

# RESEARCH INTERESTS

The HCBB focuses specifically on laboratory and clinical research, patient care and education in the following areas:

1. Biomaterials, especially the mechanical and physical properties of oral biomaterials • Head: **Joe C. Ontiveros, DDS, MS**
2. Clinical technology (includes CAD/CAM, lasers, point-of-care patient technologies, and transfer of biomedical technologies to clinical practice) • Head: **John A. Valenza, DDS**
3. Tissue Engineering (using modern tissue-compatible biomaterials and bioprinting to create implantable living cell constructs, both for oral soft tissues and hard tissues. technology)  
• Head: **Daniel A. Harrington, PhD**
4. Maxillofacial prosthodontics, including clinical and laboratory research related to treatment outcome and patient satisfaction, longevity and appearance (mechanical and physical properties) • Head: **Sudarat Kiat-amnuay, DDS, MS**
5. Color and appearance research (includes evaluation of fundamental optical properties of oral and maxillofacial tissues, testing of existing products and invention of new materials, clinical and didactic tools) • **Rade D. Paravina, DDS, MS, PhD**
6. Oral health prevention and risk assessment (includes caries management by risk assessment - CAMBRA, dental caries susceptibility, dental disease prevention and control, minimal invasive operative care, fluoride releasing materials, and remineralizing agents) • Head: **Ana Neumann, DDS, MPH, PhD**