School of Medicine WRIGHT STATE UNIVERSITY

TRAUMA

When care is critical

Dean Marjorie Bowman, M.D.,

You have to have a thirst for knowledge that persists forever. Growth:

That was an ecstatic moment... the moment you wait for in your research that eclipses all the frustrations of the last years.

ewell, M.D.:

I am amazed that every delivery can provide a new, special experience whether it's human or orangutan.

From the Dean

It's hard to believe, but it's been more than a year since I became dean of the Boonshoft School of Medicine. Now that I've had time to settle in and get to know everyone, I'm even more amazed by the dedication, innovation, and commitment to excellence I've seen here.

I have found the Boonshoft School of Medicine to be a jewel, often hidden, and less well known than it should be. In my meetings with our alumni, I have come to understand just how proud of their medical school they are. We have the proudest graduates I have ever met, and with good reason.

The Boonshoft School of Medicine has kept its eye on its mission, in spite of health care environments that would push it otherwise. I have learned that we are a great value-added school. We admit enthusiastic students with a great sense of passion, and we help them become even greater along the way. We take enthusiasm and permanently ingrain mission.

As dean, it has been my distinct pleasure to meet the students, faculty, staff, and alumni of the medical school and to learn their incredible stories.

In this issue of Vital Signs, you'll meet some of those individuals. Our faculty are leading the way with cutting-edge research. We're pleased to report on Dr. Julian Cambronero's discovery of a mechanism to slow tumor growth and metastasis in breast cancer, and Dr. Thomas Brown's research into preeclampsia, a life-threatening condition for both mothers and babies.

Our alumni are making a difference in their communities nationwide. You'll meet Dr. Nathan Schlicher, a graduate of our emergency medicine residency program who became the youngest state senator in Washington State, 1989 grad Dr. Ronald Golovan who serves as team physician for the Cleveland Indians, and 2008 grad Dr. Bryan Jewell who helped deliver a baby orangutan at Zoo Atlanta.

And our students are gaining recognition at both the state and national levels. You'll meet recent graduate Dr. Casey McCluskey, who as a medical student overcame breast cancer and went on to receive a national public health award, fourth-year student John Corker who received an AMA Physician of Tomorrow Award, and third-year Topaz Sampson who serves as the 2013-14 presidentelect of the national Student National Medical Association.

These are just a few of the remarkable stories featured in this issue. I look forward to introducing you to more members of the Boonshoft School of Medicine family in upcoming issues.

Marjorie A. Bowman, M.D., M.P.A.

What's Inside





Going Full Term: I just want to walk him out of here. take him home and snuggle him, but you can't do that.

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Nathan Schlicher, M.D.: Other legislators talk about the problems with the system, but I live in them every day with my patients.



John Corker: What better way to make an informed decision than to live and work in our nation's capital for a year.



McCluskey, M.D.: I literally put my life in the hands of my doctors...

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Vital Signs

Vol. 37, No. 1 Spring 2014

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Vital Signs is published twice a year for alumni, faculty, staff, and friends of Wright State University Boonshoft School of Medicine.

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Events

Snapshots

Wright State partners with Saudi university to create medical school

Wright State University's Boonshoft School of Medicine is expanding its global reach under a new agreement that enables a new medical school in Saudi Arabia to get started in an innovative way, bringing the best of Wright State's medical education expertise to a new set of students.

Under the agreement,
Unaizah College of Medicine
of Qassim University, Saudi
Arabia, will deliver a
concurrent educational
experience for its students,
parallel with the Boonshoft
School of Medicine's
medical education program.

Unaizah College of Medicine will become the first medical school in Saudi Arabia to offer an American-style medical education, granting the M.D. degree. Until now, Saudi medical schools have granted a Bachelor of Medicine, Bachelor of Surgery, or M.B.B.S. degree.

Unaizah representatives approached the leadership of Boonshoft in 2012 to learn more about its innovative education program, research activities, and community-based clinical training.

"Our outstanding educators and research faculty have attracted international attention," said Marjorie Bowman, M.D., M.P.A., dean of the Boonshoft School of Medicine. "We are proud that we can offer a new school in a different culture our proven program for



Dean X. Parmelee, M.D., visited Saudi Arabia in December 2013 to help finalize plans.



(L-R) Boonshoft School of Medicine associate dean for academic affairs Dean X. Parmelee, M.D.; Boonshoft School of Medicine dean Marjorie A. Bowman, M.D., M.P.A.; Sulaiman Alyahya, professor and vice president for planning, development, and quality, Qassim University; Saleh Aldamegh, dean of Unaizah College of Medicine, Qassim University; Yousef Aidebasi, dean of the College of Applied Medical Sciences, Qassim University; and Wright State vice president for research and Graduate School dean Robert Fyffe, Ph.D., met at Wright State University to work out details of the agreement.

educating the next generation of physicians."

Wright State Provost Sundaram Narayanan, Ph.D., P.E., Bowman, and representatives of Unaizah College of Medicine and Qassim University have signed a three-year \$5.5 million renewable agreement.

"This agreement helps strengthen Wright State's international identity and enables the university to increase its global impact," Narayanan said.

The agreement will also provide opportunities for student and faculty exchanges and, most significantly, faculty development to enhance medical student education.

Unaizah College of Medicine was established in 2011 as part of a new university founded by Qassim
University. Both campuses are located in Qassim
Province, northwest of
Riyadh. At Unaizah and other medical schools in
Saudi Arabia instruction is conducted in English.

26 Wright State Physicians named 2013 Best Doctors® in America

Twenty-six clinicians affiliated with Wright State Physicians and faculty of the Wright State University Boonshoft School of Medicine were named to the 2013 Best Doctors® in America list. They represented almost a third of the 81 Dayton area doctors named. Eight Boonshoft School of Medicine alumni who practice locally also were included on the list.

These leading medical practitioners, researchers, and professors are members of a prestigious, peer-reviewed group that includes the top 5 percent of U.S. physicians. Best Doctors Inc. compiles and maintains the list. For more than 20 years, Best Doctors has conducted a physician survey to identify the doctors that other doctors trust most. The list includes more than 53,000 medical

experts in some 450 specialties and subspecialties worldwide. The local list is published annually in the *Dayton Business Journal*.

The Wright State physicians and faculty were named best doctors across a broad range of specialties and subspecialties ranging from pediatric cardiology to geriatrics and psychiatry to orthopaedic surgery.

"The faculty of the Wright State University Boonshoft School of Medicine are leading the way in medical education and medical care," said Marjorie Bowman, M.D., M.P.A., dean. "Congratulations to the doctors of Wright State Physicians, the faculty of the Boonshoft School of Medicine, and our local alumni who were named the best doctors in the Dayton region."



The Wright State Physicians Health Center opened on the campus of Wright State University in summer 2012.

Listed below are the doctors of Wright State Physicians and the faculty of the Boonshoft School of Medicine who were named the Best Doctors in the Dayton region.

Sherman J. Alter, M.D.

Pediatric Infectious Disease Associate Professor, Pediatrics

Jack Bernstein, M.D.

Infectious Disease Professor, Internal Medicine, Pathology

David G. Bienenfeld, M.D.

Psychiatry Professor, Psychiatry, Geriatrics

Emmett Broxson, M.D.

Pediatric Hematology-Oncology Professor, Pediatrics

Ann E. Burke, M.D. ('96 Resident) Pediatrics/General

Associate Professor, Pediatrics

John S. Czachor, M.D. ('83) ('87 Resident)

Infectious Disease, Internal Medicine Professor, Internal Medicine; Assistant Professor, Pathology

Mukund Dole, M.D.

Pediatric Hematology-Oncology Associate Professor, Pediatrics

Margaret M. Dunn, M.D., M.B.A. Surgery, Surgical Oncology

Professor, Surgery

Greg M. Eberhart, M.D. ('94 Resident)

Pediatrics/General
Assistant Professor, Pediatrics

Robert J. Fink, M.D.

Pediatric Pulmonology Professor, Pediatrics

Julie P. Gentile, M.D. ('96) ('00 Resident)

Psychiatry
Associate Professor. Psychiatry

Paulette M. Gillig, M.D., Ph.D. Psychiatry Professor, Psychiatry

Robert A. Goldenberg, M.D.

Otolaryngology Professor, Surgery

Jerald Kay, M.D.

Psychiatry, Pediatric Specialist/Child

and Adolescent Psychiatry
Professor, Psychiatry

William Michael Klykylo, M.D. Pediatric Specialist/Child and

Adolescent Psychiatry
Professor, Psychiatry; Associate
Professor, Pediatrics

Richard T. Laughlin, M.D.

Orthopaedic Surgery Professor, Orthopaedic Surgery, Sports Medicine and Rehabilitation

Ann K. Morrison, M.D.

Psychiatry Associate Professor, Psychiatry

Gary A. Mueller, M.D.

Pediatric Pulmonology Associate Professor, Pediatrics

Maria T. Nanagas, M.D.

Pediatrics/General Associate Professor, Pediatrics

Cynthia G. Olsen, M.D. ('85)

('88 Resident)
Family Medicine
Professor, Family Medicine,
Geriatrics

John M. Pascoe, M.D., M.P.H.

Pediatrics/General Professor, Pediatrics

Arthur S. Pickoff, M.D.

Pediatric Cardiology Professor, Pediatrics, Community Health

Brenda J. Roman, M.D.

Psychiatry Professor, Psychiatry

Randy A. Sansone, M.D.

Psychiatry Professor, Psychiatry, Internal Medicine

Glen D. Solomon, M.D. ('83 Resident) Internal Medicine

Professor, Internal Medicine

Steven K. Swedlund, M.D. Family Medicine

Family Medicine
Assistant Professor, Geriatrics

We'd like to hear from you

If you're a Wright State grad who has been named to the Best Doctor's list, send us your information, and we'll include it in the next issue of Vital Signs. Contact us at som_adv@wright.edu

Boonshoft School of Medicine adopts a five-year strategic plan

The Boonshoft School of Medicine has charted its course for the next five years with the adoption of a new strategic plan. The plan was approved by the medical school's executive committee in August 2013. Development of a new strategic plan was undertaken as part of the university-wide strategic planning process to determine the path for Wright State University through 2018.

The medical school's strategic plan, "Improving Health through Exceptional Academics, Research, Social Commitment, and Community Engagement," sets strategies and tactics to achieve five specific goals over the course of five years. The goals are:



Education Advance learning experiences that prepare

learners for the medicine of tomorrow.



Research Advance the school's reputation for nationally

recognized research.



Patient Care Prepare for and create the future of patient care.



Community **Engagement** Strengthen community education.

community partnerships, and academic partnerships.



Resources Maximize revenue sources and

performance of our fundamental operations.

Each goal also features a culture statement that elucidates the school's values to inform the various strategies and tactics.

"The strategic plan lays the foundation for all of our activities over the next half decade," said Dean Marjorie Bowman, M.D., M.P.A. "This plan will allow us to strategically maximize our efforts in the five core areas of education, research, patient care, community engagement and resource management."

Behind-the-scenes work on the plan started in late 2012. In February 2013, the first meeting with task force cochairs, department chairs, and associate deans was convened. The chairs and associate deans were encouraged to provide input during the entire planning process. Five committees were assembled, one for each goal. The committees were chosen to encourage strong input from a broad range of faculty.

Innovative Interchange Associates, a local consulting and facilitation firm with experience working with corporations, government organizations, and nonprofits, was engaged to facilitate the process.

Following the kickoff meeting, the facilitators met twice with each focus committee in 90-minute sessions to generate potential strategies for the committee's goals.

The facilitators collaborated

with each focus committee cochair to create the meeting agendas and to assist in creating reports to be presented at a final retreat, which was held on May 20. The retreat included not only the membership of each of the focus committees, but also executive committee members, fully affiliated faculty members, department administrators and business managers, and representatives from Premier Health-more than 80 attendees in all.

Following the adoption of the plan, Dean Bowman and the associate deans have designated champions to guide the implementation of the plan's strategies and tactics.

"Our dedicated faculty and staff are our major asset, and they ensure the strength of our institution," said Dean Bowman. "I thank them for their tireless efforts in the strategic planning process and its implementation and for helping us improve health for citizens in our community, our nation, and around the globe."

View the Strategic Plan online: med.wright.edu/about/ strategicplan2013

Boonshoft School of Medicine earns Accreditation with Commendation for its CME

The national Accreditation Council for Continuing Medical Education (ACCME®) awarded the Boonshoft School of Medicine Continuing Medical Education (CME) Accreditation with Commendation at its July 2013 meeting.

Accreditation with Commendation is awarded nationally to only a few CME providers that demonstrate compliance in 22 criteria. The ACCME commended the medical school for meeting the accreditation requirements and for demonstrating that it is a learning organization and a change agent for the physicians served in the Miami Vallev.

This is the first time Wright State has received Accreditation with Commendation. "It's a real marker for excellence for the Boonshoft School of Medicine," said Albert F. Painter Jr., Psy.D., assistant dean for faculty and clinical affairs. "We have created a continuum of medical education that starts in medical school, continues in residency, and is offered in medical practice with continuing education. The accreditation with commendation shows that the Boonshoft School of Medicine is a national leader in physician education."

In 2011, the medical school partnered with Premier Health to help streamline continuing medical education in Dayton. "We share many of the same physicians with the hospitals. In the past,

some educational efforts were duplicated because we have similar needs but did not have the means to identify them," said Karen Bertke, CME program administrator for the medical school. "We now can simplify those efforts to include not only hospital requirements but also medical school and residency educational requirements."

The medical school's CME program works closely with other Ohio medical school CME programs through a consortium, CPD Ohio. In 2012, the medical school received the Alliance for Continuing Education in the Health Professions Award for Innovation in Continuing **Professional Development**



AAFP recognizes Boonshoft School of Medicine with a Top Ten Award



The American Academy of Family Physicians (AAFP) honored the Wright State University Boonshoft School of Medicine with a Top Ten Award for its consistent commitment to meeting the nation's need for family physicians.

During the Society of Teachers of Family Medicine spring conference, the AAFP annually recognizes schools that graduated the greatest percentage of students who chose first-year family medicine residency positions during a consecutive threeyear period. Known as the Top Ten Awards, this

recognition was expanded to 12 schools to accommodate the growth in the number of geographically separated medical school campuses. There are 141 allopathic medical schools in the United States.

According to the AAFP, Americans make more office visits to family physicians than any other medical specialty. Family physicians provide care for patients who have sore throats. patients who need stitches, and patients who have multiple, complex conditions such as diabetes with congestive heart failure.

Ann E. Burke, M.D., elected to American Board of Pediatrics



Ann E. Burke, M.D., has been elected as a director of the American Board of Pediatrics and the American Board of Pediatrics Foundation.

Burke, an associate professor of pediatrics at the Boonshoft School of Medicine and director of the school's pediatric residency training program at the Dayton Children's Hospital, began a six-year term on Jan. 1, 2013. The American Board of Pediatrics is one of the 24 certifying boards of the American Board of Medical Specialties. The board of directors of the American Board of Pediatrics includes distinguished pediatricians in education, research, and clinical practice.

Burke is the past president of the Association of Pediatric Program Directors (APPD), which serves pediatric programs and their leadership by advancing the art and science of pediatric education for the purpose of ensuring the health and well-being of children. She also served as the APPD's secretary-treasurer and curriculum task force chair.

Burke is working on the board to further Pediatrics Milestones, a collaboration of the American Board of Pediatrics and the Accreditation Council for **Graduate Medical Education** (ACGME), a private, nonprofit organization that evaluates and accredits more than 9,000 residency programs in the United States. The Milestones project aims to objectively assess pediatric resident development in a more outcomes-based manner.

She has coauthored articles in the Journal of Graduate Medical Education, a peer-reviewed, editorially independent journal published by the ACGME, about the Pediatrics Milestones Project, which addresses measurement tools and benchmarks to help develop pediatricians.

"There was not a good standard to determine when a pediatric resident is ready to graduate," said Burke. "The process was very subjective and not standardized. The outcomesbased, accreditation-based evaluation system will provide benchmarks for residents."

Burke became passionate about pediatrics while a medical student at the University of Virginia School of Medicine. She enjoyed working with children and their families. "When children are sick, they act sick. When they are well, they are running around," said Burke. "Helping children and educating families is very rewarding. It's part of our job as pediatricians."

"Dr. Burke has established herself as a leader in pediatric education," said Arthur Pickoff, M.D., professor and chair of the school of medicine's Departments of Community Health and Pediatrics. "This prestigious appointment to the American Board of Pediatrics comes right on the heels of her completion of her term serving as president of the Association of Pediatric Program Directors, another attestation to her expertise in education."

Issues In Depth TRAUMA When care is critical med.wright.edu

Vital Signs Spring 2014



Cattle farmer Kelly Long and her dog Danica, who came to her rescue when she was seriously injured by a 1,400-pound cow.

Kelly Long's date with trauma began one predawn morning last year when the normally "super-cautious" cattle farmer made a rare misstep. She was

sure there was a safe distance between the newborn calf she was about to tag and its 1,400-pound mother. But this was no ordinary mother—cow No. 6051 was a first-time mom new to Long's Lynchburg, Ohio, farm and in a particularly cranky mood that morning.

Within seconds, the cow charged Long, clearing a feed bunk along the way, and leveled the 130-pound farmer with her first blow. She then trampled her target as the 47-year-old lay helpless, barely conscious and covered in feed pen muck. "They'll come at you with their head like a bull, cows will," Long recalled months later. "If they feel their calf is threatened, they won't stop, and she didn't stop. From then on, everything is blurry."

During those blurry moments, Long later learned, a four-legged first responder came to her rescue — her dog Danica, a 2-year-old border collie who specializes in cattle herding.

Evidence later revealed that Danica must have attacked the cow during those harrowing moments, giving Long the brief reprieve she needed to stumble out of the pen and into a barn, where she found a five-gallon bucket, sat down and phoned for help. Family members rushed to her aide, and when it was clear Long couldn't catch her breath and couldn't get up from that bucket, they called 911. "The EMS squad was there in, like, two seconds," Long remembered.

First responders from Lynchburg Fire and Rescue rushed Long to Highland District Memorial Hospital in nearby Hillsboro, a rural community about 60 miles southeast of Dayton. Long's blood pressure bottomed out along the way. At Highland, doctors inserted a chest tube while a helicopter and EMS team from CareFlight Air and Mobile Services waited to whisk Long to Miami Valley Hospital, a Level I Trauma Center.

At Miami Valley (MVH), a trauma team that included Kimberly Hendershot, M.D., an assistant professor in the Boonshoft School of Medicine Department of Surgery, assessed the

damage: eight broken ribs on Long's right side, a collapsed lung and a "shattered" liver. Long would spend the next two weeks at MVH recovering from her injuries. She would return on two more occasions because of complications, but today is otherwise healthy. Most grateful, too.

"I love them all, from the EMS crews to my doctors, nurses, and therapists," Long said. "They took such good care of me."

Wright State integral partner in region's trauma care

At a time when trauma care's role in our society seems increasingly vital, as last year's Boston Marathon bombing and other tragedies of the last decade remind us, Long's experience illustrates how a trauma system is supposed to work: An EMS crew responded quickly to an injury scene. Absent a nearby trauma center, a local hospital stabilized a patient, communicated clearly with the nearest appropriate trauma center, and sent her there. From emergency department care

through physical rehabilitation, the trauma center nursed a patient back to health. A life was saved

Long's story also shows Wright State's role in trauma care through its affiliation with local trauma centers and the physicians and caregivers it educates, trains, and employs. Besides Hendershot, a 1999 Boonshoft graduate, almost the entire faculty in the Department of Surgery is on staff at a local trauma center. That includes A. Peter Ekeh, M.D., professor of surgery and interim director of Trauma Services at MVH, and his predecessor in that role, Mary McCarthy, M.D., chair and professor of surgery, who founded MVH's trauma program in 1991.

"Virtually all Level I Trauma Centers are affiliated with a university setting because research is an extremely important component, as is injury prevention and education," said McCarthy, a member of the American College of Surgeons (ACS) Committee on Trauma. "The Wright State University faculty have participated in the development of the Miami Valley program throughout its existence. So what we have here is nationally recognized quality care, and it's provided through the resources of the university and the participation of its faculty at a national level."

Preparing for disaster

In the aftermath of the Boston Marathon bombing, Level I Trauma Centers at six area teaching hospitals treated hundreds of patients, many with serious injuries. Three people died at the scene, but everyone who made it to the hospital that day survived.

"It's remarkable how well the system worked," said Daniel Butler, M.D., trauma program medical director for Atrium Medical Center in nearby Middletown.

Speaking last September at Wright State as a panel member for a discussion on the region's trauma centers, Butler noted that within three minutes of the blast, all trauma centers in Boston were notified. Within four minutes, mutual aid requests had gone out to emergency personnel. Eighteen minutes after the blast, the scenes were all cleared, and within 30 minutes, all of the injured were in a hospital. All survived.

"You know why?" asked Butler. "Because of the lessons learned from 9/11 and other disasters since then. They prepared, they practiced, practiced, practiced, and when something happened, they were ready for it."

Similarly, hospitals in the Dayton region have plans in place should a natural or man-made disaster strike this area.

The region has five trauma centers: Miami Valley at Level I, Kettering Medical Center and Dayton Children's Hospital at Level II, and Atrium Medical Center, Soin Medical Center in Beavercreek and Greene Memorial Hospital in Xenia at Level III. The entire state has 44 trauma centers in all, 14 at Level I, according to the ACS.

The different levels (I-V) refer to the kinds of resources available in a trauma center and the number of patients admitted yearly, according to the American College of Surgeons, the authority that verifies hospitals as trauma centers. Level I is the highest level, meaning the hospital must be ready at a moment's notice to respond to large-scale disasters and is capable of providing total care for every aspect of injury—from prevention through rehabilitation.

"If there is an occurrence like the Boston Marathon bombing, we are prepared for such a calamity," said Ekeh.

MVH was designated in 2006 by the National Foundation for Trauma Care as one of the top five "highly prepared" trauma centers in the nation for its preparedness to respond to large-scale disasters. The hospital joined four other medical centers nationwide that received the accolade.

Ekeh said MVH's disaster plan involves virtually every facet of hospital operations, from the emergency department to the operating rooms to the patient floors. Mock disaster training helps staff determine how and where best to use hospital resources, and determine who is most seriously injured and who is too injured to be saved. Working with other area hospitals, including competitors such as Level II Trauma Center Kettering Medical Center, is an integral component, too, he said.

"We're working on how we can work together more on responding to disasters," he said.

Working with the military lessons from war, staying sharp at home

Doctors say advancements in trauma care are largely driven by the symbiotic relationship the military and civilian medical communities enjoy.

"The trauma center here has a close relationship with Wright-Patterson Air Force Base," Ekeh said. "Their surgeons come here and rotate with us to keep them in a state of perpetual readiness. We're also involved heavily in national and international meetings

"Virtually all Level I Trauma Centers are affiliated with a university setting because research is an extremely important component, as is injury prevention and education."

where we interface with the military and exchange ideas."

Butler, the trauma surgeon in Middletown, is a colonel in the Army Reserves who has served three tours in Iraq and Afghanistan in recent years. He said in every war there have been medical advances, and "as we learn from each war we try to translate that knowledge into better civilian trauma care." He pointed to three advancements in particular:

- The use of tourniquets, long frowned upon in civilian medicine because they were believed to increase morbidity and mortality. "But in war we found that tourniquets do save lives and they're an absolute necessity to first responders, surgeons, and other medical personnel in combat zones," Butler said. In civilian medicine today, he noted, most EMS squads carry tourniquets.
- Blood transfusions. The old industry standard was to pump a bleeding patient full of I.V. fluids and red blood cells until the bleeding could be stopped on the operating table. But in the 1991 Gulf War, the military learned that method could actually increase bleeding. During the Afghanistan and Iraq wars, the military discovered whole blood transfusions produced better outcomes. Bleeding patients are loosing whole blood, after all, not just components. So today the standard is to start a "1:1:1 transfusion"

(one unit of red cells, one unit of platelets, and one unit of plasma) to match whole blood components that were lost from bleeding.

■ Damage control surgery. This type of surgery has been around since the 1980s, Butler said, but it really came into focus during the Afghanistan and Iraq wars. Military doctors learned they could save more lives by focusing on the most serious damage first and leaving the rest for the operating room or ICU at a medical facility with a higher level of care. "You don't do any fancy surgery, you do 'meatball surgery' to get the patient more stable," Butler explained.

Butler also mentioned the military's use of cots instead of backboards as an important lesson, but it's been slow to catch on in the civilian arena. "We know from the data that lots of patients are injured by being on a backboard, more so than from not being on a backboard," he said. "Some EMS units are slowly changing to get rid of backboards... Sometimes it's not easy to translate what we've learned on the battlefield into civilian medicine. It takes time and lots of education."

The military benefits from civilian medicine, too.

McCarthy, the surgery department chair, said the first Air Force attending surgeon to join MVH's staff joined in 1991. "It's like an embedded journalist; we have an embedded trauma surgeon," she said.

McCarthy said Wright State and MVH have been training Air Force residents since 1974, and that half of Wright State's eight surgical residents each year are from the Air Force.

The latest to join is Lt. Col. John Bini, M.D., under an Air Force program called the Sustainment of Trauma and Resuscitation Program (STARS-P). The program allows Air Force attending surgeons, nurses, and medical technicians to rotate through Level 1 Trauma Centers to hone their war readiness skills. The rotations are considered part of their normal duty time.

Bini came to Wright-Patterson in September from San Antonio, Texas, where he was chief of general surgery at Wilford Hall Medical Center on Lackland Air Force Base. Wilford is the Air Force's flagship hospital and serves as a Level 1 Trauma Center in Texas.

"It's providing us a platform to maintain our surgical proficiency," Bini said of STARS-P. "I think as we progress in our peacetime mission that all areas of military medicine will find themselves looking for these collaborative civilian ventures in order to maintain proficiency."

Bini brings considerable wartime experience to his latest post. He's been deployed to

"...this is a place where you can make a very big difference very quickly. You really do watch people who come in knocking on death's door get better."

Afghanistan and Iraq three times, including as a chief of trauma and as a surgical flight commander. He's also an instructor and provider of Advanced Trauma Life Support, and he has served as the course director for the Defense Medical Readiness Training Institute's Emergency War Surgery Course since 2007.

Assistant professor Kimberly Hendershot, M.D., (right), cared for Kelly Long when she was brought to the Miami Valley Hospital Level I Trauma Center.



In his current duties, Bini said he spends the bulk of his time working for Wright State and MVH, but he also works one day a week fulfilling clinical and educational responsibilities at Wright-Patterson Medical Center.

Why trauma care?

It's a brutal profession on several fronts. Long hours, calls in the middle of night, injuries that are downright grisly, and patients and families whose lives have been shattered, sometimes violently and almost always needlessly. Then there's the emotional hangover that follows.

But for those who work in trauma medicine, there's nothing else like it and nothing else they'd rather do.

"Every day is different, you never know who's going to come through the door," said Alyssa Gans, M.D., a 2009 Boonshoft graduate and fifth-year surgical resident at Miami Valley Hospital. "The other thing is this is a place where you can make a very big difference very quickly. You really do watch people who come in knocking on death's door get better. It's very rewarding to take care of them and see them walk back out the door."

Echoed Wright State nursing graduate Lisa G. Weaver, R.N., Trauma Program director for MVH: "Trauma is a great way to immediately impact patients and families during a time when their lives have been turned upside down in a matter of seconds. We can't always fix the patient, but we can provide the best care available, compassion to the patient in their last moments, and reassurance to the family that their loved one was never alone."

Weaver said she fell for trauma care during her first job as a nurse working in the emergency department at Wilson Memorial Hospital in Sidney, about 30 miles north of Dayton. She grew more committed when she joined MVH in 1991 and then CareFlight Air and Mobile Services soon thereafter, first as a flight nurse and later as chief flight nurse/clinical operations manager.

Weaver said the job can be "emotionally taxing," but trauma team members lean on each other for support. "I cope with tragedy knowing that we make a difference in so many lives, and that when trauma patients are brought to our facility—we have over 30 years of caring for high acuity trauma patients—they are being cared for by the best."

Gans said she found her calling working with MVH's night trauma team when she was a fourth-year medical student on her surgery rotation. "I loved it," the Cleveland native recalled. "I looked forward to coming to work every night. It was the most fun I had in medical school."

Gans heads this summer to the University of Cincinnati for a one-year fellowship in surgical critical care. She credits her education at Boonshoft and the training she's received from faculty for getting her to this point.

"Wright State does a very good job of getting us into the operating room and into clinical settings very, very early, which is one of the things that sets us apart from other places," Gans said. "You get much more of a hands-on education. We jump right in, and that prepares us well for our future."

-Anthony Gottschlich



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A Closer Look Politing the puzzle Polices tegether

As a former farm girl, Marjorie Bowman is used to hard work. But what some may consider the drudgery of farm life, inspired in Bowman a natural curiosity about the world around her, an overriding desire to make a difference, and a common sense approach to medical care.

She grew up on a dairy farm in western Pennsylvania, surrounded by her extended family. "Being a dairy farm," she said, "we all worked."

Although she wasn't an outstanding student in elementary school, she started to shine in middle and high school. "I did very well academically, and living on the farm, I was a very curious kid," she said.

Her curiosity led her to keep a colony of rats in the basement of her home for research. Supported and encouraged by her high school science teacher and her family's veterinarian, she began studying an anti-diabetic drug that gained attention statewide.

"I presented a lot across the state and won a fair number of awards for my research when I was in high school," she said. As a result, she was asked to visit schools and enter science fairs to discuss her research. As a country kid, she never felt like she was part of the "in" crowd in high school. But rather than let it get her down, it motivated her even more to excel. She played softball, ran track and field, competed in gymnastics, and was a cheerleader.

"I tried being on the basketball team one year, but that was really stupid," said the petite Bowman, who barely tops five feet tall. She was also class valedictorian.

A decision to enter medical school

When she was exploring options after high school, she considered research, "but it didn't have enough people interaction to suit me."

"I didn't know you could become an M.D./ Ph.D.," she said. "If I had been introduced to that type of joint degree early on, I might have done that."

She didn't have much experience with the medical field growing up. "My mother always said she was against medical care, and I think actually some of it was just the finances," she said. "They didn't have the money, and health care costs money.

"I believe I saw doctors maybe twice before I graduated from high school," she said. "But the doctor was wonderful to us. My mother would call, and he would give her answers as much as he could over the phone."

When Marjorie Bowman, M.D., M.P.A., became dean of the Boonshoft School of Medicine on October 1, 2012, she brought with her years of

experience serving at some of the premier medical schools in America. But her inspiration to enter medicine, her

dedication to hard work, and her natural inquisitiveness came

from her earliest days growing up on a farm.

What piqued her interest in medicine was her experience with the vet when he came to care for the farm animals.

"I once helped him deliver this calf that had a huge deformity," she said. "We had to use chains to pull this calf out, and we thought we were going to lose the cow." They managed to save the cow, but the calf didn't fare as well.

"I wanted to do something that would help people, that would keep me intellectually stimulated," she said, "and I didn't want to be bored. So that's how I decided to go into medicine."

College and medical school in five years

She applied to an accelerated five-year program at Pennsylvania State University and got in. "So that helped seal the deal," she said.



Dean Marjorie Bowman talks to students.

She entered the Penn State-Jefferson Premedical-Medical Program in 1971 and graduated with an M.D. from the Jefferson Medical College five years later.

Bowman remained as active as ever in college. She worked 20 hours a week in a lab from her second through fourth years of medical school. She became a master bridge player and a member of Alpha Omega Alpha, the national medical honor society.

She also joined the 1961 Society at Jefferson. "At first I didn't know what the 1961 Society was," she said. "But 1961 was the year that Jefferson admitted women after being cited by the Surgeon General's Bane report as the last medical college in the U.S. to admit women. And it's just sad to say that was during my lifetime."

She thrived in medical school, and worked in a medical lab to help support herself. "I got to do a ton of stuff I would never be allowed to do today," she said. "We had a supervisor, but we did all the CBCs, the urines, the chemistries for the hospital," she said. "I didn't even have a bachelor's degree at that point."

She credits her upbringing on the farm for her success in her surgery rotation.

"I sewed all my own clothes when I was in high school because I didn't have any money," she said. "I did surgery on the cows and the rats. Surgery was easy."

The oral exams in surgery were a different matter. She recommended a lumpectomy rather than a total mastectomy for a woman with upper outer quadrant breast tumor with negative nodes. "As soon as I got out of there, I thought, 'This is probably not what I should have said." She was sure she'd blown her chances because the physician who pioneered the radical mastectomy procedure was the chair of surgery at Jefferson.

Her fellow students told her she was sure to fail. Instead, she earned an A for the rotation. "They probably liked that I had paid attention, looked it up, was thinking about it," she said. "I said what I believed, I read up on it, and I just thought there's another way to look at this." Since then, the more conservative procedure has become much more the norm.

She considered going into surgery, but, "I couldn't stand not dealing with the whole person." She finally decided on family medicine, "because I believed in prevention, liked psychology, and wanted to deal with people over the long term."

Residency at age 22

Due to the accelerated program at Jefferson, she started her residency when she was 22. "I was so young," she said. "I tried to dress like I wasn't. I thought I was dressing older, but when I look back, I really wasn't."

Bowman went to Duke University for her residency. "I wanted to choose a good residency—one where you had a lot of options afterwards," she said. So she looked at what the graduates were doing and was impressed.

Like many residencies, hers was sink or swim. "On my first day as an intern, I had 12 admissions out of the emergency room, and mind you, this is how many doctors were around besides me—zero. Zero," she said. "You were just thrown to it in a way we don't do now. It was the way it was. We didn't think twice about it."

As a resident she published research she conducted on setting up a computerized documentation system for all the residents in North Carolina. She also became president of the North Carolina Resident Society, and national resident representative for the American Medical Association and the American Academy of Family Physicians.

After her residency, she was looking for something different. She decided to join the U.S. Public Health Services as a medical officer in Hyattsville, Maryland, which did grants and contracts related to primary care. At the age of 28, she became director of the office of graduate medical education.

She still found enough time to play adult women's soccer and earn a Master of Public Administration degree from the University of Southern California, which she found helpful in understanding politics and regulations. She also served as the federal representative on the ACGME, LCME, and National Resident Matching Program. "I've always been kind of high energy," she said.

As a commissioned officer, she worked on one of the large graduate medical education studies run out of what is now the Centers for Medicare and Medicaid Services (CMS). Her

"You can never learn everything in medical school, you have to have a thirst for knowledge that persists forever,"

work resulted in a change to a Medicare regulation that required medical schools to return Medicare money if they received federal grants. That single change in regulation has saved medical schools millions of dollars.

"It didn't make any sense," she said. "Why would schools take a grant if they then have that amount withheld from their Medicare money?" she said. "It took a long time to get that changed."

Although she enjoyed her time in the Public Health Services, she was ready to move on. She wanted to have a wider impact.

Making a difference in academic medicine

She considered her options and decided she could have the most impact in academic medicine and teaching the next generation of physicians. "Plus, I had that academic bent," she said. "So I ended up in academics and stayed here ever since."

She was interested in the dean of students position at Georgetown University School of Medicine, but it didn't work out. But the dean at the time liked her and a year later hired her as assistant dean for Continuing

Medical Education. He asked her to move to Washington, D.C., and serve as his liaison for the D.C. government. Within a year she became the residency director for family practice, and then director of the Division of Family Practice.

She also did research related to the HIV epidemic, which was just beginning to be understood. At the time, doctors were often uncomfortable asking patients about their sexual practices. Questions about the number of sexual partners, condom use, and HIV testing weren't routinely asked. She collaborated with a colleague to research a way to retrain doctors in the new era of HIV.

She came up with a standardized patient intervention and conducted both blinded and non-blinded studies. The researchers found it was beneficial to have the doctors practice asking the questions of standardized patients. "They have to practice," she said. "You can tell them all you want, but until they've said this to a standardized patient, it could be really hard to say these things to a real patient." The National Institute on Allergy and Infectious Diseases (NIAID) funded it on the first round, and she published papers on it in several journals.

She decided to become a department chair while she was at Georgetown. One week she got called by three places about department chair positions, including a call from her former dean who tried to recruit her as chair at the school where he worked after leaving Georgetown.

She ended up deciding on the Bowman Gray School of Medicine at Wake Forest University, where she served as professor and chair of the Department of Family Medicine and Community Medicine for 10 years. She was 33 years old.

"I knew I was young, but I just went ahead and did it," she said.

From Wake Forest, she went to the University of Pennsylvania to start the Department of Family Medicine, where she stayed for 16 years. As the first female clinical chair at the University of Pennsylvania medical school, she served as professor and founding chair of the Department of Family Medicine and Community Health in the Perelman School of Medicine, and director of the university's Center for Public Health Initiatives.

After serving three six-year terms as department chair, her time as chair at Penn was coming to an end. She had already exceeded the school's two-term limit, when her third term was made possible by a special presidential committee.

She was interested in deanships and looked at several positions nationwide. A friend suggested that she consider a newer medical school. When the deanship at the Boonshoft School of Medicine opened up in late 2011 it seemed like a good fit. "I liked the place, it had similar goals to mine. I was ready to leave Penn," she said.

Sixth dean of the Wright State University Boonshoft School of Medicine

Bowman expects to see big changes in the delivery of health care in the United States. "I think we are in a time of change, and there could be very large upheavals in how medical care is provided and where the doctor's role fits in that," she said. "So things will be different. Some feel that means physicians will lose power. I think much more of what we do will require intense team work."

As dean of the Boonshoft School of Medicine, Bowman wants to build a medical school that will flourish in a time of rapid change. "We may feel uncertain along the way," she said of the path ahead. "We're going to take some risks that may not pan out and we'll take some risks that will. That's who we are.

"We're going to keep our eye on the goal of providing good community service with people who are excellent, thinking clinicians who know how to work well in teams," she said. "Everybody is a part of making medical care

"But I don't think that will ever take away the need for the doctor/patient relationship," she said. "I think sometimes we get away from that, but it's still important, even with the changes that are occurring."

Fostering inquisitiveness builds better doctors

She believes in the school's basic values of providing excellent care for the community while advancing its research and academic enterprises. "I personally think that the best clinicians still think like researchers," she said "We need to be thinking about what we're doing. Why is it like this? How could it be better? What could we do?"

Bowman believes that people with a natural inquisitiveness and lifelong curiosity make better doctors. "You can never learn everything in medical school, you have to have a thirst for knowledge that persists forever," she said. "I think the worst doctors are the people who don't think."

That natural inquisitiveness should also extend to interpreting research. "You have to have enough of a critical eye for research to realize that some of it's not good, and that you shouldn't rely on it," she said. Research findings can change, and "you also have to look at the lived experiences of people."

She feels the Boonshoft School of Medicine instills and nurtures curiosity in its students. "I love the fact that we're very intent on helping our students interact with people and understand the need for lifelong learning," she said. "Because I think that's a lot of the guts of medicine."

Increasing access to medical care

Growing up in a rural environment, Bowman also sees the need for more rural health care providers. She believes it is not only important to provide students with experience in rural areas, but it also helps rural physicians with whom they rotate, "because docs learn from students."

To that end, she is involved in helping to create the Wright Rural Health Initiative in the rural counties surrounding the Wright State University Lake Campus at Grand Lake St. Marys. The new program will expand the health profession pipelines that target underrepresented students, specifically students in rural areas and small towns.

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Access to health care is something Bowman takes very seriously. "In sheer fairness and equity for people around the country, they all should have access to medical care," she said. "I think we're a school far more likely to make that happen."

That's one reason she's so dedicated to service learning. "I believe in service-based learning. I believe in getting real-world experience," she said.

Bowman is enthusiastic about the future of the Boonshoft School of Medicine. "Because we pay attention to who and what we are, we aren't trapped by some of what large institutions have gotten trapped by," she said. "We are a flexible school that will come out ahead.

"We will not always do exactly what we hoped to do," she said. "We won't get everybody out there into rural environments. But we will advance our research and try to embed it more into the every day lives of docs and their patients."

Puzzling things out

Bowman is married to Robert Choplin, a radiologist. Their five children, "yours, mine and ours," are all grown and out of the house. Up until the youngest left for college in 2012, she coached youth soccer every weekend. In her spare time, she bikes and enjoys tackling large jigsaw puzzles.

"My job is like that," she said. "There are a lot of pieces out there, and they are all important. Trying to figure out, though, how they all fit and fit together and which color they bring to it is part of the fun."

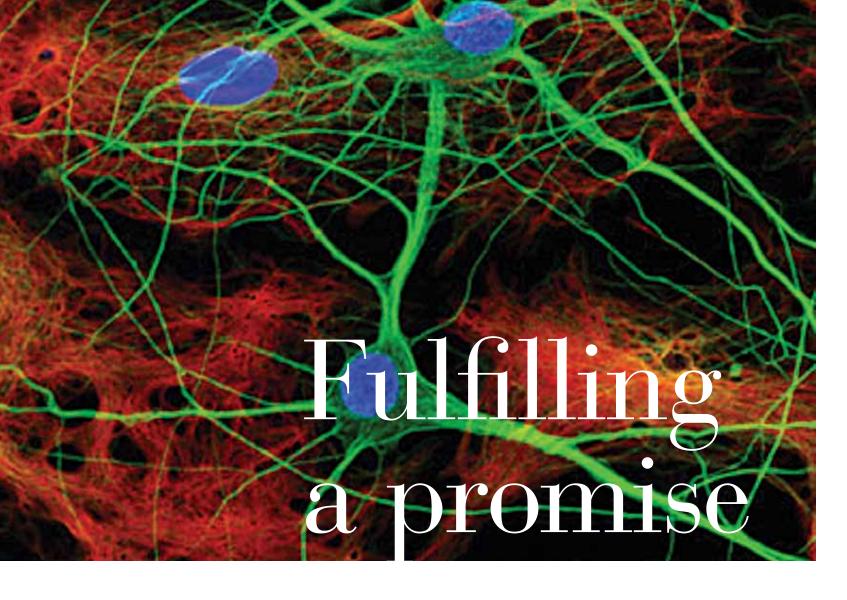
But truth be told, she admits she's not very good at relaxing.

"I've always got something else I want to do," she said. "There is more to be done."

-Cindy Young



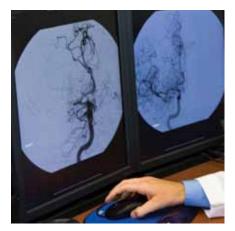
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The Wright State University & Premier Health Neuroscience Institute was unveiled on February 24, 2010, with the promise to speed the transfer of research discoveries from bench to bedside, improving the diagnosis and treatment of neurological disorders such as stroke.

This collaboration between the Dayton region's most advanced biomedical research institution, Wright State University, and the clinical resources of its largest hospital system, Premier Health, has resulted in a synergy that will accelerate translational research and transform discoveries in research laboratories into breakthroughs in patient care.

The institute has made great strides since its genesis in 2010.



May 2012: Department of Neurology established

Following his appointment as chair of the new Department of Neurology in May 2012, Kenneth J. Gaines, M.D., M.B.A., hired a core team of faculty who specialize in such areas as stroke, epilepsy, movement disorders, and critical illness.

The department continues to recruit for a movement disorders specialist and is seeking at least one more neurology generalist. In addition, the department is seeking another epileptologist to assist with the Epilepsy Monitoring Unit at Miami Valley Hospital and with cutting-edge deep brain surgical procedures focused on the treatment of epileptic seizures.



November 2012: First Annual Neuroscience Institute Symposium

In November 2012, the first annual Neuroscience Institute Symposium was held at Wright State University. Presentations explored the underlying mechanisms for the development of epilepsy, indications and outcomes for the surgical treatment of epilepsy, interventional treatment options for acute stroke management, and the mechanism of neurological involvement in critical illness.

In November 2013, the Neuroscience Institute held its second annual symposium, "Selected Topics in Translational Neuroscience." Presentations addressed the research into therapy for myasthenia gravis, research into therapy for vasospasm, therapeutic options to prevent cerebral ischemia in preterm neonates, and how stress adversely impacts health.



March 2013: \$4.6 million NIH Neuroscience Research Grant

In early 2013, Wright State won a \$4.6 million National Institutes of Health grant aimed at improving the movement of badly injured limbs—funding that will accelerate the growth and productivity of the rapidly developing neuroscience research on campus and support the research and graduate training programs that will be housed in the new Neuroscience and Engineering Collaboration Building.

The grant will explore how the central nervous system responds to injury of peripheral nerves. The research can lead directly to new therapies to help soldiers and others recover near normal function after injuries to a limb.

This award builds on the research performed in the first \$4.8 million Program Project Grant awarded to the team in 2007. In that

research, investigators identified several key, long-term adaptations that occur after nerve injury even if nerve regeneration itself is successful. These adaptations point the way to new therapeutic strategies that will improve recovery from movement and other disorders that remain long after nerve injury.

Timothy Cope, Ph.D., Brage Golding
Distinguished Professor of Research, chair of
the Department of Neuroscience, Cell
Biology and Physiology and codirector of the
Wright State University & Premier Health
Neuroscience Institute, said there is a growing
national awareness of the success in
neuroscience at Wright State.

"One of the benefits is that we're attracting first-rate students and training very highly skilled technicians, such as experts in microscopy, who have become vital assets to the community," Cope said.

"We not only have the knowledge and core facilities necessary to do top-flight research, we also have the scientists, graduate students, and technicians necessary to conduct research that will improve people's lives."

The grant was one of only two of its type awarded that year by the National Institute of Neurological Disorders and Stroke, which is part of NIH. The five-year grant is for research titled "Synaptic Function: Effects of Nerve Injury, Repair and Altered Activity." Wright State investigators involved in the project include Cope; Robert Fyffe, Ph.D., vice president for research and dean of the Graduate School; and Mark Rich, M.D., Ph.D., professor of neuroscience, cell biology and physiology, and neurology at the Boonshoft School of Medicine. Also collaborating is Francisco Alvarez, Ph.D., of Emory University.



April 2013: Groundbreaking for Neuroscience Engineering Collaboration Building

In April 2013, Wright State broke ground on the new state-of-the-art Neuroscience Engineering Collaboration (NEC) Building. The \$37 million facility will house leading engineers, neuroscientists, fellows, and medical students working and learning collaboratively. By working shoulder-to-shoulder, scientists and physicians will have an invaluable opportunity to generate and share innovative ideas, support one another's work and collaborate to achieve more than they could in isolation.

The 90,000-square-foot NEC Building will feature laboratories, shared core infrastructure, state-of-the-art equipment, and research resources for engineers, scientists, physicians, students, and post-doctoral researchers. A 105-seat auditorium will provide space for seminars, workshops, and advanced teaching sessions. The building is expected to be completed by February 2015.

Fyffe said the building has been strategically designed to encourage random interactions between the neuroscientists and engineers. "The goal is that these scientists, engineers, and physicians will work together to address significant problems and through the synergies, resources, and talent available in the NEC Building come up with very creative transformational answers to the questions," he said.

Wright State researchers are working to find treatments for stroke, epilepsy, traumatic brain and spinal injury, neurodegenerative diseases, and other medical problems. People who occupy the new building will build upon the current research and investigate why blood vessels in the brain burst, develop imaging techniques to track neurological diseases, help people at risk for depression and disorders of learning and memory, work to regenerate damaged nerves to their fullest possible function, and develop treatments for conditions like sleep apnea, SIDS and ALS.



November 2013: Neurology Residency Program approved

In November, the Accreditation Council for Graduate Medical Education approved the new residency program in neurology at the Boonshoft School of Medicine.

The new program, which will begin on July 1, 2014, was approved to accept up to 16 residents, who will train at Miami Valley Hospital, the Clinical Neuroscience Institute located at Miami Valley Hospital, Dayton Veterans Affairs Medical Center and Dayton Children's Hospital.

"We seek to graduate neurologists who are prepared to meet the challenges presented by the rapidly expanding body of knowledge in the neurosciences," said Bradley Jacobs, M.D., M.S., director of the residency

program and associate professor of neurology. "We have carefully designed a program that builds the basic strengths necessary to become an outstanding clinical neurologist and, for those interested in research, to develop into a first-rate physician scientist."

The residency program is closely aligned with other programs within the medical school, including neurosurgery and psychiatry. Areas of specialization in the neuroscience program include behavioral neurology, cerebrovascular disease, child neurology, clinical neurophysiology, critical care, epilepsy, movement disorders, neuroimaging, neuroimmunology, neuromuscular disease, neuro-oncology, neuro-ophthalmology, pain management, psychiatry, and sleep disorders.

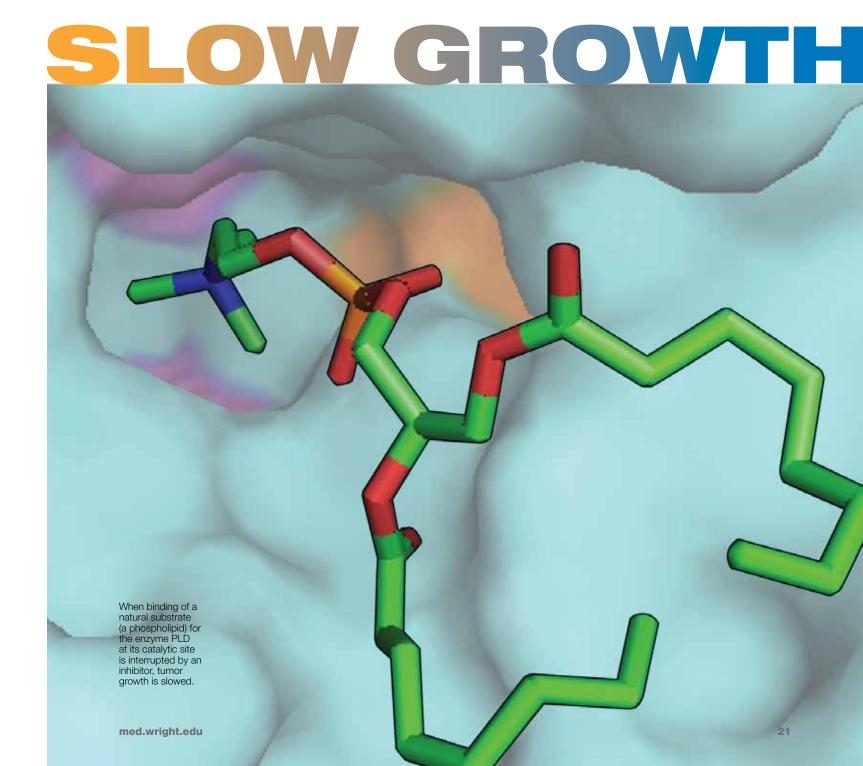
Some Neuroscience Institute scientists are included on the faculty of the Neurology Residency Program. Faculty from the Neuroscience Institute will help provide basic neuroscience education and research opportunities for the residents.

"The creation of the neurology residency programs allows us to fulfill one of the original goals of the Neuroscience Institute—to improve patient care in the Dayton region," said Marjorie Bowman, M.D., M.P.A, dean of the Boonshoft School of Medicine. "By bringing new physicians to the region, the new residency program, working in tandem with the Wright State University & Premier Health Neuroscience Institute, will enhance patient care locally in a wide spectrum of neurological disorders such as stroke, epilepsy, movement disorders, critical illness, and more."

-Heather Maurer

Research Spotlight

Wright State professor Julian Gomez-Cambronero discovers mechanism to slow tumor growth and metastasis in breast cancer



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For some research scientists, there's nothing sweeter than stopping a tumor in its tracks, or at least slowing it down. Just ask Julian G. Cambronero, Ph.D., a Boonshoft School of Medicine professor of biochemistry and molecular biology.

"This is a very satisfying moment," said the professor, smiling as he reflected one afternoon last spring in his Diggs Hall office about his latest discovery, a novel protein that contributes significantly to breast cancer tumor growth.

The protein is phospholipase D (PLD), which Cambronero and his research team say is not only central to breast cancer tumor growth but to metastasis in the nearby lungs as well. Using mice as animal models, the team found that by introducing two new chemical inhibitors of PLD, they could shrink tumor growth and reduce subsequent lung metastasis by around 70 percent.

"Although it's still early to tell, the application of these inhibitors to research in human tissue is the next step that could lead to better, less toxic treatments in the battle against breast cancer," said Cambronero, who since joining Wright State in 1995 has garnered more than \$6 million in research funding from the National Institutes of Health, the American Heart Association, the American Cancer Society, and other state and federal sources.

Breast cancer kills more women in the United States each year—about 40,000—than any other type of cancer, according to the National Cancer Institute. The disease strikes an estimated 232,340 females each year and 2,240 males.

Cambronero and his team's findings were published in a June edition of *Oncogene*, one of the world's leading cancer journals. The study's authors are all Wright State colleagues. Besides Cambronero, they include research associate Karen M. Henkels, veterinarians Gregory Boivin, D.V.M., and Emily S. Dudley, D.V.M., of the Laboratory Animal Resources Department, and Steven J. Berberich, Ph.D., associate provost for faculty and staff affairs and former chair of the Department of Biochemistry and Molecular Biology.

Getting started

Cambronero said the idea for his breast cancer research occurred to him in the summer of 2009 while vacationing in his homeland of Spain. He and his team had been researching PLD for many years by that time, finding in one study that leukocyte migration could be stopped by PLD inhibitors. While vital to our immune system, leukocytes can cause harm when deposited in large amounts to the wrong place at the wrong time. They tend to hang around the heart for too long following a heart attack, for example, damaging healthy tissue. What if these PLD inhibitors could stop malignant cancer cells, too? Cambronero wondered.

"Upon my return, I convinced a graduate student in the lab to do a pilot experiment, which, to my delight, indicated that the hypothesis was correct, that in the lab we could inhibit cell invasion with PLD inhibitors," said Cambronero. "Since this 'invasion' is a precursor of metastasis, I immediately thought that this could have wider implications."

Cambronero brainstormed for a few days and arrived at a three-pronged strategy to his study, an interdisciplinary approach that would involve research techniques in molecular biology, cell biology pathology, and animal studies.

But he had to overcome some early challenges first, including his lab's limited experience at the time in tumor implants in animals. "It took us at least a year to learn the techniques," Cambronero recalled. "We settled on commercially available immunodeficient mice, called SCID, and I had to write all protocols and get proper approval from the university. I also recruited for the project two D.V.M.s, Dr. Boivin and Dr. Dudley, to help me with the implants and the pathology studies that were going to follow."

By the fall of 2011, the research team had the SCID and human breast cancer cells in hand, ready for experimentation.

From frustration to elation

In one experiment, the researches took low-invasive breast cancer cells and introduced the gene, called "pld," that encodes for the PLD protein. This took several strategies and attempts before arriving at a successful mechanism. But once there, the results followed Cambronero's expectation: The cells became highly aggressive. The researchers subsequently injected the cells into the SCID through a procedure called orthotopic xenotransplantation. The resulting tumors grew quickly and lung metastasis developed readily.

In the second experiment, the researchers took highly invasive, aggressive breast cancer cells and "silenced" the pld gene. This was tricky, and one of several difficulties in the study, Cambronero said. "It was frustrating that the gene was not completely knocked out using molecular biology techniques in our lab," he said. "We had to try several approaches." This is where Berberich, then the department chair, lent his expertise.

When the team finally injected the cells into the SCID mice, they found the cells were less invasive than in the previous experiment, the resultant tumors grew slowly and lung metastasis was diminished.

"That was an ecstatic moment...the moment you wait for in your research that eclipses all the frustrations of the last years."

Cambronero said.

It was the summer of 2012 and there was still one more experiment to go, one that would attempt to show a real-world application of the study's findings, a way to deliver the science pharmacologically.

For this study, Boivin and Dudley took mice xenotransplanted with human breast cancer cells and surgically implanted micro-osmotic pumps underneath the skin on their backs. Henkels, Cambronero's research associate of eight years, assisted. This was new territory



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for the longtime lab manager, though, and she had to learn anesthesia techniques and how to prepare the mice for surgery. The pumps, which were filled with two different inhibitors of PLD activity, painlessly delivered the drugs to the mice over 45 days.

Cambronero's students were charged with examining the mice, checking for tumors, and reporting their findings to Cambronero. Early on they couldn't find any tumors.

"No tumors yet? Really?" Cambronero asked his students. So the professor checked one mouse himself. No lumps. He checked another mouse. No lumps there either. Then another, and another. This was in stark contrast to the control group, the mice with breast cancer that weren't receiving any PLD inhibitor. They all had lumps in their mammary pads.

For Cambronero, disbelief. So he and his students checked and rechecked again. They did so every other day for the next two weeks until they started to notice tiny lumps in the mice. The control mice, meanwhile, possessed lumps so large they were visible with the naked eye.

"I knew then that what we had found was important, and that it could have a potential application to humans," Cambronero said. "This had turned into a bona fide preclinical research that could be the beginning of a process for future use in humans. I was ecstatic, yet cautiously optimistic as I knew many more experiments needed to be done."

Henkels called the project "truly a team effort" and praised the work of all involved, especially the student members of Cambronero's lab—Madhu Mahankali, Qing Ye, Ramya Ganesan, Samuel Kantonen, and Nate Hatton.

Next steps, patience required

Cambronero has enjoyed much success in his career. He has published 90 peer-reviewed papers in scientific journals, he's presented his research at 60 scientific conferences around the world, and he's collected numerous awards for his work. Last June, he was named a Brage Golding Distinguished Professor of Research, a special award by the Board of Trustees to a WSU faculty member who has produced a significant body of work in scholarship and research that brings distinction to the university and national or international recognition to the faculty member.

But Cambronero's breast cancer research is the first with a potential application for humans, in a devastating disease, no less. And while his study shows promise, he and his team fully realize that moving the research from the bench to the bedside of human patients is a long and tedious trek. He hopes that task will quickly follow, though. He is actively seeking a partner—a pharmaceutical company or physicians in a tertiary medical setting, perhaps—to move the research forward.

Meanwhile, Cambronero's cancer research continues. He's currently designing experiments to explore the combination of the immune system with cancer, looking at "tumor-associated leukocytes." Cancer is so pervasive, he says, that malignant cells not only evade immune surveillance and elimination, the sneaky little devils co-opt leukocytes to work for their benefit and to help them grow.

"We are always thinking ahead," he said. "It has been a long dream of mine to find ways to integrate different systems. Nothing in the body occurs in isolation, and research in biomedicine is moving in an all-inclusive direction."

-Anthony Gottschlich





Here in the Neonatal Intensive Care Unit of a Dayton hospital, tiny Jaxon John Baldasare struggles in his Isolette[®], a modern-day incubator. A ventilator does the work of his underdeveloped lungs, a feeding tube delivers nutrition, and various monitors track his vital signs.

His mother, Tiffany Baldasare, looks on with a mixture of love and anguish.

"I just want to walk him out of here, take him home and snuggle him, but you can't do that," said Tiffany, who visits Jaxon daily when she's not working full time at another hospital nearby, raising two other children with husband Andy, and commuting back and forth to their home in Troy, some 20 miles north of Dayton.

It's late July and Jaxon shouldn't be here, not yet anyway, but his life depended on it. So did his mother's. Just 26 weeks into her pregnancy (and with 14 to go), Tiffany developed preeclampsia, a life-threatening condition marked by a rapid rise in blood pressure and high levels of protein in the mother's urine, symptoms that can lead to seizure, stroke, multiple organ failure, and, in the worst of cases, death of the mother and/or baby. Triggering the crisis was Tiffany's defective placenta, the nutrition pipeline that joins mothers to their developing babies.

There's no way to stop preeclampsia but to deliver the baby. So on June 6 Tiffany's doctor delivered Jaxon via cesarean section. Born at 6:30 p.m., the third son of Tiffany and Andy Baldasare weighed 1 pound 13 ounces and stretched 13.5 inches head to toe.

"I really didn't think he was going to make it," reflected Tiffany, still carrying a hint of uncertainty in her voice.

It's scenes like this one that drive Wright State's Thomas L. Brown, Ph.D., and his research team to work long hours in his laboratory in the Medical Sciences Building. Brown, a professor and vice chair for research in the Department of Neuroscience, Cell Biology, and Physiology, has dedicated the bulk of his career to the study of embryonic development and prevention of pregnancy-associated disorders that lead to premature birth.

In 2011, the promise and quality of his research garnered Brown a five-year grant of more than \$1.5 million to investigate the underlying factors that cause preeclampsia, a disease that strikes five to eight out of every 100 births in the United States. The grant was funded by the Eunice Kennedy Shriver National Institutes of Child Health and Human Development, a division of the National Institutes of Health.

Two years later, Brown said the grant is paying off.

"Many pregnancy-associated disorders, including preeclampsia, stem from abnormal placental development," he said. "We've identified a protein that plays a crucial role in placental stem cell development, and when that protein is altered and not working properly, the placenta doesn't develop as it should."

Brown said the protein, called "hypoxia inducible factor-1 alpha," or HIF-1a, is an oxygen sensor that regulates trophoblast differentiation and maturation, the process in which early placental cells become more specialized in form and function. He explained that in a normal, healthy pregnancy, HIF-1a is active for most of the first trimester, when oxygen levels surrounding the developing embryo are very low. But as the embryo grows and moves closer to the mother's blood supply, oxygen levels rise, and the protein becomes inactivated, allowing the placenta to develop properly. In preeclamptic pregnancies, however, something goes wrong with HIF-1a and it stays "on" for too long, throwing a wrench into what should otherwise be an orderly, precise process where timing is everything.

"If you blow through the red light, some bad things can happen," said Brown, who injected

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Jaxson John Baldasare

a modified HIF-1a gene into pregnant mice for his study. "We believe the prolonged presence of the HIF-1a protein prevents maternal arteries in the placenta from being remodeled. This prevents the placenta from maturing at the right time and decreases blood flow to the baby. Sensing the baby isn't getting enough oxygen, the mother's body responds by cranking up its blood pressure, and that can cascade into a bunch of problems for mother and baby both."

Those troubles almost always involve a preterm birth, and when that birth is especially early, such as Jaxon's, the baby and family are in for a long slog in a neonatal intensive care unit, if the baby survives. Even after that, Brown noted, research shows the baby could face an increased risk for hypertension, cardiovascular disease, diabetes, and stroke later in life. He added that recent research further suggests the mothers, too, are at an increased risk of stroke later in life, even though their high blood pressure quickly resolves after delivery.

In 2007, the Preeclampsia Foundation estimated the combined short- and long-term financial costs related to preeclampsia and related pregnancy disorders at approximately \$7 billion per year in the United States alone. Globally, preeclampsia and other hypertensive disorders of pregnancy are a leading cause of maternal and infant illness and death. By conservative estimates, these disorders are responsible for 76,000 maternal and 500,000 infant deaths each year.

Brown said HIF-1a probably isn't a factor in all cases of preeclampsia — like cancer and other diseases, there could be many causes. He said he and his team now are studying what causes HIF-1a to misbehave in the first place. Finding answers could help scientists identify new tools and therapies for early diagnosis and treatment.

"Every day we don't get closer is another day babies, moms, and entire families are going to suffer from this devastating disorder," Brown said from his office. "I think about that every day I walk in here, 'Are we one step closer? What can we do today to be one step closer tomorrow?' That's what motivates us to work as hard as we do around here."

At press time for this publication, Jaxon Baldasare remained in intensive care, though now at Dayton Children's Hospital, with "severe chronic lung disease," according to his mother. "We still have a long road ahead of us, but he will eventually come home," she said. VS

-Anthony Gottschlich

What is preeclampsia?

Preeclampsia (pre-e-CLAMP-si-a) is a condition unique to human pregnancy. It is diagnosed by the elevation of the expectant mother's blood pressure, usually after the 20th week of pregnancy, combined with the appearance of excessive protein in her urine. Important symptoms include headaches, abdominal pain, visual disturbances, shortness of breath or burning behind the sternum, nausea and vomiting, confusion, and a heightened state of anxiety. Preeclampsia and related hypertensive disorders of pregnancy impact 5-8 percent of all births in the United States.

Who gets preeclampsia?

The most significant risk factors include:

- Previous history of preeclampsia
- Multiple gestation (i.e., pregnant with more than one baby)
- History of chronic high blood pressure, diabetes, kidney disease, or organ transplant
- First pregnancy
- Obesity, particularly with body mass index (BMI) of 30 or greater
- Over 40 or under 18 years of age
- Family history of preeclampsia
- Polycystic ovarian syndrome
- Lupus or other autoimmune disorders, including rheumatoid arthritis, sarcoidosis, and multiple sclerosis
- In-vitro fertilization
- Sickle cell disease

Source: Preeclampsia Foundation (preeclampsia.org)

For information on how you can help support research in pregnancy associated disorders at Wright State, visit the website www.wright.edu/give/ pregnancyassociateddisorders or contact Dr. Brown via email at thomas.L.brown@wright.edu

Blowing Smoke

Exposure to secondhand smoke may lead to worsening of pediatric kidney disease In adults with chronic kidney disease (CKD), cigarette smoking is associated with an increased risk for CKD progression and transplant failure. Now, a first-of-its-kind study by researchers at Dayton Children's Hospital and Johns Hopkins University has found a possible similar effect in children with kidney disease who are exposed to secondhand smoke.

The study of 366 children aged 1 to 16 years is the first study of the effect of secondhand smoke exposure in CKD, according to lead researcher Abiodun Omoloja, M.D., associate professor of pediatrics at Boonshoft School of Medicine and attending pediatric nephrologist at Dayton Children's.

"Within the study population of children with CKD, the researchers found that 22 percent had been exposed to secondhand smoke. They also discovered that exposure to secondhand smoke was associated with higher presence of proteinuria (an abnormal amount of protein in the urine), which is a strong risk factor for CKD progression," Omoloja says.

The researchers were able to identify children's exposure to secondhand smoke by testing for the presence of cotinine, a metabolite of nicotine that shows up in the urine.

The study was published last spring in *Pediatric Nephrology*, the journal of the International Pediatric Association. The research was funded by the Dayton Children's Foundation.

Researchers were "very surprised" at the relatively high percentage of children exposed to secondhand smoke, says researcher Derek Ng, Sc.M., of the Johns Hopkins Bloomberg School of Public Health Department of Epidemiology. "Twenty-two percent is very high, considering the known adverse effects of smoking and the health status of this population."

Going forward, the researchers want to learn more about the causative link between secondhand smoke and the worsening of pediatric kidney disease, using this rich dataset, Ng says.

The Dayton Children's-Johns Hopkins study represents a significant contribution to understanding the adverse effects of second-hand smoke on children, says Karen Wilson, M.D., an associate professor of pediatrics at Children's Hospital Colorado and the University of Colorado-Denver.

"Many people think that secondhand smoke is only associated with respiratory illness," she said. "So it is very helpful to have this data showing a strong association between secondhand smoke and kidney disease. It highlights some of the systemic effects of secondhand smoke exposure in addition to respiratory problems.

"Going forward, it will be important to continue to do research on the medical effects of secondhand smoke in kids because the physiology of all these may be similar," Wilson says. Increasing the understanding of these effects "will help us better protect children, both by helping families quit smoking and also by finding treatments for children who have been exposed to secondhand smoke."

Fels Longitudinal Study featured in anniversary issue of *American Journal* of *Physical Anthropology*

Researchers at the Boonshoft School of Medicine are leading the charge in understanding what makes people different. Their research is providing physicians with a greater understanding of human growth and development. But it can also provide valuable insights useful to another field of scientific discovery: physical anthropology.

Richard J. Sherwood, Ph.D., director of the Division of Morphological Sciences and Biostatistics of the Lifespan Health Research Center and professor of community health and pediatrics, and Dana Duren, Ph.D., associate professor of community health and orthopaedic surgery, sports medicine and rehabilitation, say that the growth and development data gathered over generations by the Fels Longitudinal Study can provide valuable insights for scientists in the physical anthropology community.

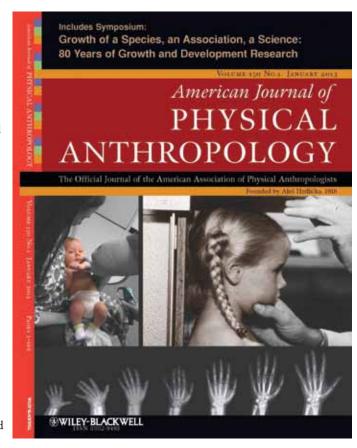
Their research and that of others was published in the January 2013 special issue of the *American Journal of Physical Anthropology*, the official journal of the American Association of Physical Anthropologists. The special issue, guest edited by Sherwood and Duren, commemorated the 80th anniversaries of the Fels Longitudinal Study, the longest continuous study of human growth and development in the world, and the founding of the American Association of Physical Anthropologists (AAPA).

In 2011 a symposium, "Growth of a Species, an Association, a Science: 80 Years of Growth and Development Research," was held in Minneapolis, Minnesota, to celebrate the

longevity and interrelated nature of the Fels Longitudinal Study and the AAPA. Several of the participants had current or historical connections to the Fels Longitudinal Study, which began in 1929 in Yellow Springs, Ohio.

Today, the Fels
Longitudinal Study
focuses on physical
growth, skeletal
maturation,
craniofacial
growth, genetics,
longitudinal
biostatistical
modeling, body
composition, risk
factors for cardiovascular disease, and
aging of the

musculoskeletal system. In 1977, the Fels
Research Institute and Fels Longitudinal
Study became part of the Wright State
University's Boonshoft School of Medicine,
residing first in the Department of
Pediatrics and later within the Department
of Community Health in the Lifespan Health
Research Center. Participants in the study
range from infants to the elderly.



web mining

Researchers use social web forum data to understand nonmedical use of painkillers

Approximately 16 million Americans used a prescription drug for nonmedical reasons in 2010, according to the National Institute on Drug Abuse (NIDA). Many of those drugs were painkillers, or pharmaceutical opiates such as hydrocodone (Vicodin®) and oxycodone (Percocet®, OxyContin®).

The nonmedical use of prescription painkillers is one of the fastest growing forms of drug abuse in the United States. Since 2002, buprenorphine (Suboxone® and Subutex®) has been prescribed to treat opiate addiction in substance abuse treatment programs, as well as by qualified private physicians. However, buprenorphine is now emerging as an abused substance.

To understand attitudes and behaviors related to the nonmedical use of buprenorphine, researchers are studying the illicit use of the drug through a NIDA-funded study, which is a collaborative effort between the Center for Interventions, Treatment and Addictions Research (CITAR) at the Boonshoft School of Medicine and the Ohio Center of Excellence in Knowledge-enabled Computing (Kno.e.sis) at Wright State University.

Raminta Daniulaityte, Ph.D., an associate professor in the Department of Community Health (CITAR), and Amit Sheth, Ph.D., professor of computer science and engineering, LexisNexis Ohio Eminent Scholar, and Kno.e.sis Center director, are principle investigators of the study.

By gleaning information from web forums of drug users, who share their experiences and post unsolicited, unfiltered, and anonymous questions, comments, and opinions about various drugs, WSU researchers are learning about the trends in knowledge, attitudes, and behaviors related to the nonmedical use of buprenorphine and other illicit opiates.

Daniulaityte explained that little information about the illicit use of buprenorphine exists. "While more buprenorphine is being prescribed to treat opiate addiction, more of it is being diverted," she said. "We want to learn more about the population who is using it for nonmedical purposes and how they use it.

CITAR is working with Kno.e.sis to extract information from various web forums. Kno.e.sis developed an application, PREDOSE (Prescription Drug abuse Online-Surveillance and Epidemiology), that helps researchers access, retrieve, and analyze usergenerated content about illicit drug use on various web forums. The application currently contains more than one million posts.

The purpose of this collaborative research is to eventually achieve a high level of automation in information extraction by applying Semantic Web, a technology that allow machines to understand the meaning of information, and other cutting-edge information processing techniques. "However, automatic information extraction is a very challenging task because the web forum posts do not always follow grammatical rules," Sheth said. "The posts may contain many abbreviations and slang terms."

Daniulaityte explained that people share their lay knowledge about drugs in these web forums. "A lot of people go there looking for information," she said. "There is an increase in discussions about buprenorphine. It appears that a lot of people are using it to self-treat opiate withdrawal symptoms."

Other indicators, such as the increase in buprenorphine-related emergency department visits, also confirm that nonmedical use of buprenorphine is increasing.

Her team also is trying to obtain geographic data to determine where buprenorphine use is prevalent. However, people using the web forums do not give their true location. They give fake locations or use slang terms to refer to a location. "Geographic indicators are very challenging," she said. "That requires much more work than what we expected."

An unexpected finding has been the extra-medical use of loperamide (Imodium®), a non-prescription medication used to treat diarrhea. Illicit drug users have been posting on various web forums that they use loperamide to self-treat a wide range of opioid withdrawal symptoms. "That was surprising," Daniulaityte said. "Nobody really knew that was happening."

Daniulaityte cautions against relying only on the web but sees its potential as a leading data source in identifying emerging drug-use practices.

"The web can be a very useful supplement," she said. "It can help researchers identify trends much earlier."



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In Residence

Giving his patients Giving his patients October 15 Classification of the State Senator fought the good fight for Medicaid patients

Nathan Schlicher, M.D., 30, was the youngest senator in the Washington State Senate. But being the youngest is nothing new for him.

As a child, he progressed quickly through school and graduated from high school at 14. He selected Pacific Lutheran University for college, because he could live on campus. He finished his undergraduate education in three years, earning degrees in biology and political science.

Schlicher knew he wanted to be a doctor. His father was a hospital administrator, and his mother was a nurse. However, the University of Washington was hesitant to admit a 17-year-old medical student. So, he went to law school at the University of Washington, finished in two years and practiced law during medical school.

He balanced a law career and medical school carefully. He worked in the morning and evening as an attorney with a law firm. "It was a challenge," said Schlicher, who met his wife, Jessica Kennedy, the first day of medical school. "But it was worth it."

Schlicher and his wife came to Ohio for their residencies. He was in the emergency medicine residency program at the Boonshoft School of Medicine from 2006 through 2009. She completed her residency through the Miami Valley Hospital Family Medicine program, which is now part of the medical school.

"My wife and I enjoyed being in Ohio," said Schlicher, who recalled his rotations at Good Samaritan Hospital, Miami Valley Hospital, Kettering Medical Center, Wright-Patterson Medical Center, and Greene Memorial Hospital. "But we also knew we wanted to come home to our community and family."

He credits his residency with helping him prepare for what he faces on a daily basis in the emergency room. "The lessons about dealing with difficult patients, caring for those who may see the world and their needs differently, and learning about the cultural differences were all great training for my current job," he said.

Schlicher works at the emergency department at St. Joseph's Medical Center in Tacoma,

Washington. He also serves nationally as the associate director of the Patient Safety Organization for TeamHealth. Jessica is a family physician working at the Harrison Medical Center Urgent Care facilities in Belfair and Port Orchard. They live in Gig Harbor, and have three young children, David, Juliette, and Henry.

More than two years ago, Schlicher entered politics when state officials decided Medicaid would not cover conditions it no longer considered emergencies, such as chest pain, seizure, coma, and shortness of breath, among others, to save \$21 million through the ER is for Emergencies Program.

"It was reckless and dangerous," Schlicher said. "I worked with the agency, sued the state, and rewrote the law. That program is now improving care and saving the state about \$31 million a year."

That experience persuaded him to enter politics. "After that, I decided that my patients needed a voice in the legislature," he said. "I believe I can provide that."

A seat in the Washington Senate was open. So Schlicher, a Democrat, applied for the appointment, campaigned, and was selected in January 2013 to replace the Former 26th Legislative District Sen. Derek Kilmer, who

As state senator he worked on several issues including the coordination of care for mental health, coordination of diabetic care across the state, and expansion of the ER is for Emergencies Program. He found long-term stable funding for the prescription-monitoring program. In addition, he worked to mandate CPR training in high school.

"Being the only physician, especially emergency medicine physician, in the legislature, brings a very different look at the world," said Schlicher, who continued to practice as an emergency medicine physician, working six shifts a month when the legislature was not in session. "Other legislators talk about the problems with the system, but I live in them every day with

He is passionate about representing the poor and disenfranchised. "I fought for them by serving in the legislature and bringing their voice to Olympia," said Schlicher, who also served as a lay preacher in multiple Methodist churches. "I worked hard to voice the problems they face in their daily lives from employment to education to health care."

While much of his work in the Senate was on

service and reduce the cost on the Tacoma Narrows Bridge administration. In addition, he worked on the overall state budget pushing for progress on education and getting people

Because he was appointed, Schlicher had to run again in the Nov. 5 election to keep his seat in the final 12 months of former Sen. Kilmer's term. Despite endorsements from the Seattle Times and other newspapers, his opponent, Republican State Rep. Jan Angel, was elected in a tight race last fall.

Schlicher's campaign started with a 20-point deficit and was able to close within a few points. "In a year in which we predicted a higher Republican turn out, and a 13-year politician ready to battle, we have closed the gap within three points," Schlicher said in a thank you letter to supporters. "This election was the toughest and closest election our opponent has ever had."

He encouraged his supporters to continue to fight. "Regardless of the results, we cannot stop fighting for Washington state," he said. "We must keep fighting for candidates that stand up for everyday citizens and fight for working families." VS



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On The Move



Alan Marco, M.D., M.M.M., FACPE Associate Dean for Faculty and Clinical Affairs President and CEO of Wright State Physicians

Alan P. Marco, M.D., M.M.M., FACPE, has been appointed associate dean for faculty and clinical affairs at the Boonshoft School of Medicine and president and CEO of Wright State Physicians.

Marco comes to Wright State from the University of Toledo College of Medicine and Life Sciences, where he served as professor and chair of the Department of Anesthesiology and program director for the residency training program in anesthesiology.

A graduate of the Johns Hopkins University, he received his medical training at the Johns Hopkins University School of Medicine and his training in anesthesiology at the Johns Hopkins Hospital. He earned a Master of Medical Management degree from Carnegie Mellon University in 2000.

After serving on the faculty at Johns Hopkins for eight years, he joined the faculty of the Medical College of Ohio (now University of Toledo) in 1998. He was named chair in 2003.

Board certified in anesthesiology, Marco is also a Certified Physician Executive, a Diplomate of the American Board of Quality Assurance & Utilization Review Physicians, and a Fellow of the American Institute for Healthcare Quality.

Therese M. Zink, M.D., M.P.H., FAAFP Chair of Department of Family Medicine

Therese M. Zink, M.D., M.P.H., FAAFP, has been named chair of the Department of Family Medicine, effective Jan. 20, 2014.

Zink comes to Wright State from the University of Minnesota (UM) in Minneapolis, where she served as a professor in the Department of Family and Community Medicine and the Rural Physician Associate Program. She also served as director of UM's Global Family Medicine Pathway.



Zink has extensive expertise in the areas of family violence, sexual assault, women's health, rural health care delivery and education, international health, medical professionalism, and creative writing.

A native Daytonian, Zink attended Carroll High School in Dayton. She earned her bachelor's degree in English at Marquette University in Wisconsin. She returned to Dayton to attend premed classes at Wright State.

She earned her M.D. from The Ohio State University in 1985 and served her residency in family medicine at Ramsey (Regions) Medical Center in Minnesota. Zink earned her Master of Public Health degree at the University of Minnesota in 1992.



Jerome L. Yaklic, M.D., M.B.A., FACOG Chair of Department of Obstetrics and Gynecology

The Boonshoft School of Medicine has named Jerome L. Yaklic, M.D., M.B.A., FACOG, chair of the Department of Obstetrics and Gynecology. He has served as acting chair since May 1, 2012.

Yaklic has been an associate professor in the Department of Obstetrics and Gynecology since 2010, and serves as medical director for Wright State Physicians Obstetrics and Gynocology.

Yaklic has served two stints as a faculty member at Wright State. As an active duty service member in the U.S. Air Force at Wright-Patterson Air Force Base, he served on the faculty of the WSU Department of Obstetrics and Gynecology from 1996 to 2000, when he left to become the founding/managing partner of Lake Huron Ob/Gyn PLLC in Bad Axe, Michigan. He returned to Dayton in 2010 to become the medical director of Wright State Physicians Women's Health Care.

In addition to his role at Wright State, Yaklic is also a medical staff member of the Miami Valley Hospital. He is board certified by the American Board of Obstetrics and Gynecology, a fellow of the American College of Obstetricians and Gynecologists and a member of the American Urogynecologic Society, the American Medical Association, the Montgomery County Medical Society, and the Ohio State Medical Society.

In Memoriam



Robert Peter Turk, M.D., Colonel, USAF (Ret.), professor emeritus at the Boonshoft School of Medicine, passed away on Thursday, Jan. 16, 2014, at Hospice of Dayton. He was 82.

Dr. Turk will be remembered as a committed physician, a scholar, and an outstanding educator. He touched the

lives of many people during his service to the Dayton medical community and the nation.

Born in Hopelawn, New Jersey, Dr. Turk served his country during the Korean War from 1950 to 1954.

Dr. Turk graduated in premedicine studies at the University of Alabama in 1956, and earned his medical doctorate at the Medical College of Alabama in 1960. He rejoined the U.S. Air Force in 1959, and served a total of 24 years. Following his service, he came to Dayton in 1975.

Dr. Turk served as chair of the Department of Surgery at Wright-Patterson Medical Center (WPMC) and founded the WPMC General Surgery Residency Program (December 1975 to September 1979). He was instrumental in the integration of the WPMC program with the surgical training program at Wright State University School of Medicine in 1979.

Dr. Turk was a member of the Department of Medical Education at St. Elizabeth Medical Center (SEMC), from 1979 to 2000, and after closure of SEMC, he continued his service to medical education in the Department of Surgery at the Boonshoft School of Medicine. During these decades, he touched the lives of hundreds of medical students, family medicine residents, and general surgery residents. His sage advice was commonly referred to as "Turk's Aphorisms," and served as a guiding light for many learners.

For his medical career and contributions, Dr. Turk received many honors, including Teaching Excellence Awards (numerous, from learners), Clinical Surgery Teacher of the Year Awards (the Alan B. Huffer Memorial Award, multiple times), Outstanding Teacher of the Year Award (Department of Emergency Medicine, 1993), and the Outstanding Clinician of the Year Award (Wright State University Academy of Medicine, 1988).

Dr. Turk was a Fellow of the American College of Surgeons and held professional memberships in the American Medical Association, American Association for the History of Medicine, Association of Military Surgeons of the U.S., Society of Medical Consultants to the Armed Forces, Society of Air Force Clinical Surgeons (Life Member), Ohio State Medical Association, Montgomery County Medical Society, and the Academy of Medicine (Life Member and Trustee).

During his military service, he was awarded the Legion of Merit, Bronze Star, Meritorious Service Award, Air Medal, Good Conduct Medal, Air Force Expeditionary Medal, National Defense Medal, and the Vietnam Service Medal.

Dr. Turk was laid to rest at Arlington National Cemetery.

The Boonshoft School of Medicine is planning a tribute to Dr. Turk on Tuesday, April 22, at 6 p.m. in White Hall on the Wright State Campus. For more information call the Office of Advancement at 937.245.7610.

To make a contribution to the Robert Turk, M.D., Colonel USAF (Ret.) Scholarship Fund visit med.wright.edu/giving.

Future Docs

A passion for policy

Fourth-year student John Corker's passion for health care policy and medical journalism wins national accolades

Alarmed about the number of uninsured Americans - 48.6 million-John Corker began studying health policy as an extracurricular passion in 2005 as an undergraduate at the University of Notre Dame, a passion that he has continued to cultivate as a medical student at the Boonshoft School of Medicine.

That passion has led to national recognition for Corker, with a fellowship with the American Medical Association (AMA) and a Physician of Tomorrow Award for Medical Journalism from the AMA Foundation.

As he began his third year of medical school, he wasn't sure he wanted to incorporate his interest in health policy into his medical career. So he applied for the Government Relations Advocacy Fellowship with the AMA to find out.

"What better way to make an informed decision than to live and work in our nation's capital for a year?" said Corker, who began his fellowship in Washington, D.C., in July 2013, taking a year off from medical school. "It is the perfect opportunity to explore the world of health policy from an insider's perspective.'

Faculty members at the medical school say Corker is a perfect fit for the AMA

fellowship. Since beginning medical school, Corker has shared the knowledge he has learned about health policy with other students through his roles as a host and director at Radio Rounds, the nation's only medical talk show created and hosted entirely by medical students, and as the health care correspondent for the NextGen Journal, an online publication run by a nationwide team of college and graduate students.

His work also has been published in USA Today and Primary Care Progress. He was interviewed by Bloomberg News for a feature article on medical student debt and was asked to speak on behalf of the AMA on the same issue for a Consumer Financial Protection Bureau field hearing in Miami, Florida,

In 2011, he was awarded a Betty Ford Foundation fellowship to study addiction medicine in California. He brought back what he learned and shared it by teaching a series of small group sessions to first-year medical students as part of an ethics class.

In addition, Corker has been the vice chair of the WSU student chapter of the AMA. He also has held leadership roles in the school's Christian Medical Association and Catholic Medical Student Association.

"I observed a continuous and sincere yearning to discover the truth in ethical and social questions, one which will

benefit his patients immensely," said Ashley Fernandes, M.D., Ph.D., FAAP, associate professor in the Departments of Community Health and Pediatrics at the medical school. "Society needs physicians who will bring competence to the science of medicine and nobility and virtue to the art of medicine. John will bring both."

Fernandes recalled how Corker excelled in the medical ethics course he directs. He described Corker as a student who was not afraid to confront his own doubts and ask questions of himself and others.

In his role with the AMA in Washington, D.C., Corker analyzed various issues, from health care delivery reform to physician payment reform to funding for graduate medical education.

He also works to keep medical students informed. He sent a weekly email with health care policy updates to medical students, residents, and young physician subscribers. He posted regular updates to the AMA website and tweeted information to AMA followers. He is responsible for working with the AMA's Medical Student Section Governing Council to assist students in writing and giving testimony for their own policy resolutions.

In addition, Corker travels around the United States to meet with medical students. At these meetings, he encourages advocacy and leadership in the students' home

communities. As legislation is discussed, he is in touch with his national network through a series of educational webinars. letter-writing campaigns, and phone-a-thons.

"As I've studied health policy, I've come to have a greater appreciation for the power of policy to impact the lives of patients on a far greater scale than ever would be possible in a single practice or hospital setting," said Corker, who will graduate this year. "Policy decisions are being made every day that will directly affect my and my colleagues' future practices."

He worked with state leaislatures to ensure the highest level of patient safety and quality care in understaffed emergency rooms. He also worked with Congress to ensure that international medical graduates who want to practice in high-need primary care specialties are not squeezed out of the U.S. physician workforce.

He organized a nationwide SaveGME campaign (SaveGME.org) to educate both the public and Congress about protecting federal funding for graduate medical education. In addition, he worked closely with the federal Consumer Financial Protection Bureau (CFPB) to bring attention to the growing medical student debt crisis and its impact on public health, representing the AMA as a panelist at a CFPB National Field Hearing on Student Debt.

He encourages physicians-intraining to not only educate themselves about health policy but also to actively engage in its formation in an effort to create the best possible health care system for patients and their doctors.

The number of bills that have been unsuccessfully presented to Congress to address the ever-growing national shortage of physicians has amazed him. "Politics are, without a doubt, the biggest obstacle to creating good policy," said Corker, who plans to pursue a career in emergency medicine while continuing to seek leadership roles in the AMA. state, and county medical societies, as well as in public policy.

His interest in medicine began when he was an undergraduate student at the University of Notre Dame. He was a biomolecular and chemical engineering major who hoped to contribute to patients' well-being through the development of state-ofthe-art technological advancements.

"Those initial experiences and patients at the hospital of the uninsured during this

with a bachelor's degree in biological sciences. "Since then, and especially since enrolling in medical school. I have been reaffirmed every day in my decision to pursue medicine."

In August, Corker was recognized for his journalism as one of two recipients nationwide to receive the AMA Foundation's Johnson F. Hammond, M.D., Physicians of Tomorrow Award for Medical Journalism.

"While I look forward to a long clinical career caring for patients in the emergency room, I also hope to apply my lifelong passions for discovery, writing, and teaching on a broader scale as a medical journalist," Corker said. **\(\foats\)**

John Corker's columns for the NextGen Journa are posted online. along with blogs from several other current students. at med.wright.edu/

After one year, he realized that the engineering experience was not what he had imagined. So, he switched his major to biological sciences and began volunteering at a local hospital.

working with doctors, nurses, got me hooked," said Corker, who learned about the plight time. He graduated in 2007

Boonshoft chapter of Student National Medical Association hosts Region V Conference

School of Medicine chapter of the Student National Medical Association (SNMA) hosted the 2013 SNMA Region V Conference, "Leadership in Medicine: Going Beyond the Clinic," last fall at Wright State University.

The Boonshoft

About 100 medical, pre-medical, and high school students attended the regional conference, which was sponsored by the Boonshoft School of Medicine, Premier Physician Services, and Doctors in Training.

"We designed the conference to enhance the leadership ability of medical students, offering them substantive knowledge in transforming health care, promoting health policies and practices, and exploring

the need for leadership in medicine," said Uchenna Conlev. second-year medical student and conference chair. "Each workshop is designed to provide medical students with the proper leadership skill sets needed as a physicianleader in the clinic and beyond into the community."

The SNMA is the oldest and largest student-run organization focused on the needs and concerns of medical students of color. SNMA Region V includes chapters from medical schools in Indiana, Michigan, and Ohio.





Boonshoft
School of
Medicine
students help
underserved
manage chronic
illnesses by
promoting
healthy
behaviors

On a snowy Saturday morning in February, William went to a health screening at the St. Vincent de Paul Gettysburg Gateway for Men homeless shelter. But this wasn't a typical health clinic.

After Boonshoft School of Medicine students took his blood pressure and checked his glucose levels, William sat down with another group of students who asked him questions about his health and helped him develop ideas to better manage it.

"They're giving me avenues of how to find a new care provider," said William, 54, who has hepatitis. "I have a chronic disease. I need to get connected to a clinic."

Passionate about fighting chronic illness among the poor and the homeless, a group of Wright State University Boonshoft School of Medicine students implemented a community-based, volunteer-powered counseling program in the fall of 2012.

Second-year medical student David Solarz checks the blood pressure of a Gettysburg Gateway client. The program, Students
Teaching Educational Plans
for Success (STEPS), works
with vulnerable populations in
Dayton to manage chronic
illnesses by promoting
healthy behaviors.

Paul Blair, a member of the cohort of students who organized the Wright State initiative, garnered the support and active leadership of six other students—Rebecca Beesley, Nikki Craker, Ross Humes, Matias Iberico, T.J. Klein, and Nadia Zaim. Today, the program is comprised of a team of WSU medical, nursing, psychology, social work, and nutrition students, along with Cedarville University School of Pharmacy students.

They were inspired by a similar program run by students at another university.

"I realized it would be a great program for the students at Wright State University and the vulnerable populations of Dayton," Blair said. "We want the participants to understand that they are the ones in charge of changing their lifestyle."

Zaim explained that STEPS works to fight the chronic illnesses that are devastating to the poor, the homeless, refugees, and minorities. "We are building an interdisciplinary collaboration of students and faculty to help people make healthy choices," she said.

The WSU initiative was implemented in September 2012 at the Dakota Center, a Dayton community center. In January 2013, the initiative was moved to the St. Vincent de Paul Gettysburg Gateway for Men, a homeless shelter for single men in Dayton.

On the first Saturday of the month, the students conduct health screenings from 9 to 11 a.m. They check for high blood pressure, obesity, and other risk factors for cardiovascular disease. Through motivational interviewing, a technique of goal-oriented, client-centered counseling, patients are empowered to take the right steps to better health.

"Chronic illness is the major cause of mortality. We are seeing unhealthy habits," Blair said. "We are trying to help patients change those unhealthy habits."

As they listen to the participants, the students help guide them toward attainable goals.

Paul Hershberger, Ph.D., ABPP, professor and director of behavioral science for the Boonshoft Family Medicine Residency Program, assists the students with motivational interviewing. At the weekend sessions, he reviews the technique with the group of volunteer students before they meet with the participants. "This is very patient-centered," said Hershberger, a clinical psychologist. "We want to discuss behavioral issues from the perspective of the patient."

He encourages the students to find out what is important to the participants by asking open-ended questions, using reflective statements, and being understanding. "Our leading health problems are chronic illnesses," Hershberger said. "Behavior is a major factor in people's susceptibility to developing these chronic illnesses."

"The STEPS initiative is giving students exposure to a

certain population of patients they may not meet—the indigent and those without health care," said faculty volunteer Robert Brandt Jr., M.D., ('80), a clinical professor with Wright State Physicians. "This is a good way for that exposure. It gives them a chance to practice their interviewing skills outside of medical school in a real-world setting."

David, 48, a participant in a recent session, was grateful for the advice he received. The students helped David, who suffers from asthma, develop a plan on how to better cope with his condition. "I am sleeping in a dorm," said David, who is staying at the St. Vincent de Paul shelter. "Because of my asthma, I have to get up in the middle of the night."

The students reviewed how to use his inhaler and gave him leads on how to connect with a primary care physician who can prescribe additional medicine.

T.J. Klein, a second-year medical student, and other students have helped some participants modify their behavior with a regimen of reduced salt intake and increased exercise. "This enables our participants to take their health and well being into their own hands," Klein said. "We encourage participants to recognize and modify their own behaviors through dialogue and conversation with us."

medical student, and other students met with a participant, who drank four sodas a day. They worked with him to develop a plan to decrease his soda intake to keep his

Ross Humes, a third-year

glucose levels down. A month later, he had decreased his soda intake to one per day, sometimes none. Humes and other students also helped him design a plan to decrease the number of cigarettes he smokes.

Humes praised the motivational interviewing aspect of the STEPS initiative. "People can

"Chronic illness is the major cause of mortality. We are trying to help patients change those unhealthy habits."

arrive at their own solutions,"

Third-year medical student Rebecca Beesley explained that many of the people the students meet with are on the verge of diabetes.

"The STEPS initiative empowers the patient by encouraging them to figure out why certain habits are bad, why they should quit engaging in certain activities, or why they should be more proactive in a certain area," Beesley said. "It is extremely rewarding to use motivational interviewing to help someone come up with their own answers to their problems. The solution comes from them, not us. They know their schedule and resources best."

While Blair and Zaim graduated last year, they made sure that the program included second- and third-year medical students who are committed to continuing the STEPS initiative.

"We feel very passionate about this initiative," Beesley said. "We are confident that we will be able to continue for years to come."

Autism in the Arab world

Fulbright grant supports Boonshoft School of Medicine student's research on autism

Boonshoft School of Medicine student T.J. Klein has been selected for a Fulbright U.S. Student Program fellowship for 2013-2014 to study autism in Oman.

The Fulbright U.S. Student Program is the largest U.S. exchange program offering opportunities for students and young professionals to undertake international graduate study, advanced research, university teaching, and primary and secondary school teaching worldwide.

Klein began the nine-month study at Sultan Qaboos University, located outside of Muscat, the capital city of Oman, in September.

"Autism, like many other mental health and developmental disorders, is relatively unstudied and under-diagnosed in non-Western parts of the world," said Klein, who completed his second year of medical school. "This project includes public health outreach and education, as well as biomedical studies dealing with the genetic and possible environmental causes of this disorder."

Although Klein has not been personally affected by autism, he gained an interest in it when he took a course on autism during his postbaccalaureate program at the University of Pennsylvania.

"My medical specialty interests are internal medicine, pediatrics. neurology, and psychiatry," said Klein, who earned his undergraduate degree at Princeton University, "This project really is a perfect fit as it dovetails all of these fields



(From left) Boonshoft School of medicine students T.J. Klein, Kelsey Black, and Jeffrey Zabinski went to Oman in June 2012 as part of a medical observership at Sultan Qaboos University Hospital.

"I am looking forward to learning more about the Arab culture and customs," said Klein, who would like to be an academic physician at a large research university, where he can work closely with patients in the clinic and conduct basic science research. "I realize that there can be some distance between the general American public and the Arab Muslim world, and I hope to use this opportunity to help bridge that distance."

Double Jeopardy



(From left) Doug Laurain, Luke Andera, and Robert Beaulieu won the Doctor's Dilemma® contest at the 2013 Ohio Chapter Scientific Meeting of the American College of Physicians on Oct 10.

Boonshoft School of Medicine students win statewide Doctor's Dilemma® contest two years in a row For the second consecutive year, three fourth-year Boonshoft School of Medicine students have won the statewide student Doctor's Dilemma® contest, a medical jeopardy competition.

Doug Laurain, Luke Andera, and Robert Beaulieu competed against other medical students teams in Doctor's Dilemma® at the 2013 Ohio Chapter Scientific Meeting of the American College of Physicians (ACP) in Columbus last fall.

The questions test medical students' knowledge on uncommon or rare syndromes in internal medicine. This is the second year the Ohio ACP has offered Doctor's Dilemma® to medical students. WSU Boonshoft School of Medicine students Tom Bacon, Kate Baker, and Paul Blair won the 2012 competition.

Glen Solomon, M.D., professor and chair of the Department of Internal Medicine, applauded their victory. "It shows how academically prepared Wright State medical students are compared with their peers at other medical schools," Solomon said. "On virtually any measure, our students are at the top of their profession. Winning a statewide contest just helps to validate the exceptional quality of our medical students.'

Kyle Davis receives AMA Physicians of Tomorrow award



His life as a hemophilia patient provides unique insights into patient care

Boonshoft School of Medicine fourth-year student Kyle Davis was one of 15 recipients nationwide to receive the 2013 American Medical Association (AMA) Foundation Physicians of Tomorrow Award.

Diagnosed at six months with hemophilia, a rare blood clotting disorder caused by inactive or deficient blood proteins, Davis has known since he was a child that he wanted to enter the pediatric hematology/oncology field.

Davis had ankle bleeds at least once every two weeks. When he was seven, he started prophylactic, or preventive, treatment with his parents' help. When he was a teenager, his hemophilia nurse trained him to self-infuse the missing blood factor.

During middle and high school, he played baseball, basketball, and ran cross-country. But he developed arthritis in his right ankle. "I'm frustrated that hemophilia has limited me in that way," he said. "Because I can't run anymore, I bought a road bike and started biking."

He self-infuses every other day. "Being medically inclined,

I'm highly motivated to maintain my treatment regimen," said Davis, who wants to serve as a mentor to people with hemophilia.

Davis is one of 18 national community speakers with the Baxter Healthcare True Identity Program. He educates families and patients about the importance of adhering to prophylactic treatment and has spoken before the Ohio Health and Human Services Subcommittee as an advocate for funding the Bureau for Children with Medical Handicaps.

He has served as the copresident of the medical school's Pediatrics Club and as vice president of Phi Rho Sigma, a service organization. His medical school peers recognized him for his commitment to service and

patient care by nominating him for the Arnold P. Gold Humanism Honor Society.

His interest in international health led Davis on a Boonshoft School of Medicine Global Health Initiative medical mission trip to Peru. He also traveled to Paris, France, to attend the 2012 World Federation of Hemophilia World Congress.

"Hemophilia has shaped my life," said Davis, who wants to become the director of a hematology/oncology center in the United States and dedicate a portion of his career to international health care. "I know my life as a hemophilia patient will provide unique insight into my patients' experiences and will allow me to better understand their needs."

Boonshoft medical student selected president-elect of Student National Medical Association



Topaz Sampson will lead national studentrun organization

Sampson, now a third-year medical student at the Wright State University Boonshoft School of Medicine, was selected the 2013-2014 president-elect of the Student National Medical Association (SNMA), the

oldest and largest student-run organization focused on the needs and concerns of medical students of color.

The nonprofit organization is committed to supporting current and future underrepresented minority medical students, addressing the needs of underserved communities, and increasing the number of clinically excellent, culturally competent, and socially conscious physicians.

"The mission of the SNMA is one that resonates within me," said Sampson, who served as president of her first-year medical school class. "As we enter into the 50th anniversary of the

founding of the SNMA, the SNMA should reflect on this mission and ensure that we stay true to our purpose."

Sampson served as the webmaster and social chairperson of the Wright State chapter of the SNMA and as the SNMA Region V webmaster. She also was selected as one of 20 SNMA Future Leadership Project Fellows.

In addition to her work with SNMA, Sampson volunteers monthly at Reach Out of Montgomery County. She served on the student committee for the selection of the dean of the medical school and a student committee for the selection of the medical school's academic advisor.

Milestones









20nvocation

The Boonshoft School of Medicine welcomed 104 new students during the Convocation and White Coat Ceremony last July, formally marking the start of their medical education.

Last year for the first time, each student received a stethoscope engraved with the words, "Excel in Leaving a Mark," thanks to The Jason Madachy Foundation.

The foundation has given more than 700 stethoscopes to medical students nationwide.

Dolly and Joe Madachy established the foundation in February 2008 in honor of their son, Jason Madachy, who died tragically in June 2007 just before he was about to start medical school at Marshall University.



Jenn Haas, M.D., ('13), says she keeps her stethoscope close to her heart because it is one of her only remaining connections to her boyfriend Jason Madachy, who died tragically in 2007 just before he was to start medical school.

The class of 2017 was selected from a group of 4,400 applications, a record for the medical school. Educated at various universities across Ohio, members of the incoming class also hail from Harvard University, Duke University, Emory University, Brown University, Furman University, and UCLA, among others.

From serving as a Salvation Army bell ringer to building houses for Habitat for Humanity, they already have shown a strong commitment to community service both at home and abroad. Several have taken mission trips to the Dominican Republic, Thailand, Costa Rica, Haiti, Honduras, South Africa, Nicaragua, and Ghana. One student served with the Peace Corps in Panama and another volunteered for a mission trip to Appalachia. The class also includes two Eagle Scouts.

Fifty-four percent are women, while
46 percent are men. They speak many of
the world's languages including Spanish,
Chinese, French, Italian, Polish, Vietnamese,
Portuguese, Pennsylvania Dutch, Japanese,
Urdu, Hindi, Greek, Arabic, Gujarati, and
Korean. One student speaks five languages
— English, Spanish, Hebrew, Russian,
and Yiddish.













Milestones









In March 2013, 104 graduating Boonshoft School of Medicine students learned where they will pursue their residency training.

Gathered with family, friends, and other supporters in the Berry Room of the Wright State University Nutter Center, the students took part in the national event that has become a rite of passage for those on the brink of becoming physicians.

Wright State students matched in outstanding programs in Dayton, throughout Ohio, and across the country, including Case Western Reserve, the Cleveland Clinic, Cambridge Health Alliance (Harvard), Duke University, and the Mayo Clinic.

Parag Amin

Emergency Medicine St. John Hospital Detroit, MI

Clara M. Antoury

Internal Medicine Cleveland Clinic Foundation Cleveland, OH

Ayesha Kader Ashai

Psychiatry University of Maryland Medical Cente Baltimore, MD

James Atkins

PGY1: Surgery-General WSU Boonshoft School of Medicine Dayton, OH PGY2: Anesthesiology Indiana University School of Medicine Indianapolis, IN

Asim Khan Babar

Internal Medicine University of Texas Medical School Houston, TX

Thomas Scott Bacon

PGY1: Transitional Year Mount Carmel Health System Columbus, OH PGY2: Ophthalmology **Boston University** Boston, MA

Kathryn Baker Internal Medicine

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University of Minnesota Medical School Minneapolis, MN

Jennifer Lauren Beck

Cincinnati Children's Hospital Cincinnati, OH

Briana Teresa Costello

Internal Medicine Rush University Medical Center Chicago, IL

Shamie Das

Emergency Medicine Emory University School of Medicine Atlanta, GA

Laura Marie DeVita

Anesthesiology University of Maryland Medical Center Baltimore, MD

Zachary DiPaolo

Orthopaedic Surgery WSU Boonshoft School of Medicine Dayton, OH

Brian Nelson Donahue

Pediatrics University of Alabama Medical Cente Birmingham, AL

Stephen R. Donnelly

Emergency Medicine/Family Medicine Christiana Care Newark, DE

Shanna O. Duffy

University Hospital

Meaghan Ebetino

Robert Alan Eick

University of North Carolina

Sarah Michele Elswick

Mayo School of Graduate Medical

University of Louisville School of

Pathology-Anatomic and Clinical

Rush University Medical Center

Mount Carmel Health System

University of North Carolina

Cleveland Clinic Foundation

Family Medicine

Hospitals

Chapel Hill, NC

Surgery-General

Education

Rochester, MN

Medicine

Louisville, KY

Cleveland, OH

Pediatrics

Chicago, IL

Lauren M. Ford

Kiran Ann Faryar

Emergency Medicine

Patrick Colin Feasel

Christoforos Michael

PGY2: Anesthesiology

Frangopoulos PGY1: Transitional Year

Columbus, OH

Chapel Hill, NC

WSU Boonshoft School of Medicine

Family Medicine

Davton, OH

Cincinnati, OH

Psychiatry/Family Med

Psychiatry Icahn School of Medicine at Mount New York, NY

George Washington University

James Brockett

Paul Wilson Blair

Internal Medicine

Washington, D.C.

Claire Brandon

Surgery-General Akron General Medical Center/ NEOMED Akron, OH

Britta Lauren Buchenroth Obstetrics and Gynecology Riverside Methodist

Columbus, OH

Cole Christopher Budinsky Surgery-General WSU Boonshoft School of Medicine Dayton, OH

Jennifer Renee Castelbuono

Anesthesiology University of Tennessee Graduate School of Medicine Knoxville, TN

Michael Robert Chaka

Pediatrics Medical College of Wisconsin Affiliated Hospitals Milwaukee, WI

Puja Dhaval Chokshi

Internal Medicine Washington Hospital Center Washington, DC

Daisy Ewurakua Conduah

Surgery-General NCC-Walter Reed National Military Medical Center Bethesda, MD

Ashleigh Galizio

Pediatrics Case Western University Hospitals Cleveland, OH

Richa Gard

Family Medicine University of Chicago Medical Center Chicago, IL

Amipratapba Gohil

Emergency Medicine Resurrection Medical Center Chicago, IL

Flor Sostene Guerengomba

Pediatrics Eastern Virginia Med School Norfolk, VA

Jennifer Angela Haas

Surgery-General Summa Health/NEOMED Akron, OH

Ryan Stephen Hamilton

Orthopaedic Surgery University of Toledo Toledo, OH

Julie Han

Internal Medicine Riverside Methodist Columbus, OH

Eric W. Hard

Internal Medicine University of North Carolina Hospitals Chapel Hill, NC

Miriam Atira Harewood

Internal Medicine Kettering Medical Center Kettering, OH

Lindsey Diane Hogle

Emergency Medicine Ohio State University Medical Center Columbus, OH

Sonya Layla Hovsepian

Surgery-General North Shore-LIJ Health System Manhasset, NY

Mariano Matias Iberico Lozada

Internal Medicine Kaiser Permanente San Francisco, CA

Erin Katherine Johnson

Emergency Medicine University of Virginia Charlottesville, VA

Ankush Kalra

Internal Medicine Thomas Jefferson University Philadelphia, PA

Michelle Marie Keelev

Obstetrics and Gynecology Beaumont Health System Royal Oak, MI

Bradley David Kuhn

Surgery-General Spartanburg Regional Healthcare Spartanburg, SC

Katherine Ann Larson

Internal Medicine Virginia Commonwealth University Health System Richmond, VA

Stephanie Marie Lauden

University of Minnesota Medical School Minneapolis, MN

Bryan Lee

Internal Medicine Ohio State University Medical Columbus, OH

Daniel B. Luckenbill

Orthopaedic Surgery WSU Boonshoft School of Medicine Dayton, OH

Marjan Elizabeth Lyons

Internal Medicine Lenox Hill Hospital New York, NY

Poorni Manohar

Internal Medicine University of Michigan Hospitals Ann Arbor, MI

Casey K. McCluskey

Indiana University School of Medicine Indianapolis, IN

Jaclyn Leigh McCord

WSU Boonshoft School of Medicine Dayton, OH

Colleen Marie McCormick

Pediatrics Northwestern McGaw/CMH Chicago, IL

Luke Daniel McCoy

Internal Medicine Christ Hospital Cincinnati, OH

Leslee McElrath

Family Medicine WSU Boonshoft School of Medicine Dayton, OH

Allison Colleen McMahon Obstetrics and Gynecology

Riverside Methodist Columbus, OH

Robert Mikan Pediatrics

Indiana University School of Medicine Indianapolis, IN

Jason Charles Miller

Anesthesiology Indiana University School of Medicine Indianapolis, IN

Abigail Margaret Mowry

Surgery-General Akron Gen Medical Center/ NEOMED Akron, OH

Brandon James Murphy

Surgery-General Mount Carmel Health System Columbus, OH

Vivian C. Nanagas

Loyola University Medical Center Maywood, IL

Brendan Neary

Family Medicine Trident Medical Center Charleston, SC

Ryan M. Noska Anesthesiology University Hospital Cincinnati, OH

Kyle L. Ott Family Medicine WSU Boonshoft School of Medicine

Jeffrey Edward Otte

Dayton, OH

Orthopaedic Surgery Mount Carmel Health System Columbus, OH

Kathleen Jean Oxner

Internal Medicine Kettering Medical Center Kettering, OH

Uloma Oziri

Anesthesiology University of Texas Southwestern Medical School Dallas, TX

Denada Palm

Internal Medicine University Hospital Cincinnati, OH

Himaja Palur

Family Medicine John Peter Smith Hospital Fort Worth, TX

Thomas Pitts

Internal Medicine Miami Valley Hospital Dayton, OH

Brandon Pollak

Internal Medicine Case Western/University Hospitals Case Medical Center Cleveland, OH

Sara Elizabeth Puening Psychiatry

University of Colorado School of Medicine Aurora, CO

Saba Iftikhar Qureshi Family Medicine

WSU Boonshoft School of Medicine Davton, OH

Robert Rakosi

Surgery-General Keesler AFB Biloxi, MS

Sridevi Ramalingam

Internal Medicine Medical College of Wisconsin Affiliated Hospitals Milwaukee, WI

Jennifer Leigh Rammel

PGY1: Transitional Year

PGY2: Ophthalmology

Kettering, OH

Boston MA

Boston University

Bradley Sanville

Internal Medicine

Portland, OR

Syracuse, NY

Transitional Year

San Diego, CA

Family Medicine

Center

Asheville, NC

Durham, NC

Scott William Seider

Navy Medical Center

Kettering Medical Center

Elizabeth Shanika Ranasinghe

Legacy Emanuel/Good Samaritan

Otolaryngology SUNY Upstate Medical University

Margarette Jeannette Shegog

Mountain Area Health Education

Lauren Elizabeth Siewny

Duke University Medical Center

Loyola University Medical Center

Jonathan Edward Silverman

PGY1: Transitional Year

Kettering Medical Center

Carolinas Medical Center

Robert Vincent Smith

University of Utah Affiliated

Mount Carmel Health System

Boston University Medical Center

PGY2: Phys. Med. & Rehab.

Emergency Medicine

Samira Sihabdeen

Anesthesiology

Maywood, IL

Kettering, OH

Charlotte, NC

Internal Medicine

Salt Lake City, UT

Rachel Snyder

Family Medicine

Columbus, OH

Internal Medicine

Boston, MA

Lakshmana Swamy

Hospitals

Ronald James Schroeder

Pediatrics University of Florida COM Jacksonville, FL

Anesthesiology Winston-Salem, NC Tasha A. Vardya

Case Western/University Hospitals-Case Medical Center Cleveland, OH

Saginaw, MI

Nathan Weir PGY1: Internal Medicine University of Illinois Chicago, IL PGY2: Dermatology WSU Boonshoft School of Medicine

Thomas C. Yang Psychiatry North Shore-LIJ Health System

Scott Matthew Yapo Psychiatry Cambridge Health Alliance Cambridge, MA

Kevin Yavorcik

Emergency Medicine Charlotte, NC

PGY1: Internal Medicine West Suburban Medical Center Oak Park, IL PGY2: Radiology-Diagnostic Cook County-Stroger Hospital Chicago, IL

Chong Yun

Family Medicine University of Texas Southwestern Medical School Dallas, TX

Nadia Zaim Pediatrics

Sinai Hospital Baltimore, MD

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Laura Nicole Thornhill Family Medicine Ventura County Medical Center Ventura, CA

Emily Marie Tibbits

Surgery-General
David Grant USAF Medical Center Travis AFB, CA

Alvssa Ann Tobe Internal Medicine

WSU Boonshoft School of Medicine Dayton, OH

Eric E. Vangeloff

Wake Forest Baptist Medical Center

Obstetrics and Gynecology

Aaron Stephen Wasserman Emergency Medicine Central Michigan University COM

Dayton, OH

Great Neck, NY

Carolinas Medical Center

Vivek Yedavalli

For information on the 2014 Match Day visit: med.wright. edu/whatsnew/2014/match

Milestones







Graduation

One-hundred and seven members of

the Boonshoft School of Medicine class of 2013 received their M.D. degrees during the school's commencement ceremony at the Benjamin and Marian Schuster Performing Arts Center on Friday, May 24.

Michelle Au, M.D., author of *This Won't Hurt a Bit (and Other White Lies)*, delivered the commencement address. Au serves as a staff anesthesiologist at Physician Specialists in Anesthesia at St. Joseph's Hospital in Atlanta. She started her popular blog "The Underwear Drawer" in October 2000 during her second year of medical school. In 2011, she published her memoir, *This Won't Hurt a Bit (and Other White Lies.)*

In addition to the degrees, several special awards and honors were presented during the ceremony:

Appreciation Award—

Dayton Children's Hospital

For exceptional collaboration and partnership in support of research and medical education at the Boonshoft School of Medicine.

Dean's Award -

Jeffrey E. Otte

For commitment to academic excellence, empathy, and compassion toward others, personal integrity and professionalism, and earning the respect and trust of classmates and faculty.

The Arnold P. Gold Foundation's Leonard Tow Humanism in Medicine Award—

Casey K. McCluskey (student) and Virginia C. Wood, M.D., associate professor, internal medicine, (faculty)

For consistently demonstrating compassion and empathy in the delivery of care to patients.

Teaching Excellence Award—

Gregory Toussaint, M.D., associate professor of pediatrics















The road less travelled

The path to medical school is as diverse as Dr. Mom the people who traverse it. Here are the stories of just a few of our 2013 grads.

Decision: Farmer or doctor?

One of seven children, Jeff Otte grew up on a pig and dairy farm in Maria Stein, Ohio. As the fifth child of a nurse and a farmer, Otte wrestled with whether to be a farmer or become a doctor. His curiosity in the sciences pushed him to pursue a career in medicine.

"I enjoyed human anatomy, biology and later medicine. I wanted to use my skills to help the greatest number of people," said Otte, who has begun a five-year residency in orthopaedic surgery at Mount Carmel Health System in Columbus, Ohio. "There is no other specialty in which you can help someone through the use of hammers, drills, and chisels with successful patient outcomes. You can drastically improve the quality of someone's life through nonsurgical and surgical measures."

Otte credits his supportive family with his success. "My family is my biggest support and my biggest asset," said Otte, who has received numerous honors and awards as a student leader. "I am very blessed."

He and his siblings worked on the farm growing up. They showed pigs at the county fair. Otte remembers taking blood from wiggling, squirming pigs for the county fair drug test. At Match Day, 16 family Wright State. members and his girlfriend

surprised him to show their support. "My parents really pushed us to work hard at everything we did, whether it was school, sports, or work," fear and excelled in the said Otte, whose great-great grandfather immigrated to the Dolson, Ph.D., associate United States in the 1870s and established the family farm in Maria Stein. His parents' farm has been in the family for more than 80 years. Otte and two of his brothers also encouraged her. grew up in the same bedroom that his father shared with his

brothers. Aunts, uncles, and

proximity to their farm. The

Otte family has dubbed the

Otte wants to return to Maria

Stein, after his residency and

orthopaedic practice. "When

I'm all done with my training,

Stein to Otteville," he said. "It's a rural area, and they need orthopaedic surgeons."

I'd like to move back to Maria

a fellowship to open an

cousins live within close

area "Otteville."

essentially self-sufficient when

As a child, Kathleen "Kit" Oxner, 41, read her older sister's nursing textbooks and magazines. She wanted to become a physician, but a challenging high school chemistry class thwarted her dream.

I started medical school," said

Oxner, who is from Springfield,

"Having a child with a chronic

increased my exposure to the

medical community from the

patient side. It also influences

how I relate to my patients."

After her three-year residency

program in internal medicine

at Kettering Medical Center,

she would like to return to her

hometown of Springfield and

"When patients don't go to

maintaining their health can

weren't raised to go to the

doctor. Others can't afford it,"

said Oxner, who also was vice

president of the WSU chapter

Women's Association (AMWA)

of the American Medical

during her second year.

"Springfield has an aging

basic primary care. I am

looking forward to doing

meaningful work."

population and needs more

physicians who can provide

be difficult. Some people

the doctor on a regular basis,

work with aging adults.

illness and an aging mother

Ohio, and graduated the

daughter graduated from

same weekend that her

Shawnee High School.

and mother-in-law has

After high school, she married her husband. Steve, and had two children, Alex and Megan. She was working and taking college courses. But Alex was diagnosed with juvenile diabetes at 2-1/2 years old. She dropped her classes to care for Alex, who is now a psychology major at

As her children got older, she began taking college classes again at Wright State. Hesitant to enroll in a chemistry course because of her high school experience, she overcame her course. Her professor, David professor and assistant chair of chemistry, encouraged her to become a premed major. Her husband, who graduated from Wright State in 1993,

"My children were teens and

From Harlem to medical school

As a child, Daisy Conduah realized that most people in her Harlem neighborhood did not have medical care. Many of her neighbors were immigrants or didn't have jobs that provided health insurance. She was fortunate. Her mother, who works as a hotel housekeeper at a Manhattan hotel, had health insurance.

"I would ultimately like to go back to Harlem to serve people who need health care but can't access it," said Conduah, who spent hours as a child and teen

reading medical books in the public library. "I also would like to mentor students from backgrounds similar to mine. I want them to know that they can become doctors. It is possible."

Before she returns to Harlem,

Conduah will spend six years in a U.S. Army residency program. An Army Health Professions Scholarship helped Conduah pay for medical school. "I also joined the Army because I wanted to serve the people who have put their lives on the line for our country," said Conduah,

who was commissioned a captain last May. "It's a great honor to serve these soldiers."

She looked forward to her general surgery residency at the NCC-Walter Reed National Military Medical Center. Walter Reed is known for its research and innovation. She wants to do a fellowship in surgical oncology.

"The operating room is an exciting place to be," said Conduah, who was an active member of the WSU chapter of the Student National Medical Association and the

Boonshoft International Health Program. "Surgery is a blending of medical and surgical intervention, which can help to alleviate symptoms or prolong someone's life."

She marvels at how the body's organs are made and fit together. "It is amazing to open up the human body, fix things, and put it back together," said Conduah, who credits her mother with instilling a love for people. "I look forward to the challenges that lie ahead. I know surgery will be a rewarding field."

All in the family

Ryan Hamilton was the second of three siblings from Beavercreek, Ohio, to pursue their medical degrees at Wright State University.

His older sister. Laura Hamilton, graduated in 2009 and has started a pediatric emergency medicine fellowship at Nationwide Children's Hospital in Columbus. His younger sister, Sarah, finished her second vear of medical school and will graduate in 2015. Laura's husband, Tim Rust, also is a 2009 graduate of the medical school.

Having an older sister in the same medical school had its benefits. She gave him advice and answered his questions. "Now I am the one giving advice to my younger sister," he said admitting that there is some friendly, joking competition.

Hamilton credits his parents with instilling their work ethic in him and his sisters. His father, Steve Hamilton, D.D.S., is a dentist in Fairborn, and his mother, Linda, manages the dental office. "From a really young age, our parents demanded our best in school," said Hamilton, who has begun a five-year residency in orthopaedic surgery at the University of Toledo. "Everything else came second to that."

Hamilton also credits Carroll High School in Dayton with providing a great science foundation "The class in high school paved the way," said Hamilton, who also earned both an undergraduate degree in biology and a master's degree in anatomy from Wright State. "It was a hard class but it prepared us for college and medical school."



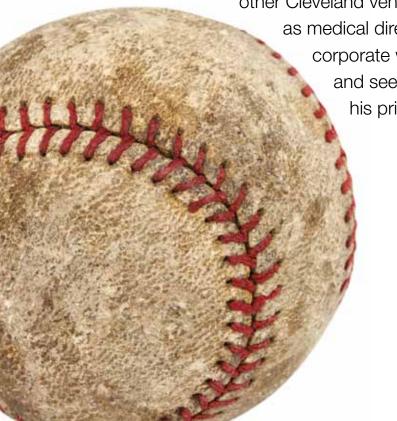
In Good Company

Grand slam

Alumnus Ronald Golovan serves as team physician for the Cleveland Indians, cares for entertainers appearing at the House of Blues, Blossom Music Center, and

> other Cleveland venues, serves as medical director for a corporate wellness firm,

> > and sees patients in his private practice.



As a Cleveland-based private practice internist, Ronald Golovan, M.D., ('89) has spent 22 years treating professional baseball players, musicians, actors, and corporate executives. However, he is quick to point out that some of the most satisfying moments of his career have come from his involvement in the health care of his more typical internal medicine patients.

"I won't lie. Taking care of professional athletes and musicians is great, but I still love going to work every day and seeing my regular office patients," said Golovan, who received the 2013 Outstanding Alumni Award from the Wright State University Alumni association.

It all started with a cold call

"It was 1991, and I was just about to start the last year of my medicine residency," he said. "Because I was interested in baseball and sports related medicine, I called the Indians just to ask about spending time with their medical staff."

That's when Golovan was introduced to Dr. William Wilder, the longtime team physician for the Cleveland Indians. The two met for dinner and immediately hit it off. Wilder invited Golovan to join his private practice at Lutheran Hospital where Golovan continues to see patients and today serves as vice president of medical operations.



Ronald Golovan spends six weeks with the team in spring training each year.

Upon Wilder's retirement in 2000, Golovan assumed the role of head team internist for the Indians. While he doesn't have to be at every game, Golovan spends a lot of time at the ballpark. He typically arrives one hour before the game to address any medical issue. He also sees players from the opposing team.

Golovan explains that the baseball season actually begins in February. "I spend six weeks with the team in spring training," he said. "It's not easy to be away from home for that long, but it is a great time to get to know the players and for them to get to know me."

Throughout the course of a long season, Golovan credits his very understanding family. "My kids grew up with baseball," said Golovan, who has great memories of being at the ballpark with his wife, Lisa, and their four children, Samantha, Chase, Isabelle, and Eric

Golovan also serves as the medical director for Be Well Solutions, a privately owned corporate wellness company. He helps companies formulate programs to keep their employees healthy and to identify those who are at risk for cardiovascular disease and cancer.

In the changing world of economics and health care, work site wellness programs are becoming more and more important. "In the simplest of terms, healthy employees are less expensive than unhealthy employees," he said,

noting that healthy employees are happier in general and are on the job more, thus incurring less sick time.

By spreading the same message to his corporate clients as he does to his own patients, Golovan is able to persuade a wider audience of the benefits of health promotion and disease prevention. He admits that the advice is not too complicated.

"Take care of yourself. Eat right and exercise regularly," said Golovan who also served on the board of directors of the Cleveland Academy of Medicine and currently holds a teaching position with the Fairview Hospital Internal Medicine Residency Program.

When he is not busy with his internal medicine practice, the Cleveland Indians, or Be Well Solutions, Golovan can be found treating entertainers at Playhouse Square or backstage providing care for the musicians at the House of Blues, Quicken Loans Arena, or Blossom Music Center. "I am a musician at heart," he said.

He points out that caring for athletes and entertainers requires many of the same skills. Often time constraints and travel schedules need to be considered. A concert tour may only be in town for a matter of hours so there is not much time to waste if a performer is ill and requires the doctor's care. This means that Golovan must be ready and willing to

accommodate. It is not unusual for him to meet with the performers prior to the show or sometimes after.

"I have had my share of late nights, but I am not complaining. I love being part of the show and I have met some really great people along the way," he said.

Golovan's generosity and spirit are evident in his willingness to give back to the Boonshoft School of Medicine. He is a steadfast supporter of the Match Day celebration.

He recalled his own experience. "I was involved in planning our Match Day party, and I remember wishing that we had a little more money to pay for some of the expenses," he said. With this in mind, he has donated to the Match Day fund since his graduation in 1989.

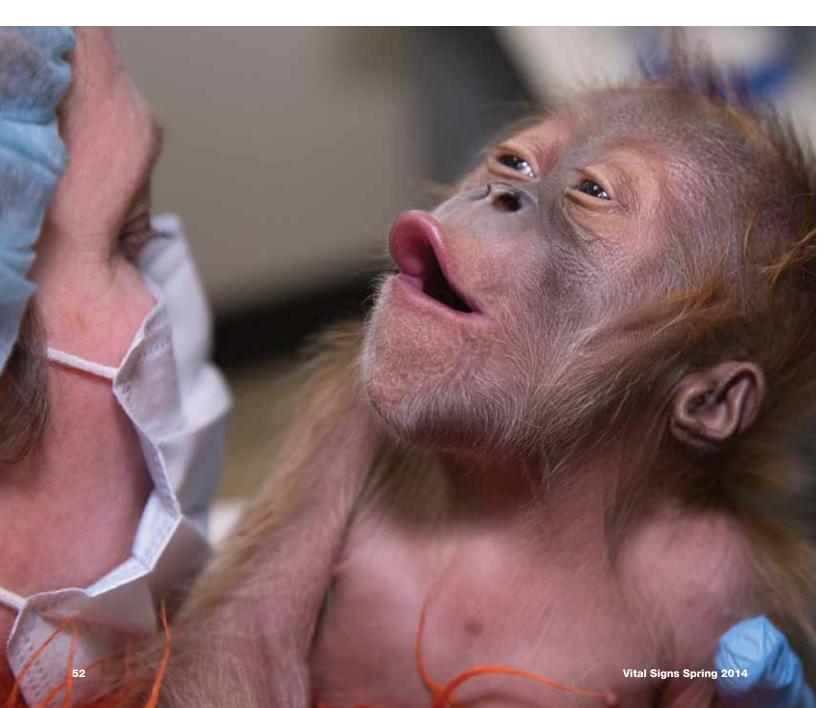
"I know how hard the students have worked," he said. "They've earned a celebration and shouldn't have to scratch to find the money to pay for it."

Whether it is backstage, in the office, at the ballpark, or in the boardroom, Golovan remains grateful to the Boonshoft School of Medicine for providing the strong foundation on which he has based his career. "I am truly fortunate. I have the greatest job in the world." **VS**

-Heather Maurer

Special Delivery

Boonshoft grad Bryan Jewell delivers a baby orangutan by C-section



When Bryan Jewell, M.D., was a student at the Boonshoft School of Medicine, he never imagined he would be part of a team that performed a C-section on an orangutan.

But on Jan. 10, 2013, Jewell worked with his business partner, Brad Moore, M.D., to perform a C-section and deliver the baby orangutan with the assistance of a team of animal doctors at Zoo Atlanta. A team of neonatologists from Children's Healthcare of Atlanta cared for the newborn male infant, Pongo.

"It was probably the coolest experience I have ever had," said Jewell, a 2008 graduate of the Boonshoft School of Medicine and a graduate of the medical school's obstetrics and gynecology residency. "The veterinarians don't normally intervene with primate deliveries at the zoo. It's best to let nature take its course, but orangutans are extremely endangered. This baby was very important to the gene pool."

Pongo's mother, Blaze, a 16-year-old Sumatran orangutan, had given birth a couple of years ago to an infant that died during delivery. Because of her small body and her reproductive history, Zoo Atlanta Animal Management and Veterinary Teams assembled a team of human experts and consultant veterinarians.

Jewell explained that Zoo Atlanta called Moore, his business partner. Jewell and Moore practice obstetrics and gynecology at Haven OB/GYN in Atlanta.

The zoo had worked with Moore before on other animal cases. For Blaze's case, the zoo's veterinarians met with Moore and other members of the medical team that included human obstetricians, neonatologists, and veterinary anesthesiologists. They met several

times before the birth to determine whether Blaze needed a C-section.

Blaze had been trained to participate in voluntary ultrasounds throughout her pregnancy. But during the C-section, the veterinary anesthesiologists gave her anesthetics.

Jewell remarked that an orangutan C-section was very similar to a human C-section. One main difference was that the patient was not awake. However, he recalled that the orangutan's anatomy was almost identical to that of a human on the inside.

Since the birth, Jewell has visited Pongo at Zoo Atlanta, which exhibits the nation's largest zoological orangutan collection.

"The baby is developing perfectly," he said.

The Zoo Atlanta website has followed the development of Pongo since his earliest days with a blog.

Jewell joined Haven OB/GYN in Atlanta in July 2012. He received many academic and humanitarian awards during his medical training at the Boonshoft School of Medicine, including the Arnold P. Gold Foundation's Leonard Tow Humanism in Medicine Award for a graduating medical student in 2008. During medical school, he participated in the Student-to-Student program, volunteered at Reach Out of Montgomery County and for the Anatomical Gift Program's Memorial Service, and was a member of the Honor Code Committee.

During medical school, Jewell and Katie Bullinger, whom he married in April 2012, also volunteered to help with Reunion Weekend, babysitting the children of the attendees. "We had so much fun with it while getting to meet many of the past alumni," Jewell said.

Bullinger, an M.D./Ph.D. student, graduated from the medical school in 2011. She is completing a three-year residency in neurology at Emory University in Atlanta.

Jewell also participated in several international medical mission trips to Jamaica, Cambodia, Bolivia, and Swaziland through the medical school's Global Health Initiative, which seeks to enhance the education of medical students by facilitating their exposure to medical issues facing people in other countries and medical issues facing immigrants in the United States.

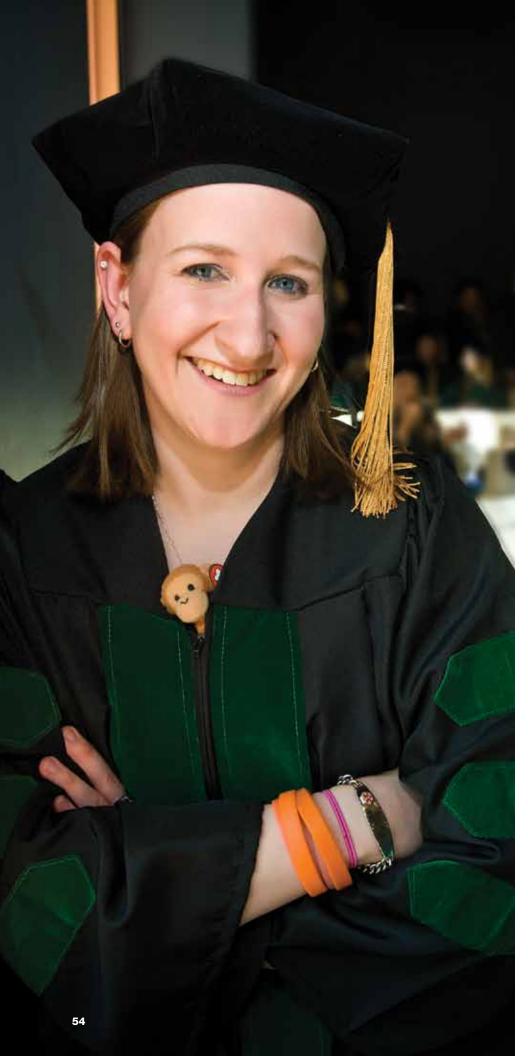
He also was a recipient of the Gold Foundation Humanism and Excellence in Teaching Award in 2010 as an obstetrics and gynecology resident.

A native of Columbus, Ohio, Jewell became interested in becoming a doctor after making frequent trips to the doctor for sports-related injuries. He chose obstetrics and gynecology because it provides a mix of office-based practice, procedures, and surgery. He enjoys the chance to get to know his patients during prenatal care, as well as the continuity of care after the delivery.

Jewell understands that not everyone who goes into medicine feels the same way that he does about obstetrics. "It's pretty amazing to participate in the delivery of babies, and I love my job more every day," he said. "I am amazed that every delivery can provide a new, special experience whether it's human or orangutan."

-Heather Maurer

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What cancer teaches

A former teacher,
2013 graduate Casey
McCluskey overcame
cancer, applied lessons
learned to caring for kids,
and received the U.S.
Public Health Service
2013 Excellence in
Public Health Award

For Casey McCluskey, M.D., M.Ed., the path to obtaining her medical degree was a circuitous journey.

After graduating from the University of Notre Dame in 2001 with a bachelor's degree in English and film, television, and theater, she earned a master's degree in education while teaching through a two-year postgraduate service program. She was placed in an under-resourced elementary school in Mississippi. "It was probably the hardest thing I've ever done," she said. "I learned a lot of life lessons with 25 kids relying on me."

She returned to her hometown of Akron, Ohio, to teach K-8 technology at a Catholic school for a few years. She also spent a summer teaching English to fifth-grade children in Ethiopia.

But she realized that she wouldn't be happy teaching for an entire career like her mother, aunt, and brother. "I didn't think I could sustain the enthusiasm I had for a teaching career. I had always thought about medicine. But I didn't know if I wanted to make the commitment," said McCluskey, whose father is a family physician. "If I hadn't pursued medicine, I think I would have wondered if that's what I should have done."

So, in the fall of 2008, McCluskey started her first year of medical school at the Boonshoft School of Medicine. Active in her class, she volunteered at Reach Out of Montgomery County, an organization that provides the underserved and uninsured with access to health care.

"I loved the opportunity to work with patients during my first two years when it seemed like all we did was bury our heads in books," she said. "It was a great reminder of why I actually went into medical school. It also was a great opportunity for medical students to work one on one with local physicians and learn from them."

However, by the end of her first year of medical school, McCluskey faced an unexpected hurdle. She was diagnosed with a malignant breast tumor. In the summer of 2009, she had a mastectomy, followed by chemotherapy.

"It's the best class I ever took in medical school," McCluskey reflected on her experience as a cancer patient. "My experience also helped me understand the sanctity of the relationship between a doctor and a patient. I literally put my life in the hands of my doctors and trusted that they were doing the right things to take care of me."

When she returned to medical school in the fall of 2009, she was behind her class because she had missed several weeks. So she retook her first year and joined the class of 2013. McCluskey jumped back into her activities and helped at Reach Out of Montgomery County, where she also served as a Reach Out board member.

A leader in her class, McCluskey participated in training activities throughout medical school that fostered the team approach in patient care. She was a cohost on Radio Rounds, the radio show hosted and produced entirely by medical students. She also was a speaker in the "Social and Ethical Issues in Medicine" course. She served as codirector of Finding Meaning in Medicine, a medical student group that discusses the purpose and meaning of medicine. She volunteered as part of a service-learning elective in New Orleans to help restore houses.

She volunteered with the Weekend Intervention Program, a driver intervention program for substance abuse clients. She served as president of the local chapter of Physicians for Human Rights. She is a member of Phi Rho Sigma Medical Society, a national social and community service organization. She collected food for the Boonshoft School of Medicine Canned Food Drive, which provides food to local food pantries.

She also began talking about her experience as a cancer patient and continues to educate young women about breast cancer awareness. She spoke at an American Medical Student Association (AMSA) national convention on the topic of "Medical Student as Patient: Lessons Learned from Breast Cancer."

"I am humbled by Casey's continual efforts to meet the needs of those with whom she comes into contact," said Gary LeRoy, M.D., associate dean of student affairs and admissions. "She is compassionate and driven to make life better for children and adolescents."

The U.S. Public Health Service (USPHS) took note of her compassion and commitment to public health. Geoffrey M. Calvert, M.D., M.P.H., a Boonshoft School

of Medicine alumnus, class of 1983, and an active duty officer in the USPHS, presented McCluskey with the 2013 Excellence in Public Health Award before the medical school's graduation ceremony. The USPHS award recognizes medical students who are involved in public health issues in their communities.

"I am going into pediatrics, and I think the foundation for that pathway was laid down before I started medical school," said McCluskey, who is in her first year of residency at the Indiana University School of Medicine in Indianapolis. "My years of teaching helped me get to know children and understand who they are and how they think."

One of the biggest things being a teacher taught her to do is break down information for patients in simpler ways so they can have a better understanding of their illnesses and treatments. "The more patients understand what is going on with them, the more motivated they are to take care of themselves," she said. "I may have left the classroom, but I will always consider myself a teacher."

After she completes her pediatrics residency, McCluskey wants to be a hospitalist in a children's hospital. As a doctor based in a hospital setting, McCluskey wants to help adolescents who are ill.

"Adolescents are walking that fine line between childhood and adulthood. It takes patience to help them navigate this world," McCluskey said. "They need to be given enough trust and responsibility, while at the same time, still be allowed to be a child again. They are a fascinating group that is often neglected in medicine."

-Heather Maurer

Alumni Notes

We're proud of our alumni and graduates of our residency programs and want to spread the word about your achievements. If you have professional news or personal updates to share—or simply want to stay in touch—please contact the Office of Advancement at som_adv@wright.edu or 937.245.7610.

John Lyman, M.D., FACEP, was named president of the Ohio Chapter of the Americal College of Emergency Physicians in June 2013.

James H. Jones, M.D.,* has been elected president of the American Board of Emergency Medicine. Jones is a professor at the Indiana University School of Medicine and medical director of the Wishard Memorial Hospital Emergency Department in Indianapolis. Jones completed his residency training at WSU in 1982.

James Augustine, M.D., was elected to the board of directors of the American College of Emergency Physicians last October. He and his wife, Linda, live in Naples, Florida. They have three grown children, Jill, Joshua, and Jenna.

Neal P. Barney, M.D., is a professor in the Department of Ophthalmology and Visual Sciences at the University of Wisconsin School of Medicine and Public Health. He and his wife, Christine, have two grown children, Erin and Patrick.

Kevin Budke, M.D., is an internist at Group Health, which is part of TriHealth Physician Partners in Cincinnati. He and his wife, Lora, live in Cincinnati. They have four grown children, Matt, Karen, Kristen, and Katelyn.

Phil Cusumano, M.D., was nominated to "Best Doctors" listing in Cleveland, Ohio, for eight years. He specializes in internal medicine at Beaufort Memorial Hospital in Beaufort, South Carolina. He and his wife, Barb, have four grown daughters, Laura, Christy, Katy, and Chelcie.

Elizabeth Mann, M.D., worked at Pediatric Center of Richmond in Indiana for 11 years. She won the Humanity in Medicine Award in 1993. In 1997, she became a full-time mom, wife, and home-school teacher. She works part time in kids' ministry at her church. She and her husband, Michael, have two children, Julie (18), and Eric (16). They live in Swanton, Ohio. She is taking Spanish with her son.

Michael Oleksyk, M.D., is the first physician in the United States who was dual-certified by the U.S. Olympic Committee in sports medicine and drug testing. He is vice president of medical affairs and chief medical officer at Baptist Health Care Inc., Pensacola, Florida. He is also an assistant clinical professor at Florida State University College of Medicine in Tallahassee, Florida. He and his wife, Suzette, reside in Pensacola.

Charles Ware, M.D., is an orthopedic surgeon at Mishawaka Orthopedics in Mishawaka, Indiana. He is a colonel in the U.S. Army Reserves. He and his wife, Liz, have three grown children, Noel, Chad, and T.J.

Faren H. Williams, M.D., is chief of physical medicine and rehabilitation at the University of Massachusetts. She enjoys traveling, cooking, gardening and music. She and her husband, Luke R. Maki, have two grown children, Trevor Maki and Preston Maki.

Tari (Smith) Anderson, M.D., practices with Riverside Gynecology in Cincinnati. She and her husband, Greg, have three children, Sam (19), Paige (17), and Grant (13).

Kathleen Glover, M.D., is the owner/director of Alma Clinic—Integrative Internal Medicine in Yellow Springs, Ohio. She has three children and four grandchildren.

Kenelm McCormick, M.D., is the senior medical director of Hospice of Medina County in Medina, Ohio. He and his wife, Jane, have two grown children and live in Akron, Ohio.

Robert M. Meuser, M.D., is a staff surgeon at Heritage Valley Health System in Southwestern Pennsylvania. He and his wife, Rebecca, have four children, Derek (20), Mitchell (18), Austin (16), and Hannah (14).

Alice Onady, M.D., is the medical director of Community Behavioral Health in Middletown, Ohio. She and her husband, Gary Onady, M.D., ('87) have two grown children, Dia and Rena.

Robert Tracy, M.D., practices family medicine with St. Elizabeth Physicians in the greater Cincinnati area. He and his wife, Randi Callahan Tracy, M.D., ('87) have two grown children.

Mark Browne, M.D., is chief medical officer and senior vice president at Covenant Health, a community-owned health system in Knoxville, Tennessee.

Judy Burichin, M.D., practices at Hilltop Obstetrics & Gynecology in Franklin, Ohio. She and her husband, Jerry Twohig, have two grown children, Patrick and Mary.

Sibel Gullo, M.D., is a primary care physician with Baptists Physicians in Lexington, Kentucky, She and her husband, Chris, have three children, Jamie (18), JoJo (16), and Tony (10).

Tom Proctor, M.D., is president of Emergency Medicine Specialists in Dayton, Ohio.

Kevin Meyer, M.D., serves as medical director of the Emergency Department at Mercy Health-West Hospital in Cincinnati.

Juanita Bhatnagar, M.D., is a pediatric hospitalist at Pediatrix Medical Group in Austin, Texas. She enjoys traveling, home fitness, and live comedy. She is the mother of twins, a son and daughter, Raghav and Jaya (10), and daughter Shreeya (7). They live in Round Rock, Texas.

Melanie Carlson, M.D., is a partner and president at Geauga Family Physicians in Chardon, Ohio. She practices family medicine. She and her husband, Jesse, have two children, Josie (11) and Connor (9), and live in Chagrin Falls, Ohio.

Sarah Prince Carlson, M.D., is practicing at Davidson Family Medicine in Davidson, North Carolina. She enjoys cooking, yoga, and volunteering in her son's kindergarten class. She and her husband, Glenn, have one son, Ben (6), and live in Morresville, North Carolina.

Kevin D. Frank, M.D., is currently practicing at Mount Carmel Medical Group at Diley Ridge in Canal Winchester, Ohio. He is the proud father of three children, Sydney (13.5), Geneva (11), and Kavanaugh (9).

Ronald McGilton, M.D., is practicing at Family Physicians of Englewood, Ohio. He ran his first marathon in 2012, the Air Force Marathon. He also has run the Disney Half Marathon the past three years. He and his wife, Mel, have three children, Sydney (13), Noah (11), and Samantha (7).

Gary Butchko, M.D.,* FAAP, FACC, joined Driscoll Children's Hospital in Corpus Christi, Texas, as a pediatric cardiologist at Driscoll Children's Medical Plaza-McAllen.

Sumant Lamba, M.D.,* is practicing in Jacksonville, Florida, where he offers leading methods of treatment for coronary care, vascular disease, and cardiac arrest.

Janice Eastman Bach, M.D., serves on the Oneida Healthcare board of trustees in Oneida, New York. She has practiced at Child Health Associates since 2003 and serves on the Oneida Healthcare Pediatric Medicine medical staff. She has been instrumental in the implementation of Oneida Healthcare's Meditech, the hospital's electronic medical record system.

Sean Barnett, M.D., M.S., FACS, FAAP, is the new chief medical officer at Kaleidoscope, a product design and development consultancy based in Cincinnati, Ohio. He was formerly a surgeon at Cincinnati Children's Hospital Medical Center.

Casey Boyce, M.D., is practicing at Hilltop OB/GYN in Middletown, Ohio. She and her husband, Scott, have two children, Cierra (5) and Bryce (2).

Chastity Edwards, M.D., is practicing as a surgical specialist in obstetrics and gynecology at Sidney Health Center in Sidney, Montana. Before moving to Montana in November 2013, she practiced in Maryland, where she was honored as one of Chesapeake Family Magazine's Top 100 Physicians because of her attention to detail and rapport with patients.

Richard V. Hausrod, M.D., FACEP, FAAEM, is chair of emergency medicine at EMH Health Care in Elyria, Ohio, and chief operating officer of Emergency Medicine Consultants. He and his wife, Brooke E. Hohn, M.D., reside in Avon Lake, Ohio.

Ellen MacRitchie, M.D., is a pediatrician with Akron Children's Hospital Pediatrics. She's currently trying to keep up with her kids, and enjoys painting, reading, and running. She and her husband, Michael Jewett, have two children, Tommy (4) and John (1.5).

Anna Rohrbacher, M.D., is an outpatient psychiatrist in private practice. She lives in St. Charles, Illinois.

Jennifer Shoenfelt, M.D., is medical director and director of psychiatry at St. Joseph's Orphanage in Cincinnati. This year she became a water color painter. She has two grown children, Michael and Stephanie.

Sarah Tibbetts, M.D., is in the Department of Emergency Medicine at Charlton Memorial Hospital in Fall River, Massachusetts. She and her husband, Allen Bernier, live in Rochester, Massachusetts.

Susan E. Williams, M.D., is on staff in the Department of Endocrinology at the Cleveland Clinic. She lives in Sagamore Hills, Ohio.

Ealena Callender, M.D.,* is practicing at Mayo Clinic Health System in Albert Lea, Minnesota, in obstetrics and gynecology. She previously provided general obstetrics and gynecology care at the Center for Women's Health in Newport News, Virginia.

Sara Houston, M.D., is practicing in the pediatrics department at Essentia Health's South University Clinic in Fargo, North Dakota.

Rubeal Mann, M.D., is the emergency department medical director at Springfield Regional Medical Center in Springfield, Ohio.

Jill Aston, M.D., is an emergency department physician at Mercy Fairfield Hospital in Cincinnati. She and her husband, Scott, have two children, Bennett (4.5) and Grant (2.5).

Todd A. Bialowas, M.D., is on active duty as a U.S. Army Medical Corps officer and is practicing emergency medicine and sports medicine. He and his wife, Catherine, have one child, T. Alexander (12).

Justin Mistovich, M.D., is chief resident of orthopedics at Allegheny General Hospital in Pittsburgh. He and his wife, Keili, have one child, Madeleine (6 months).

Elizabeth Chung, M.D.,* has joined Women's Care in Mansfield, Ohio, as an obstetrician/gynecologist. She also is on the medical staff at MedCentral Health System in Mansfield.

In Memoriam

Rudolph A. Fajardo, M.D., ('04) passed away on November 8, 2013. He was a resident of Springfield, Missouri.

* Residency graduates

Events

Upcoming events

For more information on upcoming events, visit med.wright.edu/calendar

Dermatology Reception for Alumni & Resident Graduates

American Academy of Dermatology Annual

Sunday, March 23 • 5:30-7:30 p.m. Four Seasons Hotel Reception Room 1111 14th Street, Denver, Colo.

RSVP to Nicki Crellin at nicki.crellin@wright.edu

San Antonio, Texas, Alumni Dinner

Thursday, March 27 • 6 p.m. Las Canarias

112 College Street, San Antonio, Texas RSVP to Nicki Crellin at nicki.crellin@wright.edu

New Orleans, Louisiana, Alumni Dinner

Saturday, March 29 • 6 p.m. The Grill Room, Windor Court Hotel 300 Gravier Street, New Orleans, LA RSVP to Nicki Crellin at nicki.crellin@wright.edu



2014 Medical-Spirituality Conference "Mindful Practice: Compassion and

April 10 • 8:45 a.m.-4:30 p.m. Sinclair Conference Center, Dayton, Ohio Register online at med.wright.edu/med-spirit

Resilience"

Internal Medicine Reception for Alumni & **Resident Graduates**

American College of Physicians Internal Medicine Meeting

Friday, April 11 • 6-8 p.m.

Hyatt Regency Orlando, Room: Silver Springs II, 9801 International Drive, Orlando, Fla. RSVP to Nicki Crellin at nicki.crellin@wright.edu

SNMA Reception with National SNMA President Topaz Sampson

50th Anniversary Celebration of SNMA Friday, April 18 • 6:30-9 p.m. Washington Hilton Hotel 1919 Connecticut Ave. N.W. Washington, D.C. RSVP to Lakia Q. Gray, M.P.A., at

lakia.gray@wright.edu

Academy of Medicine Dinner

April 23, 2014

Long before J.R. Martinez won legions of fans as the winner of Dancing With the Stars in 2011, he was inspiring audiences of all kinds with his remarkable story.

Born to a single mother from El Salvador, his dream was to become a professional football player. His plans were derailed by a sports injury. So he enlisted in the Army, where he was assigned to the 502nd Infantry Regiment of the 101st Airborne Division. Martinez saw it as a way to give back to a country that already had given so much to him and his family.



In March 2003, J.R. was deployed to Iraq. Less than a month later, the Humvee he was driving hit a land mine. Three other soldiers were ejected from the burning vehicle, but Martinez was trapped inside. Suffering from smoke inhalation and severe burns to 34 percent of his body, Martinez spent the next 34 months in recovery, undergoing 33 different surgeries, including skin grafts and cosmetic surgery.

Martinez has spoken at events nationwide. His message of resilience and optimism has inspired a wide variety of organizations, including corporations, veterans groups and schools. In 2008, Martinez joined the cast of ABC's Emmy Award-winning daytime drama All My Children as combat veteran Brot Monroe. The show incorporated portions of Martinez's real life into its fictional storylines.

Register online at med.wright.edu/academy



2014 Academy of **Medicine Dinner & Guest** Lecture, with J.R. Martinez

April 23, 5:30 p.m. Sinclair Conference Center. Dayton, Ohio

Register online at med.wright.edu/academy

Obstetrics and Gynecology Reception for Alumni & Resident Graduates

American Congress of Obstetricians and Gynecologists Annual Clinical Meeting April 28 Location and Time TBA Chicago, III.

Psychiatry Reception for Alumni & Resident Graduates

New York Marriott Marquis

American Psychiatric Association Annual Meeting May 5 ■ 7–9 p.m.

Aerospace Medicine Alumni Reception

Aerospace Medical Association Annual Scientific Meeting

Sunday, May 11 ■ 6 p.m. Hilton San Diego Bayfront

Department of Pharmacology & Toxicology

Earl H. Morris Endowed Lectureship, with Lydia Aguilar-Bryan, M.D., Ph.D.

May 21 ■ Time TBA

Boonshoft School of Medicine White Hall 3640 Col. Glenn Hwy., Dayton, Ohio



Reunion Weekend

Honoring the Classes of 1984, 1989, 1994, 1999, 2004, 2009 August 8-10

Cincinnati. Ohio

Inspired to make a difference



Survivor of Rwandan ethnic conflict committed to serving where the need is greatest

Diane Bizimana always wonders why her life was spared during the 1994 ethnic conflict in Rwanda.

Diane, was seven years old when the conflict in Rwanda erupted in 1994. "Did I need to see and take all those memories with me so that I will speak for those lives. lost senselessly?"

While the memories are painful for Bizimana, who is a second-year medical student at the Boonshoft School of Medicine, she wants some good to come out of what she experienced. "I would not change my sad story," said Diane, who was born in Rwanda and immigrated to the United States in 2007. "It has made me who I am today."

Her mother and aunt almost died in a large fire but escaped when her father rescued them. Her family was forced to flee to the Democratic Republic of Congo. Two years later as they returned to her homeland of Rwanda, snipers attacked them, forcing them to hide among banana trees. A bullet whizzed by her and struck the woman next to her. Within minutes, she died in front of Diane, who was then nine. "I could not do anything," she said recalling

how the woman suffered. "I decided at that moment I wanted to be a doctor."

Even after the conflict ended.

Rwanda was marked by insecurity. Her family suffered more bloodshed. People rushed into her cousin's house and killed his whole family. Her cousin was shot. but he survived with a bullet lodged in his ribs. "He is slowly dying. He is usually in a lot of pain," said Diane, explaining that there are not enough surgeons in Rwanda. "When I can, I will remove the bullet surgically."

Diane followed her father and his family to Dayton, Ohio. "I came here to be with the other half of my family and to get a better education," said Diane, who has 12 siblings. Scholarships helped her finance her undergraduate education at Wright State University.

"I don't think I could have completed my undergraduate studies at Wright State University without scholarships," she said.

Scholarships also have helped her pay for her education at the Boonshoft School of Medicine, where she is secretary of the James B. Peoples, M.D., Surgical Society: curriculum co-chair of the Global Health Initiative program; a volunteer with

Reach Out of Montgomery County, a clinic that provides access to health care to the underserved and uninsured; and a tutor for Rwandan and Burundian refugees in Dayton.

She received an Armed Forces Health Professional Scholarship in 2013. As part of her commitment to the U.S. Army, she will serve as a surgeon for five years after her residency. Then, she plans to continue to practice general surgery in the United States, but she wants to return to Rwanda for a month out of each year to do pro bono surgery. Eventually, she wants to build a hospital in Rwanda or another country in Africa. "I need to help, but I need to help in the places where I am needed the most," Diane said.

Your support can give outstanding students like Diane an opportunity to fulfill their potential, pursue their dreams, and prepare for a lifetime of service to their patients, their communities and the world. The lifechanging impact of your contribution truly is nearly limitless, so please visit med.wright.edu/giving to make your gift to the **Boonshoft School of** Medicine today.



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The Boonshoft School of Medicine's first ever WELL (Welcome to Education, Life, and Leisure) weekend was a smashing success. More than 60 alumni, faculty and friends attended the four-day CME retreat at Marco Island, Florida, in early February. The getaway weekend featured sunshine, white sandy beaches, and balmy temperatures in addition to a two-day CME symposium, a shelling expedition, Luau on the beach, and dinner in Naples at the lovely home of Joseph ('85) & Merrylee Kandel.

Enjoy education, life and leisure at our next WELL weekend in Napa Valley, California, March 26-29, 2015. With breathtaking views around every turn and picturesque rolling hills planted with vineyards, Napa Valley is the perfect place to reconnect with friends and the Boonshoft School of Medicine.







