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UNIVERSITY OF LOUISVILLE
DEPARTMENT OF MEDICINE
YEAR IN REVIEW

Message from the Chair

KIM ALLAN WILLIAMS, MD



Dr. Kim Allan Williams

Year-end summaries of academic departments often focus on accolades, rankings, and accomplishments. And while those are important, they don't tell the full story. Organizational health and long-term success, as leadership author Patrick Lencioni reminds us, require leaders to continually and clearly communicate the organization's purpose, structure, and direction. So for this year's Chairman's Message, I'd like to do something a bit different. Rather than highlight only the "what" of UofL Medicine, I'd like to emphasize the "who"—my Vice Chairs. Alongside our extraordinary Executive Director Ian Smith and a truly outstanding staff, these individuals drive our strategic priorities forward. With over 200 academic faculty and more than 100 community clinicians, leadership of this scale requires clarity, collaboration, and deep expertise. I'm proud to introduce the remarkable team that makes it possible. In sum, our Vice Chairs are not only experts in their respective fields—they are dedicated leaders who provide essential perspective, guidance, and continuity in support of our department's mission. Their steady leadership empowers our faculty and staff, enriches our programs, and advances the health of our patients and the medical communities. I'm deeply grateful for their service and proud to recognize them here.



Dr. Aruni Bhatnagar served as Vice Chair for Research during my first two years as Chair and continues to be a transformative leader in our department. As Director of the Christina Lee Brown Envirome Institute, he has led more than 30 research projects, advancing our understanding of how environmental exposures—such as air pollution—impact cardiovascular health. His pioneering work helped establish the field of environmental cardiology and earned him recognition as a Distinguished University Scholar and Fellow of the American Heart Association. Dr. Bhatnagar's vision placed our department at the forefront of environmental health research and created a foundation for future innovation.



Dr. Matthew Cave, who succeeded Dr. Bhatnagar this year, is a physician-scientist with deep expertise in hepatology and environmental toxicology. He holds professorships in Medicine, Biochemistry and Molecular Genetics, and Pharmacology and Toxicology, and directs the Translational Research Support Core for the Center for Integrated Environmental Health Science. His research focuses on toxin-induced liver injury, non-alcoholic fatty liver disease, and the role of environmental exposures in liver pathology. Dr. Cave's lab notably discovered toxicant-associated steatohepatitis (TASH) among Louisville's Rubbertown chemical workers—an example of how his research translates into real-world impact. His leadership in clinical and translational research ensures that we remain at the cutting edge of environmental health science, with a particular strength in hepatology.



Dr. Dinesh Kalra, Vice Chair for Quality, brings deep clinical and administrative expertise to his role. He also serves as Professor of Medicine, Chief of the Division of Cardiovascular Medicine, and Endowed Chair in Cardiovascular Innovations. Dr. Kalra earned his medical degree with honors from the All India Institute of Medical Sciences, followed by internal medicine and cardiology training at Baylor College of Medicine. He completed advanced training in electrophysiology at the University of Michigan and in cardiac imaging at Weill Cornell. His clinical interests include advanced cardiac MRI and CT, atherosclerotic plaque imaging, lipidology, and pulmonary hypertension. He holds multiple medical society fellow designations and serves as Governor of the Kentucky Chapter of the American College of Cardiology, where he advocates for legislative and clinical improvements in cardiovascular care across the state and the nation. Dr. Kalra's leadership in quality improvement focuses on interdisciplinary collaboration and data-driven innovation to optimize outcomes, advance safety, and enhance our delivery of care.



Dr. Jennifer Koch, Vice Chair for Faculty Affairs and Education, holds the V.V. Cooke Chair of Medicine, and teaches primary care to internal medicine residents. A graduate of the University of Louisville School of Medicine, she completed her residency here and has served the institution in numerous roles ever since. Dr. Koch is board-certified in internal medicine and a Fellow of the American College of Physicians. Her clinical practice is rooted in comprehensive, evidence-based primary care. She has received numerous honors for her work in education, including the Excellence in Ambulatory Education Award (twice), and the ACP Kentucky Chapter's Laureate Award. Her leadership extends beyond clinical education to faculty development. Dr. Koch launched a Speakers' Bureau to promote faculty visibility and professional growth, as well as an Academy of Medical Educators, reflecting her strong commitment to mentorship and career advancement. She is an inclusive leader who fosters a culture of belonging and excellence throughout our training programs.



Dr. Kristine Krueger, Vice Chair for Clinical Operations, is a longtime leader in gastroenterology and an outstanding clinician. She holds the Nancy Middleton Smith Endowed Professorship and serves as Chief of Academic and Clinical Affairs for the Division of Gastroenterology, Hepatology, and Nutrition. She earned her medical degree from the University of Florida and completed her residency and GI fellowship at the Medical University of South Carolina. Board-certified in internal medicine and gastroenterology, she joined the UofL faculty in 2000 and has since held numerous leadership roles, including interim chair of our department, Assistant Dean for Administration, Medical Director of the Digestive Health Center, and Vice-Chief of Staff for UofL Health - UofL Hospital. Dr. Krueger is an expert therapeutic endoscopist, performing between 500 and 1,000 procedures each year, and remains deeply involved in both hospital-based and outpatient care. Her areas of interest include colon cancer screening, complementary medicine, and patient-centered prevention strategies. Her clinical leadership is marked by a commitment to quality, continuity, and a holistic philosophy that emphasizes mind-body-spirit well-being.



Dr. Rosemary Ouseph, our newest Vice Chair, leads Strategic Growth while continuing to serve as Chief of the Division of Nephrology & Hypertension. A Louisville native and UofL alumna, she earned both her master's degree in anatomy and medical degree here before completing her residency and nephrology fellowship at Indiana University. With more than 20 years of clinical practice, she is board-certified in internal medicine and nephrology. Her clinical interests include chronic kidney disease, pregnancy in CKD, geriatric nephrology, and transplant medicine. Dr. Ouseph brings strategic insight and strong collaborative instincts to her new role, where she is helping lead our efforts to expand programs, partnerships, and care delivery throughout the UofL Health system. She is known for her warm leadership style, passion for patient education, and commitment to innovation. She is also a proud labradoodle owner—her dog Quinton is affectionately named after a dialysis catheter.

Our Mission:

The UofL Department of Medicine compassionately advocates for and improves the lives and health of the Louisville community, Kentucky and beyond through continued clinical excellence, the highest quality of medical education and innovations in basic science and clinical research.



Our People:

427

STAFF
MEMBERS

205

FACULTY
MEMBERS

100+

COMMUNITY
FACULTY

107

RESIDENTS

78

FELLOWS





CLINICAL



Providing excellent clinical care remains at the heart of our mission. In 2024, Department of Medicine faculty treated patients at **89,559** outpatient appointments. These took place at **11** clinical sites spanning the UofL Health system.



CLINICAL SITE ADDITIONS

- » The Division of Nephrology and Hypertension expanded inpatient consultation services to UofL Health South Hospital and Norton West Louisville Hospital, as well as outpatient services to the UofL Health Northeast Medical Center
- » Dr. Rosemary Ouseph, chief of the division, was named medical director of the dialysis unit at Frazier Rehab Hospital Brownsboro
- » The Division of Gastroenterology, Hepatology, and Nutrition expanded its services to include UofL Health Mary & Elizabeth Hospital
- » The Division of Cardiovascular Medicine expanded its services to include UofL Health Medical Center Northeast
- » The Division of Pulmonary, Critical Care, and Sleep Medicine expanded its services to include UofL Health South Hospital



Division of Infectious Diseases

AN INTERVIEW WITH FOREST W. ARNOLD

2024 marked an exciting period of growth in the Division of Infectious Diseases. Division Chief Dr. Forest Arnold recalls that over half of his clinical faculty retired to nonclinical positions during the Covid pandemic. "It left those remaining stronger, as they stepped up to manage both inpatients and outpatients at UofL and the VA hospitals," states Dr. Arnold.

Dr. Arnold has taken a multi-pronged approach to growing the division. Dr. Mohamed Aldaas and Dr. Schot Hannan joined the faculty immediately after fellowship; they "received an education in infectious diseases where they became engulfed in the pandemic. It was the best hands-on fellowship they could have ever asked for." Dr. Ryan Doster was recruited in 2022 from Vanderbilt University as a clinician researcher. This was followed by the recruitment of two new faculty members with sub-specialty training in Bone Marrow and Solid Organ Transplantation; Dr. David Thomas and Dr. Anum Fayyaz were enthusiastically welcomed by our UofL transplant teams.

Dr. Aditee Dash came from Virginia Commonwealth University as the new Director of Bone & Joint infections. She supervises a team of nurse practitioners who see patients with bone & joint infections. Dr. Nishant Patel was welcomed back to UofL by many in the department as he did his residency at UofL before training in infectious disease at Vanderbilt. He also serves as an Associate Program Director for the Internal Medicine Residency Program.

Impressively, the Infectious Diseases fellowship program filled its positions in the post-pandemic years, but also has recently expanded its number. Dr. Arnold also notes that both clinics and research laboratories have now converted

back from their pandemic roles to "business as usual." In addition, under Dr. Arnold's leadership, the division continues to operate a research scholars program which comprehensively trains international medical graduates in clinical research. Graduates receive a certificate upon completion, after which many of them go on to match in residency or serve as research coordinators.

Importantly, the Division of Infectious Diseases continues to provide outstanding care via our community's Ryan White-funded clinic serving patients with HIV. Caring for nearly 3000 patients yearly, the clinic boasts a 99% medication adherence rate. The division employs and directs over 20 grant-funded case managers in order to provide the highest quality of care. New initiatives are underway as well. The first is a 3-year initiative called the Black Women's Learning Institute that is designed to address the disparities for care access and knowledge around HIV treatment and prevention options in order to improve HIV-related health outcomes for black women. The next are programs supporting the use of HIV pre-exposure prophylaxis (PrEP) as well as an initiative to prevent other STIs with doxycycline (DoxyPEP).

When asked, "How did you accomplish so much?" Dr. Arnold responds, "I accomplished a lot by involving a lot of people. I have surrounded myself with successful people, and in turn, we thrive as a Division because we work hard, work well together and collaborate with so many others."

Forest W. Arnold, DO, MSC, FIDSA



Advancing Rheumatology

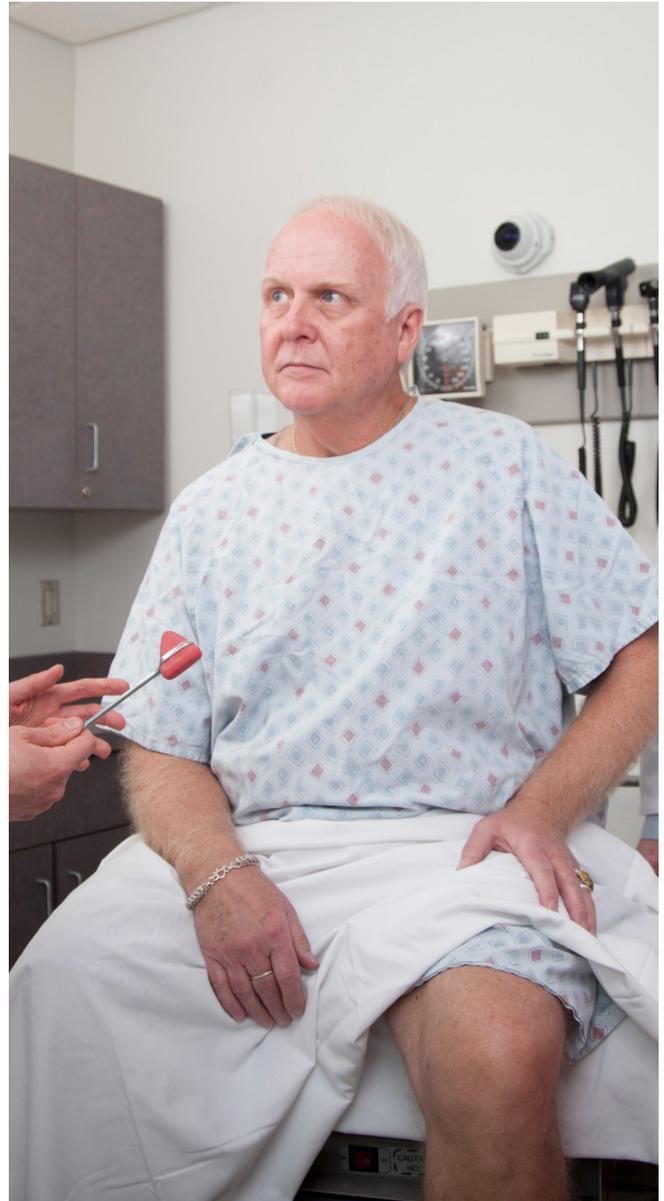
DR. HOUSAM SARAКBI LEADS THE NEW DIVISION

For the second year in a row, the UofL Department of Medicine has launched a new division, aiming to meet specialized health needs of the community. In 2024, the department was thrilled to welcome Dr. Housam Sarakbi as the Chief of our newly minted Division of Rheumatology. Dr. Sarakbi brings over 20 years of clinical experience to the role, having held positions as Program Director of Rheumatology at Wayne State University and Division Chief and Program Director at Hamad Medical Corporation in Qatar.

Building a new Division of Rheumatology is no small feat, especially considering the nationwide demand for clinical services in rheumatology. However, Dr. Sarakbi is up for the challenge. When asked what drew him to join UofL's Department of Medicine, he stated, "As I learned more about the University of Louisville, and its faculty and staff, I found myself more and more impressed. And I was right—once I began working with them, I realized I was collaborating with the best group I've ever worked with."

Dr. Sarakbi currently serves as the Chair of the American College of Rheumatology's Musculoskeletal Certification Program Oversight Committee and as President of the Arab American Rheumatology Society. He looks forward to developing a strong division that can address the significant need for clinical services in Rheumatology in Louisville and surrounding areas. Sarakbi will also be launching a fellowship program to train the next generation of rheumatologists, and he is looking forward to building both clinical and basic science research programs.

Dr. Sarakbi states, "I'm excited about the opportunity to train highly competent UofL Rheumatologists who will gain national recognition, especially in areas like lupus, scleroderma, and musculoskeletal ultrasound."



Housam Sarakbi, MD, FACR, RHMSUS



CLINICAL CALL-OUTS

- » Dr. Dawn Caster received the 2024 Gift of Life Distinguished MD Award, given by the National Kidney Foundation of Kentucky
- » Dr. Dinesh Kalra and the Division of Cardiovascular Medicine organized the University of Louisville's first annual Cardiology symposium
- » Dr. Christian Furman was selected as the first permanent Division Chief of Palliative Medicine
- » The Division of Dermatology created two new clinics: a 'single lesion' clinic and an urgent care clinic
- » Dr. Steve McClave hosted the Nestle Nutrition Scholars Program, an intensive two week course in nutrition in acute care and chronic diseases





EDUCATION



We train hundreds of medical students, residents and fellows each year. Our training programs shape compassionate physicians, primed for careers in hospital medicine, primary care and internal medicine subspecialties.

Primary Care at UofL

AN INTERVIEW WITH KASEY SCOTT & RYAN BAILER

Sometimes, the best offense is a good defense, preventing a problem before it becomes a problem. Primary care physicians at the University of Louisville, like Dr. Ryan Bailer and Dr. Kasey Scott, play a crucial role as the first line of defense in healthcare. They are often the first point of contact for patients, providing preventive care, early diagnosis, and management of chronic conditions. As graduates of both the University of Louisville School of Medicine and Internal Medicine Residency programs (Scott graduated from the UofL Combined Med-Peds program) and having served as chief residents, they saw firsthand the need for more “boots on the ground” on the front lines of medical care in Louisville.

By focusing on preventive measures such as regular check-ups, cancer screenings, and managing risk factors like high blood pressure and cholesterol, primary care physicians help prevent more serious health issues from developing. “When I would admit patients to the hospital, I would see so many problems that could have been prevented before they came to the hospital,” Scott said. “If they had had good follow-up as an outpatient, if they had had their cancer screenings, if they had been on appropriate medicines for blood pressure and cholesterol, they could have prevented the strokes and heart attacks. I realized that instead of fixing problems temporarily in the hospital and then discharging people, I wanted to try to prevent those problems from ever happening, and that’s what drew me to primary care.”

The internal medicine residency programs at UofL continue to produce well-rounded physicians prepared for various career paths, including primary care. The program emphasizes comprehensive education, strong mentorship, and a supportive learning environment. Residents are exposed to diverse patient populations and a wide range of medical conditions, ensuring they are well-prepared for the chal-

lenges of their future careers. Ironically, primary care wasn’t necessarily the path each initially looked to follow, but it’s the calling they heeded as the region and nation’s need for primary care physicians has expanded faster than the roles can be filled.

“When I first started, I thought I wanted to do critical care or maybe be a hospitalist,” Bailer said. “As I got more into my residency, I liked having more continuity of care and seeing the same patients over and over. Preventive care is definitely a part of it, and having the relationships with patients that I see in my clinic now that I’ve seen for the last three and a half years that I even saw back when I was a resident. It’s challenging, but it’s always interesting.”

Both point to their training at UofL as a key to making the transition to primary care and being able to handle just about anything they see in the exam room. “Primary care, I think, over the last 10 years, has gotten more complex because people are sicker and sicker and are now living longer,” Scott said. “As a med-peds resident, I did a lot of training in the inpatient and intensive care settings, and I really do think that that gave me a good foundation to understand the full spectrum of disease process.”

Bailer adds, “It’s really the people that I trained with, such as Drs. Clayton Smith, Bridget Hittepole and Erin Murphy. They’re just great role models and good to work with. That made me want to stay really, because they helped shape me into the attending physician I am now.”



Kasey Scott, MD



Ryan Bailer, MD



RESIDENCY & FELLOWSHIP PROGRAMS

FELLOWSHIP PROGRAMS:

- » Cardiovascular Medicine
- » Electrophysiology
- » Advanced Heart Failure
- » Interventional Cardiology
- » Mohs Surgery (Dermatology)
- » Endocrinology
- » Gastroenterology
- » Hepatology
- » Infectious Diseases
- » Medical Oncology/Hematology

- » Nephrology
- » Palliative Medicine
- » Pulmonary & Critical Care Medicine
- » Sleep Medicine
- » Rheumatology

RESIDENCY PROGRAMS:

- » Internal Medicine
- » Combined Internal Medicine/Pediatrics
- » Dermatology



What Sets UofL Apart

AN INTERVIEW WITH JUSTIN KINGERY

“I’ve traveled all around the world, and there are places that still stand out to me...”

While the late singer-songwriter Jimmy Buffett might have been talking about his own travels, the same sentiment could also apply to Justin Kingery, MD, PhD, associate professor of medicine and associate director of the University of Louisville Internal Medicine Residency Program. Kingery, who earned his MD and PhD from UofL, and completed his medical residency at UofL Hospital, has traversed the globe throughout his career. Those travels included stops in Tanzania and East Africa, Haiti, Myanmar, Italy, and eventually in New York, where he was a pioneer as the inaugural global health fellow at Weill Cornell Medical College.

However, the West Virginia native found his way back to Louisville, and he hasn’t looked back since. “My wife was at Columbia in pediatrics, and I was at Cornell, and we were deciding, do we want to continue this career path here in New York?” Kingery said. “I think when you start getting older, you start realizing that who you’re around every day matters as much or more as what you’re doing. My wife always loved UofL, and it was always her dream to come back and work at Norton Children’s Hospital.

“Frankly too, it wasn’t just UofL, it was also Louisville because we have two girls, a three-year-old and a seven-year-old, and Louisville is a great place to grow up. I love all the people here, I love the environment, and I love the training; I believe in the training mission.” Kingery feels that mission sets UofL apart, as the program aims to produce physicians who are more well-rounded in their training and experiences. “We are a program that highly values making real physicians,” Kingery said. “Physicians that can handle themselves in any situation. I think there increasingly are fewer programs that are doing that because it’s simply

easier to train people to the minimum and then they go on to fellowship. I think we’re one of the programs that goes through an exponential effort to make sure people are real physicians when they leave.”

Kingery points to his own experience as a resident at UofL for preparing him to make his mark on the global community. “I think that’s what happened to me when I graduated from UofL,” Kingery said. “I went to the NIH to train for a week for Cornell and then a couple days after that I was in East Africa rotating in the second biggest ICU in the country and people are dying of diseases I frankly probably had never heard of. I could keep them alive because I was trained to be a real doctor and to handle any situation, so I think that is a very real-world example of one of the strengths of the program here at UofL.”

He adds, “A lot of programs will kind of fit you into their own schedule and don’t really see your career path as the top priority. One of the great things about this program is that we maintain a very real focus on what is each person’s priority in their life and how can their schedule fit into that. They let me use some of my time to go on these career explorations. Global health is not a normal career path, so I did a lot of research in global health and visiting people who did global health and things like that even while I was in residency.”

Ultimately, Kingery feels that the abundance of freedom and autonomy given to the residents at UofL is what makes the program one that learners enjoy and are proud to be a part of. “I grew up in the coal fields of West Virginia, my family were all coal miners, I didn’t know medicine at all,” Kingery said. “I think that training in a program like this was super valuable, because you can’t be a ‘follow the pack’ kind of person and hope that things go well and kind of blend in and not really know what you’re doing, especially when you’re in a giant ICU in Tanzania. That’s not an optimal situation in many aspects, which is why the style of training at UofL is super valuable.”



Justin Kingery, MD, PhD



2024 AWARDS

UNIVERSITY OF LOUISVILLE PROFESSIONALISM AWARD:

Esther Bak, MD, Emily Hartman, MD, Niko Touloumes, DO

DIVISION OF GENERAL INTERNAL MEDICINE TEACHING AWARD: *AMBULATORY MEDICINE:*

Erin Murphy, MD

DIVISION OF GENERAL INTERNAL MEDICINE TEACHING AWARD: *HOSPITAL MEDICINE:*

Hazar Hassuneh, MD

STUART URBACH AWARD FOR EXCELLENCE IN FACULTY TEACHING:

Tyler Sharpe, MD

DEPARTMENT OF MEDICINE FELLOW AWARD FOR EXCELLENCE IN TEACHING:

James Bradley, MD

UNIVERSITY OF LOUISVILLE OUTSTANDING SENIOR RESIDENT AWARD:

Niko Touloumes, DO



RESEARCH

A close-up photograph of a scientist in a white lab coat and a light blue surgical mask. The scientist is using a pipette to transfer liquid into a small vial. The background is a blurred laboratory setting with various pieces of equipment. A red text box is overlaid on the lower right portion of the image.

Faculty within the Department of Medicine are involved in **9 Centers and Institutes** conducting cutting edge research on a wide variety of topics including cardiovascular disease, metabolic-associated steatohepatitis and environmental health, along with advancing cancer research to ensure lifesaving treatment.

Research Advancements

A YEAR OF BOLD IDEAS AND BREAKTHROUGHS

UOFL HEALTH - BROWN CANCER CENTER

BLOOD CANCERS, CELLULAR THERAPY AND TRANSPLANTATION (BCT) SECTION

In 2024, the BCT Section achieved significant advancements in cellular therapy for cancer treatment. A key development was the initiation of a novel gamma delta T-cell (GDT) trial for central nervous system (CNS) lymphomas, produced at the Section's Dunbar CarT GMP facility. This trial, involving gene-modified cells, provided treatment for five patients at multiple leading sites across the U.S., including Moffitt Cancer Center and Cleveland Clinic. The Section also made strides in the development of a GD2-directed Car-TILS (chimeric antigen receptor T-cell therapy with tumor-infiltrating lymphocytes) project, which is expected to progress to engineering runs at the Dunbar GMP facility in 2025. As of 2024, the BCT Section has full access to the complete line of approved CarT products, including those targeting BCMA for Myeloma and CD19 for Lymphomas, available for all appropriate patients. Additionally, a novel CD19/20-directed CarT clinical trial was launched, offering promising new therapeutic options. Notably, the BCT Section experienced its highest patient volume in 2024, treating more cellular therapy patients (including TILS and CarT) than in any previous year. This milestone reflects the growing demand for these advanced therapies. Furthermore, the Section received approval to expand its capabilities with the construction of a new cellular therapy inpatient unit on the 5th floor of the newly constructed UofL Hospital West Tower, supporting continued growth in this innovative field.

MEDICAL ONCOLOGY & HEMATOLOGY SECTION

In 2024, the Medical Oncology and Hematology Section at UofL Health - Brown Cancer Center made major advances in patient care, research, and services. A highlight was launching the region's first Young Onset Colorectal Program, led by Dr. Abigail Chan, targeting the rising number of CRC patients under 50. The program offers integrated care including genetic counseling, oncofertility, sexual health, and clinical trials. The Section became a regional referral center for Tarlatamab (BITE therapy) for small cell lung cancer and one of only 12 U.S. centers offering clinical trials for limited-stage disease. Patient visits rose 62%, and the team welcomed Dr. Anika Bhargava, an expert in hematology and GI cancers. A \$25M facility in Bullitt County is underway, set to become a regional cancer hub and rural education center. The Hematology/Oncology Fellowship Program was also approved to expand from 9 to 12 fellows. In research, under Dr. Rebecca Redman, trial enrollment doubled and reached a decade-high for new activations. A Brown Cancer Center patient became the first in the U.S. diagnosed with a novel immunotherapy targeting CEA-expressing tumors. The FDA also approved Tumor Infiltrating Lymphocyte (TIL) therapy for melanoma, following a landmark trial led by Dr. Jason Chesney, with new studies now expanding to lung and endometrial cancers. These milestones reflect the Section's growing impact in cancer treatment and innovation.

RESEARCH BY THE NUMBERS:

199

Grant applications submitted

\$47.4 mill

Amount of funds received from those 134 awards

\$6.37 mill

Amounts of funds received from those trials

134

Active grant awards receiving funds in FY24

166

Active trials receiving funds in FY24

510

Total publications

ENVIRONMENTAL MEDICINE

The Green Heart Louisville Project received a \$4.6 million grant from the National Institute of Environmental Health Sciences (NIEHS) to support research over the next 5 years. This funding will advance understanding of environmental health factors affecting communities. The project has already shown that planting trees is associated with a 13-20% reduction of neighborhood residents' C-reactive protein levels. In addition, the National Institutes of Health (NIH) and the Department of Defense awarded \$18.27 million in grants to researchers at the Christina Lee Brown Envirome Institute. These projects aim to explore various cardiovascular health topics, including the cardiovascular effects of new e-cigarette ingredients, the impact of benzene exposure, prenatal and infant exposure to chemical combinations and their influence on sleep patterns in adolescence, reduced blood flow to the heart in aging individuals, the potential benefits of the nutritional supplement carnosine in treating peripheral artery disease, the effects of inhaled agents on Gulf War Illness, and the metabolic processes after heart attacks leading to heart scarring.

GASTROENTEROLOGY

The NIH has awarded two major U01 clinical consortium grants to researchers from the University of Louisville's Gastroenterology, Hepatology, and Nutrition (GHN) department. Dr. Tom Abell is leading research on the pathogenesis and treatment of gastroparesis through the NIDDK Gastroparesis Consortium, while Drs. Craig McClain, Ashwani Singal, and Christopher Stewart are focused on integrated therapies for alcohol use and alcohol-related liver disease (ALD). Drs. Matt Cave, Banrida Wahlang, and Walter Watson from the department received significant grants from the Department of Defense to support their research. Additionally, Drs. Singal, Vatsalya, and Watson, in collaboration with researchers from various University of Louisville departments, received a Team Science grant from the National Institute of General Medical Sciences (NIGMS). In recognition of their exceptional impact in the field, five researchers from GHN were ranked among the top 2% most-cited worldwide by Stanford University and Elsevier: Drs. Thomas Abell, Matthew Cave, Craig McClain, Stephen McClave, Ashwani Singal, and Banrida Wahlang. Dr. Ashwani Singal was appointed Associate Editor of Clinical and Translational Gastroenterology, a journal dedicated to publishing innovative clinical research in gastrointestinal disorders.

NEPHROLOGY

Dr. David Powell and Dr. Dawn Caster published their groundbreaking study, "Increased Urine Excretion of Neutrophil Granule Cargo in Active Proliferative Lupus Nephritis," in *Kidney360*, an open access journal for kidney research. Their study identifies novel cellular processes and urinary diagnostic markers for lupus nephritis, offering potential for improved therapies and more effective monitoring of treatment response.

MEDICAL ONCOLOGY & HEMATOLOGY

The division's Section for Translational Research is led by Dr. Levi Beverly and comprises 21 laboratories headed by Ph.D. (or similar) researchers. In 2024, the Section members submitted nearly 50 grant applications, were awarded ~20 new grants, published 57 peer-reviewed manuscripts and gave more than 40 oral presentations on their research. We would like to highlight the work of Dr. Nichola Garbett for 2024. Dr. Garbett applies biophysical approaches to the study of biomolecules and their interactions, with particular emphasis on the development of new biophysical and biomedical technologies for disease biomarker studies and for medical diagnostics. Dr. Garbett is an Associate Professor and the Director, Biophysical Core Facility, Brown Cancer Center, University of Louisville. She submitted 3 grant proposals and acquired 1 new grant award in 2024. She currently sits on numerous committees and mentors multiple students. Work from her laboratory was presented at 2 national/international conferences and another 4 times at local/regional conferences. Dr. Garbett published two new manuscripts in 2024.



Nichola Garbett, PhD

New Transformative Research Center

UOFL LAUNCHES WITH HISTORIC \$24M INVESTMENT

The University of Louisville has announced a groundbreaking \$24 million initiative to revolutionize clinical and translational research across Kentucky. The funding—split evenly between a highly competitive \$11.7 million NIH grant and matching funds from UofL—marks the largest investment in clinical research in the university’s history.

This investment will establish the Louisville Clinical and Translational Research Center (LCTRC), a statewide hub designed to address some of Kentucky’s most pressing health challenges, including heart disease, cancer, and stroke. The center will focus on translating lab discoveries into real-world treatments while training the next wave of clinician-researchers.

The LCTRC will offer new grant programs ranging from \$75,000 to \$125,000 to help researchers, especially early-career scientists, launch innovative projects with the potential to attract larger federal funding. Two signature programs—Dean’s Scholars and Presidential Scholars—will fund dedicated research time for medical students and faculty, paired with mentorship and career development.

Beyond training, the center aims to double UofL’s clinical trial capacity, broaden its reach into rural communities through existing partnerships with UofL Health and Owensboro Health, and expand opportunities for citizen science projects that engage everyday Kentuckians in research efforts.

“This is a turning point for research in Kentucky,” said UofL EVP for Research and Innovation Jon Klein, principal investigator for the LCTRC. “With this center, we’re not just supporting science—we’re building a healthier future with and for our communities.”

The LCTRC builds on over a decade of effort, dating back to 2008, to secure major research infrastructure funding. It also reflects UofL’s commitment to fostering innovation and improving lives across the Commonwealth, laying the groundwork for life-saving discoveries for years to come.



Faculty Spotlight

ENVIRONMENTAL JUSTICE AND PUBLIC HEALTH

Dr. Natasha DeJarnett, assistant professor of medicine and researcher with the Christina Lee Brown Envirome Institute, is a leading voice in environmental justice and public health. From 2022 to 2024, she served as Deputy Director for Environmental Justice Data and Evaluation in the White House Council on Environmental Quality (CEQ), playing a pivotal role in advancing the nation's most ambitious environmental justice agenda.

During her tenure, Dr. DeJarnett contributed to key initiatives mandated by Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad. She supported the coordination and development of planned updates to the Climate and Economic Justice Screening Tool (CEJST) and helped shape versions of the Environmental Justice Scorecard (Scorecard). She also played a crucial role in implementing the Justice40 Initiative, which ensures that 40% of the benefits from certain federal investments reach disadvantaged communities. In its first two full fiscal years, the initiative successfully directed 71% of grants, loans, and other investments from Justice40 programs to these communities.

Additionally, Dr. DeJarnett supported CEQ's work with the Office of Science and Technology Policy (OSTP) as part of the Environmental Justice Subcommittee of the National Science and Technology Council, established by Executive Order 14096 on Revitalizing Our Nation's Commitment to

Environmental Justice for All. She served as a writing co-lead for the Environmental Justice Science, Data, and Research Plan, further solidifying her impact in shaping national environmental justice policies.

Beyond her policy work, Dr. DeJarnett is committed to educating the next generation of environmental health professionals. She is a co-editor of *Environmental Health: Foundations for Public Health*, a foundational textbook released in September 2024. This comprehensive resource brings together diverse perspectives to address today's most pressing public health challenges and provides the essential knowledge, skills, data, and resources needed to promote environmental health at local and global levels. Dr. DeJarnett also authored Chapter 3, *Confronting the Realities of Climate Change*, which examines the profound impact of climate change on public health and the urgent need for action. Through her work in government, academia, and publishing, Dr. DeJarnett is a driving force in the fight for environmental justice and health equity, shaping policies and knowledge that will benefit communities for years to come.



Natasha K. DeJarnett, PHD, MPH

Assistant Professor, Division of Environmental Health

NEW in 2024: UofL Department of Medicine Research Grand Rounds! Weekly presentations highlighting the research work in our department. Available, along with our clinical Grand Rounds, on VuMedi.



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The Cardinal
Minute



The Cardinal
Research Minute