A Crowning Moment
School celebrates ‘topping out’ for new building
Partners for a Common Cause

At the Medical College of Georgia School of Dentistry, we are striving to fulfill our mission of providing high-quality training for future Georgia dentists and serving those who are most in need of care through our student and residency programs and our expansive outreach endeavors. By partnering with 13 indigent care and public health clinics throughout the state, we have made a difference in the lives of more than 5,000 patients this year.

Relieving the burden of illness on society is integral to our mission, both at the dental school and throughout the entire university. Georgia dentists who volunteer at the various clinics throughout the state supervise our students as they learn the importance of providing access to care for those not able to otherwise afford it. By following the lead of these wonderful role models, we hope our students and residents will carry forward the willingness to volunteer and to serve the general public. In other words, to share the common cause of access to care!

Recently our students sought their own niches for helping those in need by starting a volunteer program at the Georgia War Veterans Nursing Home, right across from the dental school. In addition to this student-driven activity, many other events have been conducted by the students to support dental care for patients who cannot afford full treatment.

Scientific discovery is another way of serving the public, with research that leads to new technology and products for better patient care. In our new D.M.D./Ph.D. program with the Georgia Institute of Technology, Ryan Bloomquist, a second-year dental student, is well on his way to discovering the genetic secrets of tooth development in fish. This may ultimately be translated into new therapies for our patients. Imagine being able to give the patient the choice of growing their own tooth in the future!

Finally, the front cover story says it all about the philanthropic activities of our recent graduates—the class of 2010. Through the leadership of their officers and Dr. William Bennett, an M.D. who now has a D.M.D., the class was the first to make a substantial gift to the building fund as well as establishing an endowed scholarship for future students.

It’s easy to find a common cause when you have the caliber of students, residents, faculty and Georgia dentists as role models.

Connie Drisko, D.D.S.
Dean and Merritt Professor

By partnering with 13 indigent care and public health clinics throughout the state, we have made a difference in the lives of more than 5,000 patients this year.

"Partners for a Common Cause"
OPENED WIDE

A Crowning Moment
Construction milestone reached

Statewide Impression
Making our mark across the state

On the Cover

School of Dentistry
Class of 2010 students line up to form ‘10 on the roof of the new dental school building.

Dr. Levy’s Kids
Appliance reduces the number of surgeries needed to correct cleft palate

Small Town, Big Duties 16
Teaching 24/7 19
Military Connection 20
2010 Distinguished Alumnus 31
More Than a Building 33

DEPARTMENTS

Student BITES 10
Student Voice 13
Faculty BITES 24
Research BITES 28
Development 32
Alumni BITES 36
Aevergreen tree, a symbol of growth and good luck, was hoisted to the top of the new School of Dentistry building to celebrate the structure reaching its highest point on June 17, shortly after the final bucket of concrete was poured on the roof.

Weeks earlier, on April 23, more than three dozen members of the class of 2010 – the first class to unanimously pledge a donation to the building fund, gathered on the fifth floor for a photograph taken from atop a crane more than 200 feet tall. Dressed in their white coats, the seniors climbed construction ladders to the top and stood on concrete so fresh that the heat could be felt through their shoes.

Since breaking ground in late September, 13,500 cubic yards of concrete have been poured and 1,000 tons of rebar and 44 miles of cable have been placed by BE&K Building Group, the facility’s construction team. To date, $17 million has been invested into the community and the school.

“We at BE&K are excited to be celebrating the School of Dentistry topping-out milestone on schedule,” said Brandon Scott, senior manager for the $112 million, 268,788-square-foot building project slated for completion in June 2011.

The building will be more than 100,000 square feet larger than the existing building that opened on Laney Walker Boulevard in 1970.

As of mid-July, approximately 270 workers have completed 153,000 man hours on the project.

The new space will allow the school to increase class size from 63 to 100 by 2016 and its residency positions from 44 to 72, making it one of the largest dental schools in the nation.

The growth should help alleviate the state’s dentist shortage; currently 41.4 dentists per 100,000 residents, considerably fewer than the national ratio of 54.3 per 100,000.

Approximately 80-85 percent of MCG dentistry graduates practice in Georgia.
Countryside and mountains, beaches and big cities. Georgia’s varied landscape lends itself to a diverse and rapidly growing population, and that creates a challenge when it comes to training the state’s dental workforce.

The School of Dentistry is expanding to meet the state’s need for dentists — that’s evident in the new five-story facility under construction on MCG’s campus. But the school’s footprint reaches much further than its new home.

“We truly have School of Dentistry ambassadors all over Georgia,” Dean Connie Drisko says.

That counts the students, faculty and alumni who now learn, teach, volunteer and work across the Peach State. Whether it’s a student on rotation in a North Georgia clinic or an alumnus providing free care to Augusta children, they’re all fulfilling the school’s mission to improve Georgia’s oral health.

The mission starts with educating future practitioners.

Statewide education

“For our students to be exposed to the state’s varied populations, it’s important for them to go to different regions, meet dentists and patients, and assess the need for themselves,” Drisko says.

Three years ago, the school began an externship program, sending seniors to learn alongside dentists in 13 public health and indigent care clinics throughout the state. The program has grown from a single two-week rotation in the summer to three throughout the year.

Studies published in dental education journals have shown that when students spend time working outside school, they return more efficient and competent.
Class of 2010 graduate Dr. Travis Fiegle concurs. “The externships have helped build my confidence, because you get to do some of the more complicated procedures independently,” he says.

Fiegle’s final rotation, in pediatrics at the Northwest Georgia Public Health District in Rome, showed him how to better communicate with children — a handy skill as he began an orthodontics residency at MCG this summer.

For instance, he had an age-appropriate response to a young patient at the Rome clinic who pointed to his dental loupes and asked, “What’s that on your face?”

“They’re special glasses that magnify all those ‘sugar bugs’ on your teeth,” he explained.

Sugar bugs, water whistle, sleepy juice—it’s all part of the new vernacular Fiegle wouldn’t have known without experiencing pediatric dentistry firsthand under Dr. Michelle Martin at the clinic.

When students begin their rotations, she expects them to know how to do simple procedures, such as fillings, on their own. Her main goal is to teach them behavior management techniques and communication.

“The odd factor in pediatrics is learning to deal with an anxious, nervous or unruly child,” says Martin, who serves on the clinical faculty alongside the other dentists teaching at externship sites.

Fiegle’s Rome externship was also his first experience using nitrous oxide to calm a child for treatment. He says he treated more pediatric patients in two weeks than in his four years at MCG.

“We definitely put them to work,” Martin says.

In addition to pediatric dentistry, the clinic offers an oral surgery rotation under Dr. Charles Roszel, where students get to work with general anesthesia and medically compromised patients.

The majority of Roszel’s patients are seen for complicated extractions, and many have systemic diseases affecting their oral health. Without the clinic’s anesthesia component, such patients would have to be treated at a hospital.

“We see patients on dialysis or undergoing end-stage cancer therapy, women pregnant in every trimester and elderly with do-not-resuscitate orders,” says Roszel, a board-certified dental anesthesiologist who serves as the public health district’s dental director.

“Undergraduates rarely get a chance to treat these folks in school, so when they come here it’s an eye-opening experience and they really thrive.”

The clinic serves a rural 10-county area of about 500,000 residents and handles more than 5,000 patient visits a year. About 99 percent of its patients are low income with no other access to dental care.

While there are many dentists in the Rome area, there aren’t enough who treat this population. Roszel says he hopes this experience shows students the need for dentists who treat adults who have no insurance and few resources.

“Students quickly put together that this population really needs their skills and is very thankful for them,” he says.
Capital service

It’s no secret that the greatest concentration of dentists in Georgia is in Atlanta. Yet, the capital still has its underserved populations. The working poor, indigent and homeless do have access to dental, medical and mental health care at the Good Samaritan Health Center, however.

Pediatrician Bill Warren opened the center in 1999 to fulfill a calling to serve Atlanta’s neediest residents through an integrated, holistic and Christian approach to health care.

“Essentially, the entire family can have all their health care needs met under one roof,” Warren says. “We intend to reduce health care barriers so those who don’t have traditional access can achieve a sense of wellness.”

Care is not free, however. Warren believes that having patients pay on a sliding fee scale gives them a sense of ownership by investing in their health. The significantly reduced cost wouldn’t be possible without the center’s volunteers, including numerous MCG alumni and students. Dr. Kathy Smith, a 1978 graduate, volunteered at the center for years before joining its staff in 2008 as one of two paid dentists.

“Every day there’s a heartwarming story of someone who couldn’t afford care if they weren’t in a subsidized clinic,” says Smith, who now teaches the dental students volunteering at the center as part of the externship program.

She recalls a young woman who was raised by her grandparents after her mother died of AIDS. The woman had no money for dental care other than the extraction of her back and bottom teeth. The loss of her front teeth was imminent when she discovered Good Samaritan. Smith provided her with dentures and gave her back her smile.

“We’re trying to show Christ’s love through health care,” she says.

That outlook made an impact on 2010 graduate Dr. Mark Causey during his rotation at Good Samaritan. When his patients were comfortable enough to talk with him about personal crises, he and Smith were able to pray with them. “It’s a good feeling when you’re able to get a patient to open up not only about their dental problems, but their family or mental problems, as well,” he says.

The spiritual atmosphere is just one of the distinctions that sets this learning experience apart from his work in the dental school’s clinics. Throughout his Atlanta rotation, Causey spent his mornings caring for back-to-back
emergency patients and his afternoons treating scheduled patients for fillings, extractions and root canals. “It’s more of a real-life experience as far as time management goes,” says Causey, who started an orthodontics residency at MCG this summer.

Patient visits have steadily increased since the center moved to its new location in February 2009. Warren’s goal is to develop more volunteers, mentor more students and increase the number of general dentistry residents to handle the clinic’s expanded capacity.

Dr. Mike Meador was the first MCG resident to rotate through the clinic. He chose Good Samaritan because of its reputation and procedures it offers that most community health clinics don’t, such as root canals.

“Being here has increased my desire to give back to my community once I start to practice,” says the Pensacola, Fla. native. “While opening a clinic of this scope isn’t practical for many dentists, seeing it in action should encourage them to volunteer in whatever way they can.”

It encouraged Dr. Brittany Thome, 2007 MCG alumna, to lead Good Samaritan’s second dental day. Two pediatric and 12 general dentists spent a full day in May treating 87 disadvantaged patients — everyone who walked in the door. They met all dental needs, be it extractions or fillings, for a flat $50 fee. Homeless shelter residents were treated for free.

The idea for Good Samaritan’s dental day was conceived by 2009 graduate Dr. Mary Wolfe. Warren wants it to become a quarterly project.

“Dentistry is more fun when you give it away,” says Thome, a Loganville general dentist. “There’s a lot to do in our own cities if we meet the challenge to step out of our comfort zone. The benefit is huge for the patients, and us, too.”
Helping at home

That challenge persists even in Augusta, only a mile from the School of Dentistry’s front steps.

The Children’s Hospital Association Dental Clinic on Eve Street treats a small, but important, group of patients.

“We see the children who fall through the cracks,” says Dr. Bentley Roberson, 1987 alumnus and the free clinic’s only dentist. The clinic treats Richmond and Columbia County children, from first through 12th grades, whose parents can’t afford dental care and don’t qualify for an assistance program.

In Roberson’s “day job,” he treats active duty military as a civil service general dentist at Fort Gordon’s Snyder Dental Clinic, but he wanted to do even more for his community.

“I felt that working at the children’s clinic was a good service, and God led me to help out,” he says. He’s worked at the clinic for 20 years.

The little-known clinic has a storied history in Augusta. The association running it has served the area since 1910 when it opened the Wilhenford Children’s Hospital, which would later become the site of the modern MCG campus. The hospital closed in 1941, but the association continued its work, narrowing its focus to children’s oral health and opening the dental clinic in 1949.

“The board’s responsibilities and clinical operations have remained the same over the years; however, we’re seeing fewer patients these days,” says Toni Peacock, president of the association’s board of directors. When it launched, the clinic was open a full day each week. Now it’s open every other Friday morning. The first year there were 572 dental patients; now they shoot for 120.

“There’s definitely room for growth, but it’s challenging because the clinic has always been word of mouth,” Roberson says.

“However, when parents bring their children to us, we usually see them until they graduate.”

Jaci Whitfield is one such parent. She has six children, ages 9 to 38, who have all been patients of the clinic, starting with her oldest child 32 years ago.

“I’m trying to pass along the importance of good care to my kids, and I’ve liked what I’ve seen here over the years,” she says. “If it weren’t for this clinic, my kids wouldn’t have had dental care.”

Access to care. Essentially, that’s what the School of Dentistry is all about. That’s why it’s expanding its reach from Brunswick to Rome, Savannah to Atlanta, and all points in between.

“It’s an immense responsibility to be the state’s only dental school,” Drisko says. “Our mission certainly doesn’t stop at graduation. Our alumni carry that torch, and they do a phenomenal job.”
William G. Bennett Leadership Award

Dr. William Bennett, 2010 alumnus, was presented with a new award established in his name at the senior awards ceremony in May. In presenting the William G. Bennett Leadership Award, Dean Connie Drisko said the award won’t necessarily be given annually, “but only when someone aspires to reaching the bar William has set for leadership to the school. His leadership has often been behind the scenes, as he has led through service, going above and beyond what was expected or what others even thought was possible.”

Bennett served as vice president of the American Student Dental Association, represented ASDA at the 150th American Dental Association House of Delegates and served on ADA Councils for dental practice and membership. He was instrumental in creating the nation’s first state-level Dental Student Lobby Day, began MCG's participation in National Dental Student Lobby Day and created the nation's first drive for student contributions to a State Dental Political Action Committee.

Bennett began an orthodontics residency at the University of Colorado-Denver this summer.

MCG School of Dentistry students are active volunteers. Highlights include:

- A wine tasting and art auction held in March at Crums on Central raised over $3,000 for the student-run nonprofit organization Give a Smile, which assists patients in financial need.
- After an earthquake devastated Haiti, the freshmen class sold baked goods to raise money for relief. In addition, the school’s chapter of the American Student Dental Association raised more than $1,750 through a bake sale, a silent auction and collection jars passed in class. The money was donated to the American Red Cross and UNICEF.
- The junior class volunteers regularly at Habitat for Humanity and helps out at local soup kitchens.

Students Honored

These outstanding seniors were honored during a May 6 awards presentation.

<table>
<thead>
<tr>
<th>Award</th>
<th>Recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia Dental Association/American Student Dental Association Outstanding Student Award</td>
<td>William Bennett, Ryan Fulchi</td>
</tr>
<tr>
<td>Senior Class President Certificate</td>
<td>Darron Alvord</td>
</tr>
<tr>
<td>Delta Dental Rural Health Award</td>
<td>Brian Bragassa, Dawnyetta Marable, David Quintero, Leigh Ann Trotter</td>
</tr>
<tr>
<td>Willeford, Haile &amp; Associates Financial Management Award</td>
<td>Shivane Gupta</td>
</tr>
<tr>
<td>Atlanta Business Bank Award</td>
<td>Alaina Pancio, Alpesh Patel</td>
</tr>
<tr>
<td>American Academy of Dental Practice Award</td>
<td>Milin Parikh</td>
</tr>
<tr>
<td>Quintessence International Award for Clinical Excellence</td>
<td>Justin Chong</td>
</tr>
<tr>
<td>American Academy of Esthetic Dentistry Award</td>
<td>Brian Bragassa</td>
</tr>
<tr>
<td>Academy of General Dentistry Award</td>
<td>David Weldon</td>
</tr>
<tr>
<td>Georgia Academy of General Dentistry Award</td>
<td>David Weldon</td>
</tr>
<tr>
<td>Ronald Goldstein Esthetic Dentistry Award</td>
<td>David Quintero</td>
</tr>
</tbody>
</table>

Dr. William Bennett with Dean Connie Drisko
### Senior Comprehensive Care Case Award
- Brian Bragassa

### Dentsply International Merit Award
- Jonathan Bullard

### Academy of Operative Dentistry Award
- Ben Lyons

### American College of Dentists Student Professionalism Award
- Alaina Pancio

### Omicron Kappa Upsilon inductees
- Brian Bragassa
- Mark Causey
- Robert Crawford
- Travis Fiegle
- Aubrey Hedrick
- Alaina Pancio
- Alpesh Patel

### OKU National Board Part II Award
- Travis Fiegle

### Alpha Upsilon Phi Founding Members Award
- Ryan Fulchi
- Mayur Nayee

### Alpha Upsilon Phi Leadership Award
- Brian Bragassa
- Mark Causey
- Robert Crawford
- Dawnyetta Marable
- Alpesh Patel
- David Quintero
- Patrice Robbins
- Leigh Ann Trotter
- Paul Trotter

### American Association of Oral Biologists Award
- Alpesh Patel

### Quintessence Award for Research Achievement
- Alpesh Patel

### American Academy of Oral & Maxillofacial Radiology Award
- Alaina Pancio

### International College of Dentists Award
- Darron Alvord

### William G. Bennett Leadership Award
- William Bennett

### Pierre Fauchard Academy Award
- Alpesh Patel

### American Academy of Oral & Maxillofacial Pathology Award
- Aubrey Hedrick

### Oral & Maxillofacial Pathology Achievement Award
- Amanda Davis Guess
- Kyle Smith

### American Association of Orthodontists Award
- Amanda Davis Guess
- Paul Trotter

### American Academy of Oral Medicine Award
- Dawnyetta Marable

### American Academy of Orofacial Pain Award
- Aubrey Hedrick

### American Academy of Craniofacial Pain Award
- Mayur Nayee

### American Academy of Periodontology Award
- Darron Alvord

### Quintessence International Periodontics Achievement Award
- Alpesh Patel

### International Congress of Oral Implantologists Predoctoral Achievement Award
- Daniel White

### Academy of Osseointegration Outstanding Student Award
- Brian Bragassa

### American Academy of Implant Dentistry Award
- Jonathan Bullard

### Alpha Omega Award for Academic Excellence
- Alpesh Patel

### American Association of Endodontists Student Achievement Award
- Alaina Pancio

### American Academy of Pediatric Dentistry Award
- Zeyad Hassan

### Georgia Academy of Pediatric Dentistry Award
- Leigh Ann Trotter

### Golden Forceps Award
- Charles Brooks

### American Association of Oral & Maxillofacial Surgeons Student Award
- Glendon Will Smalley

### American Association of Oral & Maxillofacial Surgeons Dental Implant Award
- Shivane Gupta

### Horace Wells Senior Student Award
- Sharla Bush

### American Student Dental Association Award of Excellence
- Leigh Ann Trotter

### American Student Dental Association President Award
- Paul Trotter

### Student National Dental Association President Award
- Dawnyetta Marable
- Shaunta’ Jones

### American Academy of Public Health Dentistry Award
- Shaunta’ Jones
ASDA's Got Talent
Tonight's Talent Lineup

Megan Lowe...............singing "Temporary Home" by Carrie Underwood
Alaina Pancia.............piano/singing "Wild Horses" by Rolling Stones
Brian Rucker...............singing/songwriting "Awards by Momma" by George Strait

AWARD: MCG "Look Alike" Award

Shivani Patel, Amy Didato, Aneela Amini, Alhadi Doomes, Perice Murray, & Claire Worthly ........performing an Indian Fusion Dance
Norma Miller...............performing "Saving All My Love For You" by Whitney Houston

AWARD: Merle's MAN of the Year Award

David Langer and Kaley Peek........guitar/singing "Mexico" original piece
Adam Goldberg, Norma Schultz, & Elizabeth Brooks
.....performing "Just the Way You Are" by Billy Joel
"I Will Survive" by Gloria Gaynor & "Yesterday" by The Beatles
Dr. Coleman and Dr. Cooper........performing "The Great Smoky Mountain Rattlesnake Retreat" by Ray Stevens

AWARD: MCG Faculty Vintage Pie Award

Amy Didato and Eduardo Diaz (A&E Dance Studio)
.....performing "Tumbao la cala habana" by Sonora
Leather Lips and the Valet Soldiers..........performing "The Middle" by Jimmy Eat World & "Pride and Joy" by Stevie Ray Vaughan

The hosts

Indian Fusion Dance

Alaina Pancia

Amy Didato and Eduardo Diaz
The journey of life is marked by many different influences. Each member of the 2010 class certainly has a unique story of how they reached their goal of becoming a doctor. Our class varied greatly in age, culture and life experience. Among our individual journeys, one theme is common: It was not a solo voyage. Without the support of family it would have been impossible for most.

Our families have facilitated our education in many ways. Often it is a parent or close family member who inspired us and helped us realize our potential. They provide all levels of support, for no other reason than to see us succeed. But as they helped us speak our first words and taught us to ride a bicycle, they probably never imagined the day when we would ask them to sit in our dental chair.

It is a unique experience to work on family members while in dental school. Since I was born and raised in the Augusta area, I had no shortage of volunteers. While many were willing to become my patients, it seemed no one was willing to be first. Who better to take that leap of faith than my mom?

Early in my sophomore year, my mom was diagnosed with a vertical root fracture and needed an extraction. Hoping to save her some money, I asked my professor if she could be treated by an upper classman. Much to my surprise Dr. Alphee Bouffard asked, “Would you like to extract it yourself?”

Me? I had never extracted a tooth! And the only mandibular block injection I had given was on my classmate (Thanks, Chase!). But to my relief, Mom was actually excited I would be working on her. She had always wondered what I did while at school, and now was her chance to find out first hand.

Dr. Bouffard guided me through the procedure at the oral surgery clinic. Though I was certainly nervous, Mom seemed quite sure of my ability, and the procedure was a great success. I haven’t had a patient since who was as thrilled about having an extraction. She was certainly proud.

Over the next two years I saw many proud parents sitting in the chairs of their children. Some had to drive long distances for the appointment, but all were thrilled to receive two to four hours of personal attention from a child who had been somewhat unavailable while enduring the rigors of dental school. Each time I would meet one of these parents the pride was obvious in their eyes.

With graduation now an event of the past, this is a time of great personal triumph. It would be easy to think we are solely responsible for this accomplishment. We could believe this remarkable achievement was the result of our intelligence and personal discipline alone. But not one of us would be a dentist today without the support of those we love.

We must always consider, and be grateful for, the sacrifices made by so many people in our lives. Sacrifices that not only got us where we are, but made us who we are.
Almost everybody lost teeth playing football without a facemask in the late 1940s.

Grady Rogers played tackle in high school, and was no exception. He lost a single tooth, but at 79 years old, Rogers still has a mouthful and plans to keep them. He’s used an electric toothbrush for years because shoulder problems make manual tooth brushing difficult.

In February, MCG dental students started giving the Army veteran a hand with his oral care through a new School of Dentistry service project at the Georgia War Veterans Nursing Home.

Each month a wave of students clad in blue scrubs sweeps through the building known as the “Blue Goose” for its blue façade and interior. They go room to room helping the 185 residents with everything from tooth brushing and denture cleaning to sharing oral hygiene tips.

“They reminded me to brush for two minutes and be sure to keep those gums clean,” Rogers said.
Many of the residents lack the mobility or dexterity to maintain healthy oral habits on their own, and that’s why the project, “Dentists for Della,” was born.

“We wanted to reach outside the box for this service project, and who better to serve than the elder war veterans who fought for our freedom,” said dental student Chris DeLeon, who created the project with classmates Ryan Fulchi and Ross Levine.

They named the project in honor of School of Dentistry founding faculty member and Georgia War resident Dr. Victor Della-Giustina, a retired community dentist committed to improving access to dental care.

The project reaches out to the fastest-growing segment of America’s population – the elderly.

“People are living longer, and more people than ever are keeping their teeth throughout their lives,” said the project’s faculty adviser, Dr. Kate Ciarrocca, an instructor in the Departments of Oral Rehabilitation and Oral Health and Diagnostic Sciences. However, as people age, medical complications and other factors can negatively affect oral health.

Ciarrocca added, “Our main goal here is to improve the quality of life for the veterans, and a healthier mouth can only lead to better health.”

Laurie Feeley, a Georgia War social worker for the past 17 years, said she’s seen the project’s immediate impact.

“Our residents react phenomenally to the students,” she said. “They’re not only providing continuous dental care, but they’re also taking the time to listen to residents tell their stories and share their life experience.”

It’s also worthwhile for the students, who get to treat a different patient population, and the nursing staff, who get extra hands to help provide care.

“We’re grateful the students chose to bring this special project to us,” said Kay Roland, director of nursing at Georgia War. “It’s going to make a world of difference for these patients to have their teeth or dentures cleaned in house by a dental student.”

Donations allow students to give the residents toothpaste samples and toothbrushes, but there are still needs to be met. Dentists for Della is funded by a $7,500 grant from the Mary Allen Lindsey Branan Foundation and sponsored by the MCG chapter of the American Student Dental Association. Patterson Dental donated supplies, including denture cleaner and repair products.

“The lack of larger equipment has hindered us from fully utilizing the number of students who want to volunteer,” Fulchi said.

Additional funding would enable the team to purchase a portable dental unit to expand from basic care to extensive dental cleanings and denture adjustments that can be done in patients’ rooms.

“We’ve gotten off to a good, productive start,” DeLeon said. “I’ve definitely seen how much this service is needed here.”

**HOW TO HELP:** If you’d like to make a donation, contact Dr. Ciarrocca at 706-721-2607 or kciarrocca@mcg.edu.
SMALL TOWN, BIG DUTIES

Alumnus thrives as mayor
Dr. Drew Ferguson IV believes he’s well prepared to be mayor of his hometown.
Running a solo general dental practice has more in common with leading the growing community of West Point, Ga., than one might think.

“As a dentist, I’ve had the perfect training,” he says with a grin. “Somebody walks in with a problem and wants it fixed right then.”

Once a sleepy little river and railroad town with a rich economic history going back more than a century and a half, West Point had been declining in recent decades. That all changed when Kia Motors Corp. opened the doors on a billion-dollar manufacturing plant earlier this year.

“When we lost the textile industry, we lost our manufacturing base,” Ferguson explains. “Our infrastructure began to deteriorate, we lost human capital. Having Kia come to town is a once-in-a-lifetime event. It gives us the opportunity to revitalize the entire region. Driving that opportunity in the right direction is why I ran for mayor.”

Ferguson, a 1992 School of Dentistry graduate, took office in 2007. His roots in the community run deep in this town of 3,500 people: his children are eighth-generation West Pointers, and his home is two blocks from the house where he grew up. Except for his years at the University of Georgia and MCG, he has always lived in West Point.

Ferguson’s previous public service experience was limited to a term on the city council in the mid-1990s. He was also very active with the Georgia Dental Association, holding statewide offices and serving as president of the western district.

His lack of training in town planning, however, is outweighed by his enthusiasm and a supportive community and family.

“I enjoy the intellectual challenge transparency of public service,” he says. “It’s very challenging to meet all the goals you set and do it the right way. There are times when it’s frustrating, but having a dental practice can be frustrating. It’s just part of the job, and the rewards have been remarkable.”

Citing a “fantastic” city council and staff, Ferguson also credits private citizens for the city’s commitment to progress, which includes $30 million in infrastructure projects and $92 million overall since Kia’s arrival.

“It’s a tremendous amount for a small community. I’m most proud of the number of volunteers that are willing to step up and fill our volunteer boards, development authorities and private foundations. It’s truly a team effort. We work very hard and very efficiently.”

Staying busy comes naturally to Ferguson. He and his wife, Buffy, are parents to four children ages 6-16, and for years owned a home construction company, a passion that grew out of remodeling their first home. He’s also an avid mountain biker.

Buffy shares his fervor for the city’s redevelopment. “She’s a completely invested and very active first lady,” he says. “And I
have a very solid, flexible office staff at my practice that understands the importance of what we’re doing and is willing to get out of their routine and comfort zone to allow me to do this.”

With Kia fueling the city’s growth, West Point is poised for positive change. Thirty-four downtown businesses have opened, Columbus State University has opened a satellite campus, subdivisions are being built, and thousands of jobs have come to the area.

“West Point is unique,” Ferguson says. “We don’t want to lose our sense of place, our identity. Despite the national economy, we’ve had the luxury of time, of planning for our growth.

“I’m the type of person who wakes up every day thinking I’m going to have the best day of my life. Being so engaged in my dental practice and the city is not stressful, it’s just a wonderful opportunity to be involved.”

FAMILY
Children Drew V, 16; Lucy, 13; Mary Parks, 9; and Thad, 6 are “independent children,” says Ferguson. “Being involved is simply part of our lifestyle. I think the older ones appreciate that we’re trying to create a great community and fulfill our civic and moral obligations. The younger ones simply think it’s neat that their dad is the mayor.”

Wife Buffy owns Elizabeth Ferguson Designs, a design and construction consulting business.

Ferguson’s father, a banker, was chairman of the West Point Development Authority for more than 20 years and was instrumental in bringing Kia Motors Corp. to the area.

MEMBERSHIPS
Ferguson is a member of the West Georgia, Georgia and American Dental Associations, the Pierre Fauchard Academy and the International College of Dentists. He serves as adjunct faculty of the MCG School of Dentistry and is a member of the Chattahoochee Hospital Society Board of Trustees and the Capital City Bank Community Board of Directors.
Educating millennial students takes more than chalkboards and textbooks.

“Dentistry is a very visual profession, and this generation of students is different from previous ones when it comes to conceptual recognition,” said Dr. Kevin Plummer, associate professor of oral rehabilitation.

He is at the helm of a school-wide push to infuse videos and technology into the curriculum. With easy-to-use, high-definition video cameras and simple editing software, Plummer hopes that faculty and students will team up to create what he refers to as “cookbook videos,” because of their step-by-step approach.

Each three- to five-minute video will demonstrate a laboratory, clinical or equipment procedure from start to finish. It could be as simple as how to paint adhesive on a diagnostic impression tray or a trickier technique, such as placing attachments on a patient’s dental implant.

“As faculty, we know what we want to say and we think we’re saying it effectively, but we’re not communicating correctly if the student can’t visualize it,” Plummer said. He believes that seeing a technique or procedure happen in real time has a greater impact than still photographs.

Live demonstrations in class are costly and are sometimes difficult for large groups to see. Recording the demonstrations will save time and money in the long run and will enhance the students’ learning experience, as well.

Plummer is producing the videos as podcasts that can be downloaded onto an iPhone, smartphone or laptop computer so students can review a procedure whenever and wherever they want.

Sophomore David Forrest is part of an advisory group that will help the school decide what type of content would be most useful to students. “It will be so helpful to have these videos as refreshers of basic techniques that you learn in preclinical courses, but don’t see again until your clinical work a year later,” he said.

Rather than hiring a videographer who is unfamiliar with dental procedures, faculty and students will be the directors, photographers and actors.

“We want to pair the computer-savvy students with faculty members who may have a harder time with the production process,” Plummer said. Ideally, a faculty member from each department will serve as a mentor to his colleagues.

Plummer also is partnering with MCG Information Technology Support and Services to develop several iPhone applications, which group videos together by subject matter.

“Students today started using computers in elementary school, if not before, so this learning style better matches our personalities,” David said.

Plummer hopes to see an institutional a peer-review process for the content and thinks some applications or content could even be marketed one day.

“The videos should stand up over the years and could help teach students for many years to come,” he said.
MILITARY CONNECTION

PART 1 of 2
Series on MCG’s affiliation with military dentistry
Just three years out of dental school, Dr. Brian Stancoven shared a thriving patient population of 20,000 with one other dentist. They averaged 24 patients a day, and in 15 months, he single-handedly had extracted 1,100 teeth and done countless root canals and fillings.

Stancoven, a U.S. Army captain, was deployed as a general dentist at Bagram Air Base in Afghanistan. His patients not only included American soldiers, but also high-ranking Afghani officials and soldiers from the Afghan National Army and various NATO countries.

Apart from being located in one of the world’s least developed countries, Stancoven’s dental environment was not too far removed from practicing on American soil. The five-operatory dental clinic in the Craig Joint-Theatre Hospital, which opened shortly before he arrived in 2007, was an air-conditioned and fully digital practice.

“The hospital was brand new – the gem of the base – and any equipment or supplies we needed were accessible,” he says.

There was no oral surgeon in Afghanistan at the time, so soldiers with facial trauma were treated by an otolaryngologist, who frequently asked Stancoven to assist in the operating room by plating jaw fractures or ensuring the patient’s bite was right after surgery.

“I saw a lot of craniofacial injuries in the O.R., and while we can begin the healing process in the theatre, these are complicated injuries, so reconstruction and care takes a lot of time,” he says.

Today, Stancoven is doing research he hopes will one day make that process faster. He’s a second-year periodontics resident at Fort Gordon’s Tingay Dental Clinic and a graduate student in oral biology at MCG’s School of Dentistry, where he’s researching bone regeneration under Dr. Ulf Wikesjö, interim associate dean for research.

Dr. Brian Stancoven

Stancoven joined the Army after graduating from dental school at the University of Texas Health Science Center San Antonio. He completed an Advanced Education in General Dentistry program at Pulaski Barracks near Landstuhl, Germany.

He was stationed as a general dentist at U.S. Army Garrison Baumholder in Germany for two years before his 15-month deployment to Afghanistan. His daughter, Stella, was just 12 days old when he deployed. Stancoven’s wife, Leslie, stayed in Germany with Stella. They talked every weekend through Skype, an Internet video and voice system.

He recently placed second in the basic science category of the 2010 Southern Academy of Periodontology Billy M. Pennel research competition. Fort Gordon residents and MCG master’s students swept the competition, with Dr. Cindy Zhou taking first and Dr. Kim Inouye taking third.
Fort Gordon's Periodontics Residency:

Four residents per year enroll in the three-year program at Fort Gordon's Tingay Dental Clinic. The goal is to complete their master’s degree during their first two years, so the third year can be spent focused on clinical work.

Only active-duty and retired soldiers are treated at Tingay, which reinforces a sense of camaraderie for the residents. Stancoven says, “If you’re working on a soldier who lost a couple of teeth because he got hit by an IED and you can restore a nice aesthetic and functioning smile, it doesn’t get much more rewarding.”

After completing the residency, the new periodontists have a three-year commitment to the Army, but it’s a superb job, Bisch says. In fact, since he graduated in 1995, about two-thirds of all the periodontists that have graduated from the Army program are still in.

They want to know if the combination of bone morphogenetic protein, which induces bone formation, and parathyroid hormone, which enhances it, could further accelerate bone healing, formation and maturation.

While the study is being done in experimental bony defects, the implications of future findings could go much further.

“In Vietnam, a soldier who lost his face in battle wouldn’t survive,” Wikesjö says. “Soldiers with that same injury today survive and need treatment.”

Stancoven can relate his research to future wartime treatment. “If we want to maximize bone healing, maybe there are specific ways to best use parathyroid hormone and/or BMP to ensure an injured soldier recovers the fastest while he’s waiting to get shipped back to the States,” he theorizes.

Bone regeneration and wound healing are major areas of focus in the School of Dentistry’s Department of Oral Biology. They’re also foremost on the minds of the U.S. military, which is one reason Stancoven is not the only Army dentist walking the school’s halls.

Dr. Frederick Bisch, the U.S. Army colonel who directs Fort Gordon’s periodontics program, emphasizes the importance of a master’s degree to his residents. Although it’s currently voluntary, he’s working to make it a requirement.

“As an Army dentist, it’s a feather in your cap to have a master’s degree from MCG,” Bisch says. Advanced degrees play an important role in promotion within the Army, but the basic science knowledge obtained through the research track also is invaluable, as he knows first hand.

As a first-year periodontics resident in 1992, Bisch was in the third residency class to jointly pursue his master’s degree at MCG. His major advisor, Dr. Gretchen Caughman, is now dean of the School of Graduate Studies, which grants the degrees to his residents today. He still refers to notes he took in Dr. Keith Volkmann’s immunology course.

“Periodontics is such a scientific specialty, and I just don’t have the background to teach my residents the basic sciences portion,” Bisch says. “I can teach them the ‘how,’ but at MCG they learn the ‘why.’”

In fact, MCG’s proximity is one reason the Army chose to move the program to Fort Gordon from Walter Reed Army Medical Center in Washington, D.C. in 1982. Bisch says Fort
Gordon is now the “home of Army dentistry,” having the sole periodontic and prosthodontic residencies, one of the two endodontics residencies and one of the seven oral surgery residencies.

In the years between Bisch’s residency and his return to Fort Gordon, enrollment in the master’s program gradually dropped off. Since he took over as director in 2007, all of the residents have jointly enrolled at MCG. When three of his residents walked across the stage at MCG graduation in May, the Army reached a milestone – 50 periodontics residents who’ve simultaneously earned their master’s degree.

Bisch credits Dr. Jill Lewis, director of MCG’s oral biology graduate program, with helping renew Fort Gordon’s interest in the program. “Graduate education is about critical thinking and using a new way to approach problems, and that seems to be a high priority for the military,” she says.

Lewis thinks it takes an exceptional student to complete the strenuous master’s program and a residency simultaneously, and Fort Gordon’s residents have not disappointed. In the past five years, they’ve garnered 11 major regional and national research awards, made 15 presentations at national and international conferences and published more than 25 abstracts and articles in peer-reviewed journals.

“There’s a synergy between our institutions that’s brought about some amazing results,” Wikesjö says. “Our connection with Fort Gordon is an exchange that goes beyond what you typically see in academics.”

That exchange has given Dr. Brandon Coleman, who completed his residency and master’s degree in May, “more of an appreciation for the research and literature – all the things your practice will be based on,” he says.

Coleman’s line of research, which Bisch calls “exciting and unbelievable,” focused on what happens during the early days and weeks of the bone healing process. The study, for which he won the 2009 Southern Academy of Periodontology’s Billy M. Pennel Research Competition, will continue after he leaves Fort Gordon to become the sole periodontist at Fort Polk in Louisiana.

He’s passed the torch to a first-year resident who will continue and expand the research. The system works for many studies that might otherwise lose their spark at graduation.

Wikesjö says each student takes a project a step or two farther than his predecessor.

“This way, we gradually add the pieces to the puzzle.”

---

What is BMP?
Bone morphogenetic protein, or BMP, is like “bone in a bottle,” Wikesjö says. “BMP can fairly accurately reconstruct lost bone – it’s really ‘tissue engineering.’”

He’s studied the growth factor for 20 years and is researching its many uses, including its implications for treating bone defects around teeth and dental implants.

“The Fort Gordon residents are part of evaluating novel therapies in my lab, which makes it exciting for them, and certainly exciting for me,” Wikesjö says.
Dr. James Barenie, associate dean for academic affairs and advanced education, received the 2010 School of Dentistry Outstanding Faculty Award.

“Dr. Barenie is an amazing asset to the MCG School of Dentistry and has been for over 30 years,” Dr. Carole Hanes, associate dean for students, admissions and alumni, wrote in nominating him.

Barenie co-authored more than $2.5 million in grants from the U.S. Health Resources and Services Administration and Robert Wood Johnson Foundation to improve access to dental care for underserved Georgians. The grants increased the number of statewide teaching sites and increased loan forgiveness for graduates who opt to practice in underserved areas. As principal investigator of another $1.5 million HRSA grant, Barenie initiated the Advanced Education in General Dentistry residency in 2007.

He came to MCG in 1977 as the director of the pediatric dentistry postgraduate program, a position he held for 16 years before being appointed associate dean. He also served as acting chairman of the Department of Pediatric Dentistry for three years. He chairs the school’s advanced education, student academic review and curriculum committees.

Barenie is a diplomate of the American Board of Pediatric Dentistry and past president of the American Society of Dentistry for Children and the American Society of Dentistry for Children Foundation.

Dr. Katherine Ciarrocca, instructor of oral rehabilitation and oral health and diagnostic sciences, received the Georgia Dental Association/American Student Dental Association Outstanding Faculty Award.

Dr. Rafik Abdelsayed, professor in the Department of Oral Health & Diagnostic Sciences

Dr. Emily Chen, assistant professor in the Department of Oral Rehabilitation

Dr. Steve Roberts, associate professor in the Department of Endodontics

Dr. Martha Brackett, associate professor in the Department of Oral Rehabilitation

Dr. Jimmy Londono, assistant professor in the Department of Oral Rehabilitation

Dr. Rhoda Sword, assistant professor in the Department of Oral Rehabilitation

Dr. Stephen Hsu, Department of Oral Biology

Dr. Kalu Ogbureke, Department of Oral Biology

Dr. Wayne Herman, professor of oral health and diagnostic sciences, received the American College of Dentists Faculty Professionalism Award.
**New Faculty**

Dr. Allison K. Hunter, a 2005 School of Dentistry alumna, has joined the Department of Oral Health & Diagnostic Sciences as an assistant professor. She completed a Dental Diagnostic Science Certificate Program in Oral and Maxillofacial Radiography and a master’s degree in biomedical sciences at the University of Texas Health Science Center at San Antonio.

Dr. Alan R. Furness has joined the Department of Oral Rehabilitation as an instructor. He received his D.M.D. from the Medical University of South Carolina and completed his Advanced Education in General Dentistry residency with the U.S. Naval Dental Corps in Jacksonville, N.C. He has been in private practice since 2002 and serves as an adjunct faculty member for the College of Dental Medicine at the Medical University of South Carolina.

Dr. Edward Robert Chesla has joined the Department of Oral Rehabilitation as an assistant professor. He received his D.D.S. from the University of North Carolina at Chapel Hill. He completed his general practice residency with the U.S. Army Dental Activity at Fort Riley, Kansas, and his prosthodontic residency at Walter Reed Army Medical Center in Washington, D.C.

Dr. Jason Hamilton has joined the Department of Oral Rehabilitation as a part-time instructor. He earned his D.M.D. at MCG and stayed to complete a general practice residency. He is in private practice in Americus, Ga.

Dr. Jaebum Lee has joined the Department of Periodontics as a research scientist. In Seoul, Korea, he earned his D.D.S. from Yonsei University College of Dentistry, a master’s degree in dental materials from Kyung Hee University and a Ph.D. in biochemistry from Korea University. He has served as chief clinical scientist in MCG’s Laboratory for Applied Periodontal & Craniofacial Regeneration since 2007.

Dr. Darshanjit “DJ” Pannu has joined the Department of Oral Rehabilitation as an assistant professor. He earned dental degrees from the Manipal College of Dental Sciences in Mangalore, India and the New York University College of Dentistry. He completed a prosthodontics residency at MCG in June.

**Spring Fling**

Drs. Kalu Ogbureke and Babak Baban compete in a hula hoop contest as part of the staff-coordinated Spring Fling in March. More than $4,200 was raised through food sales, raffles, a silent auction, Dental Diner cookbook sales, contests and more during the event to support the building fund.
If you ask Dr. Daniel Levy how many children he has, he’d say one.

But ask his dental assistant, and she might tell you he has closer to 50. “He treats all his patients with love, just like they’re his own children,” says Elnora Battle, who has worked alongside Levy in the Department of Orthodontics for four years.

Dozens of pictures are pinned to a bulletin board in his office, offering constant reminders of the special patients he treats. They range in age from newborn to teenage, but they have a common bond – they were all born with a cleft lip and palate.

When Levy joined the faculty in 2006, he introduced a new orthodontic treatment to MCG. Nasoalveolar molding, or NAM, uses an appliance to help correct the palate and nose before surgery. The technique reduces the number of secondary surgeries and diminishes scarring, ultimately making treatment easier and saving the patient money.

“The sooner I can start, the better the results,” Levy says. That’s because a newborn’s cartilage is more plastic and easier to mold than that of a 4- or 5-month-old child.

At just 2 weeks old, Jacob Poole made his initial visit to Levy, but it wasn’t the first time for his mother, Dr. Levy places the appliance in Jacob Poole’s top palate.

How to Help:
MCG’s Craniofacial Center would like to help more families with cleft palate babies in Georgia and its surrounding states, but we need your help to get the word out.

“We want health care providers to know that we’re here and we’re ready to help infants born with this deformity,” Levy says.

For more information on the center and its services, visit www.mcg.edu/centers/cranio/.

If you’d like to donate to the cleft palate program, contact Dale Crail at 706-721-8614.
Crystal Robinson. Her second child, Isaiah, was born with a cleft three years earlier. Doctors told her there was a 3 to 5 percent chance Jacob would be born with a cleft, as well.

Neither she nor her husband had family history of the sporadic gene mutation, yet her gut feeling was that Jacob would follow in his brother’s footsteps. Crystal’s maternal intuition was confirmed during a sonogram when she was 28 weeks pregnant, but this time she knew what to expect.

“I was scared with Isaiah, but Dr. Levy put me at ease, and I knew everything would be OK for Jacob, also,” Crystal says.

She brings Jacob, now 2 months old, to MCG once a week so Levy can modify the acrylic appliance that fits in the roof of her son’s mouth. The modifications gradually move the bones of his palate together, which reduces the size of the gap in his lip and palate.

Levy teaches his patients’ parents how to care for the appliance, and says after two weeks of taking it in and out of the mouth daily, most mothers handle it much faster than he can.

“I only do half of the orthodontic work; the mother does the other half,” he says. In addition to cleaning and managing the appliance, mothers have given him tips that he shares with other families. For instance, the appliance is held in place with two pieces of medical tape connected by a tiny rubber band – a trick one mother showed him. Another mother designed an appliance-friendly pacifier.

Jacob wears his appliance around the clock, except for bath time. It works best that way.

“It feels normal to him and he would rather have it in,” Crystal says. “It’s easy, and I watch the gap get smaller and smaller every week.”

Levy will soon add an extension to the appliance to help reshape Jacob’s nose by elongating its columella, the portion between the nostrils.

“Then he’ll be ready for surgery, which will be less invasive and the scar will be less noticeable because the gap is smaller and there’s less tension in the skin,” Levy says. The initial orthodontic portion of cleft treatment typically takes 16 to 18 weeks, and then Dr. Jack Yu, MCG plastic surgeon, will surgically repair the lip and palate. They’re part of MCG’s Craniofacial Center, a multidisciplinary team that treats clefts and other craniofacial deformities.

Sherry Glover’s 3½-year-old son Caleb is one of their success stories.

“The scar is there, but it’s so faint that most people don’t even notice,” she says of her blond haired, blue eyed child. They have made the two-hour drive from Dublin, Ga. to Augusta to see Levy and Yu countless times throughout Caleb’s life.

Levy says they even drop by his office from time to time, and his door is always open. After surgery and as the children get older, parents have a lot of questions, especially as baby teeth begin to erupt. Caleb recently had a tooth erupting in his palate.

“Even after the surgeries to correct a cleft, the child’s teeth don’t erupt normally,” Levy says. “Parents of the children we treat can come here and we’ll give them answers, free of charge.”

The orthodontic protocol for cleft patients doesn’t stop with the NAM technique and eruption of the baby teeth, and Caleb and Jacob likely will be Levy’s patients for many years to come. There’s a high probability they’ll each need a bone graft as their dentition continues to develop, and comprehensive orthodontics will be necessary through their teen years. The boys’ situations could have been much more complex without Levy’s presurgical efforts.

So it comes as no surprise that Levy becomes an active participant in the lives of his patients and their families. He says, “The kids start to look at me less as their doctor, and more as their uncle.”
On the Cusp of Dentistry’s Future

A patient walks into your dental practice with a missing front tooth.

“No problem,” you say. “I’ll just grow you a new one.”

It may sound like science fiction, but it could be the future of dentistry. Ryan Bloomquist hopes it will be reality within a decade.

“It’s unbelievable to think we’re on the verge of this technology,” said the School of Dentistry junior, MCG’s first dual D.M.D./Ph.D. student.

Ryan aspires to be at the forefront of regenerative dentistry, an emerging field where one day stem cells could be used to grow natural teeth. Adding proteins or protein inhibitors to the undifferentiated cells would signal them to become a certain tooth, be it an incisor, bicuspid or molar.

Of course, there’s much work to be done before he can grow his patients’ teeth.

After completing the summer semester at MCG, Ryan will return to his alma mater, Georgia Institute of Technology, where he’ll spend the next three years completing his Ph.D.
During his undergraduate years, he kick-started his research working in the lab of his Ph.D. advisor, Dr. Todd Streelman, and he’s ready to pick up where he left off.

Streelman studies evolutionary developmental biology, or “evo devo,” and how it relates to tooth development. His lab attempts to find key proteins and underlying genes involved in developing and replacing teeth.

Ryan will piggyback off of Streelman’s research, homing in on its implications in health care and how it can be incorporated into regenerative dentistry.

While many dental researchers study mice, Ryan and the evolutionary biologists in Streelman’s lab study an ancient African fish – the cichlid – to trace the origins of teeth.

“One might ask, ‘How genetically close is a fish tooth to a human tooth?’ It might surprise you,” Ryan said.

Last year Streelman’s lab reported it found a network of genes whose expression is synchronized during certain phases of tooth development. The discovery of the network was made in cichlids, but the researchers said it was likely responsible for creating the first tooth half a billion years ago, and is present in all teeth – from fish to human. Ryan was an author on the 2009 study, published in the journal *PLoS Biology*.

“Cichlids are a wonderful model for evolutionary and diversity studies and are a very unique model for tooth development in particular,” Ryan said.

He attributes that to the diversity in dentition among the more than 1,000 closely-related cichlid species. For example, one species may have a single row of 50 unicuspide teeth, while another could have as many as 3,000 teeth of varying shapes in two separate jaws: the oral jaw and a hidden jaw in the fish’s “throat”, or pharyngeal arch. Cichlids’ teeth are replaced throughout life.

Through various genetic techniques, Ryan, Streelman and their colleagues are trying to identify key players in more than 1,000 genes previously identified in tooth and bone development that could be easily manipulated for regenerative dentistry.

---

**Ryan at a Glance:**

- The Riverdale, Ga. native graduated from Georgia Tech in 2008 with a double major in chemistry and biology. His undergraduate work in Streelman’s lab clued him in on his aspirations to become a dentist.

- Ryan stayed active in research at MCG by working with Dr. Mohammed Elsalanty, an assistant professor of oral biology and expert on craniofacial reconstruction who studies the effects of bone morphogenetic protein on bone grafts.

- Ryan will represent MCG in the 2010 American Dental Association/DENTSPLY Student Clinician Research Program, whose participants will present their research at the association’s annual meeting in Orlando, Fla., in October.

- In his free time, Ryan is renovating a circa 1896 American colonial-style home he bought in Augusta’s Summerville neighborhood. He’s replaced 25 windows, rewired the second floor and built two bathrooms and a privacy fence.
The fish are ideal for genetic studies such as single nucleotype polymorphism, where DNA strands from multiple species can be directly compared. Ryan hopes this technique and other methods will lead to the discovery of specific gene mutations that, in one example, would cause a change in shape from a unicusp to a bicuspid.

Another technique, in situ hybridization, lets the researchers fluorescently “label” a specific gene in an embryo to see when and where it’s expressed during development. They’ve already pinpointed genes they think are responsible for tooth growth, shape, anterior patterning and replacement.

Once the team learns the genes’ functions during tooth development, they try to manipulate those genes. “Growing teeth is a very complex science, because there’s so much to consider – the shape and size of the tooth, the time it takes to grow and the position it will grow in,” Ryan said. “We don’t want to place stem cells in an empty space and have the new tooth grow toward the bone, so we must learn how to manipulate and control the genes as much as possible.”

As he researches ancient fish for the next three years, he won’t lose sight of his future as a dentist. He’s volunteering at the Good Samaritan Health Center while in Atlanta, so that he’ll better retain his dental knowledge and begin to develop his clinical skills. “Hopefully, I’ll learn a lot and come back more than prepared to re-enter the junior year of dental school,” Ryan said.

As for his future in regenerative dentistry, his desire is to translate his basic science research to chairside delivery.

“My wish is that by the time I complete my Ph.D., dental school and possibly a residency, I can help develop techniques and lead clinical trials to make regenerative dentistry a practical means for treating patients,” Ryan said.

What is a cichlid?

- The cichlids studied in Streelman’s lab are from Lake Malawi, one of East Africa’s Great Lakes. It’s home to about 1,000 species of the ancient fish.
- Cichlids range in length from 2.5 cm to nearly a meter.
- Well-known cichlid species include tilapia, angelfish and oscar.
- Some cichlids have as many as 3,000 teeth, and each tooth is replaced every 50 to 100 days.

(Source: National Institute of Dental and Craniofacial Research’s The Inside Scoop interview with Dr. Streelman)

Three species of Malawi cichlid, (top row from right) Dimidiochromis compressiceps, Maylandia zebra and Labeotropheus fuelleborni, show great variation in their respective adult lower jaws (middle row) and their lower pharyngeal jaws (bottom row).
Flying lessons and a family background in engineering drove Dr. Michael Vernon’s high school aspiration to become an aeronautical engineer. But a health care course after graduation led him to dentistry instead.

“I went to dental school thinking I’d become an oral surgeon, but I realized I would be giving up the parts of dentistry I enjoyed the most — the art and engineering of restorative dentistry,” says the Augusta general dentist and 1977 graduate.

In April, Vernon was honored as the School of Dentistry’s Distinguished Alumnus at MCG Homecoming. The award humbled him, but also posed a challenge. “It’s an honor I will cherish forever, but I’m still trying to figure out what to do with the plaque,” he admits jovially.

The walls of Vernon’s practice are not filled with reminders of his awards and distinctions, but there is one accomplishment he doesn’t shy away from — his patent. Vernon’s invention of the sandwich bag trashcan, patented on his son’s birthday in 1991, let him dabble in engineering again. He noticed his assistants would tape a plastic bag to the side of a counter to use for trash, so he took the technique a step further by designing a clear plastic bracket that holds an open, cuffed sandwich bag.

If a dentist or assistant throws a temporary crown into the sandwich bag and the permanent crown doesn’t fit, he can reuse the temporary without worrying about cross-contamination. The sandwich bag is just the right size for waste generated during one patient’s treatment.

“Any assistant that comes to work with me just can’t do without it, but I can’t seem to convince people they need to buy it,” he says. He tried to market his invention, but after renewing his patent twice, he finally let it expire.

Vernon tries to stay on top of dental trends and issues outside of his practice as well. He is the vice president of the Georgia Dental Association and has served as its delegate to the American Dental Association since 1999.

He was introduced to organized dentistry by his former partner, the late Dr. Charlie Norwood, who was the GDA president when they practiced together in the 1980s. Seeing his mentor’s love for the profession fuse with his political involvement encouraged Vernon to get involved himself.

Now he feels it’s important to spread the word to younger dentists and students. Vernon tells them, “The most important thing we can do to help the profession is to get involved, mentor others and keep your eyes and ears open about issues relating to dentistry. Ultimately, everything we do is for the oral health of the patients we serve.”

Vernon was named an honorable fellow of the Georgia Dental Association in 1997 and received its 2007 Presidential Commendation. He is an alumni member of the Omicron Kappa Upsilon dental honor fraternity, member of the Pierre Fauchard Academy and fellow of the American and International Colleges of Dentists. He is a past president of the Augusta Dental Society, the Eastern District Dental Society and the MCG School of Dentistry Alumni Association.

Vernon served on the MCG Department of Oral Rehabilitation faculty from 1980-97.

He and wife Deborah have three children and two grandchildren. His youngest daughter is a dental hygienist at his practice.

He recently added implants to his practice. He’s placed 14 to date and hopes one day he won’t be able to keep count.

Vernon’s practice was built on the site of Godfather of Soul James Brown’s former office, which was damaged by arson. “A patient recommended I tear down the eyesore and build a new practice on that spot, and that’s what I did,” he says.
Topping Out:  
*The Celebration of Completion*

The framework is finished, but much remains to be done. The men and women building the new home for your School of Dentistry held the topping out ceremony June 17, and they did not skip a beat as they moved to the next phase of the project.

As those dedicated workers continue toward the next milestone, we in the development office are doing the same.

We have set record giving levels for the school, broken them, and have moved on to the next plateau. We plan to continue attaining new milestones.

Now at $8.5 million of our $10 million fund-raising goal for the new school, we have a lot of work before us to exceed that mark.

With your help, we will succeed.

---

If you would like to invest in the future of the School of Dentistry and dentistry in Georgia, please call the Development Office at 706-721-4001, or make your check payable to the Georgia Health Sciences Foundation, Inc.
Are you a member of the Georgia Academy of General Dentistry?

If you are, you now have the opportunity to double your investment in the MCG School of Dentistry’s new building through the generosity of the GAGD.

In January, the GAGD announced it would match dollar for dollar all new contributions from members up to $25,000.

If you have been waiting to make a gift and are a GAGD member, now is a great time to help us achieve this potential of $50,000.

If you have any questions about this generous initiative, please contact the school’s Development Office at 706-721-4156 or the GAGD Executive Office at 404-299-7987.

$3,000,000 The Robert W. Woodruff Foundation Inc.
$1,000,000 Dental Practice Group, MCG School of Dentistry
$500,000 Dr. Emilie Fisher
$250,000 Dr. and Mrs. Ronald E. Goldstein
$125,000 Dr. George N. Snelling III (’75)
$105,000 Dr. and Mrs. Sharon Chaffin (’81)
$105,000 Dr. Walter E. Stewart and Mrs. Walter E. Stewart
$100,000 Dr. Jeannie Harris Moran (’75)
$100,000 Dr. and Mrs. Ronald E. Goldstein
$100,000 SunTrust Bank Trusteed Foundation-Thomas Guy Woolford Charitable Trust
$100,000 The Tull Charitable Foundation
$76,000 Georgia Dental Association
$55,000 Dr. George MacMaster (’86)
$50,000 Dr. Kathy M. and Mr. Thomas Brittingham (’83)
$50,000 Dr. Jimmy and Mrs. Wendy Cassidy (83)
$50,000 Drs. Connie L. and Richard R. Drisko
$50,000 Dr. and Mrs. Alec Nazih Elchahal (’95)
$50,000 Dr. Aubrey F. Hedrick, Jr. (’77)
$50,000 Dr. Wayne Hester (’81)
$50,000 Dr. and Mrs. Joanne Holton Jr. (’76)
$50,000 Dr. Paul Isler and Mrs. Martha Isler
$50,000 Dr. David and Elizabeth Perry (’84)
$50,000 Dr. R. Steven Powell (81) and Mrs. Deborah Taylor Powell (’80) R.D.H.
$50,000 Dr. and Mrs. Michael B. Rogers
$50,000 Dr. Marie Schweinebraten and Dr. Chris McFarland (’79)
$50,000 Dr. Karyn L. Stockwell (’82)
$50,000 Dr. and Mrs. T. Barrett Trotter (’73)
$50,000 Atlanta Dental Study Group
$50,000 Georgia Society of Periodontists
$50,000 MCG School of Dentistry Alumni Association
$40,000 Dr. G. Blake Collins (’95)
$40,000 Drs. Hugh and Anne Mazzawi
$31,000 Dr. Dave C. and Cheryl S. Lee (’83)
$30,000 Drs. James and Elaine Whitney
$25,000 Dr. William V. Argos (’82)
$25,000 Dr. Leon and Mrs. Barbara Aronsen
$25,000 Dr. David Brantley (’85)
$25,000 Dr. and Mrs. L. Diversi
$25,000 Dr. Edward J. and Mrs. Lorraine Green (’83)
$25,000 Drs. Ken and Carol Leggett (’87)
$25,000 Dr. Thomas R. McDonald (’83)
$25,000 Dr. Scott T. McPherson
$25,000 Dr. Edward H. and Mrs. Nancy Mohme (’81)
$25,000 Dr. J. Gregory Morris (’93)
$25,000 Dr. Robert and Marianne C. Moss (’80)
$25,000 Dr. David Pumphrey and Mrs. Christine Pumphrey
$25,000 Dr. Stanley D. Satterfield (’77)
$25,000 Dr. Jennifer Diversi Thompson (’87)
$25,000 Dr. Mollie Winston and Dr. Greg Marks
$25,000 Atlanta Business Bank
$25,000 D.D.S. Staffing

$8,573,816

Building fund gifts and pledges as of July 2010
THANK YOU TO ALL OUR SUPPORTERS

Numerous contributors at MCG Club Giving Levels

782 donors

S S U M M E R 1 0
Obituaries

'84

**Dr. Mary Amelia Grant Hughes**
died April 29 at age 52. The Atlanta native practiced in Roswell, Ga., for 15 years before becoming a full-time mother in 2000. She returned to dentistry in Ellijay, Ga., with Talbot Dental Associates in 2006. Survivors include her husband of 20 years, J.D. Hughes, two sons, her mother and two brothers.

'76

**Dr. William Pellerin**
died April 15 at age 65. Pellerin had practiced family dentistry and orthodontics in Waynesboro, Ga., since 1976. The Schenectady, N.Y., native served in the U.S. Air Force and was an MCG School of Dentistry instructor in the late ’70s. Survivors include his wife, Betty, a daughter, son, grandson and two sisters.

'01

**Dr. Mark Ritz**, a longtime friend and staunch supporter of the MCG School of Dentistry, died Jan. 31 of complications from pancreatic cancer. He was 55.

A past president of the Georgia Dental Association, Dr. Ritz was an active American Dental Association volunteer, serving on the ADA Council on Dental Practice. He was also active with the Academy of General Dentistry, receiving a Distinguished Service Award. He was a fellow of the International and American Colleges of Dentists and the Pierre Fauchard Academy.

The Illinois native graduated from the University of Illinois at Chicago College of Dentistry and practiced in Homerville, Ga., since 1982. He completed his general practice residency at the Dwight David Eisenhower Army Medical Center at Fort Gordon in Augusta and also received the Army Commendation Medal.

He is survived by his wife of 30 years, Kathy, children Laura and Matthew, his parents and a brother.

---

**'77**

**Dr. Virginia A. Merchant**, professor of biomedical sciences at the University of Detroit Mercy School of Dentistry, has been elected editor of the *Journal of the Michigan Dental Association*. She is also editor of UDM’s alumni publication, *The Leading Edge*, and edited the Detroit Dental Bulletin from 2000-09. She has been at UDM since 1980.

---

**'95**

**Dr. Alec Elchahal**, owner of Johns Creek Orthodontics and Vickery Orthodontics, has opened Hamilton Mill Orthodontics in Dacula, Ga. It is the first orthodontic office in Georgia to be awarded the Gold Leadership in Energy and Environmental Design certification by the U.S. Green Building Council, recognizing sustainable building practices. Elchahal completed a master’s degree in oral biology from the School of Graduate Studies while on his orthodontic residency at MCG. He and his wife, Marlo, have three children, Ryan, Lilya and Lara.

---

**'01**

**Dr. Susan Goode Estep**
has opened Atlanta Dental Spa in Atlanta’s Phipps Plaza, offering cosmetic and general dentistry with spa amenities.

---

Do you receive duplicate copies?

Please help us minimize our mailing and printing costs by letting us know if you receive *Word of Mouth* at multiple addresses. Contact Linda Saunders at 706-721-6215 or lsanders@mcg.edu.
The mission of the Medical College of Georgia School of Dentistry is to educate dentists in order to improve overall health and to reduce the burden of illness on society through the discovery and application of knowledge that embraces craniofacial health and disease prevention. Its vision is to be a premier school of dentistry. MCG is an affirmative action/equal opportunity educational institution that prohibits discrimination on the basis of age, disability, gender, national origin, race, religion, sexual orientation or status as a Vietnam War veteran. The MCG School of Dentistry believes a diverse student body enhances the educational opportunities for all students and is beneficial to the dental profession, the School of Dentistry and the state of Georgia.

November 1969: Construction of the “Dental Clinical Services Building” (our current home)

MCG President: Ricardo Azziz, M.D.
Vice President for Strategic Support: Deb Barshafsky
Dean, School of Dentistry: Connie Drisko, D.D.S.
Director of University Communications: Jack Evans
School of Dentistry Publications Liaison: Donna Bellino
Editor: Damon Cline
Art Direction/Layout: P.J. Hayes Design
Photographer: Phil Jones
Writers: Paula Hinely and Sharron Walls

©2010 The Medical College of Georgia is the health sciences university of the University System of Georgia
White Coat Ceremony

Sixty-five sophomores received their white coats during a June 18 ceremony at the MCG Auditoria Center. The ceremony commemorated the onset of the students’ clinical training and emphasized the importance of ethical behavior and professionalism.

Dr. Richard A. Weinman, vice chairman of the Georgia Section of the American College of Dentists, spoke to the class about ethical dilemmas in dentistry. Ben S. Popple, president of the class of 2013, spoke of the class’s camaraderie and team atmosphere. Dr. Michael O. Vernon, 2010 School of Dentistry Distinguished Alumnus, led the recitation of a pledge the class wrote for the ceremony.