Oral and Maxillofacial Biology

1. Staff.

Junior Assiciate Professor Yujiro Sakamoto

2. Purpose of Education.

Oral and maxillofacial biology is a branch of morphological sciences, developmental biology, pathology and the neurosciences to understand the structure and function of human body and its pathological conditions. Students are taught in more detail about the normal tooth anatomy and occlusal function as well as the anatomy of the head and neck with specific attention to the muscles, nerves, and arteries associated with the mouth and teeth. Students also receive clinical training in oral cleaning programs. In addition to it, students learn the rudiments of English for oral health care science.

Subjects and contents.

- Structure and function of human body I and II: anatomy, histology, physiology, embryology, oral anatomy, oral histology, oral physiology.
- Mechanism and defense against infection: pathology, immunology, microbiology, oral pathology.
- Basic practice of oral health care science: the practices of the basic sciences.
- English for oral health care science I and II: reading, writing.
- Oral health care clinical training: the practice in the dental hospital (oral cleaning programs).
- Graduation thesis:

3. Research Subjects

1) Gross anatomical study of head and neck.

2) Light and electron microscopy on the formation of bone and teeth

4. Clinical Service

Oral health care clinic specializes in high quality oral cleaning programs in collaboration with dental hygienists.

5. Publication

Original article

1. Sakamoto Y. Classification of pharyngeal muscles based on innervations from glossopharyngeal and vagus nerves in human. Surgical and Radiologic Anatomy 31(10):755-761, 2009.

6. International meeting

 Sakamoto Y. Spatial relationships between scalene and anterior vertebral muscles and their innervations. Abstract book of the 26th meeting of AACA, 100-101, 2009. The 26th Annual Scientific Session of the American Association of Clinical Anatomists, Cleveland, USA, July 14-18, 2009.