THE POST

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UF
UNIVERSITY of FLORIDA
Health Science Center

DENTISTRY • MEDICINE • NURSING • PHARMACY • PUBLIC HEALTH & HEALTH PROFESSIONS • VETERINARY MEDICINE

On the Cover

On the Health Science Center campus, buildings seem to be sprouting up everywhere. Some of these are on the fringes, but the new Biomedical Sciences Building is much closer to the core campus. While these projects are a sign of progress and will be welcome additions when completed, they may create a headache or two along the way.

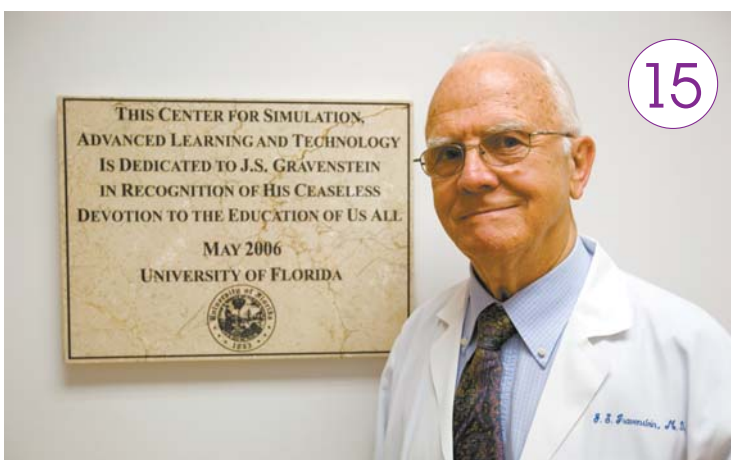

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PHOTO BY SARAH KIEWEL

UP FRONT

It does not take long to figure out where Brian Dodge's loyalties lie once you step into his office in the HPNP Complex. Dodge, Ph.D., an assistant professor in the department of behavioral science and community health in the College of Public Health and Health Professions, has begun accenting his newly painted orange office with loads of Gator memorabilia.

But the Michigan native has not stopped there. His school spirit extends to his extensive orange and blue wardrobe, his Gator-decorated Vespa motorcycle and his friends and family in the North, who consistently receive all manner of Gator paraphernalia as gifts. Although Dodge moved to Gainesville only a little more than a year ago, he became a rabid fan the first time he attended a UF football game. "The Gators chomped me up the first time I walked into the Swamp," he said. P

Post it

PHOTO BY SARAH KIEWEL

Over the Hump

Camel receives successful surgery at UF to remove neck mass

A 2-year-old camel named Samuel is at home in Palm Harbor following successful surgery Aug. 31 at the University of Florida's Veterinary Medical Center to remove a mass from his neck.

The camel belongs to Crystal Cove Community Church and lives on church grounds, along with three donkeys, two sheep and two goats. Samuel is part of a church program called "Animals Reaching Kids," and also participates in live nativity scenes sponsored by the church during the holidays as well as an Easter program.

At Crystal Cove, Samuel is considered practically a family member, said Susan Cox, his caretaker, who arranged for Samuel's treatment at UF. Cox said church members had prayed for a camel and children in the congregation were even holding fundraisers to raise money for that purpose.

Plans were made to transport Samuel to UF's VMC, where large animal surgeon Jason Errico led the procedure to remove the mass.

The biggest job and challenge was managing Samuel during anesthesia -- a task handled "exceptionally well" by Drs. Andre Shih and Luisito Pablo.

Errico said he had spoken to Cox on Sept. 18 and that Samuel's incision continues to heal, although complete healing will not occur for several months.

"We're so glad to have him back," Cox said. "He's doing very well. He's gained back some weight and he's just eating and playing and chasing donkeys."

Time capsule ceremony

Activities surrounding the 50th anniversary of the Health Science Center will culminate with the planting of a time capsule at 3 p.m. Nov. 9 in the courtyard of the Academic Research Building.

The capsule, slated to be unearthed again in another 50 years, will contain the contents of the original time capsule buried in 1956 as well as items that represent what life is like today. The capsule will be covered with a stone and an engraved plaque.

During a short ceremony, Senior Vice President for Health Affairs Doug Barrett will speak and an HSC student singer will perform.

The original capsule was encased in the foundation of the Stetson Medical Science Building.

PHHP World AIDS Address 2006

Gina Wingood, Sc.D., M.P.H., an associate professor at Emory University Rollins School of Public Health and Emory Center for AIDS will present "Research Designing and Diffusing Evidence-Based HIV Interventions for Women: A Global Perspective" from 1 p.m. to 2 p.m. Nov. 16 in the HPNP Complex, room G-301.

The event is sponsored by the College of Public Health and Health Professions and the college's department of behavioral science and community health.

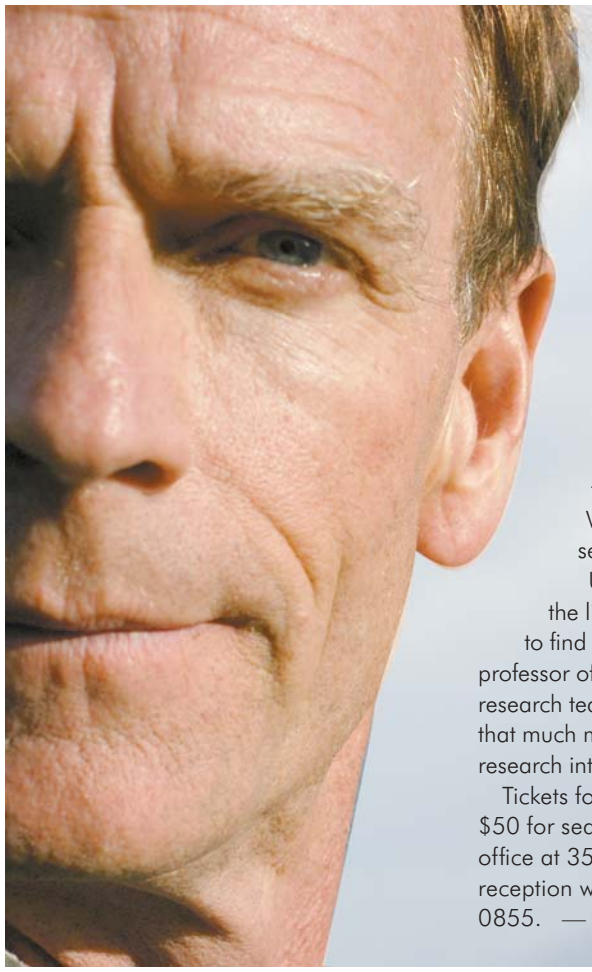


PHOTO BY BART HENDERSON

Livingston Taylor to perform at UF

Renowned musician Livingston Taylor will take the University Auditorium stage at 8 p.m. Nov. 4 to help raise money for the College of Medicine's glycogen storage research program.

Taylor is the brother of music legend James Taylor of "Fire and Rain" fame and is perhaps most well-known for his 1970s hit, "I Will Be in Love With You." Taylor's duet with Carly Simon, called "Best of Friends," was on the charts earlier this year.

All proceeds from the event, dubbed Concert for a Cure, will benefit the Matthew Ehrman Fund for Glycogen Storage Disease Research.

Each year, only about one in 100,000 children is born with glycogen storage disease, a rare condition that keeps the body from being able to release glucose, the body's fuel, between meals. Without proper treatment, the disease can cause brain damage, seizures and even death.

UF boasts the largest program studying glycogen storage diseases in the liver in the world, but because the disease is rare, obtaining funding to find a cure can be tricky, said David Weinstein, M.D., a UF associate professor of pediatric endocrinology and leader of the glycogen storage disease research team. That makes fundraising and events like the Concert for a Cure that much more important, he said. The funds raised from the concert will support research into gene therapy and new treatments for children with the disease.

Tickets for the concert range in price from $10 for children 5 and older to $50 for seats in the orchestra section. Tickets are available by calling the box office at 352-392-ARTS (2787). Anyone interested in attending an invitation-only reception with Taylor prior to the concert can call Meredith Beard at 352-265-0855. *— By April Frawley Birdwell*

Boy undergoes rare surgery to correct life-threatening disease

Story By April Frawley Birdwell **Photography** by Sarah Kiewel

Robbietta Honor didn't notice it much when Shamar was a baby. But as her son aged, she could see it; one half of his torso was growing. The other half wasn't.

"He's lopsided," Honor said. "I can notice it more as he gets older."

Shamar, now 4, was born with a severe form of scoliosis that left him not only with the telltale curvature in his spine but also with seven fused ribs, making half of his rib cage an impenetrable wall that wouldn't grow even as the lungs and organs inside it did. If left untreated, Shamar would die.

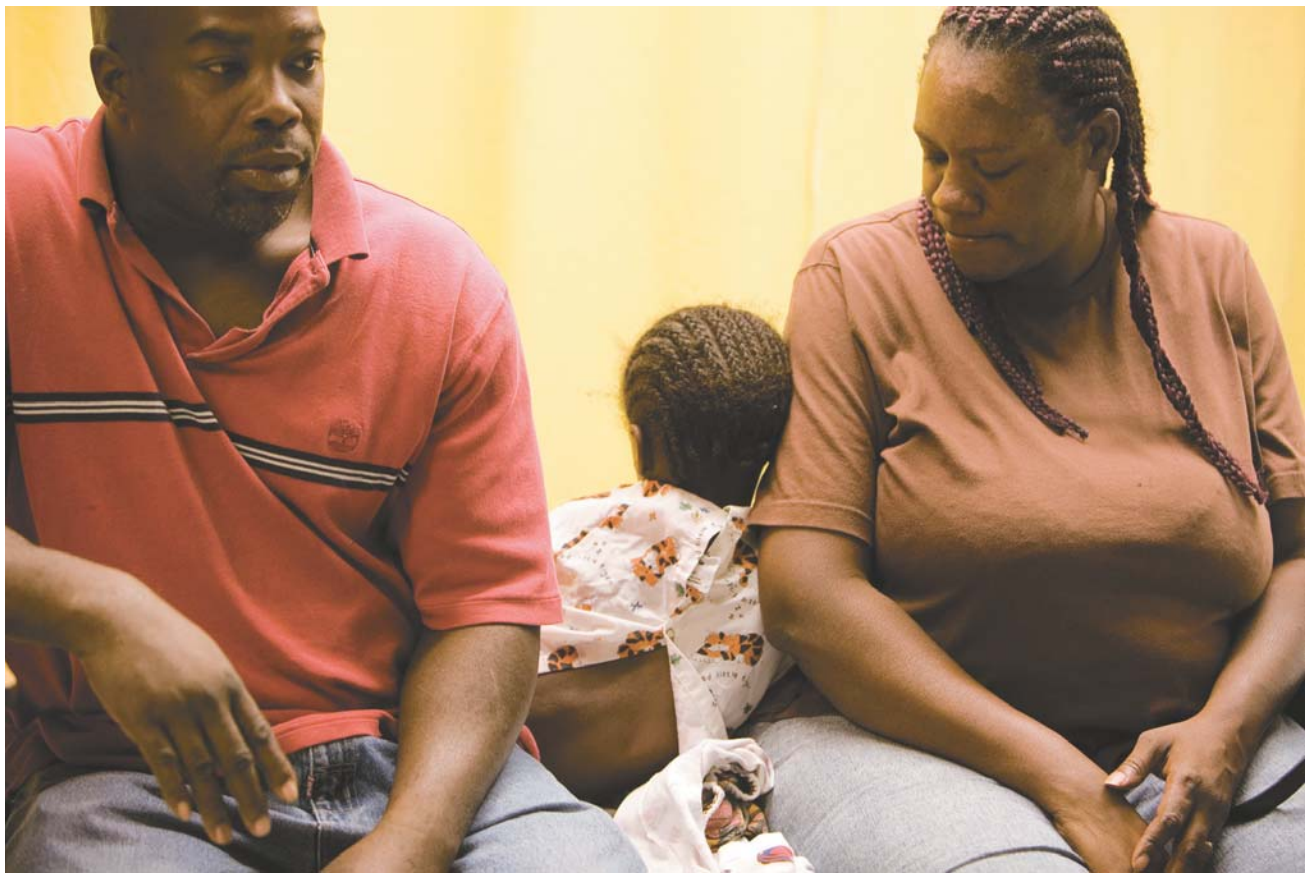
But on Sept. 25, in a crowded operating room, UF surgeons changed Shamar's fate when they implanted a titanium rib device on his rib cage that will allow his chest to expand over time.

The device spreads vertically to expand his chest cavity, creating more room for his organs, at the same time correcting the curvature in the spine, said UF pediatric orthopaedic surgeon Raymund Woo, M.D., who led the two-and-a-half hour operation.

Only about one in 1,000 children in the United States are born with this severe form of scoliosis. Most people who have scoliosis develop it in adolescence, and although the condition is still serious and often requires surgery, they do not have ribs that are fused together.

Fusing rods into the spine, considered the standard surgery to treat scoliosis in adolescents and adults, is also generally not an option for children with congenital scoliosis. The surgery straightens the spine, correcting the scoliosis,

Shamar Honor, 4, waits in a hospital bed before undergoing surgery Sept. 25. University of Florida surgeons, including Raymund Woo, top, implanted two vertical titanium ribs in Shamar, who was born with scoliosis and several fused ribs. The titanium ribs will allow his rib cage to expand as he grows and will correct the curvature of his spine.



Shamar waits with his parents, Sam and Robbietta Honor, before being prepped for surgery at Shands at UF medical center.

but does not fix the problems caused by the child's fused ribs. Prior to the development of the titanium rib, a thin bar that can be manually adjusted so the rib cage can expand over time, many children with severe congenital scoliosis died as their bodies outgrew their fused ribs,

"They don't have enough room in their rib cages for their organs to grow," he said. "(Without that) these kids are doomed to die. This is really a major step forward in the treatment of this disease."

George H. Thompson, a professor of orthopaedics and director of pediatric orthopaedics at Case Western Reserve University, said the titanium rib's ability to expand the chest cavity is particularly important

"The lung really gets most of its development in the first eight years of life," said Thompson, also president of the Scoliosis Research Society.

As a baby, Shamar suffered from respiratory infections and developed pneumonia when he was 2 months old. His parents took him to the doctor, where a chest X-ray revealed his scoliosis and fused ribs.

"We had never heard of fused ribs before," Honor said.

Woo, who took over Shamar's care when the boy was 6 months old, monitored his growth as he aged. He had some respiratory problems, but for the most part, he was a typical little boy. He played with his older brothers and sister and attended preschool. But Honor knew as her son aged, his condition would worsen.

Then, last year, Woo suggested a new surgery to the Honor family. The vertical titanium rib, produced by a company called Synthes, was new. It had been approved recently by the U.S. Food and Drug Administration for humanitarian use, and it would give Shamar a chance to grow.

"I thought it was good news," Honor said, recalling the day when Woo told her about the surgery. "Everyone (in the family) agreed with it."

Because the surgery is so unusual, Woo received special training to learn how to perform it and use the device. He also brought in University of Pittsburgh surgeon Vincent Deeney, who has performed the operation previously, to offer guidance during the procedure.

Woo placed two of the titanium ribs on Shamar's rib cage. One stretched down his spine to straighten the curvature and the other was placed on the left side of his rib cage. Woo had to separate some of the fused ribs so they could be attached to his rib cage. The only parts of the vertical ribs that actually touch the boy's bones are the points where they are attached, Woo said.

The titanium ribs have additional length inside of them, which will allow Woo to expand them by making small incisions over the spots where the device is attached to Shamar's rib. He will have to come back every six months to have them adjusted.

Shamar went home five days after the surgery and is doing well, Woo said. But it will take some time before he knows if the device is making a difference.

Aside from correcting scoliosis and allowing the rib cage to expand, the device should also allow Shamar to maintain flexibility, something that older scoliosis patients typically sacrifice when rods are fused into their spines.

"This allows you to have the best of both worlds," Woo said.

Florida boy is state's first to get new mechanical heart device designed for children

From staff reports

A gravely ill 9-year-old Orange Park boy awaiting a heart transplant recently became Florida's first patient to receive the Berlin Heart, a mechanical heart device sized specifically for children.

Alexzander Wood received the biventricular assist device Sept. 29 during a nearly five-hour procedure led by UF surgeons at Shands at UF. The Berlin Heart is designed to boost his failing heart's ability to pump until a donor organ becomes available.

"He's made tremendous progress already and we're very pleased," said UF College of Medicine cardiac surgeon Mark Bleiweis, M.D.

Alexzander was listed in serious condition at press time and will remain in the Shands at UF Pediatric Intensive Care Unit until a donor heart becomes available.

Numerous risks were associated with the procedure, including bleeding and clotting problems and infection, but the medical team felt it was the boy's only option.

"This patient has been in heart failure, on a ventilator, and his condition was deteriorating at a rate that was affecting his other organs — he was at risk for organ failure," said Bleiweis, an associate professor and director of the Congenital Heart Center. "Without a transplant or this kind of device, he would die. We're not sure how long he'd have to wait for an organ. Because of that uncertainty, we had to proceed."

Alexzander, a third-grader at Fleming Island Elementary School, had been a healthy child until he began exhibiting breathlessness and abdominal pain. In August, UF pediatric cardiologists diagnosed him with idiopathic dilated cardiomyopathy, a weakness of the heart muscle. Although the cause is uncertain, physicians suspect a viral infection.

The Berlin Heart is a computerized pump system the size of a small orange. Produced in Germany, it is available in various sizes suitable for use in infants and small children. Most of the device extends outside the body and connects to the heart via tubes implanted in the patient's chest.

The U.S. Food and Drug Administration has not yet approved the Berlin Heart, but the agency allowed UF and Shands officials to move forward on a one-time compassionate use basis. The UF Institutional Review Board and Shands officials also had to approve the procedure. A team from Berlin Heart Inc. flew in from Germany Sept. 27 to assist.

Alexzander's mother, Elizabeth Wood, said the medical team confirmed the procedure would take place on her birthday.

"That was the best birthday present ever," she said. "God was listening."

Alexzander is the 68th child in the United States and Canada, and one of only 200 internationally, to receive the Berlin Heart. Other United States and Canadian Berlin Heart recipients have relied on the device anywhere from one day to 234 days.

"The issue is donor availability," said F. Jay Fricker, M.D., chief of the division of pediatric cardiology at UF's College of Medicine. "If a donor is not available and the patient is deteriorating, the options are some form of circulatory support. We think the Berlin Heart is an excellent way to transition patients until they can receive a transplant. It gives additional support to the failing heart. The results in older children and adults with similar devices have been very successful in bridging patients to transplant."

For patients and their families and care providers, this device could offer hope during the uncertain wait for a donor organ, said nurse practitioner Barbara Williams, pediatric heart and lung transplant coordinator at Shands at UF.

"Everyone involved in the care of this patient and these precious children is extremely hopeful that the Berlin Heart will provide the time he needs to make it to transplant," Williams said. "As a member of the Shands pediatric heart transplant team, this is a very exciting step for us. There is no way to predict or plan for the arrival of a donor heart, and unfortunately we have lost babies and children during the wait for an organ."

Currently, 19 children in Florida and 236 nationally are on the heart transplant waiting list. For more information about organ donation, please visit www.donatelife.net. P

The Berlin Heart (above) is a computerized pump system the size of a small orange. Produced in Germany, it is available in various sizes suitable for use in infants and small children.

UF 'docs on wheels' keep Jacksonville teens healthy

By Patricia Bates McGhee

While most physicians avoid the term "doc in a box," Jon Schneider, D.O., chief of adolescent medicine in the pediatrics department of UF's College of Medicine–Jacksonville, likes to introduce himself by that moniker or another favorite nickname — "man in the van."

That's because Schneider really does work in a box — a box on wheels provided by St. Vincent's Care Mobile Program in Jacksonville. Schneider, colleague Jeri Dyson, M.D., a UF assistant professor in adolescent medicine, and two pediatrics residents a month keep the health-care van rolling.

The program is a joint effort between St. Vincent's Medical Center and the Florida Department of Health through the Duval County Health Department, the Duval County Public Schools, the University of Florida and Ronald McDonald House Charities and other community partners.

The goal is to provide comprehensive health-care services to Jacksonville's middle and high school students, but in an unusual setting — at their schools.

"The care mobile visits 21 middle and high schools in Duval County five days a week and usually travels to each school at least once a month," Schneider said. "We're fully staffed with a pediatrician, nurse and medical assistant and fully equipped with two patient exam rooms, a reception area and a medical records area."

Although developed to bring high-quality medical care to underserved and uninsured adolescents in Jacksonville's urban and rural areas, the program provides treatment for any child, regardless of insurance and financial status. All services are free. Parents don't even have to be present for a child to be seen, as long as a consent form has been completed and signed in advance — a godsend for working parents.

Schneider says teenagers are often left out of the health-care system.

"The reasons why teens don't get proper health care vary," he said. "Sometimes parents don't keep up with them or some teens rarely get sick, but when they do get sick, some teens and their families rely on the emergency room as their primary physician."

The care mobile provides ongoing care for teens, and their parents don't need to take them to the doctor because the doctor comes to them at school.

"Here the students get the same care they'd receive in a doctor's office, including comprehensive services like physicals, routine checkups, vision screenings and even dental screenings," Schneider said.

"Over the course of a year, we do about 3,000 to 4,000 sports exams, but because we do one-on-one examinations, ours are much more personalized, which gives us the ability to pick up on many biopsychosocial issues as well as medical issues," he said. "This makes our services pretty unique."

The program-on-wheels is a boon not only to Duval County adolescents and their parents but also to UF resident doctors.

"All pediatrics residents spend time on the van as part of their required one-month adolescent medicine rotation," said Frank Genuardi, M.D., assistant dean for educational affairs. "The van provides an outstanding educational opportunity for them to deliver care to adolescents who might not otherwise have access at a location convenient to them."

Third-year pediatrics resident Carol Mannings, M.D., said her experience with the care mobile was refreshing.

"Residency can be particularly challenging, and somewhere along the road one can lose sight of the bigger picture and goal," she said. "However, working on the care mobile with Dr. Schneider and Dr. Dyson reminded me of all the reasons I went into medicine and all the reasons I chose to specialize in pediatrics. The experience renewed my spirit."

As the residents learn and work alongside their professors, Schneider says the lessons learned are valuable: learning how to have meaningful interaction and service to the community, understanding bread-and-butter adolescent medicine and treating volumes of patients with staff supervision.

"It is our obligation to teach them well as we pass the torch to a new generation of pediatricians," Schneider said. "It's a win-win-win situation for UF residents, UF physicians and the Jacksonville community."

PHOTOS BY SARAH KIEWEL

Top: Students at Kirby-Smith Middle School in Jacksonville take a break from class for medical checkups in St. Vincent's Care Mobile, parked in the school's parking lot. Faculty members and residents from the UF College of Medicine-Jacksonville pediatrics department help staff the traveling van, which visits 21 middle and high schools in Duval County five days a week during the school year.

Bottom: Third-year pediatrics resident Carol Mannings, M.D., (left) and Jon Schneider, D.O., chief of adolescent medicine in the pediatrics department of UF's College of Medicine-Jacksonville, (right) chat with 11-year-old Austin Kriznar, a sixth-grader at Kirby-Smith Middle School. "I had two shots here in the Care Van, and they really didn't hurt," he said.

Decaf coffee **not caffeine-free**

By Denise Trunk

Coffee addicts who switch to decaf for health reasons may not be as free from caffeine's clutches as they think. A new study by UF researchers documents that almost all decaffeinated coffee contains some measure of caffeine.

Caffeine is the most widely consumed drug in the world. And because coffee is a major source in the supply line, people advised to avoid caffeine because of certain medical conditions like hypertension should be aware that even decaffeinated brew can come with a kick, UF researchers reported in the Journal of Analytical Toxicology.

"If someone drinks five to 10 cups of decaffeinated coffee, the dose of caffeine could easily reach the level present in a cup or two of caffeinated coffee," said co-author Bruce Goldberger, Ph.D., a professor and director of UF's William R. Maples Center for Forensic Medicine. "This could be a concern for people who are advised to cut their caffeine intake, such as those with kidney disease or anxiety disorders."

Despite caffeine's widespread use, most medical texts have no guidelines for intake, Goldberger said, but even low doses might adversely affect some people. So UF researchers set out to conduct a two-phase study designed to gauge just how much caffeine is likely to turn up in decaffeinated coffees.

First they purchased 10 16-ounce decaffeinated drip-brewed coffee beverages from nine national chains or local coffee houses and tested them for caffeine content. Caffeine was isolated from the coffee samples and measured by gas chromatography. Every serving but one - instant decaffeinated Folgers Coffee Crystals - contained caffeine, ranging from 8.6 milligrams to 13.9 milligrams.

In comparison, an 8-ounce cup of drip-brewed coffee typically contains 85 milligrams of caffeine.

In the study's second phase, scientists analyzed 12 samples of Starbucks decaffeinated espresso and brewed decaffeinated coffee taken from a single store. The espresso drinks contained 3 milligrams to 15.8 milligrams of caffeine per shot, while the brewed coffees had caffeine concentrations ranging from 12 milligrams to 13.4 milligrams per 16-ounce serving.

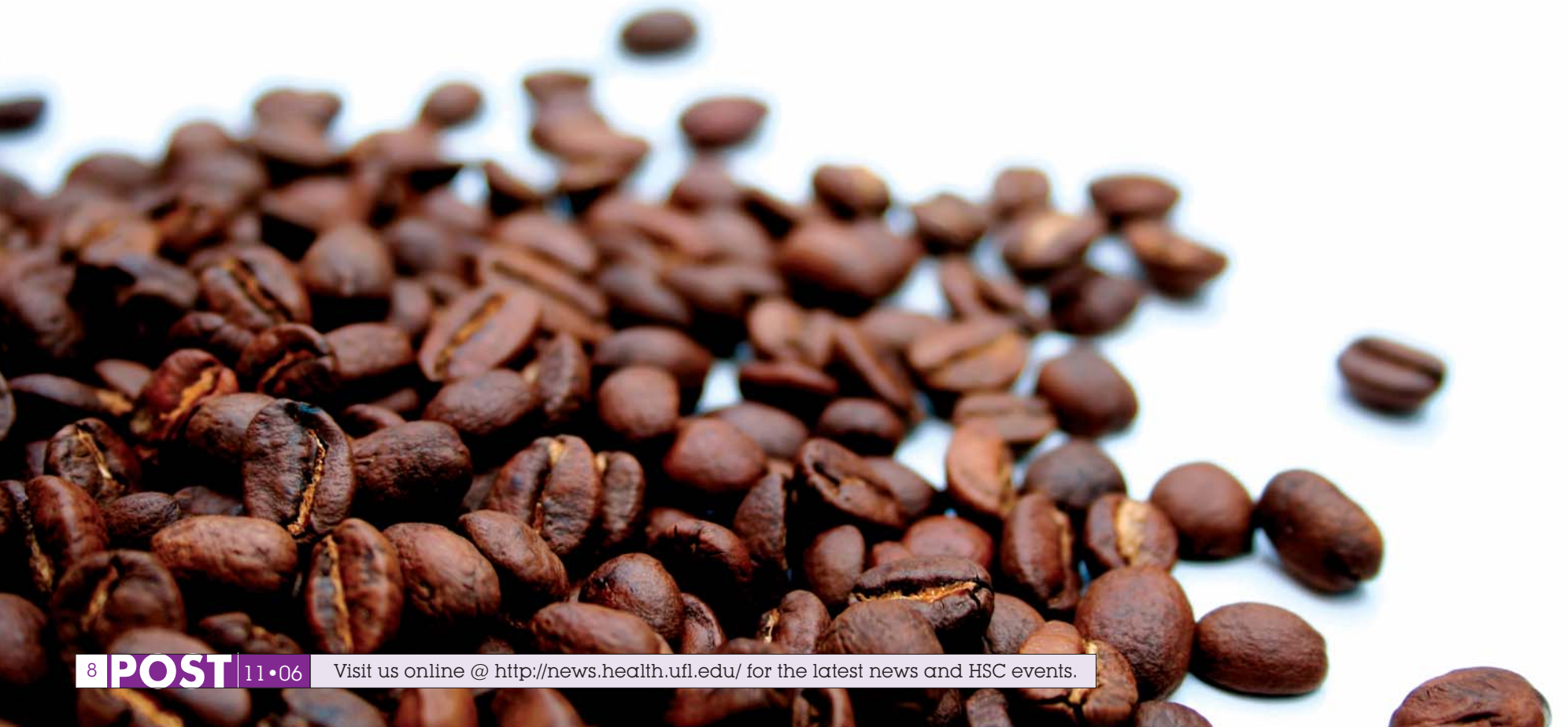
Even though the amount of caffeine in these coffees is considered low, some people could conceivably develop a physical dependence on the beverages, said co-author Mark S. Gold, M.D., a distinguished professor of psychiatry, neuroscience and community health and family medicine at UF's College of Medicine.

"One has to wonder if decaf coffee has enough, just enough, caffeine to stimulate its own taking," Gold said. "Certainly, large cups and frequent cups of decaf would be expected to promote dependence and should be contraindicated in those whose doctors suggested caffeine-free diets."

Bruce Goldberger, Ph.D.

And even moderate caffeine levels can increase agitation, anxiety, heart rate and blood pressure in some susceptible individuals, Goldberger said.

"Carefully controlled studies show that caffeine doses as low as about 10 milligrams can produce reliable subjective and behavioral effects in sensitive individuals," said Roland Griffiths, Ph.D., a professor of behavioral biology and neuroscience at the Johns Hopkins School of Medicine. "The important point is that decaffeinated is not the same as caffeine-free. People who are trying to eliminate caffeine from their diet should be aware that popular espresso drinks such as lattes (which contain two shots of espresso) can deliver as much caffeine as a can of Coca-Cola - about 31 milligrams."



Cocaine makes a comeback

By Denise Trunk

Like some drug déjà vu, cocaine use is once again on the rise among students and the rich and famous, a trend University of Florida researchers say likely signals a recurring epidemic of abuse.

Once known as the champagne of drugs, cocaine killed "Saturday Night Live" comedian John Belushi and basketball star Len Bias in the 1980s before use declined in the 1990s.

Now new data from UF and the Florida Department of Law Enforcement show that since 2000 cocaine has increasingly been cited as the cause of death in coroner's reports, and that the number of cocaine deaths per 100,000 people in the state has nearly doubled in the past five years, from 150 in 2000 to nearly 300 in 2005. The steepest per capita rise in death rates was in college towns and wealthy, upper-class seaside communities, such as Melbourne, West Palm Beach and the Florida Keys.

What's happening in Florida is likely occurring coast to coast, says Mark Gold, M.D., a distinguished professor of psychiatry, neuroscience, anesthesiology and community health and family medicine at UF's College of Medicine. Gold and colleagues analyzed FDLE data gathered in Florida and presented their findings Oct. 15 at the Society for Neuroscience's annual meeting in Atlanta.

"Our data is closest to real time to any data available in the United States," Gold said. "With death reports, there is no fudge factor. The other states will show the same thing: That we are in the early stages of a new cocaine epidemic that is being led by the rich and famous and students with large amounts of disposable income and that is responsible for more emergency room visits and more cocaine-related deaths than we have seen at any time since the last cocaine epidemic."

Prescription drugs, often abused for the immediate rush of euphoria they trigger, can cause sudden respiratory or cardiac arrest. In contrast, cocaine's cumulative effects — including blood vessel damage that increases the risk of heart attack or stroke over time — can unexpectedly kill years after abuse begins, Gold said.

PHOTO BY SARAH KIEWEL

Mark Gold, M.D.

UF experts said the recent spike in deaths should serve as a wake-up call, prompting more drug education in schools and communities nationwide. Gold said such interventions are necessary to avoid another full-fledged cocaine epidemic.

One-of-a-kind imaging probe reveals secrets useful for drug discovery

Good things may indeed come in small packages for scientists eager to find natural substances to help cure diseases. The challenge is to analyze material that is smaller than the proverbial gnat's eyelash.

But using a refined version of nuclear magnetic resonance technology, or NMR, scientists have unlocked secrets hidden in tiny amounts of venom taken from spindly insects called common two-stripe walking sticks, which are relatively harmless, plant-eating creatures common in the eastern United States.

The analytical technique, described in the *ACS Chemical Biology* by scientists at the McKnight Brain Institute of the University of Florida and the Center for Medical, Agricultural and Veterinary Entomology at the Gainesville U.S. Department of Agriculture, could aid in the search for natural substances to make medicines. It also shows that scientists can obtain volumes of information from very tiny samples, which could be useful in efforts to understand Alzheimer's disease and other disorders.

"There are many potent, useful molecules made by plants and animals, but they are usually produced in such small quantities it takes a huge amount of material to characterize them," said Arthur Edison, Ph.D., an associate professor of biochemistry and molecular biology. "In this case, it previously required hundreds of milkings to get enough walking stick venom for analysis. We were able to get great data from just one milking."

Researchers at the McKnight Brain Institute's Advanced Magnetic Resonance Imaging and Spectroscopy equipped an NMR spectrometer with a special probe to examine the venom, which the walking stick sprays to defend itself from predators.

— by John Pastor

Tiny Tampa Bay fish key to evolution of immune system

Armed at first with nothing more than boots, a screen and a bucket, scientists studying a tiny primitive fish in Tampa Bay now say they have found the "missing link" marking the point in evolution that led to the development of the modern-day human immune system.

The inch-long spineless fish, called a lancelet, produces a key immune system protein that is similar to but much hardier than the version found in people. The bay waters are a microbial soup teeming with microorganisms, yet the worm-like bottom-feeder that makes up 70 percent of the bay's biomass is remarkably adept at standing up to the bacterial, viral and chemical threats in its environment.

Understanding how it does so could lead to improved biodefense and better immune-boosting drugs to fight cancer and disorders such as rheumatoid arthritis, say scientists at the University of Florida and the University of South Florida, who reported their findings recently in Nature Immunology.

"At a basic level, this sea worm tells us about the evolution of the immune response; specifically, it tells us that primitive organisms have more sophisticated immune systems than we previously thought," said X-ray crystallographer David Ostrov, Ph.D., an assistant professor of pathology, immunology and laboratory medicine at UF's College of Medicine who is affiliated with the UF Shands Cancer Center. "This is the first organism below the level of jawed vertebrates that expresses the type of proteins we use in our own complex adaptive immune system."

— Melanie Fridl Ross

Whooping cough rates higher in states where vaccination exemptions easily obtained

By Jacqueline Teusner

Whooping cough is re-emerging nationwide and youngsters in states that permit parents to easily opt out of vaccinating their children are at increased risk from the disease, researchers from Johns Hopkins University and the University of Florida reported Oct. 11 in the Journal of the American Medical Association.


Daniel Salmon, Ph.D.

PHOTO BY SARAH KIEWEL

States that readily grant exemptions or offer personal belief exemptions have about 50 percent higher rates of pertussis, more commonly known as whooping cough, after adjusting for a large number of demographic variables.

"By demonstrating an association between state policies and pertussis, we highlight the very real consequences of relaxing school immunization requirements," said Saad Omer, M.B.B.S., M.P.H., an assistant scientist of international health at the Johns Hopkins Bloomberg School of Public Health and the study's first author.

All states require documentation that children entering school have met the requirements, which include vaccines to protect against diseases such as diphtheria, measles, polio and pertussis.

But all states also permit medical exemptions to immunization requirements, and most allow exemptions based on religious beliefs. Many offer a broader exemption based on personal belief that may be granted for religious, philosophical or other nonmedical reasons. Recently, several states also have sought to expand nonmedical exemptions.

"This really adds a new piece of information in our effort to control pertussis," said Daniel Salmon, Ph.D., an associate professor of epidemiology in the UF College of Medicine's department of epidemiology and health policy research and the study's senior author.

Researchers at the two academic health centers and at the Centers for Disease Control and Prevention examined long-term data on state-level exemption rates at school entry and the incidence of pertussis for individuals 18 years or younger. They found that nonmedical exemption rates were higher and increasing in states that permitted exemptions based on personal belief and in states where exemption processes were less arduous. Those states also were strongly associated with higher incidence of pertussis.

"Our study shows an increase in the number of children exempted in states that make exemptions widely available," Omer said.

Pertussis - a highly contagious but preventable disease - is endemic in the United States. According to the CDC, the incidence of the disease has increased nationwide in the last 20 years, with 25,827 cases reported in 2004, the most recent data available.

Pertussis is caused by a toxin produced by a bacterium that is spread through person-to-person contact, coughing and sneezing. It is more severe in infants and young children, who consequently have a greater risk of pneumonia, seizures, encephalopathy (a brain disorder) and other potentially deadly complications.

In a study published last year, the researchers found the No. 1 reason why parents refuse vaccines and claim exemptions are concerns about vaccine safety, despite strong scientific evidence that vaccines are extremely safe.

"There are also differences between parents of vaccinated and unvaccinated children in perceived susceptibility to and severity of (vaccine-preventable) diseases, perceived efficacy of vaccination and trust in their government," Salmon said.

Children who are not vaccinated are at increased risk of contracting disease and passing it on to others. Among those vulnerable are children too young to be vaccinated, those with a valid medical reason for not vaccinating or those who are vaccinated but have not had a sufficient immunological response to fight off the disease. Protection in people who are vaccinated decreases over time, in what health experts call "waning immunity."

The researchers propose that a balance be struck between parental autonomy and public health mandates. Health-care professionals and public vaccine information campaigns need to do a better job at risk communication for parents who have real concerns, and the exemptions must be more difficult to obtain, the authors said.

'Dream is now reality'

for proton center

By Tom Fortner

The University of Florida Proton Therapy Institute, perhaps the most eagerly anticipated project in the history of the College of Medicine, made an auspicious debut Oct. 13 in front of about 250 friends and supporters on the campus of the UF Health Science Center in Jacksonville.

Although operational since August, the formal dedication ceremony marked the emotional peak for a facility that was both technically challenging and expensive to build. Yet there seemed to be little doubt among those assembled that the cost and hard work will be easily outweighed by lives saved and suffering avoided in the fight against cancer.

C. Craig Tisher, M.D., dean of the College of Medicine and the person widely acknowledged to be the driving force behind the project, cited a quote by the writer Goethe that best described his sense of the day's significance: "Dream no small dreams, for they have no power to move the hearts of men."

"I would submit to you," he continued, "that this was no small dream, and that our dream has moved the hearts of literally hundreds of individuals. Indeed, the dream is now a reality."

The opening of the 98,000-square-foot, $125 million facility comes eight years after the initial proposal but, remarkably, only three years after construction began. It is only the fifth facility of its kind in the United States and the only one in the Southeast.

Proton therapy is a precise radiation treatment that destroys cancer cells and minimizes damage to healthy tissue. This results in higher cure rates, a low incidence of side effects and fewer long-term effects. Proton therapy is especially beneficial for treating cancer in children and in adult cancers located in sensitive areas like the head, neck, lung, breast and prostate.

The cancer treatment facility houses both conventional radiation and proton therapy, and when it is at capacity will deliver proton therapy to 150 to 200 patients a day.

PHOTOS BY SARAH KIEWEL

"We are so thankful to see this day finally arrive," said Stuart Klein, who was recruited 18 months ago to serve as the institute's executive director. "It has taken a collaboration of many public and private sector partners, along with a dedicated team of radiation oncologists, physicists, engineers, computer scientists and community leaders, to make this facility happen."

Notable ceremony speakers included John Peyton, mayor of Jacksonville; UF President Bernie Machen; Pierre Mottet, CEO of IBA, the Belgian company that specializes in building particle therapy facilities; Nancy Mendenhall, M.D., the institute's medical director; and Russell B. Newton Jr., a Jacksonville citizen who has been influential in raising private support for the facility.

Also on hand was Ben Smith, a Cocoa Beach man who was the first person treated in the facility.

But the day belonged primarily to Tisher, who announced last summer that he will step down as dean next year.

Machen recognized Tisher for the "incredible effort to make this day happen."

"This project is living testimony to the vision, the ingenuity and the fortitude of one person," he said, "and that person is Craig Tisher."

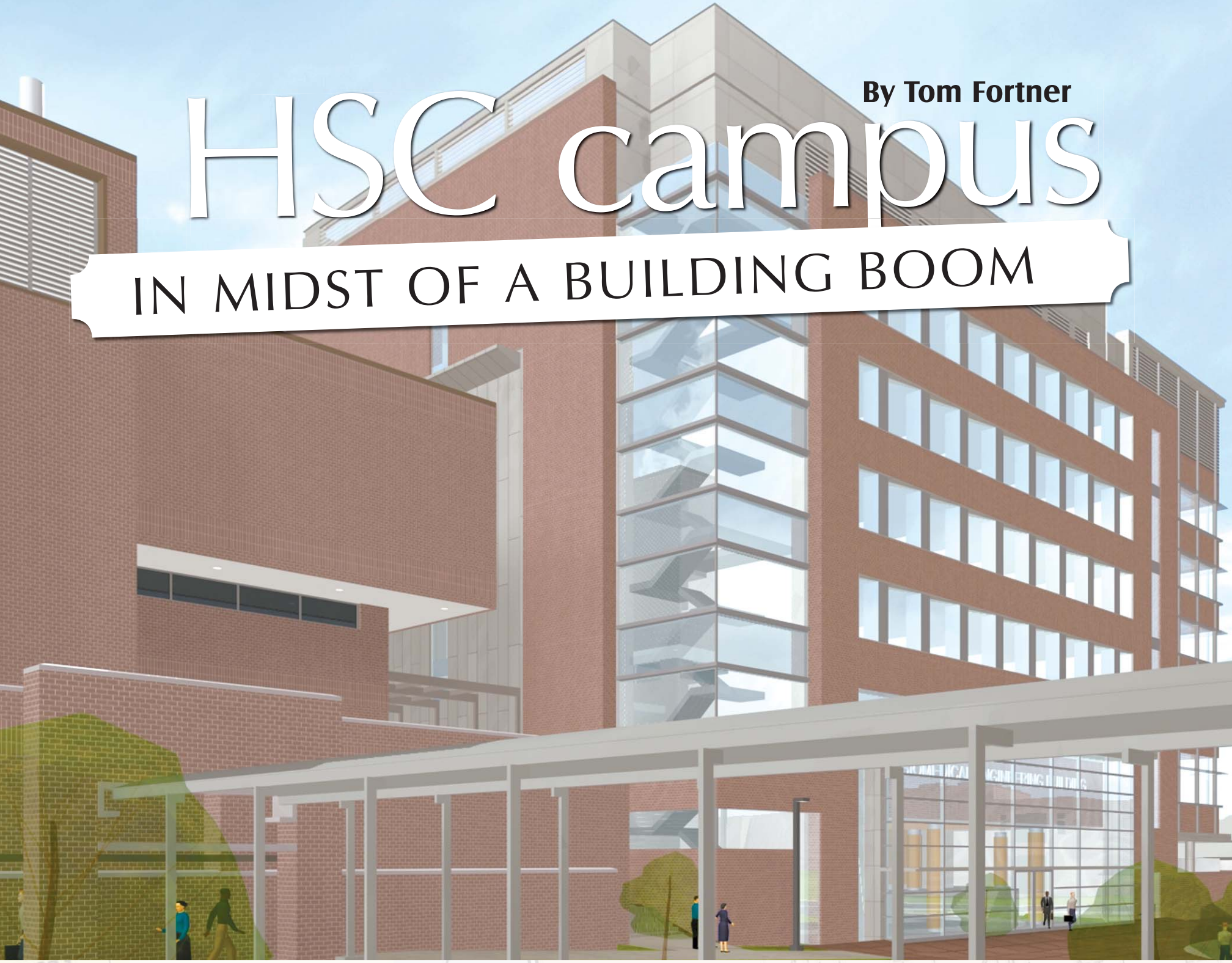
For more information about institute, visit www.floridaproton.org.

At the dedication of the UF Proton Therapy Center Oct. 13 in Jacksonville, College of Medicine Dean Craig Tisher (top photo, at lectern), who shepherded the project from beginning to completion, addressed participants. Ben Smith (bottom left photo), from Cocoa Beach, Fla., was recognized as the first person to receive proton therapy at the institute. Visitors stream into the facility after the ceremony.

HSC campus

IN MIDST OF A BUILDING BOOM

By Tom Fortner



An artist's depiction of the Biomedical Sciences Building (above) shows the extensive use of glass in offices and a two-story, glass-walled lobby that fronts the HPNP plaza. A patio at the rear of the building (far right) reflects the intent to make better use of the outdoor spaces adjacent to the existing Communicore and Basic Science Building. The new facility will be constructed on the site of the Communicore loading dock, in photo at right.

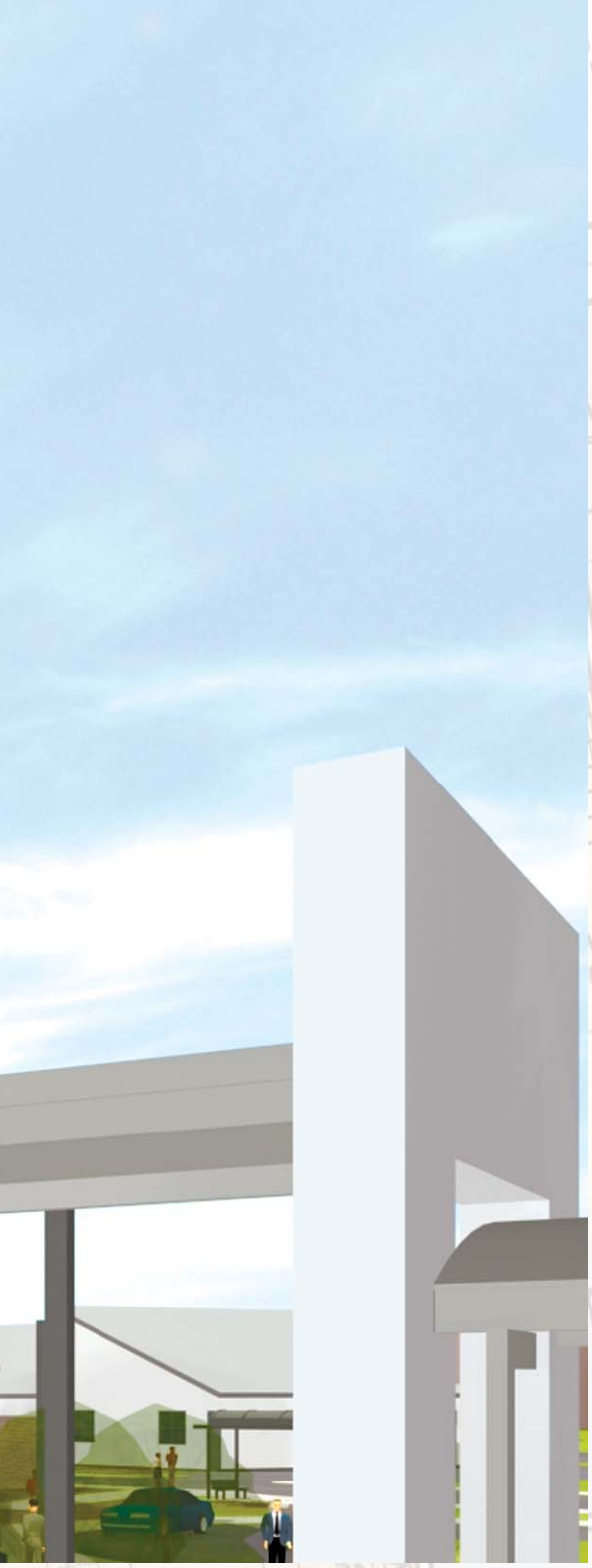
In the memorable words of a prizefight announcer, "Ladies and gentlemen, let's get ready to rummmm-blllllle!!!"

In this case, the rumbling won't come from a boxing ring surrounded by a throng of spectators, but jackhammers, power saws and pile drivers set to begin construction on a new building close to the heart of the Health Science Center.

When it's completed in early 2009, the six-story, $94 million Biomedical Sciences Building will be an architecturally stunning anchor on the western end of the plaza encircled by the McKnight Brain Institute, the Academic Research Building, the recently face-lifted Communicore and the HPNP Building. But until then, it's likely to be an inconvenience, and occasionally a disruptive force, in the life of the HSC.

The BMSB, as it's called, is just one of a spate of buildings either under way or planned for the near future that represent a building boom for the health sciences. A quick rundown:

- Faculty and staff have just occupied the Cancer and Genetics Research Complex.
- Work is under way on a nanoscience building – which has a significant health science presence – just up the hill on Center Drive.
- A building to house the newly created Emerging Pathogens Institute should get started next summer.
- Shands is building a new patient tower focused on cancer south of Archer Road and is partnering with the College of Medicine to build an outpatient surgery center behind the Orthopaedics and Sports Medicine Institute.
- The College of Veterinary Medicine is completing plans for a building that will include a small animal teaching hospital.
- Before the decade is out, HSC leaders hope to get started on a state-of-the-art facility that will replace the Communicore as the center of educational activities and the home of the HSC Libraries.



Building boom? Miles Albertson, associate director of facilities planning and construction at the Health Science Center, agreed that the pace of building has picked up over a three- to five-year period, particularly for research buildings. That pace is consistent with a strategic vision of the future prominence of UF's research effort, according to Win Phillips, D.Sc., the university's vice president for research.

"UF is building an unprecedented number of interdisciplinary research buildings," he said. "From cancer and genetics to nanoscience and from basic biological sciences to emerging pathogens, UF will be at the forefront and have forward-looking programs to conduct cutting-edge research. This expansion of research facilities will be a cornerstone of UF's future in research, helping attract and facilitate the work of world-leading faculty."

Of all those projects, none is likely to be more daunting than the BMSB. Construction crews have already begun preparing the site for the new building – the loading dock abutted by the Communicore and the Basic Sciences Building. Through the first of the year, they will be fencing off the site, moving the northbound bus stop on Center Drive and relocating existing underground utilities.

The first noisy activity will occur in March and continue through June, when workers begin demolishing the concrete loading dock, driving piles to shore up adjacent walls and compacting soil.

"That's the activity that's going to be most disruptive to the university because it's going to be noisy and it's going to be messy," said Lorne Bazzle, a construction superintendent with Whiting-Turner, the construction manager, at a kind of town meeting on the project held in September.

Frank Javaheri, the university's point person in managing the BMSB effort, said "This is a very challenging project. It's an infill project, between five active occupied buildings."

The proximity of those buildings means that Javaheri and others will be working diligently to mitigate the effects of noise, vibration, utility interruptions and detours. But he concedes there's a certain amount of unpleasantness that can't entirely be avoided.

"Noise is noise," he said. "We can't stop that, obviously."

Those negative effects will diminish when the frame of the building starts going up this summer. Moreover, a separate project to replace chilled water pipes that has disrupted the plaza for several months is slated to conclude in March.

In the end, when the building is completed in early 2009, the result should be worth any temporary irritation. The design features lots of glass on the north and west facades, a handsome two-story glass-walled atrium on the ground floor and exterior improvements to adjacent no-man's-land areas like the walkways and loading dock on the west side of the Communicore.

"It's a building in massing and content and materials that really fits in, and we think it will be a good neighbor to those around it," said Dominick P. Roveto, an architect with Ellenzweig Associates, which helped design the building with a second firm, Hunton Brady.

The nearly 90,000-square-feet of research space will be divided among three major users. They include a burgeoning Biomedical Engineering program, Animal Care Services and strategically important medical research programs in neuroscience, autoimmune diseases and stem cell biology.

That extra laboratory area – plus what will be provided by nanoscience and emerging pathogens – will make a significant dent in the shortage of dedicated research space that has been a primary focus of Senior Vice President for Health Affairs Doug Barrett, who says his focus has already shifted to meeting the educational and clinical space needs of the health center colleges.

"Over the past five years, we have attacked the single biggest limitation to research growth – a serious shortage of laboratory and research space within the Health Science Center," Barrett said. With what's on the drawing board, he said, "we will have the facilities to catalyze real growth in our research capabilities."

The building will also house a large teaching laboratory dedicated to exposing gifted undergraduates to cutting-edge life sciences research through the university's partnership with the prestigious Howard Hughes Medical Institute.

That ground floor lab opens onto an attractive lobby

Continued on page 14

PHOTO BY SARAH KIEWEL

fronted with a soaring glass façade that marks the main entrance to the building. At the rear of the BMSB, just below the elevated walk leading to the Sun Terrace, a patio with plantings, tables and an overhead trellis will provide a shady spot for people to meet and mingle.

Such "architectural amenities," said Albertson, have thankfully become the norm for new buildings on campus. Recent projects – think the Brain Institute and the HPNP Complex – are a far cry from the featureless, no-frills structures built in the 1970s, when most UF construction was managed by the Division of General Services in Tallahassee.

"We didn't have consistent campus standards that governed aesthetic appearance," said Albertson of that era. "Today, through UF's Board of Trustees and administration, we manage all that construction ourselves and control the standards that we live by."

That aesthetic sensibility is inconsistent with the existing Communicore loading dock, which will be gutted and reconfigured by the BMSB. Trucks will still make deliveries to the new building, but the delivery area will be disguised and larger, 18-wheel trucks will be handled exclusively by the loading dock at the dentistry building. Indeed, the BMSB is the first step in a long-term effort to beautify the area along Center Drive.

Said Albertson, "We are cosmetically upgrading the west face of the Health Science Center."

Despite its good looks, the new building still represents an efficient use of resources. The wet lab areas have the open design now in vogue, prized for their flexibility.

"We're using every square inch of the footprint, maximizing the space available for research," Roveto said.

The project also incorporates a long-sought capability of the HSC administration: an emergency backup generator to power critical services during power outages. And the entire project will be coupled with a badly needed renovation of the basement of the Communicore, where about half of the space will essentially be gutted and rebuilt. Existing biosafety Level 3 labs will be expanded, but will be off-line for most of the 10-month project.

All that progress comes with a price tag, and unfortunately it's been going up over the last four or five years. Albertson said the construction sector is experiencing a "cost explosion for labor, materials – everything."

The reasons for the inflation are as exotic as competition from the economic boom in China and as basic as the price of gas. But the effects are dramatic. For example, Cancer-Genetics, at 250,000 gross-square feet, is nearly half again as large as the BMSB but will wind up costing about $8 million less, even though the buildings are otherwise comparable.

Despite the high costs of construction, university officials are forging ahead to meet their ambitious goals. And while hard hats and earplugs may be standard academic regalia for a few months, it will all be over soon. Until the next building.

For a schedule of construction activities and more details about various projects, visit www.facilities.ufl.edu.

PHOTO BY SARAH KIEWEL

Located just a hammer-throw away on Center Drive from the BMSB project, the site for the nanoscience facility is being prepared. When work is completed in December 2007, a state-of-the-art facility will catalyze UF efforts in nanotechnology.

AT A GLANCE: OTHER CURRENT PROJECTS

Project: Nanoscience Institute for Medical and Engineering Technology

Square feet: +70,000

Estimated cost: $39 million

Completion date: December 2007

Comment: Will establish and maintain state-of-the-art fabrication and characterization facilities for leading-edge research in nanoscale science, nanotechnology and nanomedicine.

Project: Emerging Pathogens Institute facility

Square feet: 100,000

Estimated Cost: $55 million

Completion date: Early 2009

Site: Undetermined, but likely west of Cancer-Genetics

Comment: Various College of Medicine, College of Veterinary Medicine, CLAS and IFAS programs will jointly use a common facility to pursue research initiatives that will focus not only on human diseases but plant an animal pathogens that could directly or indirectly affect human health as well.

New simulation space dedicated to anesthesiology professor

PHOTO BY SARAH KIEWEL

Dr. J.S. Gravenstein arrives at the UF College of Medicine at 7 a.m. most days to teach medical students and anesthesiology residents using the Human Patient Simulator, the technology that he and several UF faculty members developed.

By April Frawley Birdwell

Beep... beep... beep...

The medical students crowded around J.S. Gravenstein, M.D., as he prodded them for answers about the patient before them. What did they expect to see, Gravenstein asked his pupils, the heart monitor's ringing cadence building speed. Beep, beep, beep, beep…

"Let's start over," Gravenstein said, signaling to the technician in the back of the room. "Let's try this again."

A few keyboard clicks later, Stan the Human Patient Simulator, was back to a normal heart rate. The residents resumed solving his case of hypotension, just one of hundreds of programs Stan runs to help students and residents learn concepts difficult to safely teach with actual patients.

Gravenstein, 81, a UF graduate research professor emeritus of anesthesiology, arrives at 7 a.m. most days to teach residents using the simulator, something he's been doing since he and his UF colleagues developed the technology—although his sessions have never been in such cozy environs. Stan recently moved to his new space, aptly titled the Center for Simulation and Learning Technology, in a revamped room in the Communicore Building.

It's the first space specifically designed for the Human Patient Simulator at UF, said Gravenstein, detailing its benefits, namely more room and an audio response system. Using the technology in the new simulator space, he also hopes to broadcast lessons to wider audiences. What he doesn't mention is the plaque on the wall, honoring his years of dedication to using simulation in medical education. He isn't one to talk about his own accomplishments. That would be immodest.

"He dedicated his life to improving patient safety and physician education in anesthesiology," said Tammy Euliano, M.D., a UF associate professor of anesthesiology who also uses the simulator to teach students. "He's indispensable to our department."

Gravenstein has never been one to stick to convention in his teaching, said son Nik Gravenstein, M.D., chairman of the College of Medicine's anesthesiology department. The idea for developing a simulator at UF was born when then-resident Michael Good, M.D., suggested to Gravenstein that a simulator might help residents understand what an anesthesiologist is doing in the operation room.

"His curiosity and his enthusiasm rubs off on the people around him," Nik said. "(The simulator), which is something that nobody could imagine how it would turn out in the '80s, has now become an industry with worldwide impact."

His curiosity and creativity are perhaps part of the reason Gravenstein emigrated to the United States from Germany in 1952, his son said. Harry Beecher was the biggest reason, though. The renowned anesthesiologist invited Gravenstein, who had graduated from medical school in Germany after World War II, to come to Massachusetts General Hospital in Boston as a resident.

He took the position, but once in Boston, he quickly sensed that his German medical education may have been lacking. Listening to his American colleagues, he thought, "What on Earth are they talking about?" Gravenstein remembers.

"German science, which was excellent pre-World War I, and internationally recognized, went downhill (under Hitler's leadership)," he said. "Many of the teachers left, others had not returned from (World War II), they had been killed. The education suffered."

While a resident, Gravenstein enrolled in Harvard Medical School to catch up. When he was appointed chief of anesthesiology at UF's fledgling College of Medicine in 1958, months before he would actually start, he was technically still in medical school.

Gravenstein was the first, and only, member of the anesthesiology department when the teaching hospital, now Shands at UF, opened in 1958. Aside from 10 years at Case Western Reserve University, he's been at UF since then.

In 1986, Gravenstein, along with Good, Sem Lampotang, Ph.D., and other UF researchers, began developing the Human Patient Simulator. The simulator took 10 years to produce, Gravenstein said.

"About half of U.S. medical schools have them now," he said. "And they're evolving even further."

Gravenstein is also trying to find new ways to use the simulator to teach not only medical students and residents, but also high school students and teachers.

"I think most people really don't have any notion as to the scope of his creativeness, whether it's writing children's stories or playing a musical instrument," Nik said. "It's this continued intellectual creativity, but it's not just in medicine, it's in life."

He even found time recently to give his wife of 57 years a lifetime achievement award, an honor similar to the one the UF College of Medicine gave him in 2005. He gathered all eight of their children and their families together earlier this summer for a black-tie event to celebrate her.

"I thought if anybody deserves an achievement award it's my wife, because after she is retired from being mother and wife, her achievements will still be running around," he said. "(Children are) a continuation, rather than something that is quickly forgotten."

Constance Haan, M.D.

Haan named associate dean for educational affairs

By Patricia Bates McGhee

For Constance Haan, M.D., a cardiothoracic surgeon in the College of Medicine–Jacksonville, accepting the opportunity to take on the role of associate dean for educational affairs was a no-brainer. Her new position is consistent with the direction of her career path, she says, only now she's moving from helping one patient at a time to effecting change on a broader scale.

"My professional interests beyond cardiac surgery include improving quality and decreasing disparities in health and health care delivery, as well as contributing to educational techniques and objective measures of educational effectiveness," she said. "I continue to value each patient I care for, just as I always have."

A graduate of the University of South Dakota medical school, Haan completed two residencies—one in general surgery at University Hospital in Boston and another in cardiothoracic surgery at Ohio State University Hospitals—followed by a fellowship in cardiothoracic surgery at Beth Israel Deaconess Medical Center in Boston. She is board-certified in both cardiothoracic and general surgery

Haan says current trends in graduate medical education mirror trends both in education and in health care—with the goal of seeking measures and measurable outcomes for performance and effectiveness.

"In undergraduate and graduate medical education, we are working to substantiate that we are graduating safe, competent, effective and compassionate professionals," she said. "Traditionally, we have tracked test scores and board certification rates as our educational outcomes. But now we, and our accrediting bodies, are working to demonstrate that high-quality education is linked to high-quality patient care and clinical outcomes."

Already UF faculty members, in collaboration with Shands Jacksonville, have been working on measurable improvements in quality of care processes and outcomes, says Haan. "Now we are being asked to link this work to our educational programs, while at the same time prepare our trainees for careers that contribute to monitoring and improving quality of care."

With these goals in mind, Haan looks forward to maintaining and enhancing high-quality undergraduate and graduate medical education programs on the Jacksonville campus of UF's College of Medicine.

"My role will be to assist and guide programs and program leadership with the transition to greater and more meaningful use of data and quality improvement techniques," she said. She also hopes to "further enhance the infrastructure needed to prepare physicians for lifelong learning and for roles as leaders and innovators in a rapidly evolving, highly technical profession."

Haan also plans to prepare physicians to identify the communities they, individually, can best serve. "I will help our young professionals develop the framework from which to consider and address the health and health care needs of the community they serve—however they may define that community, local or global," she said.

> "In undergraduate and graduate medical education, we are working to substantiate that we are graduating safe, competent, effective and compassionate professionals."
>
> — Constance Haan, M.D.

PHOTO BY SAM BRILL

Dentistry's "Jawbreakers," rock 'n' rollin' professors include (from left) Jack Jones, Ron Watson, Matthew Dennis and Lawrence Brock (kneeling) at the college's 2005 holiday party.

Dental profs get in the groove

By Adrianna C. Rodriguez

At the College of Dentistry, rock 'n' roll is here to stay, thanks to the Jawbreakers—four professors-turned-rockers who don't mind trading in their dental gear for drumsticks and guitars.

As the Jawbreakers, dental faculty Matt Dennis, D.D.S., Larry Brock, D.M.D., Ron Watson, D.D.S., M.A.E., and Jack Jones, D.M.D., specialize in rock 'n' roll classics from the 1960s and '70s.

"Students don't think you can do much else than teach dentistry, so they're always amazed we can do other things and have hobbies," said Watson, an associate professor of operative dentistry.

After playing together for 18 months and meeting almost weekly for practice sessions, the group has established a 50-song repertoire that includes hits from the Eagles, The Beatles and Tom Petty & The Heartbreakers.

The band—which features Brock as the drummer, Dennis as lead singer, Jones (an assistant professor of prosthodontics) on the bass guitar and Watson on the guitar—has been featured at several dental school events, including the end-of-the-year holiday party and senior banquet in May.

Although band members enjoy practicing and performing, they agree one of the top perks of being a Jawbreaker is the reaction from students when they find out their professors are in a rock band.

"Most students think it is cool when the faculty shows an interest in their activities," said Dennis, a clinical assistant professor of operative dentistry. Dennis said he especially enjoys performing "Free Fallin'" by Tom Petty, because of the Gainesville connection and because "his vocals aren't too hard to copy."

The doctors also said being in a band helps bring out shared interests between them and their students.

"It gives you another level of communication," said Brock, an assistant professor of periodontics.

In the past, the Jawbreakers have invited talented UFCD students to sing and perform with the band.

"I only wish we could play more of the songs that they like, but I'm still trying to figure out how to work an iPod, so it may be a while," Dennis said.

Simulated practice makes perfect

By Patricia Bates McGhee

Training today's surgical residents in the latest laparoscopic and minimally invasive techniques is essential to a comprehensive surgical residency. And using state-of-the-art simulation equipment may be one way to improve their training experience, according to Ziad Awad, M.D., an assistant professor of surgery and director of minimal invasive surgery in the College of Medicine–Jacksonville.

"Laparoscopic training is evolving to include educational models that have been linked to improvements in intraoperative skills," he said. "Our aim is to develop a proficiency-based curriculum that effectively develops laparoscopic intracorporeal skills that translate to the operating room."

In Jacksonville surgical residents develop these skills by working with low-cost, foam rubber "organs" in the Center for Simulation Education and Safety Research, or CSESaR, a collaborative effort supported by the College of Medicine–Jacksonville and Shands Jacksonville Medical Center. "The hands-on, repeatable training improves operative efficiency and has a significant impact on technical safety," Awad said. "It also allows them to learn 'the feel' of laparoscopic instruments and give them a zero-pressure environment to learn how to cut and suture tissue with those instruments."

PHOTO BY NELSON KEEFER

Fourth-year surgery resident Susanne Tracy, M.D., hones her intracorporeal suturing skills on a foam-rubber stomach during a minimally invasive surgery lab under the direction of Ziad Awad, M.D., an assistant professor of surgery and director of minimal invasive surgery in the College of Medicine–Jacksonville.

UF veterinary students honored in animal reproduction group's competition

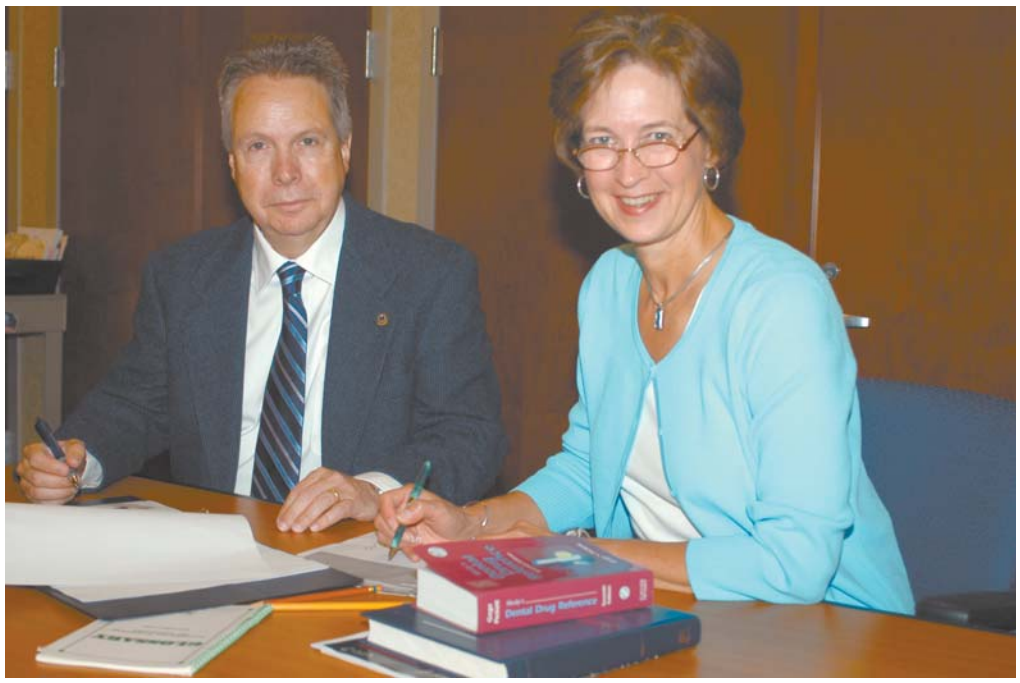
Three students from the UF College of Veterinary Medicine, including one who tied for first place, were among the six winners of the 2006 Society for Theriogenology's annual student case presentation competition.

Theriogenology is the study of animal reproduction. Winners are chosen based on abstracts submitted, and 17 abstracts were considered this year. Each of the six winners gave a 10-minute presentation on specific cases at the society's recent annual meeting, held in St. Paul, Minn.

Courtney Riley, a senior veterinary student, tied for first place and received $650 for her abstract, titled "Medical Treatment of a Kerry Blue Terrier with Prostatitis and Poor Sperm Quality." Her classmate, Erin Sellers-Newkirk, received $450 and third-place honors for her abstract, titled "Sry-negative Sex Reversal in a Pug." Tonya Stephens, a sophomore, received fourth place for her presentation, titled "Bilateral Seminoma in a Stallion."

Tonya Stephens, '09, left, Dr. Bruce Christensen, Courtney Riley, '07, and Erin Sellers-Newkirk, '07 competed successfully in the Society for Theriogenology's annual student case presentation competition.

Duo wraps up review of National Board Dental Exam questions



By Lindy McCollum-Brounley

Arthur Nimmo, D.D.S., F.A.C.P., above left, a professor of prosthodontics at the UF College of Dentistry, and Margot L. Van Dis, D.D.S., M.S., a professor of oral and maxillofacial radiology at the Indiana University School of Dentistry, have completed their six-year terms of service on the American Dental Association Consultant Review Committee for the National Board Dental Exam.

"It's been a tremendous learning experience because our skill sets complement each other," Nimmo said. "I'm more the 'hands-on' clinician and Dr. Van Dis is more the scientist-clinician, so we really worked well as a team."

As consultants, the duo reviewed every question on Part II of the National Board Exam for content, format, grammar and verification of radiographs and clinical photographs in the clinical cases. All U.S. dental students take Part II of the National Board Dental Exam in their senior year prior to completing state boards to become licensed to practice dentistry.

"Drs. Nimmo and Van Dis together have an exceptional blend of clinical experience and science and have been very effective in analyzing the exam questions each year," said Debra L. Willis, coordinator of test development for the ADA.

Nimmo is a diplomate of the American Board of Prosthodontics and Van Dis is a diplomate and past president of the American Board of Oral and Maxillofacial Radiology. They have previously served five-year terms on their respective test construction committees prior to moving up to the Consultant Review Committee.

Nursing students excel at convention

UF nursing students brought home their own championship in late October. The UF chapter of the Florida Nursing Students Association was named Chapter of the Year at the organization's state convention. The award is the highest honor given at the convention and recognizes the chapter with the highest level of accomplishments and community service.

The UF chapter has been active in community service projects like the March of Dimes walk, where they raised the most money from any non-Greek organization and were named most spirited team, and in donating time to the Suwannee River Area Health Education Center. They also helped to educate more than 400 area high school students on the importance of the nursing profession at a local career fair.

In addition, two UF nursing students were elected to the FNSA State Board. Meghan Bullard, president of the UF chapter of FNSA, was elected Region 2 Director and Community Health Chair, and Camille Hanson was elected Region 1 Director and Nominations and Elections Chair.

Faculty adviser Joan Castleman, a clinical associate professor, was given the Community Health Faculty Award at the convention. She was nominated by her students. — Tracy Brown Wright

The UF chapter of the Florida Nursing Students Association was named Chapter of the Year at the organization's state convention.

Andresen named chair of department of epidemiology and biostatistics

By Jill Pease

Elena Andresen, Ph.D.

Epidemiologists study the factors that affect the health of individuals and populations in an effort to influence preventive health-care policy. But what happens after someone gets sick? What are the long-term consequences of disability and chronic illness? Those are questions that Elena Andresen, Ph.D., a professor and chair of the College of Public Health and Health Profession's new department of epidemiology and biostatistics, hopes to answer.

"I care about why people get sick," Andresen said. "That's typical of epidemiologists, but I also find myself drawn to the question of what happens next, what are the health outcomes and quality of life, rather than the causes of illness."

Andresen is among a handful of epidemiologists who are studying disability and rehabilitation, and her expertise landed her a spot on the Institute of Medicine's prestigious Committee on Disability in America. The committee is examining the gaps in disability science and recommending actions to reduce the impact of disability on individuals and society.

Andresen, whose research is largely funded by the Centers for Disease Control and Prevention, is also a member of the International Society for Quality of Life Research.

"Our group develops measurements for use in clinical trials and population research to predict quality of life outcomes in much more personal ways," she said. "So, for example, instead of saying that therapy has improved function in a patient's left knee, we look at it from the patient's perspective. Has the patient's quality of life improved? If not, then perhaps we should look at other therapies for the patient instead of focusing on the left knee."

In addition, Andresen is working on several studies examining the challenges for people who provide home care for family members with disability. She also is a research health scientist at the Rehabilitation Outcomes Research Center of the North Florida/South Georgia Veterans Health System.

"Through my research, I'd like to determine how to intervene to make sure that quality of life and access to care are equal for everyone," Andresen said. "We're not there yet, but we are working on it."

Andresen's vision for the department of epidemiology and biostatistics is to meld the two disciplines' strengths in public health teaching and research with the work of the college's clinical specialists in disability and chronic conditions.

"The goal is to develop an increasing critical mass of faculty members who do what their disciplines do and do it very well, but also expand into the areas the rest of the college has to offer," Andresen said. "We can't limit ourselves to the classic teaching and research in epidemiology and biostatistics. We have a community of disability and aging experts here in the college to grow with. There isn't another public health program that has this opportunity anywhere in the United States."

> "I care about why people get sick. That's typical of epidemiologists, but I also find myself drawn to the question of what happens next, what are the health outcomes and quality of life, rather than the causes of illness."
>
> — Elena Andresen, Ph.D.

COLLEGE OF MEDICINE


Bautista

MIHO BAUTISTA, M.D., a clinical assistant professor with the department of aging and geriatrics, has received a fellowship from the Advanced Postgraduate Program in Clinical Investigation sponsored by the College of Medicine. The fellowship will provide partial tuition and fees as she pursues a master's degree in science in the next two years. In addition, Bautista received an APPCI Faculty Award, also from the College of Medicine. The $100,000 award will support her efforts to obtain the knowledge and skills needed to be an independent clinical researcher.


Byrne

BARRY J. BYRNE, M.D., has been named to a two-year term as chair of the National Institutes of Health's Skeletal Muscle and Exercise Physiology Study Section. Members of NIH study sections review grant applications for their scientific merit. Byrne, the Virginia Root Sutherland professor of pediatrics and director of the Powell Gene Therapy Center, was selected on the basis of his scientific achievements and leadership abilities.


Gibbs

C. PARKER GIBBS, M.D., an associate professor in the department of orthopaedics and rehabilitation, has been awarded $306,185 from the National Cancer Institute at NIH to conduct a two-year study to examine if stem-like cells in bone cancer are capable of causing tumors in living tissue.


McGarry

SEAN MCGARRY, M.D., a fellow in the department of orthopaedics and rehabilitation, was awarded a Zimmer Orthopaedic Fellowship. This fellowship allows McGarry, an orthopaedic surgeon, to spend one year in the laboratory as a basic science researcher investigating issues related to osteosarcoma.


Normann

SIGURD NORMANN, M.D., Ph.D., a UF professor of pathology and division chief of cardiovascular pathology in the college, was one of four UF faculty to receive the 2006 Distinguished Faculty Award.

Normann was honored during UF's Homecoming festivities. Faculty members are nominated for the prestigious award each year by their peers.

Normann earned his medical degree and doctorate at the University of Washington. He joined the UF faculty in 1968 after spending two years on active duty with the U.S. Army. He has served as division chief of cardiovascular pathology since 1975.

Normann also received the College of Medicine's Lifetime Achievement Award in 2004, was chosen as the college's Teacher of the Year in 1995 and received the Basic Science Teacher Award from the 2006 graduating class.


Pepine

CARL J. PEPINE, M.D., has won an APEX Award of Excellence for a column he published recently in *Today in Cardiology*.

His article, titled "From the Editor—Keeping Imaging Procedures In House: Why It Makes Sense," was selected from among hundreds of entries in the 18th Annual Awards for Publication Excellence competition, sponsored annually by Communications Concepts Inc. to recognize professional communicators.

Pepine is chief of cardiovascular medicine at UF's College of Medicine and chief medical editor of *Today in Cardiology*, a monthly publication designed to provide timely clinical news to practicing cardiologists.

ALBERT L. RHOTON, JR., M.D., a professor of neurosurgery, received the Congress of Neurosurgeons Founders' Laurel award at the group's annual meeting last month.

The award is given each year in recognition of contributions to the field of neurosurgery.

Rhoton, who earned his medical degree from the Washington University School of Medicine, is considered the father of microscopic neurosurgery. He began holding microsurgery courses for neurosurgeons at UF in 1975, and has trained dozens of fellows and residents in microsurgery. He also developed a line of surgical instruments that can be used in microsurgery.


Rhoton

COLLEGE OF NURSING


Horgas

ANN HORGAS, Ph.D., R.N., an associate professor of nursing, has received the Rose and George Doval Award for Excellence in Nursing Education.

Horgas, the college's associate dean for research, was recognized by New York University's College of Nursing for her progressive efforts in nursing education. Horgas will receive the award this month at the 19th Annual 2006 Celebration for Nursing Excellence in New York City.

Horgas, has been at UF since 2000, and is one of the country's leading nurse researchers on pain and aging. She is currently conducting a National Institutes of Health-funded study on methods to assess pain in nursing home residents with dementia.

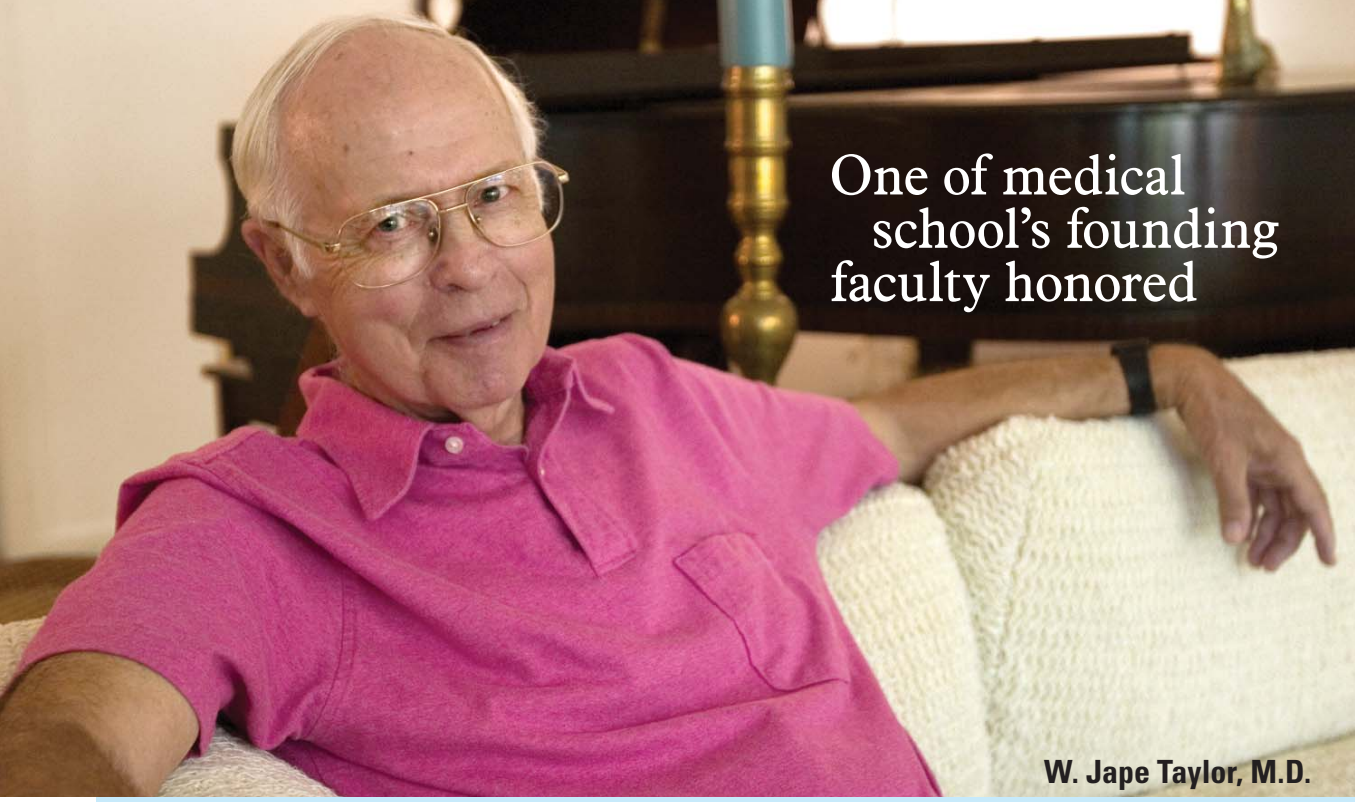
COLLEGE OF VETERINARY MEDICINE

MELISSA BOURGEOIS, a senior, recently received third place in the annual J. Fred Smithcors essay contest sponsored by the American Veterinary Medical History Society.


Butterweck

VERONIKA BUTTERWECK, Ph.D., and **HARTMUT DERENDORF**, Ph.D., co-directors of the Center for Food and Drug Interaction Research and Education, have received a $317,933 grant from the U.S. Department of Agriculture to investigate grapefruit juice interactions with a cholesterol-lowering drug. The one-year grant supports the UF center's mission through a systematic investigation of the interaction between grapefruit juice and simvastatin, or Zocor, in a time- and dose-dependent manner. The investigation will also assess the potential of clinically relevant drug interactions when the drug is taken regularly with grapefruit juice. Hartmut Derendorf, Ph.D., a distinguished professor and chair of pharmaceutics, will also serve for two years as the 2006-07 president of the American College of Clinical Pharmacology, a national association that works to advance the science of clinical pharmacology and educational efforts in the public interest.

ACCP Past-President, Lawrence Lesko, left, director of the FDA Office of Clinical Pharmacology and Biopharmaceutics, passes the gavel to incoming president, Hartmut Derendorf.



One of medical school's founding faculty honored

W. Jape Taylor, M.D.

PHOTO BY SARAH KIEWEL

One of the UF College of Medicine's founding faculty members, who many alumni say taught them everything they know about bedside diagnosis, has been named an honorary alumnus of the university.

W. Jape Taylor, M.D., will receive the prestigious honorary alumni award during a special reception at 1 p.m. Nov. 19 in the J. Wayne Reitz Union auditorium.

Taylor, a retired UF distinguished service professor of cardiology, had a reputation of being tough on his students. Students couldn't slip by if they presented a case to him unprepared in the hospital.

"I could be pretty demanding, but I did something they didn't recognize then," said Taylor, now 81. "I made sure I helped them ask the questions that would lead to the answers. They solved (the case)." If World War II had not intervened when he was a freshman at Yale University, Taylor may have become a mathematician or zoologist. After Pearl Harbor was attacked, Taylor was one of many college students the U.S. Navy recruited to attend medical school. He earned his medical degree in 1947 from Harvard Medical School.

He joined the faculty of the fledgling College of Medicine in 1958 as chief of the division of cardiology.

The class of 1973 honored Taylor's teaching with the Hippocratic Award, the highest distinction the senior class bestows on one of its professors each year.

Aside from teaching and his practice, Taylor studied the sickle cell phenomenon in deer for 20 years, and his research with colleagues on pregnant mice that ingested alcohol led to a greater understanding about the link between alcohol and birth defects. He also established Physicians for Social Responsibility, accompanying a group of students to the then-Soviet Union in 1990. Taylor retired in 1996.

"He was an admirable role model," said Robert T. Watson, senior associate dean of educational affairs and one of two College of Medicine alumni to nominate Taylor for the award. "A lot of things I do to this day are modeled after Dr. Taylor.

"He was a true legend in his own time."

— By April Frawley Birdwell

Bourgeois

In addition to pursuing her veterinary degree, Bourgeois is a candidate for the Ph.D. degree in the college's department of large animal clinical sciences. Her award-winning essay was titled "From 1946 to the Present — NASA's Contributions to the Veterinary Medical Sciences." Her award consists of $250, a copy of the Merck Veterinary Manual, a one-year subscription to the AVMHS newsletter and publication of all or part of her article in the newsletter.

Held to encourage interest in history from students enrolled in veterinary medical colleges in the United States, Canada and the Caribbean, the contest is named in honor of J. Fred Smithcors, D.V.M. Ph.D., founder of the AVMHS and an author of several books on veterinary history.

JAN SHEARER, D.V.M., a professor and dairy extension veterinarian at the University of Florida College of Veterinary Medicine, received The Ohio State University College of Veterinary Medicine's Distinguished Alumnus Award.

Shearer

The award recognizes alumni who have made distinguished contributions to society in the course of their professional careers and who have brought positive recognition to their college.

Shearer received the award last summer during commencement exercises at OSU.

JACKSONVILLE

THEODORE BASS, M.D., a professor of medicine and chief of the division of cardiology at the College of Medicine–Jacksonville, has been elected to a two-year term on the American Board of Internal Medicine Test Writing Committee on Interventional Cardiology. ABIM is the U.S. board that sets the standards and certifies the knowledge, skills and attitudes of physicians who practice in internal medicine and its subspecialties.

Bass

ABIM is an independent, not-for-profit organization whose certificates are recognized throughout the world as signifying a high level of physician competence. The only recognized board in the specialty of internal medicine, it is one of 24 certifying boards recognized by the American Board of Medical Specialties.

JAY SCHAUBEN, Pharm.D., a UF clinical professor of emergency medicine and pharmacy and director of the Florida Poison Information Center–Jacksonville, has been elected to the board of directors of the American Association of Poison Control Centers. AAPCC directors serve three-year terms and meet twice annually. A nationwide organization of poison centers and interested individuals, AAPCC sets voluntary standards for poison center operations and provides a forum to promote the reduction of morbidity and mortality from poisonings through public and professional education and scientific research.

Schauben

PUBLIC HEALTH AND HEALTH PROFESSIONS

LINDA R. SHAW, Ph.D., associate chair of the department of behavioral science and community health and director of the division of rehabilitation counseling, was elected president of the Council on Rehabilitation Education. The council accredits 103 master's programs in rehabilitation counseling throughout the nation and in Puerto Rico, and also maintains an undergraduate registry for programs in rehabilitation services and disability studies.

Shaw

ORIT SHECHTMAN, Ph.D., an associate professor in the department of occupational therapy, received the American Society of Hand Therapists' Evelyn Mackin Research Grant at the society's annual meeting in September in Atlanta. The society awards only one of the $5,000 grants each year. Shechtman studies the validity of grip strength measurement instruments and is currently developing new measures to evaluate patient's maximal grip strength.

Shechtman

PHHP researcher works to ease the burden of low back pain

By Jill Pease

With 80 percent of Americans experiencing low back pain at some time or another, it is little wonder that it is the leading cause of missed work and one of the most common neurological ailments, second only to headaches.

With two major studies under way, researcher Steven George, P.T., Ph.D., an assistant professor in the department of physical therapy at the College of Public Health and Health Professions, is working to make a dent in those numbers by preventing and reducing the impact of low back pain.

George was recently awarded a four-year $1 million grant to study low back pain prevention programs for U.S. soldiers. The funding came from the Department of Defense Peer Reviewed Medical Research Program of the Office of the Congressionally Directed Medical Research Programs Medical Research Program.

Low pack pain affects 150,000 active-duty soldiers a year and is the second-most-common reason for soldiers to seek health care, with injuries typically sustained during physical training or sports, said George, adding that soldiers with low back pain have the highest risk of disability five years after injury.

Researchers spearheading the Prevention of Low Back in the Military, or POLM, trial plan to start recruiting participants early in 2007. George is collaborating with fellow UF investigators Samuel Wu, Ph.D., and Michael Robinson, Ph.D., and with Maj. John Childs, P.T., Ph.D.; and Maj. Deydre Teyhen P.T., Ph.D., of the Army Medical Department Center and School at Baylor University. The research team will test prevention programs for 2,700 soldiers.

"This study could have a wider impact on health outcomes, as the programs we are studying could also be used by the general public," George said.

George is also the recipient of a $150,000 grant from the National Institutes of Health to test behavioral interventions for reducing chronic disability from low back pain. During the three-year study, he is examining whether women receive more benefit from the interventions than men do.

"Chronic low back pain is one of the most common forms of chronic pain and is a significant source of disability and cost for society," George said. "Not surprisingly, it is a common reason for health-care utilization and an effective treatment is a public health priority."

College meets fundraising goal to build new hospital thanks to $1 million estate gift

By Sarah Carey

A $1 million installment of a multimillion-dollar estate gift from a South Florida cattle ranch owner to the University of Florida College of Veterinary Medicine will help ensure the construction of the Veterinary Education and Clinical Research Center, which includes a new small animal hospital.

PHOTO COURTESY OF UF NEWS BUREAU

At the ceremony to present a gift of $1 million from Robin Weeks to the College of Veterinary Medicine are Warren Wiltshire Jr., left, of the firm representing Robin Weeks' Estate; Dr. Jim Thompson, Dr. Mike McNulty and UF President Bernie Machen.

College administrators said the gift puts the UF veterinary college just over its $4 million private fundraising goal. The college's financial commitment is expected to be matched and supplemented with additional state dollars to complete the project, which is estimated to cost approximately $50 million.

"Our hope is that groundbreaking for our new hospital will take place in 2008 and that the facility will be completed by 2010," said Jim Thompson, associate dean for students and instruction, who was interim dean at the time the first gift installment was received.

"The college and hospital faculty, staff and students know how fortunate they are to receive these gifts and to have the opportunity to continue to expand the health care of animals," Thompson added.

Warren Wiltshire, a UF alumnus and business partner of the personal representative of the estate of Robin Weeks, came to UF Sept. 23 to present the $1 million check to UF President Bernie Machen and college administrators.

With him was Mike McNulty, D.V.M., a mixed-animal practitioner and a member of the college's class of '83. McNulty was Weeks' veterinarian and friend for many years. Along with another "cowboy" friend, McNulty worked with Weeks' four herds of Brangus cattle, moving them from one pasture to another several times each year.

He also served as Weeks' pipeline for information when she decided to put the UF College of Veterinary Medicine in her will.

"I'll never forget, a few years before she died, I was leaving her ranch late on a Saturday afternoon and I told her, 'I'm going to stop and get a six-pack of beer and a lottery ticket.' She immediately replied, 'you've already won the lottery.'"

McNulty added, "I looked at her quizzically and she explained, 'with your education, you've already won the lottery.' She knew education was a sure ticket, if not to wealth and riches, at least to a better life. I've never forgotten that afternoon and appreciate it greatly every time I think about it."

Publix makes a $100,000 commitment to pharmacy education at UF

PHOTO BY LINDA HOMEWOOD

Presenting a check to Kelly Markey (right), UF College of Pharmacy director of development and public affairs, are Publix employees (from left) Betsy Guy, Publix pharmacy operations manager, and COP alumni Emily Fourman (class of '71), pharmacy manager, and Heather Hardin (class of '04), assistant pharmacy manager.

By Linda Homewood

Owing much of Publix pharmacists' education and training to the University of Florida, Publix Super Markets Charities has made a commitment to pharmacy education at UF. Pledging a $100,000 gift over five years, Publix joins the College of Pharmacy's efforts to meet the growing demand for pharmacists while promoting excellence.

The Publix charities organization was established by the founder of Publix Super Markets Inc., George Jenkins, to improve community life, said Betsy Guy, pharmacy operations manager.

The Publix gift will assist the college's distance education outreach campuses in St. Petersburg, Jacksonville and Orlando. The three pharmacy distance education sites combined with the Gainesville campus nearly doubles pharmacy student enrollment at UF, and that will go a long way toward meeting the growing demand for pharmacists in the state, said Dean William Riffee, Ph.D.

The expansion of the college's academic sites across the state coupled with greatly increasing enrollment has created a need for increased faculty and student support, Riffee said. The five-year gift helps by contributing to the college's Academy for Excellence, which fosters student and faculty participation at state and national conferences, in student leadership activities and in research competitions.

"The gift from Publix will ensure the quality of our distance programs across Florida by providing much-needed student and faculty support for leadership activities and educational initiatives," Riffee said.

Alumnus gift grows in support of pharmacy education

By Linda Homewood

North Florida independent pharmacy owners Carl and Joan Allison have reaffirmed their support of the College of Pharmacy by adding more than $50,000 to their 2004 contribution, providing a generous $225,000 total gift to the college.

The Allisons' support will help the college fund educational initiatives like the Academy for Excellence, substance abuse education and student scholarships through the Oscar Araujo Alumni Scholarship Endowment. The college is honoring the gift by establishing the Carl and Joan Allison Skills Laboratory at the Gainesville campus.

Carl Allison graduated from UF College of Pharmacy in 1976 and worked for Revco Drugs for 10 years before the couple opened their first drug store, Baya Pharmacy, in north Florida. Today they own three stores, two in Lake City and one in Jasper.

A member of the Dean's National Advisory Board since 2000, his dedication to the pharmacy profession is evident through his accomplishments. He received the 2005 Suwannee Valley Area Entrepreneur of the Year award, and in 1990 he was a founding member of the Impaired Pharmacist Committee – an intervention program.

The Allisons also support the College of Pharmacy Institute for Pharmacy Entrepreneurs workshop, which Carl participated in last August. The workshop, providing business and finance continuing education for pharmacists, is a UF program that he supported from its early development.

"The aging population and new drug development have resulted in an increase in prescriptions that have made the past 10 years an excellent opportunity for independent pharmacies," he said.

PHOTO BY LINDA HOMEWOOD

Dean William Riffee, right, presents the Allisons with a plaque commemorating the Carl and Joan Allison Skills Laboratory at the UF College of Pharmacy

PHOTO BY SARAH KIEWEL

Debbie Myers, right, zoo medicine resident at UF, and UF veterinary student Tiffany Holcomb examine an anesthetized 13-year-old Bengal tiger Oct. 11 at UF's Veterinary Medical Center. The privately owned tiger received a root canal six months ago and had come to UF for a dental re-check. The tiger's mouth was deemed to be in good shape, UF veterinarians said.

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