently to guide organ development and function, and how these processes can be therapeutically harnessed to treat human disease.

- ◆ Delineating the mechanism by which kidney disease risk variants in APOL1 accelerate the progression of kidney disease in humans.
- ◆ Studying the basic mechanisms of kidney injuries and repair.
- ◆ Understanding the relationship between GPCRs (EP receptors) and hypertension pathogenesis.

Clinical and Translational research:

Duke Nephrology is actively involved in clinical research that translates to advances and improvements in clinical care. Examples of our clinical research activities include studies of factors influencing the morbidity and mortality of patients on hemodialysis, studies of non-pharmacological treatments for hypertension, and investigations into the genetics of glomerular disease. Duke investigators are actively involved in numerous NIH-sponsored consortia, such as NEPTUNE, CureGN, KPMP, and HubMap, that aim to study glomerular diseases, chronic kidney disease, and acute kidney injury. Also, the Division has a strong presence at the Duke Clinical Research Institute, including leadership roles in large clinical trial networks in genetics and chronic kidney disease. Areas of focus within these research programs include:

- ◆ Identifying novel interventions that integrate geriatric principles into kidney care settings.
- ◆ Studying modifiable risk factors for cardiovascular morbidity and mortality in people with advanced kidney disease.
- ◆ Reducing racial and health disparities among patients with hypertension and chronic kidney disease using lifestyle modifications.
- ◆ Studying kidney disease in people with HIV.
- ◆ Improving screening and management for chronic kidney disease in people with diabetes.
- ◆ Applying image analysis tools to identify novel digital biomarkers of disease progression and improve risk stratification.

Education Mission:

The Division is committed to training the next generation of academic Nephrologists to become leaders by offering in-depth clinical training to diverse populations paired with structured, mentored, patient-centered research, while supporting trainee well-being, diversity, and teamwork. Our approach is to attract the most talented fellows and then equip them to accomplish their goals.

Nephrology Fellowship

We offer five first-year fellowship positions in our ACGME-accredited Nephrology Fellowship Program per year, with 11 current fellows in training. Our fellowship program has successfully filled all of its fellowship slots since the inception of the NRMP Match. The program offers individualized career development scholar pathways, including the following: Clinical Concentration Pathway, Clinical Investigator Pathway, Biomedical Science Investigator Pathway, and Global Health Pathway.

Transplant Nephrology Fellowship

We offer a one-year AST-accredited kidney transplant fellowship to board-eligible nephrologists interested in a career in transplant nephrology. This 12-month program offers a unique multidisciplinary training experience in a thriving kidney transplant program with a strong track record in career development. This fellowship combines superb clinical training, an innovative curriculum and personalized career development in support of the program's mission to develop both complete physicians, comfortable with all aspects of clinical transplantation, as well as capable leaders with the knowledge and ability to direct a multidisciplinary transplant program.

Internal Medicine Residency Program and Undergraduate Medical Education

Our division faculty are actively engaged in teaching Internal Medicine Residents on the Nephrology Consult Services and outpatient Nephrology clinics at Duke University Hospital, Duke Raleigh Hospital, and the Durham VA Hospital. Our faculty are heavily engaged in mentoring residents interested in careers in Nephrology. Also, our faculty train undergraduate medical students in both clinical and classroom settings.

Other Important Highlights:

The Division has a strong tradition of close engagement with research and training units across the University, including:

Duke Clinical Research Institute (DCRI): The mission of DCRI is to develop, share, and implement knowledge that improves health around the world through innovative clinical research. The DCRI is the world's largest academic clinical research organization that generates world-class evidence to improve health; creates novel methods that accelerate clinical research; shares and implements knowledge widely; develops the next generation; and improves health equity through our research. For more information: [Duke Clinical Research Institute](#)

Duke Molecular Physiology Institute (DMPI): The mission of DMPI is to produce integrated multi-omics and physiologic profiles of chronic human diseases, and to use such profiles to develop new disease detection strategies, novel therapies, and insights into disease mechanisms. For more information: [Duke Molecular Physiology Institute](#)

Hubert-Yeargan Center for Global Health: The mission of the Hubert-Yeargan Center for Global Health is to develop the next generation of globally educated, socially responsible healthcare professionals dedicated to improving the health of disadvantaged populations, and one of our current junior faculty members recently completed the Global Health Pathway for Residents and Fellows. For more information: [Hubert-Yeargan Center for Global Health](#)

Division Chief: Key responsibilities

The Division Chief of Nephrology at Duke is a pivotal leadership role responsible for overseeing clinical, research, and educational activities related to kidney disease. The successful candidate will provide strategic leadership and collaborate with faculty, fellows, and staff and with health system leadership to advance patient care, research, and teaching in nephrology. The role will report directly to the Chair of Medicine.

Leadership:

- ◆ Leading and implementing Divisional strategic plans to strengthen programs within the Division of Nephrology.
- ◆ Understanding and participating in wider Departmental and Health System strategy development, and aligning nephrology activities with institutional goals.
- ◆ Ensuring Divisional fiscal soundness and administrative compliance.
- ◆ Overseeing the growth and development of the faculty, trainees and staff through mentorship, sponsorship, and implementation of supportive Divisional processes.
- ◆ Implementing processes which support diversity and inclusion within the Division and across the institution.
- ◆ Representing the Division within the institution and at national/international forums to enhance its reputation and standing.

Clinical Care:

- ◆ Ensuring high-quality and equitable patient care, emphasizing patient satisfaction and outcomes.
- ◆ Collaborating with other departments and specialties to enhance multidisciplinary care.
- ◆ Collaborating with the Chief of Nephrology at the Durham VA to ensure consistency of the training mission and support for shared faculty.

Research and Innovation:

- ◆ Overseeing and growing a vibrant basic, translational, clinical, and health services research program within the Division.
- ◆ Encouraging collaborative scientific endeavors.
- ◆ Fostering a culture of research integrity, sustained funding, collaboration, and excellence.

Education and Training:

- ◆ Ensuring the continued success and growth of educational programs across the UME, GME, and CME spectrum.
- ◆ Direct mentoring or identification of mentors for junior faculty and fellow research development.

Requirements:

- ◆ MD degree, Board Certified in Nephrology
- ◆ Associate Professor level or higher and eligible for Tenure Track
- ◆ Commitment to academic excellence across all mission areas

ABOUT DUKE UNIVERSITY SCHOOL OF MEDICINE

Duke University School of Medicine, established in 1930, is a cornerstone of excellence in health professions and biomedical education, clinical care, and groundbreaking research. Home to over 2,600 regular-rank faculty physicians and researchers, the School of Medicine cultivates the talents of nearly 2,000 students across various health professions and graduate degree programs, supported by a dedicated staff exceeding 6,200 individuals. Within the broader Duke Health framework, the School of Medicine collaborates with entities such as Duke University Health System, Duke University School of Nursing, and Duke-NUS Medical School to advance health care globally.



At the heart of Duke University School of Medicine lie its core values, which guide its pursuit of excellence in education, research, patient care, and community engagement. These values include:

- ◆ Excellence: A commitment to delivering outstanding performance across all facets of its mission.
- ◆ Inclusivity: Embracing individuals from diverse backgrounds and fostering a culture of respect and belonging.
- ◆ Service: Dedication to addressing real-world challenges and improving human health.
- ◆ Innovation: A sense of urgency in translating discoveries into tangible societal benefits.
- ◆ Integrity: Upholding professionalism and ethical conduct in all endeavors.

Leadership

Duke University School of Medicine is led by Dean Mary E. Klotman, MD. She also serves as Executive Vice President for Health Affairs for Duke University and Chief Academic Officer for Duke Health. She works with a leadership team comprising 13 vice deans and a chief of staff, as well as department chairs and center and institute directors. Associate and assistant deans also assist the dean with the oversight and management of the School of Medicine.

The Duke University School of Medicine includes 26 clinical and basic science departments. The school's strong emphasis on research to improve clinical outcomes encourages collaborations among faculty members, departments and other schools at the university, and has resulted in the development of numerous centers and institutes.

ABOUT THE DUKE DEPARTMENT OF MEDICINE

Leadership: The Duke Department of Medicine is led by Kathleen A. Cooney, MD, MACP, the George Barth Geller Distinguished Professor of Medicine. Dr. Cooney is the tenth chair of the department and has led the unit since 2018.

Mission: The Duke Department of Medicine strives for excellence and equity by providing compassionate health care for all individuals, creating an inclusive environment to train the next generation of health care providers and leaders, and driving new knowledge to improve the health of our population locally and globally.

Value-driven and Data-informed: Our decision-making process is dedicated to data-driven insights. As we navigate the evolving landscape of medicine and its impact on Duke's future, we pledge to base our decisions on thorough analysis and informed perspectives.

Increasing Inclusivity: With a steadfast focus on diversity, inclusion, and anti-racism efforts, we stand united as one Duke against racism, bias, and hate. Upholding our commitment to inclusivity, we strive to create a welcoming environment for all.

Our Faculty: The Duke Department of Medicine boasts over 800 distinguished faculty members, recognized as national leaders in their respective fields across 13 divisions. From spearheading groundbreaking research initiatives to leading clinical care teams, our faculty members are at the forefront of medical innovation.

Clinical Leadership: Our faculty physicians are dedicated to delivering innovative and high-quality care to every patient. From pioneering heart transplant procedures to developing novel treatments for various diseases, our clinicians are at the forefront of advancing medical care.

Research Success: Ranked No. 6 among the top institutions for NIH funding, the Duke Department of Medicine is a driving force in Duke University's research enterprise. Our faculty consistently secure significant funding and publish groundbreaking research articles that help us continue to push the boundaries of medical knowledge.

Innovations in Medical Education: The Department offers competitive training programs that cultivate the next generation of physicians and physician-scientists. With renowned residency and fellowship programs, trainees collaborate closely with faculty mentors to hone their skills and expertise.

Embodying the spirit of collaboration and excellence, the Duke Department of Medicine remains committed to advancing patient care, education, and research to create a healthier future for all.

DUKE IN DURHAM

Located halfway between the Blue Ridge Mountains and the beaches of the Atlantic, Durham is a community that is home to over 300 restaurants, more than 40 annual festivals, Duke and North Carolina Central universities, Durham Bulls Triple-A baseball, art and science museums, and world-class medical facilities just to name a few. With more than 5.2 million visitors annually, Durham is the top destination of arrivals at RDU International Airport.

Durham was nicknamed the "Bull City" in the late 1800s when the Blackwell Tobacco Company named its product "Bull" Durham Tobacco. By the time James B. Duke of the American Tobacco Company purchased the Blackwell Tobacco Company in 1898, Bull Durham was the most famous trademark in the world.

The "Bull City" prospered as a manufacturing hub for the tobacco industry and textiles for many decades, but has since transformed itself into a place where shopping thrives and high-tech industry flourishes with upscale housing in the same classic buildings where tobacco giants American Tobacco and Liggett-Meyers once made this City their industrial home.

Research, Innovation and Technology

The cities of Durham, Chapel Hill and Raleigh, known as the Triangle, are a nucleus for many startups and a vibrant hub for innovation and technology. Groups like InnovateCarolina, the Council for Entrepreneurial Development (CED) and events like Triangle Entrepreneurship Week and the Duke Start-Up Challenge provide resources and opportunities business ideas. Located between these three is the Research Triangle Park (RTP) is one of the most prominent high-tech research and development centers in the U.S. housing operations such as GlaxoSmithKline, IBM, Cisco and SAS. RTP currently employs more than 60,000 employees and more than 300 companies.

