

ANESTHESIOLOGY INTERNSHIP PROGRAM

Program Overview

Anesthesiology Internship Program (<https://www.pacific.edu/dental/academic-programs/anesthesiology-internship-program/>)

The Anesthesiology Internship Program offers a one-year internship position for dentists who are seeking to become dentist anesthesiologist specialists and who want to gain an additional year of education and experience in anesthesiology & perioperative care prior to beginning a dental anesthesiology residency. The program is based at University of the Pacific, Arthur A. Dugoni School of Dentistry's Department of Oral & Maxillofacial Surgery (OMS), in the Division of Anesthesiology & Perioperative Care.

The primary goal of this internship is to provide each intern with an in-depth view of the role of the dentist anesthesiologist in the preoperative evaluation and preparation of pediatric and adult patients for dental and surgical operations, and in their intraoperative and postoperative management. The internship will provide a robust introduction to the practice of dental anesthesiology, with introductory education and experiences in:

- basic science and medical technology review
- applied cardiopulmonary physiology and resuscitation
- pre-operative assessment and treatment planning
- anesthesia equipment, supplies, ordering and operations management
- patient monitoring
- intravenous access and cannulation
- pharmacology, medication preparation and delivery
- basic and advanced airway management
- anesthesia crisis resource management (ACRM)
- perioperative systems of care and principles of patient safety

Interns will also gain training and experience in the principles of simulation-based medical education pedagogy for teaching and learning, starting each intern on the pathway to becoming a Certified Healthcare Simulation Educator (https://www.ssih.org/Portals/48/Images/CHSE_Examination_Blueprint_2024.pdf) (CHSE) through the Society for Simulation in Healthcare (<https://www.ssih.org/>). Interns will assist with the development and facilitation of simulation-based learning programs focused on Perioperative & Emergency Medicine (P&EM), and ACRM principles for students, residents, faculty and practicing professionals.

Learning Objectives

Anesthesiology & Perioperative Care Learning Objectives

- Demonstrate the meticulous preparation, sterilization, and maintenance of anesthesia equipment and supplies
- Perform comprehensive anesthesia OR preparation following M.S.M.A.I.D.S.
- Perform complete anesthesia OR disinfection and turnover
- Describe different techniques of anesthesia suitable for various procedures
- Describe the key elements of a focused pre-anesthetic evaluation
- Discuss ASA standard patient monitoring and interpret patient vital signs

- Understand the concepts of the depth of anesthesia and muscle relaxation
- Describe cardiovascular and respiratory depression in the context of anesthesia and surgical procedures
- Describe common respiratory and acid-base abnormalities
- Describe considerations around fluid therapies for various patient populations
- Describe the pharmacology for muscle relaxants, opioids, intravenous and inhaled anesthetic agents
- Discuss common anesthetic complications and their management
- Discuss the clinical manifestations and management of local anesthetic toxicity
- Discuss strategies for postoperative pain management
- Describe induction of, and recovery from, general and regional anesthesia
- Assist with recovery from anesthesia and facilitate safe patient discharge
- Compile an organized and detailed anesthetic written record
- Become familiar with common anesthesia literature and peer-reviewed journals
- Perform intravenous access, phlebotomy, and cannulation of patients of various ages
- Demonstrate management of the airway in an unconscious patient
- Demonstrate insertion of airway adjuncts (i.e., OPA, NPA)
- Demonstrate insertion of a supraglottic airway (LMA, iGel)
- Perform uncomplicated laryngoscopy and tracheal intubation
- Describe arterial catheter insertion, indications, and precautions
- Describe central venous catheter insertion, indications, and precautions
- Recognize and initiate evaluation and management of common perioperative urgencies and emergencies in a simulation environment or real life

Clinical Simulation Education Learning Objectives

- Create, facilitate, and evaluate medical simulation training programs for a variety of learner types with various levels of experience
- Demonstrate programming of simulation scenarios in Laerdal LLEAP software
- Facilitate high-fidelity simulation-based learning scenarios using *on-the-fly* dynamic physiologic changes in Laerdal LLEAP
- Facilitate debriefing sessions to meet simulation scenario learning objectives
- Create, facilitate, and supervise partial task trainer-based workshops covering essential psychomotor skills for urgent and emergent patient management
- Describe the key points from the Anesthesia Crisis Resource Management, Crew Resource Management and TeamSTEPPS 2.0 programs
- Become familiar with the healthcare simulation literature and peer-reviewed journals
- Design continuous quality improvement (CQI) initiatives to address human factors risk mitigation, systems-based engineering, and patient safety issues

Alongside the clinical anesthesia and simulation-based education experiences and learning objectives described above, the intern will be expected to participate in a minimum of one scholarly project, including but not limited to research projects, invited presentations, poster presentations, table clinics, and continuous quality improvement projects, with delivery of at least one scholarly presentation.