



DENTISTRY

WINTER 2016-17



Jamie Hargett Howard, left, and Dr. Stephanie Tullos take an X-ray of Kassidee Watson of Bay Springs.

Dental CODE

Outreach program gives dentistry students 'real world' experience

By Alana Bowman

On Oct. 7, 2016, a group of University of Mississippi School of Dentistry students became the first to complete a six-week program practicing in private dental clinics throughout the state.

The Community Outreach Dental Externship may be in its infancy, but the program is already providing wins for all involved: the students, the school and rural Mississippians.

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Felton

Holiday season kindles reflection, anticipation

I trust that each of you has had a wonderful Thanksgiving and Christmas holiday season, and have been able to spend some quality time with family and friends.

On Jan. 18, Sue and I will celebrate our first full year in Mississippi and here at the School of Dentistry. By all

accounts, it's been a stellar year!

Let me take this opportunity to update you on a few happenings at the School of Dentistry.

First, we have submitted the required paperwork to the American Dental Association's Commission on Dental Accreditation (CODA), and to the Board of Trustees, Mississippi Institutions of Higher Learning (IHL), for moving the Dental Hygiene Department and Program from the School of Health Related Professions (where it has existed since its inception in 1970) to the School of Dentistry. Pending IHL approval, we are excited to welcome the dental hygiene faculty, staff and students to the School of Dentistry and look forward to working much more closely with them. Dr. Beckie Barry will remain chair of the Department of Dental Hygiene during this transition.

Second, as many of you are aware, our CODA self-study has been completed and submitted, and we will have our site visit Feb. 28-March 2. We had a mock site visit in late October. Dr. Karen West, dean of the University of Utah School of Dentistry and former chair of CODA, and her colleagues conducted the mock site visit. It was an incredibly informative review of our current educational programs and enabled us to strengthen our CODA self-study documentation for submission.

Dr. Scott Phillips has taken the leadership role in the production of the self-study documents, and we're excited to have the CODA team visit our great school and showcase our excellent facilities, programs, faculty and students.

Next, we've completed our School of Dentistry Strategic Plan 2020 and are working to implement the plan during the next few years. The strategic plan provides us with a "roadmap" for where the school is heading.

We're also working toward hosting our first "Dental Mission Week," scheduled for Feb. 6-10 here at the school. This will be a "mission of mercy" (MOM)-style clinic, and during that week we will offer free dental treatment for the underserved populations of Jackson and the surrounding areas.

Monday-Thursday, we will focus on providing care to adults, and we will offer exams, prophies, radiographs, extractions, anterior root canals, dentures and general restorative care. All School of Dentistry faculty, staff and students will participate. We've partnered with the other schools at UMMC for support in the triage of patients, and we've partnered with the Mississippi Dental Association and Mississippi Dental Society for this event, too. We're excited to offer this clinic to the underserved in our community and state. On Friday, Feb. 10, we will host our annual Give Kids a Smile Day, and we will provide dental care to children at our school.

In the research arena, we have received word that Dr. Amol Janorkar in the Department of Biomedical Materials Science has received his first NIH award, which totaled more than \$1.3 million! In these days of competitive research grants, this is great news for the university and bodes well for Dr. Janorkar's future as a highly respected scientist! Dr. Janorkar and Dr. Michael Roach both received Excellence in Research Awards from UMMC last November.

And speaking of November, that month we hosted our very first "Fund the Beard" competition to raise money for the Our Oxford Family memorial fund. Please see the article in this issue of Dentistry for more coverage of this fun, funding event.

Finally, this month we will begin a comprehensive curriculum review and revision, which is greatly needed. Our current pre-doctoral D1 and D2 students are overwhelmed with courses, labs and exams

during their first two years. Our plan is to eliminate the summer "off" after the D1 year and decompress the curriculum for our students. We also will take a careful look at our current offerings and determine what, if any, courses need to be changed, modified, added or discontinued. A daunting task, but one that is critical to our ability to provide the most current, contemporary

dental education for our students.

I'd like to take this opportunity to wish you all the best for a Happy New Year, and Sue and I look forward to our second year at UMMC as we lead the School of Dentistry forward. We'd like to thank you for all the support we have received this past year and for the kindness and friendship each of you has extended. We're very fortunate to have "landed" in such a great community and at such a robust, energetic academic institution!

— Dr. David Felton

"We are excited to welcome the dental hygiene faculty, staff and students to the School of Dentistry and look forward to working much more closely with them."

UMMC Dentistry is published by the Division of Public Affairs at the University of Mississippi Medical Center

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PAGEANT PERFECT

Corrective surgery eases beauty contestant's physical, emotional pain

By Annie Oeth

It may seem hard to believe that anyone would tease Laura Lee Lewis because of her looks.

After all, the 23-year-old education major at Mississippi State was crowned Miss Mississippi in June 2016. She represented the state in the Miss America Pageant in September 2016 and has been a regular visitor to Batson Children's Hospital since winning the state crown.

Those times are play time for her and for the children she meets.

"You have to blink three times, turn around, curtsy and wrinkle your nose and blow a kiss," Lewis instructed Makinzie Jackson, a Children's Cancer Center patient, during a recent visit to the center. Both were wearing crowns. "You are an official princess," Lewis told the beaming little girl.

If Lewis has the ability to bring smiles to patients, it's because she's been where they are.

As a teenager, Lewis' upper jaw was underdeveloped, a condition called maxillary hypoplasia. This left her with an underbite and pain in her temporomandibular joint (TMJ). She also developed asthma because of severe sinus infections.

Not only was she physically uncomfortable because of her condition, but she had to deal with the pain of being picked on by classmates because of her looks.

"I remember being called 'horseface' and locking myself in the bathroom because of what people said. It hurt," Lewis told *The Clarion-Ledger* in one of her first interviews after winning the Miss Mississippi crown.

"Her dad and I were taking her to lunch one day and she was called from the classroom to meet us, but she never came," said her mother, Lorin Lewis. "We found her hyperventilating in the bathroom, crying because she had been called names in the hallway." The teasing was taking its toll, "pushing Laura Lee to the breaking point.

"She said, 'Please don't make me go back to school.'"

Mark and Lorin Lewis knew running from her problems wasn't the answer for their daughter.

"We encouraged her to go back to school, thank the bully and choose to be beautiful on the inside," Lorin Lewis said. "Her dad and I told her to find the good in it."

Lewis did, and from that experience came her platform: HERO, an acronym for "Honor, Excel, Reach, Overcome," which she brought to schools as Miss Mississippi's Outstanding Teen, a competition she won in 2009. Her Miss Mississippi platform, "Mentoring Matters," also grew from those experiences.

Still, Lewis battled jaw pain and breathing problems, something that started in elementary school and showed no signs of changing on its own.



Laura Lee Lewis, left, in 2009 before her orthognathic surgery, and in 2016, right.

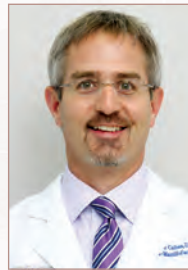
Enter Dr. Ron Caloss and the Oral Maxillofacial Surgery Program in the School of Dentistry.

"Dr. Caloss was her hero," Lorin Lewis said. "He said, 'I can fix this.'"

Caloss and his team help teenagers who have bite issues – and the problems of sleep apnea, jaw pain and chewing problems that go with them – through orthognathic surgery. Derived from the Greek terms "orthos," or "straight," and "gnathos," or "jaw," these procedures reposition the jaw. UMMC

has the most comprehensive orthognathic surgery program in Mississippi.

"We worked with her orthodontist (Dr. Dodd Brister in Pearl) and Dr. Caloss and stuck to the plan," Lorin Lewis said.



Caloss

When Lewis' growth stopped, she became eligible for surgery. The five- to six-hour procedure, which she had on her 18th birthday, advanced her upper jaw forward, augmented her cheeks and set her lower jaw back. In the process, her underbite was corrected.

"We did her surgery right before she was going to college," Caloss said. He noted summertime and Christmas break could be called "orthognathic season," because many patients get the surgery at those times to miss as little school as possible.

He said the results of Lewis' case "were pretty dramatic."

"After her surgery, Laura Lee went back to school to have her transcripts sent to Mississippi State," Lorin Lewis said. "She went to the school secretary, who knew her well, but she didn't even recognize her.

"Once she realized it was Laura Lee, she started crying and ran down the hall to tell everyone to come see."


While orthognathic surgery helps correct functional problems with one's bite, TMJ and airway issues, its most notable effect can be the esthetic improvement that results from an "improved facial balance," Caloss said.

"Some kids really get teased and bullied a lot over their looks." Caloss said Lewis' pageant success is no surprise, pre-surgery or afterward.

"Laura Lee already had a great attitude and she was adapting fairly well, but some patients have a very poor self-image because of their appearance," Caloss said.

He followed Lewis' Miss Mississippi pageant progress through Dr. Griffin West, chief resident in the Oral Maxillofacial Program and now Lewis' brother-in-law.

As for Lewis' Miss Mississippi win this past summer?

"I wasn't surprised at all," Caloss said. "She was already beautiful, inside and out. I am so proud of what she has accomplished." 

MISSION: OUTREACH

Dentistry, dental hygiene students share unprecedented trip to Belize

By Alana Bowman

There are approximately 12,000 school-aged children in the Toledo district of Belize – but only one dentist.

To say that Toledo dentist Dr. Solomon Enriques has his hands full may be an understatement. But Dr. Charles Ramsey, assistant professor of dental hygiene, and a handful of dentistry and dental hygiene students lent Enriques their services this past May.

Until this year, a mission trip to provide actual dental treatment to the poorest district of Belize would not have been possible. Two years ago, Ramsey approached Ruth McDonald, deputy prime minister of health for the Toledo district, about bringing dentistry students to treat the children in her district.

"She was adamant that it would never happen," Ramsey said. According to Ramsey, medical missions aren't even allowed in the district because of negative experiences with medical and dental groups in decades past.

"This particular district is very cautious about who is allowed in to provide health care," he said.

Since 2012, Ramsey has organized trips for dental hygiene students to provide handwashing demonstrations, diet counsel, oral hygiene instructions, fluoride treatments, toothbrushes and toothpaste. But the need for actual dental procedures is great.

Ramsey wasn't willing to give up the fight so easily. With Enriques' assistance, he contacted Dr. Raphael Samos, senior dental surgeon of Belize, and the two began to correspond by email. Samos reviewed the complete

dental curriculum, and in January 2016, arrived in Mississippi to see the facilities and to meet the faculty.

"He toured the school the entire morning," Ramsey said. "We visited and had him ask any and all questions that he wanted to ask."

Ramsey said after that visit, Samos was convinced he could assure the stu-

dents' entry into Belize. "He was very impressed."

On May 8, Ramsey, Dr. Amy Sullivan, professor of dental hygiene, and a group of dental hygiene students arrived in Belize. As in years past, they traveled from school to school, providing dental evaluations, instructions on dental hygiene, fluoride treatments and supplies.

"We did about 3,000 fluoridations," Ramsey said. "Dr. Sullivan was a tremendous asset to me."

As they were fluoridating, the hygiene students would look for problem areas and would ask Ramsey or Enriques for a second opinion. Children who needed dental work were given a note to take home to their parents, informing them about the free clinic available the following week. Ramsey said the group distributed nearly 500 notes that first week.

The following Sunday, five dental students – fourth-year students Chelsea Barr, Blake Boleware and Bryan Rhoads and third-year students Chauncey Craft and Andrew Sinclair – and dental hygiene student Hannah Hales landed in Belize City and made the five-hour bus ride to Punta Gorda, the capital of the Toledo District.

Sinclair said he was struck by the poverty before even touching the ground.

"Flying in, I could see multiple wildfires through the area, pillars of smoke, uncontrolled," he said. "It was the dry season, and they didn't have the resources to manage the fires."

He said the group passed families selling vegetables on the side of the road as the students made their way to the clinic. Many people in the Toledo district are subsistence farmers. Ramsey said the average yearly income is only about \$250.

The clinic where the students saw patients is owned by a Methodist church and located in a village that is about a 20-minute ride from Punta Gorda. It is equipped with two dental rooms and two hygiene rooms – but no air conditioner.

"Driving up the first day, we didn't really know what we were getting into," Boleware said. "There was a huge line. We had a really good turnout."

As School of Dentistry dean,

Dr. David Felton made his fourth trip to Alaska this year to provide prosthodontic care to Native Alaskans.

"I've been three times to Sitka, and this is my first time to Juneau," Felton said.

The trip was organized as a part of the Academy of Prosthodontics' Outreach Program. The program recruits members of the academy to visit locations in the western United States – such as Alaska, Montana, North Dakota, Oklahoma, South Dakota and Utah – and spend a week making dentures and partial dentures for Native Americans.

According to the academy's website, limited resources and isolation have caused hundreds of Native Americans to wait for dentures.

Felton said the Alaska trip was originally started about 20 years ago by Dr. Tom Taylor, chair of restorative dentistry and prosthodontics at the University of Connecticut School of Dentistry.

Felton and the group created 27 sets of dentures for patients during the trip. Since creating and fitting dentures is not usually a one-visit procedure, Indian Health Services flew patients in to Juneau and provided them free housing for the week. Patients were asked to pay a small fee for the dental work.

"It was a great experience," Felton said. "It was your standard denture protocol, but we just confined it to a week so the patients didn't have to make the trip back and forth."

Felton said there aren't many prosthodontists in Alaska.

"There are two in Anchorage, two in Eagle River and one in Fairbanks, but that is about it, outside of the military personnel," he said. "As prosthodontists,



Enriques, left, and Ramsey

Some people had risen before 4 in the morning to travel two hours to reach the clinic early. Rhoads said it was not uncommon to see a whole family riding a single bicycle.

"The dad was riding the bike with the mom on the handlebars holding a kid with another kid on the back holding onto the dad," he said.

The fourth-year dental students were responsible for restorations. Ramsey said they completed 90 sealants and 80 fillings, more than they would have completed in two years seeing patients in the dental clinic at UMMC. Craft, Sinclair and Hales performed cleanings and checkups, sterilized equipment and developed X-rays.

The students worked from Monday to Thursday, 10-12 hours on most days. They decided not to close the clinic for a full hour-long lunch break, but had the mission organizer, Wayne Sellers, bring lunch to the clinic instead.

"We would take shifts and eat when we could," Boleware said. "We just kept working. It went by quick.

"It was a lot of work, but a lot of fun."

The students rolled up their sleeves and worked — literally. "It was very hot," Boleware said. "I don't think we really knew how hot it



Ramsey makes friends in the Toledo district of Belize.

was going to be. I didn't, at least. We all had our scrubs rolled up and kind of made shorts out of them."

Rhoads said the experience in Belize gave him a lot more confidence returning to dental school.

"We were all working together," he said. "If there was something we were unsure about, Dr. Ramsey was there, and he would jump in. It was definitely a confidence builder. He trusted us. He wasn't over our shoulder checking on everything. He knew we were not going to do insufficient work."

On Thursday, the team closed the clinic early to make travel arrangements and take in some sites before heading home.

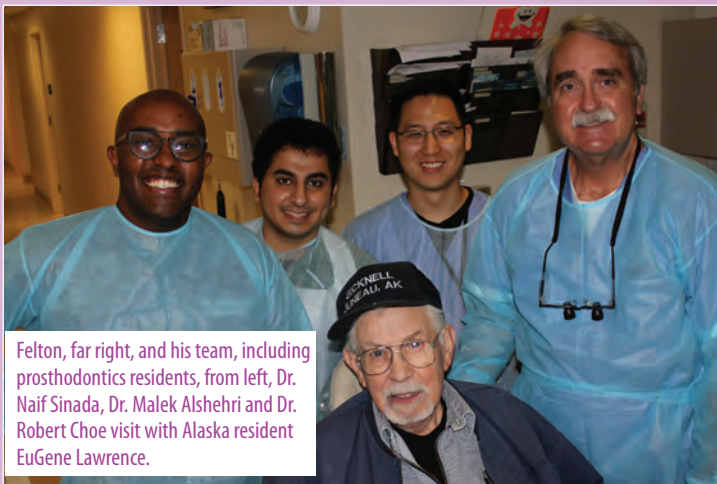
"We took the students out to see a ruin," Ramsey said. "I got a phone call from Solomon."

Enriques was attending a conference in Belize City and had just watched a presentation by Samos. When Samos spoke, he showed a photo of Ramsey and himself standing in front of the School of Dentistry

and told the attendees about the new relationship the country had with the school and all the work the group had done that week.

"He was very pleased with what the students accomplished," Ramsey said. "I tell you, I was so proud of them. They did really well." 🦷

Felton continues annual pilgrimage to America's Icebox



Felton, far right, and his team, including prosthodontics residents, from left, Dr. Naif Sinada, Dr. Malek Alshehri and Dr. Robert Choe visit with Alaska resident Eugene Lawrence.

we see primarily difficult and challenging patients, not just the run-of-the-mill denture patients."

One patient in particular was an elderly gentleman who had worn dentures for 50 years.

"He still wore the set he came in with for more than 20 years, and they were worn out," Felton said. He said depending on the patient, well-made dentures should be replaced every five to 10 years.

Felton said during his four trips to Alaska, his most challenging patient was an elderly woman with Alzheimer's disease.

"She couldn't communicate. I had to try to make her a set of dentures, and the only thing she could say was 'no' and 'ow.' That was a difficult patient to assess and treat."

However, rewards came along with the challenges. When a young female patient who had been without teeth for two years came back for her post-insertion adjustment grinning from ear to ear, Felton asked her why she was smiling so much. Her reply: "My husband can't quit looking at me!"

Although it rained the entire week he was in Alaska, Felton said there was one break in the rain that allowed the group to experience some of the beautiful Alaskan scenery.

"We took two hours off and drove up to the Mendenhall Glacier, did a little bit of hiking, and then went back to work," Felton said. "It was nice that afternoon. It was really pretty."

"One of my colleagues, and the three graduate prosthodontic residents who were there with us, had never seen Alaska, and we wanted them to see something other than the inside of a dental clinic."

Felton said he plans to continue making the mission trip.

"I enjoy going. It's a great service to the Alaskans, who are incredibly appreciative for the care we provide, and we always have a great time. I get to see some of my good friends who are prosthodontists and hang out with them all week, which is nice."

"I enjoy it from the standpoint of being able to give back, not only to our academy but also to the Native Alaskans. They are just great folks, warm and giving, and are very appreciative of the dentures we provided." 🦷

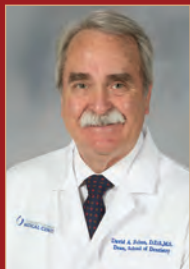
CODE program offers dentistry students

Jamie Hargett Howard of Oxford, who now lives in Flowood, was placed in the Raleigh practice of Dr. Stephanie Tullos, a 2003 graduate of the School of Dentistry. Tullos built her practice from the ground up as the only dentist in her small town.

"My first day, I walked into the office and Dr. Tullos asked me if I wanted to do a surgical extraction," Howard said. "I knew from Day 1 that this was going to be an invaluable experience."

When Dr. David Felton accepted the position of dean of the School of Dentistry a year ago, he brought the idea of sending students in their final year of school to treat patients at dental clinics across the state.

Students would be placed in underserved areas to gain clinical experience that would count toward their course requirements, to provide care at a reduced cost for the uninsured and underinsured, and to get a feel for the private practice environment.



Felton

"The CODE program gives our students the added experiences of providing clinical care to patients that the Jackson area doesn't supply, the opportunity to see firsthand how a private dental practice works, the opportunity to see that a rural practice can be a good practice location, and clinical credit towards graduation requirements for our D4 students," Felton said.

He assigned the task of organizing the program to Dr. John Smith, associate professor of dentistry in the Division of Care Planning and Restorative Sciences and assistant dean for admissions. Smith said the first step was to present the idea to the Mississippi State Board of Dental Examiners, which the school did last May.

"We've had a program in the past that was an observation period," Smith said. "Students could go to an office and just watch. The state board gave us permission for the students to provide care with the exception that students cannot receive any compensation from the practice."

Smith compiled and submitted information about the proposed program to the Commission on Dental Accreditation. The commission gave the School of Dentistry permission to start the program and will evaluate it during the school's accreditation site visit scheduled for February 2017.

Smith then took a page from the playbook of UMMC's Department of Family Medicine, which has a program that sends medical students on a community rotation.



Jamie Hargett Howard, center, one of the first round of students in the CODE program, receives hands-on experience in the Raleigh clinic of Dr. Stephanie Tullos, left, with the assistance of Amanda Sullivan.

"I got their agreement, legal and compliance forms and modified them to fit our dental needs," Smith said. "That really sped things up through legal, compliance and human resources."

"It gave us a basic template to start with."

Once all of the paperwork was in place, Smith began to recruit clinician-educators – dentists in rural areas of Mississippi willing to host students.

"I had a core group of people in mind," Smith said. "I knew these were practitioners to whom I would send my children. I had no worries about sending students out to these practices."

"When Dr. Smith asked me to be a clinical director, I thought it was a good idea," Tullos said. "I enjoy teaching and explaining the procedures. Both of my parents were teachers, and I guess I have it in my blood."

Clinical educators sign a formal, five-year agreement with the school, but receive no monetary compensation.

"They are not getting paid for this," Smith said. "They are doing it out of the goodness of their hearts. We have good people here in Mississippi."

The school is working to offer continuing education for the clinical educators at employee cost. The educators also have access to the Rowland Medical Library and campus email.

The pilot program was pulled together in just four months. Smith said that a lot of the credit for the program's quick start goes to Sandra Johnston, administrative assistant.

"Sandra has her plate full right now, but she has done a remarkable job," he said. "We started in the middle of May and



Smith

clinical opportunities, rural perspective

we received approval from CODA at the end of July. It was a fast process. We worked pretty hard to get it done.”

The second group began its rotation three days after the first group finished; the final group will begin its rotation in January 2017.

Students spend six weeks in the assigned clinic, enough time to complete procedures that require multiple visits. Smith said the length of the rotations will be evaluated and adjusted, if needed, once the pilot year of the program is completed.

The students must complete one year of clinical practice, treating patients at the School of Dentistry, before they are eligible for the CODE program. Smith said there is a suggested number of each basic dental procedure – such as crowns, dentures and fillings – that students should complete before going out on rotation; those who already had met the goals were chosen for the first rotation.

From the information Smith has gathered, it seems students placed in the more rural practices are getting the most experience, likely due to the shortage of dentists in rural Mississippi. Dental practices in rural areas tend to see patients with more basic dental needs, such as periodontal treatments, dentures, partials, fillings and single unit crowns – procedures the students most need to experience.

Howard said at first, she was apprehensive about going on the rural rotation, but that changed on the first day at Tullos Family Dentistry. Since then, she has completed more than 200 dental procedures, mostly on pediatric patients with limited access to care and limited financial resources.

“Jamie has been accepted to a periodontal residency at UAB,” Smith said. “After the second week of her externship, I approached her to ask if she would like for me to arrange for her to spend the final four weeks of her rotation at a periodontal office. She almost teared up and said, ‘Please don’t take me away from Dr. Tullos. I can’t tell you how much I’m learning from her.’”

Many of the procedures will count toward Howard’s graduation requirements. Smith said students must provide documentation for each procedure in the form of radiographs or models to meet the CODA requirements on credit for procedures performed outside of the school. The school also is tracking the dollar amount of uncompensated care given to Mississippi residents by the students.

“Dr. Tullos helped me significantly increase my speed and efficiency by teaching me new clinical techniques, encouraging me

to always consider the best and fastest way to complete each task and, at times, insisting I pick up the pace,” Howard said. “The staff was incredible and treated me like a dentist every day.”

Tullos said taking the students out of the structured environment of school allows them to see what it will be like in the “real world” of dentistry.

“In the dental school, protocols and checks from instructors make the procedures more time-consuming,” she said. “In a private practice, there is a strict schedule because patients have taken off work to be there. They don’t have all day or even half a day.

“This program allows students to put into practice what they’ve learned in ‘real time.’”

Beyond checking off procedure requirements for graduation, Howard said she gained experience in running a private practice.

“Dr. Tullos took time between patients to explain her practice management methods to me,” Howard said. “She walked me through each step in setting up a successful practice – from employee management to evaluating productivity versus expenditures. The staff was extremely helpful in explaining insurance matters, collections for procedures executed and how to handle specific situations with patients.

“Dr. Tullos is an inspiration to women in dentistry.” Tullos said she had a good experience with Howard.



Howard, right, completed more than 200 procedures during the six-week program.

“I was lucky to get her,” Tullos said. “I’m sure they are all good students, but she and I really clicked and developed a great relationship from Day 1. I look forward to having another student.”

Though only in its pilot year, the CODE program promises to be an invaluable addition to the curriculum of Mississippi’s dental students. “It’s a win-win proposition for us,” Felton said. “We’re excited to be able to offer this new training opportunity to our clinical educator faculty and our students.”

TISSUE ENGINEER

NIH funds biomedical materials science maven's 3-D study of fat

By Karen Bascom

In Dr. Amol Janorkar's lab, the work is about better living through chemistry, biology, engineering and materials science.

Janorkar, an associate professor of biomedical materials science, studies tissue engineering. The goal is to use cells, materials and biologics to construct new ways to study and treat disease.

Tissue engineering is much more than the "Vacanti mouse," a rodent that made news headlines for the ear-shaped cartilage on its back.

Rather, the goals are practical and noble: revitalizing livers, replacing cartilage and bone, and growing new skin for burn victims.

"That is the promise of tissue engineering . . . but solid organs, like livers and hearts, are farther down the road" and years from clinical use, Janorkar said. However, the basic science research is happening now in his lab at UMMC and at universities across the country.

One of Janorkar's projects, recently funded by a \$1.4 million grant from the National Institutes of Health, takes on part of health care's largest challenge: He is developing and studying three-dimensional models of human adipose tissue, or fat.

The model binds fat cells in a spheroid, or almost round, shape using elastin-like polypeptide and polyelectrolytes (E2P). A common protein, elastin is a component of mammalian fat tissue, making the engineered ELP a relevant tool to help hold the cells together, Janorkar said.

In a previous study, Janorkar "fed" the cells fatty acids to study how adipose grows and proliferates. On the current grant, he will add metabolic stressors like Tissue Necrosis Factor (TNF) - to determine how they affect adipose development.

"By learning how cells become fatty, we can begin to answer the question, 'How can we make these cells lean again?'" Janorkar said.

These spheroids aren't visible to the naked eye, but Janorkar hopes they could become an important part of the drug development process.

"When drugs are first tested in vitro, scientists use two-dimensional cell cultures," he said. The cells grow as a single layer on a Petri dish. However, fat is not flat. Neither is any other part of the human body.

As few as one out of every 5,000 drugs evaluated in laboratory tests makes it to clinical trials. A 2014 report in Nature Biotechnology found only 10 percent of those receive FDA approval. Janorkar said this disconnect is one potential reason for the lack of approved obesity treatments and other pharmaceuticals.

In contrast to other in vitro models, Janorkar's 3-D adipose model is tethered by ELP above the culture plate like a balloon. The electric charge of the polyelectrolytes force the cells together, allowing them to interact with each other as they would in human tissue.

"If we can make more realistic in vitro three-dimensional models, then we can potentially decrease the timeline and expense associated with drug development and make the system more efficient," he said.



Janorkar, fourth from left, leads his biomedical materials science team, including, from left, Dr. Jared Cobb; Quynh Chau Nguyen, D2; Dr. Sarah Fitzgerald; Bhumana Gurumurthy, third-year Ph.D. student; and Kendra Clark, D3.

As part of the School of Dentistry, the Department of Biomedical Materials Science has a particular focus on applications for dental prosthetics and implants. Janorkar and two of his graduate students published research in the October 2016 issue of the journal Dental Materials testing composites for guided bone regeneration (GBR), which uses scaffolds and cells to regrow bone in patients.

In dentistry, GBR is used to "stabilize the foundation for the teeth," said Dr. Matt Milner, assistant professor of dentistry in the Department of Care Planning and Restorative Sciences.

"Think of the gums and bone as the foundation of a house," Milner said.

"If there is . . . a significant amount of erosion, then it is beneficial to stabilize the foundation and fill back in what was eroded [using] GBR procedures in order to save the tooth."

Bhumana Gurumurthy, a third-year Ph.D. student in biomedical materials science, is the paper's first author. She said the goal was to find composites with the most ideal mechanical properties, like stiffness and toughness, to withstand conditions in the mouth.

"The patient is going to be biting and chewing," she said. "We want this implant to stay in the body for a long time."

In addition to durability, Gurumurthy said the ideal scaffold should biodegrade as bone regrows. Current GBR methods use scaffolds that require an additional surgery to remove. Therefore, the Janorkar lab made scaffolds with different amounts and ratios of ELP and collagen to make an ideal home for human adipose stem cells as they differentiate into bone.


In future studies, Gurumurthy plans to add bioglass and antibiotics to the composite and move the preclinical testing forward. As a dentist by training, she hopes her dissertation research will form a foundation for new clinical applications.

"If all of the properties of the scaffold work well, then there is a better opportunity for the materials to integrate into the body, and a shorter amount of time will be needed for bone regeneration," she said.

Dr. Jennifer Bain, assistant professor of dentistry and interim chair of periodontics and preventive sciences, said clinicians look for additional properties in any GBR product.

"It needs to be easy to use," Bain said. "If [a GBR product] is too cumbersome to handle, then clinicians may not use it. It also needs to be cost-effective," particularly for patients who may pay out-of-pocket expenses.

Lastly, the regenerated bone needs support for what is placed on top. "It's all about the final result: the crown that goes on top of the implant," Bain said.

"It's like we are putting together a puzzle," Janorkar said. "We want to build a composite that can do it all – help growth, fight infections and limit the surgical procedures needed." 

DISCERNING DESEGREGATION

Dentistry alumna, high school classmates pen integration memoir

By Alana Bowman

It was Jan. 21, 1970, when the Fifth Circuit Court of Appeals finally tired of the city of Jackson dragging its feet with desegregation.

Jackson Public Schools were given 10 days to adjust the ratio of black and white students in each school to mirror the ratio in the population of each district.

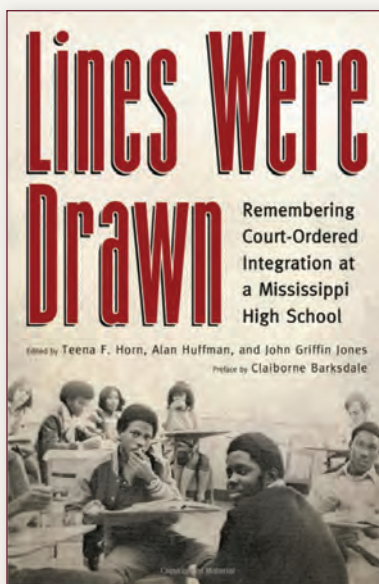
Children, both black and white, were uprooted from their familiar surroundings and forced to attend strange schools in strange neighborhoods, giving up family legacies and sports glories to participate in a social experiment on a grand scale.

Dr. Teena Freeman Horn, a 1983 graduate of the School of Dentistry, experienced this disruption firsthand as a student at Murrah High School, located just across Woodrow Wilson from UMMC's main campus. Horn now runs a private dental practice in Houston, Mississippi.

"I think I was changed by my experiences during that time," Horn said.

"I think that has helped me in my practice. I treat all races. I see physically disabled patients.

"We don't discriminate, and I don't think twice about that. It changed my view of the world."



Having lived through the era of forced desegregation, Jones took affront to the idea that his and his classmates' experiences were for naught. So Jones began the email: "With the stroke of a Republican pen, this Court abandoned the basic principle that dominated our youth and determined our experiences: desegregation of the public schools was mandated by the Constitution . . ."

Horn received that email and said she was offended by the opening statement.

"He said something about the Republicans," she said. "I'm a Republican, and he's a Democrat. We got into a little spat."

Horn said Jones suggested the two write down and share what each of their personal experiences were between forced desegregation in 1970 and graduation in 1973.

"After we wrote our stories, we decided to bring in some other people," Horn said. "Johnny and I really didn't know what everyone in our class felt about what went on and which schools they went to."

Two other contributors were Huffman, now an author, and Claiborne Barksdale, who had been the students' English teacher at Murrah. Horn then placed ads in local newspapers asking alumni in the classes of 1972-75 to contact her to contribute their stories.

"Some people wrote and sent in their stories, and we did some interviews," Horn said. "You'll see that Gov. William Winter was interviewed. His daughter, Lele, was one of our classmates."


Horn said the group collected 63 stories. Although the authors sought input from both black and white classmates, the majority of those who replied were white. For this reason, in the forward of the book, Huffman wrote the story isn't complete.

Those who did respond were given an opportunity to tell their stories as remembered with no editing to sugarcoat a difficult subject.

Horn remembers that some students went to two or three different schools in ninth grade alone as lines were drawn and redrawn by the courts to adjust the percentages of whites and blacks in each school. These frequently changing school zone lines, drawn on maps of the city and published in *The Clarion-Ledger*, were the inspiration for the book's title.

Horn said she thinks she was changed as a person by what she experienced.

"We had a great group of people and made great friendships that have lasted a lifetime," she said. "We had a lot of professionals come out of that class from Murrah. We learned to look deeper into people.

"I think that has helped me in my practice." 



Horn

Horn said the lessons she learned at Murrah were reinforced in dental school by Dr. Bill Alexander's classes on community and oral health.

Because of how these experiences changed their lives, Horn and fellow Murrah Class of 1973 graduates John Griffin Jones and Alan Huffman decided the stories of their own experiences and those of their classmates must be recorded for history. Those stories are told with many voices in the book

Lines Were Drawn: Remembering Court-Ordered Integration at a Mississippi High School, published by University Press of Mississippi.

"We wrote the book because we felt like it was a moment in history that needed to be catalogued," Horn said. "In fact, a couple of people who are in the book are now deceased."

The project was born from an email Jones, an attorney in Jackson, sent in 2009 to the Murrah High School Class of 1973 after he had read about a Supreme Court opinion in a case that had originated in Seattle. The opinion of Chief Justice John G. Roberts was that the 1954 decision of *Brown v. Board of Education*, which led to desegregation, was no longer relevant today.

The GREAT ESCAPE

Dentistry student brings worldwide gaming phenomenon to Jackson



By Alana Bowman

An astronaut wakes from hypersleep – disoriented and in the dark – to find her spaceship has been damaged by a meteor shower. She and the crew have only 60 minutes to power the escape pod or they will be pulled into the event horizon of a nearby black hole.

This isn't a movie, but it's not exactly real, either. It's a live-action game called an escape room.

The experience is now available to Jacksonians, thanks to third-year School of Dentistry student Clint Sistrunk and his wife, Paulina.



Sistrunk continues to expand his JXN Escape Room.

A team of participants are locked in a theme-based room. To escape, the players must work together to find clues and solve puzzles. Each puzzle they solve leads closer to the key that opens the door. The goal is to open the door and "escape" before a timer runs out.

Worldwide, escape-type games are not new. According to a whitepaper by Dr. Scott Nicholson, a professor of game design and development at Wilfrid Laurier University in Brantford, Ontario, Canada, the first escape room was started in Japan by the publishing company SCRAP in 2007. Escape games spread from Asia to Europe before finally making it to the United States. Escape the Room USA claims to have offered the first escape game in the U.S. in October 2013.

Sistrunk, a Jackson native who lives in Pearl, played his first escape room game after his first year of dental school. He was visiting his soon-to-be wife in her native country of Poland.

"I knew it was our last summer break, probably forever," Sistrunk said. "I wanted to go see Paulina. So I booked a flight and said I was going to spend my three months of summer just taking it easy.

"When we were planning things to do, she said there's something in Warsaw called an escape room. It sounded interesting, so we booked a room."

After that first experience, he said the couple fell in love with the games.

"We played one more that summer and then started brainstorming about bringing it to Jackson. Of course in the fall, with second year of dental school, I was focusing on boards and making sure I was on top of schoolwork."

When the holidays brought a respite from classes, the couple married. They spent Christmas break honeymooning across the western United States.

"We got married on a Friday and rolled out Saturday morning," he said. "We just got in the car and knew we would end up at the Grand Canyon."

Along the way, they stopped to play escape rooms in Phoenix; El Paso, Texas; Austin, Texas; and Albuquerque, New Mexico, with themes like a UFO abduction and a kidnapping.

"The alien abduction was really cool," he said. "It took place in a cellar, an actual basement of a house. We walked outside and around to the back of this house into an underground room. It was designed for eight people, but she and I were the only ones who booked that night. It was tough.

"There were too many games for us to keep up with, and we did not get out."

When they returned from the honeymoon, the couple began working to open their own business.

"As soon as we got back in January, we hit the ground running," Sistrunk said. "It worked out really well in that the early part of the spring semester gave me extra time to focus on a project."

JXN Escape Room opened on Valentine's weekend, and about a month later, added a second room. A third room will open soon.

"We have two themes right now," Sistrunk said. "One is called 'The Investigation,' and it is built around the idea that players are trying to solve a murder. The fastest time we've had for that room was 48 minutes and 30 seconds. The record for the spaceship-themed room is around 52 minutes."

While Sistrunk describes "The Spaceship" as being more science and math-oriented, no special skills or knowledge are required to solve the puzzles. The information is in the room, if the players can find it. One skill that will help is the ability to communicate.

"We don't ask you to do differential equations or anything like that," he said. "The No. 1 thing we've found is communication. Communication is 100 percent of the game."

That may be the reason escape games have become popular team-building exercises for corporate training and are being incorporated into classrooms as teaching tools.

Sistrunk advises group members to share what they find in the room with each other and use teamwork to solve the puzzles.

"You never know what is going to trigger somebody else's thought process and move you along," he said. "We design our rooms to be challenging. Players need to solve a puzzle every six or seven minutes to keep progressing and escape."

To stay on top of their "escape game," the Sistrunks travel frequently to scope out the competition and get new ideas.

"We write off these games as research," he said. "We try to play as often as we can. Probably one of the best rooms we've done was in Atlanta. The theme was a haunted, creepy hotel.

"Out of the first four or five games we played, we probably escaped only two. Now we've got a good little team. We try to make sure we break records."

He and his wife often travel with fellow School of Dentistry classmates Ronald Young and Alyssa Swenson.

"We are pretty proud of our team," Swenson said. "We actually set one record at Break Out 'Kidnapped' in Atlanta of about 40 minutes."

Young said the furthest the team members have traveled is Orlando, Florida, where they completed a game at America's Escape Game.

"The room had a 9 percent success rate with 10 people," Young said. "We got out with only four people and about five or six minutes left on the clock."

What about the team's name?

"A Team Has No Name," Young said. Game of Thrones fans would understand. 🗝️

School of Dentistry welcomes new faculty



Dr. Susana Maria Salazar Marocho, a recent post-doctoral research fellow at the University of Mississippi Medical Center, has joined the School of Dentistry faculty as an instructor in biomedical materials science.

After receiving her bachelor's in dentistry from the Universidad de San Martin de Porres, USMP, Perú, in 2004, Salazar Marocho served as an instructor in fixed prosthodontics there from 2004-05 and as an instructor in complete denture prosthodontics, dental materials, implant dentistry and fixed prosthodontics from 2005-08 at the Sao Paulo State University "Julio de Mesquita Filho" (UNESP-School of Dentistry), where she earned her master's in restorative dentistry in 2008 and her Ph.D. in restorative dentistry in 2012.

She was a postdoctoral research fellow from 2013-14 at the University of Sao Paulo, USP, Brazil, before beginning her postdoctoral research fellowship here.

The author or coauthor of 28 refereed articles in professional publications, Salazar Marocho has given numerous invited lectures and currently serves as a reviewer for several scientific journals.



Dr. Reid Lester, a periodontist with Lester Periodontics/Mississippi Periodontic Specialists Group, has joined the School of Dentistry faculty as an assistant professor of periodontics and preventive sciences.

After receiving his B.B.A. from Mississippi State University in 2000, Lester was an executive financial planner in Jackson before entering the School of Dentistry. He received his D.M.D. from UMMC in 2009 and earned his specialty certificate at the LSU Dental School's Department of Periodontics in 2012.

A guest lecturer at UMMC since 2013, Lester is an active member of the American Dental Association, the Mississippi Dental Association, the American Academy of Periodontology and the American Board of Periodontology. The coauthor of six articles in peer-reviewed professional publications, he is the founder of Smiles for Mississippi, an annual fund-raiser that supports dentistry in Mississippi.



Dr. Laura Leigh C. Moody, owner of River Hills Family Dentistry in Jackson, has joined the School of Dentistry faculty as a part-time assistant professor of endodontics.

After receiving her B.S. in microbiology cum laude from Mississippi State University in 1999, Moody earned her D.M.D. with honors at UMMC in 2005. She then joined River Hills Family Dentistry and also serves as a contract dentist for ReachOut Health Care, which provides dental health to soldiers.

She is an active member of the American Dental Association and the Mississippi Dental Association.



Dr. Charles David Ratcliff, recently an endodontic resident at the Louisiana State University Health Sciences Center, has joined the School of Dentistry faculty as a part-time assistant professor of endodontics.

After receiving his B.S. in biological sciences magna cum laude from Mississippi State University in 2006, Ratcliff earned his D.M.D. cum laude in 2011 from UMMC, where he had an AEGD residency from 2011-12. He also had an endodontic residency at the LSU Health Sciences

Center from 2012-14.

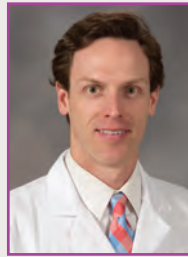


Dr. Lamonica Davis Taylor, owner of Smiles on Broadway Dental Care in Jackson, has joined the School of Dentistry faculty as a part-time assistant professor of pediatric dentistry and community oral health.

After receiving her B.S. in biology and pre-dentistry from Spelman College, Atlanta, in 2007, Taylor earned her D.M.D. at UMMC in 2011. She had postdoctoral residencies in general dentistry practice from 2011-12 and in pediatric dentistry from 2012-14 at Bronx-Lebanon Hospital,

New York. She then opened Smiles on Broadway.

An active member of several professional organizations, including the American Dental Association, the Mississippi Dental Association, the American Academy of Pediatric Dentists and the American Association of Women Dentists, Taylor has given numerous professional presentations.



Dr. Jason Vassar, a private practice orthodontist in Jackson and Ridgeland, has joined the School of Dentistry faculty as a part-time assistant professor of orthodontics.

After receiving his B.A. in Spanish magna cum laude from the University of Mississippi, Vassar earned his D.M.D. cum laude at UMMC in 2012. He earned his master's of dental science in orthodontics at the University of Tennessee Health Science Center, Memphis, in 2015.

A diplomate of the American Board of Orthodontics, Vassar is an active member of the College of Diplomates of the American Board of Orthodontics, the American Association of Orthodontics, the American Dental Association and the Mississippi Dental Association. Owner of Bierdmann/Vassar Orthodontics in Jackson and Ridgeland, he has served as a general dentist for ReachOut Health Care in Grenada.

National honor society inducts four School of Dentistry students

The 2016 ceremony for Medical Center initiates of Phi Kappa Phi took place in the Norman C. Nelson Student Union in fall 2016. UMMC students were chosen for membership in the honor society on the basis of superior scholarship and good character.

More than three dozen UMMC students were initiated. The group included four School of Dentistry students: Kellie Mc-Adams Watts, Jamie Katherine Hargett Howard, Blake Denton Boleware and Edgar Newton Donahoe III.

Phi Kappa Phi is the only national honor society that recognizes academic excellence in all disciplines in the undergraduate, graduate and professional schools. Dr. Deborah Winger from the



Watts



Hargett



Boleware



Donahoe

University of Mississippi serves as chapter president; Dr. Don Cole, assistant provost at the University of Mississippi, presided at the ceremony.

In Memoriam: Plane crash claims four SOD alumni

By Alana Bowman

Just before noon on Sunday, Aug. 14, Mississippi's dental community suffered a great loss.

Six University of Mississippi alumni were killed in a plane crash in Alabama. Four were graduates of the School of Dentistry. They were making their way home from a dentistry continuing education event in Florida.

On board were Dr. Jason and Dr. Lea Farese, Dr. Austin and Angie Poole, and Dr. Michael and Kim Perry. Together, they leave behind multiple practices and hundreds of patients, colleagues, friends and family. Most heartbreaking is the loss suffered by their combined 11 children.

The dental community has rallied to fill the void left by these special lives. Fellow alumni have stepped in to keep practices open and staff employed, and a fund has been started to provide for the children's care and education.

Dr. Jason and Dr. Lea Farese

The Fareses met in dental school and were married in 2002. Jason was a Vanderbilt graduate, captain of the baseball team his senior year, while Lea graduated from Belhaven. The two were a perfect pair . . . of contrasts.

"He was like the fiery guy and she was like the calming of the waters," said Dr. David Duncan, professor emeritus of dentistry in the Department of Care Planning and Restorative Sciences. "They just meshed together really well."



Dr. Jason and Dr. Lea Farese with their children.

Duncan recalls Jason coming to him during dental school for some personal advice.

"He was wringing his hands and he said, 'I just don't know. I'm thinking about asking Lea to marry me.' And I said, 'Duh! Yeah! Y'all are perfect for each other.'"

Lea worked in public health for a few years while Jason worked on getting a private practice started. The two joined in practice as Farese Family Dentistry in Oxford.

They were members of the Tri Lakes Dental Study Club, which includes a coverage group to provide clinic coverage for members who were injured or ill and unable to practice for a time.

Dr. Thomas Hodge, a 1995 School of Dentistry graduate, said both Lea and Jason had helped to cover two other dental practices since the group was formed. Now it's time for the group to give back to the Fareses.

Hodge said it was the first time the group had covered for a death in the dental community.

"We tried to get in there and keep their normal business hours going, keep the staff in place until the family could sell the practice," Hodge said.

However, the person who traveled the farthest to help out was not a member of the Tri Lakes group. Dr. Lauren Timmons, who graduated in 2002 with Jason Farese and Austin Poole, traveled from his practice in Ocean Springs to help keep the practice going.

"I really felt like God spoke to me when I heard it happened," Timmons said. "I knew, in that minute."

He received the call while driving back from Orlando, Florida. Timmons had attended the same conference from which the three couples were returning.

"The second thought that was in my head was, 'Do it for the kids.' I knew this was their retirement. The value of the practice would slip away quickly if people didn't step in."

The Fareses had one of the most technologically advanced practices in Mississippi. Attending the seminar in Florida was a testament to their commitment to staying on the cutting edge of dentistry. However, Timmons said the group skipped one day of classes to take in the sights at Universal Studios.

"I didn't want to skip class," he said. "I am kind of glad now that they did, not knowing it was going to be one of their last few days."

Timmons said he talked to Jason Farese on the day before the crash.

"Farese just came and sat down beside me before this class started,"

Timmons said. "He talked to me for just a little bit, which was kind of unusual, I thought. He's always busy, somewhere to go and something to do.

"I was focused on the class and my notes, and he just wanted to small talk. Now I really regret not putting my paper down and totally giving him 100 percent of my attention. I didn't realize that was going to be the last time I ever talked to him."

Green described Jason Farese as the little brother he'd never had.

"I've known Jason since the time he was born," he said. "His older brother and I were best friends. Jason was a consummate perfectionist in everything he did — academically, professionally and even spiritually. You could say that about all of them.

"They donated a lot of their time and did a lot of pro bono work for people who couldn't afford it."

Green said Lea Farese was great with the children who came into the clinic.

"She was kind of Jason's alter ego, if you will," he said. "She was a great mom and a great mentor to a lot of children. She was always at Jason's side and always at the children's side."

"They were not just good dentists — and they were very good dentists — but they were good people," Hodge said. "They were people whom you'd want your families to be around. They are going to be missed by many, many, many people."

Dr. Austin and Angie Poole

Austin and Angie Poole met later in life. Austin worked his way through college on his way to a degree from Delta State University. Angie was a University of Mississippi alumna.

Theirs was a second marriage for both, and together they parented five children. As a family, they enjoyed spending time outdoors.

"They spent a ton of time outdoors with all their children," Green said. "They were outdoors all the time."

Austin Poole is remembered by many for his Delta roots. Dr. Neva Penton Eklund, associate professor of dentistry and chair of pediatric and public health dentistry, wrote in the Mississippi Dental Association publication MDA Insider about Austin Poole wearing his hunting boots to class "because he had either just come from hunting that morning or was headed that way as soon as he could after the afternoon lab class."

Former teacher and New York native Dr. Frank Serio remembers the stories Austin Poole told him of time spent in the woods, hunting and fishing.

"I loved talking to Austin because he was just a country boy, no question about it," Serio said. "He would rather spend time out in the woods chasing hogs or hunting deer than just about anything else in his life.

"He was also a really good fisherman. He taught me a few things about fishing. I really enjoyed his company."



Dr. Austin and Angie Poole

Angie and Austin Poole spent their days together. As office manager, Angie ran Austin's practice in Clarksdale. Together, they would drive an hour each way from Oxford to Clarksdale to provide care to patients in the underserved, rural area.

Duncan said patients often were treated regardless of their ability to pay.

"Angie was just kindhearted," Green said. "She was very confident and constantly involved in all of their children's lives. She was a great mom, very welcoming. Her house was open to everyone. They'd take in total strangers.

"Austin and Angie were just great to everyone they knew. They never met strangers."

Timmons said Austin Poole was one of the nicest people he had ever known.

"Austin Poole would, literally – if it was during finals, if there was a war going on, if the building was on fire – he would stop and help somebody," Timmons said. "He would sacrifice his time."

Timmons summed up the way many friends and colleagues are feeling in the aftermath of the untimely deaths:

"It's really sad and tragic. It is a tremendous loss to the dental community. Jason was way ahead of his time in dentistry with technology. That was a great loss. Michael Perry did so much for the community, as you know, and so did all of them, really.

"They were just an inspiration to live our lives that way."

Dr. Michael and Kim Perry

Dr. Michael Perry and Kim Westerfield grew up together in Brandon. They started dating when he was in the ninth grade and she was in the eighth.

After high school, they both attended the University of Mississippi. Westerfield received a degree in nursing; after receiving a math degree in Oxford, Perry went on to attend the School of Dentistry in Jackson. He completed postdoctoral training in periodontics at the Baylor College of Dentistry while Westerfield earned a master's degree from Texas Woman's University and a postmaster's degree as a family nurse practitioner at the Mississippi University for Women.

The high school sweethearts married in 1997. They settled in Oxford: Michael Perry established a periodontal practice and Kim Perry served as a nurse practitioner at the University of Mississippi Health Center. John Green of Oxford, a family friend of all three couples, said Kim Perry was a committed wife, mother and health-care provider.

"She spent her entire adult life taking care of others," Green said.

"That's common with all of them. They were all just very giving people."

Michael Perry's brother, Robert, said his brother was very passionate about his work, his patients and his staff. More than one person described Michael Perry him as "driven." He grew five practices in north Mississippi and the Memphis area, and his staff followed him to each location to provide care.

"People say that he ran 90 miles an hour everywhere he went," Robert Perry said. "He wanted to cover as much of an area as possible and see as many patients as possible."

Michael Perry also went the extra mile to show how much he cared for his patients.

"I've received a lot of letters – the whole family has – about how Michael would call his patients after he had seen them that day," Robert Perry said. It was the first time most patients had ever received a telephone call from a doctor or a dentist checking on them, and it meant a lot to them. "He really did care."

Michael Perry showed his caring nature in other ways as well: He traveled with Serio to the Dominican Republic to provide care to the less fortunate. He took his oldest children with him to nurture in them an appreciation for helping others.

Robert Perry said his brother's legacy will be the 73-acre Oxford-Lafayette SportsPlex he built with his own money.

"Michael always knew how important sports were growing up and how there were role models in coaches and good support in youth sports," Robert said.



Dr. Michael and Kim Perry with their children.

"They were very motivated for the youth in this town," Green said. "They took care of people who couldn't financially take care of themselves."

Serio said Michael Perry was not just tireless for himself but for everyone around him.

"He and Kim really did so much for the Oxford community," Serio said.

"Any way that Michael touched people was just tremendous, and of course Kim was right by his side the whole time."

The Perrys leave behind three children.

Our Oxford Family

Green has formed a memorial fund to help the children of all three families.

"Our Oxford Family was set up to take care of the short- and long-term needs which should arise for the children who were left when their parents passed away," Green said. "Short- and long-term needs include education or basic needs going forward."

Those who wish to contribute may visit the Our Oxford Family website at <https://ouroxfordfamily.com/>.

In memoriam:



Dr. Sigurd Krolls

Dr. Sigurds Krolls, professor emeritus of dentistry and one of the longest-serving faculty in the School of Dentistry, died Oct. 26. He was 84.

A native of Riga, Latvia, Krolls came to America in 1949. He earned his B.S. and his D.D.S. at the University of Illinois, Chicago. He also received his M.S. in oral pathology from Indiana University and his M.S. in education from Jackson State University.

"Dr. Krolls was such an inspiration to all of his dental students and to everyone he encountered," said Dr. Tina R. Woods (D.M.D. '97), assistant professor of dentistry in the Division of Oral and Maxillofacial Surgery and Pathology. "He was so encouraging and supportive of each of us individually as well as the School of Dentistry as a whole.

"He had such a passion for research in the field of oral pathology and loved forensic dentistry . . . He was always engaging with us and enjoyed teaching an elective on forensic dentistry."

A 20-year veteran of the U.S. Air Force, Krolls rose to the rank of colonel and served as vice chairman of the Department of Oral Pathology. He also received the Legion of Merit, the nation's second-highest peacetime award.

Krolls joined the School of Dentistry faculty in 1977 and taught oral pathology to virtually every student in the school. He became chair of the Department of Diagnostic Sciences in the school, authored more than 100 scientific papers and received many local, state and national awards for science and academics.

A diplomate of the American Board of Oral and Maxillofacial Pathology and the American Board of Oral Medicine and a fellow of the American College of Dentists, the Pierre Fauchard Academy, the American Academy of Oral Pathology and the American Academy of Oral Medicine, Krolls was doctor honoris of Stradina University, Institute of Stomatology, Riga, Latvia.

Services for Krolls will take place next summer at Arlington National Cemetery.

The Sigurds O. Krolls, D.D.S. Oral Pathology Fund has been created to help support the needs of the Department of Oral-Maxillofacial Surgery and

Pathology and to honor Krolls' exceptional career and significant contribution to dental medicine. To make a donation to the fund, visit umc.edu/givenow or contact Sheila Henderson at (601) 815-3302 or sahenderson@umc.edu.



Dr. Aaron D. Puckett Jr.

Dr. Aaron D. Puckett Jr., a longtime professor of biomedical materials science in the School of Dentistry, died Aug. 18, 2016. He was 59.

A native of Greenville, Puckett was a 1975 graduate of Ocean Springs High School and received his B.S. in polymer sciences in 1979 and his Ph.D. in polymer science in 1986 from the University of Southern Mississippi. He then joined the School of Dentistry in 1984 as an instructor in restorative

dentistry and served on faculty for 32 years. He retired from UMMC on July 1, 2016.

He was named to the Nelson Order for the School of Dentistry in 2010 and received the D2 Basic Science Teacher of the Year Award from the Hembree Honor Society. He served as vice-chair of the Health Sciences Division for the Mississippi Academy of Sciences from 2011-12 and was a member of the University of Mississippi Foundation Board from 2003-06.

He gave numerous invited presentations; coauthored more than 70 articles in refereed publications, 120 abstracts and three book chapters; obtained 23 research grants; and acquired three patents. On Feb. 21, 2008, he was presented the Outstanding Contributions to Science Award by the Mississippi Academy of Sciences, of whom he was a life member.

Puckett is survived by his wife of 39 years, Leslie O. Puckett of Gluckstadt, and their two children, Courtney McIlwaine of Jackson and Eric Puckett of Anchorage, Alaska. A Celebration of Life took place at the Pucketts' home. In lieu of flowers, memorial donations may be made to the Arbor Day Foundation or to Community Animal Rescue and Adoption, Inc. of Jackson.

SOD faculty, students spare the shave, Fund the Beard for memorial drive

The School of Dentistry's first "Fund the Beard" campaign raised \$3,143 for the Our Oxford Family memorial fund. Started by John Green, the fund benefits the children of three couples with strong ties to the school who died in a plane crash last August. (See pages 13-14 for more information.)

Participants in the contest grew facial hair from Oct. 3-Nov. 17, while voting for "Best Facial Hair" took place through the purchase of tickets. The first-place winner, as determined by the amount of money raised, was Dr. Mark Livingston, professor of advanced general dentistry. Second place went to Dr. Patrick Smith, professor of family medicine in the School of Medicine.

A complimentary "Best Beard Shaving Design" took place in the School of Dentistry's fifth floor bench lab. Brave would-be stylists placed bids for the chance to shave participants. Livingston bought his way out of being shaved by a colleague; however, Dr. David Felton, School of Dentistry dean, was not so lucky: His shave was performed by administrative assistants Agnes Triplett and Latoshia Robinson, who completed Felton's new look with a curly ribbon in Louisiana State University colors.

Students also raised money for the memorial fund by serving a potluck lunch in the Norman C. Nelson Student Union. The luncheon crowd chose the best beard design by applause. Second-year dental student Andrew Harris won first place with his Mohawk



School of Dentistry faculty and students let their facial hair grow out to benefit Our Oxford Family

design, while third-year dental student Miles Backstrom took second place while sporting stars, stripes and a molar on his face.

First-place winners in both categories received a pewter and ceramic shaving mug, brush and soap.

"We sincerely appreciate your efforts in supporting this most worthy cause," Felton told the participants. "Thank you for growing facial hair – and being willing to shave it – for a worthy cause. I'm very proud of our school for this great effort."

To see a video of the "Fund the Beard" festivities, visit <http://bit.ly/fundthebeard>.

Orthodontics chair takes ADA award



Dr. Ahmad Abdelkarim, right, associate professor of dentistry and chair of the Department of Orthodontics, receives the American Dental Association/American Association for Dental Research Evidence-Based Dentistry Mid-Career Faculty Award from Marcelo Araujo, ADA vice president of science, at an Oct. 19, 2016 reception after the Evidence-Based Dentistry Champions Conference.

The annual ADA/AADR awards recognize dentists and researchers who make significant contributions to implement and advance evidence-based dentistry.

Board-certified in orthodontics and oral and maxillofacial radiology, Abdelkarim received his D.M.D. and his Ph.D. from the University of Mississippi, a certificate in orthodontics from Jacksonville University in Florida, a doctorate in education from the University of Louisiana at Monroe, and a Master's of Science from the University of Texas at San Antonio.

Abdelkarim's wide-ranging research interests include clinical and educational research, and his scholarly articles have been published in several journals. He is a fellow to the International College of Dentists, the American College of Dentists and the Pierre Fauchard Academy, and his honors include six awards from the American Academy of Oral and Maxillofacial Radiology and the Outstanding Faculty Award from the American College of Dentists Mississippi Section.

A strong proponent of implementation and advancement of evidence-based dentistry, Abdelkarim is one of the leading advocates for the appropriate use of ionizing radiation in orthodontics. He serves as a consultant to the American Association of Orthodontists Council on Scientific Affairs and is an editor and a reviewer for numerous dental journals.

CODA taps dentistry prof for chair position



Livingston

Dr. Harold Mark Livingston, professor of advanced general dentistry and director of the General Practice Residency Program in the School of Dentistry, has been appointed chair of the Commission on Dental Accreditation (CODA).

CODA serves the oral health-care needs of the public through the development and administration of standards that foster continuous quality improvement of dental and dental-related educational programs.

SNDA taps SOD students for national posts

The Student National Dental Association has selected four School of Dentistry students to serve the organization in various capacities.



Amadia Giles was named SNDA treasurer; Alexa Lampkin was selected as the SNDA representative to the Mississippi Dental Association House of Delegates; Clora Evans was named SNDA Corporate Round Table Representative 1; and Jiman Nelson was named SNDA Corporate Round Table Representative 2.

Nelson also received a second-place award at an SNDA conference for his study, "Modification and Characterization of Anodized Titanium for Dental and Orthopedic Implants." Nelson's faculty mentors are Dr. Michael Roach, Dr. Scott Williamson and Dr. Amol Janorkar.

The School of Dentistry's SNDA representatives also received a first place award in the organization's scrapbook competition.

The SNDA's stated goal is to "promote, aid and support the academic and social environment of minority students."

Boom Magazine names alumna top dentist



Taylor

Dr. LaMonica Davis Taylor, a School of Dentistry graduate, has been selected by Jackson's Boom Magazine as its 2016 Top Dentist.

The owner of Smiles on Broadway Dental Care in Jackson, Taylor was lauded by the publication for her practice, which primarily serves children ages 1-21 and special needs adults. Taylor also operates a Saturday clinic to serve the parents of Smiles on Broadway patients.

Class of 2020 signs dental ethics pledge



Mike Scruggs, a member of the School of Dentistry Class of 2020, signs a pledge during the school's annual Ethics Signing Ceremony Oct. 13, 2016 in the Norman C. Nelson Student Union.

Denise Annette Aikman of the Ethics and Civility Council, Dr. Charles Caskey, chair of the Mississippi Section of the American College of Dentists, were guest speakers at the event, while Dr. Ralph H. Didlake, associate vice chancellor for academic affairs and chief academic officer at UMMC, provided the keynote address.

After the school's Policy on Ethical Conduct and Professional Behavior for Students was read, and as the roster was called, each member of the Class of 2020 came forward to sign the Code of Ethics and receive the American College of Dentists ethic wallet card.

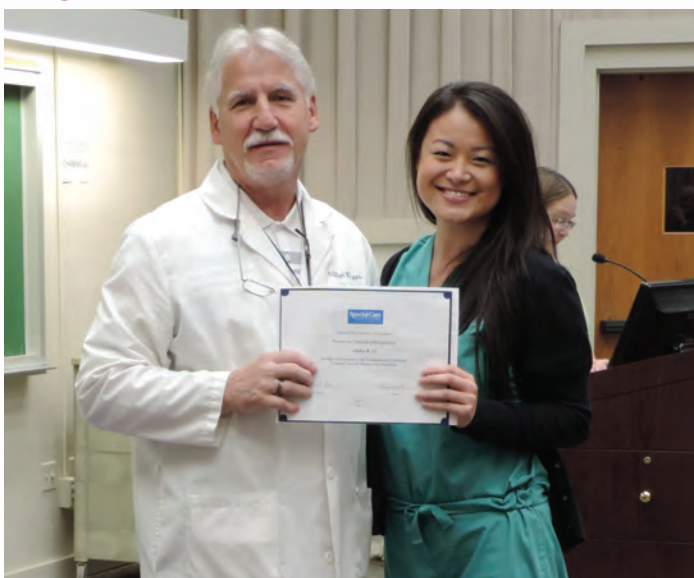
Senior dentistry class receive honors



Members of the School of Dentistry Class of 2016 pause for a photo in the stairwell of the Jackson Marriott following the Senior Honors Convocation and Banquet May 13, 2016.

Sponsored by the School of Dentistry and the Mississippi Dental Association, the ceremony included a keynote address by Dr. Jimmy Hollingsworth, president of the MDA, and recognition of awards winners among the senior class.

Program honors SOD students' achievements



Alisha Huifang Li receives the Special Care Dentistry Association Student Award from Dr. William Duncan, professor of pediatric dentistry and community oral health, during the School of Dentistry Award Day program April 19, 2016 at UMMC.

Li's award was among approximately 30 that were presented that day to dentistry students for outstanding academic and clinical achievements.

SOD classes converse at annual alumni dinner



Enjoying the School of Dentistry's annual alumni dinner, top photo from left, Dr. Toby Brandon, Claire Harkins and Dr. Michael Harkins; and bottom photo from left, Dr. and Mrs. James Duncan and Dr. and Mrs. James Lott.



D1s enjoy Christmas at the School of Dentistry

In top photo, D1s will celebrate their talent competition victory for their 12 Days of Dental School song, written and sung by the students; while Dr. David Felton, sitting on Santa's lab, center, joins members of the D1 class in presenting donated canned goods to Stewpot.



The School of Dentistry will host its first Dental Mission Week Monday-Friday, Feb. 6-10, 2017. The event will take place in combination with the school's 13th annual Give Kids a Smile Day, scheduled for Friday, Feb. 10.

During Dental Mission Week, the school will provide essential oral health care and oral health education to children and adults in underserved communities.

School leaders have set a goal to provide free dental care to 800 patients – 200 per day – for men and women in homeless shelters and for those who use free dental clinics. In coordination with Mississippi Donated Dental Services, the school also will provide 20 sets of dentures for edentulous patients.

On Friday, as part of Give Kids a Smile Day, the school will provide services to third and fourth grade students from Galloway Elementary School, Johnson Elementary School and Walton Elementary School and fourth and fifth grade students from Power APAC.

For the first time, Give Kids A Smile Day will be expanded to include clinics in the afternoons for children who participate in the north unit of the Boys and Girls Club of Mississippi's after-school care program and the Stewpot Homeless Shelter's after-school care children program.

To donate time or service to these worthy causes, call Marsha Burton at (601) 815-4090; to donate dental materials or supplies, call Marla Martin at (601) 984-6184 or email her at memartin@umc.edu.

Class Notes: highlighting news, events in the lives of SOD alumni

CLASS of '79

Roger Wright, D.M.D., has retired after 37 years of service in Aberdeen. He sold his practice in March 2016.

Wright's son, Chris, completed his Master's in Mathematics at the University of Mississippi, had advanced training at Sanford and Brown in Atlanta, and is now travels the country as a cardiovascular technician for Health Fair.

Wright's daughter, Rachel, is married to Jobe Best of Hattiesburg. She completed her undergraduate degree in marketing at the University of Mississippi and is now a pharmaceutical representative for Shire Pharmaceutical Company in the Atlanta area. She and her husband have two children: Quinn and Bailey.

Wright and his wife, Jeri, have moved closer to their children and grandchildren in the Atlanta area.

Martin Chaney, D.M.D., lives and practices general dentistry in Vicksburg. His three daughters – Lacey, Logan and Liza Kate – have given Chaney and his wife, Teresa, four wonderful grandchildren – Nicholas, 7; Olivia, 4; Fiona, 2; and Amelia, 7 months. The Chaneys are expecting another granddaughter in March 2017.

Chaney has received the Vicksburg Post Reader's Choice "Best Dentist" Award four years in a row. He also has participated in the Halloween Candy Buy-Back for six years. In 2015, Chaney collected 345 pounds of candy that was shipped to military members overseas through Operation Gratitude.



CLASS of '81

Tony Bounds, D.M.D., and his family have celebrated two weddings this year.

Bounds' son, Wilson Bounds, married Ali Butler Bounds in July (photo at right). Ali is a freshman dental student at UMMC.

In September, Bounds' daughter, Lauren Bounds, married Black McBride in St. Lucia (photo below).



CLASS of '86

Michael B. Ellis, D.M.D., has sold his dental practice in Vicksburg to his daughter, **Kaitlyn Ellis Morgan, D.M.D.**, and her husband, **Pierce M. Morgan, D.M.D.**, both members of the Class of 2016. Ellis is still working part time for them!

Dr. Acie Whitlock, D.M.D., had been named president of the School of Dentistry Alumni Board.

CLASS of '83



Ed Wheeler, D.M.D., Hal Jones, D.M.D. and Bert Keel, D.M.D. (Class of 1981) recently attended a continuing education event sponsored by Dr. Billy Ledoux, a Gulf Coast orthodontist.

CLASS of '93

Last fall, **Jimmy Hollingsworth, D.M.D.**, was inducted into the American College of Dentists in Washington, D.C. He was also elected as an American Dental Association Delegate from the Mississippi Dental Association at the annual session of the MDA in June.

This fall, Hollingsworth was appointed by Red Stevens, Fifth District Trustee, to serve on the ADA Council on Dental Benefit Programs.

Hollingsworth has also been named to the UMMC School of Dentistry Alumni Board.

After two years in New Orleans, **Nathan Burns, D.M.D.'s** pediatric dental practice is going great; Burns was recently named "Best Pediatric Dentist in the 504 Area Code in 2016."

Burns and his wife, Vanessa, are excited to announce the arrival of their first child, daughter Clara.

CLASS of '03



In September, **Courtney M Gianola, D.M.D.**, opened her private practice - Bellevue Family Dentistry – in Hattiesburg.



John Carlton, D.M.D., has started providing free dentistry services to the Adams County Sheriff's Department at his practice, Carlton Family and Cosmetic Dentistry, as a way of showing support for local and national law enforcement.



Deidra Jones Snell, D.M.D., married Titus Snell in April 2015, gave birth to their son, Titus Aiden, in February 2016, and opened her office, Ridgewood Smiles Dentistry, LLC, in September 2016. The office is located at 5800 Ridgewood Road, Suite 105, in Jackson.



Jennifer Bain, D.M.D., was recently named to the School of Dentistry Alumni Board.

Sam and **Trevor Tindle Hall, D.M.D.**, announce the birth of their daughter, Olivia Claire Hall, on Oct. 19, 2016 in Hattiesburg. The baby's grandmother is Raanne Ray Tindle, D.M.D., Class of 1987.



Summer research program mentors young dentistry UPSTARTs



Participants in the School of Dentistry's 2016 Undergraduate and Professional Student Training in Advanced Research Techniques (UPSTART) summer research program pause for a photo. The program provides eligible dental, pre-dental, pre-graduate and high school students the opportunity to participate in faculty-mentored research.

The participants include, front row from left, Sarah Burnham Kimbrough, D4; Mary Reynolds, D2; Caitlin Alford, D2; Quynh Nguyen, D2; Denise Cherry, D2; and Allison Dickson, D2; second row from left, Mabry Harris, undergrad; Kally Xu, high school student; Ashley Max, undergrad; Adam Travis, undergrad; and Bernard Seal, high school student; third row from left, Jennybeth Hendrick, D2; Andrew Sinclair, D3; and Bo Key, undergrad; and fourth row from left, Dr. David Felton, School of Dentistry dean; Evan Theilman, undergrad; Dr. Jason Griggs, associate dean for research; and Caleb Hardman, D2.

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Mark Your Calendar for 2016 Continuing Dental Education:

Feb. 3, 2017

District I

BancorpSouth Conference Center, Tupelo

Feb. 17, 2017

District II

Northwest Mississippi Community College, Senatobia

Feb. 10, 2017

District III

Thad Cochran Center at the University
of Southern Mississippi, Hattiesburg

Feb. 9, 2017

Oral Health Day at the Capitol

Jackson

Feb. 6-10, 2017

Dental Mission Week

University of Mississippi Medical Center, Jackson

June 1-4, 2017

Mississippi's Dental Meeting – 2017

Perdido Beach Resort

Orange Beach, Florida