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

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Biomedical Sciences
PHD, Baylor University College of Dentistry, 1973

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Biomedical Sciences
PHD, University of Massachusetts Amherst, 1974

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Biomedical Sciences
PHD, University of Chicago, 1980

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PHD, University of Connecticut, 1991

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PHD, University of California, Santa Barbara, 1991

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PHD, University of Kansas, 1988

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PHD, Texas A&M University, 1996

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PHD, Tsinghua University, China, 2002

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PHD, University of Missouri - Kansas City, 2007

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PHD, The University of Texas Medical School at San Antonio, 1973

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PHD, University of the Witwatersrand, South Africa, 1985

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PHD, Okayama University, Japan, 1998
DMD, Harbin Medical University, 1983

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PHD, McGill University, 2002

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PHD, University of Michigan, 1985

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PHD, University of Nebraska Medical Center, 1982

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PHD, Fudan University, China, 2000
MD, Wannan Medical College, China, 1986

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PHD, Baylor University, 2006

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Biomedical Sciences
DEN, University of Florida, 2004

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PHD, Chinese Academy of Sciences, 1998

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

Courses