

Winter 2011

FLORIDA STATE UNIVERSITY COLLEGE OF MEDICINE

FSUMED

THE COURSE THAT TEACHES FUTURE PHYSICIANS
ABOUT COMPASSION – AND THE HUMAN BODY

LESSON OF A LIFETIME

PLUS:

LEARNING IN A SMALL TOWN
AN AMAZING JOURNEY





really love my job. I was at a national meeting last year with deans from medical schools around the country, and we had a session on the future of medical education. An emeritus dean from a distinguished university was lamenting how, as dean, he probably spent less than 5 percent of his time on medical student education issues. Clearly the best part about being dean here is that my **major** job is medical student education.

Trust me – this school is different. At many medical schools, the dean's major job might be called "president of the practice plan" or "vice president for health affairs." Whatever the title, that dean spends huge chunks of time overseeing the health-care professionals who treat patients referred to the academic medical center.

Not here at Florida State. We're not in the business of running a medical center. Instead, we partner with hospitals and other health-care providers across the state to give our students hands-on experience in their communities. That arrangement allows us to focus our time and energy on nurturing and preparing our students for those patient encounters. When we say that the College of Medicine strives to foster a student-centered environment, it's more than just nice-sounding words.

Reading the remarkable cover story in this issue of FSU MED reminded me of an important discovery I made about our student focus when I arrived here in 2008. I was accustomed to a traditional medical school's academic year, in which students graduate from college, work or take the summer off, then start their first semester in the fall with gross anatomy. So I was surprised when I was asked to welcome the new first-year Class of 2012 in May 2008 before I had even officially gotten here. I learned that here at Florida State, the first-year students spend their summer in the anatomy lab.

"Wow," I remember thinking, "that's asking a lot to give up their senior summer." Now I know better. It's actually very student-focused, for two reasons:

1. First-year students pretty much get the med school all to themselves in the summer. So while they're getting to know anatomy and being introduced to Doctoring, they're also getting to know the campus and gradually getting the hang of being medical students.

2. Each year, new second-year students compete to stick around in the summer to be teaching assistants in the anatomy lab. It is truly a magical experience. The first-year students look at these "veterans" and think, "They know everything!" The second-year students not only provide good teaching and training but also act as big brothers and sisters. This teaching opportunity boosts their confidence level sky-high.

Our student-centered philosophy gives us a unique competitive edge among medical schools. It helps us produce the competent, compassionate physicians that Florida needs. And it all begins with our "first patients" in the anatomy lab.

John P. Fogarty, M.D.
Dean, College of Medicine

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12

Lesson of a lifetime

12

By Doug Carlson

Body donors play a vital role in the quest to create physicians who are as compassionate as they are knowledgeable. Find out what first-year medical students do in the anatomy lab.

Small towns, enormous opportunities

20

By Ron Hartung

If "rural medicine" conjures up images of sleepy villages where kindly country doctors kill time at the general store, climb out of your time capsule. Our Rural Track offers boundless opportunities for ambitious medical students.

An amazing journey

26

From a childhood marked by homelessness to a medical degree at Florida State, Jimmy Moss is proof that you don't have to follow the usual route to become a good physician.



20



26

PHOTOS BY COLIN HACKLEY

soap notes

2

Scientific Endeavors, On Main Campus,
At the Front Lines, People of Note

rounds

28

Checking up on our alumni

second opinion

30

A student shares his thoughts

zebras

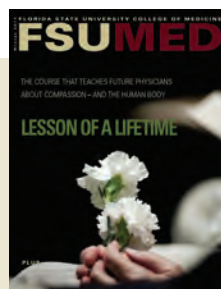
31

Things you don't expect to find in medical school

tongue depressor

32

Musings from life at the medical school



on the cover

The end-of-summer memorial service for body donors isn't the end of their gift. Medical students carry the lessons they learn in clinical anatomy for a lifetime.

scientific endeavors

Credo in Action

Richard Nowakowski may be gone from the University of Medicine and Dentistry of New Jersey, but clearly he's not forgotten. In September, in fact, he was one of four winners of the university's first Credo in Action awards, the highest awards it gives.

They are intended to recognize staff, faculty and students who exemplify the words and values expressed in the University Credo: "We Teach. We Discover. We Heal. We Care."

"Your colleagues have identified you as someone who through actions, words and deeds helps the Credo come to life," wrote William F. Owen Jr., M.D., president of UMDNJ.

Before Nowakowski moved to Tallahassee early this year to become chair of the Department of Biomedical Sciences, he was New Jersey Professor of Spinal Cord Research in the Department of Neuroscience and Cell Biology at UMDNJ-Robert Wood Johnson Medical School. One of his key accomplishments was creating and leading the Postdoctoral Career Development Program.



Richard Nowakowski, center, accepts the Credo in Action award from the University of Medicine and Dentistry of New Jersey.

The anxiety puzzle

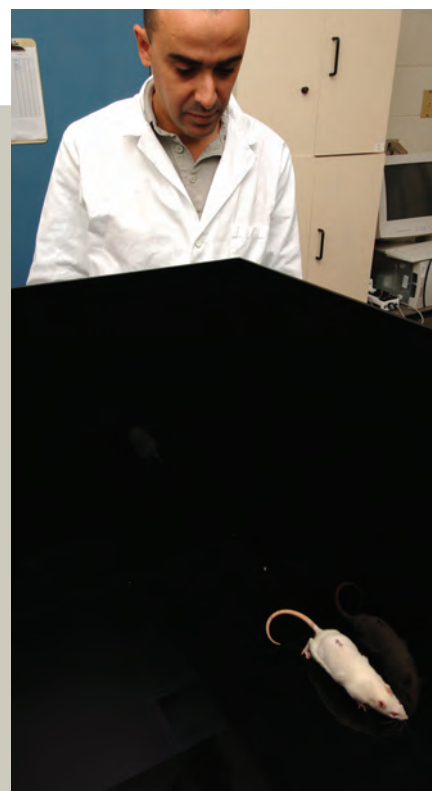
Testosterone. It usually makes the news only when boys behave badly.

But in the laboratory of Mohamed Kabbaj, researchers are beginning to see a previously unknown benefit of testosterone – as a shield against anxiety. They're wondering whether the greater amounts of this hormone in males could help explain why men are afflicted by anxiety only half as much as women are.

To seek answers to those and other questions, Kabbaj, an associate professor in the Department of Biomedical Sciences, has been awarded a five-year, \$1.8 million grant from the National Institute of Mental Health.

"We have shown recently that estrogen is not implicated in sex differences in anxiety," Kabbaj said. "Now we are focusing on testosterone. We think testosterone is protective in males. And since females don't have a lot of testosterone, they are more prone to developing anxiety and depression. That's the hypothesis we are trying to follow up on."

As part of this research, Kabbaj's team also is trying to pin down the exact



RAY STANVARD

Mohamed Kabbaj received a \$1.8 million grant to study the neurobiology behind sex differences. His work could lead to better ways of controlling anxiety in humans.

role played by the gene known as zif268. Using animal models, they've discovered that, during stressful situations, the gene is activated in the medial prefrontal cortex of the brains in males far more than in females.

"I see our studies as shedding light on the neurobiology behind sex differences – why females are more anxious," Kabbaj said. Eventually, he said, a drug manufacturer will be able to take his information and develop a drug to reduce anxiety more effectively.

"Once you have identified a target, I think it's easy for people who design drugs on a regular basis to do that," he said. "I have more fun, though, with finding those first pieces of the puzzle."

Thanks to this grant, he has until 2015 to work on that puzzle.

PHOTO COURTESY OF UMDNJ

Explaining cancer

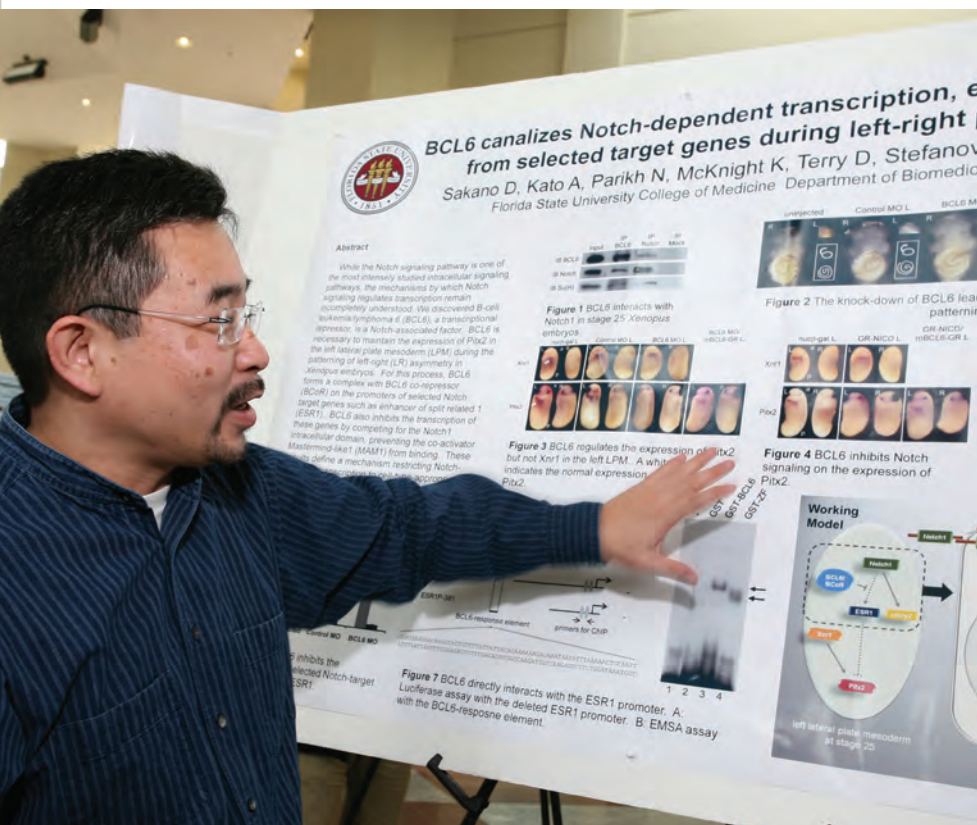
Yoichi Kato has discovered a new interaction between a cell signaling system and a specific gene that may be the cause of B-cell lymphoma. The finding suggests a similar interaction could be occurring during the development of other types of cancer, leading to further understanding of how cancer works — and how it might be stopped.

Kato, Ph.D., an assistant professor in the Department of Biomedical Sciences, and his lab team found that the gene — known in scientific shorthand as BCL6 — can inhibit one of the pathways cells use to transmit signals to other cells. Called the Notch signaling pathway, it's an important mechanism for cells to control gene regulation.

"There are very few molecules that we know directly inhibit Notch signaling," Kato said. "So that is why the interaction, and our finding, is very interesting to people in many areas — cancer specialists, neuroscientists and many others."

Kato's team produced a paper outlining the findings that was published in the journal *Developmental Cell*, and he presented the paper at an international conference in Cold Spring Harbor, N.Y., for scientists studying early development of vertebrates.

Kato's research is supported by grants from the National Institute of Child Health and Human Development and the Bankhead-Coley Cancer Research Program.



Yoichi Kato explains his work at the 2010 College of Medicine Research Fair.

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Cover shot

First came the good news for Tim Megraw, associate professor of biomedical sciences: The prestigious journal *Developmental Cell* not only accepted his manuscript for publication in its June 15 issue but also wanted to feature his lab's work on its cover. The research article, "CDK5RAP2 Regulates Centriole Engagement and Cohesion in Mice," laid out new discoveries in cell division that one day might translate into more effective use of anti-cancer drugs in humans. Megraw's work is supported by grants from the National Institutes of Health.

Then came the good news for Zach Folzenlogen, now a second-year student in the College of Medicine: *Developmental Cell* accepted the cover design he had submitted at Megraw's request.

on main campus

Little by little, full at last

In the fall of 2001, this school began with 30 students. Four years later, 27 of them graduated.

The next year, 36 graduated. Then 48, 58, 73, 94. Slowly but surely, the College of Medicine has been climbing toward its goal.

Last summer, it reached a total of 480 students. That's 120 per class, give or take. Full enrollment.

Gone is the intimate atmosphere of those early years. But in its place is a bustling sense of energy and a growing sense that all of these bright, compassionate people in white coats really will help alleviate the state's physician shortage.

How diverse is this Class of 2014, which arrived in June to lift us to that 480 mark? Here's a glimpse:

- The class is nearly 60 percent male. That's the same percentage as the Class of 2005, but all eight of our other classes have had more women than men.
- Nineteen percent of the new students are Asian.
- More than 8 percent are Hispanic.
- More than 7 percent are black.
- And the Class of 2014 contains three Alexanders, two Alexandras and one Alexandru.

Now that's diversity.



COLIN HACKLEY



Lessons from an old white coat

On June 24, 1970, Robert Watson wrapped up his one-year hospital internship at the University of Alabama in Birmingham. He was heading south to the University of Florida for a neurology residency. He figured he'd never again wear UAB clothing – including the jacket-length white coat he'd worn as an intern.

Most of us would have left it behind. For Watson, though, this was not just any old jacket. On the front were the words "Robert Watson, M.D." In the pockets were reminders of his first year as a physician.

So he placed it on a hanger in a garment bag. It's still there. And after 40 years, it still fits.

The 120 first-year students and their guests at the August White Coat Ceremony for the Class of 2014 can attest to that. Shortly after Watson began his remarks to the students who soon would receive their own white coats, he removed his coat, reached into the back of the lectern and, surprise, put on a coat that was shorter, yellower and far more memorable.

One by one he went through the pockets, briefly reliving intern days. A box of Roi-Tan cigars, which "all the really cool interns" smoked. A Wint-O-Green mint, to mask the cigar breath of cool interns. Slides from the last



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The white coat still fits, and its pockets are filled with memories. Dr. Robert Watson tells first-year students why the coat still matters all these years later.

patient whose blood he had drawn. And a stethoscope, its rubber no longer flexible but its memories intact.

"This stethoscope heard hundreds of hearts, thousands of lungs," he told the audience. "What memories this coat and these pockets hold. The white coat is special."

Watson's colleague Curtis Stine, M.D., took a different approach in his address to the assembled students. He reminded them that a physician's life ought to be a life of service. Then he challenged them:

"Who will become the pediatrician in Immokalee caring for children of migrant farm workers? Who will become a general internist at the Community Health Center in Orlando, caring for adults that fall below the poverty level? Who is going to deliver all the babies born in 2016 to single moms in Tampa?

"Who will become the family physician who devotes him/herself to serving a rural community in North Florida? Who will be my geriatrician as I retire, grow old and, eventually, die? To paraphrase the Talmud: 'If not you, who? If not now, when?'"

Lincoln High student Ziyan Song and other SSTRIDE Summer Institute participants got to experience the lab and other aspects of the College of Medicine.

Med school at first glance

Though you can't know exactly what medical school is like until you're a med student, a weeklong immersion will give you a pretty good idea. This past summer, once again, more than 50 hand-picked high-schoolers from across Florida got to be med students for a week in the College of Medicine's SSTRIDE Summer Institute. The program was demanding, but all who filled out evaluation sheets said it helped them prepare for college.

SSTRIDE (Science Students Together Reaching Instructional Diversity and Excellence) seeks to introduce underrepresented minorities to the possibility of a career in medicine. Summer Institute participants were chosen from schools near the College of Medicine's regional campuses and rural training sites.

For five days, they took blood pressures, visited rural health centers, spoke with people their grandparents' age ("seasoned citizens," one student called them), explored the latest in technology, absorbed many lectures and generally soaked up information. Afterward, organizers asked for their

frank appraisals of everything. For some participants, it was life-changing.

"I definitely see the hard work and determination needed to become a physician," one student wrote, "but I found out mostly that medical students are just normal people trying to do good for the world. (At least the ones I met at FSU.)"

"I think becoming a physician would be amazing," another wrote. "I've really enjoyed this past week and I would do it all over again in a heartbeat."

From another student: "It opened my eyes to a new experience and helped me decide my career."

According to the evaluations, the most popular activities were visiting the anatomy lab, exploring the Clinical Skills and Simulation Center, and shadowing physicians.

"This was probably the best experience of the whole week!" one participant said after shadowing. "It gave me an eye-opening and inside look into the jobs and tasks of doctors. It was something I wouldn't be able to do anywhere else."



COLIN HACKLEY

A call from the White House

Among the visitors doing business at the White House in August was the pediatrics clerkship director from the Orlando regional campus, there to discuss one key element in the federal government's effort to reduce obesity among children: breastfeeding.



Dr. Joan Meek, right, teaches Florida State medical students from the Orlando Campus and is a nationally recognized expert and advocate for breastfeeding.

RICHMOND GIBBS

Joan Y. Meek, M.D., was invited to Washington in her role as chair of the United States Breastfeeding Committee. In their meeting with policy advisors to first lady Michelle Obama, she and others who are connected with the committee emphasized that increasing the initiation and duration of breastfeeding could aid in preventing obesity.

Among other topics, they also addressed provisions in the Affordable Care Act that require employers to provide workplace time and space for breastfeeding. They talked about having the White House and federal agencies becoming role models as Breastfeeding Friendly Workplaces. Representatives from the U.S. Department of Labor and Department of Agriculture also were there, she said.

In June, Meek also met with the U.S. surgeon general, Dr. Regina Benjamin. Soon, the surgeon general is expected to release a Call to Action on Breastfeeding Support.

"Multiple studies have shown that a history of not breastfeeding increases the risk of being overweight or obese in childhood and adolescence," Meek stated earlier this year. "Adolescent obesity often persists into adult life. Breastfeeding plays an important role in obesity prevention and improving overall health outcomes, and therefore is vitally important to public health."

A matter of life and death

When your mother was younger and healthier, she did the smart thing and filled out an advance directive. Part of the reason was that she didn't want her physicians to use extreme measures to keep her alive when she became seriously ill. Life went on.

Eventually, she did become seriously ill. Somehow, as she moved from home to nursing home to hospital and back, her physicians either never saw or never seriously considered her end-of-life wishes. They gave her medical treatments she didn't want.

The point is not that an advance directive or living will is worthless. The point is that, by itself, it's not enough.

What she needed in addition was something that would turn her treatment wish into an actionable medical order, the kind of document that any physician would understand and take seriously.

There's a name for such a document: a POLST. That's shorthand for the Physician Orders for Life-Sustaining Treatment Paradigm, a program that a College of Medicine professor helped create in Oregon years ago. Now the Center for Innovative Collaboration in Medicine & Law at the medical school is coordinating efforts to implement POLST in Florida.

One reason patients' wishes sometimes get ignored, said Marshall Kapp, director of



the center, "is that doctors are afraid of legal consequences if they don't do a full-court press for every patient."

That's what the POLST Paradigm is trying to change. Kenneth Brummel-Smith, M.D., chair of the College of Medicine's Department of Geriatrics, was involved in starting the POLST program when he led the center on aging at Oregon Health & Science University.

Two words make all the difference. "All medical treatments are provided through what are called 'doctor's orders,'" he said. "If you're in a hospital, you can't even get an aspirin without a doctor's order. What POLST does is take the kinds of wishes that patients state in their advance directive, and converts them into a set of doctor's orders. Emergency personnel, nurses and other doctors are used to dealing with that kind of communication." The system works, Brummel-Smith said. He completed a study in Oregon indicating that when the patient had a POLST, 94 percent of his or her wishes were followed in the hospital, compared with just 50 percent without one.

A September conference in Orlando was the first step in developing a legal strategy for the POLST to become an accepted document in Florida.

COLIN HACKLEY



Marshall Kapp is director of the Center for Innovative Collaboration in Medicine & Law.



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Dean John Fogarty, right, and Dr. Alma Littles, senior associate dean for medical education and academic affairs, helped announce the news of a new internal medicine residency program at Tallahassee Memorial Hospital.

Establishing residency

One way to address the shortage of medical residency programs in Florida is to create your own program. The College of Medicine and Tallahassee Memorial HealthCare have teamed up to do just that.

The two institutions announced in August that they were establishing an internal-medicine residency program that would be housed at TMH and sponsored by the medical school. If everything falls into place, as many as eight residents could begin their training in summer 2012, said CEO Mark O'Bryant of TMH.

To get an idea of how such a program benefits a community, look at TMH's residency program in family medicine. This past summer, it graduated 11 residents – and seven of them are staying in Florida. In fact, five – nearly half – are staying in Tallahassee.

Keeping more of the state medical schools' alumni in Florida will require establishing more such programs. History indicates that most physicians settle down in the area where they do their residency, which lasts at least three years. At the moment, though, there are only 10 internal-medicine residencies in the whole state. That's why this kind of announcement excites people in medical education.

"While the FSU College of Medicine is committed to training the kinds of doctors that Florida needs the most, we can do only part of the job," said Dean John P. Fogarty, M.D. "This year, 60 percent of our graduating seniors left the state to pursue their residency training. It is critical that we develop new programs to train these residents locally to keep them here in Florida.

"It is wonderful to partner with TMH in this endeavor and build on the record of success they have had with the Family Medicine Residency Program. Internal medicine is the next logical step to increase the primary-care work force here in Tallahassee."

Internal medicine is one of the specialties that make up what is known as primary care. The others are family medicine, pediatrics and, by some yardsticks, obstetrics-gynecology. Primary-care physicians are in especially short supply in Florida, and producing them is part of the College of Medicine's mission.

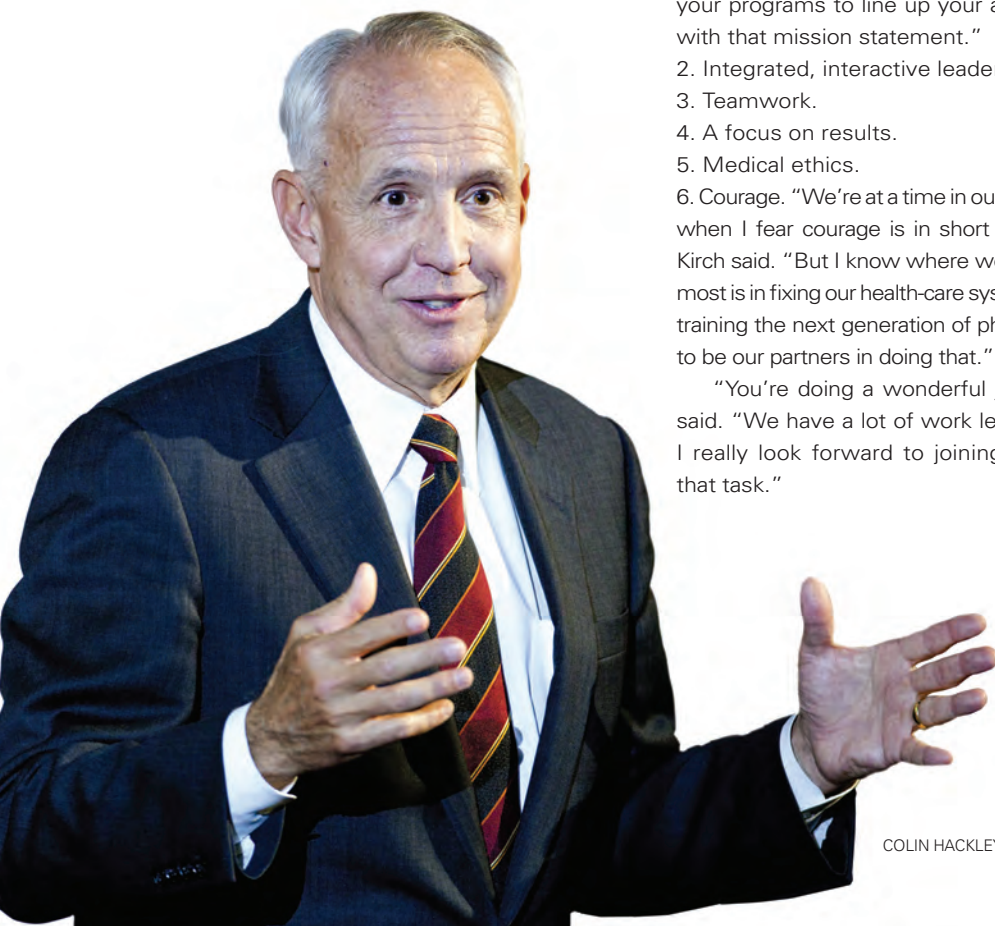
Another part of the mission is to serve the underserved. As Senior Associate Dean Alma Littles pointed out, "Residency programs also serve as the only access to care for many patients in the area where they are located."

people of note

'You're doing a wonderful job'

The Darrell Kirch fan club gained several hundred new members Oct. 7. Kirch, president and CEO of the Association of American Medical Colleges, told a statewide College of Medicine audience that this school has come a long way since its creation – but also that this country's health-care system has a long way to go.

"We've all been basking in the glow of what you've accomplished in the last 10 years, and you should have your buttons just bursting with pride about that," he said at the medical school's capstone anniversary event. "But the last time I checked, we have 90 years to go in this century, and ... we face some huge challenges ... for medical schools and academic medicine in general, and some huge challenges as a nation. And while you should take pride in where you've gotten, I hope you leave here this evening thinking about where you want to go."



Janine Edwards, chair of the Department of Medical Humanities and Social Sciences.

In a voice simultaneously friendly and concerned, Kirch spoke mostly as a patient rather than a CEO. Reviewing the past century of health care, he showed how the U.S. – despite great advances in medical knowledge and education – has created a culture that discourages patient-centered care.

"Who is going to fix this?" he asked. "You need to have some of the best minds in the nation who understand how you deliver health care, how you educate health professionals and how you study – do research on what works and doesn't. You need to have those come together, and they come together in academic medicine."

He described a recipe for change with six ingredients – all of which he had seen in action during his two days at the College of Medicine:

1. A mission statement that you actually intend to fulfill. "You have the most focused mission statement I've ever seen for a medical school," he said. "And you've been relentless in every one of your programs to line up your activities with that mission statement."
2. Integrated, interactive leadership.
3. Teamwork.
4. A focus on results.
5. Medical ethics.
6. Courage. "We're at a time in our country when I fear courage is in short supply," Kirch said. "But I know where we need it most is in fixing our health-care system and training the next generation of physicians to be our partners in doing that."

"You're doing a wonderful job," he said. "We have a lot of work left to do. I really look forward to joining you in that task."

COLIN HACKLEY



RAY STANYARD

A classic example

Janine Edwards, Ph. D., chair of the Department of Medical Humanities and Social Sciences, is a leading expert in one of the things that help the College of Medicine attract diverse and talented students. In fact, her article "The Interview in the Admission Process" is being included in Academic Medicine's AM Classics collection.

Academic Medicine, the journal of the Association of American Medical Colleges, is producing the special edition to recognize articles it has published since 1990 that have been cited 50 or more times (according to the ISI Web of Science database).

Edwards' article, which first appeared in March 1990, makes several recommendations intended to increase the value in how prospective student interviews are conducted.

The personal interview has been an important component of the College of Medicine's mission-focused effort to recruit a diverse student body.

Academic Medicine has published thousands of articles since 1990. AM Classics features those that, based on the number of citations, have made significant contributions to the literature about medical schools and teaching hospitals.

Darrell Kirch, president and CEO of the Association of American Medical Colleges, enthusiastically praised the College of Medicine's mission-driven work at the 10th-anniversary celebration Oct. 7.

Excellence in teaching

Of the 13 physicians nationwide selected to receive the 2010 Pfizer Teacher Development Award, two are clerkship faculty members at the College of Medicine. Jason Salagubang, M.D., who practices in Apopka, teaches students from our Orlando Regional Campus. Joanne DeAussen Saxour, M.D., practices in Port Orange and teaches students from our Daytona Beach Regional Campus. Both are family physicians.

The prestigious teaching award is given by the American Academy of Family Physicians Foundation based on scholastic achievement, leadership qualities and dedication to family medicine.

"Pfizer Teacher Development Awards spotlight the best of our profession: those in active practice who give of themselves to teach, mentor, and inspire residents and students. Tomorrow's family doctors and their patients will be better because of their efforts," said AAFP Foundation President Richard Roberts, M.D.



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Myra Hurt, senior associate dean for research and graduate programs.

Leading research

Long before she was instrumental in the creation of the College of Medicine, Myra Hurt was a researcher. She still is. In August, Hurt – now senior associate dean for research and graduate programs – was elected chair of the Florida State University Council on Research and Creativity for this academic year.

Last year, the CRC distributed \$2 million through internal competition for support from its grant programs.

It comprises more than 30 members from the departments and colleges of the university. Hurt has represented the medical school since 2004, when she became the first member from the college.

Members are appointed by the vice president for research. Their mission is to advise the vice president on ways to stimulate growth and innovative thinking within the university's research community.

For more information, visit <http://www.research.fsu.edu/crc/>.

RICHMOND GIBBS



Dr. Jason Salagubang, center, demonstrates for Marla Mickel (M.D. '08), right. His teaching has been recognized by the American Academy of Family Physicians.

people of note



BILL LAX/FSU PHOTO LAB

Former Sen. Durell Peadar Jr., left, listens as Dean John Fogarty speaks during a Medicaid reform roundtable discussion at the College of Medicine.

Medical schools work together

There's healthy competition among Florida's medical schools, but ultimately they're all looking out for the present and future health of our state. In fact, you might not know that they collaborate and cooperate extensively through the Council of Florida Medical School Deans.

Earlier this year, Dean John Fogarty was elected council chair.

The deans speak with one voice when, for example, they wish to remind state leaders of their medical schools' collective \$23 billion economic impact on Florida. Another thing they point out is how their schools work to recruit and retain badly needed physicians in the state.

Besides Fogarty, other council members are deans of the medical schools at Florida International University, Nova Southeastern University, University of Central Florida, University of Florida, University of Miami and University of South Florida. The two ex officio members are the deans at Florida Atlantic University and the Bradenton campus of Lake Erie College of Osteopathic Medicine.

A chair that fits

If you Google the name of Ricardo Gonzalez-Rothi, you'll see him accepting a plaque for two decades of volunteer work at an Alachua County clinic for low-income patients. You'll read the words of a former student praising him as a physician-mentor with a passion for healing. And, best of all, you'll learn that Gonzalez-Rothi is the College of Medicine's new Department of Clinical Sciences chair.

Currently he's a professor of medicine and pharmaceuticals at the University of Florida College of Medicine and is chief of medical service at the North Florida/South Georgia Veterans Health System. He looks forward to Jan. 1, when he will become a professor and department chair at Florida State.

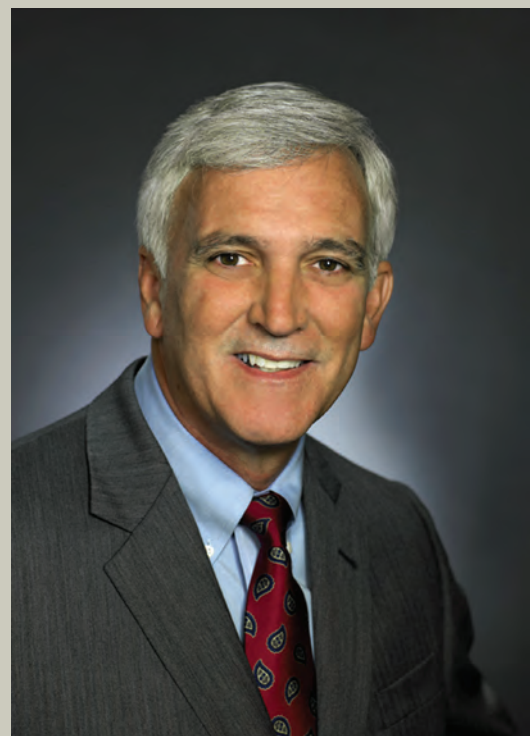
"I find it greatly appealing to be in an environment where innovation and bold approaches to learning and teaching are embraced in the context of a primary care platform," Gonzalez-Rothi said. "I am particularly interested in FSU's emphasis on innovative ways of preparing a new generation of physicians trained with the needs of the public in mind. We need scientifically well-trained doctors who are prepared to function with safety and confidence in a health system which has become increasingly technically complex."

Here's a bit of background: He was born in Cuba; graduated from Cornell University and the New York University School of Medicine; is a fellow of the American College of Chest Physicians; is a charter member of the UF College of

Medicine's prestigious Society of Teaching Scholars; and, like many faculty members here, has a long history of taking students to sites such as health fairs for migrant farm workers and remote villages in other countries.

"His background and interests are a great mission fit for the college," said Dean John Fogarty, M.D., "as we prepare the next generation of physicians for practice in rural and underserved communities in Florida."

Gonzalez-Rothi will replace interim chair Harold Bland, M.D., who will continue as professor and pediatrics education director.



Dr. Ricardo Gonzalez-Rothi



BILL LAX/FSU PHOTO LAB

Dr. Charlotte Maguire, right, at the 2010 medical school graduation ceremony.

Take two, Dr. Maguire

The ever-lengthening list of awards that Dr. Charlotte Maguire has received has grown by two in recent months.

In May, during the College of Medicine's commencement ceremony, she learned that a mentorship program in the newly established Resident Division of the American Medical Women's Association had been named for her. As one of Florida's first female pediatricians, and as a key benefactor to Florida State University in general and the College of Medicine in particular, her influence as a role model is immeasurable.

In July, at a Tallahassee community program marking the 20-year anniversary of the Americans With Disabilities Act, Maguire was recognized for her years of both treating and advocating for children with disabilities. The award came from a group that knows all too well the challenges of living with disabilities: the Capital Polio Association. Said Mark Ravenscraft, the association's president, "She was there in the trenches during the polio wars."

'A culture of inquiry'

The Robert Wood Johnson Medical School in New Jersey has been very good to us this year. First Richard Nowakowski left there to become our chair of Biomedical Sciences. Now Nancy Hayes has left to fill a brand-new position at Florida State: director of clinical foundations (Year 1 and 2) at the College of Medicine.

She brings with her a reputation for excellence in teaching. In fact, both this year and last year she received awards inscribed with that exact phrase. This year's award specifically recognized her work in teaching innovation, producing significant advances in RWJ's web-based system for the neuroscience course.

"Our job as educators is less about the transfer of information than about developing a culture of inquiry in our classrooms and in our students," said Hayes, Ph.D., a neurobiologist who was chair of the first-year course directors committee and a member of the curriculum task force. "I've been enormously impressed by the faculty at Florida State and by their commitment to education."

In her new role, she will work with Curtis Stine, M.D., her counterpart for Year 3 and 4. Together they will evaluate courses, clerkships and the four-year curriculum to ensure that everything is integrated, developmental and competency-based.

"She has superb academic credentials," said Dean John Fogarty, M.D., who is extremely happy she's here. So is Nowakowski. He's her husband.



Nancy Hayes

RAY STANVARD

feature

LESS



ON

OF A LIFETIME THE PRICELESS GIFT OF ANATOMY CLASS

By Doug Carlson

Few visitors ever step beyond the locked doors of the College of Medicine's clinical anatomy laboratory. These two brightly lit rooms on the lower level are 2,700 square feet of sacred space.

Hand-picked from more than 3,000 applicants, 120 new medical students arrive each May filled with confidence – until they report to the anatomy lab. No amount of previous success can prepare them for the anxiety and emotional upheaval of their first medical school experience. The uncertain first step toward becoming a physician begins with a cut.

"I think anatomy really is sort of the rite of passage," said Lynn Romrell, Ph.D., professor and associate dean for curriculum development and evaluation. "Medical students are among the very few individuals who get to dissect as they study the fascinating details of the human body."

Romrell has taught clinical anatomy in Florida for 41 years to more than 4,000 medical students. For 25 years in Gainesville, he directed the state anatomical board that accepts donated bodies and distributes them to Florida's medical schools.

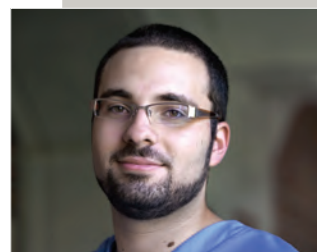
With his permission, FSU MED interviewed five first-year medical students as they went through the emotions and discoveries – both personal and scientific – of a semester in clinical anatomy. The students who agreed to share their story over a three-month period in the summer of 2009 are as diverse as the lessons learned, each bringing their own approach to coping with this uniquely transforming experience.

Though only students and faculty are allowed inside the lab while cadavers are present, the interviews provide a glimpse at how the course works and why it has such an emotional impact.

During orientation week, before the first day of class, the first-year students are gathered in a lecture hall. Less than an hour later, they are in the anatomy lab for the first time, seeing the 21 cadavers (most students refer to them as "patients") they will be dissecting over the next 10 weeks.

"You're changing into your scrubs and you're about to meet your patients," said Brett Thomas, who grew up in a rural area south of Tallahassee and is the first person in his family to go to medical school. "And I was thinking, 'Wow, this is orientation?'"

Katie Powell is now a second-year medical student at Florida State.



From top: Professor Lynn Romrell, Cindy-Sue Turco, Brett Thomas, Souhail Karam and Samsad Mansoor.

PHOTOS BY COLIN HACKLEY

FIRST DAY OF CLASS

Each chemically preserved body is stored in one of the \$8,000 stainless steel immersion dissecting tables that are arranged in two rows throughout the rooms. At the start of each dissecting session, the steel tabletop doors are opened as a closet door might be, and a pedal raises the body for access and observation.

"I think a lot of people, the girls especially, are surprised by how much labor it is," said Cindy-Sue Turco, whose previous experience with dissection involved mice, rats and hamsters.

It's no accident that dissection begins on the back. Emotions already are in full swing, but at least starting out by working on the patient's back gives students a few weeks to sort out their feelings about the process – before the bodies are turned over.

"When you think of a person, you think of their face," said Katie Powell, whose father is a physician and whose brother is in the same class. "That was the most difficult part emotionally. You know, it really affected me.

"But you just kind of take the next step and keep moving."

Students work in six-person teams divided into Alpha and Beta groups. Alpha and Beta take turns either dissecting or closely observing. They work with a manual that shows them where to make a cut and how to find what they are looking for. More often, Romrell or one of the 18 second-year medical students who serve as teaching assistants will provide guidance.

Inside the lab, the odor from chemicals is strong, but none of the first-year students in 2009 wore a breathing mask. An exhaust system that fully replaces air in the room every three minutes has exhaust fans near the floor, where the heavier vapor from formaldehyde tends to gather. Some students smear a dab of Vick's VapoRub under their nose, though they said the chemical smells become easier to ignore after a few days.

Each body has a unique smell, so there is an adjustment period each time the teams rotate to a new one.

"I was kind of concerned I would get nauseous or stop and be overcome at the thought that this is someone who at some point recently was alive," said Souhail Karram, a student from Boca Raton whose outgoing personality and wit sometimes helped his team get past sensitive situations.

"I guess when you're working you kind of get caught up in it. You get very focused on the task at hand, and then when you walk out of the lab at the end of the day it hits you – the thought of what we were doing in there."

Chisels and cutting instruments, including power saws, are necessary to access parts of the body, leaving little room for timidity. The sounds of tools and group discussion may serve to create another layer of distraction from the work being done.

"It was odd or awkward to be using a power saw, but it didn't really feel traumatic to me," Powell said. "It had more of a surgical feel than anything."



MAKING A CASE

Class starts each day in the lecture hall, where Romrell presents a case relevant to what the students will dissect that afternoon in the lab. The class is organized and taught by region of the body, so on the first day Romrell presents a case about a spinal deformity.

“What I’m really going to talk about on Day One is the spine and the muscles of the back,” he said. “But I don’t teach muscles of the back. I teach, ‘Here is your clinical case and now how are we going to understand it?’ You can’t understand unless you know the structure of the spine, how things are organized, what’s its normal shape?”

Down in the lab, students learn to perform a laminectomy, a surgical procedure in which one or more sides of the rear arches of a vertebra are removed to provide access to the spinal cord. They’re investigating both to see what a normal spine looks like and to see whether they can spot a deformity similar to what Romrell described in the lecture hall.

“It’s not often you look at someone’s spinal cord, so it was an unusual experience and definitely very interesting,” Karam said.

In another lecture, Romrell presents the case of a woman who had a mass in one of her eyebrows that years later reappeared in her neck. He’s teaching the clinical relevance of structures in the neck – including the location of lymph nodes – that the students will observe in the lab that day.



PERSONAL PERSPECTIVES

Students are taught from the beginning that how they react to the course will depend, in part, on their own circumstances.

Samsad Mansoor is a modest and shy student who grew up in South Florida but was born in Bangladesh. Her beliefs are a reflection of Muslim traditions, and she worked to balance religious tenets with seemingly conflicting expectations in the lab.

“I was really nervous in the beginning,” she said. “When I first saw the body I didn’t know what to expect, so I kind of kept my distance a little. ... Basically, according to Islam, you’re supposed to preserve the body – but for medical research, dissection is permissible. The most important thing is to treat the body with respect.”

Turco found herself struggling, at times, to separate the lab work from her grieving over the recent death of her mother. Her positive attitude, along with a disciplined approach to preparing for course material before entering the lab each day, may have hidden the inner turmoil from classmates.

“As far as apprehension goes, I’d say I’m feeling like a 1 [on a scale of 1 to 10] on the physical side, but 8 on the emotional side,” Turco said before her first day. “Because of that experience with my mom, I’m much more aware

this is not just a body; this is someone’s mom, someone’s dad, someone’s son or daughter.”

There were times when Turco couldn’t ignore the reminders and had to catch her breath, or shed a tear. For the most part, she said, she handled her emotions by focusing on preparation. Early in the course, Romrell granted her request to not work on the female cadaver to which she originally had been assigned.

He understands the course’s emotional impact and doesn’t expect students to think it’s only about science. The science, in fact, might play a role in helping students cope with their emotions, keeping them focused and requiring several hours of reading each day to avoid being left behind.

Though all the students FSU MED interviewed reported anxiety about working with cadavers, they were equally, if not more, concerned about the volume of scientific material to be covered in 10 weeks.

Clinical anatomy often is referred to as “a drink from the fire hose of knowledge,” and the pace and scope of the information being delivered can distract from thoughts about what is actually taking place.

“It’s like learning a foreign language,” Powell said. “It can be overwhelming with the amount of information you’re trying to grasp.”

Katie Alonso, right, and Samsad Mansoor. Alonso was one of 18 second-year medical students who volunteered to serve as teaching assistants during the clinical anatomy course in the summer of 2009.



ANATOMY OF A TEAM

With each new region of the body, students are assigned to a new team – and patient. They'll work with at least 15 other students over the course of the summer and will get to know all of the cadavers. They'll also get to know each other quite well, and that's part of the course's design.

"I have them work on teams to start building camaraderie," Romrell said. "They need to understand the importance of teamwork as they go through a medical career. I emphasize constantly: Medicine is a team sport."

With each team, they'll do anonymous peer assessments to provide feedback on individual performance and promote the development of professionalism, both in taking constructive criticism and in giving it.

"You really get a feel for people's personalities, because it's a moderately stressful situation and you can kind of see what they're about," said Karram. While laughter helped Karram and his team deal with stress, he said he tempered his humor to avoid appearing disrespectful.

The good news is that nobody is expected to retain every piece of information.

"I'm not trying to teach all the facts of anatomy," Romrell said. "What I'm mainly getting at is: What's the anatomy needed in order to learn and understand and be a good physician?"

Every few weeks the students take a quiz, and exams are scheduled every three weeks. Exams are both written and practical, meaning students are asked to look at a cadaver and identify structures. The written portion is administered in the morning, and the practical exam normally is given later the same day.

During the practical, students are divided into two groups, and each group rotates through the lab. Romrell and teaching assistants place about 60 labels on the cadavers, flagging a particular structure. Each student has 60 seconds to look at and identify the structure before a buzzer sounds, signaling it's time to move to the next station.

Outside of class time, most students spend several evenings a week and parts of their weekend in the lab.





PAYING TRIBUTE

Though he is always eager to find out what students learned during the course, Romrell is just as interested in what he hears at the annual memorial service at the end of the summer.

The service, which takes place in the College of Medicine auditorium, is planned by the students as a tribute to the donors. Participants share personal observations and all have a chance to write personal thoughts about the experience. Following the course's completion, the donor bodies are cremated and the ashes spread at sea.

The service is meant to be more joyous than somber, a celebration of one person's gift so that others could learn.

"It's not sad or depressing like a funeral service. It's just a really happy time when you're remembering a lot that happened this summer, all those good memories, and then truly realizing and acknowledging the person who allowed that to happen for you," said Katie Alonso, who went through the course twice – once as a first-year student and once as a teaching assistant before the start of her second year.

For some, layers of emotional insulation built up in the lab dissolve slowly.

Two weeks after the memorial service, Turco reflected on how her thoughts had shifted.

"Now I realize that I learned so much more than anatomy, more than what was in the objectives or on the schedule," she said. "I've always known to show respect for those who have passed away. It's something that your parents teach you when you're a kid.

"But it wasn't until this summer, until I had the opportunity to actually work with the cadavers, that I fully realized that those who donate their bodies to science deserve a whole new level of respect. The gift they gave is tremendous, simply irreplaceable."

Ron Hartung assisted with the interviews for this article.



COLIN HACKLEY

RESPECTFULLY YOURS

Before he allows new students in the anatomy lab, Professor Lynn Romrell wants them to know more about the people who donated their bodies to support medical education. So he reads them some of the letters he has received from family members over the years.

"I want the students to realize that these are real people who really did carefully consider their donation of the body. I want the students to realize this is a thoughtful gift," Romrell said.

"Then we have to detach. When we go in and start dissecting, you can't be focusing on 'This is somebody's mom, dad, brother...'"

Only about two-tenths of 1 percent of people who die in Florida donate their bodies to the Anatomical Board of the State of Florida for use in medical schools.

The board evenly distributes available bodies, and donors may choose the destination school if they wish. Romrell's course in the summer of 2009 had 21 bodies, ranging in age at time of death from 56 to 99.

The students aren't the only ones who have to detach personal feelings from the work at hand. In 25 years as director of the anatomical board, Romrell frequently knew donors before they passed away.

"Sometimes I'll talk to these people, off and on, through many years as they are considering donating their body," he said. "And sometimes when the body arrives, their family members want to be sure that you realize who this is.

"One of the major concerns of family members – some of whom didn't want Dad to donate his body or Mom to donate her body – is they want you to realize this is a real person who meant a lot to them. Frequently in the letters they'll say, 'Please show them some respect.'"

Fostering respect begins with Romrell reading the letters. He also limits what students know about the donors to age, sex, occupation and cause of death. Only Romrell knows the whole story.

One donor was a former student.

"He was so intent that, even in his death, people would learn," Romrell said. "I made sure that that body was in the lab where I was working. It was just my own statement of respect – that this decision was made."

An 18-year-old who worked in Romrell's lab before dying in an accident also became a donor.

"The students had a very difficult time dealing with someone who was basically their peer. That was very hard," he said. "When you're working on a body and it's somebody who was 93 years old, it's easier to detach from that emotion. When it's younger people, it's much harder."

On several occasions, the donors have been husband and wife, where one spouse died not long after the other. In each case, Romrell ensured that the couples remained side by side on adjacent dissection tables throughout the course.

More information about body donation is available at the anatomical board's website: <http://www.med.ufl.edu/anatbd/>

WHY SO REAL?

Some medical schools are moving away from the use of cadavers in the clinical anatomy course, relying instead on techniques such as three-dimensional imaging.

“There are some schools right now that are trying to sell their program based on ‘Look, we have it all computerized!’ and on being all New Age-y,” Florida State medical student Katie Powell said. “But the psychological component of it, the emotional component of it – I mean, you’re going to be dealing with death as a doctor. That’s a huge component of being a doctor, so I just think it’s a good baptism by fire to understand that.”

Professor Lynn Romrell believes nothing can replace having a well-educated physician making decisions based on a thorough understanding of the human body.

“We have imaging techniques that get you pictures of organs and other structures like never before, but to truly understand what is going on inside the body, you have to understand the basic structure,” he said. “To use procedures like endoscopy, or to work with available

imaging technology, it all comes back to the physician’s visual image of the body. And there’s no way to replace the visual image you get from dissection by looking through a bunch of pictures from books.”

“You can look at cirrhosis in pictures, but it’s another thing to hold in your hand a real human liver with cirrhosis,” said medical student Souhail Karam. “You can know that somewhere around the belly button you have your gallbladder, but I know exactly where the gallbladder is now.”

The emotional impact of using cadavers is impossible to miss in students who have completed clinical anatomy the old-fashioned way.

“I’ve got a new perspective now on how I will view patients based on the pathology that these people had,” Powell said. “I can only imagine how terrible the last few days, months or years of their life were after seeing some of the things they were living with. It made things more realistic for me. These were real people – somebody’s patient. They could have been my patient.”

COLIN HACKLEY





SMALL TOWNS, ENORMOUS OPPORTUNITIES

By Ron Hartung

It's not always big-city medical students who cringe at the phrase "Rural Track." At first even Marianna native Philip Burke feared that he might never encounter interesting cases there. He loved Marianna, population about 6,300, but he was concerned he'd be paddling into a medical backwater.

Medical whitewater is more like it. Burke, a fourth-year College of Medicine student who spent last year in Marianna, says he got more clinical experience than some classmates at other regional campuses:

- He delivered a baby on Day One of his OB-GYN rotation at Jackson Hospital.
- He admitted a patient on Day One of his internal-medicine rotation.
- He *performed* half of the 30 required major operations on his surgery rotation. Students at most medical schools primarily assist or observe.
- He heard from a classmate at one regional campus that she'd done only three sutures; he did nearly 50 on his own and assisted with nearly 30 more.

In a medical school that prizes hands-on experience, Rural Track students may have the most experienced hands of all.

What's more, Burke got to follow some patients from one rotation to another. And he saw medicine in a whole new light when his grandfather entered the hospital.

For some students, the Rural Track experience – whether in Marianna, migrant-rich Immokalee or elsewhere – is a perfect fit. Robin Albritton, who grew up in Marianna and returned there this summer to practice, calls rural medicine an unbeatable learning opportunity.

"You've got a group of physicians who don't have to teach residents. Their only person to teach is that medical student," said Albritton, Class of 2007, who did his surgery rotation and an elective rotation at Jackson Hospital. "There were a lot of times when I finished up a case in the OR, and the internist would come down and say, 'Look, I've got a sick patient in the ICU and I want to teach you something.'

"When I started my residency at TMH, I felt like I'd already completed a year of residency in Marianna. It was a huge advantage. If you're really motivated and want to learn a lot, the Rural Track is an amazing place."

WHAT IS THE RURAL TRACK?

One reason that Crestview physician/legislator Durell Peaden looked up Florida State University's president in the late 1990s to lobby for a four-year medical school here was that he saw far too few primary-care physicians in small Panhandle towns. So "rural" is built into the law that created this school. Family Medicine and Rural Health is one of its five departments.

"In addition," said Department Chair Daniel Van Durme, "we are required to have a rural training track. This wasn't just a good idea that somebody came up with. The Legislature that passed the bill said the school must have a program where the students can spend significant amounts of their training living and practicing in rural environments."

Knowing where Florida needs physicians is part of his job.

"Even though I'm a family doc by training and practice," Van Durme said, "I take a whole lot more pride when I can get somebody to be a general surgeon in rural Florida than putting one more family doc in the suburbs of Orlando."

The Rural Track Medical Education Program has two main sites:

- Marianna, west of Tallahassee. Clerkships in family medicine, pediatrics, internal medicine, general surgery and obstetrics-gynecology are offered at Jackson Hospital and a number of physician practices. The psychiatry clerkship is offered at Florida State Hospital in nearby Chattahoochee. Students spend their third year on the Rural Track and fourth year at one of the six regional campuses.
- Immokalee, northeast of Naples. In 2007, the College of Medicine entered into an agreement with Collier Health Services to provide medical education opportunities and health care for the rural and underserved population. Medical students can complete some rotations there.

Other rural opportunities exist. Many first-year students spend three weeks shadowing community physicians in rural settings during the summer clinical practicum; some students spend spring break serving rural areas; some regional campuses have rural sites; and many faculty members are involved in research and clinical care in rural communities.



COLIN HACKLEY

Kara Dalke (M.D. '10) with patient in Immokalee.

Komal D'Souza, then a third-year medical student, examines a patient at the Isabel Collier Read Medical Campus in Immokalee.

The College of Medicine graduated its first class in 2005 and has only 51 graduates in practice, so far. Even so, 12 of those – a whopping 24 percent – are practicing in rural areas.

“Especially in family medicine, if you really want to have a full scope of practice, you should be in a rural area,” said Maggie Blackburn, the college’s director of rural health, who lived in New York City before moving to a rural community to practice. “Because you are the one that people are going to come to first. So you get to see a lot more; you get to do a lot more.”

THE IMMOKALEE EXPERIENCE

Immokalee is an inland melting pot of farm workers from around the world, and its population of roughly 25,000 nearly doubles in the peak agricultural season. If you’re seeking a cross-cultural experience, this is the mother lode.

“We try to provide as many opportunities as possible for third- and fourth-year students to complete their core clerkships and electives in Immokalee,” said Karimu Smith-Barron, faculty administrator in Immokalee, where roughly 70 percent of the population is Hispanic and the 2008 median household income was about \$30,000. “This sort of augments whatever they see at their main campuses, and provides a multicultural component.

“They see such a plethora of medical pathology here. Patients are coming from all over the world. A lot of uninsured patients. Patients who have been medically neglected.

“Our students are exposed to some medical issues that they might miss otherwise – things that are being farmed out to some specialist in less-rural communities. It’s a good opportunity to be exposed to as much as possible, to practice your Spanish speaking skills and Haitian-Creole speaking skills, and just to learn good medicine.”

Unlike Marianna, Immokalee doesn’t play host to students for their whole third year. It has an impressive new medical clinic run by Collier Health Services at the Isabel Collier Read Medical Campus, but it doesn’t have a hospital or the medical staff that third-year students would need for a full year. Still, every year about two dozen third- or fourth-year students complete their six- or eight-week rotations in family medicine, pediatrics or internal medicine and learn things they couldn’t learn elsewhere. They work with patients whose needs – and gratitude – are great.

“In Immokalee, I have learned how to provide high-quality health care with limited resources,” said Komal D’Souza, Class of 2011. “Also, the rich diversity of the community was a great avenue to practice culturally sensitive health care.”



Third-year student Phillip Burke, left, with patient in Marianna.

‘TOP OF THE TOTEM POLE’

When Philip Burke was in sixth grade, his teacher’s husband – Marianna physician Richard Goff – talked to the class about careers in medicine. Last year, Burke worked every Tuesday at Goff’s family-medicine practice, which gave him a chance to see the same patients multiple times.

Originally, Burke had planned to spend his third year in a big city at one of the regional campuses. He’s glad he reconsidered.

Marianna may not be large, but Jackson County itself has 40,000 people, and Jackson Hospital is right off Interstate 10 and U.S. Highways 90 and 231. There are few hospitals between Panama City and Tallahassee, so Jackson has no shortage of patients.

“Here, a third-year medical student is on top of the totem pole,” Burke said.

One of the reasons Burke decided on Marianna was that his grandparents lived there and he was concerned it could be their last year. In fact, it was.

“I ended up my first week into my surgery rotation admitting my grandfather from the ER,” Burke said. “He had a small-bowel obstruction and had surgery, had complications, a massive heart attack, had pneumonia, was ventilated, cycled up and down. He had a pretty rough course.

“But I was very fortunate that I was able to be here, and Dr. Steven Spence” – the clerkship administrator for the Rural Track – “actually was his doctor.”

It was difficult at times to straddle the line between medical student and grandson, but he’s glad he had the chance.

“I wasn’t making the decisions, but I knew his chart inside and out, and I knew every decision that was made,” Burke said. “It was helpful for the family because there was a lot I could explain.

“I had faith in Dr. Spence. He’s a really good doctor. I was able to bounce things off of him, and ask him, ‘Can we try this? Would you want to do that? Why or why not?’

“It was good to be able to know that everything was being done that could be done, and know that there was no exaggerated effort. We gave my grandfather as many chances as you could really give somebody before you say, ‘Enough is enough.’”

His grandfather died in March. Five weeks later his grandmother, who had Alzheimer’s, also died. Their grandson was never far away.

WHO CHOOSES RURAL MEDICINE?

Traditionally, the physicians most likely to practice in a rural area are those who grew up in one. So through its pipeline programs, the College of Medicine seeks out and nurtures potential physicians in places such as the Panhandle.

"We know that about 12 percent of the population of Florida is located across the rural Panhandle," Van Durme said. "Twenty-five percent of our students come from that area."

COLIN HACKLEY



Dr. Vechai Arunakul coaches Amanda Rose, Class of 2011, on how to operate a scope in Marianna's Jackson Hospital.

Blackburn notes, however, that a fair number of students in the Rural Track – such as this year's Joseph Gaskins from Fort Lauderdale – have big-city backgrounds. To her, the key is to find students predisposed to serving the underserved, whether urban or rural.

"Both involve working with limited resources, and poverty, and a lot of other social issues that are similar," she said.

Getting those potential rural physicians into medical school is one thing. Getting them to actually move to a rural community after their training is more complicated.

"It's not enough to just have a student spend a week or a few weeks in a rural setting," Van Durme said. "The training that we do has to have people there for significant periods of time. We need to have them living in that community, being a part of that community, not just commuting."

Once they leave medical school, they spend at least three years at a residency site – and most medical students settle down in that general area. Florida has a shortage of residency sites, and rural residencies are almost unheard of. Across the U.S., Blackburn said, there are only 23 rural residencies for family medicine.

"There is a push to do more," she said, "but also to make sure we understand what the problems are so that, if we are going to try to expand, we do it right."

MARIANNA MEDICAL MYSTERY

Smaller towns have no shortage of rare maladies that help students learn. When Philip Burke spent the 2009-10 school year in Marianna, he encountered several unusual cases, including a woman with hemineglect.

She'd had a cerebral stroke on the left side of her brain and, as a result, had become completely unaware of everything in her right field of vision. On the left side, her hair was neatly brushed; on the right side, it was sticking out, unbrushed. On the left, her glasses were tucked neatly behind her ear; on the right, they were shoved way above the ear.

The best thing for such patients is intense rehab and physical therapy, says Burke, who was surprised that he didn't have to be in a big city to encounter so many unusual cases.



RAY STANVARD

Dr. Maggie Blackburn, the College of Medicine's director of rural health.

IMMOKALEE'S BOUNTY

Komal D'Souza, seen in fall 2009 when she spent part of her third year in Immokalee, examines the vividly colored produce at a local market. Students see mostly farm workers during rotations there. The Immokalee website states: "The growing season runs October through May, supplying the country with citrus, cucumbers, tomato, peppers, squash, eggplant, cantaloupe, watermelon, and a variety of specialty items. During this time, the population expands, as thousands of migrant workers from different ethnic groups (Mexican, Cuban, Haitian, Seminole Indian, Caucasian, African-American, Puerto Rican, and Guatemalan) converge to harvest."



PHOTO COURTESY OF ROBIN ALBRITTON

Robin Albritton (M.D. '07) with his wife, Katie, and their son, Cooper, outside the family's new home in Marianna.

ROBIN ALBRITTON, MARIANNA M.D.

Philip Burke is not certain he'll return to practice in Marianna. He's engaged to a law student, and he's spending his fourth year in Orlando, so they'll need to weigh what's best for both of them.

Jackson Hospital does more than cross its fingers and hope that the county's bright young scholars come back with M.D.s. It offers scholarships to medical students. If they don't return to Jackson, they must pay back the loan. But for each year they do come back to practice there, a year of tuition is forgiven.

Rachel Cartechine, left, Class of 2011, learns from Dr. Karimu Smith-Barron, faculty administrator in Immokalee.



COLIN HACKLEY

It's a big incentive at a time when the average U.S. medical student graduates with more than \$150,000 of debt. Even so, it's no guarantee.

"Life happens," said Albritton, who got a five-year scholarship from Jackson Hospital. "You go off to medical school a single person, you meet somebody, you get a residency somewhere else, their family's close, things happen. The hospital people understand that."

It seemed almost preordained that Albritton would come back. When he was around 16, family hunting-and-fishing friend Rick Brunner, who was chief of trauma surgery at Shands Hospital in Jacksonville before he returned to Marianna, started inviting Albritton to tag along with him to the OR. Albritton, fascinated with how the human body worked, was there two days a week, for two years. Brunner told him, "You'll always have a place here to practice."

What Albritton tells other students is that they have a place here to learn.

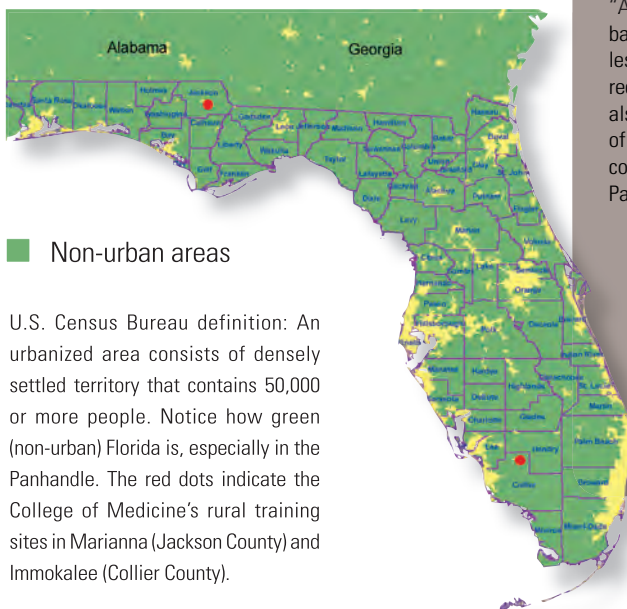
"If you have skills with your hands, and you've never done a procedure, why should you have to wait till your third year of residency?" he said. "Why not do it when you're a third-year medical student? Rick Brunner let us do so much it was amazing. My surgical skills when I started my residency were so far ahead of my peers."

"Also, you got to intubate every patient that came into the OR, and every patient coming into the ER, and you put in chest tubes, and you got to do amputations. You got to do things that most surgical residents don't get to do until they're deep in their third year."

Now, having finished his Tallahassee Memorial Hospital residency in June, he's back in Marianna, a family-medicine physician doing both inpatient and outpatient care. He and his wife of nine years, Katie, have a 1-year-old son named Cooper and a home right on a golf course.

Philip Burke, meanwhile, has at least four years to go before he's in private practice. No doubt Marianna will be watching closely.

For more about the Rural Track, visit <http://www.med.fsu.edu/education/Regional/default.asp>



RURAL STATS

Students who've completed Rural Track

Josef Plum (Class of 2007); Murray Baker and Patrick Hawkins ('08); Chelsea Boston and Stephanie Chase ('09); Tanya Anim ('10); Philip Burke, Amanda Rose and Amanda Sautter ('11)

Sampling of alumni who see mostly rural patients

Robin Albritton, Jackson Hospital, Marianna
Kara Brooks, Sacred Heart Hospital, Crestview
Jeffrey Davenport, Family Medicine, Blackshear, Ga.
Fawn Grigsby Harrison, DeSoto Hospital, Arcadia
Joda Lynn, Doctors' Memorial Hospital, Perry
Christopher Rodgers, Leesburg Regional Medical Center

Jackson Hospital facts

Number of beds: 100 (number licensed for)
Number of physicians: 29 active medical staff
Number of students (from this and other medical schools) it has on scholarship now: 8
Year it began its association with College of Medicine: 2002
Latest addition to list: Mitchell Whitehead, College of Medicine Class of 2014
Amount of scholarship offered by hospital this year:
• Medical school: \$18,000 per year for maximum of four years.
• Residency: \$12,000 per year for maximum of three years.
• Fellowship: \$1,000 per month while in fellowship program, for maximum of 12 months.

To find out more: <http://www.jacksonhosp.com/>

One definition of 'rural' (from Florida's Office of Rural Health)

"As of the 2000 Census, 33 of Florida's 67 counties are considered rural based on the statutory definition of an area with a population density of less than 100 individuals per square mile or an area defined by the most recent United States Census as rural... Portions of other Florida counties also contain large, rural areas but are not classified as rural. Many of the counties bordering on the Atlantic and Gulf have populations concentrated near the coast, but thinly populated interiors (e.g., Collier, Palm Beach, or Escambia counties)."

JIMMY MOSS, M.D.

AN AMAZING JOURNEY FROM HOMELESSNESS TO A MAYO CLINIC RESIDENCY

By Doug Blackburn

Sometimes the apple falls far from the tree. Jimmy Moss landed in an entirely different orchard.

His story seems more the stuff of Hollywood than real life, yet Moss is as real as can be. Built like an NFL linebacker and blessed with an engaging personality, Moss [recently earned] his medical degree at Florida State University. In June he [began] a three-year residency in internal medicine at the esteemed Mayo Clinic in Jacksonville.

Dr. Jimmy Moss.

Local physicians describe him as the best of the best, “a star.”

No one — not even Moss — could have possibly imagined this two decades ago.

Twenty years ago Moss and his grandmother, Ella Jackson, were in survival mode. Moss, the oldest of three



COLIN HACKLEY

Moss announces his Match Day news: He'd been accepted into the internal medicine residency program at Mayo Clinic of Jacksonville.

children and about to turn 10, was living one day at a time. His father was in and out of jail; his mother was battling diabetes and unable to work.

They shuttled from one Broward County public housing complex to another, trying to hide their tracks from Moss' father. Jackson's janitorial jobs provided what little money they had.

In 1992, when Moss was 12, they moved to New Jersey, where Jackson figured her 17 brothers and sisters would be able to help out. Instead, Moss and his siblings found themselves in a homeless shelter.

“It didn't get better,” Moss said. “It just got different. It got real bad. You wear out your welcome going from one relative to another.”

He remembers living in the basement of a house with no electricity. He was able to run an extension cord from the house next door so they could use a hot plate to prepare meals.

Moss tries to tally how many addresses he and his brother and sister claimed between first grade and high school. He loses count at 21.

At age 13, Moss got a job at a tire factory and became the family bread winner.

School was his salvation, his safe place. Always.

For reasons that defy explanation, Moss excelled in the classroom even though his life away from school was a daily struggle.

“It always came pretty easy to me and I took pride in knowing I could do something. School was a face saver because I didn't have to be in the classes with people who would tease me,” he said. “I was never picked on for being smart.

“I went to a lot of schools. It actually helped me,” Moss added. “I was able to get into new situations and adapt. I learned all the ‘poor kid’ jokes and started telling them on myself.”

College was a different story.

He started out at Temple University in Philadelphia — he knew about it only because it's Bill Cosby's alma mater — on a partial scholarship. He realized midway through the first semester he didn't have enough money to make it work.



Jimmy Moss (M.D. '10).

MIKE EWEN/TALLAHASSEE DEMOCRAT

"I was intimidated," he acknowledged. "I had kids in my classes driving a Lexus and I didn't have a textbook."

Moss developed a long-distance relationship with a young woman in Florida who was a student at Florida A&M. They eloped and he found himself in Tallahassee.

The marriage did not last, but Moss found everything he was looking for in Tallahassee, starting with Tallahassee Community College. He also found role models through different outreach programs he signed up for at TCC and FSU, where he majored in biology.

"I never saw a black physician until I got to Tallahassee," he said. "I didn't know it was even an option. I thought to be a doctor you had to come from a family with a lot of money."

Moss was inspired and hungry to learn. He was accepted into FSU's College of Medicine. He volunteered at the Bond Clinic and spent time shadowing Dr. A.J. Brickler at North Florida Women's Care. Brickler was amazed when Moss eventually shared his personal story.

"His background would have swallowed a whole lot of people up and made them dysfunctional," Brickler said. "He was able to keep his eyes on the prize. He is one of those people who you know is going places."

His comments are echoed by Dr. Terry Allen at John D. Archbold Memorial Hospital in Thomasville, Ga., where Moss spent most of his third and fourth years in medical school.

"Every day Jimmy is bigger, stronger, faster. He's going to be a star someday," Allen said. "I see him 10 years from now the head of a department somewhere."

"He's everything we look for in a med student," Allen added. "He's super bright. He's someone who really wants to learn and goes out of his way to do it."

He also believes in sharing and inspiring. Moss frequently gives talks at local Boys & Girls clubs, at churches.

"Anytime there's a window to talk to minority youth, I try to take advantage of it," he said. "There's always a way out."

While Moss has blossomed — he's also remarried — his siblings have struggled. His younger brother, like his father, has been in and out of jail. His younger sister, a mother of four, had her first child at 16. Moss and his mother are trying to re-establish a relationship.

Moss is at a loss to explain how he has thrived. He shakes his cleanly shaven head back and forth, not sure what the answer is.

"Somebody had to be looking for me," he said. "It wasn't just luck and hard work. I can't explain it — I really can't."

This story originally was published in April in the Tallahassee Democrat and is reprinted here with the newspaper's permission

Dr. Mel Hartsfield, dean of the Tallahassee Regional Campus, hoods Moss at graduation, signifying his promotion from medical student to physician.

BILL LAX/FSU PHOTO LAB



PHYSICIAN PIPELINE

Since the first class graduated in 2005, 52 College of Medicine alumni have completed residency (and, in some cases, fellowship) training and have entered practice. No city has benefited more than Tallahassee, where 11 College of Medicine alumni now are treating patients. Six of those have entered practice since June.

Orlando is the second-most preferred destination for our alumni, with a total of six now practicing there.

Many of the recent graduates to enter practice in Florida also have joined the College of Medicine faculty to teach third- and fourth-year students during clerkships.

The newest alumni faculty members are Robin Albritton, Garrett Chumney, Javier Miller, Shannon Price, Lorna Stewart and Chris Sundstrom. All but Miller (Orlando) and Albritton (Marianna) will be teaching students in Tallahassee.



BILL LAX/FSU PHOTO LAB

Drs. Paul Payne, left, and Chris Sundstrom, members of the College of Medicine Class of '06.

A SACRED HEART FIRST

In June, Class of 2006 members Paul Payne and Chris Sundstrom became the first alumni to also graduate from the College of Medicine's residency program at Sacred Heart Hospital in Pensacola.

Both specialized in obstetrics and gynecology. Sundstrom now is practicing at North Florida Women's Care in Tallahassee, where he's joined by former College of Medicine classmate Shannon Price.

Payne is practicing with OB-GYN Associates at The Veranda, a private, multispecialty practice in Albany, Ga.

A month into his new job, Payne wrote a letter to the Sacred Heart faculty and staff to say thanks for his graduate medical education.

Here is an excerpt from what he wrote:

When I began training at the residency program in July 2006, I was told the next four years would fly by. I recall around Christmas of my intern year thinking, "This is never going to end." The weekends away from my family, the long nights of call, at that time, seemed like an eternity. Now, it is hard to believe I have completed residency and my family and I have begun a new chapter in life. I can already tell after a month of practice how fortunate I was to train at Sacred Heart.

Sacred Heart adequately prepared me for this new phase in my career and, without a doubt, it was a blessing to have trained there. Thank you to everyone who helped me along the way.

Among the highlights of his first month on the job, Payne cited performing a laparoscopic supracervical hysterectomy. He's believed to be the first physician in Albany to perform the procedure, which he learned as a resident at Sacred Heart.

GIFTS THAT SUPPORT MEDICAL EDUCATION

We deeply appreciate the generosity of the College of Medicine's many friends. Without their financial support, many of the high-quality programs essential to our students' learning experience would be lost to budget adjustments necessary in today's financial environment. We extend our profound thanks to the more than 1,800 donors who've responded to help support this medical school since it was created in 2000.

If you would like to discuss making a gift in support of the College of Medicine's vital role preparing new physicians to meet the challenges of Florida's health-care needs, please contact Wayne Munson, assistant dean for development. Call 850-644-4389 or e-mail wayne.munson@med.fsu.edu.

REUNION 2011

The 2011 PIMS and College of Medicine Alumni Reunion will take place April 15-16 at the main campus in Tallahassee. Featured guests are alumni from the Class of 2006. If you are planning to attend and would like to help us encourage classmates to join you, please contact Alexa Von Staden, alumni relations coordinator, at (850) 645-9428 or alexavonstaden@med.fsu.edu.



REUNITED: Here you see roughly half of the Class of 2005, standing in the courtyard where they graduated five years earlier, enjoying themselves at the 2010 alumni reunion in April. Welcoming them back are, from left, Senior Associate Deans Alma Littles and Myra Hurt; former Dean Ocie Harris; Director of Clinical Relations Mollie Hill; Assistant Dean for Graduate, Undergraduate and Pre-College Programs Helen Livingston; and Director of Medical Informatics Education Nancy Clark.

PIMS

Mark S. Pascale, M.D. (PIMS 1977-78), is the head team orthopedic surgeon for Oklahoma State University and provides orthopedic and musculoskeletal care for all Oklahoma State student-athletes. Pascale is certified by the American Board of Orthopaedic Surgery and practices at the McBride Clinic and McBride Orthopedic Hospital in Oklahoma City. He is also a clinical assistant professor in the University of Oklahoma Department of Orthopaedic Surgery, where he teaches sports medicine and arthroscopic surgery. He is also the team physician for two high schools and assists in the orthopedic care of the OKC/New Orleans Hornets, the Oklahoma City Blazers hockey team and other teams. He and his wife, Renee, have four children attending college: Nick, Blaise, Luke and Maddy.

'05

Manny Herrera, M.D., after a year as the obstetrics-gynecology chief resident at Orlando Health, has entered into a solo practice in Clermont, Fla. In addition to Herrera, the staff at Healthy Women of Florida includes a nurse, medical assistant and office coordinator.

Javier Miller, M.D., was named Arnold B. Tein Resident of the Year in the University of North Carolina Urology Residency Program prior to his graduation in June. That's nothing new for Miller, who was named the outstanding student of the Class of 2005 while in medical school. He also received the Orlando Regional Campus dean's award. Miller now practices with Winter Park Urology Associates in Orlando.

Sachin Parikh, M.D., is now the father of Shaan Lee Sachin Parikh, born June 11.

'06

Danielle Bass, M.D., completed a sports medicine fellowship at O'Connor Hospital, San Jose, Calif., and has entered practice at the Chicago Center for Orthopedics at Weiss Memorial Hospital. Bass, who was a member of the University of Florida's 1998 national champion women's soccer team, evaluates sports injuries and guides injured children and adults in their quest to return to competition.

Esther Vildor-Dazil, M.D., is practicing internal medicine with St. Vincent's Healthcare in Jacksonville.

'07

Robin Albritton, M.D., finished his family medicine residency at Tallahassee Memorial Hospital and is practicing at Jackson Hospital in Marianna.

Adam Denker, M.D., finished his internal medicine residency at Emory University School of Medicine and started a cardiology fellowship at the University of Florida in July. Also, his manuscript titled "Metabolic Abnormalities in Adults with Cystic Fibrosis" has been accepted for publication in the journal *Respirology*. On a personal note, he is engaged to be married in January 2011 to Debbie Goldberg.

Josef Plum, M.D., finished his family medicine residency at Tallahassee Memorial Hospital and is practicing at Patients First in Tallahassee.

Gary Visser, M.D., graduated from residency and is in the University of South Florida's Sports Medicine Fellowship Program.

Brandy C. Willis, M.D., finished her family medicine residency at Tallahassee Memorial Hospital and is practicing at Tallahassee Primary Care Associates.

'08

Nick Anthony, M.D., was named a chief resident for his internal medicine program at Carolinas Medical Center. Also, he has matched for a fellowship in gastroenterology and hepatology at Carolinas. In addition, one of his research projects, "Clostridium difficile colitis: A retrospective study of incidence and severity before and after institution of an alcohol-based hand rub policy," has been accepted for publication in the *American Journal of Infection Control*. And over the past three years he has presented six separate posters at both the National Society of General Internal Medicine Conference and the national American College of Gastroenterology conferences.

Paola Dees, M.D., was named All Children's Hospital (St. Petersburg) Resident of the Quarter (2010). Also, she was co-author last year of a paper on Lemierre Syndrome (available from Antimicrobe.org).

Griffin Gaines, M.D., was named Resident of the Year for 2009-2010 at University Medical Center, Louisiana State University, in internal medicine.

Andrew Galligan, M.D., has been named chief resident in pediatrics at Shands Hospital at the University of Florida.

Patrick Hawkins, M.D., is in his final year of the Family Medicine Residency Program at Tallahassee Memorial Hospital and has been granted practice privileges to return to his hometown of Bonifay, Fla., at Doctor's Memorial Hospital.

Kathryn Hunt, M.D., is in her third and final year of residency at the Puget Sound Family Medicine Residency Program in Bremerton, Wash., which is affiliated with the U.S. Navy. After that, she said, she'll go where the Navy sends her for four years. She's also a mom: "We celebrated the birth of our first child, a girl, Loyra Anne, on April 16."

Randa Perkins, M.D., is chief resident in the Tallahassee Memorial Hospital Family Medicine Residency Program.

Jessica Suber, M.D., presented a poster at the Southeastern Society of Plastic and Reconstructive Surgeons meeting in June. The title was "Breast Reconstruction after Implant Sparing Mastectomy."

Jeremy Williams, M.D., is chief resident in emergency medicine at Orlando Health.

Share your news: Did you get married? Start work in a new practice? Publish an article of note? The College of Medicine wants to share your good news with friends and classmates. Send an e-mail with your news to pr@med.fsu.edu.

A WHITE COAT FOR ALL

American patients often prefer American physicians. Female patients often prefer female gynecologists. Spanish-speaking patients often prefer physicians who speak Spanish. It's not about prejudice; it's about comfort. Research indicates, and our hearts tell us, that we often feel more at ease when our doctors resemble us.

What do we say, then, to the patients in America's waiting rooms who would prefer to be treated by a black man? "Come back in several years?"

The fact is that black men are underrepresented in U.S. medical schools and medical practice. Some of them figure that an M.D. degree is an option for others but not for them.

Yet some black men do choose the field of medicine and succeed. Those are the ones who interest me. For a master's research project earlier this year, I focused on a handful of them. Not on the barriers that could have kept them out of the medical field but on the factors that helped them get in. Not on the bad news but on the good news: They made it ... and if they can, other black men can, too.

I interviewed 10 black male students at the College of Medicine and three black male physicians associated with the college. They spoke about the contributors to their success. It was a privilege to hear their stories.

They all belonged to the same stereotyped group, but their lives had been anything but the same. Some came from stable homes; at least one had been homeless. Some had experienced racial prejudice; others had been sheltered from it. Some breezed through school and the MCAT exam; others struggled. Yet somewhere along the way, someone – whether a parent or a teacher, a coach or a doctor, their church or their culture, an outreach group or an inner voice – told them that if a career in medicine was what they wanted, and if they really worked at it, they could succeed. Then a whole network of people encouraged and supported them – just as several of them mentored

me during our interviews because they saw a young black man pursuing the same path they had chosen.

Like many of them, I grew up with challenges: divorced parents, limited resources, a rural county with little access to health care. I am here now, in my first year of medical school, thanks to a long list of contributors. My parents, who always stressed education's power to open doors of opportunity. My brothers, who taught me about life by their example. My middle brother's physicians, who impressed me with their commitment to his care. My teachers, who made school a world of inspiration. The SSTRIDE outreach program, which gave me my first white coat and stethoscope when I was in high school. The Bridge preparatory program, which gave me a huge boost in self-confidence. The admissions committee here, which goes to great lengths to get to know the students knocking at the door. The professors, who care about us beyond just our grades.

Not everyone is as blessed as I have been. Some people have never been counseled about the power of education, the satisfaction of hard work, the thrill of giving your all. You and I can mentor them, as so many have mentored me. Whatever your race, whatever your situation, you can play a role.

The point is not to turn every child into a physician. The point is to let every child know, right from the start, that with passion and hard work, anything is possible. Our job is to plant seeds of opportunity where no one has planted them before.

To black men who might be reluctant to consider the field of medicine: We need you. Your patients need you. If I can do this, so can you.

Contact Brett Thomas at bathomas@med.fsu.edu. For more information on outreach programs, visit: <http://www.med.fsu.edu/StudentAffairs/undergrad.asp>.

BILL LAX/FSU PHOTO LAB

Brett Thomas receiving his white coat in August 2010.





Jessica De Leon and Roger Mercer in the college's new translational science laboratory.

RAY STANFORD

RESEARCH OUTSIDE THE LAB

For most people, the word “research” conjures up images of serious-looking scientists in white coats, beakers filled with colorful liquids, microscopes and cluttered laboratories.

But consider this image: A mother takes her daughter to the pediatrician after her child bangs her head in a collision during a youth soccer game. The physician is concerned that the child has suffered a concussion, and there's a question about what course of action to take.

When will it be safe for this little girl to resume her normal activities? She wants to play in tomorrow's big game, but should the doctor say it's OK?

Diagnosing head injuries, unfortunately, is an inexact science. The same blow to the head might cause drastically different outcomes in two people who otherwise appear very similar. Also, there is not enough good research about what happens inside the brain when it's exposed to a concussive blow.

That's where the College of Medicine's unique educational model and burgeoning research program intersect.

Yes, there is plenty of groundbreaking research taking place in traditional research laboratories at the main campus. Soon, though, there will be groundbreaking College of Medicine research taking place outside the lab, too, in communities across Florida.

To educate and train its third- and fourth-year medical students, Florida State employs more than 1,700 physicians statewide. The idea is to send students out into Florida's communities, where they will get one-on-one training and will see the kinds of cases, and patients, they will most often encounter once they become practicing physicians.

Sounds simple enough, but it's a drastic departure from conventional medical education. The community-based approach is producing remarkable outcomes and there's no reason to think a community-oriented research initiative won't do the same.

Altogether, physicians who teach our medical students take care of more than 2.5 million patients. Their participation in the new FSU Clinical Research Network will provide opportunities for including data from healthy patients, as well as those suffering from disease or injury.

For example, researchers will have the opportunity to collect baseline data that will allow a pediatrician to quickly compare how a child's brain functions in performing basic tasks both before and after suffering a concussion. That will facilitate a more informed diagnosis.

“The relationships we've built with physicians across the state through our education program will be invaluable toward establishing the FSU Clinical Research Network,” said Dr. Michael Muszynski, dean of the Orlando campus and regional campus dean for research at the College of Medicine.

At the main campus, a new clinical translational research laboratory has just been completed. The lab will serve as the central collecting point for analysis, storage and sharing of information.

The college recently welcomed Roger Mercer, Ph.D., as director of the translational science laboratory, and Jessica De Leon, Ph.D., as clinical research projects director.

In November, the College of Medicine and the University of Florida jointly received a \$600,000 grant from the Board of Governors of the State University System to strengthen research, education and service efforts in public health and to boost economic growth.

The funds will support the UF-FSU Community Research Collaborative Program, with initial efforts involving the assessment and monitoring of mild traumatic brain injury and of health risk behaviors among youngsters in Florida.

“This project, and our broader initiative to engage physicians statewide in research that takes us directly into the community, will serve to improve health care outcomes for patients,” said Myra Hurt, senior associate dean for research and graduate programs at the College of Medicine.

“Ultimately our aim is to perform patient-oriented research services that help us better understand root causes of disease, while becoming more effective in prevention, diagnosis and treatment.”

So while scientists (some of them in white coats) will continue to diligently pursue answers in the laboratory, taking research out to the doctor's office will offer a promising new approach.

It doesn't guarantee that children with head injuries will get back to playing soccer any sooner. But it raises hope that the doctors who treat them will be better equipped to make decisions that lead to the best possible health-care outcomes.

KEEPING YOU (AND FRUIT FLIES) SAFE IN THE LAB

By Ron Hartung

The most provocative sign you'll find in the College of Medicine's Thrasher Building may be "No Food or Drink in Classroom." Yawn. Next door, though, in the medical school's Research Building, is a collection of signs that are alternately sobering and mystifying.

Here to help decode them is Myra Hurt, senior associate dean for research and graduate programs.

'BIOHAZARDOUS AREA'

One place you'll see this sign is outside the cell culture room. "We culture human cells," Hurt said. "We culture hamster cells. But the thing in that facility that we are really careful about is a derivative of something called an adenovirus. It's a DNA virus, and DNA viruses kind of freak people out. They have the possibility of integrating into DNA if they get into your cells."

Researchers like the adenovirus because it helps them move genes from one place to another. "People think about using 'gene transfer' to cure diseases and so forth, but it's also a way to get a gene that you want into a cell to study the effect on the cell," she said. "These are modified viruses that are not capable of doing the things that a virus in nature is capable of, but we consider them to be somewhat biohazardous."

The sign is posted so you won't go in there and eat, for example. "In truth," she said, "it's probably completely safe. But this is why I've been at this for almost 40 years and I have no ill effects. You treat everything with the maximum precaution that you think it deserves."

'CAUTION: RADIOACTIVE MATERIALS'

Researchers often use radioactive material to label DNA or RNA or whatever molecule is being studied. In the small

amounts they use, it's not harmful to humans if it's used properly. In the room where it's being used or stored, Hurt said, "you put that sign up so that people who don't need to be in there will keep out. That way you stay out of trouble."

'DO NOT WAX THIS ROOM'

This inscrutable sign hangs outside a room where a high-resolution, laser-fired microscope can view such marvels as fluorescent-tagged antibodies. Seemingly innocuous floor wax poses two challenges, Hurt said:

- Volatile chemicals. "If you look under your sink," she said, "you've got more stuff that's unsafe than probably a lot of stuff that's on our shelves in the lab."
- Buffing the floor, which produces airborne particles.

The combination of the two, she said, can produce a sort of glue that gums up the works of this sophisticated machine, which sells for as much as \$400,000. So, hold the wax.

'NO PESTICIDES!' (WRITTEN IN ENGLISH AND SPANISH)

You see this sign outside the lab of Tim Megraw, who does research using fruit flies. Get the picture? "He may have as many as several thousand genetic strains of fruit flies that he keeps alive in his lab," Hurt said. Bug spray? Disaster.

'REMOVE GLOVES BEFORE ENTERING AND EXITING'

First, why are all the lab doors closed? "The air in that building is exchanged numerous times per minute," Hurt said. That's to meet OSHA standards, keeping organic chemicals from reaching a concentration that might be harmful to humans. That system can't work properly if lab doors are open.

A closed door means someone has to touch the doorknob. If the people in the lab have been trained correctly, she said, they shouldn't have anything on their gloves. But let's say there was a leak. Something got on a glove. Now that glove has touched the doorknob. Then someone else touches it – and moments later grabs his sandwich in the break room. That's why, she said, you don't want people who've been using their gloves in the lab to touch common surfaces.

Florida State makes sure that labs follow these rules. "Environmental Health and Safety from the university comes around regularly, and they swab surfaces everywhere," she said. "Then they put them in a very sensitive radiation counter. If they find anything, they can shut your lab down."

She said it's her job to tell her students in her lab, "We take this very seriously. This is not funny. If I walk in here and I see you doing something unsafe, you can kiss it goodbye."



RAY STANYARD

Florida State University College of Medicine Partners

As a community-based medical school, the FSU College of Medicine provides clinical training at regional medical school campuses around the state through affiliations with local physicians, ambulatory care facilities and hospitals. The medical school is proud to recognize its partner institutions and organizations.

1 Daytona Beach Campus

Bert Fish Medical Center
Florida Health Care Plans Inc.
Florida Hospital DeLand
Florida Hospital Flagler
Florida Hospital Memorial Medical Center
Halifax Health
Stewart-Marchman-Act Behavioral Healthcare
Surgery Center of Volusia County
Twin Lakes Surgical Center
Volusia County Health Department
Volusia County Medical Society

2 Fort Pierce Campus

Florida Community Health Center Inc.
Florida Department of Health – Children's Medical Services
Grove Place Surgery Center
HealthSouth Treasure Coast Rehabilitation Hospital
Indian River Medical Center
Indian River Medical Society
Lawnwood Regional Medical Center
Martin Memorial Health Systems
Port St. Lucie Hospital
Raulerson Hospital
Sebastian River Medical Center
St. Lucie Medical Center
St. Lucie Surgery Center
Surgery Center of Fort Pierce
Surgery Center of Okeechobee Inc.
Surgical Center of the Treasure Coast

The Surgical Center at Jensen Beach
Treasure Coast Center for Surgery
Treasure Coast Hospice

3 Orlando Campus

Community HealthCenters Inc.
Downtown Surgery Center
Florida Hospital
HealthSouth – Physicians' Surgical Care Center
M.D. Anderson Cancer Center Orlando
Nemours Children's Clinic
Orange County Health Department
Orange County Medical Examiner's Office
Orange County Medical Society
Orlando Health
Orlando VA Clinic
St. Cloud Regional Medical Center

4 Pensacola Campus

Baptist Health Care
Children's Medical Services
Covenant Hospice
Escambia County Medical Society
Fort Walton Beach Medical Center
Haven of Our Lady of Peace
Lakeview Center Inc.
Naval Hospital Pensacola
Nemours Children's Clinic
North Okaloosa Medical Center
Sacred Heart Health System
Santa Rosa Medical Center
VA Gulf Coast Health Care System
West Florida Hospital

5 Sarasota Campus

Bay Pines VA
Cape Surgery Center
DeSoto Memorial Hospital – Arcadia
Doctors Hospital of Sarasota
Doctors Same Day Surgery Center
GulfCoast Surgery Center Inc.
Intercoastal Medical Group Ambulatory Surgery Center
Lakewood Ranch Medical Center
Manatee Memorial Hospital
Sarasota County Health Department
Sarasota County Medical Society
Sarasota Memorial Health Care System
Venice Regional Medical Center

6 Tallahassee Campus

Apalachee Center Inc.
Big Bend Hospice
Bond Community Health Center Inc.
Capital Health Plan
Capital Medical Society
Capital Regional Medical Center
HealthSouth Rehabilitation Hospital
Neighborhood Health Services
Refuge House
Tallahassee Memorial HealthCare
Tallahassee Outpatient Surgery Center
Tallahassee Plastic Surgery Clinic
Tallahassee VA Clinic
Westminster Oaks
Archbold Medical Center – Thomasville
Doctors' Memorial Hospital – Perry

Rural Sites

Collier Health Services Inc. – Immokalee
Florida State Hospital – Chattahoochee
Jackson Hospital – Marianna

FSU-Sponsored Residency Programs

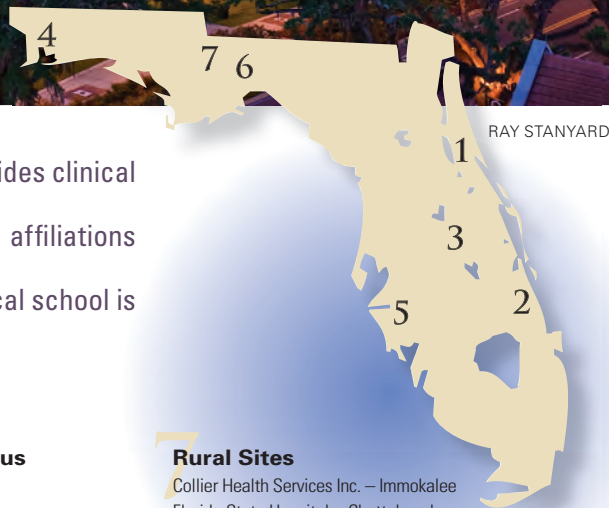
Sacred Heart Hospital Pediatric Residency Program – Pensacola
Sacred Heart Hospital Obstetrics and Gynecology Residency Program – Pensacola

Family Medicine Residency Program Affiliations

Bayfront Medical Center – St. Petersburg
Florida Hospital – Orlando
Halifax Health – Daytona Beach
Mayo Clinic – Jacksonville
Miller School of Medicine, University of Miami, Department of Family Medicine and Community Health
Morton Plant Hospital – Clearwater
Naval Hospital Pensacola – Pensacola
St. Vincent's Medical Center Inc. – Jacksonville
Tallahassee Memorial HealthCare

Other Affiliates

Cleveland Clinic Florida – Weston
Gadsden County Health Department – Quincy
H. Lee Moffitt Cancer Center & Research Institute – Tampa





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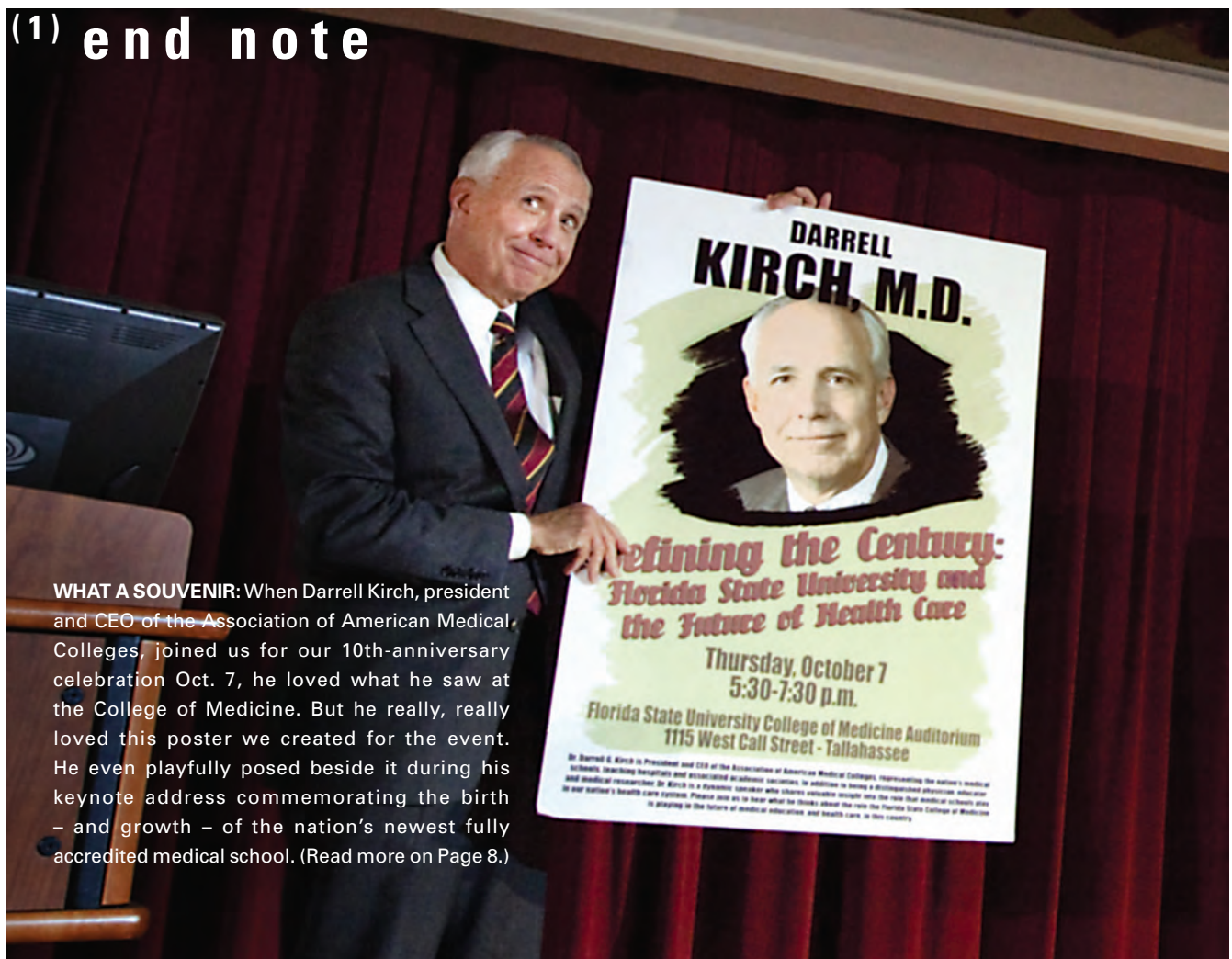
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(1) end note



WHAT A SOUVENIR: When Darrell Kirch, president and CEO of the Association of American Medical Colleges, joined us for our 10th-anniversary celebration Oct. 7, he loved what he saw at the College of Medicine. But he really, really loved this poster we created for the event. He even playfully posed beside it during his keynote address commemorating the birth – and growth – of the nation’s newest fully accredited medical school. (Read more on Page 8.)

Dr. Darrell G. Kirch is President and CEO of the Association of American Medical Colleges, representing the nation's medical schools, teaching hospitals and associated academic societies. In addition to being a distinguished physician, educator and medical researcher, Dr. Kirch is a passionate speaker who shares valuable insight into the role that medical schools play in our nation's health care system. Please join us to hear what he thinks about the role the Florida State College of Medicine is playing in the future of medical education and health care in this country.