

## Carolina 2010: School of Dentistry Academic Plan



### PREAMBLE

*The University of North Carolina at Chapel Hill embraces an ambitious vision: becoming the nation's leading public university. By striving for the highest levels of excellence in teaching, research and public service, the University best serves the people of North Carolina and beyond. The University intends to be the best it can be for the State of North Carolina, the nation, and the world.* (1)

As we enter the 21<sup>st</sup> century, it is perhaps the best of times and the worst of times for academic dentistry. While clinical practice opportunities for graduates in primary care general dentistry and specialty programs have probably never been better, academic dental institutions are struggling to recruit and retain faculty, maintain cost efficient programs, compete for extramurally funded research support in a time when the NIH budget is not growing, absorb more direct costs for academic programs with the continued loss of state and federal financial support and keep tuition and fees moderately priced to recruit a diverse student body. At all times, but especially in challenging times, it is prudent to outline a plan to guide our School of Dentistry. ***Carolina 2010: School of Dentistry Academic Plan*** will focus our energies and deploy our resources to continue the outstanding programs of excellence which have been a Carolina tradition for over 50 years.

The School of Dentistry will be guided in its aspirations and resource allocations to meet the goals and objectives laid out in *Carolina 2010*. We will embrace our vision and work diligently to fulfill our mission within the framework of the Academic Plan for the University of North Carolina at Chapel Hill. As a context for the School of Dentistry Academic Plan, we will align our academic activities in concert with those established by the University. Six overriding university academic priorities guide *Carolina 2010* over the next five years. These are:

### University of North Carolina Academic Plan Priorities (2)

- *Provide the strongest possible academic experience for undergraduate, graduate, and professional students.*
- *Further integrate interdisciplinary research, education, and public service.*
- *Significantly strengthen faculty recruitment, retention, and development.*
- *Increase diversity among faculty, students, and staff.*
- *Enhance public engagement.*
- *Extend global presence, research, and teaching.*

## **VISION:**

**The vision of the School of Dentistry is to be a world leader in improving oral health through excellence in education, patient care, research, public service and engagement.**

Dental education at UNC has historically been defined by its leadership and standards of excellence which benefit the people of North Carolina and beyond. The UNC School of Dentistry remains true to its founders' ideals, continuing traditions of free inquiry, service, engagement and leadership. The School is dedicated to improving the health and well-being of the people of North Carolina, the United States, and the world, constantly striving to attain distinction in education, patient care, research, public service and engagement.

The vision for the future is to lead dental higher education with integrity, dynamism and flexibility. Public service is a key element of the UNC School of Dentistry's vision and we share UNC alumnus Charles Kuralt's description of Carolina as "the University of the People." (3) The UNC School of Dentistry is committed to balancing global and national aspirations with service to North Carolinians. That means connecting academic endeavors with tangible benefits to the state's citizens through dental education, oral health care, and the development of new knowledge.

## **CORE VALUES:**

**The core values of the School of Dentistry are to:**

1. Discover, integrate, apply and disseminate new knowledge.
2. Encourage freedom of speech, expression and inquiry to promote solutions to the scientific, social, policy and ethical issues that impact the health of the public.
3. Facilitate an academic culture of interdisciplinary teaching and scholarship in which a broad range of disciplines within the School and University collaborate on biomedical, public health, educational and clinical issues.
4. Provide a stellar student experience that allows students to participate in the process of learning and discovery, making them better-prepared professionals and future leaders. We are committed to educating scholarly, ethical and highly skilled future dental professionals.
5. Offer access to dental education to students from all socioeconomic and cultural backgrounds.
6. Advance the health of the people of North Carolina by shaping our teaching, research, and service agendas around the state's needs. We seek to provide oral health to all segments of the public with a special responsibility to educate oral health professionals to meet the needs of underserved communities.
7. Be a world center for education, clinical practice, and research in oral health.
8. Respect diverse beliefs and cultivate the involvement of students, staff, faculty, and patients drawn from an array of cultures and heritages.

**MISSION:**

**The mission of the School of Dentistry is to promote the health of the people of North Carolina, the nation and the world through excellence in teaching, patient care, research, and service.**

**I. Mission of Education**

The School of Dentistry is committed to conducting high quality dental education programs at the undergraduate, graduate, doctoral and postdoctoral levels. The School's academic environment fosters the acquisition of knowledge in the basic, behavioral, and clinical sciences. Independent thinking and life-long learning are encouraged through degree-granting and continuing education programs. A high standard of professional and personal ethics, as well as technical excellence, are integral to the learning experience. The School prepares its graduates to enter the general practice of dentistry, the dental specialties, allied dental health fields, research, and teaching in a wide variety of settings, primarily in service to the people of North Carolina.

In support of the mission of education, by 2010, the School's goals and objectives are to:

- A. Provide an excellent academic experience for Pre-doctoral, Advanced Education, and Allied Dental students.
  - 1. Clearly define the desired attributes of a graduate – the competency sets expected of Pre-doctoral, Advanced Education, and Allied Dental program graduates at UNC.
  - 2. Ensure that the Pre-doctoral, Advanced Education, and Allied Dental curricula achieve the desired graduate through contemporary evidence-based knowledge, science, and clinical practice. As part of this:
    - a. Revise the competency-based clinical educational programs as a component of curriculum review.
    - b. Explore models for delivering “comprehensive care” in the clinical programs and define a UNC philosophy on “comprehensive care.”
    - c. Ensure adequate integration of patient care and clinical activities into the overall educational program.
    - d. Consider pre-admission basic science prerequisites to relieve pressure on the early portion of the Pre-doctoral curriculum.
    - e. Enhance the educational value of community-based clinical experiences for all Pre-doctoral and Allied Dental students.
    - f. Integrate instructional technology, outcome measures, and better methods of teaching evaluation to enhance educational quality.
    - g. Foster a clinical teaching method that encourages independent decision making by students.

- h. Conduct Allied Dental Education programs of national distinction in dental hygiene and dental assisting, and improve integration of these programs with the Pre-doctoral program, particularly in the clinical setting.
    - i. Promote the concept of life-long learning.
    - j. Conduct PhD programs in Epidemiology and Oral Biology; rename/revamp the Oral Biology program to better integrate into the Health Sciences.
    - k. Explore the possibility of other combined programs (e.g., DDS-MBA, DDS-MEd).
  3. Explore the implementation of a stipend-supported Post-Graduate Year 1 (PGY-1) experience for all UNC graduates.
- B. Earn and maintain a national and international reputation as an institution that produces faculty for academic positions.
  1. Conduct scholarly Advanced Education programs in the areas of:
    - a. Advanced Education in General Dentistry
    - b. Dental Hygiene Education (MSDH)
    - c. Endodontics
    - d. General Practice Residency
    - e. Pediatrics
    - f. Periodontics
    - g. Prosthodontics
    - h. Operative Dentistry
    - i. Oral & Maxillofacial Surgery
    - j. Oral & Maxillofacial Radiology
    - k. Oral & Maxillofacial Pathology
    - l. Orthodontics
  2. Develop incentives that would assist Advanced Education students in pursuing academic careers.
  3. Develop incentives, such as loan repayment programs, for students in Pre-doctoral and Allied Dental programs to pursue academic careers.
  4. Initiate a program for internationally trained dentists designed for graduates of non-U.S. dental and allied dental schools who plan to practice dentistry or become academics in the United States. To prepare non-U.S. trained dentists to meet ADA requirements, the UNC School of Dentistry would offer a formal, rigorous, structured, but abbreviated program for internationally trained dentists and dental hygienists leading to a UNC DDS or Certificate in Dental Hygiene.
  5. Implement a program for education in dental specialties for graduates of non-U.S. dental schools that plan to become dental academics and/or practice dentistry in the United States. This formal and structured program would be designed to offer possible dental licensure in the US to well-trained, selected dental specialists who are engaged in, or have completed, advanced training in the UNC School of Dentistry residency programs. The participants in this program might engage in a period of service to underserved North Carolina communities during which time

they will undertake an executive degree program which leads to a DDS degree from UNC. Distance education and/or face-to-face instruction and evaluation could be employed.

- C. Strengthen faculty and staff recruitment, retention and development.
  - 1. Design and implement a comprehensive faculty development program.
  - 2. Utilize post-tenure review to ensure continued development of senior faculty.
  - 3. Design and implement a faculty renewal (sabbatical) program that does not “penalize” the recipient’s home department.
  - 4. Utilize the T32 grant and similar opportunities to develop entry-level and mid-career faculty.
  - 5. Design and implement staff development programs to ensure recruitment and retention of competent staff, following discussions with the staff to obtain their input.
  
- D. Increase diversity among faculty, staff and students to reflect the diversity of the State of North Carolina.
  - 1. Continue to recruit and enroll a diverse student body.
  - 2. Recruit and retain a diverse faculty.
  - 3. Invest financial aid to make SOD programs affordable for qualified North Carolina residents (analogous to Carolina Covenant).
  - 4. Increase understanding of the admissions process through discussions of the process, including diversity considerations – and encourage more faculty participation in the admissions process.
  
- E. Annually reallocate resources from lesser priority to higher priority programs to build excellence in education.

## **II. Mission of Research**

The School of Dentistry's faculty and students generate new knowledge in the basic, applied, and clinical sciences that is directed at the promotion and advancement of oral health and function. Improvement of oral and general health of the changing public is advanced through research in the areas of health services, health policy, and health education. New knowledge is disseminated through presentations at scientific forums and publication in the scholarly literature. School of Dentistry scientists interact and collaborate with leading investigators and scientists at the University, local, state and national levels. Health improvement of the public is optimized through scientific and multidisciplinary interactions directed at finding and implementing solutions for the complex, diverse and dynamic diseases present in the population.

In support of the Mission of Research, by 2010, the School’s goals and objectives are to:

- A. Enhance the quality and quantity of research and scholarship within the School such that the School will be consistently ranked among the top five US dental schools. This undertaking will be realized by achieving the following goals:
1. Develop appropriate research infrastructure and support systems to stop the decline in research funding acquisitions and lay the requisite foundations that will promote and sustain an increase in research funding by 2010.
    - a. Create an efficient and effective research infrastructure of grants management and human resources to facilitate all research efforts that is under the direction of the Associate Dean of Research (Recommend immediate implementation).
    - b. Provide a foundation for the acquisition of extramural funding of at least \$20 million per year (at least 70% will be from NIH sources) through the realization of 15% growth per year between 2010 and 2015.
  2. Promote increased faculty participation in research activities by establishing a research incentive plan to supplement faculty compensation.
  3. Investigate models for and adopt a program (e.g. new department, center, institute) that would provide advocacy and support for research intensive faculty that perform outside the traditional department domains or boundaries that exist at the School.
  4. Empower Associate Dean of Research to work proactively with the administration, chairs and interested faculty to identify programmatic research areas for the future and recruit faculty to these programmatic areas.
  5. Make certain that faculty development plans are in place to ensure that all faculty members are actively encouraged to participate in research and scholarly activities and that those participating in translational and basic research are provided enrichment opportunities to advance their careers.
  6. Increase opportunities for the development of future research scholars by increasing activities in and opportunities for formal research training programs (e.g. PhD, K12, T32,).
  7. Increase research programs and activities integrated within the UNC research community and other state, national and international biomedical groups and organizations.
- B. Invest in priority research programs pertaining to:
1. Biomedical Imaging
  2. Genetics, Epigenetics & Craniofacial Biology
  3. Health Services Research/ Health Policy

4. Infectious Diseases/Host Response
  5. Neurosensory Disorders
  6. Oral Systemic Diseases
  7. Tissue engineering/Biomaterials/Regenerative Medicine
- C. Explore emerging research opportunities and position the School's faculty and research infrastructure so that it can proactively respond to these opportunities for future investment and meet the health needs of the changing public.
- D. Nurture entrepreneurial activities that will be of mutual benefit to UNC and the people of North Carolina by utilizing technology transfer and business startups for economic development.
- E. Build research training programs for emerging scholars from international settings. This program will provide research design and methodological expertise, statistical training, and biomedical and public health research mentorship and training. Such a program would guide participants in seeking initial research funds and would generate future dental scholars and academics with international roots.
- F. Develop a strong and effective public relations program directed at educating and informing the public, health professionals and educators of the programs and accomplishments of the School's basic science and clinical research endeavors.
- G. Annually evaluate resources and allocate them to productive programs and new initiatives to build excellence and leadership in research and scholarship.

### **III. Mission of Patient Care**

The School of Dentistry provides high quality comprehensive, primary and specialized oral health care to individuals of all socioeconomic and cultural groups from North Carolina and the region. Patient care enhances the educational programs and supports the scientific and clinical research efforts of the School.

In support of the mission of Patient Care, by 2010, the School's goals and objectives are to:

- A. Provide outstanding patient care throughout the entire spectrum of dental services recognized by the profession.
1. Offer patient care to people of all ethnicities and levels of income.
  2. Deliver dental treatment guided by a "patient first" philosophy.
  3. Enhance communication with non-English speaking patients by utilizing appropriate signage and interpreters.
  4. Utilize teams of supervising instructors/mentors and students of multiple experience levels to deliver care in the student clinics, emphasizing a caring, coordinated and efficient approach. Dental hygiene and dental assisting students shall function as an integral part of the mentored teams.

5. Establish a comprehensive, evidence-based Quality Assurance program. Post-treatment assessment will be an integral part of this program.
6. Perform analyses of the cost efficiency of all clinical programs on a periodic basis.
7. Continue to develop programs to improve access to care within available resources. These programs will emphasize the provision of care at locations external to the dental school throughout the state.
8. Emphasize outstanding patient education throughout the period during which the patient is undergoing treatment so as to emphasize the partnership between patient and health care provider that is essential to the maintenance of optimal health.
9. Incorporate best practices in clinical education into clinic operations on a periodic basis and perform outcomes assessment
10. Develop a comprehensive credentialing program to assure compliance with all relevant standards (i.e. CPR, HIPAA, etc.)

**B. Enhance the Dental Faculty Practice.**

1. Periodically analyze the methods for the delivery of care and the maintenance of quality of care to assure that the practice represents a state-of-the-art institution.
2. Encourage and support continued professional development on the part of the practitioners.
3. Continuously apply best practices in financial management to ensure that the DFP is capable of supporting the financial goals of the School of Dentistry.

**C. Explore future patient care opportunities.**

1. Explore, with UNC Student Health, the feasibility of partnering on a dental facility in a new student health complex.
2. Encourage partnerships with UNC Hospitals in joint medical/dental collaborations to provide patient care in novel ways that emphasize oral/systemic health relationships.

**IV. Mission of Service and Engagement:**

Service and engagement activities are important ways of connecting the resources of the University to the social and health issues faced in society. Service implies a donor-recipient relationship in which one party receives benefit from interaction with the university or a faculty member. Seattle's Community-Campus Partnerships for Health, Linking Scholarship and Communities, defines engagement as the "application of institutional resources to address and solve challenges facing communities through collaboration with these communities." (4) Community engaged scholarship involves a mutually beneficial partnership with the community to promote new knowledge. The UNC School of Dentistry seeks to build partnerships with communities to develop and diversify the health workforce and to deliver quality community-based oral health care. We are committed to translating oral health research into practice and policy and to disseminating research findings to communities and practitioners.

The UNC School of Dentistry seeks to further state-of-the-art practice in oral health care delivery through continuing education offered by its research-oriented and scholarly faculty dedicated to promoting the awareness of current and developing clinical and scientific knowledge.

To advance its mission of service and engagement, by 2010, the School's goals and objectives are to:

- A. Encourage faculty, staff and students to serve in leadership roles. We seek to provide interaction with practitioners and policy makers and to nurture endeavors which contribute to economic development, entrepreneurial activities and improved access to oral health.
- B. Provide contemporary continuing education programs.
- C. Collaborate with state agencies and community colleges to develop programs to meet state and regional oral health needs through the use of traditional and innovative educational technologies.
- D. Encourage the scholarship of engagement.
- E. Provide strong and growing extramural academic and clinical experiences for students through community practice and education. We target ways to bridge the university and the community through innovative dental care initiatives.
- F. Offer enhanced opportunities for UNC DDS and Allied Dental students in the DISC (Dentistry in Service to Communities) Program to broaden their understanding of the practice of dentistry in other nations through student rotational and exchange programs with selected dental schools or centers outside the U.S. This program seeks to produce future practitioners and leaders in oral health who can integrate a global and local perspective in their careers. The goals are to enhance students' knowledge about oral health and health care systems in other countries and cultural contexts and build cross-cultural competency and awareness among students, faculty and staff.
- G. Develop a program of short-term international student exchange visits to assure the reciprocity of our global programs. Build mechanisms to allow students from selected international dental schools to participate in UNC and DISC Program clinical settings.
- H. Enroll underrepresented minority and disadvantaged students to achieve as broad access to dental education as is possible. We seek to provide future dental professionals to address the needs of all North Carolina communities.
- I. Develop new educational, research and service activities that incorporate approaches to oral health needs at a population, community, and individual level. We plan to increase collaboration with the UNC School of Public Health and other related centers and agencies, including the statewide Area Health Education Centers (AHEC) Program to provide population-based and community-centered education and scholarship at the pre-doctoral and post-doctoral level.
- J. Initiate a global program and office that will build and support the international stature of the School of Dentistry, enhance the global vision and outlook of its faculty, students and staff, increase the school's endeavors in global oral health issues, and expand its linkages with international universities, dental schools and other institutions. This program would organize existing and new endeavors in global service, education and research.

K. Integrate School activities into the broader service mission of the University and collaborate with the Carolina Center for Public Service.

References:

1. *University of North Carolina Academic Plan*. The University of North Carolina at Chapel Hill. Jul 2003: Page 3.
2. *University of North Carolina Academic Plan*. The University of North Carolina at Chapel Hill. Jul 2003: Page 15.
3. Kuralt, Charles. Opening Ceremony Remarks, Bicentennial Observance, Chapel Hill, N.C. 12 Oct 1993.
4. *Report of the Commission on Community-Engaged Scholarship in the Health Professions*. Community-Campus Partnerships for Health, Linking Scholarship and Communities. University of Washington. Seattle, WA. Feb 2005: Box 4, Page 12.