

Leveraging artificial intelligence to improve patient safety and care quality

By CODY HAWLEY, PHD

When a patient undergoes a routine knee surgery, they are under the direct care of numerous health providers, such as an anesthesiologist, a physician assistant and a surgeon. But when you peel back the layers of what it takes to coordinate a safe and successful operation, there are thousands of caregivers linked by millions of interactions — all of whom must collaborate seamlessly to ensure optimal patient outcomes.

At the UF College of Medicine, physician-scientists are leveraging artificial intelligence to model this expansive clinician-clinician network, creating a robust patient safety graph capturing the almost infinite interactions between caregivers to change how we think about hospital operations and pioneer new ways of delivering quality care. The patient safety graph is one of the many ways the College of Medicine is turning to AI to improve patient safety under the AI-QI initiative, a series of programs designed to make a tangible impact in the realm of patient care by extending AI research into quality improvement activities at UF Health. Patrick Tighe, MD '05, MS, is the associate dean for AI application and innovation at the College of Medicine and the project champion for the AI-QI initiative under the college's strategic plan. We sat down with Tighe to discuss these groundbreaking AI-QI programs and how they can help physicians enhance quality in health care.

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Clinicians and researchers at the UF College of Medicine, including Patrick Tighe, MD '05, MS, and Ray Opoku, MS, developed the clinician-clinician patient safety graph, which uses AI to look at how teams collaborate to deliver care to patient populations.



The patient safety graph is one of the many ways the College of Medicine is turning to AI to improve patient safety under the AI-QI initiative.

Visit news.drgator.ufl.edu to view the graph.

NEWS CLIPS

► COLLEGE ANNOUNCES INTEGRATION OF PHYSIOLOGY AND AGING DEPARTMENTS

Since the College of Medicine's beginnings, researchers in the department of physiology and functional genomics have generated discoveries in fetal development, gene therapy, vascular biology and cell/receptor signaling. Meanwhile, since 2005, investigators in the department of aging and geriatric research have worked to improve the health and quality of life of older adults, using state-of-the-art clinical research space to integrate leading-edge research into clinical practice and educate future geriatric medicine scientists and clinicians.

In August, the college combined the departments' expertise to create a new integrated academic unit: the department of physiology and aging. The merger consolidates the educational programs and research endeavors under one umbrella. Home to 26 faculty members, the newly formed department is poised to enhance collaboration, with experts working side by side to conduct bench-to-bedside research examining all life phases of the human body. ■

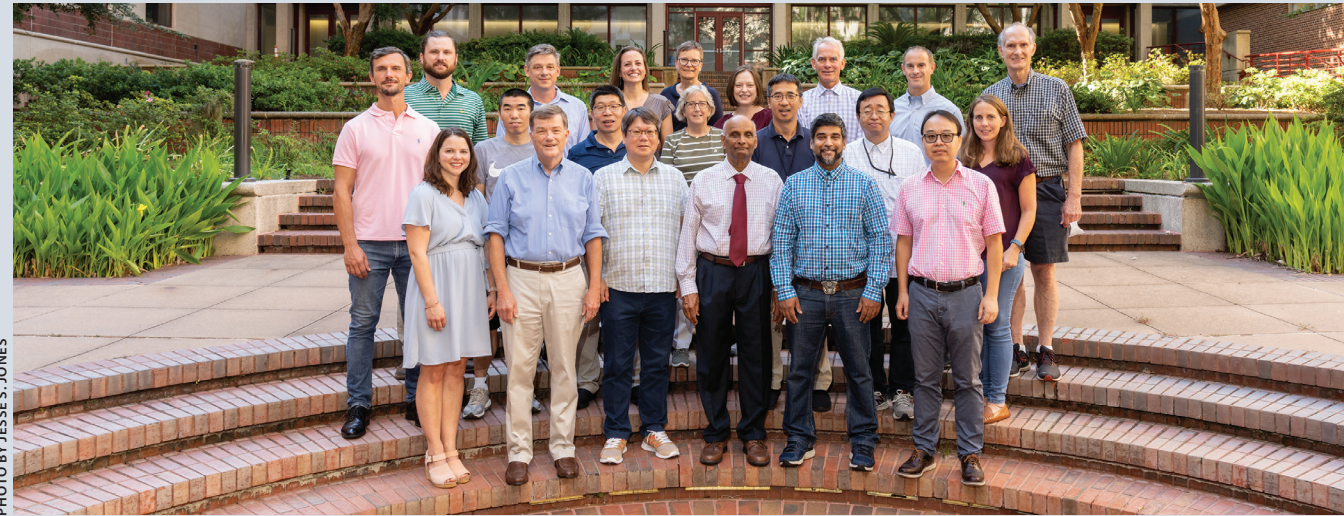


PHOTO BY JESSES, JONES

► COLLEGE NAMES NEW CHAIRS

Carol Mathews, MD, an internationally known clinician and translational researcher in obsessive-compulsive disorder, tic disorders and anxiety disorders, was named chair of the department of psychiatry in October after serving as interim chair since September 2021.

Longtime UF faculty member and limb salvage surgery expert **C. Parker Gibbs, MD '89**, became chair of the department of orthopaedic surgery and sports medicine in January.

Dan Wesson, PhD, who leads an externally-funded independent research lab that is the world's leading authority on the brain's olfactory tubercle and serves as the college's assistant dean for basic science research, was appointed chair of the department of pharmacology and therapeutics in February.

Brain injury and sleep medicine expert **Michael S. Jaffee, MD**, who is the founding director of UF's Brain Injury, Rehabilitation and Neuroresilience Center, was named chair of the department of neurology in March. ■



Carol Mathews, MD



C. Parker Gibbs, MD



Dan Wesson, PhD



Michael S. Jaffee, MD



Timothy Morey, MD



Jennifer L. Hunt, MD, MEd



Jennifer Bizon, PhD

► WELCOMING NEW LEADERS

Timothy Morey, MD '92, who served as chair of the department of anesthesiology for eight years, was named chief medical officer for UF Health Shands and the senior associate dean for clinical affairs at the College of Medicine in January.

Jennifer L. Hunt, MD, MEd, chair of the department of pathology, immunology and laboratory medicine, continues to serve as chair while leveraging her experience collaborating across specialties as the new chief of staff for UF Health Shands, a role she was appointed to in January.

Jennifer Bizon, PhD, chair of the department of neuroscience and an expert in brain aging, was appointed director of the Evelyn F. and William L. McKnight Brain Institute of the University of Florida in February. ■

FACULTY SOUND BITES



Very much like in sports, you can accomplish a lot more through a collaborative effort as a team than you can individually."

— **Duane Mitchell, MD, PhD**, co-director of the Preston A. Wells Jr. Center for Brain Tumor Therapy, discussing UF Health's brain cancer research efforts with ESPN, Nov. 30.



Every place in this room senses something about you. Is this enough light, is this enough noise, are you OK, are you moving enough, are you in the bed, are you out of the bed? I think that's the future of how we will design hospitals."

— **Azra Bihorac, MD, MS**, the senior associate dean for research affairs, describing using artificial intelligence to help patients in the intensive care unit with NBC Nightly News, Feb. 4.



As a matter of general principle, any products that contain chemicals and cover large surface areas of the skin should only be used if considered necessary during pregnancy."

— **John C. Smulian, MD**, the B.L. Stalknaker Professor and chair of the department of obstetrics and gynecology, discussing the safety of using self-tanners with Everyday Health, Jan. 12.



"I think it's going to be a staple. It's going to be something that's expected, that you're going to the hospital and you're going to have access to these things. And we need to think about it not only just in terms of the medicine, but in terms of the healing."

— **Michael S. Okun, MD '96**, director of the Norman Fixel Institute for Neurological Diseases at UF Health and a professor in the department of neurology, discussing arts in medicine with PBS NewsHour, June 27.



Q&A

Patrick Tighe, MD, MS, on AI-QI efforts *continued from page 1*

Q What is the driving force behind the college's AI-QI initiative?

A: For over a decade, UF and the College of Medicine have led the way in developing AI advances in health care in collaboration with so many in engineering, pharmacy and psychology. As that technology and science matures, we have been asking, "What do these advances look like when we apply them in a clinical setting? How does it advance care for our patients?"

The AI-QI initiative allows us to pivot from the classic objectives of expanding knowledge to translating these findings to clinical stakeholders and their individual workflows.

Q One of the ways you are using AI is to model hospital operations and hidden collaboration points between caregivers. Could you tell us more about this?

A: One of the first opportunities we saw to better quantify our clinical processes and how we take care of patients was by modeling health care as a complex system. To do this, we developed the clinician-clinician patient safety graph, which uses AI to look at how teams collaborate to deliver care for patient populations. We found that in a typical year, thousands of caregivers are connected by millions of patient care interactions, and we can now measure those interactions at scale and use that information to propose improvements to patient care.

Looking at these interaction points between caregivers helps us better understand health care teams and how they cooperate daily. Most recently, we've extended the graph to be multimodal, linking clinician networks to similar patient-centered networks of medications, labs, consults and procedures. We can now see who clinicians work with and how these collaborations translate into pathways of clinical care.

Q How else is the AI-QI Initiative pioneering new approaches to quality and patient safety?

A: We recently launched a new grants program called **Rapid AI Prototyping and Development for Patient Safety, or RAPiDS**, to encourage the creation of unconventional AI solutions that AI health researchers and clinicians might not typically pursue because they aren't sure they will work. The goal of this program is to create a safe place for developing, testing and advancing innovative AI quality improvement efforts.

We also brought together teams from across UF and the College of Medicine to test a secure data and computing resource called **ALPS — AI Labs for Patient Safety** — that will create an integrated infrastructure for sensitive analytics and develop an ideal workflow for promoting teamwork across disciplines.

Q What do you see as the potential impact of these AI-QI efforts on patient care and hospital operations?

A: We often talk about the "Swiss cheese" model for safety, when "holes" in layers of stacked safety systems allow a medical error through. While it's a nice model, it's of limited use for mapping out a single safety issue, let alone a complex system like a hospital. I think the AI-QI efforts, through projects like the patient safety graph, will help us not only create this new kind of map, but also use the map to simulate how we can change clinical workflows to improve patient safety.

I'm also so excited to link AI-QI to clinical AI research across the college. What if we could predict a patient's medical error or surgical complication and then use the patient safety graph to automatically predict potential improvements to the care plan, all before the patient ever arrived at our hospital? One of the long-term goals of AI-QI is to not just help translate and implement the phenomenal AI research underway here into clinical practice, but to do so in an impactful and sustainable way.

Patrick Tighe, MD '05, MS



PHOTO BY JESSES, JONES

Rising to the Challenge

By STYLIANA RESVANIS

Alumni and friends of the UF College of Medicine team up to meet scholarship campaign goal

The goal

When the Legacy Challenge campaign kicked off in February 2017, the UF College of Medicine Medical Alumni Board set an ambitious goal: recruit 100 graduates and friends to support scholarships to help medical and physician assistant students obtain the world-class education they deserve.

The purpose

Born in part to alleviate the cost of medical school in the U.S. and meet the growing national need for health care workers, the campaign aided in recruiting the best and brightest future health care professionals to UF, establishing a lasting legacy by ensuring that students with the commitment and compassion for medicine could pursue their dreams.

The how

Participants got involved in three ways: establishing an endowed scholarship with a gift of \$100,000 or more, dispensed on need- or merit-based criteria; sponsoring a medical student with a gift of \$20,000, payable over four years, to provide \$5,000 annually to recruit the most competitive medical students; or including the College of Medicine in their estate plans or making a planned gift.

In 2022, the college surpassed its goal of 100 gifts to scholarships. Meet some of the key players who helped the college cross the Legacy Challenge finish line.



 **James Duke**
MD '85

Then-alumni board president James B. Duke, MD '85, and his wife, Pam, helped kick off the Legacy Challenge campaign in 2017 with a gift to sponsor a medical student. Duke continued to champion the challenge throughout his term as board president, and he and his wife followed up their original donation with an estate gift to support the College of Medicine.



"Part of the mantra of our family is, 'The best thing you can do on a daily basis is show appreciation,'" said Duke, an orthopaedic surgeon in Ocala. "We appreciate the foundation UF gave us and we love giving back when we can."



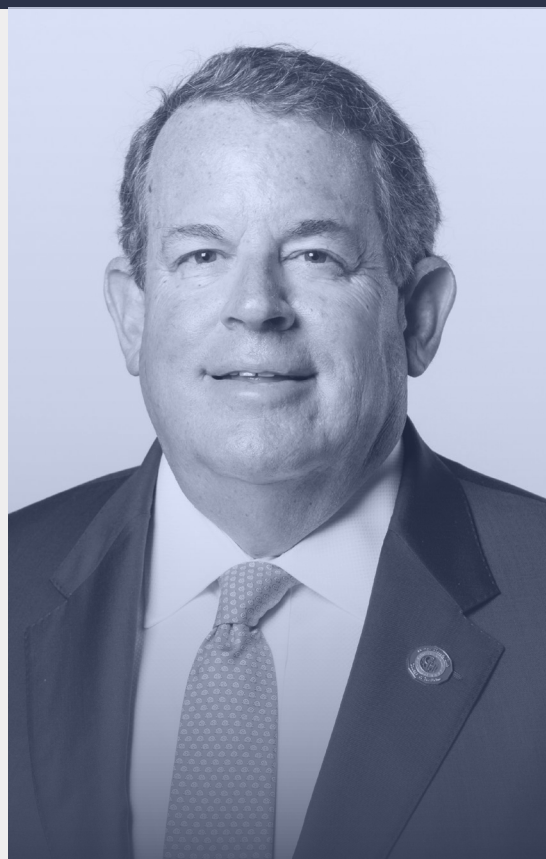
 **Jason Rosenberg**
MD '95

Gainesville plastic surgeon Jason Rosenberg, MD '95, committed to the Legacy Challenge in 2017 with an estate gift of \$1 million to establish the Rosenberg Family Florida Medical Opportunity Scholarship.

Rosenberg, who specializes in breast cancer reconstruction and served as president of the College of Medicine's Medical Alumni Board from 2010 to 2012, was a member of the first generation in his family to attend college and hoped the recipient of his family's scholarship was someone with a passion for serving others.



"I want someone who's going to go out there and change the world," Rosenberg said. "The possibilities are limitless."



 **Mark Michels**
MD '85

As Legacy Challenge participants, Mark Michels, MD '85, and his wife, Lyn, made a gift to provide scholarships to two medical students in honor of Jean Bennett, MD '60, and made an estate gift to name an endowed scholarship. The Palm Beach ophthalmologist also encouraged fellow alumni to support the campaign throughout his time as board president from 2019 to 2021.



"With supportive faculty, excellent programs and a competitive environment without individual competition, the college has been a family for us," Michels said.

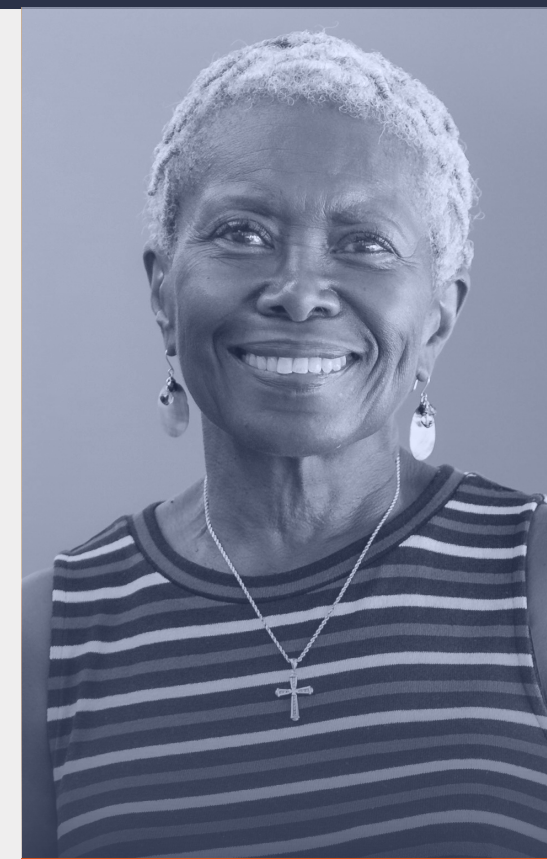


 **Shireen Madani Sims**
MD '01

UF obstetrics and gynecology professor Shireen Madani Sims, MD '01, and her husband, Steven Sims, MD '01, committed to the Legacy Challenge by sponsoring a medical student. The 2021-23 alumni board president, who serves as the assistant dean of student affairs at the College of Medicine, is a quadruple Gator, completing her undergraduate studies, medical degree and residency at UF before joining the faculty in 2005.



"We're so proud of the education that we received at the University of Florida College of Medicine," Madani said.



 **Maude Lofton**
MD '79

Longtime UF College of Medicine supporter and retired pediatrician Maude Lofton, MD '79, joined the Legacy Challenge via a gift to the Willie J. Sanders Scholarship, a fund named for one of her medical school mentors. Sanders, who was one of UF's first Black students and was the first Black faculty member at the College of Medicine, taught anatomy from 1968 to 1989.



"Coming back to campus and meeting students who have received scholarships, seeing their excitement about the specialties they're considering and the education they're receiving — it's a really good feeling because you know you're part of making a change," Lofton said.



 **R. Dean Hautamaki**
MD '89

R. Dean Hautamaki, MD '89, and his wife, Lizzie, joined the campaign team by establishing the Dr. R. Dean and Elizabeth F. Hautamaki Endowed Medical Scholarship Fund, which provides \$1 million to establish merit-based scholarships for College of Medicine students.



"This scholarship is designed for individuals who are clearly driven, passionate and hardworking in the field of medicine, no matter what specialty they decide to go into," said Hautamaki, who practices in Sarasota. "Every physician practicing in this country should be well-trained, ethical, caring, compassionate and communicative. We can make sure that is the case for every graduate of the UF College of Medicine."

RESEARCH ROUNDUP



In memoriam: Nicholas Muzyczka, PhD

Nicholas Muzyczka, PhD, a UF College of Medicine professor emeritus and eminent scholar in the department of molecular genetics and microbiology, died peacefully on Jan. 6 in his Cocoa, Florida, home.

Muzyczka and his team studied the biology of adeno-associated virus, or AAV, replication, leading to the development of AAV as the dominant viral vector for gene therapy applications worldwide. He is listed as an inventor on seven patents related to the use of AAV as a gene therapy vector.

He also founded UF's Powell Gene Therapy Center, serving as its director for six years, as well as Applied Genetic Technologies Corp., a Florida-based company that commercializes gene therapy applications, and Lacerta Therapeutics, whose mission is to develop therapies for central nervous system and lysosomal storage diseases. Muzyczka was also awarded the American Cancer Society Edward R. Koger chair.

College hosts 13th annual Celebration of Research



During the 2023 Celebration of Research Feb. 27-28, which included an art gallery, mentorship roundtable discussion, awards ceremony and more, five College of Medicine faculty members received recognition for outstanding contributions to research or research mentorship. Congratulations to the following UF Medicine faculty — pictured above with senior associate dean for research affairs Azra Bihorac, MD, MS, and dean Colleen Koch, MD, MS, MBA — who received the 2023 College of Medicine faculty research awards:

1. RISING STAR RESEARCH AWARD

Olga Guryanova, MD, PhD, an assistant professor in the department of pharmacology and therapeutics, received the **Rising Star Researcher Award in Basic or Translational Sciences**.

2. OUTSTANDING RESEARCH SCIENTIST AWARD

Todd M. Brusko, PhD '06, a professor in the department of pathology, immunology and laboratory medicine and the research director for the UF Diabetes Institute, received the **Outstanding Research Scientist Award in Basic or Translational Sciences**.

3. RISING STAR RESEARCH AWARD

Coralie de Hemptinne, PhD, an assistant professor in the department of neurology, received the **Rising Star Researcher Award in Clinical, Data or Artificial Intelligence Sciences**.

4. DR. MAVIS AGBANDJE-MCKENNA DISTINGUISHED RESEARCH MENTORING AWARD

Barry Setlow, PhD, a professor in the department of psychiatry, received the **Dr. Mavis Agbandje-McKenna Distinguished Research Mentoring Award**.

5. OUTSTANDING RESEARCH SCIENTIST AWARD

Michael Haller, MD '00, a professor and chief of pediatric endocrinology in the department of pediatrics, received the **Outstanding Research Scientist Award in Clinical, Data or Artificial Intelligence Sciences**.

Visit news.drgator.ufl.edu to view a complete list of faculty, learner and trainee poster presentation award winners.

During the Celebration of Research poster session and reception, **Lou and Rosemary Oberndorf** (bottom left), longtime supporters of medical education technology, made a gift to the College of Medicine in support of AI-related discovery. The first of its kind for the college, the **Oberndorf College of Medicine AI Prize** will be awarded to second-, third- and fourth-year medical students working on AI-focused team research projects.



CELEBRATING 50 YEARS OF EXCELLENCE

By EMILY MAVRAKIS

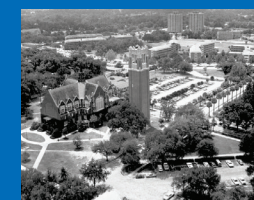
School of Physician Assistant Studies observes milestone anniversary

In the decades since physician assistants were officially introduced as members of the medical profession, they have become integral to health care practices, forever transforming and enhancing patient care. In fall 2022, the UF School of Physician Assistant Studies, the Sunshine State's longest-running PA program, celebrated its 50th anniversary.

"We look forward to continuing our track record of training some of the best PAs in Florida and the nation as our profession grows in stature among the medical community and in the eyes of the public," said Nina Multak, PhD, MPAS, the associate dean and Randolph B. Mahoney director of the School of PA Studies.



Florida's first PA program begins at Santa Fe College and the UF College of Medicine, under the guidance of founding director Richard Henry, MD, with an associate degree awarded through Santa Fe.



Building off its early successes — including running a world-renowned rural health care program in nearby Trenton — Gainesville's PA program progresses steadily and is fully incorporated into UF, offering a bachelor's degree.



The program's longest-serving director, Wayne Bottom, MPH, PA-C, joins the faculty, leading the program for 27 years through a period of exponential growth and progress.



Through the generosity of one of its graduates, Randy Mahoney, MPAS '01, PA-C, the School of PA Studies relocates to the newly constructed George T. Harrell, MD, Medical Education Building, where UF PA and medical students share a home for the first time.

The American Academy of Physician Assistants votes to change the name of the PA profession to physician associates to better reflect the scope of work. Adoption of the new name will take several years to change at the state level and become incorporated into the names of learning institutions.

2021



The UF School of PA Studies celebrates its 50th anniversary.

2022



The PA school continues to develop its curriculum to better integrate medical education technology, adding simulation and patient encounter experiences to give students a glimpse of the real-world scenarios they may encounter as PAs.

2023



Nina Multak, PhD, MPAS, joins the School of PA Studies as the associate dean and Randolph B. Mahoney director, the first woman appointed to the role.

2018

2015

Upon Bottom's retirement, Ralph Rice, PA '91, DHS-C, PA-C, joins as associate dean and director, serving in the role until his retirement in 2017. Under his direction, the PA school implements a pass/fail curriculum for first-year students. Rice holds quarterly director's meetings with first-year students to foster open communication and encourage professional development and mentoring opportunities for faculty.

2011



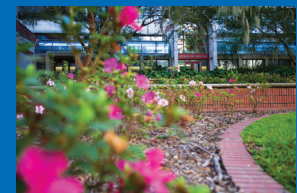
The PA program receives school status, giving it the equivalent rights and privileges of a department within the College of Medicine.

2009



The PA program is upgraded to the master's degree level.

1996



After moving between colleges, the PA program returns permanently to its current home at the College of Medicine.

1993

Funding from the Florida Legislature enables class sizes to double to about 60 students, and the 1329 Building, situated between Southwest Archer Road and Southwest 16th Avenue, serves as the PA program's home base.

1980s

The **Wayne D. Bottom Physician Assistant Scholarship Fund** helps meet the needs of students who might not otherwise be able to study at UF and rewards students for academic excellence and achievement, impacting PAs for generations to come.

Visit med.ufl.edu/pascholarship to make a gift.

HEALTH CARE ACCESS FOR ALL

By EMILY MAVRAKIS

UF's Equal Access Clinic Network celebrates 30 years of free services in Gainesville

Consisting of one small intake room, a closet and classrooms converted into makeshift patient exam rooms inside the old Salvation Army on East University Avenue, UF's Equal Access Clinic began in 1992 with few resources and a \$450 donation from Robert C. Cade, MD.

"It was bare-bones," recalls Marci Slayton, MD '94, then Marci Hartog, the student-run clinic's first assistant director. "People showed up with nothing other than the stethoscopes and otoscopes they brought with them. We had no lab capabilities at all."

It's a stark contrast from the bustling Equal Access Clinic Network that UF students run today, which includes four Gainesville clinics that see thousands of patients annually from across the state. The Equal Access Clinic Network, or EACN, which celebrated its 30th year in operation in 2022, looks forward to more growth in the future.

UF medical students in the class of 1992 started the EACN after being inspired by a community health clinic they participated in at Williams Elementary School. At the EACN's first location at the Salvation Army, students visited homeless and disadvantaged patients once a week for issues ranging from high blood pressure to rashes.

Florida tries to emulate," he says. "It's a model."

Today, the EACN is a system of free, student-run clinics serving Gainesville and surrounding areas. In addition to medical and physician assistant students at the College of Medicine, students from throughout the UF academic health center, including those studying dentistry and physical therapy, provide care. Donations, grants and endowments fund the clinic's nearly \$100,000 operating budget.

Clinics take place four nights a week at four locations, including two mobile units. Fourteen clinics offer specialized care for pediatrics, Spanish speakers and more. The clinics received about 2,000 patient visitors between August 2021 and June 2022.

One of the newest clinics offers psychiatric care, including medication management and brief therapy services. Medical and PA students run the clinic with on-site supervision by physicians from the UF department of psychiatry, says David Feller, MD '89, who has served as the EACN faculty adviser since 1994.

Feller says that while other medical schools give their students the chance to practice medicine in a clinic program, UF's is unique in being completely student-run, under the supervision of trained physician faculty.

"Not only do they get to see things from a medical standpoint," he says, "but they also learn about an organization's structure, the business aspect of ordering supplies and taking on leadership roles. All of that is useful in any profession you go into, but especially in medicine."

THEN AND NOW: 1992 to 2023



FILE PHOTO

Student leaders stand at the first Equal Access Clinic location, inside the former Salvation Army on East University Avenue, in 1994.

About a year later, the clinic moved from east Gainesville into the former family medicine building on Fourth Avenue, across the street from Alachua General Hospital. Even though the founding classes who began the EACN had graduated and moved on, subsequent classes continued to expand the services available.

Robert Watson, MD '69, who was senior associate dean for educational affairs when the clinic began, says he is amazed at the growth of the program and used it as inspiration to start a similar program at the Florida State University College of Medicine.

"UF's is probably the student-run clinic that every school in

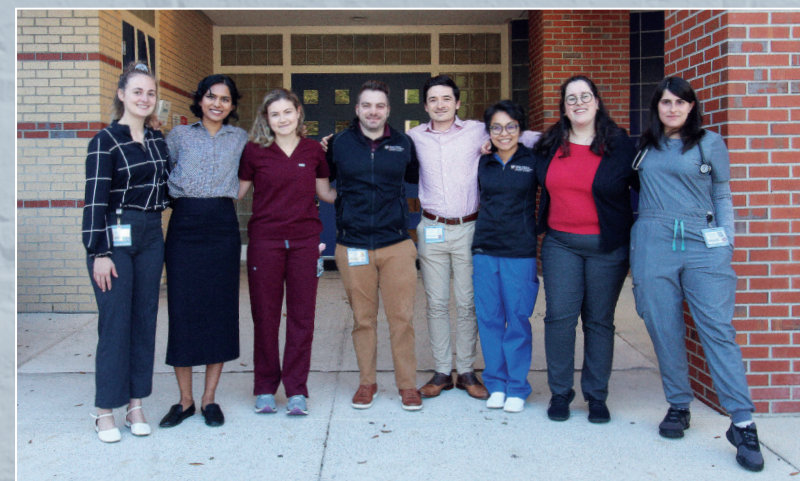


PHOTO BY EMILY MAVRAKIS

Current student officers for the UF Equal Access Clinic at Eastside stand in front of UF Health Eastside on Northeast Waldo Road before visiting with patients.

Leading the clinic's dozens of volunteers is Phillip Mackie, a student in UF's MD-PhD Training Program, and the EACN's current executive director. Mackie first became involved with the clinic as a first-year medical student and has since served as a grants coordinator and finance director for the program.

"I enjoyed the idea of seeing a patient and putting into practice the things I learned in a lecture," he says. "And it felt like I was making a positive impact on an individual's life, which is the essence of why a lot of us went to medical school in the first place."

★ ★ ★ SUTURES AND SERVICE

By DANIELLE IVANOV



Veteran and trauma surgeon
Robert Borrego, MD '84,
gives back through a dedication
to teaching and patient care

Just behind the front lines in Iraq, Robert Borrego, MD '84, spent four months inside a U.S. Army medical tent stitching wounds and saving the lives of soldiers and children injured in the war in 2003.

He had joined the Army Reserve years before, after volunteering to be on standby as a surgeon during the Gulf War, but it wasn't until the Iraq War that he was called to serve on active duty. For the UF College of Medicine alumnus, his military experience with a small, mobile surgical team allowed him to give back to the country that became his family's second home.

When Borrego was 9 years old, he and his mother, father and three siblings left Cuba's political unrest and moved to Miami. Initially wanting to pursue marine biology because of his love for water sports and his father's career as a fisherman, Borrego was swayed when an adviser in college noticed his affinity for science and people and recommended that he consider a career in medicine. Borrego found his calling in surgery as a third-year medical student at UF and specialized in trauma and critical care as a resident and fellow at the State University of New York and the University of Miami.

Decades later, he still strives to improve patient outcomes and medical education using skills from his military service and his passion for teaching the next generation.

"In trauma surgery, we get the worst of the worst — but you get to make quick decisions that make a big difference in patients' outcomes," Borrego says. "I think I was cut out for that. I like the excitement; I like making decisions on the spot, and I love surgery."

The skills and friends he gained at UF

made a difference during his time in the Army as a lieutenant colonel, Borrego says. During boot camp, he trained with fellow College of Medicine alumnus Timothy Floyd, MD '82. They were a year apart at UF and in boot camp but became fast friends and served together on the same forward surgical team in Iraq.

Spending 20 years in the Army Reserve and volunteering for active duty in Iraq was the best decision of his career, Borrego says, because it taught him to listen and provide thorough but timely care for life-threatening injuries.



I feel privileged to be a trauma surgeon, to have been part of the military and to take care of people every single day."

— ROBERT BORREGO, MD '84

Now, as the trauma medical director and chief of surgery at St. Mary's Hospital in West Palm Beach and an associate professor of surgery at Florida Atlantic University, Borrego is helping to train rotating medical students and residents to become tomorrow's top trauma surgeons. He looks forward to growing the teaching program at St. Mary's Hospital and aims to start a surgical fellowship on

top of the residency program's success. And although he is no longer part of the military, Borrego still serves the U.S. with St. Mary's as part of the White House Medical Unit, a health care network that provides worldwide emergency action response and comprehensive medical care to the U.S. president, vice president and their families.

In his free time, Borrego enjoys spending time outdoors with his wife, Cori, and two children, Roberto and Alexa. They especially like the beach, he says, where they can go boating, swimming, diving and fishing, as Borrego did with his own father growing up.

"I got a great education from medical school at the University of Florida College of Medicine, and it's an honor to have been able to do this for so many years," he says. "I feel privileged to be a trauma surgeon, to have been part of the military and to take care of people every single day."



Left: Robert Borrego, MD '84, smiling in his Army uniform with a fellow service member. Right: Borrego hauling a shark on a beach.

Under new name and leadership, The Wertheim UF Scripps Institute will innovate biomedical research

Largest individual gift in UF history names The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology, launches \$1 billion public-private partnership

By DOUG BENNETT AND STEVE ORLANDO

UF's newest research center has a new name and new leadership that will help the institution drive the future of biomedical research and innovation.

The Dr. Herbert and Nicole Wertheim Family Foundation provided \$100 million — the largest gift from an individual donor in University of Florida history — to elevate the stature of UF Scripps as one of the world's leading forces in biomedical research and to advance the ground-breaking work of faculty at the Jupiter, Florida, campus, now called The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology.

This transformational lead investment will launch a 10-year, \$1 billion public-private partnership — spearheaded by The Wertheim UF Scripps Institute — that is focused on amplifying fundamental science, driving research that translates profound discoveries from bench to bedside to business, training the next generation of innovators and investigators and improving the health outcomes and experiences of countless patients and families in Palm Beach County, throughout Florida and across the nation.

The new UF associate vice president of research, Joe G.N. "Skip" Garcia, MD, recently joined the faculty of the Jupiter campus as the Herbert A. Wertheim Professor of Inflammation



The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology, located in Jupiter, Florida.

Science. A distinguished pulmonologist and critical care physician, Garcia is internationally recognized as a preeminent authority on the genetic basis of inflammatory lung disease, the development of novel biomarkers and therapies for critically ill patients, and the examination of lung health disparities among vulnerable populations. He is an elected member of the National Academy of Medicine.

In his role at UF, Garcia serves as the founding director of a dynamic new center for the study of inflammation biology — the Center for Inflammation Science and Systems Medicine. The center focuses on conducting groundbreaking research and training at the intersection of immunology, vascular biology, drug discovery and data science, facilitating and catalyzing research initiatives and training the next generation of interdisciplinary scientists to excel in translational biomedical research. As the associate vice president for research, Garcia promotes ways to enhance the research

mission across UF Health, from the colleges to the centers and institutes.

"I'm energized by the opportunity to join the UF faculty and to partner with colleagues at such a crucial time, to support and grow the research mission and, in the coming years, to add to the stellar track record of scientific breakthroughs at UF, UF Health and The Wertheim UF Scripps Institute," Garcia said.



WELL-BEING INDEX MEASURES WELLNESS FOR RESIDENTS AND FELLOWS

With demanding early-career work schedules, medical residents and fellows often feel the strain of stress. By completing the **Well-Being Index questionnaire**, now available through a project under the people pillar of the **UF College of Medicine's strategic plan**, UF Health trainees can better understand stressors in their lives and gain access to local and national resources to help address physical, emotional and financial concerns, as well as stress and fatigue.

The short, confidential web-based questionnaire, developed specifically for health care professionals, also allows residency and fellowship programs across the college to gather anonymized data that can be used to address particular areas of concern regarding the well-being of their trainees. As a result, the college will be better able to identify specific areas to focus housestaff well-being improvement effort.



PHOTO BY JESSE JONES

College launches platform for faculty mentoring and development

This spring, the College of Medicine launched the Faculty Mentorship Resource Center, a centralized hub where faculty can access key resources and connect with mentors to receive personalized coaching.

Created as part of the people pillar of the college's strategic plan, the center aims to cultivate a community for faculty through an online dashboard that promotes a culture of growth and collaboration. The platform includes three portals: peer-to-peer, which allows prospective mentors and mentees to build online profiles and find matches based on shared interests; circles, an online chatroom where members can set up groups to talk with other faculty to answer questions or collaborate on research ideas; and onboarding, which provides a step-by-step guide to enhance the orientation experience for new faculty.

"We want to prioritize building lasting connections," said Jennifer Bizon, PhD, chair of the department of neuroscience, director of the Evelyn F. and William L. McKnight Brain Institute and champion of the mentorship initiative. "This platform will be another valuable resource for our faculty and will help empower them to take charge of their careers."

Branching Out

Former dean shares UF Hippocratic tree cuttings and values with medical schools around the nation

By DANIELLE IVANOV

Beneath the cream-colored scaling bark and broad green leaves of a plane tree, medical students at the UF College of Medicine have honored the Hippocratic oath and beloved clinical faculty members who best exemplify its ethics of humanism, professionalism and teaching prowess for 54 years.

These celebrations have stood in the shadow of the father of modern medicine since 1969, when the graduating class and university worked with American and Greek consulates to receive six cuttings from a plane tree, commonly known in the U.S. as a sycamore, on the Greek island of Kos that is widely believed to be the same tree, or a descendant of the tree, under which Hippocrates taught medical students.

Decades later, UF is sharing this deeply rooted history by donating new, genetically identical cuttings so that other medical schools around the state and the Southeast can plant their own Hippocratic trees.

"As they become freshly minted doctors, it's important to remind medical students of the ideal behavior in teaching and patient care that the Hippocratic principles espouse," said Craig Tisher, MD, the director of UF's Wilmot Botanical Gardens and a professor emeritus and former dean of the College of Medicine.

Four of the six original cuttings that UF received were successfully grown by a UF horticulture expert, and the most

promising cutting was planted in front of UF Health Shands Hospital on June 14, 1969, as witnessed by representatives from the consulates, UF, the American Medical Association and more. That same day, the medical school class of 1969 honored the first recipient of the Hippocratic Award: obstetrics and gynecology professor and beloved mentor Hugh M. "Smiley" Hill, MD. The award ceremony later moved to Wilmot Botanical Gardens, where another plane tree cutting also grows.

In early 2022, Tisher and colleagues noticed the tree by the hospital was struggling to thrive and had put out many suckers along its lower trunk due to stress. As part of the effort to rehabilitate the tree, Tisher and Bart Schutzman, PhD, a lecturer in the department of environmental horticulture at UF's College of Agricultural and Life Sciences, removed the offshoots and immediately thought to share the wealth.

While Schutzman worked on successfully rooting 13 of the new cuttings, Tisher contacted peer institutions to gauge interest in receiving a tree and starting their own version of UF's Hippocratic Award ceremony. Ten schools responded favorably, and eight have already received their plane tree.

One cutting went to the Florida State University College of Medicine, where Robert Watson, MD '69, understands the impact of the Hippocratic tree and award from both the student and faculty perspective. Prior to becoming an FSU professor, Watson served as a professor of neurology at UF, spent 17 years as the senior associate dean for educational affairs and earned the Hippocratic Award from the class of 1985. His name appears on a plaque beneath the Hippocratic tree in Wilmot Botanical Gardens, along with every other award winner since his medical school class started the award in 1969.

"Getting a cutting from the tree under which Hippocrates is said to have taught seemed perfect," he said. "To call the best clinical teacher of the year the winner of the Hippocratic Award ... it became the most cherished award a clinical faculty member could receive."



Bart Schutzman, PhD, standing beside one of the thriving plane tree cuttings in front of a UF greenhouse.

Medical schools working with Tisher for Hippocratic tree cuttings

- **Duke University School of Medicine** *tree received
- **Florida International University Herbert Wertheim College of Medicine** *tree received
- **Florida State University College of Medicine** *tree received
- **Nova Southeastern University Dr. Kiran C. Patel College of Allopathic Medicine** *tree received
- **Tulane University School of Medicine** *tree received
- **University of Alabama at Birmingham Heersink School of Medicine** *tree received
- **University of Central Florida College of Medicine** *tree received
- **University of South Florida Morsani College of Medicine** *tree received
- **Florida Atlantic University Charles E. Schmidt College of Medicine**
- **Emory University School of Medicine**

ALUMNI COUPLE ESTABLISH AWARD IN HONOR OF CLASSMATE

Dr. Emma Segal Award supports residency applicants who aim to align their path with their significant other’s

By EMMA BEHRMANN

Leora Lieberman, MD ’19, and Robert Eisinger, PhD ’20, MD ’22, owe their medical foundation and their relationship’s origins to the UF College of Medicine — and a friend who dabbled in matchmaking. Now, they plan to give back to both.

When Lieberman was in her third year of medical school, her friend and classmate Emma Segal, MD ’19, urged her to meet Eisinger, who was in his second year of the MD-PhD Training Program. Thanks to Segal’s matchmaking abilities, the two went on a date in 2018, and the rest is history.

The couple spent time together but apart when Eisinger stayed in Gainesville to complete his MD-PhD training and Lieberman moved to Pennsylvania for residency at the Children’s Hospital of Philadelphia in 2019. Three years later, Eisinger matched at the University of Pennsylvania, where he is now a neurology resident.

Upon closing the more than 900-mile gap that separated them and reflecting on their time at the College of Medicine, the couple wanted to thank the institution and the friend who gave them the experiences they cherish. Last June, Lieberman and Eisinger established the Dr. Emma Segal Award to help ease the financial burden for medical students applying to residency programs and participating in the couples match.

Medicine, academia and long-distance relationships can pose a difficult balancing act. Couples who want to

stay together may need to travel more often or apply to more residency programs to ensure they live in the same city, which is an expensive process.

“We didn’t want people to apply to fewer places and risk not being able to be together because they don’t have the extra finances to apply,” Eisinger said. “We’re hoping that for couples who want to stay together, they’re able to do so more easily with these extra funds that can support their applications.”

The Dr. Emma Segal Award aims to support College of Medicine students who are in relationships and helps couples align their paths.

“This award just goes to show how caring and kind Robert and Leora are and how much they want to give back,” said Segal, who remains close friends with Eisinger and Lieberman and received a FaceTime call after they got engaged in July 2021. “We can all say how much we loved being part of UF College of Medicine. You develop long-lasting relationships, and this award sheds light on that.”

Lieberman and Eisinger’s love for one another and the College of Medicine inspired this award that hopes to keep other love stories alive.

“We both are really grateful that our foundational learning was in an environment that was so supportive, warm and loving,” Lieberman said. “We are grateful for the people and the community. We hope we can support other students in their journeys.”

The UF Center for Experiential Learning and Simulation

provides College of Medicine students and UF Health professionals with technical training and immersive simulation in a safe environment. Using simulators ranging from a premature infant to an adult female trauma patient, the center’s resources enable current and future medical professionals to practice caring for a variety of patients in a diversity of settings, with the ultimate goal of improving health care delivery.

The comprehensive medical simulation training program, located in the George T. Harrell, MD, Medical Education Building, is fully accredited by the Society of Simulation in Healthcare, an achievement earned by fewer than 30 organizations globally that demonstrates a level of excellence in meeting international standards for curricula.



PHOTO BY JESSE S. JONES



PHOTO COURTESY OF LEORA LIEBERMAN AND ROBERT EISINGER

Leora Lieberman, MD ’19, and Robert Eisinger, PhD ’20, MD ’22, established an award for medical students applying to residency programs and participating in the couples match.

COLLEGE OF MEDICINE

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