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Because we heart hearts ... 

Heart disease and stroke are the No. 1 and No. 3 killers of both men and women in the United States. To raise awareness about these conditions and how to prevent them, Shands at UF held an employee heart awareness health fair in the Atrium Feb. 3 on the eve of the American Heart Association’s National Go Red Day. Tables were set up to provide information on heart health, diabetes and stroke, among other things, and free health screenings were offered.
THE ART OF YOGA

The practice of yoga can help cancer patients manage pain and anxiety. And those are just some of the benefits. To learn more about yoga and gain skills for living with greater ease, awareness and invigoration, attend “Yoga of Awareness for Cancer,” a free session being held by Shands Arts in Medicine yoga instructor Tammy Bernard, M.Ed. The session is open to all and will be held from 5:30 p.m. to 7:30 p.m. March 15 in the Criser Cancer Resource Center at the Shands Cancer Hospital at UF.
By Jamie Harrison

Looking for the right major is no easy task, especially in the world of health care. But at the first annual Health Professions Forum, UF students were able to do just that.

Held Jan. 27 in the Health Professions/Nursing/Pharmacy Complex, the forum featured break-out sessions from the colleges of Dentistry, Medicine, Nursing, Pharmacy and Public Health and Health Professions, allowing students to get an inside look at what each college has to offer.

“It gives a good overview of the different professions,” said Allison Ohlin, a third-year pre-med student who sat in on a session about physician assistant studies. “They really emphasize you choose something that you normally wouldn’t.”

At the beginning of the forum, several health care professionals discussed a case and the roles each would play in caring for a 4-year-old patient who was diagnosed with AIDS.

The purpose of the case study was to show how different health care professionals work together to ensure patients receive the best care.

Wanda Washington, an academic adviser for the College of Public Health and Health Professions, said the goal of the forum was to draw undergraduate students’ attention to the different areas of health care and to provide a broader view about what it is all about.

“I had students coming to me that wanted to be in the health care field but didn’t necessarily want to be doctors or nurses,” she said. “So we wanted a forum that would show students how all the different professions interface as a health care team.”

Another purpose of the forum was to provide an opportunity for students to learn more about the different educational programs available at the HSC and the requirements to pursue these options, said Roberta Knickerbocker, a pre-health and biology adviser for the College of Liberal Arts and Sciences who helped plan the event.

“I really feel this is a unique opportunity for our students,” Knickerbocker said.

Meet the new members of the Chapman Society, the UF College of Medicine’s chapter of the Gold Humanism Honor Society.

Thirty-two UF College of Medicine students and physicians were inducted into the Chapman Society, the UF chapter of the Gold Humanism Honor Society at its ninth annual banquet, held March 1 at the Paramount Plaza Hotel and Conference Center. The new members of the society, which celebrates compassion and caring in medicine, include 24 medical students, six residents and two faculty members. This year’s Leonard Tow Humanism in Medicine award, recognizing outstanding examples of clinical excellence and humanism, went to faculty member David Feller, M.D., and medical student Paul O’Rourke. Tad Kim, M.D., was named recipient of the 2010 Hugh A. Walters, M.D. Humanitarian Award, which supports surgical education. — Melanie Azam
Higher LEARNING

Florida nurses below U.S. average for advanced degrees

By Tracy Brown Wright

Nurses in Florida are falling behind national trends in terms of education—a direction that may affect patient safety and quality of care as well as the ability to educate the next generation of nursing professionals.

A statewide survey of registered nurses suggests Florida’s nursing workforce is more diverse than those of other states, which has positive implications for patient care, according to a UF study published online this week in Nursing Forum. However, the study found that the state has a significantly lower percentage of nurses with baccalaureate and graduate degrees than the nation as a whole.

Forty-one percent of Florida’s nurses had either a baccalaureate or graduate degree as their highest degree in nursing versus 50 percent nationally. Previous research has found that patient mortality is significantly reduced in hospitals with a higher proportion of nurses with baccalaureate or higher degrees.

“The lower educational levels are not only worrisome because of possible effects on the quality and safety of patient care, but the pipeline for nursing faculty is greatly hampered when there are fewer nurses with graduate degrees,” said lead researcher Donna Neff, Ph.D., A.P.R.N., an assistant professor in the UF College of Nursing.

Neff says the development of new R.N. to B.S.N. programs in many of Florida’s state colleges is a “positive first step,” allowing more nurses to pursue advanced education.

Study surveys were mailed to a random sample of registered nurses in Florida, resulting in 49,385 responses. Data were collected on demographics, education and outcomes, among other things. Responses were compared with results from a similar national survey of nurses.

In the U.S., registered nurses on the frontlines of care are challenged by changes in staffing, increased turnover, demands on their time and the continual need to update knowledge and training. In Florida, nurses in hospitals and nursing homes were among those with the highest proportion of burnout and job dissatisfaction.

“The outcomes reported by nurses employed in Florida hospital and nursing home settings are consistent with prior research conducted in the U.S.,” Neff said. “These findings can be important to policymakers in developing approaches to retain our state’s nurses and improve patient outcomes.”

A recent Institute of Medicine report on the future of nursing recommended increasing the proportion of nurses with a baccalaureate degree from 50 percent to 80 percent by 2020, and doubling the number of nurses with a doctorate by 2020 to add to the cadre of nurse faculty and researchers.

Nursing schools in Florida already turn away thousands of students each year because of a lack of resources, notably a shortage of qualified faculty.

In addition, the greater proportion of elderly residents in Florida and the future possible effects of U.S. health care reform suggest a greater need for advanced practice nurses prepared at the graduate level, Neff said.

“Overall, I think the results of the study highlight the need to address issues of predicted nurse shortage, work environment and educational level for nurses in Florida; this could ultimately lead to more satisfied nurses, higher quality care for patients and improved patient care delivery,” Neff said.
The College of Public Health and Health Professions has received approval from Florida’s Board of Governors to offer a doctoral degree in public health beginning this fall. With the addition of the Ph.D. program, UF now offers doctoral and master’s level education in each of the five core disciplines of public health.

The new Ph.D. program will offer two concentration areas: environmental and global health, and social and behavioral sciences. The college expects to add more concentrations and students will be able to choose a specialty within each concentration. Graduates of the program are likely to go on to work in education and research at universities, nonprofit organizations, health and environmental research firms, and state and federal agencies, such as the Centers for Disease Control and Prevention.

“This new Ph.D. training program will permit new students not only to join us, but also to design and conduct their own research studies,” said Gregory Gray, M.D., M.P.H., chair of the college’s department of environmental and global health. “We have some of the finest emerging disease laboratory space in the world and it has been my experience that adding a cadre of bright and enthusiastic young minds to a research group often results in new research ideas that can have a profound impact upon public health.”

The Association of Schools of Public Health estimates that by 2020 the United States will have a shortage of more than 250,000 public health workers.
On Jan. 19, Sara Plager, a UF speech-language pathologist and chief of the College of Public Health and Health Professions’ Speech and Hearing Center, shared her promise during the I Promise kickoff event in the Shands at UF Atrium.

“I promise to provide equitable, efficient and respectful care to our patients so they can achieve their desired outcomes. I promise to continually listen and respond to our patients so they have access to needed services with the intent to regain their optimal functioning.”

I Promise is an initiative launched by UF&Shands in January to make every employee, volunteer and student think a little more about their role in ensuring patients have the best experience possible.

Now, the question is, what’s your promise?

To share your promise, e-mail ipromise@shands.ufl.edu. Want to help us spread the word about “I Promise”? Please attend one of the following information sessions in Shands at UF Room 2154: 9 to 10 a.m., March 14; 3 to 4 p.m., March 15; or 11 a.m. to noon, March 16. — April Frawley Birdwell

A new type of department
HSC forms cross-college epidemiology department, hires chair

By Jill Pease

UF has appointed internationally recognized epidemiologist Linda B. Cottler, Ph.D., M.P.H., the founding chair of UF’s department of epidemiology, a newly created department administered jointly by the College of Medicine and the College of Public Health and Health Professions.

The department was established in June. It brings together epidemiology faculty from both colleges, to be complemented by the recruitment of new faculty members under Cottler’s leadership.

“This innovative cross-college structure draws on the strengths of both colleges and offers new opportunities for research collaboration and growth of the educational programs,” said David S. Guzick, M.D., Ph.D., UF’s senior vice president for health affairs and president of the UF&Shands Health System.

Cottler will begin her UF appointment July 1. She currently serves as a professor of epidemiology in the department of psychiatry at Washington University School of Medicine in St. Louis, where she directs the Epidemiology and Prevention Research Group, the Center for Community Based Research and the Master of Psychiatric Epidemiology program.

Cottler’s research has focused on drug and alcohol use and dependence in populations such as injection drug users, criminal offenders, women and African-Americans. A recent study led by Cottler, published last month in the journal Drug and Alcohol Dependence, showed that former NFL players use painkilling opioid drugs at a rate four times higher than the general public.

The department of epidemiology will be housed in UF’s Clinical and Translational Research Building when construction is completed in 2013. The new building is designed to encourage multidisciplinary research across several departments that will share the facility with UF’s Clinical and Translational Science Institute and the Institute on Aging.

“There will be many opportunities for faculty in this new department and I am excited to be working with my colleagues at the College of Medicine, College of Public Health and Health Professions, the CTSI and throughout UF,” said Cottler, who will also serve as co-director of community engagement for the CTSI.

“My goal is to work on the problems that are of the greatest concern to the community and make the department one of the strongest in the country.”
GatorAdvantage gives employees priority at UF Physicians practices

Need a doctor fast? Just say “GatorAdvantage.”

Starting Feb. 21, all UF employees can have fast access to outstanding care from medical providers at UF and Shands HealthCare, thanks to the UF Physicians’ new GatorAdvantage initiative.

GatorAdvantage gives UF employees and their family members expedited access — including next-day appointments — to medical providers at UF Physicians and Shands at UF outpatient facilities as long as they are covered by an accepted health plan. Accepted plans include all state of Florida-sponsored plans, as well as Shands Basic, Shands Limited and Shands Preferred Blue Cross Blue Shield. In addition, GatorAdvantage members do not have to pay parking fees when they visit one of the practices on campus.

Experts in various specialties and subspecialties are available at 40 group practices throughout Gainesville, providing pediatric and adult care to meet the basic and more complex health care needs of the UF community.

If you have difficulty getting an appointment, have problems related to parking or need more information, call the GatorAdvantage help line at 352-265-8363. For more on individual practices, visit the UF Physicians web site.

Pets are Gators, too

UF Veterinary Hospitals offering discounts to UF, Shands staff

In September, the UF College of Veterinary Medicine implemented a new program aimed at making the cost of veterinary care more affordable for pet-owning faculty, staff and students.

Now, anyone employed by or enrolled at UF or Shands HealthCare is eligible for a 10 percent discount on all services offered by the UF Veterinary Hospitals, the college’s patient-care arm.

“We have been asked by the university to make an effort to be more accommodating to our internal UF community, and our new discount program is one way we decided to do that,” said Glen Hoffsis, D.V.M., dean of the UF veterinary college. “Many people do not know we offer a full range of veterinary services for both large and small animals, or that a referral is not necessary to make an appointment.”

The discount will only be honored upon presentation of a valid UF Gator 1 identification card or a Shands badge.

For more information about the UF Veterinary Hospitals, please call 352-392-2235 for small animals or 352-392-2229 for large animals, or visit www.vethospitals.ufl.edu. — Sarah Carey
Research

By John Pastor

With the help of $1 million from Tyler’s Hope for a Dystonia Cure Inc., a new research center is being established and a leading scientist has joined UF to confront a disease that has disabled a half million Americans.

Yuqing Li, Ph.D., whose research has already played a part in current clinical testing to repurpose a commonly prescribed antibiotic to treat dystonia, is now a professor in the department of neurology at the UF College of Medicine.

Along with clinical researchers at the existing Tyler’s Hope Center for Dystonia Care at UF’s Center for Movement Disorders and Neurorestoration, Li will investigate causes and potential treatments for a malady that is not well-known, even though it is the third most common movement disorder behind Parkinson’s disease and tremor.

“UF already has the best neurosurgeons and neurologists in the world working on this problem. The role of Tyler’s Hope is to bring a dream team together to cure a disease that has affected not only my children, but thousands of other kids,” said Richard A. Staab, president of Tyler’s Hope for a Dystonia Cure. “We want to provide support so the best and brightest researchers work side by side, focused on a single goal, without being distracted by administrative or nonproductive responsibilities.”

Tyler’s Hope is named for Staab’s son, who unexpectedly began having movement problems when he was 7. Tyler was diagnosed with DYT1 dystonia, named for the first gene mutation that scientists linked to the disorder. Later, Tyler’s sister, Samantha, was also diagnosed with DYT1 dystonia — the type Li primarily studies.

The gift will establish a Tyler’s Hope Dystonia Research Laboratory to work in conjunction with the Tyler’s Hope Center for Dystonia Care.

Dystonia causes prolonged, involuntary muscle contractions. In some instances, muscles that normally tighten and relax in harmony work against each other, causing the body to twist into abnormal, often painful postures. The contractions may strike a single muscle or a group of muscles, such as those in the arms or legs.

No part of the body is off limits — even the neck, eyelids, face and vocal cords are susceptible. Scientists suspect neurotransmitters responsible for brain-muscle communication are being scrambled. But beyond that, little is known.

“We are trying to see inside of a black box,” Li said. “On one side of this box, there is an altered gene. On the other side, there is a movement problem. How one problem leads to the other is unknown. If we can open up that black box and see how it all connects, we can interrupt the process that is causing all the harm to the patient.”

Li uses mice that have been engineered to have a genetic mutation similar to the one that causes dystonia in people. The models give scientists insight into genetic cause and effect, and also allow scientists to test drugs that might provide relief to children and adults with dystonia.

“In so many cases at this center, it’s been real people like the Staabs who have taken the initiative to move things forward,” said Michael Okun, M.D., a co-director of the center and the national medical director of the National Parkinson Foundation. “This is an organization that has done so much for UF and the community.”

Visit us online at http://post.health.ufl.edu for the latest news and HSC events.
Taking an unauthorized photo of a patient and posting it on Facebook is a giant no-no for health-care providers, who follow strict federal guidelines protecting patient privacy.

But what if the patient is a little girl in Ecuador receiving a vaccine from an American medical student, who’s in the country on a medical outreach trip? Although taking photos of patients in developing countries and posting them on the Web may not be illegal, it’s not ethical, say UF College of Medicine researchers.

It’s long been a common practice for health care providers to snap photos while volunteering their time in developing countries, generally to bring back evidence of the conditions patients face there. But reporting in the Journal of Medical Internet Research, UF College of Medicine researchers say providers should treat patients’ privacy with the same reverence no matter where the care takes place.

“A medical student would not take a picture of a patient in clinic here and post it on Facebook,” said Erik Black, Ph.D., an assistant professor of pediatrics with the UF College of Medicine and one of the lead authors of the paper. “But there is a disconnect on these trips. We are not respecting these people as individuals. If we are not going to respect them in the same way we respect patients in the United States, why are we even going?”

UF researchers examined the Facebook profile pages of 1,023 medical students and residents, finding no breaches of patients’ privacy in the United States. But they did find 12 photos depicting patient care in developing countries.

Every year during spring break, students from all health fields fan out across the globe to work in clinics in medically underserved nations, such as the Dominican Republic, Haiti and Ecuador.

For students, who work closely with faculty mentors on these trips, it’s a chance to get hands-on experience in a patient-care setting and help people who sometimes travel for days in search of care.

Legally, privacy protection under the Health Insurance Portability and Accountability Act only extends to patients in the United States, said Lindsay Thompson, M.D., an assistant professor of pediatrics in the College of Medicine and also a lead author of the report. If a nation has privacy laws in place, doctors must follow them when practicing there. In addition, Thompson says doctors are ethically bound to adhere to the laws of the state or country in which they practice.

“We in the medical profession have to be held to a different standard,” Thompson said. “Our actions, however altruistic they are, could have some unintended consequences.”

In many cases, medical students and doctors may not even be fully aware of the differing patient privacy laws in a given country or that these laws could be even stricter than those in the U.S.

In the United States, patients who agree to be photographed sign written consent forms. But Black says even getting consent from patients in developing countries poses an ethical challenge. If a doctor or medical student asks, patients may feel they have to sign the form to receive medical care.

“We are not telling people not to do anything,” Black said. “We are telling them to think about it. Use your moral and ethical compass. What if this was your child?”

Patient privacy should be respected abroad and online

By April Frawley Birdwell

Not so picture perfect

Photo by Maria belen farias

ERIK BLACK, PH.D.

LINDSAY THOMPSON, M.D.
When Lisa Strickland came to UF as a freshman in 2005, she didn’t know what she wanted to do or what she wanted to major in. She just took some classes she thought would be interesting.

Now, almost six years and multiple mission trips later, Strickland is enrolled in her first year of nursing school after graduating from UF with a degree in African studies, and is planning her life as a missionary in Africa.

A newlywed, Strickland said she and her husband both plan to become missionaries in Africa after she graduates from nursing school. He works for the health department in Levy County.

“Part of what brought us together was that we both wanted to do that,” Strickland said.

It was after a summer in Tanzania working at a health clinic that she knew she wanted to become a medical missionary.

“I realized I wanted to not only help them spiritually, but physically,” she said.

Nursing school wasn’t something she planned. She decided she wanted to go into the field after returning from a mission trip in Tanzania, where she helped administer immunizations and HIV tests and record growth charts.

Strickland spent about eight weeks in a mobile health clinic where she saw a woman give birth and met a little girl who had to have her leg amputated because of a snakebite.

Strickland helped a friend found the club HOPE during their undergraduate days at UF, which is dedicated to fundraising to support clinics in Africa.

The club helped pay for the little girl’s prosthetic leg and therapy after losing her leg to the snakebite.

Strickland will graduate next December from UF’s accelerated nursing program. But before she goes back to Africa, she said she wants to stay and get some firsthand nursing experience. She’s even planning on taking courses in tropical medicine and emergency response.

“I knew I wanted to do missions, but now I know I can bring a tangible skill,” she said.

She never predicted she would earn degrees in African studies and nursing. She said it took a few years for her mom to come around to the idea of her as a missionary in Africa, but her family has been more than supportive.

“Even though nursing school is difficult, exhausting and intense, I love what I’m learning and can’t wait to see where it will take me in the future,” Strickland said.

She doesn’t know what specifically she and her husband will do when they move to Africa, and they don’t have a set time frame, yet.

“Honestly, we’re just like ‘OK God, what do you want us to do?’”
Friends

UF’S STREETLIGHT PROGRAM GIVES TEENS WITH CHRONIC ILLNESSES WHAT THEY NEED MOST, A FRIEND

The scar cuts across her knee and thigh, visible when Jackie Morse stretches her slender legs out on the hospital bed. Like the scarf the 16-year-old carefully ties around her head, it’s a not-so-subtle reminder of the bone cancer she was diagnosed with last summer.

But today in Jackie’s room on Unit 42 in Shands at UF, the subject is painting — her nails and a ceramic mug she is decorating for an auction. Not cancer.

“I messed one of them up,” Jackie says, glancing first at her manicure and then at Jessica Greer, a UF medical student who’s sitting in a chair across from her in the dim room with green and blue stripes stretching across the walls.

A volunteer with the program Streetlight, Greer laughs and leans over to inspect the botched nail, which she painted earlier in the week. Sick from her chemotherapy, it had been a rough day for Jackie that Monday. So Greer worked on the girl’s fingernails and toes. And they talked.

They have known each other for a few months now, since Jackie started coming to Shands for her chemotherapy. Greer giggles and jokes with Jackie. She paints her nails. She offers sage advice about what quotations to paint on the mug. And Greer has sat with Jackie when she cried over losing her hair, a traumatic moment for any patient, let alone a 16-year-old girl.

“It sucks not having any way to be a normal student in high school,” Jackie says. “I am always in the hospital two or three weeks out of the month.”

It’s a complicated place, that world between childhood and adulthood. Navigating the social hierarchy of high school is confusing enough without adding a chronic illness, pain, worry about dying and long stays in the hospital to the mix. And while doctors and nurses can care for these patients medically, they can’t provide one of the most critical components teens need to cope and live with illness — friends who get it.

That’s why in 2006, Rebecca Brown, M.Div., founded Streetlight at Shands at UF, a peer palliative care program geared specifically for adolescents. This team of heavily vetted UF student volunteers is an in-demand social network for teens and young adults in the hospital. And it’s the only peer-to-peer palliative care program for teens in the country.

Unlike hospice care, which is offered at the end of life, palliative care is support that is offered throughout a patient’s illness starting at the time of diagnosis, regardless of the patient’s outcome or prognosis. The American Academy of Pediatrics supports this model of care.

“I cannot stress enough how important peer support is at this age,” says Brown, who has worked with adolescents her entire career. “For adolescents dealing with fears of a relapse or constant pain, these issues affect their compliance and how the treatment plan works. They are teenagers so they can be anxious, withdrawn and depressed. It’s natural to look for support and comfort from their peers.

“Sometimes our team members are getting texts from patients saying they are coming in before I even see it on a chart.”

The team

It’s Thursday afternoon, the eve of spring break, and two groups of Streetlight members are crowded into the “Tree Room” on the fourth floor of Shands Children’s Hospital at UF. One group has just spent the afternoon visiting patients in their rooms; the other is gearing up for “Lounge,” a time set aside for teens to hang out.

Brown and assistant director Amy Bucciarelli, M.S., hold meetings like these daily to make sure the volunteers on duty that day are plugged into what’s happening with their

Continued on page 14
TEKA WILLIAMS (LEFT) HAS FOUND FRIENDS IN STREETLIGHT MEMBERS SHAY CHARLES (RIGHT) AND GIORGIO WILLIAM.
patients. Who's in. Who is having a bad day with chemo. Who's gone home. Who needs support.

If the volunteers are the patients’ support system, Brown describes herself as the volunteers’ support. She’s not only their leader but their guide, shepherding them through the heartbreaks they face. In all, Brown has about 67 students on her team. She’s picky about who volunteers — recommendations come from doctors and other members — and has a waiting list 80 people long.

“I tell them it’s not easy. We ask them to partner with these kids through their whole treatment,” Brown says. “And some of our patients die.”

Back from visiting a patient, Shay Charles reports to the group how the young man was doing — in and out of pain — and leans back in her chair in the Tree Room. Charles is a member of the group’s sickle cell team. Although the group sees any patient between 13 and 25, it has a specific focus on patients with cancer, cystic fibrosis and sickle cell disease, as well as their “frequent flyers,” teens who have been admitted more than three times in a year. Brown has three drawers stuffed with reports about their frequent flyers — information like what hobbies a patient has and what movies they like. With teens, understanding things like this can be a key to opening them up and making a connection.

Unlike some of her peers, Charles has a built-in way to relate to what her patients are going through. She has sickle cell disease, too. “In high school, I missed school so much people thought I had AIDS because I wouldn’t share that part of my life. I didn’t start speaking about it until I joined Streetlight and Miss Rebecca pushed me to,” says Charles, who will graduate this year and hopes to go to nursing school. “I am grateful for that because now I feel my job is to bring awareness to it.”

Shay has befriended many of her patients, including Giorgio William, who is now a member, and Teka Williams. At first, having someone come in her room felt a little awkward to Williams, a Santa Fe College student whose sickle cell disease led to a stroke when she was 10. But once she began to talk to Charles and other members, she realized how much they had in common.

“It keeps your mind off the pain and what is really going on, and it makes you feel like you have a friend in the hospital and you are not just there waiting to get better so you can hurry up and go home,” Williams said.

Volunteers learn to provide comfort for those with chronic illness, pain and sometimes death. For most of the program’s volunteers — the majority are pre-med students — these experiences can help prepare them to be better, more compassionate doctors. But it is still difficult, particularly considering how close they get to their patients.

“It is not just confined to volunteer hours, you become emotionally attached. It’s a friendship,” says Ryan Berger, a volunteer and leader of the group’s cystic fibrosis team.

The friendships Tim Penn, a 17-year-old frequent flyer with cystic fibrosis, has made in Streetlight have helped a lot this past year. Stress at home has affected his health. He’s
been in the hospital four times the past year, each time for about two weeks.

“They are just trying to keep your mind off being in the hospital,” Penn says. “Their focus is 100 percent on the patient.”

Streetlight members also encourage patients, bringing them laptops to do their homework, tutoring them in math and talking to them about their goals.

“A lot of sickle cell patients are out of school so much they don’t have friends,” Charles says. “There are patients who want to give up, and that is where we step in. Most of our job consists of letting them know we are trying to make it, they can, too.”

Often, the work Streetlight members do with patients helps doctors and nurses, too.

“We can learn how patients really feel about their illness and pain, what is happening at home, even how they are feeling about death and these are things we might never learn if there weren’t people available to support the patients in this way,” said William Slayton, M.D., chief of pediatric oncology in the College of Medicine.

The whole journey

Sitting outside the Park Meadows rehabilitation facility in Gainesville, Michael Starling and Andrew Resnick chat, about the Gators and baseball. They’re both fans. Andrew travels from Tampa — he graduated in May — for his Streetlight shift every Wednesday and he stops by to visit Michael on his way.

“If you are in place like this, to have somebody to look forward to come see you and know someone is always thinking of you, nothing is better,” says Starling, 23, who was born with spina bifida. “That is what keeps me going.”

Streetlight doesn’t stop at the hospital doors … or at adulthood. One of the key areas the group focuses on is helping patients — specifically those with cystic fibrosis — transition from pediatric care to adult care.

It’s a scary move, leaving doctors they have always known for new providers, and a new part of the hospital. In part, it’s good news: Patients with cystic fibrosis didn’t always make it to adulthood in years past, but advances in care have improved treatments and outcomes. But their lives are still limited, and for some, the move to adult care can be a frightening admission that the end is getting closer, Brown says.

Cystic fibrosis patient Josh Burch, 19, isn’t worried about switching doctors but says the difference between the way the pediatrics floor looks, with its brightly colored walls and décor, and the way the adult floor looks is stark and may affect how younger patients feel.

“When you are on the pediatrics floor, it really feels like you are there to get better and you are going to get out,” Burch says. “One of the first emotions I felt when the elevator opened (to the adult floor), and I saw what the floor looked like, was like ‘Wow, people come up to here to die.’”

To help patients get through the transition, the Streetlight team works closely with cystic fibrosis patients, producing a yearbook to remind them of their pediatric care team and introduce them to their adult team.

“This transition to adult care is very important. When you get to be 20 or 25, you have other problems pediatricians don’t take care of,” says Richard Bucciarelli, M.D., chair of the College of Medicine department of pediatrics. “This program is unique. You won’t find anything like it anywhere else.”

Now home in Deltona, Jackie Morse will be back at Shands at UF in April for her last round of chemotherapy. The past several months have not been easy. But she feels better about coming to the hospital knowing she has friends here.

“Everybody in Streetlight is a little older than me, but I feel like I can talk to them openly and they can still give me good advice and help me cope with things. They are really good listeners,” she said. “Whoever’s idea this was, I am so thankful.”

Left: ANDREW RESNICK (LEFT) VISITS PATIENT MICHAEL STARLING EVERY WEEK. STARLING IS ONE OF FOUR OUTPATIENTS THE GROUP VISITS. Right: STREETLIGHT DIRECTOR REBECCA BROWN LEADS DAILY MEETINGS TO KEEP STREETLIGHT VOLUNTEERS PLUGGED IN TO WHAT IS HAPPENING WITH THEIR PATIENTS.
Thousands of women receive unnecessary surgical breast biopsies in Florida each year, UF researchers have reported in the American Journal of Surgery.

These surgeries carry greater health risks and are more expensive than a less invasive, equally effective procedure called a needle biopsy.

“Open surgical biopsy is not accounting for 10 percent or 5 percent of initial breast biopsies, which is what’s recommended,” said Luke Gutwein, M.D., a UF surgical resident. “It’s accounting for 30 percent of initial breast biopsies, so open biopsy is incredibly over-utilized.”

Gutwein and six other UF researchers analyzed state public health data for the years 2003 to 2008 and found that about 30 percent of breast biopsies were performed through open surgery. The study reflects conditions outside Florida, too, said David P. Winchester, M.D., a professor of surgery at NorthShore University HealthSystem in Evanston, Ill., and a former chair of the National Accreditation Program for Breast Centers.

“This is an important message and should be generalizable to other parts of the country, in terms of the desirability of using minimally invasive biopsy techniques,” he said.

Needle biopsies are usually more appropriate when the suspicious area can be seen clearly through imaging techniques, according to breast health specialists. Typically performed by radiologists, the procedure requires inserting a needle through a tiny incision into the suspicious area and extracting tissue samples. The radiologist monitors the procedure via ultrasound or mammography as it takes place.

A needle biopsy leaves only a tiny dot of a scar and carries significantly less risk of infection than a surgical biopsy. In addition, it is less painful and does not require any recovery time. Most breast biopsies show the area in question to be benign.

The latest report, published in the Journal of the American College of Surgery in 2009, stated that open breast biopsies, which require a full surgical procedure and general anesthesia, should be used to initially diagnose a lesion in less than 10 percent of cases.

Though use of needle biopsies increased significantly during the five years studied, the researchers found that overuse of open breast biopsies in Florida leads to $37.2 million in charges each year. The study did not take providers’ charges into account, meaning the actual amount wasted is much greater.

Some patients, such as those with very small breasts or whose lesions are located close to the chest wall or an implant, are not candidates for a needle biopsy.

In cases where a needle biopsy reveals cancer, physicians can begin treatment before surgery and can plan better for removal of the cancer, increasing the likelihood of extracting it entirely in a single surgery.

But Stephen Grobmyer, M.D., medical director of the UF Breast Center, said he regularly sees patients who have undergone an open breast biopsy when a needle biopsy would have sufficed. He said this can make multidisciplinary therapy and additional surgeries more difficult to plan and administer.

Grobmyer said educating health-care providers and patients alike about the issue should be a higher priority.

“We spend a lot of time talking about a lot of other things,” he said. “This is a major area in breast cancer care which is cost-inefficient. It’s bad for patients. It’s just bad for the whole system.”

Study shows surgical biopsies are overused
Like a switch stuck in the on position, the bone marrow can churn out blood cells that bloat internal organs and clog blood vessels, leading to life-threatening disease.

Now UF scientists have discovered a potential new drug that can throw the switch on the runaway blood cell-production mechanism. The drug shrinks cell-gorged organs and stems the overproduction of blood cells, and researchers are working toward bringing it into clinical trial in one year.

“The disease has a path it’s going to take and you need to be able to alter that path — our drug does that to a reasonable extent,” said Peter P. Sayeski, Ph.D., an associate professor of physiology and functional genomics in the College of Medicine and member of the UF Shands Cancer Center who led the research team.

The work, funded in part by the National Institutes of Health and the American Heart Association, is described in the Journal of Biological Chemistry.

The new drug, dubbed “G6,” targets a group of life-threatening and hard-to-diagnose diseases called myeloproliferative neoplasms, or MPNs, that occur when the bone marrow cranks out too many red cells, white cells or platelets because of a mutant form of a protein called Jak2 that is key to blood cell formation. The condition affects about 170,000 people in the United States, according to the MPN Research Foundation, also known as the MPD Foundation.

“These bone marrow cells are replicating and growing out of control because one very important protein is stuck in the on position,” said Christopher R. Cogle, M.D., an associate professor of hematology/oncology in the UF College of Medicine and also a member of the UF Shands Cancer Center.

The result is blood counts so high they elevate patients’ risk of stroke, bleeding, infection and blood clots in various parts of the body. Ironically, the condition can also lead to low blood cell count and anemia symptoms, because it impedes the flow of normal cells from the bone marrow into the blood stream.

Doctors typically treat patients with low-dose oral chemotherapy that keeps the disease in check, but doesn’t cure it. And long-term chemotherapy carries its own risk of secondary blood cancers and leukemia.

“There is a need for new drugs, because these diseases are progressive and terminate fatally, and there’s no single good treatment to date,” said Richard Silver, M.D., a professor of medicine and director of the Leukemia and Myeloproliferative Disease Center at New York Presbyterian-Weill Cornell Medical Center.

The UF researchers, along with colleagues at the University of South Florida, Heriot-Watt University in the United Kingdom, and Budapest University of Technology and Economics in Hungary, used computer technology to identify a chemical compound that can bind to the mutant protein and, in effect, turn it off. The compound belongs to a family called stilbenoids, which are known to slow cell growth and have antioxidant and tumor-suppressing properties.

In laboratory studies of cell cultures and in mice, the new drug reduced swelling in the spleen, corrected the low ratio of white to red blood cells in the bone marrow and decreased the percentage of immature blood cells circulating through the body.

“This drug is a very promising and could significantly improve patients’ lives and possibly increase their survival,” Cogle said.

By Czeme M. Reid
Man is but a worm" was the title of a famous caricature of Darwin’s ideas in Victorian England. Now, 120 years later, a molecular analysis of mysterious marine creatures unexpectedly reveals our cousins as worms, indeed.

An international team of researchers, including a UF neuroscientist, has produced more evidence that people have a close evolutionary connection with tiny, flatworm-like organisms scientifically known as “Acoelomorphs.”

The research in the Feb. 10 issue of Nature offers insights into brain development and human diseases, possibly shedding light on animal models used to study development of nerve cells and complex neurodegenerative diseases such as Alzheimer’s and Parkinson’s.

“It was like looking under a rock and finding something unexpected,” said Leonid L. Moroz, Ph.D., a professor in the UF College of Medicine department of neuroscience. “We’ve known there were very unusual twists in the evolution of the complex brains, but this suggests the independent evolution of complex brains in our lineage versus invertebrates, for example, in lineages leading to the octopus or the honeybee.”

The latest research indicates that of the five animal phyla, the highest classification in our evolutionary neighborhood, four contain worms. But none are anatomically simpler than “acoels,” which have no brains or centralized nervous systems. Less than a few millimeters in size, acoels are little more than tiny bags of cells that breathe through their skin and digest food by surrounding it.

Comparing extensive genome-wide data, mitochondrial genes and tiny signaling nucleic acids called microRNAs, the researchers determined a strong possibility that acoels and their kin are “sisters” to another peculiar type of marine worm from northern seas, called Xenoturbella.

From there, like playing “Six Degrees of Kevin Bacon,” the branches continue to humans.

“If you looked at one of these creatures you would say, ‘What is all of this excitement about a worm?’” said Richard G. Northcutt, Ph.D., a professor of neurosciences at Scripps Institution of Oceanography. “These are tiny animals that have almost no anatomy, which presents very little for scientists to compare them with. But through genetics, if the analysis is correct — and time will tell if it is — the study has taken a very bothersome group that scientists are not sure what to do with and says it is related to vertebrates, ourselves and echinoderms (such as starfish).

Scientists used high-throughput computational tools to reconstruct deep evolutionary relationships, apparently confirming suspicions that three lineages of marine worms and vertebrates are part of a common evolutionary line called “deuterostomes,” which share a common ancestor.

Understanding the complex cellular rearrangements and the origin of animal innovations, such as the brain, is critically important for understanding human development and disease, Moroz said.

“We need to be able to interpret molecular events in the medical field,” he said. “Is what’s happening in different lineages of neuronal and stem cells, for example, completely new, or is it reflecting something that is in the arrays of ancestral toolkits preserved over more than 550 million years of our evolutionary history? Working with models of human disease, you really need to be sure.”
Hope in a coral reef
Organism could help fight diseases and repair bone

By Linda Homewood

A promising medicinal compound discovered in a marine organism by UF pharmacy researchers is showing its versatility against multiple diseases.

Having already demonstrated its power as an anti tumor agent, largazole, produced by a cyanobacterium inhabiting coral reefs, has shown a new potential benefit for treating serious fractures, osteoporosis and other bone diseases, according to a study reported in the journal ACS Medicinal Chemistry Letters online.

Hendrik Luesch, Ph.D., an associate professor of medicinal chemistry at the UF College of Pharmacy, discovered the marine compound in Key Largo and reported initial findings in 2008. After understanding largazole's properties and cellular mechanism of action, Luesch, a member of the UF Shands Cancer Center, put it to the test against cancer cells with promising results. The researchers published their findings on largazole's effectiveness against colon cancer last fall. Since then, Luesch and collaborators in South Korea have unlocked largazole's medical potential for bone regeneration.

Tests show that largazole has an unusual dual action of repairing injured or diseased bone and also blocking bone degeneration. These benefits stem from largazole's effects on an enzyme class called histone deacetylases, or HDACs, which serve as a control switch for protein production. Overactivity of HDACs can lead to the silencing of important genes and consequently disease, Luesch said. He sees HDAC inhibition as a promising strategy to reactivate suppressed genes in diseased cells.

The current research also showed that largazole, in a mix with a synthetic biomaterial containing collagen and calcium phosphate used for bone grafting, helped heal fractured bones.

The disaster beyond the shore

By Claudia Adrien

The psychological effects of the BP oil spill, the largest recorded environmental disaster in human history, extend far beyond people living around the Gulf of Mexico, a new study finds.

Writing in Environmental Health Perspectives, the researchers reported that even in areas that did not have oil exposure, people still experienced elevated levels of anxiety and depression and reduced ability to show resilience in difficult emotional and financial situations because of the disaster.

“The findings highlight the substantial psychological impact that the oil spill has had on coastal communities in Florida and Alabama,” said J. Glenn Morris, M.D., director of the Emerging Pathogens Institute and a professor of medicine in the College of Medicine. “In particular, the impact was not directly related to the amount of oil that reached an area. Instead, it correlated most closely with financial loss resulting from the spill.”

The researchers asked the study participants — mostly men involved in the Gulf fishing industries, or people who had suffered direct financial damages because of the spill — to answer a range of psychological questions, from how their financial circumstances were affected by the spill to how well they were able to cope in the months following the disaster. Participants were also assessed on cognitive tests to determine dexterity, speed and attention span.

Among people living in Franklin County, where oil had not reached the shore, participants showed similar levels of anxiety, depression, fatigue, anger and overall mood disturbance as the citizens living in Alabama's directly affected communities, especially if the participant's livelihood depended on fishing or had been affected financially by the spill.
Ashley was riding on the back of an all-terrain vehicle when the driver lost control and hit a tree in the Osceola National Forest. A quick-thinking friend performed CPR while another ran to the nearest house to call 9-1-1. Baker County EMS transported Ashley to U.S. Highway 301, where she was met by the TraumaOne flight crew. She arrived at Shands Jacksonville 11 minutes after liftoff.

“From the minute she arrived, it was obvious that she had some pretty severe injuries and we needed to act quickly,” said Amy Klucher, R.N. “We had very limited exposure to her before she went to the OR.”

When Ashley’s parents arrived at the hospital, she was undergoing surgery to remove her ruptured spleen. She had facial, rib and skull fractures, two fractured vertebrae, and bruising on her heart, lungs and liver, which affected her ability to breathe. After removing her spleen, doctors performed brain surgery to relieve pressure caused by a blood clot. She remained in critical condition for several days as her respiratory problems continued to worsen. When conventional treatment failed, her medical team took extreme measures.

“We had to use a type of ventilator that I believe we had only utilized one other time here in this hospital,” said Bracken Burns Jr., D.O., a UF assistant professor of surgery.

While Ashley’s family and medical team waited for the equipment to be brought from Orlando, they held on to hope that she would live until it arrived.

“The odds were against her surviving, let alone having a good recovery,” Burns said.

After three weeks, Ashley began to breathe on her own, and although she was unable to speak or move anything but her eyes, she had improved enough for doctors to discuss rehabilitation.

“I knew that if they were going to release her … they thought she was at least going to survive,” said Ashley’s mother, Sharon. “Up until then, because of her internal injuries, it was very questionable.”

On July 17, 2009, Ashley was discharged to Brooks Rehabilitation Hospital. Four weeks later she was home, welcomed by neighbors lining the streets leading to her house in Glen St. Mary, Fla.

“It’s funny looking at her now and trying to remember her needing help, walking around on a walker, needing to hold your arm to go around the house. And today she’s fine,” said her brother, Ryan.

Now, the 23-year-old is looking forward to graduating from the University of North Florida with a degree in elementary education. Even though she still has some physical limitations, she is thankful to be able to spend time with her family and play with her young niece and nephew.

“I don’t sweat the small stuff that much,” Ashley said. “I realize it’s not that big of a deal, so I don’t get upset over some things like I would before.”

“It’s a second chance a lot of people don’t get,” said Ashley’s dad, Larry. “We know we’re blessed and thankful to God for his mercy and the hospital and staff.”

By Sarah Bailey
For 16 years, Shahla Masood, M.D., has been bringing leading experts from all facets of breast cancer care together in one place, long before multidisciplinary care was a key goal for most health care centers.

“When we started this, that word (multidisciplinary) was not even used,” said Masood, a professor and chair of the department of pathology and laboratory medicine at the College of Medicine-Jacksonville and medical director of the Shands Jacksonville Breast Health Center.

This year’s Multidisciplinary Symposium on Breast Disease was no exception, bringing health care providers, physician-scientists and patient advocates under one roof to discuss the latest advances in breast cancer treatment and research.

But this year’s event, held at the Ritz-Carlton in Amelia Island, Fla., brought one new partner into the mix. This year, UF and the H. Lee Moffitt Cancer Center jointly sponsored the event.

“The symposium highlights the latest evidence-based research in breast cancer care and brings together researchers so they can hopefully collaborate. It is crucial to work together because breast cancer is not a disease that can be taken care of by one physician or one surgeon,” Masood said.

This year’s symposium featured keynote speaker Armando Giuliano, M.D., a clinical professor of surgery at both the University of California, Los Angeles and the University of Southern California and the chief of science and medicine at the John Wayne Cancer Institute. Giuliano introduced sentinel node biopsy for the treatment of breast cancer and is considered a pioneer in breast cancer surgery.

Aside from Giuliano there were 16 other speakers at the event covering every aspect of breast disease, including Umberto Veronesi, the scientific director for the European Institute of Oncology who pioneered breast conservation therapy for breast cancer; and Vivian Pinn, M.D., associate director of research on women’s health for the National Institutes of Health.

A member of the UF Shands Cancer Center, Masood said her primary goal for the symposium has always been to ensure that patients receive the right care for their specific disease. Bringing surgeons, oncologists, pathologists, radiologists and other specialists together helps broaden understanding about the latest advances and treatment options in breast health care.

“This is not about doing more but doing the right thing for the right patients,” Masood said. “This is about quality of care based on the extent and biology of the disease.”

Since its inception in 1995, the symposium has become an international event and has been held in Rome and Paris. Last year, the symposium was held in Cairo, Egypt, in conjunction with the Susan G. Komen Foundation.

“I am delighted I have been able to sustain what we do on a yearly basis,” Masood said. “It has not been easy, but I think we have come a long way.”
Keeping caregivers healthy

Last fall Elena Andresen, Ph.D., a professor in the department of epidemiology, joined former first lady Rosalynn Carter for a summit, “Averting the Caregiver Crisis,” at Georgia Southwestern State University, home of the Rosalynn Carter Institute for Caregiving. The institute proposes 12 recommendations for caregiving research and development, system design, and public and tax policies. Andresen spoke to summit attendees about the recommendation on monitoring caregiver health, which proposes that all states adopt the Center for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System Caregiver Module questions, developed by Andresen and UF colleagues.

COLLEGE OF MEDICINE

PAUL GULIG, Ph.D., a professor in the department of molecular genetics and microbiology, has been named associate dean for graduate education. In this role, Gulig will supervise the college’s Office of Graduate Education and will serve as director of the Interdisciplinary Program in Biomedical Sciences, the college’s Ph.D. program. Gulig has been on the college faculty since 1988.

ANN GROOMS, M.D., an assistant professor of community health and family medicine and a Student Health Care Center physician, received the University of Tennessee Health Science Center’s Outstanding Alumnus award. The award recognized Grooms’ accomplishments during her career at UF, namely her efforts to establish a medical program for all student-athletes. A UF team physician, Grooms completed both her undergraduate and medical degrees at the University of Tennessee.

RAJA KANDASWAMY, M.D., has been named chief of the department of surgery’s division of transplantation and the Robert H. and Kathleen M. Axline professor of surgery. Kandaswamy comes to UF from the University of Minnesota, where he served as a professor of surgery and as director of pancreas transplantation and the transplant fellowship program. His research interests include islet transplantation and immune tolerance.

COLLEGE OF PHARMACY

CAROL MOTYCKA, Pharm.D., a clinical assistant professor and assistant dean and director of the UF College of Pharmacy Jacksonville campus, has been accepted into the UF College of Medicine’s Master Educator Fellowship Program. Motycka, the second pharmacy faculty member selected since the program began, joins 15 College of Medicine faculty members for an 18-month intensive workshop. The pedagogical fellowship is designed to enhance knowledge and skills about educational theory and innovative educational curricula. Fellows also complete individual educational research projects.

LESLIE HENDELES, Pharm.D., a professor of pharmacotherapy and translational research, has been elected to the National Academy of Practice as a distinguished scholar. The academy’s mission is to advise public policymakers on health care issues. Most elected members are distinguished health practitioners and scholars who have achieved distinction while spending a significant portion or all of their careers in direct patient care. Hendeles will be recognized March 25 at the group’s annual meeting in Arlington, Va.

COLLEGE OF PUBLIC HEALTH AND HEALTH PROFESSIONS

JENNA DIETZ, a doctoral student in the department of clinical and health psychology, received a predoctoral grant from the National Institute of Neurological Disorders and Stroke. The grant, “Psychophysiology of Emotion in Parkinson’s Disease,” is mentored by Dawn Bowers, Ph.D., a professor in the department of clinical and health psychology, and Margaret Bradley, Ph.D., a research professor in the department of psychology.

COLLEGE OF VETERINARY MEDICINE

PAUL S. COOKE, Ph.D., has been named chair of the college’s department of physiological sciences. Prior to his appointment, Cooke was the Billie A. Field endowed chair in reproductive biology in the department of veterinary biosciences at the University of Illinois, Urbana/Champaign. Cooke’s professional interests include reproductive biology, companion animal contraception and developmental toxicology.
Robert Primosch reflects on time as associate dean

By Bridget Higginbotham

When Robert Primosch, D.D.S., M.Ed., started dental school, pediatrics was the furthest thing from his mind — he was actually fearful of his first few child patients. But thanks to the instruction and encouragement of faculty, Primosch realized he loved the specialty.

“I had certain mentors during my education that had such a strong influence on me,” said Primosch, a professor of pediatric dentistry in the College of Dentistry. “And perhaps I also chose academics because I’d like to have had somewhat the same influence on other students. I strongly believe in mentoring. By training future clinicians, I have a much wider range of influence on the quality of pediatric dental care than I could ever do as an individual practitioner.”

In order to return to spend more time mentoring residents and continuing his own research in pain and anxiety in children, Primosch decided to step down as the College of Dentistry’s associate dean for education.

There are several milestones from his time as associate dean on which he looks back with pride, namely serving as a facilitator to help other staff, students and faculty accomplish their goals.

Take for instance the searchable, Web-based Electronic Curriculum Organizer, or ECO. By putting standardized syllabi and PDF versions of course materials online eight years ago, the college is more organized, user-friendly and green, which saves money, time and labor.

“Now I don’t know how we’d live without it,” he said. “I think it’s grown a life of its own.”

The student handbook and teaching standards were also put online and are easily accessible, which Primosch says will be invaluable when the college is going through reaccreditation in a few years.

The curriculum also was realigned to improve the sequence of basic biomedical sciences instruction.

Another big change, says Primosch, was the hiring of a full-time director of student and multicultural affairs, Patricia Xirau-Probert, who counsels students with their struggles and recruits minorities to the school.

In March, the college opened the renovated pediatric dental center and named it after Primosch in honor of his 25 years of training residents. Primosch helped raise the $750,000 for the clinic by contacting the program’s former residents.

“I sort of had a discussion with myself one day. I said ‘Get past your fear of asking people for money. I’m not asking for them to give me money, I’m asking them to give money to the program,’” Primosch said.

“The thing that was always easy to say was, ‘Where would you be today if the University of Florida’s program was not here?’”

Primosch is in the clinic several times a week working with dental students, hoping to spark within them an interest in treating children, in part because of the lasting impact his students could have on young patients.

“I think that’s a very unique aspect of treating children: You’re the first one in. You can really develop their attitudes and behaviors toward future dental care significantly,” Primosch said. “And I think that’s a great contribution to be able to do that.”
Danny Trivett, a volunteer from the North Central Florida Post-Polio Support Group, works with a UF physical therapy student. The volunteers provide a history of the onset of polio in their lives, allow the students to perform basic tests of strength, range, balance and function and describe living and surviving polio.

Masters of Public Health students pose for a group photo.

Dr. Margaret Wallace, John Reith and Jack Kelly present information on rare diseases in the Shands at UF Atrium on Feb 28. Rare Disease Day is an annual event that brings awareness and access to information about institutions and specialities dealing with rare diseases.