The Department of Biomedical Sciences is a major locus for basic science and translational research at the College of Dentistry. Departmental faculty interests range widely within a central research focus of craniofacial biology. These research interests include:

1. the genetics of caries-causing bacteria;
2. the genetics of tooth development;
3. the developmental biology of sutures, palate, and temporomandibular joint;
4. the mechanics of bone;
5. analysis of craniofacial growth in mutant and transgenic animal models; and
6. neurophysiological and endocrine mechanisms of orofacial pain.

Exciting new areas of research include identifying the genes involved in the development of craniofacial structures, tissue engineering, and tissue regeneration.

In addition to many well-outfitted individual laboratories, the Department provides access to analytical tools such as confocal microscopy, laser capture microscopy, real-time PCR, and microCT.

Departmental faculty provide all basic science instruction to dental and dental hygiene students, to graduate students in postgraduate specialty certificate programs, and to graduate students pursuing an MS or PhD in Oral Biology.

**Faculty**

Bellinger, Larry L, Professor
Biomedical Sciences
PHD, University of California, Davis, 1974

Benson, M Douglas, Associate Professor
Biomedical Sciences
PHD, University of Michigan, 2000

Berry, Charles W, Professor
Biomedical Sciences
PHD, Baylor University College of Dentistry, 1973

Carlson, David S, Adjunct Professor
Biomedical Sciences
PHD, University of Massachusetts Amherst, 1974

Dechow, Paul C, Professor
Biomedical Sciences
PHD, University of Chicago, 1980

Feng, Jian Q, Professor
Biomedical Sciences
PHD, University of Connecticut, 1991

Groppe, Jay C, Associate Professor
Biomedical Sciences
PHD, University of California, Santa Barbara, 1991

Honeyman, Allen L, Associate Professor
Biomedical Sciences
PHD, University of Kansas, 1988

Kramer, Phillip R, Professor
Biomedical Sciences
PHD, Texas A&M University, 1996

Liu, Xiaohua, Associate Professor
Biomedical Sciences
PHD, Tsinghua University, China, 2002

Lu, Yongbo, Assistant Professor
Biomedical Sciences
PHD, University of Missouri - Kansas City, 2007

Newman, Joseph T, Adjunct Associate Professor
Biomedical Sciences
PHD, The University of Texas Medical School at San Antonio, 1973

Opperman, Lynne A, Professor
Biomedical Sciences
PHD, University of the Witwatersrand, South Africa, 1985

Qin, Chunlin, Professor
Biomedical Sciences
PHD, Okayama University, Japan, 1998
DMD, Harbin Medical University, 1983

Ruest, Louisbruno, Associate Professor
Biomedical Sciences
PHD, McGill University, 2002

Schneiderman, Emet D, Professor
Biomedical Sciences
PHD, University of Michigan, 1985

Svoboda, Kathy K, Professor
Biomedical Sciences
PHD, University of Nebraska Medical Center, 1982

Tao, Feng, Associate Professor
Biomedical Sciences
PHD, Fudan University, China, 2000
MD, Wannan Medical College, China, 1986

Umorin, Mikhail P, Instructional Assistant Professor
Biomedical Sciences
PHD, Baylor University, 2006

Varanasi, Venu G, Assistant Professor
Biomedical Sciences
DEN, University of Florida, 2004

Wang, Qian, Associate Professor
Biomedical Sciences
PHD, Chinese Academy of Sciences, 1998

Wang, Xiaofang, Assistant Professor
Biomedical Sciences
DDS, Fourth Military Medical University, China, 2003

**Courses**