



Heads Up

Carolyn Brown Retires A Legacy of Love, Creativity, and Innovation

by David B. Perry



Carolyn Brown with 6-year-old Faith Anthony, who received her cochlear implant at 11 months of age.

Carolyn Brown retired at the end of August. After 15 years in the Department, she leaves an extraordinary legacy of cutting-edge thinking, creative vision, and pioneering programs. When Dr. Pillsbury and Dr. Paul Biggers brought Carolyn to Chapel Hill in 1993, UNC had a total of 14 pediatric cochlear implant patients. The turning point was made possible when the Carolina Children's Communications Disorders Program (CCCDP), which provides financial support for North Carolina families with children who have hearing loss, was funded by the General Assembly. This unique concept was conceived by Dr. Biggers and made possible by the determined efforts of then North Carolina Senator, Howard Lee. Carolyn, who had at one time served with Dr. Bill House on the team that had developed the first cochlear implants, was made Program Director of the new program.

With the active support of Dr. Pillsbury over the years, Carolyn Brown developed the CCCDP into an umbrella program housing

the UNC Pediatric Cochlear Implant Program, the Center for Acquisition of Spoken language Through Listening Enrichment (CASTLE), and the Financial Assistance Program. On August 31, 2008, at the end of her watch, the Pediatric Cochlear Implant Program had 543 patients in its research database, most of them current, and 32 children currently being evaluated as potential implant candidates. CASTLE had been expanded to a second location and remains focused on the training and mentoring of school professionals throughout the State. And, the Financial Assistance Program has enrolled more than 1300 children since its inception.

Carolyn will surely be best remembered, both in North Carolina and internationally, for her pioneering work in developing a community-based support system that supports the potential for children with cochlear implants to live at home and to be mainstreamed in their local schools. In creating CASTLE and in building a network of trained professionals across the State, she has developed a functioning model that can be replicated elsewhere.

Speech therapists, teachers of the deaf, and others from school districts across North Carolina have participated in training internships at CASTLE's model preschool, in the annual summer institute training program, and in training seminars and conferences hosted by the CCCDP. CASTLE focuses on school professionals in particular, teaching a team approach to developing listening skills and speech among children with hearing loss whose parents are committed to such an approach.

The ultimate goal for CASTLE is to train and mentor professionals in each of North Carolina's 100 counties. Many early intervention educators and school professionals from across North Carolina have already received training from CASTLE and it is hoped that sufficient funds will be acquired to add a third center in the western part of the State. The Pediatric Cochlear Implant Program is now supporting children in 77 counties and two adjacent states. So, the word is out. Visitors and inquiries arrive on a regular basis from

institutions interested in Carolyn Brown’s initiative. Most recently she has worked closely with the Department of Otolaryngology at Old Dominion University in Norfolk, Virginia, where development of a program patterned after CASTLE is currently underway.

One of the highlights of Carolyn’s final year at UNC has been her success at securing seed funding for an endowment for CASTLE. The Thomas Barnhardt Family Foundation contributed half a million dollars to make this possible. Carolyn has raised more than \$3.4 million for CASTLE from the private sector, while the North Carolina General Assembly has gradually increased its contribution for general operating costs each year since 2005. In addition to funding for CASTLE, the CCCDP has also continued to receive its core funding from the State. Legislative funding reflects strong support for the CCCDP and CASTLE on both sides of the aisle, coordinated by the Majority Leaders of both houses.

The CCCDP Financial Assistance Program has played a critical role during Carolyn’s tenure. Since 1993 the Pediatric Cochlear Implant Program has been in the extraordinarily position of never having had to turn away a child who presented with the need for a cochlear implant. No other state has such a program, so far as we know. Funding began with the arrival of Carolyn Brown at UNC, supplying certain communication devices, as well as UNC physician, audiological, and speech services for qualifying children with hearing loss. A resource of last resort, the program assists families who cannot afford the high cost of required devices and do not qualify for funding through other public programs. The state contract is managed by Department of Health and Human Services, Division of Public Health, and funding flows through the UNC Department of Otolaryngology. The program was proposed in 1992 by Dr. Biggers, and funds were first received in the fall of that year.

Paul Biggers passed away suddenly in the spring of 2000. His wife, Joyce, and daughter, Missie, have continued to be great fans of the CCCDP. They were both present at a reception held in Carolyn’s honor on September 5. How very pleased Dr. Biggers would have been to be present as well. Patient families, clinicians, and representatives of numerous agencies and programs across North Carolina came to see Carolyn Brown honored that evening. Dr. Pillsbury and Dr. Buchman both made eloquent statements during an emotional ceremony in which it was announced, much to Carolyn’s obvious astonishment, that CASTLE had been renamed “The Carolyn J. Brown Center for Acquisition of Spoken language Through Listening Enrichment.”

Chair’s Corner



This autumn has been a time for change, as it is in our department each year. Carolyn Brown, who has been a stalwart in our children’s cochlear implant program and really gets a lot of credit for starting the CCCDP and especially the Castle Program, has retired as of this September and her legacy will live at our institution. The work she did with our deaf children has touched every corner of our state and there are literally thousands of deaf children who have benefited from the interaction with Carolyn and her staff. In addition, Libby Drake, who had been our allergy nurse for almost 30 years, retired this fall, and we will miss her too. We have appointed Dr. Buchman Vice Chair for Clinical Affairs and Dr. Senior Vice Chair for Academic Affairs. In terms of new arrivals, we have Kara Willette, who is joining us as a Pediatric Nurse Practitioner. The beloved Carol Shores is moving to Wake Med. She will still be in our department but hailing from the other side of the Research Triangle.

In an ongoing tradition of our involvement with intramural sports, our department now has a flag football team, which has been very enthusiastically embraced by the faculty and residents over the last few months.

We are starting our interview process for new residents. We have 330 applicants for four positions this year. This is a daunting task, but it is a very happy time for us to see all the young people that are interested in our program.

These multiple events have all occurred in the last several months and it has been quite exciting around here for all of us. We look forward to this winter and more exciting things to come.

Harold C. Pillsbury, MD
Department Chair

Some of “Carolyn’s Kids”



Anna



Mylah



Micah and Brianna



Sammy

Time Out for Sports!

As anyone close to ENT here at UNC knows, the Department has a long tradition of success on the golf course. Dr. Pillsbury takes great pride in our golfing accomplishments, and the trophies from many of these victories can be seen on display in our clinic at the Neurosciences Hospital. Some may not realize, however, that the Department has a history of fielding teams in a number of other sports.

The mid to late 90's saw the development of the ENT Softball Program by then coach, now sinus surgeon, Andy "Just Win Baby" Lane. A series of teams competed annually in the Hospital's co-rec league, including such classic squads as the Turbinators, the Radical Necks, the Neds, and the Sultans of Snot. There was great enthusiasm in those days, with residents, attendings, medical students, and even members of Audiology & Speech and Language Pathology helping to field the teams. "I really enjoyed having the chance to play on those teams," said Austin Rose, then a medical student and now an attending here at UNC in Pediatric Otolaryngology. "I still have a few of those vintage jerseys, which I'm certain will one day be highly sought after as collector's items."

Recently, the Department revived its athletic program, fielding a team for UNC's 2008 intramural flag football league. Coach



Standing, left to right: Alex Rich (MS IV, Manis Lab), Austin Rose, Allen Marshall, Chris Thompson (MS IV), Keith Ladner, Joe Roche, Paul Bryson, Jessica Smyth, Yu-Tung Wong. Kneeling: Pali Shah, Trinitia Cannon.

Rupali Shah, also one of our outstanding residents, did a great job in organizing this effort and leading UNC ENT's first football team to the playoffs. The Department does have some tradition in football as well – one of the many claims to fame of the late Dr. Paul Biggers was a brief stint with the Green Bay Packers prior to his career in otolaryngology. He would certainly be proud that some of our young physicians and medical students were able to find time for athletics in addition to their studies and many patient care duties.



Coach Rupali Shah



Jessica Smyth in action!



Paul Bryson makes a pass.

UNC Temporal Bone Lab:

Tool for Development, Evaluation, and Improvement of Cochlear Implant Electrodes



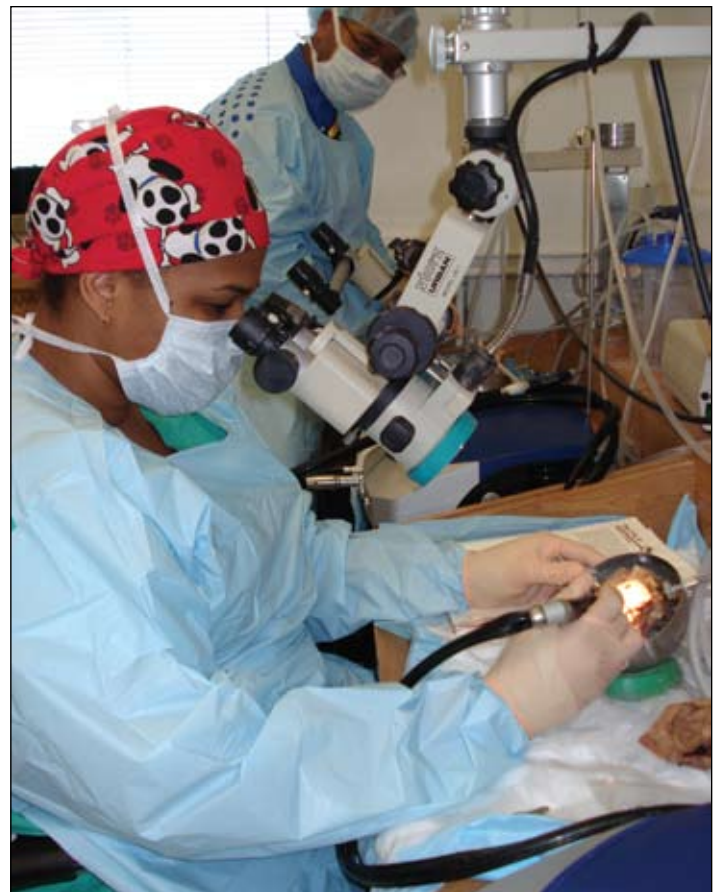
Drs. Craig Buchman and Oliver Adunka

Tissue processing by means of conventional histology remains a cornerstone in modern medical and surgical diagnostics. In otology, histological processing has helped in the understanding of fundamental disease processes such as sensorineural hearing loss or otosclerosis.

With the advent of cochlear implants, histological methods have been used to evaluate intracochlear and neuronal tissues important for electrical stimulation of the auditory system. Specifically, investigators have looked at the spiral ganglion and its implications for successful cochlear implantation. Also, new cochlear implant technologies have been developed that allow for the preservation of residual hearing in a select group of patients. The Department of Otolaryngology/Head and Neck Surgery has been engaged and is currently leading enrollment in the North American Trial for the evaluation of the MED-EL Electric Acoustic Stimulation system. This device allows for a combination of acoustic and electric hearing and relies on the surgical conservation of residual hearing, which is typically lost after conventional cochlear implantation.

The goal of hearing preservation during surgery can be achieved by using atraumatic surgical principles and special soft and shorter electrode carriers. The electrode currently in use for the EAS clinical trial has been histologically evaluated in a previous study by Dr. Oliver Adunka. Several other studies have then focused on the evaluation of other cochlear implant electrode prototypes and proper surgical cochleostomy technique.

With the help of MED-EL, the Department of Otolaryngology/Head and Neck Surgery at the UNC has now established a temporal bone laboratory, which will serve as a scientific tool to develop and evaluate new cochlear implant electrodes and improved surgical techniques. The laboratory offers a special sawing, grinding, polishing method which allows handling of un-decalcified bone and hard material, such as platinum-iridium contacts found in cochlear implant electrodes. Thus, removal of the electrode prior to histological processing is not necessary and subsequently, this technology allows for an improved evaluation of both intracochlear electrode position and resulting trauma. Several projects are currently under way and results are pending.



Drs. Paula Harmon and Mitchell Gore. Part of resident training includes a temporal bone course, as well as a competition.

The Restoration Artist

The Head and Neck Oncology Program saw 595 new head and neck cancer patients last year. While the physicians try to preserve the form and function of each patient as they go through their treatment, in some patients this is not possible. For instance, certain patients will require the removal of their maxilla, leaving them with a large cosmetic deformity since a large portion of their teeth will be removed. But they will also have a permanent opening from their mouth into their sinuses. Eating and communicating are drastically altered (Figures 1 and 2). Other patients will need to have their cheek and orbit removed, leaving them with a significant cosmetic deformity which often prevents them from engaging in social activities.



1. An obturator is used by a patient after maxillectomy.

2. The obturator must fit perfectly.

The University of North Carolina has an advantage when it comes to rehabilitating these patients. Dr. Glenn Minsley, Associate Professor in the Department of Prosthodontics, is a dedicated and experienced Prosthodontist, who has been assisting patients for years (Figure 3). “He is one of the true unsung heroes of our program. Without him, many of our patients would not be able to return to their lives as they do now. We are all enormously grateful to Dr. Minsley,” states Dr. Mark Weissler, Division Chief of Head and Neck Oncology.

Horace Bennett knows how difficult it would be to recover from his operation without Dr. Minsley. He had a radical maxillectomy and is without any evidence of recurrence. Dr. Minsley not only created an orbital prosthesis that matches his remaining cheek and eye, but used implants so that the prosthesis is securely attached, without using glue or other adhesives (Figure 4). Mr. Bennett was able to go out to dinner with his family without feeling self-conscious. His wound care was reduced as well.



4. A patient with an orbital prosthesis.



3. Dr. Glen Minsley, Associate Professor of Prosthodontics

“There are very few prosthodontics that work with head and neck cancer programs in the country,” said Dr. Marion Couch. “They are truly artists and yet they must be experts in the proper use of implants as well as dentistry. This is tedious and precise work. And yet, Dr. Minsley always helps us. He never turns down a patient. He is a huge asset to our patients and our program.”

The UNC Multidisciplinary Head and Neck Oncology Team consists of surgeons, medical oncologists, radiation oncologists, pathologists, diagnostic and interventional radiologists, dentists, epidemiologists, prosthetic specialists, nutritionists, speech and swallowing specialists, nurses and social workers. Our team of specialists brings expertise and understanding to these complex cancers where vital life functions may be affected.

To make an appointment, call (919) 966-9717.

5 questions for Trinitia Cannon, MD

1 Tell us a bit about your background and why you chose a career in medicine.

For me, the decision to choose a career in medicine was slightly different from the decision to become a physician. I chose medicine because I had spent most of my youth inside hospitals. This was not because I had family members who were physicians, but because my loved ones were often ill. My father, a Vietnam veteran, suffered from alcoholism. As a result he developed pancreatic disease leading to pancreatic and gastric cancer. We lost him



shortly after I graduated from high school. I can remember the days inside the hospital when he was ill wishing that there was more that I could do for him. My dissatisfaction with the care that he received led me to believe that I could make a difference. Even though becoming a physician interested me, I didn't have a viable plan on how to turn what seemed to be unachievable dreams into a reality. Everything changed during my sophomore year of high school. I got pregnant and gave birth to my son Shoun shortly before my junior year. Becoming a mother was a wake up call that matured me. Somehow impossibilities didn't matter because I had someone else depending on my success. When people would point out to me that my life was over because I had made the decision to keep and raise my son, I became more determined to become successful, and that meant becoming a physician. With the help of Cory (currently my husband), I developed a plan to help achieve my dreams. After graduating from high school, Cory moved us to Syracuse, NY. We worked until Shoun started Kindergarten and then I went to school. With the goal of becoming a physician, I went to nursing school first and worked as an RN while getting my bachelor's degree. I then applied to medical school.

2 Why did you decide to train in Otolaryngology and in the research track at UNC?

Like everything else in my life, the path to becoming an Otolaryngologist was not direct. When I started medical school, I didn't even know about Otolaryngology as a career option. As a nurse, I worked in a Cardiac unit and I thought it would be a natural transition to become a Cardiologist. During my medical school rotations I discovered that I was a surgeon—at least I thought that I was. I modified my plan and well, I thought that I

would become a Cardiothoracic surgeon. I am sure that you see the pattern in this. Everything would have worked out beautifully if I had liked one thing about General Surgery. So like anyone in my position without a plan, I panicked. I was involved in the surgery interest group and at the University of Rochester the ENT residents were very actively involved. They did a presentation on what it meant to be an Otolaryngologist, and I was hooked. The rest, as they say, is history—at least they'd say that if they hadn't met Dr. Pillsbury. On my interview day, he told me that if I was serious about a career in academics, I should consider doing research. Because I had no research experience, I decided to do the Research track.

3 What's your most rewarding experience as a resident so far?

The most rewarding experience that I have had and hopefully will continue to enjoy is the thanks that I receive from the patients and their families. They entrust their lives to me, and even when there are complications or I can't cure them, they are usually so kind and grateful for all that was done.

4 What's the most important thing you have learned from the faculty?

I have learned so much from the faculty, but most important has been their commitment to patient care. All of our faculty members are dedicated to providing the best care possible for their patients, and this is drilled into the residents. Because our mentors work hard, we work hard. Most of the time we have to get up earlier to see our patients and put orders in before Drs. Weissler and Shores so that we don't feel like slackers. No matter how busy Dr. Zdanski is, he will take on another consult. Dr. Shockley and Dr. Buckmire are so patient and they always have time to teach, and it is never malignant or intimidating. Dr. Couch's door is always open and she will buy you coffee and then sit and help you write three papers. These are the things that I treasure about our program and the lessons that I will carry with me when I move forward.

5 Have you made plans for the future?

Yes, I have decided to pursue a career as a head and neck oncologist. Although it is a minor discrepancy, it makes me feel better to say I finish in December of 2009. It's kind of like saying something cost \$29.99 instead of \$30.00. In January of 2010, I begin a 6-month fellowship with Dr. Scott Meredith at the Cancer Centers of North Carolina. Following that, I plan to do an accredited 1-year fellowship in head and neck oncology. Applications will open up in November, so I don't know where I will be for that year. I just know that I am looking forward to the future, and I am privileged to go forth with the knowledge and commitment that I learned from this department.

What's New This Fall?

A Pediatric Nurse Practitioner

The Department welcomed pediatric nurse practitioner, Kara Willette, MSN, PNP-C, on August 22nd, filling a real need in the Division of Pediatric Otolaryngology. A native of Connecticut, Kara graduated from the Nurse Practitioner Program of the University of Hartford with a Master of Science in Nursing. She began her career 16 years ago as an RN in pediatrics. Eight years ago, she became a board certified pediatric nurse practitioner. Prior to coming to Chapel Hill, she worked as a primary care provider for children from birth to 18 years of age. She has two children, Abigail (6) and Alex (10). Her husband, Scott, works in I.T. Kara states that she came to UNC because of its reputation as an excellent teaching hospital. "It is a pleasure working under the direction of Dr. Amelia Drake and Dr. Harold Pillsbury," she says. "In the few weeks that I have been here, I have learned an enormous amount about pediatric ENT medicine and thoroughly enjoy what I am doing."



A New Location for Dr. Shores

Carol G. Shores, MD, PhD, has moved her practice to Wake Med in Raleigh, where she joins Drs. Ferguson, Dorfman, Cook, and Bloedon. She fills a need there for a specialist in head and neck oncology. Dr. Shores will continue delivering excellent patient care and helping to train our residents during their rotations at Wake Med. We wish her all the best in her new location!

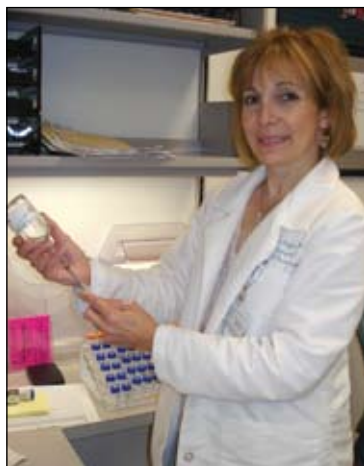


Diane Burden led a rousing rendition of "Twist and Shout" as the entertainment at a luncheon held in honor of Dr. Shores.

Changes in the Allergy Clinic

Elizabeth Drake, RN, retired on October 1st, after 30 years of service to the Department and our allergy patients. She began working as the Charge Nurse in the ENT Clinic, and then in 1981, Dr. Biggers opened the Allergy Clinic and hired Libby as the first allergy nurse. Thousands of allergy shots later, Libby says she is just enjoying spending more time with family and friends. Judy Miles, RN, who had been working with Libby all these years, continues doing allergy testing and giving shots at our facility at Carolina Pointe.

Regina Stoffel, RN, is our new allergy nurse in the ENT Clinic in the Neurosciences Hospital. She started in January as the clinical nurse for Drs. Couch and Adunka, and when Libby retired, Gina transitioned to the Allergy Clinic.



Regina Stoffel, RN

New Administrative Appointments

As the Department has grown, so have administrative responsibilities. Dr. Brent Senior was appointed Vice Chairman of Academic Affairs, and Dr. Craig Buchman is taking on the duties of Vice Chairman of Clinical Affairs. Dr. Senior was also recently promoted to full Professor, and has a joint appointment as Professor of Neurosurgery.



Dr. P with some of our fantastic nursing staff: Samyia Alston, CNA; Claire Culberson, RN; Lynda Lucas, RN; Harold Pillsbury, MD; Shely Riley, CNA; Diane Burden, CNA; and Sherry Egodo, CNA (kneeling)

Questions, comments, or suggestions about Heads Up? Contact Elizabeth Perry, eaperry@med.unc.edu, or 919-260-9002.

The Department of Otolaryngology/Head and Neck Surgery is proud of its skilled faculty and staff who are committed to providing patients with the highest quality health care. Get to know us!

The Department of Otolaryngology/Head and Neck Surgery

Harold C. Pillsbury, MD, FACS, Chair, Thomas J. Dark Distinguished Professor of Otolaryngology/Head and Neck Surgery
Craig A. Buchman, MD, FACS, Vice Chair of Clinical Affairs
Brent A. Senior, MD, FACS, Vice Chair of Academic Affairs
Carolyn Hamby, Clinical Academic Departmental Administrator

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Marion E. Couch, MD, PhD, FACS, Associate Professor
Xiaoying Yin, MD, Assistant Professor
Adam M. Zanation, MD, Assistant Professor
Andrew F. Olshan, PhD, Professor
Brian K. Kanapkey, Speech Pathologist

The Division of Pediatric Otolaryngology

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Austin S. Rose, MD, Assistant Professor
Kara Willette, MSN, APRN, PNP-C

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Sleep and Snoring Surgery

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Ellen S. Markus, MA, CCC-SLP, DMA, Coordinator
Linda F. Hube, MS, CCC-SLP, Speech Pathologist

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