



البحر العربي



## SAUDI BOARD ORAL MEDICINE & PATHOLOGY CURRICULUM

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**TABLE OF CONTENTS**

<b>INTRODUCTION</b>	<b>6</b>
<b>Foreword</b> .....	<b>6</b>
<b>Definition</b> .....	<b>6</b>
<b>History</b> .....	<b>7</b>
<b>Rationale of the Program</b> .....	<b>7</b>
<b>Vision</b> .....	<b>7</b>
<b>Mission</b> .....	<b>7</b>
<b>Difference between existing and proposed curriculum</b> .....	<b>8</b>
<b>Program Overview</b> .....	<b>8</b>
<b>OUTCOMES AND COMPETENCIES</b>	<b>9</b>
<b>Learning Objectives and Clinical Competencies</b> .....	<b>9</b>
A. Medical Expert	9
B. Communicator	14
C. Collaborator	15
D. Leader	15
E. Health Advocate	16
F. Scholar	16
G. Professional	17
<b>Continuum of Learning</b> .....	<b>18</b>
<b>Top Conditions in the Specialty</b> .....	<b>21</b>
<b>Top 10 Procedures Performed</b> .....	<b>21</b>
<b>Common Health Issues Related to the Specialty</b> .....	<b>22</b>
<b>Procedure Competency According to the Level of Training</b> .....	<b>22</b>
<b>LEARNING OPPORTUNITIES</b>	<b>23</b>
<b>General Principles</b> .....	<b>23</b>
<b>Core Educational Program</b> .....	<b>23</b>
A. Universal Topics	23
B. Core Specialty Topics	25
C. Trainee-selected Topics	34
<b>Teaching and Learning Activities</b> .....	<b>35</b>
A. Oral Medicine Grand Rounds	35
B. Advanced Oral Medicine and Oral Pathology Seminar	35
C. Oral Medicine and Oral Pathology Journal Club	35
D. Head & Neck Tumor Board	36
E. Research Activities	36
F. Elective Rotations	36

## TABLE OF CONTENTS

---

G.	Optional Activities	36
H.	Examples of Weekly Education Activities	37
<b>ASSESSMENT OF TRAINEES AND SUPPORT</b>		<b>38</b>
<b>Purpose of Assessment</b> .....		<b>38</b>
<b>General Principles</b> .....		<b>38</b>
<b>Tools and Methods of Assessment</b> .....		<b>40</b>
<b>Trainee Support</b> .....		<b>41</b>
A.	Guidelines for Mentor	41
B.	Goals	42
C.	Roles of the Mentor	42
D.	SCFHS Guidelines for Mentoring	42
E.	Roles of the Resident	42
F.	Who can be a Mentor?	42
G.	Number of Residents per Mentor	43
H.	Frequency and Duration of Engagement	43
I.	Tasks during the Meeting	43
J.	Mandatory reporting to Program Director or Head of the Department	43
<b>APPENDICES</b>		<b>44</b>
<b>Appendix 1</b> .....		<b>44</b>
<b>Appendix 2</b> .....		<b>45</b>
<b>REFERENCES</b>		<b>48</b>

# INTRODUCTION

### Foreword

Oral Medicine and Oral Pathology (OM & OP) are two related specialties of dentistry concerned with the diagnosis and non-surgical management of oral disorders as well as oral health care of patients with chronic, recurrent, and medically related disorders of the oral and maxillofacial region. Although these specialties are vital for comprehensive oral health care in dental service centers, including educational and research institutions, there is a shortage of specialists as well as training programs nationally and worldwide. The provision of specialty training in OM & OP for a new generation of learners that meets the societal needs is essential. The Saudi Commission for Health Specialties (SCFHS) has adopted the CanMEDS 2015 framework to set up the core curricula of all training programs, including the Saudi Board in Oral Medicine and Pathology (SBOMP). CanMEDS 2015 is a powerful educational framework that describes the abilities clinicians require to effectively meet the health care needs of the people they serve. It is competency-based and outcomes-driven with variable assessment tools.

The SBOMP program was developed by a curriculum development committee with vast expertise in dental education as well as clinical practice. Since this is the first program of its kind in Saudi Arabia, a plan has been set to survey all current programs in OM & OP internationally. Standards, requirements, and competencies were summarized and tabulated. Certified oral medicine and pathology specialists were surveyed. The needs of the program were prioritized and the first version of the program was developed and reviewed by the SBOMP Scientific Committee.

The curriculum is to be used by SBOMP program stakeholders including educators, program directors, teachers, trainees, and researchers as a guide in the process of learning, training, educational strategy, assessment, and certification.

The success of the program is ensured through the provision of adequate resources, financial support, collaboration with excellent training centers, and efficient faculty development programs. The support of the SCFHS, program-supervising committees, and contributing faculty is crucial for the attainment of the program's goals.

Finally, a program evaluation plan will be formulated; in addition, periodic program evaluation will be conducted by the SBOMP Scientific Council to allow for future curriculum refinement and continuous quality improvement.

### Definition

OM & OP are the disciplines of dentistry that identify and manage diseases affecting the oral and maxillofacial regions, and investigate the causes, processes, and effects of these diseases. Oral Medicine is also concerned with the oral health care of medically complex patients, and with the diagnosis and non-surgical management of medically related disorders or conditions affecting the oral and maxillofacial region.



### History

OM & OP are relatively young dental specialties in many countries, whose scope of practice is typically to provide diagnosis and nonsurgical care to patients with a variety of conditions affecting the orofacial region, whether local disorders or conditions related to systemic diseases.

OM & OP work closely with other dental specialties such as geriatric dentistry, oral surgery, periodontology, pediatric dentistry, and special care dentistry, as well as with medical specialties, especially dermatology, gastroenterology, hematology, hepatology, immunology and infectious diseases, maxillofacial surgery, neurology, oncology, otorhinolaryngology, pediatrics, pathology, psychiatry, psychology, rheumatology, and transplant medicine.

Thus, although oral medicine is a relatively young specialty, a recent international survey found that 33 of 37 countries surveyed (89%) reported oral medicine as a recognized specialty, a distinct field of study, or an actively developing specialty/distinct field of study<sup>1</sup>. In addition, at least 22 countries now identify as having postgraduate programs in oral medicine<sup>2</sup>.

### Rationale of the Program

In the Kingdom of Saudi Arabia, there are a total of 415 governmental hospitals and 127 private hospitals according to the 2010 Ministry of Health statistics. However, there are only 24 dental schools (18 Governmental/6 Private). The current number of qualified and trained OP & OM specialists is very limited. Moreover, most of the available specialists are working at academic institutions (mainly in Riyadh and Jeddah). Demand for the services of qualified specialists far exceeds the existing number of doctors (Ministry of Health, Strategic Plan, 1431 to 1440). On the bright side, the number of interested new graduates who would like to pursue a higher education and training in the field is increasing dramatically. Therefore, the need to establish a local highly integrated clinical and laboratory training program with international standards is crucial.

### Vision

The SBOMP program's vision is to supply the healthcare sector with trained and qualified leaders in the integrated practice of Oral Medicine and Oral Pathology in the Middle East region

### Mission

The SBOMP program is dedicated to bringing together the best in oral health care. The mission of this program is to train future leaders in the field of Oral Medicine and Oral Pathology. The program is uniquely organized such that students benefit from the rich academic and institutional resources of medical and dental colleges at the different universities in The Kingdom of Saudi Arabia while receiving all clinical and research training at the main leading hospitals and medical centers.

### Difference between existing and proposed curriculum

The existing graduate dental education program in Oral Medicine and Oral Pathology was designed to provide the trainees with a certificate of clinical competency and a master's degree. This type of teaching is aimed to fill the shortage of qualified academicians who can teach at dental colleges. However, this proposed curriculum is offered for the first time in Saudi Arabia and aims to produce clinicians who are also well-qualified in the clinical management of patients and to meet the hospitals demands.

### Program Overview

The SBOMP proposes to provide training in clinical and laboratory OM & OP. Students delve deeply into the mechanism of oral diseases and oral manifestation of systemic diseases, advanced diagnostic techniques, and participate in non-surgical and surgical treatment of oral diseases. A combined Oral Medicine and Oral Pathology program provides specialized training in general medicine, oral and maxillofacial pathology, and oral radiology. The dental training includes advanced general dentistry, dentistry in a hospital setting, and dental treatment of medically complex patients (e.g. cancer, transplant, cardiac, and hematological disorders).

The SBOPM is a 4-year program in which the didactic clinical sciences and advanced clinical training are integrated into the program duration. It is a hospital-based residency program taking place at the main tertiary hospitals in Saudi Arabia.

## OUTCOMES AND COMPETENCIES

### Learning Objectives and Clinical Competencies

#### A. Medical Expert

As Medical Experts, specialists in Oral Medicine and Pathology integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centered care. “Medical Expert” is the central practitioner role in the CanMEDS framework and defines the Oral Medicine and Pathology residents’ clinical and laboratory scope of practice.

#### Key and Enabling Competencies: Oral Medicine and Pathology specialists are able to:

- 1) Establish and apply basic knowledge, clinical and laboratory skills, and attitudes appropriate to oral medicine and oral pathology practice

#### Module 1.1. Basic Sciences Core Courses

This module provides the residents with the essential basic science knowledge relevant to the practice of the specialty, including: Anatomy, Embryology, Oral Biology, Oral Microbiology, Oral Radiology, Pharmacology, Hematology, General Pathology, and Physiology.

- Head and Neck Anatomy
  - Identify and differentiate the anatomical structures and topographic anatomy of the head and neck, as well as neuro-anatomy, by dissection, prosection, and museum study.
  - Identify the major external features and internal structure of the brain and spinal cord, along with its afferent and efferent connections.
  - Explain the anatomical relationship of different structures. The students shall also practice the dissection of different regions.
  - Integrate knowledge of head and neck anatomy with different clinical presentations.
- Oral Biology and Genetics
  - Describe the basic embryology of the head and neck.
  - Describe the histology of oral and maxillofacial tissues.
  - Identify correlations between the structure and function of oral tissues.
  - Interpret basic genetic principles.
- General Pathology
  - Explain the morphological and functional differences between normal and injured or diseased tissue.
  - Analyze the etiological factors that are known to be involved in causing disease.
  - Describe the basic pathogenesis of various disease entities.
  - Correlate pathological findings with clinical manifestations of disease.
- Hematology
  - Describe and identify cellular components of blood and bone marrow.
  - Correlate cells with disease states.
  - Discuss the various steps and factors in the coagulation scheme.
  - Correlate oral manifestations of hematological disorders with the underlying pathological mechanism.

## OUTCOMES AND COMPETENCIES

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- Pharmacology and Therapeutics
  - Outline the basic principles of pharmacology that guide prescribing in a general medical setting.
  - Outline the basic principles of dose adjustment, pharmacokinetics, and pharmacodynamics.
  - Discuss the factors contributing to individual variation, including consideration of patients with organ failure and pregnancy.
  - Identify the possible drug reactions and interactions in dentistry.
  - Prescribe medications for patients under their care.
- Physiology
  - Demonstrate an in-depth understanding of the main principles of the neurophysiology, muscle, cardiovascular, and respiratory systems.
  - Demonstrate an understanding of and be able to identify how changes in normal physiology lead to disease.
  - Combine knowledge of the neurophysiology, muscle, cardiovascular, and respiratory systems with practical and data analysis skills to perform physiological tests that examine the function of various body systems.
- Oral and maxillofacial Radiology
  - Discuss the basic principles of radiation production, and list and identify the factors necessary for the production and control of ionizing radiation in dentistry.
  - Describe the basic principles of radiation biology.
  - Describe the methods of radiation protection for the operator, patient, and public.
  - Recognize and diagnose errors in radiographic technique and discuss corrective measures.
  - Discuss various extraoral and TMJ imaging modalities in dentistry.
  - Discuss various advanced imaging modalities available in dentistry.
  - Use descriptive terminology for the radiographic appearance of pathology, identify a lesional category (developmental, benign, malignant, systemic/metabolic, trauma, and inflammation) and arrive at accurate differential diagnoses.
- Scientific Research, Biostatistics, and Informatics
  - Describe basic research methods.
  - Write a research proposal.
  - Conduct scientific research.
  - Apply statistical methods to data analysis.
  - Prepare a manuscript for publication.

### **Module 1.2. Oral Medicine Clinical Rotations**

#### **Module 1.2.1: Oral Medicine & Dentistry Consult Service**

- Recognize the role of the oral medicine consult service within the hospital framework.
- Work inter-professionally with other hospital staff, including nurses, physician assistants, physicians in training, and attending physicians.
- Demonstrate a clear understanding of the rationale for various oral medicine consultations.
- Provide clear and concise consultation notes and clinical recommendations. Demonstrate good communication (spoken, written, and electronic) with the various members of the health care team

**Module 1.2. 2. Oral Medicine**

- Obtain a detailed history and perform a head and neck exam of patients with oral lesions.
- Present clinical findings, differential diagnosis, and treatment plan.
- Manage oral lesions.

**Module 1.2.3. Oral and Maxillofacial Radiology Rotation**

- Identify the fundamental principles of radiographic diagnosis and management of patients with oral and maxillofacial lesions.
- Identify the radiographic features of the common pathology of oral and maxillofacial region.
- Formulate differential diagnosis of lesions and conditions affecting head and neck area.
- Describe the principles of all aspects of advanced imaging used for the diagnosis and management of oral and maxillofacial pathology.

**Module 1.2.4. Head and Neck Radiology**

- Explain the principles of head and neck imaging, and the indications for and limitations of different imaging modalities.
- Describe the basic hard and soft tissue anatomy of the head and neck region.
- Categorize the primary indications (e.g., what conditions/findings and what studies specifically) for ordering advanced imaging studies of the head and neck.
- Interpret written radiology reports.

**Module 1.2.5 Oral and Maxillofacial Surgery**

- Residents learn the fundamentals of OMFS and the correct terminology for a variety of OMFS conditions. Residents present their findings, differential diagnoses and treatment plan to the attending oral surgeon. Residents also have the opportunity to assist with and perform dental extractions and complex oral biopsies.

**Module 1.2.6. Internal Medicine**

- Identify and interpret important components of the medical patient's history and physical exam.
- Order and interpret common laboratory tests in medical patients.
- Describe patterns to distinguish the severity of common medical conditions for which oral medicine is frequently consulted.

**Module 1.2.7. Dermatology**

- Use basic descriptive dermatological terminology (macule, papule, vesicle, etc.).
- Describe the most common or serious dermatoses, and those with significant oral manifestations.
- Identify important cutaneous reactions and markers of syndromes (erythema multiforme, erythema nodosum, GVHD, etc.).
- Identify patients with cutaneous signs of systemic disease, particularly collagen, vascular, and malignant diseases.
- Discuss the basic principles of dermatological therapeutics.

### **Module 1.2.8. Hematology/Oncology**

- Participate in the evaluation, diagnosis, and management of patients in the pediatric and adult hematology/oncology inpatient and outpatient clinics.
- Interpret hematologic tests, bone marrow biopsy, and read blood smears.

### **Module 1.2.9. Otolaryngology/Head & Neck Oncology**

- Demonstrate a clear understanding of the radiographic and laryngoscopic features of the head and neck.
- Describe the most frequent infections of the head and neck region, their primary causes, and management protocols.
- Identify potential non-odontogenic causes of orofacial pain/symptoms, and know when referral to an ENT specialist is indicated.

### **Module 1.2.10 Oncology**

- Residents observe and gain practical clinical experience in the evaluation, diagnosis and management of patients in a variety of oncology clinics.

### **Module 1.2.11. Infectious Diseases**

- Evaluate and diagnose patients with a variety of infectious complaints on an inpatient and outpatient basis.
- Prescribe standard antimicrobial medications as well as new agents for the management of localized and systemic infections.

### **Module 1.2.12. Rheumatology, Allergy, and Immunology**

- Evaluate the diagnosis and management options of patients with rheumatologic, autoimmune, and allergy disorders.

### **Module 1.2.13. Pain and Headache Clinic**

- Identify fundamental principles of acute and chronic pain management in both inpatient and outpatient settings.
- Diagnose and manage patients referred for a variety of orofacial pain and headache disorders.

Use pharmacological agents as well as alternative therapies for the treatment of chronic pain.

## **Module 1.3. Oral and Maxillofacial Pathology Rotations**

### **Module 1.3.1 Surgical Pathology Rotation (General)**

Residents rotate through all subspecialties of pathology, namely head and neck pathology, dermatopathology, general surgical pathology, neuropathology, gynecologic pathology, genitourinary pathology, breast pathology, hematopathology, and bone and soft-tissue pathology. Students participate in all the didactic and clinical conferences that take place in the pathology department during their rotations and complete any exercises usually required of residents, such as oral presentations and participation in clinicopathological conferences.

- Provide gross descriptions of common small and large surgical specimens.
- Microscopically identify common pathological findings in the routine surgical service.
- Describe the principles of tissue fixation and processing, including common special staining procedures i.e., neutral fat, glycogen, elastin etc., and IHC.
- Integrate clinical, radiological and laboratory data to provide the best diagnosis.

**Module 1.3.2. Surgical Pathology Rotation (Oral and Maxillofacial)**

- Correlate the gross and microscopic characteristics of biopsy specimens in order to write an accurate description.
- Synthesize clinical and pathologic information to formulate a meaningful differential diagnosis.
- Identify the appropriate differential stains, immunohistochemistry, and biomolecular diagnostics required in order to reach a precise diagnosis.
- Diagnose oral mucosal diseases including vesiculobullous diseases, infectious diseases (particularly viral and fungal), and premalignant and malignant lesions.
- Maintain the operation of an oral pathology biopsy service.

**Module 1.3.3. Cytopathology Rotation**

- Perform cytological preparations, including the following: direct smear preparation, cytospin, conventional Pap smear, liquid-based cytology (thin prep, SurePath), or equivalent methods by different manufacturers.
- Clearly and concisely describe the light microscopy findings.
- Interpret the findings to provide an accurate diagnosis or differential diagnosis of lesions of the head and neck region.

**Module 1.3.4. Laboratory Medicine Rotation**

- Integrate the basic molecular biology techniques in molecular pathology and principles of practice of hematology, immunopathology, microbiology, and molecular diagnostics.

**Module 1.3.5. Autopsy Rotation**

The current authorizing body for postmortem human care management in Saudi Arabia is the Bureau of Investigation and Public Prosecution (BIP). Therefore, the BIP functions as a coroner. The residents will be trained according to the approved procedure followed by the General Pathology Residency Program.

- Assist in full autopsy case performance.
- Formulate an opinion regarding the identification, cause, and manner of human death taking into consideration the history and autopsy findings with a possible medicolegal scope.
- Identify the basic pathophysiology of the types of diseases and injuries common in autopsy service.
- Practice autopsy safety procedures.
- Identify the basic histology of common diseases evident on microscopic slides.

**2) Act as primary care providers for patients with orofacial, non-odontogenic diseases**

2.1. Treat patients with conditions as outlined in this document, providing comprehensive oral health management consultations and management of orofacial infections, mucosal disease, potentially malignant lesions, and oral cancer.

2.2. Perform dental evaluation of patients in preparation for medical procedures such as organ transplantation, valvular surgery, head and neck cancer therapy, and intravenous bisphosphonates therapy.

2.3. Manage cancer therapy-related and transplant-related oral complications.

2.4. Diagnose and manage mucosal and odontogenic infections in medically complex patients.

2.5. Diagnose oral and maxillofacial pathology cases and share knowledge through a consultation service.

## OUTCOMES AND COMPETENCIES

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### 3) Function competently, efficiently, and effectively in the healthcare environment as a member of a multi - disciplinary healthcare team

- 3.1. Participate in tumor boards, seminars, and teaching rounds during medical rotations.
- 3.2. Communicate professionally with other healthcare professionals for better patient care.
- 3.3. Seek appropriate consultation, recognizing the limits of their own expertise.

### 4) Apply scientific principles to learning and patient care through critical thinking and self-directed, life-long learning

- 4.1. Evaluate and critically interpret the scientific literature.
- 4.2. Use information technology efficiently.
- 4.3. Making evidence - based decisions regarding patient care.
- 4.4. Conduct clinical as well as basic science research.

### 5) Behave ethically and professionally with students, colleagues, and patients

- 5.1. Apply highest standards of professionalism in the work environment.
- 5.2. Share experience and transfer knowledge to other colleagues and students.

### 6) Engage in community service and act as an ambassador for dentistry and the oral medicine and pathology specialty

- 6.1. Plan and conduct awareness programs for diseases and conditions of interest to the community.

## B. Communicator

As Communicators, Oral Medicine and Pathology residents should communicate effectively with patients and their families throughout the patients' management course, and communicate clearly and effectively in both verbal and written forms with other health care professionals.

### Key and Enabling Competencies: Oral Medicine and Pathology specialists are able to:

#### 1) Convey effective oral and written information about a case

- 1.1. Present and discuss the cases effectively at clinical rounds.
- 1.2. Use standardized reporting formats as appropriate or indicated.
- 1.3. Communicate effectively with surgeons.
- 1.4. Express diagnostic uncertainty and recommend additional studies when required.
- 1.5. Maintain clear, accurate, and appropriate written or electronic documentation of cases.

#### 2) Establish professional therapeutic relationships with patients and their families

- 2.1. Communicate using patient-centered approach, thereby encouraging patient trust and autonomy.
- 2.2. Optimize the physical environment for patient comfort, safety, and privacy.
- 2.3. Recognize and consider the cultural background of the patients and its effect on their decisions.
- 2.4. Recognize and respond to a patient's non-verbal behaviors to enhance communication.

#### 3) Accurately elicit and synthesize relevant clinical and pathological information, incorporating the perspectives of patients and families

- 3.1. Use patient-centered interviewing skills to effectively take medical and dental history.
- 3.2. Seek and synthesize relevant medical information from other sources such as the patient's family.

#### 4) Document and share written and electronic information about the medical encounter to optimize clinical decision making, patient safety, confidentiality, and privacy

- 4.1. Accurately document all clinical encounters in a timely and accessible manner.
- 4.2. Communicate information using written or electronic medical records.



4.3. Share information with patients and other professionals in a manner that respects patient privacy and confidentiality.

### C. Collaborator

As collaborators, Oral Medicine and Pathology residents should work effectively within a health care team to provide patients with optimal care.

#### Key and Enabling Competencies: Oral Medicine and Pathology specialists are able to:

1) Participate effectively and appropriately in an inter-professional healthcare team (dental and medical)

- 1.1. Participate effectively in inter-professional team meetings.
- 1.2. Participate in decision-making with other colleagues.
- 1.3. Demonstrate leadership in a healthcare team.

2) Work with other health professionals effectively to prevent, negotiate, and resolve conflict

- 2.1. Show respect toward other collaborators.
- 2.2. Recognize self-differences and limitations that may contribute to inter-professional conflicts.

### D. Leader

As leaders, Oral Medicine and Pathology residents should be integral participants in oral healthcare organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the oral healthcare system and promoting the specialty. As Pathologists, they play an essential role in quality management within the laboratory.

#### Key and Enabling Competencies: Oral Medicine and Pathology specialists are able to:

1) Contribute in activities that enhance the effectiveness of their health care organizations and systems

- 1.1. Apply quality management principles to improve patient care delivery.
- 1.2. Demonstrate expertise in clinical and laboratory safety initiatives.

2) Manage their practice and career effectively

- 2.1. Set priorities and practice time management skills to integrate practice and personal life.
- 2.2. Implement processes to ensure personal practice improvement.
- 2.3. Use information technology efficiently.

3) Demonstrate administrative and leadership roles

- 3.1. Demonstrate leadership skills to enhance health care delivery.
- 3.2. Contribute to specialty promotion among dental organizations.

**E. Health Advocate**

As Health Advocates, Oral Medicine and Pathology residents responsibly use their expertise and influence to advance the oral health and well-being of individual patients, communities, and populations.

**Key and Enabling Competencies: Oral Medicine and Pathology specialists are able to:**

1) Respond to individual patient’s diagnostic and management needs within and beyond the clinical environment

- 1.1. Identify the determinants of patients’ health, including access to care and resources.
- 1.2. Work with patients and families to promote healthy life behaviors.

2) Respond to the health needs of the communities or populations they serve

- 2.1. Work with the community or population representatives to identify the determinants of health care that affect them.
- 2.2. Improve and modify clinical and laboratory practices to ensure they meet community needs.

**F. Scholar**

As Scholars, Oral Medicine and Pathology residents demonstrate a lifelong commitment to excellence in practice through continuous learning and by teaching others, evaluating evidence, and contributing to scholarship.

**Key and Enabling Competencies: Oral Medicine and Pathology specialists are able to:**

1) Maintain continuous enhancement of professional activities through ongoing learning

- 1.1. Develop and implement a personal learning plan to improve professional practice.
- 1.2. Conduct personal practice reviews.
- 1.3. Integrate new learning into practice.
- 1.4. Identify and contribute to collaborative learning opportunities.

2) Critically evaluate medical information for effective integration of evidence into practice

- 2.1. Formulate a focused question addressing a knowledge gap in clinical or laboratory encounters.
- 2.2. Critically appraise health-related research and literature in order to address a clinical or laboratory question.
- 2.3. Integrate evidence into decision-making in the practice.

3) Contribute to teaching of other health professionals, residents, students, patients, families, the public, and others

- 3.1. Describe the principles of learning relevant to medical education.
- 3.2. Identify the learning needs and outcomes of the potential learners.
- 3.3. Maintain patient safety in the learning environment.
- 3.4. Provide feedback in a timely manner to enhance the learning process.

4) Contribute to the development, dissemination, and translation of new knowledge and practices

- 4.1. Describe the principals of scientific research and its impact on health care
- 4.2. Identify and apply research ethical principles in their practice
- 4.3. Contribute to the work of research teams or programs
- 4.4. Communicate scientific knowledge with other professionals as well as patients

**G. Professional**

As Professionals, Oral Medicine and Pathology residents are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behavior.

**Key and Enabling Competencies: Oral Medicine and Pathology specialists are able to:**

1) Demonstrate a commitment to their patients, profession, and society by applying ethical standards

- 1.1. Demonstrate integrity, commitment, honesty, respect for diversity, and maintenance of confidentiality.
- 1.2. Respond effectively to ethical issues in their practice.
- 1.3. Demonstrate professional skills in the use of technology-enabled communication.
- 1.4. Demonstrate a high level of commitment to excellence in all aspects of practice.

2) Demonstrate a commitment to their profession through participation in profession-led regulation

- 2.1. Adhere to professional and ethical codes of conduct and respond appropriately to breaches.
- 2.2. Contribute in peer assessment processes and standard-setting.
- 2.3. Demonstrate accountability to professional regulatory bodies.

3) Demonstrate a commitment to practitioner health and optimal patient care

- 3.1. Balance personal and professional demands.
- 3.2. Support and respond effectively to colleagues in need.

OUTCOMES AND COMPETENCIES

Continuum of Learning

COMPETENCIES	R1	R2 & R3	R4
<b>MEDICAL EXPERT</b>			
Establish and apply basic knowledge, clinical and laboratory skills, and attitudes appropriate to oral medicine and pathology practice.	<p>Acquire fundamental scientific knowledge through basic science courses.</p> <p>Search, evaluate, and present scientific data effectively (OMP seminar series).</p> <p>Become familiar with the different basic science laboratories.</p>	<p>Apply the basic knowledge to clinical and laboratory practice.</p> <p>Acquire knowledge and skills of practice of other related specialties through different rotations.</p> <p>Develop basic clinical and laboratory skills related to core clinical and pathological problems.</p> <p>Analyze and interpret clinical and laboratory findings.</p> <p>Diagnose and manage common oral lesions.</p>	<p>Acquire up to date knowledge related to the diagnosis and management of core clinical problems of the specialty.</p> <p>Evaluate and manage challenging cases, and modify management plans.</p> <p>Evaluate and resolve conflicts, and communicate information appropriately with other professionals.</p>
Act as a consultant for the dental and medical community.		Evaluate and treat patients with medical conditions under the supervision of instructors.	Treat and provide consultation to patients with complicated medical conditions.
Function competently, efficiently, and effectively in the healthcare environment as a member of a multi-disciplinary healthcare team.		<p>Work efficiently in a multi-professional team.</p> <p>Participate in tumor boards, seminars, and teaching rounds.</p>	
Apply scientific principles to learning and patient care through critical thinking and self-directed, life-long learning.	Evaluate and interpret scientific literature pertaining to a specific topic.	Make evidence-based decisions regarding patient care.	Conduct clinical as well as basic science research.
Engage in community service and act as an ambassador for dentistry and the oral medicine and pathology specialty.		Plan awareness programs for diseases and conditions of interest to the community.	Conduct and evaluate awareness programs for diseases of interest to the specialty.
<b>COMMUNICATOR</b>			
Convey effective oral and written information about a case.	Acquire the basics of a case study and summarize the findings.	<p>Present and discuss the cases effectively at clinical rounds.</p> <p>Communicate effectively with other professionals.</p> <p>Maintain clear, accurate, and appropriate written or electronic documentation of cases.</p>	Express diagnostic uncertainty and recommend additional studies when required.

OUTCOMES AND COMPETENCIES

COMPETENCIES	R1	R2 & R3	R4
Establish professional therapeutic relationships with patients and their families.		<p>Communicate using a patient-centered approach, encouraging patient trust and autonomy.</p> <p>Recognize and consider the cultural background of the patients and the effect on their decisions.</p> <p>Recognize and respond to a patient's non-verbal behaviors to enhance communication.</p>	
Accurately elicit and synthesize relevant clinical and pathological information, incorporating the perspectives of patients and families.		Use patient-centered interviewing skills to effectively take medical and dental history.	
Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy.		Accurately document all clinical encounters in a timely and accessible manner and communicate effectively using written or electronic medical records.	
<b>COLLABORATOR</b>			
Participate effectively and appropriately in an inter-professional healthcare team (dental and medical).		Participate effectively in inter-professional team meetings.	<p>Make decisions related to patient care with other colleagues.</p> <p>Demonstrate leadership in a health care team.</p>
<b>LEADER</b>			
Contribute in activities that enhance the effectiveness of their health care organizations and systems.		Acquire the basics of quality management principles of clinical and laboratory practice.	<p>Apply quality management principles to improve patient care delivery.</p> <p>Demonstrate expertise in clinical and laboratory safety initiatives.</p>
Manage their practice and career effectively.	Set priorities and practice time management skills to integrate practice and personal life.	Implement processes to ensure personal practice improvement.	
Demonstrate administrative and			Contribute to specialty promotion among dental

OUTCOMES AND COMPETENCIES

COMPETENCIES	R1	R2 & R3	R4
leadership roles.			organizations.
<b>HEALTH ADVOCATE</b>			
Respond to individual patient's diagnostic and management needs within and beyond the clinical environment.		Recognize determinants of patients' health, including access to care and resources.  Work with patients and families to promote healthy life behaviors.	
Respond to the health needs of the communities or populations they serve.			Improve and modify clinical and laboratory practices to ensure they meet community needs.
<b>SCHOLAR</b>			
Maintain continuous enhancement of professional activities through ongoing learning.	Develop and implement a personal learning plan.	Conduct personal practice reviews.	Contribute to collaborative learning opportunities.
Critically evaluate medical information for effective integration of evidence into practice.	Critically appraise health-related research and literature in order to address a clinical or laboratory question.		Integrate evidence into decision-making in the practice.
Contribute in teaching of other health professionals, residents, students, patients, families, the public, and others.		Recognize principles of learning relevant to medical education.  Identify learning needs and outcomes of potential learners.	Participate in teaching of residents and other health professionals.
Contribute to the development, dissemination, and translation of new knowledge and practices.		Recognize the principles of scientific research and their impact on health care.  Identify and apply research ethical principles in practice.	Contribute to the work of research teams or programs.
<b>PROFESSIONAL</b>			
Demonstrate a commitment to their patients, profession, and society by applying ethical standards.		Demonstrate integrity, commitment, honesty, respect for diversity, and maintenance of confidentiality.	
Demonstrate commitment to their profession through participation in profession-led regulation.			Contribute in peer assessment processes and standard-setting.
Demonstrate commitment to practitioner health and optimal patient care.		Balance personal and professional demands.	

### Top Conditions in the Specialty

#### Top 10 Conditions in the Specialty

- 1) Odontogenic and non-odontogenic infections
- 2) Oral mucosal lesions
- 3) Oral cancer (e.g., squamous cell carcinoma, verrucous carcinoma, salivary gland adenocarcinomas)
- 4) Potentially malignant lesions (e.g., leukoplakia, submucous fibrosis, dysplasia)
- 5) TMJ disorders
- 6) Orofacial pain
- 7) Immunomediated conditions
- 8) Salivary gland diseases
- 9) Bone pathology
- 10) Soft tissue tumors

### Top 10 Procedures Performed

- 1) Patient assessment and evaluation
- 2) Dental management of medically compromised patients
- 3) Oral biopsy
- 4) Pharmacologic prescriptions
- 5) Oral laser applications
- 6) Grossing of oral and maxillofacial specimens
- 7) Use of microscope
- 8) Preparation of pathology reports
- 9) Performance of some laboratory techniques
- 10) Autopsy dissection
- 11) Histological examination
- 12) Interpretation and sign-out cases

**Common Health Issues Related to the Speciality**

- 1) Diabetes
- 2) Hypertension
- 3) Cancer
- 4) Cardiovascular diseases
- 5) Gastrointestinal diseases
- 6) Autoimmune diseases
- 7) Hematological disorders
- 8) Hepatitis and HIV
- 9) Dermatological diseases
- 10) Genetic diseases
- 11) Nutritional deficiencies
- 12) Mental health diseases

**Procedure Competency According to the Level of Training**

Procedure	R1	R2 & R3	R4
Patient assessment and evaluation			
Dental management of medically compromised patients			
Oral biopsy			
Grossing of oral and maxillofacial specimens			
Use of microscope			
Preparation of pathology reports			
Performance of some laboratory techniques			
Autopsy dissection			
<b>Didactic</b>			
<b>Competent</b>			
<b>Proficient</b>			



## LEARNING OPPORTUNITIES

### General Principles

SBOMP curriculum is largely dependent on self-motivation, self-directed-learning, individuality, and drive for knowledge and exploration with a passion for lifelong learning. Residents are expected to work hard, seek out opportunities, embrace challenges, and achieve at their highest possible level. While there is a considerable framework of organization, structure, and requirements, in large part it is what residents put in to the program, at every level (i.e. coursework, seminars, clinical rotations, research), that will define what they take away.

- 1) Every week, at least 6 hours of formal teaching time should be reserved which should be planned in advance with an assigned tutor, time slots, and a venue. Formal teaching time excludes clinical training.
- 2) The Core Education Programme (CEP) would include following three formal teaching and learning activities:
  - A. Universal topics: 20%
  - B. Core specialty topics: 70%
  - C. Trainee-selected topics: 10%
- 3) A monthly session of Oral Medicine Grand Rounds: Attendance and regular presentations throughout the program are mandatory. Presentations should include adequate background and introduction, concise presentation of the case, including all pertinent laboratory, histopathology and radiology studies, and a review of the literature.
- 4) A weekly Oral Medicine and Oral Pathology Seminar: The seminar series includes in-depth review of core OM & OP curriculum, case reviews, and critical analysis of the literature. The annual schedule should be prepared in advance.
- 5) A monthly journal club activity should be planned in advance with an assigned tutor, time slot, and venue. Residents from all hospitals in the region will gather in this activity.
- 6) Other academic activities include:
  - Weekly evidence-based review in Oral Medicine and Pathology
  - Weekly oral radiology, pathology, or medicine meeting
  - Workshops and simulation courses
- 7) Every month, at least 1 hour should be assigned to a meeting with mentors, review of portfolio, patient progress, mini-CEX etc.
- 8) Trainees are required to attend and participate in the academic and clinical activities of the department, such as clinics, journal clubs, systemic reviews, surgical pathology, radiology, and immunology, and other activities. Attendance and participation shall not be less than 75% of the number of activities within any training rotation/period.

### Core Educational Program

#### A. Universal Topics

Universal topics are high value, interdisciplinary topics of utmost importance to the trainee. The reason for delivering the topics centrally is to ensure that every trainee receives high quality teaching and develops essential core knowledge. These topics are common to all specialties.

Topics included here meet one or more of the following criteria:

- 1) Impactful: these are topics that are common or life-threatening
- 2) Interdisciplinary: hence topics that are difficult to teach by a single discipline

## LEARNING OPPORTUNITIES

- 3) Orphan: topics that are poorly represented in the undergraduate curriculum
- 4) Practical: topics that trainees will encounter in hospital practice

### Development and Delivery

These topics will be developed and delivered centrally by the Commission through an e-learning platform; it is didactic in nature with a focus on practical aspects of care. These topics will be more content-heavy as compared to the workshops and other face-to-face interactive sessions planned. The suggested duration of each topic is 1.30 hours. The topics will be delivered in a modular fashion. At the end of each learning unit there will be an online formative assessment. After completion of all topics, there will be a combined summative assessment in the form of context-rich MCQ.

All trainees must attain minimum competency in the summative assessment. The titles of these universal topics are listed and described in the following modules.

Module	Topic	Subtopic	Year
1	Introduction	<ul style="list-style-type: none"> <li>• Safe drug prescribing</li> <li>• Hospital-acquired infections</li> <li>• Sepsis; SIRS; DIVC</li> <li>• Antibiotic stewardship</li> <li>• Blood transfusion</li> </ul>	R1
2	Cancer	<ul style="list-style-type: none"> <li>• Principles of management of cancer</li> <li>• Side effects of chemotherapy and radiation therapy</li> <li>• Oncologic emergencies</li> </ul>	R2
3	Diabetes and Metabolic Disorders	<ul style="list-style-type: none"> <li>• Recognition and management of diabetic emergencies</li> <li>• Management of diabetic complications</li> <li>• Abnormal ECG</li> </ul>	R1
4	Medical and Surgical Emergencies	<ul style="list-style-type: none"> <li>• Management of acute chest pain</li> <li>• Management of acute breathlessness</li> <li>• Management of hypotension and hypertension</li> </ul>	R1
5	Acute Care	<ul style="list-style-type: none"> <li>• Pre-operative assessment</li> <li>• Acute pain management</li> <li>• Chronic pain management</li> </ul>	R2
6	Ethics and Healthcare	<ul style="list-style-type: none"> <li>• Occupational hazards of HCW</li> <li>• Evidence-based approach to smoking cessation</li> <li>• Patient advocacy</li> <li>• Ethical issues: transplantation/ organ harvesting; withdrawal of care</li> <li>• Ethical issues: treatment refusal; patient autonomy</li> <li>• Role of doctors in death and dying</li> </ul>	R3

**B. Core Specialty Topics**

**Module 1.1.: Basic Sciences Core Courses**

Formal didactics are a cornerstone of the advanced graduate education program in Oral Medicine and oral pathology. The aim of the Basic Medical Science Courses (BSC) is to provide the postgraduate students with a solid scientific background and thorough knowledge in the basic medical subjects that are relevant to their specialty in Oral Medicine & Pathology. Residents must receive a passing grade in every required course. All coursework is expected to be completed during the first year of the program.

S. No	Courses	List of Topics
1.1.1	Head and Neck Anatomy	<ul style="list-style-type: none"> <li>• Introduction of head and neck anatomy</li> <li>• Clinical anatomy of skull and mandible</li> <li>• Clinical anatomy of face and scalp</li> <li>• Embryology: development of face, nose, lips, and palate</li> <li>• Cranial cavity, meninges, blood supply of meninges, dural venous sinuses, diploic and emissary veins. Cranial nerves: attachment to brain, foramina of exit</li> <li>• Overview of functions of cranial nerves. Clinical tests for cranial nerves</li> <li>• Bony orbit, eyelid, lacrimal apparatus. Extrinsic muscles of eyeball, nerves and vessels. Eyeball and intrinsic muscles. Orbit and eyeball; fascia, muscles, vessels and nerves of orbit</li> <li>• Anatomy of temporal bone, structure of ear</li> <li>• Histology of nervous tissue</li> <li>• Degeneration and regeneration of nerves</li> <li>• Nervous system (I): organization and functions</li> <li>• Nervous system (II): functional anatomy of the brain, protection</li> <li>• Cerebral hemispheres; functional areas and blood supply</li> <li>• Cerebellum, blood supply and functions</li> <li>• CSF: formation, absorption, and functions</li> <li>• Blood-brain barriers</li> <li>• Brain stem</li> <li>• Spinal cord; internal and external structure</li> <li>• Parotid region</li> <li>• Deep fascia of neck. Anterior triangle of neck</li> <li>• Carotid triangle; main arteries of neck</li> <li>• Mandibular nerve and related ganglia. Trigeminal neuralgia</li> <li>• Embryology: branchial arches and pharyngeal pouches.</li> <li>• Temporal and infratemporal regions</li> <li>• Maxillary artery</li> <li>• Posterior triangle of neck</li> <li>• Muscles of mastication</li> <li>• Temporo-mandibular joint and pterygoid plexus</li> <li>• Last four cranial nerves: 9, 10, 11, and 12</li> <li>• Submandibular region and floor of mouth</li> <li>• Oral cavity, tongue, and palate. Histology: oral cavity, tongue and palate</li> <li>• Nasal cavity</li> </ul>

## LEARNING OPPORTUNITIES

S. No	Courses	List of Topics
1.1.2	Oral Biology & Genetics	<ul style="list-style-type: none"> <li>• Introduction to oral biology</li> <li>• Embryology of head, face, and oral cavity</li> <li>• Development of the tooth, its supporting structure, and enamel</li> <li>• Dentin-pulp complex &amp; periodontium</li> <li>• Oral mucosa</li> <li>• Salivary glands</li> <li>• Repair and regeneration of oral tissues</li> <li>• Structure and biochemistry of DNA</li> <li>• Transmission genetics</li> <li>• Linkage, mapping, and chromosomes</li> <li>• Specialized topics I (mechanisms of mutation, genetic engineering, and genomics)</li> <li>• Specialized topics II (cancer, the basics of population genetics)</li> </ul>
1.1.3	General Pathology	<ul style="list-style-type: none"> <li>• Introduction to general pathology. Review of investigative techniques in pathology</li> <li>• Histopathology processes</li> <li>• Cellular pathology I (cellular adaptation of growth and differentiation)</li> <li>• Cellular pathology II (cell injury and cell death)</li> <li>• Intracellular accumulations (lipids, proteins, glycogen, and pigments)</li> <li>• Inflammation (acute and chronic)</li> <li>• Tissue regeneration and repair</li> <li>• Infectious diseases</li> <li>• Hemodynamic disorders, thrombosis, and shock</li> <li>• Diseases of the immune system (hypersensitivity reactions, autoimmune diseases, immunodeficiency syndrome)</li> <li>• Neoplasia</li> <li>• Environmental and nutritional diseases</li> </ul>
1.1.4	Hematology	<ul style="list-style-type: none"> <li>• Hematopoiesis</li> <li>• Erythropoiesis and introduction to the anemias</li> <li>• Reticuloendothelial system, lymphatic system, and spleen</li> <li>• Normocytic anemias, megaloblastic anemias, and hypochromic anemias</li> <li>• Hemoglobin structure and function</li> <li>• Sickle cell anemia, thalassemias, and hemolytic anemias</li> <li>• Polycythemias</li> <li>• Blood group chemistry, physiology, and transfusion therapy</li> <li>• Leukocyte phagocytosis disorders</li> <li>• The leukemias</li> <li>• The lymphomas</li> <li>• Plasma cell disorders</li> <li>• Hemorrhagic disorders</li> <li>• Laboratory methods in hematology</li> </ul>
1.1.5	Pharmacology and Therapeutics	<ul style="list-style-type: none"> <li>• Introduction to pharmacology; drug therapy, clinical and general pharmacology</li> <li>• Infection and inflammation; anti-bacterial, anti-viral, and anti-fungal agents</li> <li>• Anti-inflammatory drugs</li> <li>• Immunomodulatory agents</li> </ul>

LEARNING OPPORTUNITIES

S. No	Courses	List of Topics
		<ul style="list-style-type: none"> <li>• Nervous system-related drugs; pain-pathway modulators, narcotic analgesics and non-narcotic analgesics, and anti-anxiety and anti-psychotics</li> <li>• Cardiovascular system-related drugs</li> <li>• Endocrine system-related drugs</li> <li>• Pre-anesthetic medications</li> <li>• Anesthetics</li> </ul>
1.1.6	Physiology	<ul style="list-style-type: none"> <li>• Introduction to physiology</li> <li>• Cell, cell membrane transport and electrical properties, and body fluid balance</li> <li>• Composition of blood, hemoglobin, and anemias</li> <li>• White blood cells (WBCs) and their role in inflammation and immunity, and their disorders</li> <li>• Physiology of coagulation, bleeding and clotting time, and bleeding and clotting disorders</li> <li>• Blood groups, and blood transfusion and its complications.</li> <li>• Autonomic nervous system</li> <li>• Introduction to cardiovascular system. Electrocardiogram (ECG) interpretation</li> <li>• Coronary circulation and ischemic heart disease</li> <li>• Respiratory system; pulmonary ventilation mechanism. Gas exchange and transport. Regulation of respiration. Pulmonary function tests and their clinical applications.</li> <li>• Introduction to renal physiology. Glomerular filtration. Pathophysiology of renal failure</li> <li>• Swallowing and its disorders. Saliva.</li> <li>• Vomiting and acid-base regulation</li> <li>• Adrenal gland, hormones, and pathophysiology of the adrenal cortex.</li> <li>• Pancreatic hormones, glucose homeostasis, and diabetes mellitus</li> <li>• Hormone classification and mechanisms of action</li> <li>• Pituitary gland and hormones; pathophysiology of pituitary gland/hypophyseal axis</li> <li>• Thyroid hormones and parathyroid hormones.</li> <li>• Calcium homeostasis and calcium metabolism assignment</li> <li>• Motor cortex and pathways; clinical motor reflexes</li> <li>• Synapses and sensory receptors</li> <li>• Neurophysiology of pain I &amp; II</li> <li>• Analgesia in dental practice</li> </ul>
1.1.7	Oral Radiology	<p><b>Imaging:</b></p> <ul style="list-style-type: none"> <li>• Digital imaging</li> <li>• Film imaging</li> <li>• Projection geometry</li> <li>• Intraoral projections</li> <li>• Intraoral radiographic anatomy</li> <li>• Extraoral projections and anatomy</li> <li>• Panoramic imaging</li> <li>• Cone-beam computed tomography: basic principles and normal anatomy</li> </ul>

LEARNING OPPORTUNITIES

S. No	Courses	List of Topics
		<ul style="list-style-type: none"> <li>• Other imaging modalities</li> <li>• Quality assurance and infection control in oral and maxillofacial radiology</li> <li>• Prescribing diagnostic imaging</li> </ul> <p><b>Radiographic Interpretation:</b></p> <ul style="list-style-type: none"> <li>• Principals of radiographic interpretation</li> <li>• Dental caries</li> <li>• Periodontal diseases</li> <li>• Inflammatory diseases</li> <li>• Cysts</li> <li>• Benign tumors</li> <li>• Other bony diseases</li> <li>• Malignant diseases</li> <li>• Systemic diseases</li> <li>• Paranasal sinuses diseases</li> <li>• Temporomandibular joint abnormalities</li> <li>• Soft tissue calcifications and ossifications</li> <li>• Salivary gland diseases</li> <li>• Trauma</li> <li>• Dental anomalies</li> <li>• Craniofacial anomalies</li> </ul>
1.1.8	Scientific Research, Biostatistics and informatics	<ul style="list-style-type: none"> <li>• Study design, planning of data management procedures</li> <li>• Statistical analysis methods</li> <li>• Scientific &amp; technical writing</li> <li>• Research methodology</li> <li>• Human-computer interaction in dentistry</li> <li>• Dental bioinformatics and computing</li> <li>• Clinical dental research informatics</li> </ul>

**Module 1.2: Oral Medicine Clinical Rotations**

The clinical clerkships begin in the second year of the program. Clinical rotations include training in oral medicine as well as various related medical specialties. There are both core and off-service clerkships, described below. Sufficient time is made available for coursework, seminars, and research.

**General Rules:**

- All clinical rotations will take place at SCHS accredited training center of a tertiary hospital
- Dress code should be professional and photo ID must be worn during all clinical rotations
- The Patient Encounter Log must be maintained on each rotation
- Evaluations must be completed following completion of each clinical rotation

### **Module 1.2.1: Oral Medicine & Dentistry Consult Service (2 blocks; 3 months / block)**

Starting from R3 and during this block rotation, the resident is responsible for managing the inpatient consult service. Residents will also be responsible for four outpatient clinic sessions per week, with the focus being oral healthcare management of medically complex patients, and coordination and provision of emergent care for inpatients. Residents will have an opportunity to participate in dental rehabilitation under general anesthesia, including clerking of the patients and getting all requirements for admission. The resident will become proficient in interacting with the medical staff, and examining and treating patients who are severely immunocompromised.

Residents will also provide daytime Emergency Department coverage. Residents will be responsible for the evaluation and treatment planning for dental clearance required before organ and hematopoietic cell transplant, cardiac valve replacement, head and neck cancer therapy, and chemotherapy patients either by direct patient care or consulting on off-site dental evaluations.

#### **Goals and Objectives**

- Understand the role of the oral medicine consult service within the hospital framework
- Learn to work inter-professionally with the hospital staff, including nurses, physician assistants, physicians in training, and attending
- Understand the appropriate use and interpretation of laboratory and diagnostic tests in the context of inpatient consultations
- Provide clear and concise consultation notes and clinical recommendations and demonstrate good communication (all forms: spoken, written, electronic) with the various members of the health care team

### **Module 1.2.2: Oral Medicine (3 blocks; 3 months / block)**

Residents will rotate through the Division of Oral Medicine at the training tertiary hospitals, King Abdulaziz University (KAU) and King Saud University (KSU) College of Dentistry. Residents will see a range of cases including patients with mucosal diseases such as lichen planus and leukoplakia; patients with burning mouth syndrome; patients with oral manifestations of systemic disease; and patients with chronic graft-versus-host disease and other cancer-related complications. Residents will obtain a history and perform a head and neck exam as well as present the findings, differential diagnosis, and treatment plan.

#### **Goals and Objectives**

- Develop effective skills in obtaining a complete medical history and writing clinical notes
- Develop proficiency in the appropriate use and interpretation of diagnostic tests
- Develop proficiency in generating an appropriate differential and working diagnosis
- Develop proficiency in determining the most appropriate treatment plan, including pharmacotherapeutics, patient education and counselling, and monitoring and follow-up

**Module 1.2.3: Oral and Maxillofacial Radiology (2 weeks)**

Residents will observe and learn the principles of all aspects of advanced imaging used for the diagnosis and management of oral & maxillofacial lesion patients. They will perform radiographic procedures in the clinics, including processing 3D images, interpreting radiographs, and preparing radiographic reports. The following procedures will be covered:

- 1) Intraoral radiography:
  - Periapical radiography
  - Bitewing radiography
  - Occlusal radiography
  - Intraoral radiography for pediatric patients
- 2) Panoramic radiography
- 3) Extraoral radiography and cephalometric radiography
- 4) Sialography
- 5) 3D volume acquisition and image processing
- 6) Dental implant site radiographic assessment
- 7) Radiographic assessment of impacted teeth

**Module 1.2.4: Head & Neck Radiology (2 weeks)**

Residents will observe all aspects of imaging studies at the training center with faculty members. Residents will learn the principles for the evaluation of CT scans, MRIs, and newer imaging technologies such as PET scans, as well as other nuclear medicine studies.

**Goals and Objectives**

- Understand the principles of head and neck imaging, and the indications for and limitations of different imaging studies
- Become familiar with the radiographic interpretation of advanced head and neck imaging studies
- Understand how to interpret the written radiology report

**Module 1.2.5: Oral and Maxillofacial Surgery (1 month)**

Residents learn the fundamentals of OMFS and the correct terminology for a variety of OMFS conditions. Residents present their findings, differential diagnoses and treatment plan to the attending oral surgeon. Residents also have the opportunity to assist with and perform dental extractions and complex oral biopsies.

**Goals and Objectives**

- To receive exposure to simple and surgical dental extractions
- To have exposure in the management of oral bacterial infections, wound care and wound healing
- To learn the principles of different types of biopsies and suturing techniques

**Module 1.2.6: Internal Medicine rotation (1 month)**

This rotation aims to strengthen trainee's training in the fundamentals of Internal Medicine history taking, bedside physical examination, and note writing. Through didactic sessions and case based learning, residents improve their ability to:

- Identify and interpret important components of the medical patient's history and physical exam
- Understand reasons for ordering and interpretation of commonly ordered labs in



medical patients Recognize patterns to distinguish severity of common medical conditions for which oral medicine is frequently consulted

- Residents meet with Internal Medicine clinician-educators for several half-day immersion sessions in the first half of the R3 year that focus on the skills needed to interpret medical admission notes and progress notes, using interactive exercises aimed at applying the information to clinically relevant situations.

In the second half of the year, review sessions provide time for guided case-based interpretation of internal medicine cases that residents are likely to encounter during their clinical rotations. Trainees bring in notes from cases they have been involved with, and have the opportunity to review cases, clarify points of confusion, and discuss the medical issues encountered. These sessions focus on improving the trainees' ability to effectively communicate about and manage the oral care of medically complex patients.

### **Module 1.2.7: Dermatology (1 month)**

Residents will learn the fundamentals of dermatology, including how to perform a skin examination on patients. Residents will learn the correct terminology for a variety of skin conditions and present their findings, differential diagnosis, and treatment plan to the attending dermatologist. Residents will also have the opportunity to assist with and perform skin punch biopsies, cryotherapy, and intralesional injections.

#### **Goals and Objectives:**

- Review the epidemiology, pathophysiology, diagnosis and management of the most common dermatologic conditions
- Understand the principles of a full skin exam
- Understand the various diagnostic tests used in dermatology
- Review the medical management of patients with mucocutaneous disease with particular emphasis on the basic principles of dermatological therapeutics

### **Module 1.2.8: Hematology/Oncology (1 month adult/ 1 month pediatric)**

Residents will observe and participate in the evaluation, diagnosis, and management of patients in the pediatric and adult hematology/oncology inpatient and outpatient clinics. Residents will gain extensive experience in hematopoietic cell transplantation and graft-versus-host disease. This rotation will provide insight into how to interpret hematologic tests, perform a bone marrow biopsy, and read blood smears. From observing the interaction between physician and patient in this particular rotation, residents learn to treat patients with empathy and professionalism.

#### **Goals and Objectives**

- Understand the clinical work-up involved in the diagnosis of benign and malignant hematologic conditions
- Understand the role of the various diagnostic tests involved in hematology and hematology/oncology, including molecular and genetic tests
- Develop a strong understanding of the principles of therapy in benign and malignant hematologic conditions, including oral and intravenous medications as well as the roles for autologous and allogeneic hematopoietic stem cell transplantation
- Understand the range of potential oral manifestations and complications that can arise in patients with hematologic conditions, how to conduct an appropriate risk assessment

**Module 1.2.9: Otolaryngology/Head & Neck Oncology (1 month)**

Residents will see patients referred to the department of Otorhinolaryngology at medical centers for a variety of head and neck complaints. They will observe the diagnosis and management of patients with a wide range of ENT conditions in the inpatient, outpatient, and operating room settings, ranging from benign to malignant. Residents will participate in the Head and Neck Oncology combined clinic and gain extensive experience in head and neck oncology during this rotation.

**Goals and Objectives**

- Review and demonstrate a clear understanding of the radiographic and clinical aspects of head and neck anatomy
- Learn the epidemiology, pathophysiology, diagnosis and management of the most common ENT conditions
- Understand the principles of ENT physical examination and head and neck imaging
- Identify potential non-odontogenic causes of orofacial pain/symptoms, and know when referral to an ENT specialist is indicated
- Learn the principles of diagnosis and management of head and neck cancer

**Module 1.2.10: Oncology (1 month)**

Residents observe and gain practical clinical experience in the evaluation, diagnosis and management of patients in a variety of oncology clinics.

**Goals and Objectives**

- Understand the fundamental principles of clinical diagnosis and management of patients with solid cancers
- Become familiar with medical considerations that impact the management of oncology patients
- Gain an appreciation for the role of clinical research in oncology, in particular early phase studies

**Module 1.2.11: Infectious Diseases (2 weeks)**

During this rotation, residents will evaluate and diagnose patients with a variety of infectious complaints on an inpatient and outpatient basis. The outpatient facility sees mainly patients with HIV as well as a specialized hematology/oncology clinic. Residents will learn the appropriate use of standard antimicrobial medications as well as new agents in the management of localized and systemic infections.

**Goals and Objectives**

- Recognize the central role of the infectious disease consult service in the hospital and cancer center
- Gain familiarity with the indications for and interpretation of diagnostic tests in infectious diseases
- Understand the principles of therapy and management in infectious diseases

**Module 1.2.12: Rheumatology, Allergy & Immunology (2 weeks)**

Residents will learn about the diagnosis and management of patients with rheumatologic, autoimmune, and allergy disorders. Special emphasis will be placed on history taking, physical examination, and the appropriate use and interpretation of laboratory and imaging tests. They will specifically learn about the use and limitations of allergy testing.

### **Goals and Objectives**

- Understand the work-up of a patient suspected to have a rheumatic condition, with particular emphasis on history taking, use of laboratory medicine, and the roles of imaging and pathology
- Become familiar with the range of pharmacotherapeutic approaches to managing rheumatic, immunologic and autoimmune conditions, including rationale for use of various agents as well as necessary monitoring
- Be able to recognize oral manifestations of systemic diseases and understand the role for oral medicine in management of such patients

### **Module 1.2.13: Pain & Headache Clinic (2 week)**

Residents will learn about the fundamental principles of acute and chronic pain management in both the inpatient and outpatient settings. Residents will observe the diagnosis and management of patients referred for a variety of orofacial pain and headache disorders. They will learn the proper use of pharmacological agents as well as alternative therapies for the treatment of chronic pain.

### **Goals and Objectives**

- Understand the role of the pain service in a hospital and cancer center
- Learn the basic principles of clinical pain assessment
- Become familiar with the range of available pharmacologic and non-pharmacologic therapeutic options in the management of chronic pain
- Recognize the role of therapy and counseling in management of most headache disorders and chronic pain

### **Module 1.3: Oral and Maxillofacial Pathology Rotations**

These are General Anatomic/Surgical Pathology, Clinical Pathology, and Laboratory Medicine. Residents must keep Log book of all activities during their pathology rotations.

### **Module 1.3.1: Surgical Pathology Rotation (6 months)**

Six months of anatomic pathology training (R2) will take place within the pathology department of the KSU or KAU and training center of tertiary hospital. The rotations include surgical pathology and frozen section. The rotation also includes dermatopathology and haematopathology cases. During this rotation, the resident should obtain at least 10 autopsy cases.

### **Surgical Pathology aspects:**

- 1) Operating room consultations, frozen section, and consultation reports
- 2) Microscopy and photography
- 3) Special studies
- 4) Histochemistry (special stains)
- 5) Electron microscopy
- 6) Immunofluorescence in kidney and skin disease
- 7) Immunohistochemistry
- 8) Flow cytometry
- 9) Cytogenic and FISH
- 10) Molecular Pathology

**Module 1.3.2: Surgical Pathology Rotation (Oral and Maxillofacial pathology)**

The oral biopsy service receives many cases each year and these cases serve as the basis of oral pathology experience for the 18-month rotation. The resident will be taught and will have prepared a written, gross and microscopic work up of each case to be signed out. Then, at the microscope level, the resident will learn the histological features of the various oral diseases. Also at this time, the resident will be taught to correlate the gross, clinical, and radiographic features with the microscopic appearance of the various specimens. At each session, students will offer their interpretations and receive feedback from one another and from the instructor.

**Module 1.3.3: Cytopathology (1 month)**

The resident will learn the fine needle aspiration biopsy technique and specimen handling procedures, especially for:

- 1) Thyroid
- 2) Salivary Gland
- 3) Lymph Nodes
- 4) Soft tissue

**Module 1.3.4: Laboratory Medicine rotations (3 months)**

The residents will rotate in the following sections: molecular medicine, genetic consultation clinics and laboratory medicine, which can provide important bases for clinical excellence.

**Module 1.3.5: Autopsy (1 month)**

The residents should conduct their autopsy cases throughout their rotation at surgical pathology. During this rotation, the resident should observe and help in all aspects of the autopsy procedure in ten cases. Typically, the resident from the OM & OP program will assist the residents and physicians from anatomic pathology.

**C. Trainee-selected Topics**

The trainees are encouraged to select an interesting or hot topic to present either during their clinical rotation or laboratory rotation or during Oral Medicine and Oral Pathology seminar.

## Teaching and Learning Activities

### A. Oral Medicine Grand Rounds

A monthly session should be scheduled in advance. Attendance and regular presentations throughout the program are mandatory. Presentations should include adequate background and introduction, concise presentation of the case, including all pertinent laboratory, histopathology and radiology studies, and a review of the literature. Two cases are presented, with each taking approximately 30 minutes. Residents should keep a records of all cases (Log book). It is responsibility of the presenter to identify a case two weeks prior to each session and discuss it with a Faculty member prior the presentation. It is the organizing resident's responsibility to 1) maintain the Oral Medicine Grand Rounds Excel spreadsheet log (by contacting each individual presenter for date, case history , examination, and diagnosis), 2) create a new folder in website of the program for each session (Year-Month-Day), 3) ensure that the presenters upload their PowerPoint presentations to the folder, and 4) maintain a database of suggested cases to be presented approved by the oral medicine faculty

### B. Advanced Oral Medicine and Oral Pathology Seminar

A weekly seminar which includes in-depth review of core OM & OP curriculum, case reviews, critical analysis of the literature and the retrospective file of more than 1,000 biopsy specimens, as well as several slide study sets. Advance reading of assigned articles and the preparation of formal, professional PowerPoint presentations (when presenting a topic for the session) are mandatory. The annual schedule is prepared in advance. A select number of keynote guest speakers will be invited throughout the years. Advanced reading of assigned articles and preparation of formal, professional Power Point presentations (when presenting a topic for the session) are mandatory.( see Topics of Advanced Oral Pathology & Medicine Seminars in Appendix 1).

It is the Seminar presenter responsibilities to upload pertinent scientific articles for the seminar topic into website one week before the seminar.

At the end of the session, each resident will be evaluated according to the following:

- Participation: residents are evaluated on a four-point scale according to the substance and quality of their contribution to the discussion of assigned readings
- Presentation: the presenting resident is evaluated according to the organization, clarity, quality, and content of the seminar presentation.

### C. Oral Medicine and Oral Pathology Journal Club

The scope of this monthly session is to keep residents up to date with the current literature, and to learn how to critically read/review scientific papers. It consists of Journal updates and critical analysis of the literature. Based on an annual syllabus, each resident is assigned a list of journals to review. Residents are expected to identify 3-4 articles to present from their assigned journals. Each resident will send their journals' tables of contents and the list of articles for presentation to the Course Director no more than one week prior to the scheduled session. Following approval, the articles are uploaded to website prior to the club.

#### Journals reviewed

American Journal of Transplantation, Biology of Blood Marrow Transplantation, Blood, Bone Marrow Transplantation, Head and Neck, Journal of Clinical Oncology, Journal of Oral Pathology and Medicine, Journal of Oral and Maxillofacial pathology, Journal of the American Dental Association, Journal of the American Medical Association, Lancet Oncology, New England Journal of Medicine, Oral Diseases, OOOO, Oral Oncology, and Journal of Oral and Maxillofacial Surgery, JAMA Dermatology, Journal of Oral and Facial Pain and Headache

**D. Head & Neck Tumor Board**

This weekly activity is held by the combined clinics of Head and Neck Oncology in the hospital. It includes discussion of new Head & Neck cancer cases through review of their histories, clinical presentations, histopathology, diagnosis, and treatment plan for each case. Resident is expected to participate by revising and demonstrating the guidelines for dental management of those patients before, during and after the cancer therapy.

**E. Research Activities**

Advances in the field of Oral Medicine and Oral Pathology depend on well-planned, designed, and executed research. Residents gain introductory experience in research through coursework and seminars, as well as through practical experiences.

Residents during their program are expected to complete ONE of the following research activities:

- Case report to be submitted for presentation at one of the local or international specialty conference
- Write a review paper as the primary author.
- Conduct an original research project. It is expected that the results will be presented as an abstract at a scientific meeting and subsequently published in a peer-reviewed journal.

**F. Elective Rotations**

The resident can select to spend one extra month in one of the following rotations:

- 1) Dermatology
- 2) Otolaryngology/Head & Neck Oncology
- 3) Dermatopathology
- 4) Hematopathology
- 5) Laser Surgery

**G. Optional Activities**

Among the various hospitals and institutions, there is a various learning opportunities in the form of lectures, seminar series, and special events. Residents should review print and electronic bulletins for learning opportunities.

Each training center must encourage the following educational activities:

- 1) Resident is encouraged to present at least once a year at a local, national, or international oral medicine and pathology meeting or at local research resident day.
- 2) Resident is encouraged to attend any national educational activities (symposia, workshops, review course).

LEARNING OPPORTUNITIES

**H. Examples of Weekly Education Activities**

Time	Sunday	Monday	Tuesday	Wednesday	Thursday
8-9 am		Oral Medicine Clinic		Oral Medicine Clinic	
9-10 am					Morning weekly report
10-11 am					
11-12 am	Grossing				
12-1 pm	Break/ Prayer time				
1-2pm	Signing out				
2-3 pm	Journal Club		Oral Medicine Grand round	OMP Seminar	

## ASSESSMENT OF TRAINEES AND SUPPORT

### Purpose of Assessment

Recent trends in postgraduate dental education are moving rapidly away from predominantly knowledge-based traditional examinations towards competency and professional behavior-based evaluation. For this reason, on-the-job workplace-based assessments (WPBA) have been developed to assess workplace-based learning programs. Direct Observation of Procedural Skills (DOPS), Mini-Clinical Evaluation Exercises (mini-CEX) and Case-based discussion (CbD) are some of the most commonly used methods of workplace-based assessments that will be implemented in the current program.

The purposes of the assessment during the training program are as follows:

- 1) Assessment should help residents to learn
- 2) Assess the progress of trainees
- 3) Determine the competency level of the trainees
- 4) Certification of the trainees
- 5) Training program evaluation (Program Evaluation System will be implemented)

### General Principles

The assessment methods are designed to:

- 1) Provide trainees with feedback on their learning and longitudinal competency development
- 2) Include a variety of types of assessment to allow a range of different learning outcomes to be assessed
- 3) Offer learning opportunities
- 4) Promote reflective and self-directed learning activities
- 5) Enable faculty to make robust (defensible and transparent) high-stakes (promotion/remediation) decisions



The assessment plan of the SBOMP program is formulated in accordance with the Saudi Commission’s training and examination rules and regulations.

<b>A. Annual Assessment</b>		
1. Continuous Appraisal	This assessment is conducted toward the end of each training rotation throughout the academic year and at the end of each academic year in the form of formative and summative evaluation.	1.1 Formative Continuous Evaluation 1.2 Summative Continuous Evaluation
2. End-of-year Examination	The end-of-year examination will be limited to R1, R2, and R3. The number of exam items, eligibility, and passing score will be in accordance with the commission’s training and examination rules and regulations. Examination details such as dates of the exam and blueprint are published on the commission website, <a href="http://www.scfhs.org.sa">www.scfhs.org.sa</a>	
<b>B. Board Examination (Part-I)</b>		
<p>This exam is conducted in the form of a written examination with a MCQ format, and it is held at the end of the first year. The number of exam items, eligibility, and passing score will be in accordance with the Commission’s training and examination rules and regulations.</p> <p>In addition, there will be a practical exam with slides for long and short cases, and a computer-based exam.</p>		
<b>Final In-Training Evaluation Report (FITER)</b>		
<p>In addition to the approval of completion of the clinical requirements (Trainee’s logbook) by the local supervising committee, the FITER is also prepared by the program’s directors for each resident at the end of his/her final year in residency (R4). The FITER should be completed by the program director of the hospital in which the trainee is based for their final 6 months and then submitted to the chair of the local committee.</p>		
<b>C. Board Examination (Part-II)</b>		
<p>The final Saudi Board Examination comprises two parts:</p> <ul style="list-style-type: none"> <li>- Written Examination</li> <li>- Practical and Oral Examination</li> </ul> <p>Examination details such as dates of the exam and blueprint are published on the commission website, <a href="http://www.scfhs.org.sa">www.scfhs.org.sa</a></p>		
<b>D. Certification</b>		
<p>A certificate of training completion will only be issued upon the resident’s successful completion of all program requirements. Candidates passing all components of the final specialty examination are awarded the “Saudi Board in Oral Pathology and Oral Medicine” certificate.</p>		

## Tools and Methods of Assessment

Multiple assessment methods are used to capture all or most aspects of the required competencies. For knowledge, concepts, and application of knowledge ('Knows' and 'Knows How' of Miller's conceptual pyramid for clinical competence), context-based MCQ, extended matching item, and short answer questions are implemented. For 'Shows How', multi-station OSCE and performance-based assessment ('does') mini-CEX and DOPS are used. Alternatively, clinical work sampling and the portfolio or logbook are used.

Tool of Assessment	Rationale	Check list items
Context-based MCQs and Extended Matching Items	For assessment of application of knowledge and concepts	
Written Assignment		
Objective Structured Clinical Examination (OSCE)	The OSCE consists of multiple stations where each candidate is asked to perform a defined task, such as taking a focused history or performing a focused clinical examination of a particular system. A standardized marking scheme specific for each case is used. It is an effective alternative to unstructured short cases.	<ol style="list-style-type: none"> <li>1. Patient care <ul style="list-style-type: none"> <li>- Interviewing; counseling and educating patients and families; physical examination; preventive health service; informed decision making</li> </ul> </li> <li>2. Interpersonal and communication skills <ul style="list-style-type: none"> <li>- Creation of therapeutic relations with patients; listening skills</li> </ul> </li> <li>3. Professionalism <ul style="list-style-type: none"> <li>- Respectful, altruistic; sensitive to cultural, age, gender, and disability issues</li> </ul> </li> <li>4. Medical knowledge <ul style="list-style-type: none"> <li>- Investigative and analytic thinking; knowledge and application of basic science</li> </ul> </li> </ol>
Mini-Clinical Evaluation Exercise (mini-CEX)	The Mini-CEX is a rating scale developed to assess six core competencies of residents.	<ol style="list-style-type: none"> <li>1. Medical interviewing skills</li> <li>2. Physical examination skills</li> <li>3. Humanistic qualities/professionalism</li> <li>4. Clinical judgment</li> <li>5. Counseling skills</li> <li>6. Organization and efficiency</li> </ol>
Direct Observation of Procedural Skills (DOPS)	DOPS is a structured rating scale for assessing and providing feedback on practical procedures.	<ol style="list-style-type: none"> <li>1. Demonstrates understanding of indications, relevant anatomy, technique of procedure</li> <li>2. Obtains informed consent</li> <li>3. Demonstrates appropriate preparation pre-procedure</li> <li>4. Demonstrates situational awareness</li> <li>5. Aseptic technique</li> <li>6. Technical ability</li> <li>7. Seeks help where appropriate</li> <li>8. Post-procedure management</li> <li>9. Communication skills</li> <li>10. Consideration of patient</li> <li>11. Overall ability to perform procedure</li> </ol>
Multiple Source Feedback (360 assessment method)	The 360-degree evaluation assesses general aspects of competence, including communication skills, clinical abilities, medical knowledge, technical skills, and teaching abilities.	<ol style="list-style-type: none"> <li>1. Caring behaviors</li> <li>2. Effective questioning and listening</li> <li>3. Effective counseling</li> <li>4. Demonstrates ethical behavior</li> <li>5. Sensitive to age, culture, gender, and/or disability</li> <li>6. Communicates well with staff</li> <li>7. Works effectively as team member and</li> </ol>

Tool of Assessment	Rationale	Check list items
		leader 8. Works to improve system of care 9. Participates in therapies and patient education 10. Advocates for quality 11. Committed to self-assessment and uses feedback 12. Teaches effectively
Portfolios and Logbooks	Portfolios/Logbooks should contain evidence of how trainees fulfill tasks and how their competence is progressing. Portfolios may be digital or paper-based, reporting on work done, feedback received, progress made, and plans for improving competence.	Should be completed for each rotation throughout the program.

## Trainee Support

### A. Guidelines for Mentor

The mentor is an assigned faculty supervisor responsible for the professional development of residents under his/her responsibility. Mentoring is the process by which a mentor provides support to the resident. A mentee is the resident under the supervision of the mentor.

The needs: Post-graduate residency training is a formal academic program for residents to develop their full potential as future specialists. This is potentially the last substantial training program before they become an independent specialist. However, unlike the undergraduate program with a well-defined structure, residency training is inherently less organized. Residents are expected to be in a clinical setting, delivering patient care. They are rotated through multiple sites and sub-specialties.

The design of the residency program, while necessary for good clinical exposure, also lacks an opportunity for developing a long-term professional relationship with a faculty member. Residents may feel lost without proper guidance. Moreover, without a long-term longitudinal relationship it is extremely difficult to identify a struggling resident. They also struggle to develop professional identity with the home program, especially when they are rotating away in other disciplines for a long duration.

Finally, the new curriculum has a more substantial work-based continuous assessment of clinical skills and professional attributes. Residents are expected to maintain a logbook, complete mini-CEX and DOPS, and chart meticulously their clinical experience. This requires a robust and structured monitoring system in place with clear accountability and defined responsibility.

Nature of Relationship: Mentorship is a formal yet friendly relationship. This is a partnership between the mentor and resident (i.e. the mentee). Residents are expected to take the mentoring opportunity seriously and help the mentor to achieve the outcomes. The mentor should receive a copy of any adversarial report by other faculty members about the resident.

**B. Goals**

- 1) Guide residents towards personal and professional development through continuous monitoring of progress
- 2) Early identification of struggling residents as well as high achievers
- 3) Early detection of residents who are at risk of emotional and psychological disturbance
- 4) Provide career guidance

**C. Roles of the Mentor**

The primary role of the mentor is to nurture a long-term professional relationship with the assigned residents. The mentor is expected to provide an ‘academic home’ for the residents so that they can feel comfortable in sharing their experiences, expressing their concerns, and clarifying issues in a non-threatening environment. The mentor is expected to keep sensitive information about the residents in confidence.

**D. SCFHS Guidelines for Mentoring**

The mentor is also expected to make appropriate and early referral to the Program Director or Head of the Department if s/he determines a problem that would require expertise or resources that are beyond his/her capacity. Example of such a referral might include:

- Serious academic problems
- Progressive deterioration of academic performance
- Potential mental or psychological issues
- Personal problems interfering with academic duties
- Professional misconduct, etc.

**However, the following are NOT expected roles of a mentor:**

- Providing extra tutorials, lectures, or clinical sessions
- Providing counselling for serious mental and psychological problems
- Being involved in residents’ personal matters
- Providing financial or other material support

**E. Roles of the Resident**

- Submit resume at the start of the relationship
- Provide mentor with a medium (1–3 years) and longer term (3–7 years) goal
- Takes primary responsibility in maintaining the relationship
- Schedule monthly meeting with mentor in a timely manner; do not request for ad hoc meeting except in emergency
- Recognize self-learning as an essential element of residency training
- Report any major events to the mentor in a timely manner

**F. Who can be a Mentor?**

Any faculty member, consultant grade and above, within the residency program can be a mentor. There is no special training required.

**G. Number of Residents per Mentor**

As a guideline, each mentor should not have more than 4–6 residents. As much as possible, the residents should come from all years of training. This will create an opportunity for the senior residents to work as a guide for the junior residents.

**H. Frequency and Duration of Engagement**

The recommended minimum frequency is once every 4 weeks. Each meeting might take 30 minutes to 1 hour. It is also expected that once assigned, the mentor should continue with the same resident preferably for the entire duration of the training program, or at least for two years.

**I. Tasks during the Meeting**

The following are suggested tasks to be completed during the meeting:

- Discuss the overall clinical experience of the residents with particular attention to any concerns raised
- Review logbook or portfolio with the residents to determine whether the resident is on target to meet the training goals
- Revisit earlier concerns or unresolved issues, if any
- Explore any non-academic factors seriously interfering with training
- Document excerpts of the interaction in the logbook

**J. Mandatory reporting to Program Director or Head of the Department**

- Consecutive absence from three scheduled meetings without any valid reasons
- Unprofessional behaviour
- Consistent underperformance in spite of counselling
- Serious psychological, emotional, or health problems that may potentially cause unsafe patient care
- Any other serious concerns by the mentor

## APPENDICES

## Appendix 1

## Topics of Advanced Oral Pathology &amp; Medicine Seminars

R2	R3	R4
1. Introduction to oral pathology	1. Introduction to clinical oral medicine	1. Introduction to clinical oral medicine
2. Clinical research, study design/phases, IRB, FDA approval	2. Pigmented lesions I: Oral lesions	2. Cancer treatment complications (short-term )
3. Hematology/Oncology I: Leukemia	3. Pigmented lesions II: Associated disorders	3. Cancer treatment complications (long-term)
4. Lymph nodes: reactive/ benign. Pitfalls of lymphoma diagnoses (IHC, & ancillary tests)	4. Salivary gland disease I: SG anatomy/physiology, saliva, diagnostics	4. HIV
5. Hematology/Oncology II: Solid tumors post-SCT Hematology/Oncology III: Stem cell transplantation, GVHD	5. Salivary gland disease II: neoplasia	5. Antibiotics/ antimicrobials
6. Soft Tissue lesions; infections and Tumors I	6. Salivary gland disease III: Infections, inflammatory conditions	6. Case review
7. Soft Tissue lesions; infections and Tumors II	7. Case review	7. Complementary and Alternative medicine
8. Case review	8. Autoimmune I: SLE, Sjögren syndrome, RA, etc.	8. Endocrine I: Diabetes mellitus
9. Cardiovascular disease	9. Autoimmune II: Therapies (immunosuppressive, biological)	9. Endocrine II: Thyroid, parathyroid and pituitary disorders
10. Hematology I: Bleeding disorders	10. Transplantation	10. Case review
11. Hematology II: Hemoglobinopathies	11. Case review	11. Pain I: Review of anatomy and pathways, clinical features, patient assessment
12. Case review	12. Odontogenic cysts and tumors	12. Pain II: TMJ/TMD
13. CNS and psychiatric disorders	13. Fibro-osseous lesions (benign/malignant)	13. Pain III: Neuropathic
14. Odontogenic infections	14. Leukoplakia, PVL and other potentially malignant lesions	14. Pain IV: Headaches
15. Antiresorptive therapy in cancer	15. Case review	15. Case review
16. Case review	16. Liver diseases	16. Taste and smell disorders
17. Vesiculobullous and ulcerative I: RAS, LP, Behcet	17. Renal/Adrenal diseases	17. Fungal infections
18. Vesiculobullous and ulcerative II: PV, BP, MMP, paraneoplastic	18. Cancer I: Cancer biology (introduction to the cancer problem)	18. Viral infections (1): Herpes simplex virus 1/2
19. Vesiculobullous and ulcerative III: EM, SJS, TEN	19. Cancer II: Common adult/pediatric cancers	19. Viral infection (2): all others
20. Granulomatous diseases I: OFG, IBD, vasculitis	20. Cancer III: Treatment of cancer	20. Principles of nutrition (with emphasis on oral health and orofacial diseases)
21. Granulomatous diseases II: sarcoidosis, TB, cat scratch, leprosy, syphilis	21. Cancer (4): Head and neck SCC	21. Case review
22. Case review	22. Case review	

**Appendix 2**

**Course Distribution**

R1										
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
Orientation	Module 1.1 Basic Sciences								1.1.8. Scientific Research, Biostatistics and informatics	
	Oct//					Jan//			May//	
	Dec //					Apr//			Jun//	
	1.1.2. Oral Biology and Genetics					1.1.1. Head and Neck Anatomy			1.1.8. Scientific Research, Biostatistics & Informatics	
	1.1.3. General Pathology					1.1.4. Hematology				
	1.1.6. Physiology					1.1.5. Pharmacology and Therapeutics				
	1.1.7. Oral and Maxillofacial Radiology									
	Self-Learning: 6 hours/week									
	Oral Medicine Grand Rounds / Oral Medicine and Pathology Seminar									

APPENDICES

R2										
Orientation	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
	Module 1.3.1. Surgical Pathology (General)						Module 1.3.3 Cytopathology	Module 1.3.4 Laboratory Medicine	Module 1.3.5 Autopsy	
	Oct //						Apr//	May//	Jun//	
	Mar //						Apr//	May//	Jun//	
	Self-Learning: 3 hours/week									
Oral Medicine Grand Rounds / Oral Medicine and Pathology Seminar / Journal Club										

R3											
Orientation	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
	Module 1.2.3. Oral Radiology	Module 1.2.4 H & N Radiology	Module 1.2.5 OMFS	Module 1.2.6 Internal Medicine	Module 1.2.7 Dermatology	Module 1.2.8 Hematology/Oncology	Module 1.2.9 ORL & H & N Oncology	Module 1.2.10 Oncology	Module 1.2.11 Infectious Diseases	Module 1.2.12 Rheumatology, Allergy & Immunology	Module 1.2.13 Pain & Headache Clinic
	Sept//										
	Apr//										
	Self-Learning: 3 hours/week										
Oral Medicine Grand Rounds / Oral Medicine and Pathology Seminar/ Journal Club											
Module 1.2.2. Oral Medicine Clinic											
Module 1.3.2. Surgical Pathology (Oral and Maxillofacial)											



APPENDICES

R4										
Orientation	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
	Module 1.2.1 Oral Medicine & Dentistry Consult Service									
	Module 1.2.2 Oral Medicine Clinic									
	Module 1.3.2 Surgical Pathology (Oral and Maxillofacial)									
	Oral Medicine Grand Rounds / Oral Medicine and Pathology Seminar/ Journal Club									
	Research									
	Self-Learning: 3 hours/week									

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