

A black and brass microscope is the central focus, positioned diagonally from the top right towards the bottom left. The background is a warm, golden-yellow laboratory setting with various pieces of glassware, including a beaker with red liquid on the right and several bottles in the background. The lighting is soft and directional, creating highlights on the microscope's metal parts and casting gentle shadows.

NORTH CAROLINA

# DENTAL REVIEW

A Publication of the University of North Carolina  
Dental Alumni Association

Spring 2007 • Volume 24, Number 1

School Celebrates  
Forty Years of Dental  
Discoveries

UNC DENTAL ALUMNI ASSOCIATION

# Board of Directors



## President

Dr. Richard Pence  
*DDS Class of 1971*  
*Lincolnton*

## Vice President

Dr. G. Bennett Smith  
*DDS Class of 1983*  
*Mount Airy*

## Secretary-Treasurer

Dr. John G. Buchanan  
*DDS Class of 1983*  
*Lexington*

## Immediate Past President

Dr. John Matheson  
*DDS Class of 1969*  
*Asheville*

## 1st District

Dr. Keith Dedmond  
*DDS Class of 1975*  
*Lincolnton*

Dr. Scott Eidson  
*DDS Class of 1978*  
*Lenoir*

Dr. Brad Morgan  
*DDS Class of 1981*  
*Canton*

## 2nd District

Dr. Scott Davenport  
*DDS Class of 1984*  
*Charlotte*

Dr. Mustafa Shah-Khan  
*DDS Class of 2002*  
*Charlotte*

Dr. Michael A. Webb  
*DDS Class of 1979*  
*Charlotte*

## 3rd District

Dr. Bryan Cobb  
*DDS Class of 1977*  
*MS Class of 1979*  
*Greensboro*

Dr. Ralph Leonard  
*DDS Class of 1985*  
*Chapel Hill*

Dr. Scott Michael Vines  
*DDS Class of 1996*  
*Reidsville*

## 4th District

Dr. Stan Hardesty  
*DDS Class of 1993*  
*Raleigh*

Dr. Robert Hollowell, Jr.  
*DDS Class of 1986*  
*Raleigh*

Dr. Deuce Roberson  
*DDS Class of 1999*  
*Henderson*

## 5th District

Dr. Barry Belton  
*DDS Class of 1985*  
*Rocky Mount*

Dr. Phyllis Cook  
*DDS Class of 1996*  
*Ayden*

Dr. Mary Lynn King  
*DDS Class of 2001*  
*Wilmington*

## Out-of-State

Dr. Michael F. Hasty  
*DDS Class of 1986*  
*MS Class of 1990*

## Ex-Officio

John Williams, DMD, MBA  
*Dean*

Kelly Almond  
*Executive Director*

Jennie Boone  
*Executive Secretary*

Craig Dorian  
*Senior Class President*  
*DDS Class of 2007*



# Contents

The *North Carolina Dental Review* is published twice annually by the Dental Alumni Association and the Dental Foundation of North Carolina for alumni and friends of the UNC School of Dentistry.

**Dean**

John N. Williams, DMD, MBA

**Editor**

Kelly Almond, BA, UNC '94  
*Executive Director, Dental Alumni Association*  
*Associate Director, Dental Foundation of North Carolina*

**Assistant Editor**

Courtney Jones, BA, UNC '01

**Contributing Writers**

Chrys Bullard, BA, UNC '76  
Deb Saine, BA, UNC '87

**Photographers**

Ramona Hutton-Howe  
Will Owens, BA, UNC '88

**Cover Art & Graphic Design**

Alison Duncan, BA, UNC '96,  
Duncan Design

We welcome your comments, opinions or questions. Please address correspondence to Kelly Almond at the UNC Dental Alumni Association using the address below, or by e-mail at [alumni@dentistry.unc.edu](mailto:alumni@dentistry.unc.edu).

Dental Alumni Association  
UNC School of Dentistry  
Campus Box 7450  
Chapel Hill, North Carolina 27599

- 5 A Timeline of Dental Discoveries at UNC School Celebrates Forty Years of Research
- 19 School News
  - Thank You Day CE Course
  - Dental Hygiene Commitment Ceremony
  - 40 Years of Research
- 24 Faculty News
  - Faculty Notes
- 27 Student News
  - Student Profile
  - Student Update
  - Student Notes
- 34 Dental Foundation News
  - Deans Club Ball
  - Campaign Update
  - Why I Give
- 40 Alumni News
  - Alumni Profile
  - Alumni Notes



MR. EMANUEL "BUD" TARRSON  
NOVEMBER 25, 1915 - OCTOBER 5, 1999



# Dear Alumni and Friends:

In June of 1967, the School of Dentistry took a huge step in its development with the opening of the Dental Research Center. We celebrated this 40-year milestone in dental discovery earlier this year with several events, including a keynote Dental Research in Review Day address from Dr. James W. Bawden.

The Dental Research Center was completed near the beginning of Dr. Bawden's eight years as dean. Dr. Bawden had also received our School's first individual research grant from the National Institute of Dental Research (now the National Institute of Dental and Craniofacial Research, or NIDCR). The memories and insights he shared with us earlier this year reinforced the DRC's critical role in establishing our School as one of the preeminent dental institutions nationwide. Not surprisingly, Dr. Bawden received a standing ovation after his remarks.

Dr. Bawden and Dr. John Brauer understood that to truly offer our students the best education possible, the School of Dentistry had to establish leadership in oral health research. We could not forfeit our obligation to prepare our students for research discoveries that would influence their experiences as practitioners. We could not forfeit our stake in the nation's emerging opportunities for research that would have a positive influence on oral health.

Establishing this research leadership involved the sacrifice, hard work and vision of many people. Forty years after the creation of the DRC, the School of Dentistry is number three of all dental institutions nationwide in NIDCR funding in the most recent numbers

(fiscal 2006). More importantly, this ranking reflects research that is asking compelling questions about the role of oral health in systemic health, the underlying causes of chronic pain and treatments for craniofacial malformations, among other issues.

Clearly, we stand at another crucial crossroads in positioning our School for continued educational and research excellence. The DRC has not received significant renovations during its 40-year history, and its antiquated structure is proving more and more insufficient in sustaining our faculty members' promising research. The N.C. General Assembly has generously appropriated \$5 million for the planning and design of our proposed Dental Sciences Building, and I would heartily encourage you to let your elected officials know how vital this building is to the advancement of oral health in our state.

The proposed Dental Sciences Building, as currently designed, would add state-of-the-art educational and research space and technology. The design includes an auditorium able to seat more than 200 people, several 100-plus-seat lecture halls and larger seminar rooms. We currently have no lecture halls within our buildings that can seat more than 80 people.

Of course, state-of-the-art educational space is only one factor

in a high-quality education for our students. This year, our School is embarking on a major DDS curriculum revision; building on my decision to increase clinic attendance last year, I have asked our new associate dean for academic affairs, Dr. Janet Guthmiller, to lead this curriculum revision initiative. We are identifying ways to offer our students even more patient-care experience for the world they will enter as practitioners—particularly our third- and fourth-year DDS students.

*Carolina 2010: School of Dentistry Academic Plan*, featured in this issue of the *North Carolina Dental Review*, is our School's blueprint for sustained excellence within our missions of education, research, patient care and service. As the enthusiastic response to Dr. Bawden's dental research presentation demonstrated, our School of Dentistry is, and always has been, a community with a shared commitment to improving the oral health of our fellow citizens. You are an important part of that community, and I welcome your thoughts on *Carolina 2010*.

My warmest wishes,

John





# Dear Friends:

This year marks forty years since the doors to the Dental Research Center at the School of Dentistry first opened. A dedication ceremony complete with stage and podium, distinguished guest speakers, and a lawn full of alumni and friends marked the occasion. The men wore suits; the women, hats. Then-UNC President Bill Friday addressed the crowd along with the School's first dean, Dr. John Brauer, who travelled from his new home in California to be present for the occasion.

For the School of Dentistry in 1967, the opening of the Dental Research Center was a big deal.

Forty years later, it remains so.

Why? Read on. We've designed this issue of the *North Carolina Dental Review* to offer a journey through the history of dental research at UNC and to highlight some of its impact on your practice and on the oral health of the patients you treat.

The journey as you see it here is by no means exhaustive, nor is it anywhere near its end. Indeed, the research being conducted within the walls of the School of Dentistry today is some of the most compelling and trenchant the field has to offer. For proof, peruse the stories on the ongoing work of our faculty members, Drs. Tim Wright, Bill Maixner and Steve Offenbacher.

As dean of research for the School, I'm often asked why the School spends its resources and the time of its faculty on research. It's a good question, as there can seem a disconnect between safety goggles, petri dishes and surveys and your day-to-day practice. But in truth, the radiographs you take of your patients every day were once a discovery in a scientist's laboratory. Imagine doing your work without them. Our research today leads to your best practices tomorrow.

But there's more than that. At UNC, we are fortunate to be a dental school among a full complement of exceptional health affairs schools at a top-tier university which has a mission to conduct research. To fulfill this mission, the university has established tertiary care clinics which not only foster and enhance research, but provide highly-specialized assistance to patients and the community that general clinicians cannot.

Research also serves as an economic base for the School. The process of discovery spins off funds that provide for the hiring of faculty and the support of programs that bolster the educational mission of the School. At the same time, novel

research and discovery leads to economic development for the state by spinning off companies, patents or licensing.

Finally, many people who are drawn to academic careers are drawn to opportunities to uncover new knowledge. To do so, these faculty look for schools that strongly foster that inclination. Carolina's long-standing reputation for robust evidence-based research is a critical attractor for the recruitment of new faculty and the retention of the superlative faculty we have.

With that said, I hope you enjoy this first research-oriented issue of the *North Carolina Dental Review* and put it down having learned something new about the promising and useful work taking place in Chapel Hill.

Sincerely

Pat Flood, PhD  
Associate Dean for  
Research





“It is the joy of  
discovery  
that makes life  
worth the effort.”

VIJAY KRISHNA



# It's a wonderful life.

Take a Frank Capra moment and imagine your practice without dental research, then explore this timeline of tangible contributions from Carolina's forward-thinking scholars. Like Jimmy Stewart's pocketful of Zuzu's petals, it's a reality check.

by Chrys Bullard '76



## 1950

Under the leadership of Dean John Charles Brauer, Carolina's School of Dentistry opens on Sept. 20, educating 40 students in two Quonset huts. The Dental Foundation forms to fund initiatives in preventive dentistry, research and continuing education at the new school.



## 1953

Research into mercury amalgams necessitates a temperature- and humidity-controlled environment. The Dental Foundation air-conditions a lab in the basement of the original building and presages the need for the Dental Research Center.

## 1956

A \$6 million nod from Congress benefits dental research nationwide. Grants to Carolina from this money fund investigations into fluorides, tooth calcification and maturation, dental assistant training, cancer, dental materials, high-speed handpieces, diamond stones and tungsten carbide burs.

1948

1950

1952

1954

1956

## 1947

In 1856—three years before the American Dental Association—the North Carolina Dental Society formed to advance its trade as a science. By 1947, these savvy professionals knew the state needed its own school. A 1947 survey proves their hunch and by 1949, legislation formalizes appropriations for the dental school at UNC.



## 1951

Carolina receives \$4,665 from the Atomic Energy Commission to study tooth development and its relation to dental caries.

## 1952

The National Cancer Institute funds research into oral cancer. The school opens its first building, welcomes its first patient in the Private Patient Clinic and becomes the first school in the nation to allow educators to practice in the School as part of their work-week, enhancing salaries that attract top faculty to the School.



## 1955

The School names Dr. Kermit Knudtson director of Dental Research. He consolidates departmental initiatives that include the cause of voids in dental gold castings, dimensional changes in wax patterns, image clarity in dental radiographs and graduate student investigations in orthodontics and pediatric dentistry.

## If walls could talk

These do. Biomedical investigation and discovery within the laboratories of the Dental Research Center find voice in scholarly, peer-reviewed articles and journals, the mainstream media, in professional conferences and weekend workshops. Funding seeds the process. It built the Center that attracts the scholars who solicit the grants that advance the research informing the dentists who improve their practice (somewhat like *The House that Jack Built*). Thanks to the Dental Research Center and its groundbreaking scientists, we consistently rank among the top dental schools in the nation for attracting elite funding from the National Institutes of Health—all benefiting your 8–5 schedule. From water fluoridation, advances in pain and infection control and improved dental materials to the pathogenesis of periodontal disease, the viral properties of HIV infection and temporomandibular joint disorders, Carolina research is as much a part of patient care as your warm smile and gentle touch.



**1957**

Federal grants support record numbers of graduate student and post-doc fellowships. Research funding advances the practice of bonding ceramics onto chrome. The School launches a training program in the expanding field of dental epidemiology.

**1967**

Success! Funded by the Dental Foundation, the NIH grant and University trust funds, the Dental Research Center building opens, signaling Carolina's commitment to world-class dental research.

**1963**

Dean Brauer appoints Dr. Bawden assistant dean and coordinator of Research.

1958

1960

1962

1964

1966



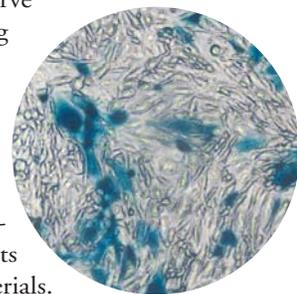
**1961**

Dr. J.W. Bawden receives the school's first National Institute of Dental Research RO-1 grant to study the placental transfer of calcium and fluoride. The National Institutes of Health (NIH) offers a \$492,000 challenge grant to build the Dental Research Center building. The Dental Foundation accepts the challenge and begins fundraising to match the grant.



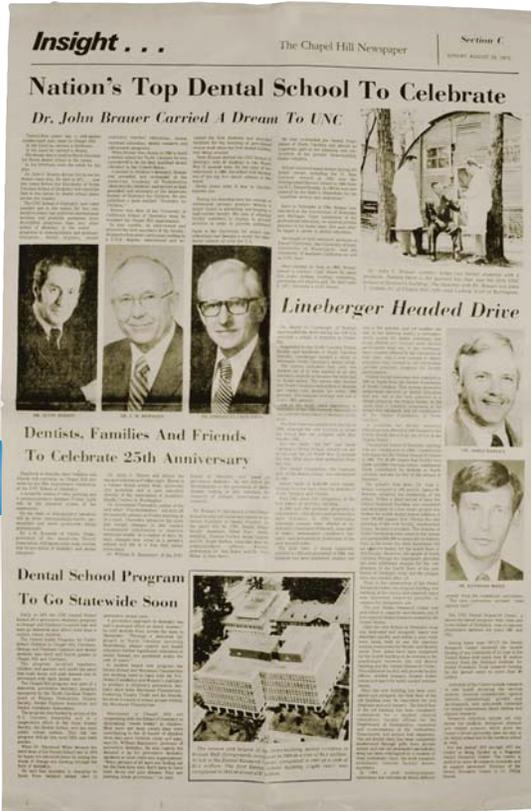
**1966**

Bawden succeeds Brauer as dean of the School and Dr. Andrew Dixon joins the faculty as assistant dean for Research and director of the Dental Research Center. Dixon investigates craniofacial nerve tissue, sparking research into neural mechanisms, mineralization, speech, immunology, growth, biomaterials and hemostasis. Projects encompass cleft palate, pain control, tooth and bone formation, wound healing, transplants and composite restorative materials.



## Cutting our teeth

Pediatric dentist and father of five, James Wyatt Bawden, looked into toothless, baby-faced grins and saw science. Could tooth formation and dental health be influenced prenatally? He applied to the National Institute of Dental Research for a grant investigating the placental transfer of calcium and fluoride and received it, ushering in the School's first individual research project grant and heralding a new age of discovery. Bawden's grant signaled to other Dental Research Center scientists that our scholars could compete for the most prestigious national funding and win it. His ensuing investigations established baseline science that has influenced the practice of dentistry and medicine for decades: nutrient requirements for preterm infant formulas, implications for maternal alcohol and drug use, preventive dentistry for Medicaid-eligible children and fluoride sealants, just to name a few.



**1974**

In more accolades, Columbia University surveys the nation's graduate schools in 17 fields, and Carolina's School of Dentistry comes out on top. Dr. Raymond White becomes the School's third dean.

**1977**

Student research receives a financial boost: the Dental Foundation awards \$20,000 to the School. The Dental Research Center celebrates its 10th anniversary as a national research institute supporting 20 full-time researchers, and the NIH funds a post-doc program in craniofacial pain mechanisms and control.

1973

1975

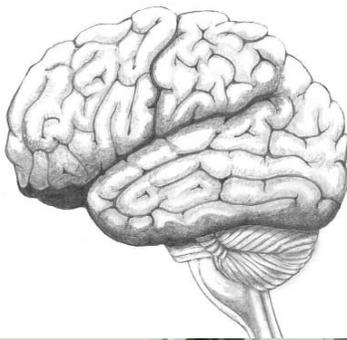
1977

**1973**

We're number one: the School ranks first in the nation, becomes the nation's first dental school to manage clinics via computer and the Dental Research Center is named one of five regional dental research institutes in the country. The National Institute of Dental Research funds investigation of the cerebral cortex function, especially nerve pathways as they relate to pain. Miss A. Jane Hunter bequeaths \$25,000 to support graduate student research.

**1975**

Investigations into the physiology and pharmacology affecting calcium metabolism attract attention as Dr. Philip Hirsch, professor of pharmacology in the School of Medicine is named director of the Dental Research Center. The School purchases a scanning electron microscope to enhance research.



## Cleft Lip/Palate: An About Face

Tad Lincoln, beloved son of Abe and Mary Todd, was born with a cleft that remained untreated, eventually rendering his speech unintelligible. Today, the birth defect is still no respecter of persons: In 2006, 6,800 infants came into the world with a cleft lip, palate or both, ranking these anomalies first among the 18 most common birth defects in the United States. Scholars in the School of Dentistry are gaining ground. Thanks to decades of research, cleft lip/palate are both preventable and treatable. Our labs discovered an increased frequency of newborns with cleft anomalies in mothers taking the anticonvulsive drug, lamotrigine, and the

anti-acne drug, isotretinoin. The UNC Craniofacial Center draws from physicians and practitioners in adult general or pediatric dentistry, audiology, genetics, otolaryngology, oral and maxillofacial surgery, orthodontics, pediatrics, plastic surgery, prosthodontics, psychology, social work and speech-language pathology to ensure total patient care. We have earned an international reputation for research and treatment that improves outcomes, drawing scholars, professionals, patients and more to our doors: In 1997, the American Cleft Palate-Craniofacial Association (ACPA) and the Cleft Palate Foundation ended a 23-year affiliation with the University of Pittsburgh to join the School's Department of Dental Ecology.

**1979**

Breakthrough! Researchers in the Dental Research Center discover a link between a drug commonly used to treat epileptics and the frequency of cleft lip in newborns. The Center receives \$1.5 million in renewed funds and Rolfe O'Neill, publisher of *The Charlotte Observer* writes, "Welcome to North Carolina: We Produce the World's Best Dentists."



**1985**

Out of the lab and into the operatory: addressing the shortage of community practitioners whose backgrounds include advanced scientific research skills, the National Institute of Dental Research grants \$1.9 million to the School. Dr. John Stamm becomes assistant dean for research and director of the dental research center.

**1987**

Twenty years and going strong: the Dental Research Center celebrates two decades of scientific excellence.

1979

1981

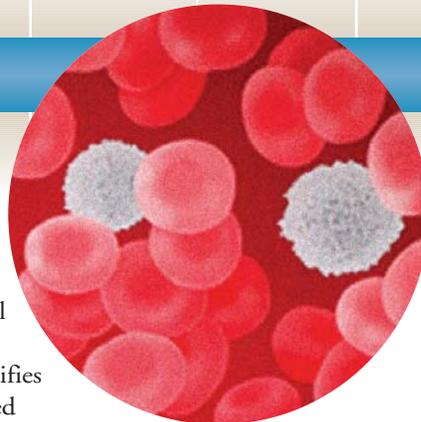
1985

1987



**1981**

*Newsweek* takes notice: A member of the Dental Research Center faculty, Dr. Jacob Hanker, identifies a previously undiscovered form of white blood cells. The finding receives mainstream press. Dr. Ben Barker assumes deanship of the School.



**Newsweek**

**1988**

In the mid '80s, Carolina becomes the nation's top school of dentistry for fiercely competitive NIH grants and contracts, and—for the first time in the School's history—every clinical department receives these valuable funds. Inquiry begins into orthognathic surgery, the clinical impact of early versus late orthodontic intervention, pulp biology, geriatric dentistry and dental implants.



## Murphy to Manteo and Beyond

No brag—just fact: As the School of Dentistry started improving the health of North Carolinians, others began to take notice. Research done in hushed labs emerged in respected publications and scholarly presentations that suddenly had people talking—all over the world. International dental scholars sought collaborative research relationships with our faculty. We welcomed visiting professors from around the world and reciprocated. The nearby Research Triangle Park promoted an international collegiality that inspired multidisciplinary thinking and cross-cultural discovery. While the School's mission remains to promote the health of North Carolinians through teaching, research and service, its vision has expand-

ed: to be a world leader in improving oral health through excellence in education, patient care, research, public service and engagement. We are well on our way. Recent PhD/visiting professorships include participants from Peru, Nigeria, China, Iceland—nearly 20 countries in all. International research spans the globe from the Malawi HIV and Oral Diseases projects to the UNC-Hawaii Low Birth Weight Study and many more. International companies such as Unilever (England) Sunstar (Japan) and AstraTech (Sweden) partner with us for scholarly research. Informal collaborations are underway in Africa, Singapore, Tai, Canada, Colombia and 12 other countries. Mention that you earned your DDS from Carolina, and a dentist from Germany just may nod with approval.

**To be (or not to be) removed.  
That is the question.**

Did Mother Nature's infinite wisdom include—pardon the pun—wisdom teeth? Our ancestors lost most of their teeth to decay by the time their 3rd molars appeared, making these hearty grinders handy to have around. But like the “fight-or-flight” response that saved us from wild animals, wisdom teeth are less essential to our lives today—though no less intriguing. As noted in the *New York Times*, chair of the UNC orthodontic department, Dr. Kitty

Tulloch's research found that the common preventive practice of removing wisdom teeth in the teen years didn't necessarily translate into best practices when it came to costs tallied in dollars and misery. Other newsworthy research explores periodontal problems in middle-aged and older adults who keep their wisdom teeth intact. A new \$2 million study led by former dean Dr. Raymond P. White discovers how to predict which patients are at high risk for wisdom teeth infection and other quality of life issues. What is conventional wisdom about wisdom teeth? It's getting wiser thanks to Carolina's place at the top in 3rd molar research.



**1990**

National and international media smile on School researchers who develop an inexpensive, modern way to whiten teeth.

**1992**

Front-page news! *The New York Times* features Dr. Kitty Tulloch's research into alternative strategies for the management of wisdom teeth. The Minority High School Student Summer Research Apprentice Program celebrates ten years of helping teenagers conduct and present research.

**1994**

Research draws a crowd: student representatives from 52 dental schools throughout the U.S. and Canada attend the 30th Annual Dental Students Conference on Research, hosted by Carolina. Dr. Patrick Flood is named associate dean for Research and director of the Dental Research Center.

**1997**

The School draws more than 400 medical and dental scientists to its largest and most prestigious symposium to date: Periodontal Diseases and Human Health: New Directions in Periodontal Medicine. National and international media spotlight Drs. Steven Offenbacher and James Beck for their exploration of the link between periodontal infection and premature births.

1990

1992

1994

1996

1998

**1989**

The School names Dr. Stamm its dean. Carolina hosts the Conference on Risk Assessment in Dentistry, introducing national and international audiences to a management strategy based on risk assignments, indicators and planned preventive treatments.



**1991**

Setting his sights on increased funding, renovations and faculty recruitment, Dr. Roland Arnold becomes director of the Dental Research Center and Assistant Dean for Research. The estate of Dora Lee Brauer, widow of the School's first dean, establishes a fund supporting pilot research projects undertaken or endorsed by the faculty.

**1993**

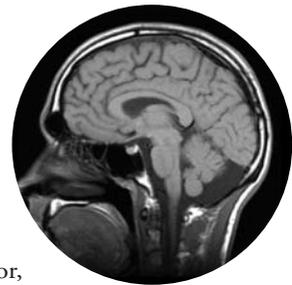
U.S. News and World Report ranks Carolina among the top three dental schools in the nation. Johnson & Johnson awards professor of orthodontics, Dr. Robert Kusy, a grant to research biosensors that determine an individual's health, replacing outdated population methods. The School launches a PhD program in Oral Biology.

**1995**

History repeats itself when the School ranks among the nation's top three in competitive NIH funding. The American Dental Association recognizes orthodontics professor, Dr. Bill Proffit, with the Norton



Ross Excellence in Clinical Research award. The Orofacial Sensory Disorders Center opens to explore multidisciplinary responses to neurological diseases.



**Ph.D.-- Phinally Done**

As old jokes go, PhD can mean Pizza hut Driver, Please hire, Desperate, or Phinally Done. For the School of Dentistry in 1995, it meant a serious commitment to seeding brilliance. “The best research programs have a mix of senior, mid-level and junior people,” said Dr. John Stamm, former director of the Dental Research Center and dean emeritus. Under his leadership, ensuing PhD programs in Oral Biology and Oral Epidemiology ensured it. Only the best need apply: Statistics from 2002 show that out of 81 inquiries, 25 students applied to the PhD program and four were accepted. Fresh-thinking PhD's feed the genius of our academy.

They help generate new knowledge disseminated through conferences and publications to be harvested by industry. They establish new truths that advance inquiry, and their research informs best practices: For example, in 2005, Charlotte dentist and former doctoral student Dr. Matthew Savage studied more than 9,000 of N.C.'s preschool-aged Medicaid children and discovered that early preventive dental visits encouraged the likelihood that children would use preventive services as they grew older. Perhaps best of all, many of our PhD candidates remain at the School to become faculty members, sharing their experience and expertise with the next generation of our nation's dentists.





## What's next?

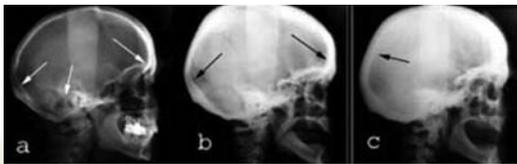
Exploratory, creative and dynamic research pushes boundaries. Generous financial resources drive change. Invest in the transforming power of research and make a profound contribution to tomorrow's dental arts, today.

### 1998

The Craniofacial Center receives a \$3.5 million grant to create the first national registry that measures the outcomes of craniofacial surgery, highlighting the most effective treatments for craniofacial anomalies. Partnering with Wake Forest University, School researchers locate and clone the gene responsible for tricho-dento-osseous syndrome, a mutation that results in defective—but extraordinarily strong—teeth. Treatment for osteoporosis may benefit.

### 2004

The Academy of Dentistry International names retiring dean, Dr. John Stamm, International Dentist of the Year. A \$25,000 gift from the Holiday Dental Conference Foundation stimulates research by creating an annual clinical research award.



2000

2002

2004

2006

2008

### 1999

Under the leadership of Dr. Patrick Flood, the School receives \$2.1 million per year for five years to create the Comprehensive Center on Inflammatory Disorders, courtesy of the National Institute of Dental and Craniofacial Research (NIDCR).

### 2001

Triple crown: NIH funding puts Carolina third among all dental schools in the nation. Dr. Steven Offenbacher earns a Special Impact Award from the National Healthy Mothers, Healthy Babies Coalition for his research into periodontal disease, prenatal complications and birth outcomes.

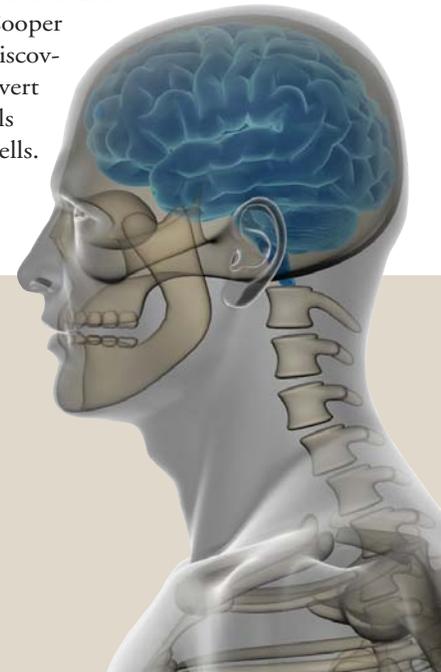


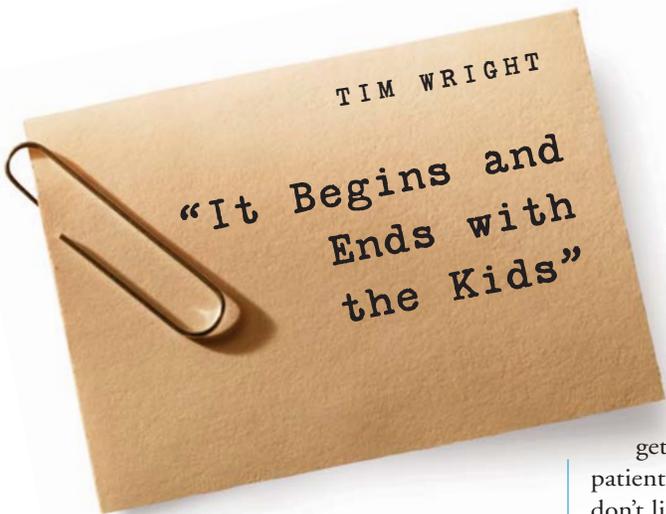
### 2000

The School marks its 50th anniversary.

### 2005

Dr. John Williams is named dean. Dr. Bill Maixner makes news exploring a genetic predisposition to the way people experience pain, opening the door to individualized treatment. \$19 million from the NIDCR—the School's largest award to date—supports this and TMJD research in the Orofacial Pain Center. In a boost to regenerative therapies, Dr. Lyndon Cooper and collaborators discover a method to convert human fat stem cells into human bone cells.





TIM WRIGHT

“It Begins and  
Ends with  
the Kids”

by Kelly Almond '94

For Tim Wright, the road to a career in complex pediatric dental research began with the chance to pet a skunk.

The “skunk”—a toy comprised of a strip of furry white cloth on top of black cloth that would rise up like an arched back when rubbed—was the reward Wright’s childhood dentist offered his young patients at the end of a visit to his chair. “He’d pull it out of one of those shallow drawers in an old dental cabinet so you could pet it and it would do its thing. He had me at skunk.”

The son of a chemist, Wright grew up in a small town in West Virginia with dreams of becoming an astronaut. “Because of my dad, I was always into science and had the best chemistry set in the neighborhood. As a kid, I liked fooling around with experiments—seeing what I could blow up. I did that pretty much all the way up until high school.

“I kind of lost interest in high school—by then, there were girls and cars—better kinds of experiments to try.”

About the same time Wright was conducting these better experiments, he began to bring his career aspirations down to earth. “Let’s face it—my chances of getting in the space program weren’t all that good.”

Instead, he turned his attention to dentistry: “For one thing, it’s more accessible than outer space, and I liked my family dentist. I didn’t like what he did to me, but I liked him a lot. I

get that now from my patients and their parents. They don’t like what I do to them, but they like me okay.”

Early on in his career, the plan was to practice general dentistry out West: “Work four days a week and ski the rest.” Plans changed when Wright took his first job in the public health arena and began working with children. With his interest piqued, Wright sought specialty training in pediatric dentistry. He opted to attend the University of Alabama because, among other things, they enthusiastically offered a post-doctoral research training program funded by a National Institutes of Health (NIH) fellowship.

As he worked on his specialty training, Wright began looking at academic dentistry as the means to have the greatest impact on the population he cared about most. It occurred to him that he could treat hundreds of children in practice himself, or he could train other people to treat children and have an impact on hundreds of hundreds. Hundreds of hundreds became the goal.

During his time in the clinics in Alabama, Wright found himself encountering case after case of children with genetic dental abnormalities. Motivated by a desire to find the causes of these abnormalities in the hopes of treating and, ultimately, preventing them, Wright has been conducting research into genetic malformations in teeth and their

consequences ever since.

“My research always starts with something I’ve seen clinically—I’m looking for a way to help my patient. It all begins and ends with the patient. Or in my case, with the kids.”

Something of a kid himself, Wright better resembles your favorite uncle—the fun, irreverent one who livens up holiday meals—than the man behind the safety glasses inspecting the beakers. That he is both makes him a treasure to the kids he treats, to their parents and to his colleagues.

“Tim brings an infectious enthusiasm to everything he does,” says Mike Roberts, DDS, MS, Henson Professor and former chairman of the department of pediatric dentistry, which is now chaired by Wright. “His patients feel that enthusiasm and know they can trust him to take care of them.”

#### THE RESEARCH:

In layman’s terms, Wright’s research probes the causes of abnormalities in tooth formation at the genetic level. As Wright explains it, “lots and lots” of genes are involved in forming a single tooth and there is a host of ways that formation can go wrong. His research focuses on identifying which genes are the source of a given problem.

Being able to identify which genes are at play in a particular patient’s case leads to a better diagnosis and treatment plan for that patient—important because many tooth malformations can have similar manifestations though wildly different causes. Knowing the cause is essential to being able to inform the patient about their condition and what



photo by Will Owens

“My research always starts with something I’ve seen clinically—I’m looking for a way to help my patient. It all begins and ends with the patient. Or in my case, with the kids.”

they can expect, as well as to being able to treat it.

For Wright, it’s an interesting time to be involved in this particular science. The NIH has launched an initiative encouraging geneticists to “build” a tooth. Wright sees the value of this, but adds gravely: “Hey, even Star Trek didn’t go so far as to build a tooth. They gave out new spinal columns, but they never tried building a tooth.”

Whatever the hesitation of scientists in far-off galaxies, the research here on Earth looks promising. A Swiss group is having some success building teeth in mice and dogs afflicted with ectodermal dysplasia—a condition characterized by the abnormal development of the outer layer of tissue which can affect skin, hair, teeth, nails and sweat glands. Researchers identified

which gene wasn’t doing its work in forming the teeth of the affected mice and dogs, replaced it with a functioning gene and new, normal teeth are generating.

While still early in the discovery process, such promising outcomes suggest a better life awaits patients battling genetic tooth malformations in the future.

Another part of Wright’s work is to study the psychosocial effects of the genetic disorders he encounters. Currently, it can cost around \$100,000 for the treatment of disorders related to tooth formation, and that’s merely to get a child to adulthood. Wright’s research has proven that it’s medically necessary for affected children to receive treatment for these disorders. Untreated adults demonstrate lower education levels, are less likely to be married, less likely to have chil-

dren, and have lower self-image than their unaffected siblings.

Improving the understanding that these disorders are not merely a matter of aesthetics should help patients and their families receive coverage through their health insurance to offset the costs of treatment.



Wright was recently named the first James Bawden Distinguished Professor for the School of Dentistry and divides his time between administering his department, conducting his research and taking care of his patients. But it’s not all work with no play—it’s serious business with a wink. Fitting for the man whose career was launched by a toy skunk.



photo by Will Owens

BILL MAIXNER

## Pursuing Pain

by Kelly Almond '94

Most of us do what we can to avoid pain in life. Bill Maixner spends his days pursuing it.

When Maixner, professor in the department of endodontics, joined the faculty at UNC in 1986, he'd been working with pain for a number of years. Maixner is one of the world's foremost researchers into the genetic causes and risk

factors for chronic pain, particularly the pain associated with TMJD, or temporomandibular joint disorder.

A born scientist, Maixner's career in the pursuit of pain began thoughtfully and at a young age. "For as long as I can remember, I was always interested in making life better for others—in improving the human condition."

For Maixner, science held the keys to that improvement and initially led him to the study of psychiatry and philosophy as an undergraduate at the University of Iowa. Over time, however, his interests migrated toward the hard sciences and the treatment of disease.

Pain first piqued Maixner's interest during his undergraduate

years when he took a job in the department of surgery at Iowa. It was there he realized that pain—its origins, manifestations and psychological impact—had not received much attention in the scientific community.

By his junior year, he was doing formal research into the subject and presenting his findings at national research conferences.

Less than two years later, when he received his bachelors of science degrees in both biochemistry and zoology, Maixner already had well-formed thoughts about his future career path: he wanted to be a clinician/scientist. "Dentistry seemed to me the obvious career choice for marrying research into pain with practice."

Unfortunately, there was no academic tract for clinician/scientists at the time—one could either be a clinician or a scientist. The

“For as long as I can remember, I was always interested in making life better for others — in improving the human condition.”

only way to be both was first to earn your doctor of dental surgery degree and then return for more years of academic training to receive your PhD.

Undaunted, Maixner proposed to the departments of dentistry and medicine at the University of Iowa his own plan to achieve simultaneous dual degrees. It would require the development of a special curriculum to earn a DDS as well as a PhD in pharmacology over the course of six years.

The administration at Iowa accepted his proposal and a career was born.

Maixner left Iowa in 1983 with a pocketful of degrees to work as one of a select few fellows at the National Institutes for Dental and Craniofacial Research (NIDCR). Shortly thereafter, UNC came calling, wanting the gifted researcher to further his pursuit of pain from the top of the Hill.

#### **THE RESEARCH:**

Maixner's research, which he conducts in concert with a team of talented researchers in the Center for Neurosensory Disorders at UNC, delves into the genetic and environmental causes of chronic pain, particularly the kind associated with TMJD. The Center's scientists also look at what risk factors might cause a person to be more likely to suffer from chronic pain or certain chronic pain conditions.

TMJD is a baffling disorder affecting between 5 and 15% of the population that manifests itself in a veritable buffet of misery: searing, shock-like pains in the jaw when chewing, headaches, ear-

aches, neck pain and tension. Often, TMJD sufferers are in some form of pain all the time.

Despite the number of symptoms and the level of discomfort experienced by the patient, x-rays and other tests often reveal no apparent physical cause for TMJD—a frustration for its sufferers, who can be inclined to wonder if they've lost their grip.

They haven't. The proof? A series of complex studies conducted by Maixner and his team revealed that there is, in fact, a genetic component to an individual's susceptibility to and experience with chronic pain.

The studies spanned several years and involved hundreds of female subjects (female because women are more likely to suffer from TMJD and other chronic pain conditions), who were free of chronic pain at the beginning of the study. The subjects offered samples of their DNA and underwent a variety of tests designed to measure their pain threshold, or the levels at which they were able to tolerate pain.

The results from these tests were then combined to develop a pain “portrait” for each subject. Over time, the studies indicated that those subjects whose portraits included a particular genetic trait linked to the body's ability to break down the stress hormone epinephrine were more likely to develop TMJD or suffer another chronic pain condition.

These findings should be a source of hope to TMJD sufferers and the dentists and physicians who treat them, as new drug targets for the symptoms associated

with TMJD have already been identified, and drugs currently indicated for other conditions may be useful in combating the symptoms of TMJD and other chronic pain conditions in the future.

A small clinical trial is currently underway using the drug propranolol for the treatment of TMJD. Presently, propranolol is indicated for the treatment of hypertension and anxiety, but because of its ability to block the body's receptors for epinephrine, it holds promise for the sufferers of TMJD and other chronic pain conditions.

Identifying potential drug treatments is only one step in the overall goal for Maixner and his fellow researchers. Ultimately, they hope to achieve well-formed methodologies for the clinicians who are diagnosing and treating patients suffering chronic pain. How close are they to that goal? “I believe we're two-thirds of the way there,” says Maixner, so matter-of-factly that TMJD sufferers have good reason to be encouraged.

In 2006, the NIDCR sponsored the research being done by Maixner and a group of fellow researchers from UNC and around the country to the tune of \$19 million. It was the largest grant ever received by a researcher at the University of North Carolina—a University which has as part of its mission the promise “to improve the condition of human life.”

Maixner and his team are helping the University fulfill that mission through their work—pursuing pain for the ultimate gain of relieving it for good.

# Dr. O's research began nearly three decades ago with the premise that the mouth is not distinct from the body and that factors affecting the health of the mouth more than likely hold systemic implications for the body as a whole.

STEVEN OFFENBACHER

## Research and the O Zone

by Kelly Almond '94

Imagine for a moment: you have an open wound on your fore-arm roughly the size of your palm. It is bleeding and puss-filled and painful. It has not been treated and you are not feeling well. You determine to see your physician.

Your physician examines you— your eyes, your ears, your throat. He draws some blood, listens to your heart, orders a battery of tests. In the end, he gives you a diagnosis and a treatment plan, all without looking at or addressing the swelling, infected sore on your arm.

That would never happen, you say. And you're probably right. Move the swelling, infected sore from your arm to your mouth, however, and it happened all the time for many years.

For ages, there was something of a scientific divide between what was happening in your mouth and what was happening

with the rest of your body. The gums could be horribly diseased and teeth could be rotting, but these factors would seldom, if ever, be linked to other diseases or medical conditions present in the same body.

It was this divide — the scientific disconnect between the arts of medicine and dentistry — that has for years seized the attention of Dr. Steven Offenbacher, OraPharma Professor of Periodontology, and director of UNC's Center for Oral and Systemic Diseases (COSD). That the divide is beginning to disappear is due, in part, to Offenbacher's prodigious work examining the link periodontal disease has to cardiovascular issues and to pre-term and low birth-weight babies.

Referred to as "Dr. O" by his staff, Offenbacher reigns over what they call "the O Zone"— a modest laboratory in the Dental Research Center that has, shall we say, the patina of age to it. The lab, along with the COSD's laughably remote and compact warren of offices, defies the sophistication of the science taking place, as well as the singular reputation in which the COSD's research is held world-wide.

Dr. O's research began nearly three decades ago with the premise that the mouth is not distinct from the body and that factors affecting the health of the mouth more than likely hold systemic

implications for the body as a whole.

Today, a sizeable body of evidence suggests this premise is true. How so? There may be multiple ways that periodontal disease impacts other systemic diseases like diabetes and cardiovascular disease, but in the case of pre-term and low birth weight babies, animal and human studies suggest its impact could be manifold.

That infections in pregnant mothers can cause problems during pregnancy is not news. Between one-third and one-half of all premature births are linked to infection in the mother. And those infections that induce fever in expectant mothers are known to cause a host of problems, among them miscarriage, premature birth and the birth of abnormally small babies.

On one hand, infection causes these dangers by triggering the mother's body to defend itself against it. To do so, her body produces chemicals to beat back the offending virus or bacteria— chemicals that can be harmful to the developing child and its environment. Threats introduced by these chemicals include the impairment of normal fetal growth, as well as precipitate contractions and cervical dilation which can lead to premature birth.

On another hand, infection threatens a normal pregnancy by the inflammation it causes in the mother's body. Inflammation can



photo by Will Owens

occur in the membranes of the placenta, weakening their structure and encouraging the conditions for premature labor. At the same time, animal studies on placental inflammation demonstrate a variety of ill effects, including edema which can destroy tissue, and damage to blood vessels — causing them to shrink and inhibit bloodflow and the flow of nutrients from the mother to the child.

It follows then that the infectious properties of periodontitis, as well as the inflammation it causes, could profoundly impact the health of a pregnancy. It is this theory that drives the research being conducted by Dr. O and the COSD.

So far, studies conducted in the COSD have determined that oral bacteria in both mice and rabbits can cross the placental barrier and reach the fetus. These

findings were later confirmed in humans by studies undertaken at another university. Other COSD studies rendered the conclusions that fetal exposure to the mother's oral bacteria is common, and exposure to enough periodontal bacteria to trigger an immune response in the fetus leads to two-and-a-half to three times the risk for premature birth.

While the link between periodontitis and complications with pregnancy cannot yet be termed unequivocal, the evidence produced by the work of Dr. O, the COSD and other researchers worldwide is substantial. So substantial, in fact, that health insurance companies have taken note and initiated new policies: some are now providing coverage for pregnant mothers undergoing periodontal treatment.

This is no small achievement, but there is other good news as a result of the COSD's work. Periodontal disease can be prevented, and where not prevented, can be managed. Treatment for a suffering expectant mother can be provided safely and, by limiting the spread of infection and inflammation, have a swift, positive effect on her health and the health of her unborn child.

In time, as studies grow more conclusive, other preventive measures may result, including the development of vaccines to protect developing babies from the harmful bacteria produced by oral infections. Until such time, the work of the COSD goes on.

# Calendar

## CONTINUING DENTAL EDUCATION COURSE CALENDAR

<p>■ <b>APRIL 2007</b></p> <p>April 13 April 20  April 20–23  April 27–11  April 27–28</p>	<p>Provisional Restoration Fabrication Workshop: A Hands-on Course</p> <p>Annual Harrell Symposium: Fiber Posts and Shade Selection in Restorative Dentistry featuring Dr. Thom Ziemiecki</p> <p>Annual Shankle Lecture: Differential Diagnosis—Is It Really Toothache? and Forensic Dentistry featuring Dr. Asgier Sigurdsson</p> <p>Annual Dental Hygiene Lecture: Periodontal Health to Overall Health—News You Can Use featuring Maria Perno Goldie</p> <p>Advanced Functions in Dental Assisting: A DA II Prep Course</p>
<p>■ <b>MAY 2007</b></p> <p>May 4 May 4 May 11 May 11 May 11 May 31–June 2</p>	<p>OSHA and Infection Control Annual Update Training (morning)</p> <p>Medical Emergencies in the Dental Office (afternoon)</p> <p>OSHA Compliance Made Easy and HIPAA Update</p> <p>Update in Oral Surgery for General Practitioners</p> <p>Nitrous Oxide Sedation: Annual Update</p> <p>Update in General Practice 2007</p>
<p>■ <b>JUNE 2007</b></p> <p>June 1–10th June 8  June 14–16 June 30–July 7</p>	<p>Annual Straumann Lecture</p> <p>Esthetics and Conservative Operative Dentistry for General Practitioners: Posterior Composites</p> <p>Annual Dental Review at Myrtle Beach, SC</p> <p>CE at Sea—Cruise of the Greek Isles featuring Dr. David Paquette</p>
<p>■ <b>JULY 2007</b></p> <p>July 15–17 July 18–19 July 23–28</p>	<p>Carolina Radiology Institute for Dental Radiology Educators</p> <p>Clinical Oral Pathology for Educators</p> <p>Annual Prosthodontics for General Practitioners on Hilton Head Island featuring Dr. Charlie Goodacre, Dr. George Blakey and Dr. Fernando Rojas</p>
<p>■ <b>AUGUST 2007</b></p> <p>August 3 August 16–19 August 24</p>	<p>Clinical Excellence in Dental Hygiene</p> <p>Institute for Teaching &amp; Learning – Part 1</p> <p>Esthetics and Conservative Operative Dentistry for General Practitioners: Ceramic Restorations</p>

*For Additional CE Course Information Please Contact:*  
Continuing Dental Education  
UNC School of Dentistry, CB 7450, Chapel Hill, NC 27599-7450  
Phone: (919) 966-2729, Fax: (919) 966-8954  
Email: [cde@dentistry.unc.edu](mailto:cde@dentistry.unc.edu)



photo by Ramona Huton-Howe

## School Honors Part-Time Faculty with first “Thank You Day” CE Course

The first Thank-You Day CE Course for part-time faculty participating in clinical teaching for Operative Dentistry, Fixed Prosthodontics and Comprehensive Care began with a free continuing education course. The course was designed especially for part-time faculty to honor their significant contribution to the School's clinical programs. The course was held in October 2006 at the School of Dentistry and offered three hours of CE credit for participation, along with a barbecue lunch sponsored

by the Dental Foundation of North Carolina and football tickets to the UNC vs. Wake Forest football game sponsored by Dean John Williams.

The course was planned for the mutual benefit of part-time faculty members and the two restorative clinical departments. The departments wished to show appreciation to their adjunct faculty for their invaluable contribution to the School, and particularly their clinical teaching in Operative Dentistry and

Prosthodontics. It also gave the departments the opportunity to discuss the pre-clinical curriculum and what is expected of students in terms of quality standards, techniques, materials, and instrumentation. The course highlighted the preparation and restoration techniques taught pre-clinically in both disciplines and was intended to promote a more consistent educational experience for the students as they progress from the pre-clinical labs to clinical patient care.

# Dental Hygiene Students Affirm Commitment at Ceremony

They had just completed a first semester of rigorous learning, and on January 7, members of the UNC School of Dentistry's dental hygiene Class of 2008



**Dr. Sally Mauriello, director of the Dental Hygiene Programs, stands with members of the Class of 2008, including (L to R) Seung Jeon, Sarah McPeters and InAe Kim.**

donned blue lab coats and affirmed their commitment to advancing the public's oral health.

"As these dental hygiene students enter the arena of patient care this semester, we thought it appropriate to recognize the seriousness of this step and congratulate them for their sincere commitment to improving the health of our state's citizens," said Dr. Sally Mauriello, director of the Dental Hygiene Program.

Mauriello offered introductory remarks at the ceremony, and Dean John N. Williams spoke about the "sacred relationship" between patients and those health-care providers who care for patients. "We need to recognize the tremendous accomplishments you have made as students and the joys you will experience in your careers."

Erin Ross, president of the dental hygiene Class of 2008, gave the student address, encouraging the other members of her class — 35 in all — to use the next three semesters to strengthen their skills and increase their knowledge.

Donna Reed Collins, president of the North Carolina Dental Hygiene Association, was the ceremony's keynote speaker and offered three critical success factors to the Class of 2008: always respect patients, be professional in all aspects of life and be flexible.

The keynote address was followed by the donning of the lab coats and the recital of the dental hygienist's pledge. The ceremony concluded with a reception for families and friends of the dental hygiene students.

## *School Ranks Third in National Institute for Dental and Craniofacial Research Funding*

The UNC School of Dentistry ranks third among dental institutions nationwide in 2006 National Institute for Dental and Craniofacial Research (NIDCR) grant funding. The NIDCR is a component of the National Institutes of Health.

"Dental research has a long history at Carolina, dating back to the early 1950s," says Dr. John N. Williams, Dean of the School of Dentistry. "From its beginning, this research has focused on

outcomes that will improve the lives of people throughout North Carolina and beyond. The NIDCR recognizes the critical role research at this School is playing in the future of patient care and has funded it accordingly. We are proud of the accomplishments of our distinguished faculty, not so much for the sake of science, but for the sake of the patients who will ultimately benefit from their hard work and discoveries."

*"The NIDCR recognizes the critical role research at this School is playing in the future of patient care and has funded it accordingly."*

DEAN JOHN WILLIAMS



photo by Ramona Hinton-Howe

## School Joins Prosthodontic Leaders in Discussions on Future of Research

The UNC School of Dentistry and the American College of Prosthodontists Education Foundation (ACPEF) co-sponsored a recent symposium at which oral health research leaders discussed the best ways to advance patient-directed prosthodontic discovery.

“The Scope of Prosthodontic Research,” held in January, featured presentations by deans, chairs, and academic, military and corporate investigators from throughout the United States and Canada. Presenters discussed activities under way to strengthen prosthodontic research and its impact on the future of patient care.

“The participants have indicated their desire to build our research infrastructure and to reinforce prosthodontics’ place in the biomedical academic environment through research activity,” said Dr. Lyndon Cooper, symposium

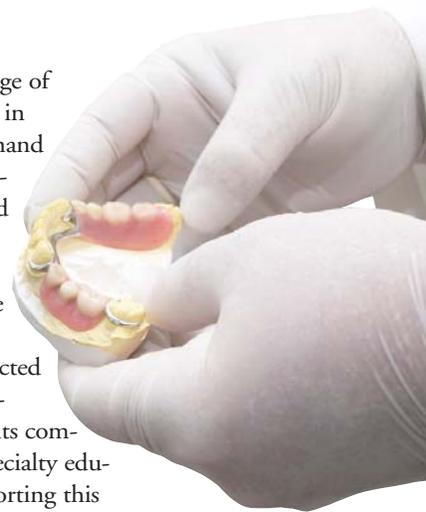
organizer and director of graduate prosthodontics at the School of Dentistry. “We can do this without sacrificing our commitment to clinical excellence. Every prosthodontist’s contribution to the ACPEF is necessary to achieve the excellence in research necessary to restate the significance of our clinical specialty.”

“This was a first-ever and important event in terms of this type of summit on the future of prosthodontic research, and our School of Dentistry was honored to host it,” Williams said. “The discussions were substantive and demonstrated just how powerful collaboration will be in advancing prosthodontic research. What was discussed will become a crucial building block in the advancement of the research that is most responsive to patient needs.”

The ACPEF, created by the

American College of Prosthodontists in response to demand for research support, has funded prosthodontic-related research since 1985. The funded research has been conducted entirely by post-graduate students completing their specialty education. In supporting this prosthodontic-related research, the ACPEF has provided necessary and otherwise unavailable funding for more than 120 projects that have increased the overall understanding of many dental conditions and promising treatment outcomes.

Other symposium sponsors were Astra Tech Inc., 3M ESPE and Ivoclar Vivadent.



## “Dental Research at UNC-Chapel Hill: Past, Present and Future”

*A Symposium*

# School of Dentistry Honors 40 Years of Research

On February 20, the School of Dentistry hosted a symposium, “Dental Research at UNC-Chapel Hill: Past, Present and Future,” that focused on the school’s contributions to research and the future of oral health discovery. Presenters were UNC School of Dentistry researchers and the director of the National Institute of Dental and Craniofacial Research (NIDCR).

The symposium was part of the dental school’s

celebration of its 40 years of oral health research.

The next day, February 21, the School hosted its annual Dental Research in Review Day, featuring research poster viewing and judging, and a keynote presentation by dean emeritus, Dr. Jim Bawden, on the history of research at the School. The entire School community was invited to attend both events.

The Dental Research Center was officially dedicated on October 15, 1967. The dedication address that day—just as the celebration of 40 years achievement this year—focused on the past, present and future.



**Back row, left to right: Dr. J. Timothy Wright, chairman of the department of pediatric dentistry and Bawden distinguished professor of pediatric dentistry; and Dr. Steven Offenbacher, OraPharma distinguished professor of periodontal medicine.**  
**Front row, left to right: Dr. John N. Williams, professor and dean; Dr. William Proffit, distinguished professor of orthodontics; Dr. William Maixner, director of the school-based Center for Neurosensory Disorders and professor of endodontics; Dr. Lawrence Tabak, director of the NIDCR; and Dr. Patrick Flood, associate dean for research.**





# Faculty & Staff Notes



## Office of Academic Affairs

**Dr. Janet M. Guthmiller**,  
associate professor within the



**Guthmiller**

University of Iowa College of Dentistry's department of periodontics and Dows Institute for Dental Research, has been appointed associate dean for Academic Affairs. Guthmiller began the transition into her role at UNC beginning in January 2007, focusing her time in Chapel Hill on beginning a major revision of the School of Dentistry's predoctoral (DDS) curriculum. She will fully transition to her new role in July.



## Department of Continuing Education

**Sue C. Felton**, director of continuing dental education, became the Chair-elect of the Continuing Education section of the American Dental Education Association (ADEA) at their annual meeting in New Orleans in March 2007.



## Department of Diagnostic Sciences and General Dentistry

**Donald Tyndall**, DDS '80, MSPH, '84, PhD '88, professor,



**Tyndall**

was elected to the American Academy of Oral and Maxillofacial Radiology (AAOMR) Executive Council as Councilor for Scientific Affairs and Public Policy. This election result was announced at the annual AAOMR meeting in Kansas City, MO, in November 2006.



## Department of Endodontics

**Eric M. Rivera**, DDS '85, MS '89, associate professor, was appointed chairman of the UNC School of Dentistry's Department of Endodontics on February 1.



**Rivera**

A faculty member at the school since 2003, Rivera previously served as interim chairman of the department.

Rivera previously served as graduate program director and chairman of the Department of Endodontics at the University of Iowa College of Dentistry. His career experience has spanned academic, private practice and

corporate settings. His research areas include the biochemical and functional aspects of collagen cross-linking and structure of dentin related to tooth fracture and the use of calcium hydroxide as a medicine in root canal therapy.



## Department of Operative Dentistry

**Harald O. Heymann**, DDS '78, professor and director of the Operative Dentistry Graduate



**Heymann**

Program, lectured at the Chicago Midwinter Meeting in February 2007 and served as moderator of a Symposium entitled, "Ethics in Esthetic Dentistry" with panelists, Drs. Gordon Christensen, Frank Spear, Terry Donovan (of UNC), and Mark Friedman.



## Department of Oral and Maxillofacial Surgery



**White**

The American Association of Oral and Maxillofacial Surgeons (AAOMS) bestowed their most prestigious award, The Torch Award to **Raymond P. White, Jr.**, DDS, PhD, Dalton L. McMichael Distinguished Professor of Oral



### Department of Allied Dental Education

**Rebecca Wilder**, MS, Director of Graduate Dental Hygiene Education, is the 2007 recipient of the University of Missouri-Kansas City (UMKC) Alumni Achievement Award. Each year UMKC honors select alumni who have achieved notable success in his or her field and rendered outstanding service to the community. Wilder, who also serves as the Editor in Chief for the *Journal of Dental Hygiene*, receives this award from the UMKC School of Dentistry Division of Dental Hygiene. She attended UMKC from 1978-1980 where she completed a BS in dental hygiene and an MS in dental hygiene education and administration. She will be honored publicly by UMKC's Chancellor at a dinner in April. UMKC's alumni office notes, "Rebecca has had a distinguished career as a dental hygiene educator and is nationally known for her expertise in periodontics and her knowledge about the dental hygiene process of care. She is an accomplished scholar with number publications in scientific journals."



Wilder

Wilder has also been elected from the UNC faculty-at-large to serve a three-year term on the UNC Faculty Executive Committee (FEC). The FEC meets bi-weekly with the Chair of the Faculty and Provost to discuss faculty issues and concerns on the UNC campus.

Education Consortium and the Madigan Army Medical Center in Tacoma, Washington. Her clinical interests include surgical treatment of temporomandibular joint patients, cosmetic facial surgery to include nasal, peri-orbital and ear esthetic medication/rejuvenation, and dental implant reconstruction.

**Timothy A. Turvey**, DDS, MS, chairman of the OMFS department, was an invited speaker at the Asian Congress of Oral Maxillofacial Surgery held in Hong Kong in November 2006. His lectures included "Facial Osteotomies for the Sick and Syndromic" and "Biodegradable Bone Plates and Screws in Maxillofacial Surgery."



Turvey

He also lectured at the Finnish Dental Society Apollonia's Research Meeting in Tampere, Finland on "The Exaggerated Immunological Response to Biodegradable Bone Plates and Screws."

and Maxillofacial Surgery and dean emeritus of the School, on October 4, 2006. The award, which is not given annually, honors White for his career-long devotion to education, research, patient care and involvement in professional service. In addition to this honor, Dr. White was recently named the principal investigator in a multi-center project studying the efficacy of third molar removal.

At the annual AAOMS meeting, OMFS residents **Anthony Ruvo**, DDS, **Donald Hull**, DDS '03, **David Stoker**, DDS '04, and

**Michael Gentile**, DDS (along with Nazir Ahmad, DDS Class of 2007) presented a total of 10 programs.

**Jan Faulk-Eggleston**, DDS, MS, has joined the Department of Oral and Maxillofacial Surgery as a clinical associate professor. Dr. Faulk-Eggleston recently completed a 26-year career in the



Faulk-Eggleston

United States Army at Brooke Army Medical Center in San Antonio, Texas, the San Antonio Uniformed Services Health



### Department of Orthodontics

**H. Garland Hershey**, DDS, MS, professor, has been named to the Review Committee on Postdoctoral Dentistry Education by the American Dental Association. The Review Committee is advisory to the Commission on Dental Accreditation on matters of accreditation policy and program review.



Hershey

*Faculty/Staff  
Notes continued  
on next page*



photo by Ramona Hutson-Howe

■ ■ ■ ■  
**Department of  
 Prosthodontics**

**Dina Dedi, DDS, MS**, clinical assistant professor, received the Best Clinical Research Presentation Award at the



**Dedi**

Research Competition of the European Association for Osseointegration (EAO). The award was presented to Dr. Dedi during EAO's annual session in Zurich Switzerland in October 5-7 2006, for her presented abstract "Immediate Tooth Replacement: A 2-year comparative study."

Dr. Dedi was also voted as a Fellow of the International Team

of Implantology (ITI), based in Basel, Switzerland. Fellows of this prestigious organization demonstrate an active commitment in the areas of leadership, research, education and development in implant dentistry.

**Albert Guckes, DDS, MS**, associate professor and assistant dean for academic affairs, received the National Foundation for Ectodermal Dysplasias' John E. Gilster, DDS, Outstanding Service Through Dentistry Award at its recent 25th anniversary gala. Guckes was honored for his commitment to the oral health of individuals affected by ectodermal dysplasia syndromes and for his outstanding



**Guckes**

contributions to the foundation. Ectodermal dysplasia syndromes constitute a group of about 150

heritable disorders that affect the ectoderm, which is the outer layer of tissue in a developing baby.

**Dr. Stella Kourkouta** joined the Department of Prosthodontics in October 2006 for a one-year



**Kourkouta**

implant research scholarship program, a scholarship granted on an annual basis through the International Team for Implantology (ITI) based in Basel, Switzerland. ITI is a worldwide non-profit organization of scientists and practitioners in the field of implant dentistry that aims to promote and disseminate knowledge in implant related research, education and patient care. Kourkouta also holds a position as an Honorary Consultant at the Eastman Dental Hospital and Institute in London, England.



## STUDENT PROFILE

# Allison Cavanaugh, DDS Class of '09

*Family's Christmas Tradition Leaves Mark on Craniofacial Center*

by Courtney Jones '01



For most college-age students, homemade Christmas gifts have gone the way of the paper plate Santa and the clothespin reindeer. And while most parents look forward to the clothing and restaurant gift certificates their older children can now afford to purchase, Bruce and Alice Cavanaugh — parents to Allison Cavanaugh, DDS Class of 2009 — have gone back to basics.

*Student Profile  
continued on  
next page*

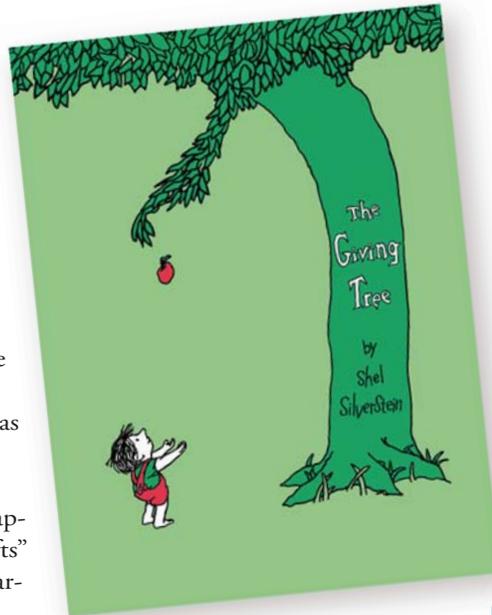
photo by Will Owens

Student Profile,  
continued from  
previous page

“My junior year of college, my parents asked that rather than give them gifts for the holidays, my brother Matt and I donate our time or money to a charity for children,” says Cavanaugh. “So we documented what we did that first year in a scrapbook and gave that to them as a Christmas gift.”

Every year since, they’ve added a new page to the scrapbook documenting their “gifts” and rewrapped it for their parents to open on Christmas morning. The pages—eight of them now—are decorated with narratives and photos of the projects undertaken by Allison and her brother, and why they chose them. Among the pages are tales of children sponsored through the Salvation Army, Spanish-language books donated to children who need them, and paper angels plucked off local charities’ trees. Inspired by her parents—who request the same kind of giving from the employees at their five car dealerships in Wilmington, NC—the giving has gotten bigger and bigger. On Christmas morning, the excitement centers not around the gifts from Mom and Dad, but on watching her parents discover the new entry in the years-old scrapbook.

This year, Allison focused her charity on UNC’s Craniofacial Center. Following a meeting for Miles for Smiles, a student fundraising group for the Center for which she serves as treasurer, Allison knew that the Center



Allison had noticed the condition of the clinic’s playroom, a space filled sparsely by the Center’s limited state funds. She knew that the Center would be the place to focus her efforts.

would be the place to focus her efforts. She had noticed the condition of the clinic’s playroom, a space filled sparsely by the Center’s limited state funds. The toys were worn, and there were lots of small toys, but not many learning materials. “Some children would be there for hours

and have very little to play with.”

Exhausted one evening from studying for a prosthodontics final, Allison set out for Target. Choosing the toys for the children was the perfect pick-me-up. She filled her cart with books she’d loved as a child, like Shel Silverstein’s “The Giving Tree,” a small bookshelf, cloth toy chests, and heaps of toys to fill them. Classmate Marshall Long chipped in a large over-stuffed toy horse to round out the spree.

“When I do my Christmas giving, I never want my right hand to know what my left hand is doing,” she says. The day after her last exam, Allison had arranged to bring in the toys without telling the Center staff what she was up to, hoping to sneak out unnoticed and leave a surprise behind. The surprise was on her: “When I looked up everyone was watching me. Dr. (Ronald) Strauss gathered the Center staff together and they had all come to see.”

Cavanaugh credits her tightly-knit family for her interest in giving back, which she already translates into her interest in the children and staff at the Craniofacial Center and her love for dentistry.

“I love observing in the clinic at the Craniofacial Center. I love seeing the disciplines come together. It’s not about one aspect of health—you have to pay attention to the comprehensive treatment of the individual.”



## Running Miles to Create Smiles

Savannah Gelesko, a first-year DDS candidate, recently started Miles for Smiles—a student fundraiser collecting donations for miles run by students in local races—to make a difference in the lives of children and families affected by cleft lip and cleft palate. The goal is to bolster Dental Foundation of North Carolina funds for UNC’s Craniofacial Center to ensure access to comprehensive, specialized treatment for all children with cleft lip and cleft palate. The Center will be able to allocate the funds raised to needy families on a case-by-case basis.

Gelesko was inspired to start Miles for Smiles not only by the children and families who are unable to afford the craniofacial care they need, but also by the families and Center faculty and staff who often step in to donate money or services.

“All too often, children are denied treatment because their

families cannot afford it,” Gelesko says. “In the past, some of the most financially able parents at the Craniofacial Center have come forward to donate money to these struggling families. And the doctors often donate both their money and their expertise.”

A former track athlete, Gelesko says, “Our goal is to get in shape while raising money for families who cannot afford the full cost of treatment for their children with clefts.”

In addition to a host of fundraisers still in the planning stage, the group will be running 8K and half-marathon races this spring. Miles for Smiles will be asking members of the School and community to sponsor each participating runner for money per mile.

“We can run the miles, but need help making the kids smile,” Gelesko says.



Gelesko

*“Our goal is to get in shape while raising money for families who cannot afford the full cost of treatment for their children with clefts.”*

SAVANNAH GELESKO

# Dental Student takes on World Hunger

Students, faculty and staff all over the UNC's campus know where to go to get a good meal when money's tight. A dense slice of cornbread, a healthy portion of seasoned black beans and a heaping pile of sticky wild rice await for a mere three dollars. Sweet tea and as much Texas Pete as you can stand are thrown in in what's known as the "hunger lunch." It's a small price to pay for such a lunch.

It's also a small price to pay to help stamp out hunger and poverty, which is what each lunch is designed to do.

The "hunger lunch" is sponsored every other week around campus by Nourish International (NI), an organization created by Sindhura Citineni, a first year dental student, in 2002 while she was still an undergraduate at UNC. The Hunger Lunch and



Citineni

NI were entrepreneurial ideas born of necessity for Citineni, who felt compelled to do something to combat hunger in impoverished nations after encountering a rapidly blinking world map online with the notice "every time a country changes color, another person dies from hunger."

According to its mission statement, NI "designs entrepreneurial fundraising ventures (*a la* the Hunger Lunch) to finance and implement sustainable development projects for communities in dire need." Now a successful model running at UNC, Duke University, North Carolina State University and Ohio State, Citineni's brainchild is a full-fledged non-profit organization that is expanding nationwide.

"Nourish uses business models because it helps them recruit people who would not have other-

wise joined a socially-minded organization," says Citineni. This summer NI plans to use funds raised through the weekly hunger lunches and their annual poker tournament to build an after-school educational facility in La Pista, Guatemala. Since 2002, NI funds and workforce have supported communities in Hyderabad, India; Mumbai, India; Buenos Aires, Argentina; La Bolivia and Mbale, Uganda. The central goal of each project is not only to provide assistance to the community but also to ensure a sustainable impact.

While NI is a tough workload in addition to dental school, for Citineni it's worth it. "It feels that any free time I have I'm being as productive as possible" she says. "Our goal is to run at full capacity and be at 50 chapters by the end of next year. Think how many communities could be helped with that."

More information on Nourish International can be found at [www.nourishinternational.org](http://www.nourishinternational.org).

## Students Chip In for New Dental Sciences Building at UNC

A group of DDS students have found a new way to chip in to help the School. They plan golf tournaments.

The first annual, entirely student-run Path of Draw Invitational was held August 26, 2006, with 31 golfers at UNC's Finley Golf Course. The tournament raised \$1,600 for the Dental Foundation of North Carolina for a new dental sciences building at UNC.

The aim of the tournament is to provide students, faculty and private practitioners the opportunity to come together and bond outside of the School and workplace while raising money for the future of dentistry at UNC.

The winning team was Eric Roman, Chad Biggerstaff, and Ethan Nelson, all students in the DDS Class of 2007, who shot a 17 under 55. Prizes were given for best team score, longest drive,

and closest to the pin.

Tournament planner Michael Demo, a third year dental student, would like to make the Path of Draw Invitational an annual event for the School's chapter of the American Student Dental Association. He and his fellow classmates have begun plans for the second annual tournament to be held this fall.

# Morton Tackles New Challenges



Morton

*“In a matter of a few minutes, we went from a party of three to a party of seven.”*

MIKE MORTON

When we profiled Mike Morton—former professional football player turned fourth year dental student—in the last issue, Mike, his wife and son planned to return to their hometown of Kannapolis after graduation in May. Mike’s focus was on settling his career there. Nine short months later, the challenge is no longer so much establishing his practice in Kannapolis, but in finding a car large enough to get his family there.

You see, the Mortons, once just Mike, Alana and Trey, welcomed quadruplets on January 19, 2007—Katie, Laney, Molly and Jesse. “In a matter of a few minutes, we went from a party of three, to a party of seven,” Morton says.

More than doubling the size of your family would be enough to make a day interesting, but

January 19 was also one day shy of Mike’s due date to take his clinical boards. Given the option to reschedule his boards for later, Morton focused on the needs of his family in the way you might not expect: “My family was healthy and my wife told me I needed to go pass those boards,” he laughs. With four new babies under one day old and without much sleep, pass the boards is what he did.

Mike and Alana credit their strong faith with guiding them through this expansion of their family, from the minute they first discovered four heartbeats to the day they saw their faces for the first time. “This was a leap of faith. We’ve known from the start that if this was God’s plan, we’d be okay.” In fact, he notes that Molly was the smallest of the babies, which were born at 28 weeks and remain in the neonatal intensive care unit at UNC, “and she’s the feistiest!”

Morton casually mentions that The Learning Channel (TLC) has been filming segments of their lives for a special on multiple births, but the family man is modest. “I made it clear to the producers that this was not about me. This is about my wife and our children.”

Certainly more impressive than the nuances of television production has been the support from his classmates, patients, and faculty. “It’s a humbling experience to see so much good. Everyone has gone above and beyond for us and we couldn’t be more appreciative of their concern and support.”

At press time, the babies—all healthy and growing stronger—were due home in four weeks, when Mom and Dad will surely be glad he got those boards out of the way.



Jessie



Laney



Molly



Katie

# Student Notes

**ENNEAD**, one of the School's student volunteer groups, completed a two-day mobile dental clinic this past November at the Shelter Rock Ministries facility in Foscoe, NC. ENNEAD, Shelter Rock Ministries, NC's Missions of Mercy (established by Steve Slott, DDS '84), and local volunteer dentists, dental hygienists, and dental assistants participated in treating over 250 patients with cleanings, fillings, and extractions.

**Nimet Adatia**, DDS, a graduate student in the department of prosthodontics, won the 2006 John J. Sharry Prosthodontic Research Competition at the American College of Prosthodontists' annual session in November in Miami. Sponsored by the American College of Prosthodontists Education Foundation, the competition is designed to stimulate and acknowledge original student research in prosthodontics. Adatia's abstract was titled "Fracture Resistance of Y-TZP Dental Implant Ceramic Abutments." She is the 2006-2007 Astra Tech Dental Implant Fellow at the School of Dentistry and received both her undergraduate and DDS degrees from the University of Alberta.



**Bigelow**

**Carrie Bigelow**, BS, RDH, a second year graduate student in the Dental Hygiene Education Master of Science degree program, is conducting a full time internship during the spring semester at the University of British Columbia. Under the direction of Bonnie J. Craig, RDH, M.Ed., Carrie will assist in administrative program planning and implementation for a new, four year dental hygiene program at UBC. Carrie will also have the opportunity to work with the British Columbia College of Dental Hygienists, the regulatory authority for the profession of dental hygiene in Canada, learning more about laws and ethics as they relate to the profession in Canada. Carrie has been invited to present her thesis research to the British Columbia Oral Prevention Program, housed at Vancouver General Hospital. Carrie worked with Dr. Lauren Patton on a project entitled, "Dental Hygienists' Views on Oral Cancer Control in North Carolina."

**Danielle Furgeson**, BS, RDH, a second year graduate student in the Dental Hygiene Education Master of Science degree program, has been selected to assume a new position at the American Dental Hygienists' Association

(ADHA) effective May 2007. Danielle, who is conducting a full time internship at ADHA in Chicago, IL during the spring semester, will complete her UNC graduate degree in May and will become the first ever ADHA

Manager of the Student American Dental Hygienists' Association (SADHA). She conducted her thesis research in the area of SADHA and her project is entitled "Role of the Student American Dental Hygienists' Association in Mentoring Dental Hygiene Students for the Future." Danielle is also the ADHA student member of the Committee on National Boards for the 2006-2007 fiscal year. This committee will meet in March with the ADA Joint Commission on National Dental Examinations' Committee on Dental Hygiene.



**Furgeson**

**Christina Karamini**, DDS, a graduate student in the department of prosthodontics, was among three finalists for the 2006 John J. Sharry Prosthodontic Research Competition. Sponsored by the American College of Prosthodontists Education Foundation, the competition is designed to stimulate and acknowledge original student



Photo by Will Owens

research in prosthodontics. Karamini's abstract was titled "A Matricellular Hydrogel Enhances Bone Regeneration in Rat Calvarium Critical Size Defects." She will be the 2007 ITI implant scholar at the School of Dentistry and received her dental school education at the Kings College School of Medicine and Dentistry in London. She completed a residency at the Kings College Hospital in General Dentistry, Oral Surgery, Oral Pathology, Restorative and Removable Prosthodontics, as well as an Oral and Maxillofacial Surgery residency at Guys Hospital also in London.

**Vandana Kumar**, a third year graduate student in the Oral and Maxillofacial Radiology program, was recently awarded the Radiology Centennial Award from the American Academy of Oral and Maxillofacial Radiology at its 57th annual meeting in Kansas City, MO in November. The award is given annually to the U.S. radiology graduate student who demonstrates the most promise as an oral and maxillofacial radiologist and carries with it a \$5,000 scholarship. This is the second year in a row that a UNC Radiology student has won this award.

**Douglas Lambert**, BS, RDH, a second year graduate student in the Dental Hygiene Education Master of Science degree program, is conducting a full time administrative internship at Guilford Technical Community College. He is working with Mary West, division chair of health sciences and with Lois Smith, department chair of dental hygiene, in administrative activities.



**Lambert**

**Julie Robinson Molina**, DDS '05, a second-year graduate resident in the department of pediatric dentistry, has been named a recipient of the American Academy of Pediatric Dentistry/OMNII Pediatric Dentistry Postdoctoral



**Molina**

Fellowship for 2006-07. This recognition is presented by the American Academy of Pediatric Dentistry (AAPD) Foundation and OMNII Oral Pharmaceuticals, a division of 3M. Molina's research is titled "Traumatic Root Fractures in Children and Adolescents: Diagnostic and Clinical Considerations." She received a grant award of \$7,500 to support her research and supplement her stipend. Molina presented her

findings in March at the International Association for Dental Research's General Session in New Orleans. She will also present her findings in May at the AAPD's Annual Session in San Antonio.

**Ashley Puleo Schaff**, DDS candidate, Class of 2008, with the help of the Orange County Health Department, Eugene Sandler, DDS, MS, professor of dental ecology, Nona Breeland, BSDH '73, DDS '87, MS, and ENNEAD volunteers—outfitted 231 middle and high school students with custom mouthguards. Schaff and Bill Vann, DDS, MS '76, PhD '80, Demeritt Professor of Pediatric Dentistry, were featured on a WRAL health segment promoting the benefits of mouthguard use.



**Schaff**



# Carolina First Campaign Update

Dear Alumni and Friends,

More than \$2 billion and counting! It is my privilege to report that the University of North Carolina at Chapel Hill has exceeded its \$2 billion Carolina First Campaign goal. The Carolina First Campaign and reaching this \$2 billion goal are wonderful testimonies to the dedication, loyalty and generosity of Carolina's alumni and friends.

Carolina First is another great story of this University's excellence.

From Elkin to Emerald Isle, I want to personally thank alumni, friends, corporations, founda-

*Building  
ON  
Excellence*

tions, and donors who have reached into their pockets and supported the School of Dentistry's goals in the Carolina First Campaign. Over the past eight years, the School's foundation, the Dental Foundation of North Carolina has received more than \$39,500,000 in gifts and pledges to our Carolina First Campaign: Building on Excellence — that's 40% more than our stated \$30,000,000 goal. For those of you who have given, once again, thank you.

Since July 1999, your generous gifts and Carolina First commitments to the Dental Foundation have provided:

- Annual support for the current operating activities of the School of Dentistry;
- Post-DDS graduate fellowships and new scholarships for outstanding DDS, Dental Hygiene and Dental Assisting students;

- Endowed professorships to attract and retain the best faculty to Carolina; and
- Programmatic support to improve patient care and fund research.

There is still time to make a campaign commitment before Carolina First comes to a close on December 31, 2007. It is my hope that every alumna, alumnus and friend of this leading School of Dentistry will participate in Carolina First.

On behalf of the Dental Foundation of North Carolina and the School of Dentistry, I thank you for your enthusiasm, friendship and continued generosity.

With thanks and congratulations!

*James A. Harrell, Sr.*

James A. Harrell Sr., DDS,  
*Campaign Chair*

*For more information about how you can participate in the Dental Foundation of North Carolina and the School of Dentistry's Carolina First Campaign: Building on Excellence, contact Jim Ervin or Kelly Almond at (919) 966-2731.*



## WHAT IS THE DENTAL FOUNDATION OF NORTH CAROLINA?

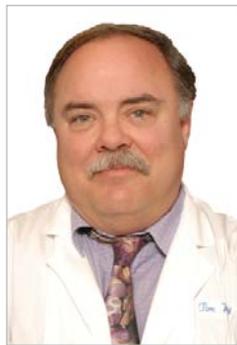
Chartered in 1950 by the UNC School of Dentistry's founders, the Dental Foundation of North Carolina is the School's non-profit foundation. It raises funds from alumni, friends, corporations and foundations to provide exclusive support for students, faculty, and programs at the UNC School of Dentistry. Assets in the Dental Foundation are overseen by its Board of Directors, most of whom are UNC School of Dentistry alumni. All contributions to the Dental Foundation of North Carolina are tax deductible and are, in short, contributions to the UNC School of Dentistry.

# Wright Named Bawden Distinguished Professor of Pediatric Dentistry

Dr. J. Timothy Wright has been named the first Dr. James W. Bawden Distinguished Professor of Pediatric Dentistry in the UNC School of Dentistry.

Wright serves as chair of the School's Department of Pediatric Dentistry.

Friends and colleagues of Dr. James Bawden, who was dean of the School from 1966 to 1974, established the endowed chair to attract or retain a distinguished teacher and scholar within the



Wright

School's Department of Pediatric Dentistry.

The gift of more than \$333,000 was provided by more than 165 individuals and organizations; state funds of \$167,000 were matched to this amount to create an endowment exceeding \$500,000.

"Dr. Bawden had an incredible vision for our school, and you see his influence in so many of our strengths — patient-centered research and collaboration with our fellow health affairs schools are just two examples," said Dean John N.

Williams. "Dr. Wright has directed almost the entirety of his career to advancing the field of pediatric dentistry, and his efforts have had a major influence on patient care, education and research at our School. He richly deserves this honor."

Wright received his doctor of dental surgery degree from the West Virginia University School of Dentistry and his master of science degree from the University of Alabama at Birmingham. He began his career in 1978 as director of the Children's Dental Clinic, a component of the Cabell-Huntington Health Department in West

*Continued on next page*

## Carolina First Campaign Exceeds \$2 Billion Goal

From the UNC News Service  
Feb. 21, 2007

CHAPEL HILL – More than \$2 billion and counting.

The University of North Carolina at Chapel Hill surged past its \$2 billion goal for the Carolina First Campaign – with more than 10 months to spare and the single largest commitment in university history pushing the drive into its closing months.

A \$50 million commitment from Dennis and Joan Gillings to support the School of Public Health put Carolina First over the \$2 billion mark.

"This history-making com-

mitment exemplifies what we aim to achieve with Carolina First," Chancellor James Moeser said. "It will greatly extend the university's ability to innovate public health solutions across North Carolina and around the world. UNC is committed to global education, and our School of Public Health is one of the best in the world."

UNC will recognize the Gillings' contribution by renaming the School of Public Health as the Dennis and Joan Gillings School of Global Public Health.

The Gillings' pledge raised total Carolina First commitments to \$2.05 billion. The campaign, which supports UNC's vision to

become the nation's leading public university, began July 1, 1999, and will end Dec. 31. Its public launch came in October 2002 with a \$1.8 billion goal. That mark was raised to \$2 billion in October 2005.

"This is an extraordinary achievement, and a tremendous testament to the generosity of our supporters and their belief in what this university is all about," Moeser said. "In every way, we're a stronger institution thanks to Carolina First, and the campaign will continue to pay dividends in its final months. "Our deepest gratitude goes out to the thousands of loyal supporters who've brought us to this point."

Virginia. Wright, who joined the UNC School of Dentistry faculty in 1990, also is a practicing dentist in the school's Pediatric Dentistry Clinics and specializes in care for patients with special medical and dental health-care needs.

His research interests include the diagnosis and treatment of developmental abnormalities in teeth that result from hereditary and environmental conditions, and understanding normal tooth development. He is the author of more than 130 journal publications, edited texts and chapters. Wright's research has identified mutations in genes that are critical to normal tooth and bone formation. His research has provided the clinical tools to diagnose a variety of craniofacial conditions and has led to novel treatment approaches for disorders that are associated with devastating malformations involving the head and neck.

Bawden received his doctor of dental surgery and master's degrees and doctorate from the University of Iowa. He was a dental officer in the U.S. Navy Dental Corps from 1954 to 1956 before practicing privately in Glenwood, Colo. When he came to UNC as an assistant professor in 1961, his career accelerated quickly. In 1962, he became an associate professor, and the following year he was appointed assistant dean and coordinator of research.

He achieved the rank of full professor in 1965 and dean in 1966. Bawden served as the School's dean through 1974, providing crucial leadership in the School's establishment of its research infrastructure. The Dental Research Center, which he helped dedicate in 1967, is celebrating its 40th year of operation this year.

As a researcher, Bawden led studies on enamel formation, mechanisms of fluoride action and clinical effects of topical fluorides. He retired in 2000.

"I'm just delighted that Tim got this," Bawden said. "I think he is a fantastic scientist, teacher and clinician, and he is doing a wonderful job as department chairman."

Of the professorship established in his honor, Bawden said, "It was a huge honor, one of the

nicest things that has happened to me in my long career."

Wright said Bawden was a pioneer in research investigating the effectiveness and safety of fluorides in preventive dentistry. "He helped envision a statewide plan for preventive oral health care and referral for children from birth to 3 years of age and has been a leader in preventative health care for children.

"I had the pleasure of working with Dr. Bawden in his research laboratory when I first joined the UNC faculty and was immediately impressed by his undying conviction for the search for truth," Wright added. "He has been an incredible role model and a tremendously positive influence on my thought process in approaching research and then applying those findings to improve the oral health of children." ■



*"Dr. Wright has directed almost the entirety of his career to advancing the field of pediatric dentistry, and his efforts have had a major influence on patient care, education and research at our School. He richly deserves this honor."*

DEAN JOHN WILLIAMS

# Why I Give

SUZETTE STINES, DDS '81

*“It’s important to support dental education in the ways in which you believe it should be supported. With your degree, you can support the School from here all the way to Alaska and back.”*



by Courtney Jones '01

Bread and butter, n.

1. *A means of support, a livelihood.*
2. *The essential sustaining element or elements, the mainstay.*

This is the definition according to the American Heritage Dictionary, but the Dental Foundation of North Carolina (DFNC) would define their essential sustaining element as the Annual Fund. Private gifts to the Annual Fund are essential to the School’s ability to achieve and maintain its lofty academic, service, and research goals.

To thank the School for her own sustaining elements — an enjoyable way of life, the ability to educate her three children at top institutions, the training and expertise to treat the various dental maladies of Chadbourne, NC — Suzette Stines, DDS '81, donates monthly to the Annual Fund designation of her choice, the Department of Operative

Dentistry.

“Our nostalgia always makes us think what we had was best, but I truly do value the way I was taught. The instruction has really stuck with me. The knowledge is still in there and I am able to properly diagnose patients when they walk into my practice. You have to be grateful for a skill like that — that you can look at a patient and diagnose them. From pathology to comprehensive dentistry, I use everything I learned.”

By giving through a monthly bank draft, Dr. Stines says she is able to donate more than with an annual check. “Each year, I bump up my monthly draft a little more. I don’t even notice the change, but over time, it makes a difference to the School.”

Stines is certainly making her own difference in the dental profession. She owns a practice in Chadbourne, NC, serves on the DFNC Board of Directors, instructs every other week at the School’s Comprehensive Care

Clinic, and travels as a certified trainer in Cerec crown technology.

She encourages the students she instructs and alumni she meets to find their own way to make a difference. “It’s important to support dental education in the ways in which you believe it should be supported. With your degree, you can support the School from here all the way to Alaska and back.”

Stines says the inspiration to lead such a full life as a dentist came from the Operative Dentistry faculty who shaped her professionally. “They were really influential in my becoming a dentist and I want to honor them because they’re a really special group of professors. Dr. (Ken) May and Dr. (Ted) Roberson set a model for us, a model to make service your life. They set a high bar, but, hey, that’s the bar!”

It’s the same bar Stines sets for her students in the Comprehensive Care Clinic and the same she set for her three children: Lee Gause is a Howard-educated dentist in Manhattan, New York, Hollins Gause works for the corporate office of Teach for America in New York and Alexander Gause is a first year DDS candidate at UNC. Upon their graduations, she has encouraged all of them to begin their annual giving programs to their alma maters.

“The School has given my children and me a blessed life,” she says thankfully. “We have to remember how we got here.” ■

# Dean's Club Ball

Loyal donors, alumni and friends of the Dental Foundation of North Carolina braved a rainy night as they gathered in Chapel Hill on October 27, 2006 for the Dean's Club Ball. The Dean's Club is an annual giving society recognizing those who contribute upwards of \$1,000 per year to the School of Dentistry through the DFNC. Before enjoying a candlelit dinner of sea bass, guests proudly joined the Dental Alumni Association as they honored Dr. Sandra Madison with the John C. Brauer Award and the DFNC as they bestowed their highest honor — the Distinguished Service Award — on Dr. Ted Roberson.



photos by Will Owens





## ALUMNI PROFILE

# Nolan Davis DDS '04

by Courtney Jones '01

For the spotty cell phone connection, Nolan Davis, DDS '04, apologizes. “You have to take advantage of a sunny day in Juneau,” he says loudly over the audible crack and crunch of ice beneath his boots. As he describes the scene before him — sunshine made brighter by the snow, the weather holding steady at 25 degrees — one can almost see the frost on this native Tar Heel’s breath. He finds a rock to rest and exhales, “I absolutely love it here!”

After graduation, Davis left North Carolina with a handful of cash, a couple of credit cards inching to their limits, and a paper diploma so valuable it would secure not only his place in the dental profession, but also the credit for a car, and later a home. After a month of travels, Davis and his beloved dog crossed the border to Alaska with only one dollar left. “I took it out and snapped a picture of it,” says the ever-optimistic dentist. “I’ve still got that picture somewhere.”

One would need a little optimism to drive across the country with so little in his pockets. But while many of his classmates were settling down in secure private practices, Davis was living in his car and worried about how



*Alumni Profile  
continued on  
page 42*



**Davis's last dollar, summer 2004. Three years later, he has enough to share—giving back to the School of Dentistry to support the scholarships that once supported him. “Being around dentists from all over, I know that UNC has the best program out there. We shine.”**



*Alumni Profile,  
continued from  
page 40*

he would feed his dog. Happily, a series of serendipitous events — a group of hitchhikers paying for a ride to a pub; a free pool tournament where Davis won a salmon rod and reel he could sell; a store charging one dollar for a week's worth of day-old pastries — would keep Davis and his dog fed and show him he was definitely in the right place at the right time.

“The main draw up here was the location and adventure,” says Davis, who first fell in love with Alaska on a summer trip. “And with public health dentistry I can extract any tooth that walks in the door. I've seen some crazy pathology. We don't have a lot of

resources so you have to be a jack of all trades.”

Recently returned from a week-long job in Pelican, Alaska — which could only be reached by floatplane — Davis says he's comforted by the small town feel of this “Mayberry, Alaska,” having come from a small town outside of Lenior, NC himself. “Everyone knows you're coming before you get here and they always send you home with bags of fresh meat or fish.”

Does he miss anything about the part of the country that raised him? His friends, his family, and the landscape of the Blue Ridge are all on the list. To save money for extra time with

his family on the east coast this year, Davis will spend the summer working in a private practice in Juneau. After some time in NC, he'll head to South Vietnam for a month of volunteer dentistry. “I really don't know exactly where I'll be in five years. The hardest thing to see is the blatant neglect of the dental health needs of children in these areas. I feel like my help is needed and I fit this niche really well.”

Once literally down to his last dollar, Davis's early optimism was well-founded: he now owns his own home, with a view of the Alaskan mountains he's grown to love. Just don't count on him settling down any time soon. ■

*“Being around dentists from all over, I know that  
UNC has the best program out there. We shine.”*

# Class Notes

**W**e want to hear from you! Please keep your fellow classmates, colleagues and friends informed of your news. Drop us a note in the enclosed envelope or send us an email at [alumni@dentistry.unc.edu](mailto:alumni@dentistry.unc.edu) and we'll include your news in the next issue of the *North Carolina Dental Review*.

## ■■■ 1957 ■■■

**Charles Strange**, DDS, retired in 1988 after serving 31 years in the US Navy. He is a life member of the American Prosthetic Society. Charles is living in Carlsbad, California with his wife Pat. They will celebrate their 50th Anniversary in October 2007.

## ■■■ 1964 ■■■

**John R. Dunn**, DDS, won a trophy as the best male dancer in the silver division last fall at the First Coast Ballroom Dance competition in Jacksonville, FL.

## ■■■ 1971 ■■■

**Roger N. "Nick" Reynolds**, DDS, MS '73, was elected President of the Southern Academy of Periodontology at their annual meeting in Naples, FL.

## ■■■ 1980 ■■■

**Michael D. Spreng**, DDS, was awarded a fellowship in the American College of Dentists during its annual meeting and convocation on October 17, 2006 in Las Vegas, Nevada. Dr. Spreng practices general dentistry in Ashland, Ohio. **Rex Card** and **David Paquette**, also members of the DDS Class of 1980, were also inducted.

## ■■■ 1988 ■■■

**Kim Perry**, DDS, clinical assistant professor in restorative sciences at Baylor College of Dentistry – Texas A&M Health Science Center, has been selected as one of 14 National Institutes of Health Multidisciplinary Clinical Research Scholars supported by a \$9.7 million grant from the NIH to UT Southwestern Medical Center. Part of Perry's study will be to conduct a study at the College for which she will receive \$100,000 in research funds.

## ■■■ 2001 ■■■

**Jennifer Burke Sams**, DDS completed an AEGD residency at Langley Air Force Base in 2002. While stationed in England, she met and married Dr. Jon Sams in the town of Bury St. Edmunds. The couple now resides in San Antonio, TX where they celebrated the birth of their first child, Jonathan "J.J." Sams, Jr. this past June. Jennifer has been selected for promotion to Major in the US Air Force but will be leaving military service this summer to practice dentistry part time and to spend more time with J.J., her pride and joy.

## ■■■ 2003 ■■■

**Jeremy R. Fry**, DDS, MS, along with his wife, Nicki and their daughter, Caroline, welcomed new daughter, Lily Suzanne Fry on Thursday, February 1st.

# The DDS Class of 1991

gathered in Chapel Hill in October 2006 to celebrate their 15th reunion. The Class enjoyed dinner at the Carolina Inn, golf at Finley Golf Course, and some class members stuck around for bluegrass and barbecue at the School prior to the UNC vs. Wake Forest football game.



photo by Will Owens

## DENTAL OPPS

### **Online Professional Posting Service**

Visit [www.dent.unc.edu/alumni/opps](http://www.dent.unc.edu/alumni/opps) to use this helpful service to members of the UNC Dental Alumni Association. As a DAA member you can list the sale of your practice, available office space for lease, or post an ad for an associate or staff member. This service is **free** for members of the UNC Dental Alumni Association.

## Send Us Your News!

**Share your news** with classmates and friends through "Alumni Notes." What to send? We'd love to hear about:

- Changes in your Practice
- Family Events
- Leadership in Dentistry
- Community Leadership
- Travels and Hobbies

## Change of Address?

Be sure to send us your name, address and e-mail changes.

Dental Alumni Association  
UNC School of Dentistry  
1090 Old Dental, CB 7450  
Chapel Hill, NC 27599-7450

phone: 919-966-4563

fax: 919-966-4049

e-mail: [alumni@dentistry.unc.edu](mailto:alumni@dentistry.unc.edu)

web site: [www.dent.unc.edu/alumni](http://www.dent.unc.edu/alumni)

We look forward to hearing from you!

## Join the UNC Dental Alumni Association Today.

Your membership dues make a difference!

DAA membership supports important alumni activities including:

- Class Reunions
- Online Professional Posting Services (Dental OPPS)
- Associates Day
- The North Carolina Dental Review
- The Online Alumni Directory
- Annual Meeting and Breakfast at the Beach
- The annual DDS Alumni Scholarship

Register online at [www.dent.unc.edu/alumni/dds](http://www.dent.unc.edu/alumni/dds), click on Membership.

Or mail your \$45 check today to the Dental Alumni Association.



Visit us online at [www.dent.unc.edu](http://www.dent.unc.edu)



UNC School of Dentistry  
The University of North Carolina at Chapel Hill  
CB 7450  
Chapel Hill, NC 27599-7450

Non Profit Org  
US Postage  
**P A I D**  
Permit 177  
Chapel Hill NC

