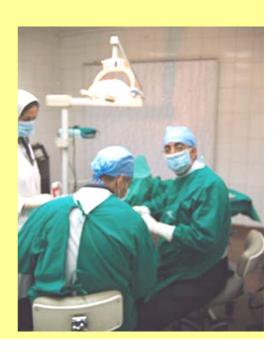
# BECOMING A DENTIST



#### **FORWARD**



Welcome to our new dental students, tomorrow's dentists. A dentist, also known as a dental surgeon, is a surgeon who specializes in dentistry—the diagnosis, prevention, and treatment of diseases and conditions of the oral cavity. Dentistry offers many rewarding career options combining science and technology with helping people enhance and maintain their oral health. On the other hand, dental education is very unique, even among the medical education. The practical and clinical skills are a major essential part of undergraduate dental education.

The information in this booklet will acquaint you with different aspects of dental education and of career options dentistry can offer. You'll discover why dentistry is truly a unique career.

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#### WHY BE A DENTIST?

American Dental Education Association (ADEA),
The Voice of Dental Education
www.adea.org

here are as many reasons to be a dentist as there are dentists. It is a career that provides plenty of rewards and challenges as well as an opportunity to help people and make communities healthier places.

#### People choose to become dentists because they can...

- Restore the oral health and transform the lives of their patients: Whether it is
  providing preventative care, delivering dental restorative procedures, eliminating
  pain or correcting dento-facial esthetics, often, in a single visit, the dentist can experience the satisfaction, privilege and joy of positively transforming a patient's life by
  restoring oral health.
- Be independent in their careers Dentists have the opportunity to own their own businesses right after dental school. This gives them a lot of independence and allows them to set their own business and career goals.
- Earn a good salary. The average net income for an independent private general
  practitioner who owned all or part of his or her practice is among the higher end of
  alary scale in any country.
- Choose from a number of career options. While 80% of dental school graduates go
  into private practice in general dentistry, the profession offers a wide range of clinical, research and academic opportunities to both new graduates and dentists at any
  stage of their careers.
- Maintain a flexible lifestyle. Because there are a number of different career and
  practice options in dentistry, practitioners can choose what kind of lifestyle they will
  lead and often what hours and days they will work.
- Shape the future of oral health care. In addition to clinical practice, the dentist can also contribute significantly to the future direction of oral health care by engaging in dental education and research. Dental educators have the ability to shape the dental school curriculum and the professional role of the dentist by establishing themselves as faculty members in dental education. As a dental researcher, the dentist uses the most advanced techniques and technologies and applies cutting-edge scientific findings to advance the profession forward by discovering new oral health phenomenon or seeking a resolution to a myriad of oral health issues.
- Be respected members of their communities. Dentists are highly regarded by the communities they serve for their contributions to the general health of the public as well as their drive to improve the lives of those around them.
- Exercise creativity in their daily work. Dentistry is often referred to as an art. It

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requires mastery and technique unique to the profession. Dentistry is largely based on maintaining proper oral health, but is also an aesthetically focused practice. A large part of dentistry involves restoring teeth and making a smile beautiful, one that the patient is happy to show to others.

- Work as part of a team. Although the dentist is often portrayed as the "lone practitioner," in actuality, dentistry is a team-oriented profession. Whether it is the dental team (dental hygienist, assistant and lab technician) working together with the patient to ensure the restoration and maintenance of oral health, or the dentist's role on an interprofessional team, working with other health professionals to improve overall health, the dentist receives much satisfaction as a primary team player.
- Provide benevolent care to their communities. With an annual income well above
  the average, combined with a flexible work schedule, the dentist is allowed the privilege and ability to provide oral health care to those communities and populations
  that desperately lack access and affordability.

The public's need and respect for dentists continue to grow with the increasing popular recognition of the importance of health in general and oral health in particular. The demand for dental care is expected to continue. Increases in preventive dental care, geriatric dental care, and cosmetic treatments also have contributed to growth in the demand for dental care.

# AN INTRODUCTION TO DENTISTRY

Dentistry is the branch of the healing arts and sciences devoted to maintaining the health of the teeth, gums, and other hard and soft tissues of the oral cavity and adjacent structures.

A dentist is a scientist and clinician dedicated to the highest standards of health through prevention, diagnosis, and treatment of oral diseases and conditions. The notion of dentists as those who merely "fill teeth" is completely out-of-date. Today, dentists are highly sophisticated health professionals who provide a wide range of care that contributes enormously to the quality of their patients' day-to-day lives by preventing tooth decay, periodontal disease, malocclusion, and oral-facial anomalies.

These and other oral disorders can cause significant pain, improper chewing or digestion, dry mouth, abnormal speech, and altered facial appearance. Dentists are also instrumental in early detection of oral cancer and systemic conditions of the body that manifest themselves in the mouth, and they are at the forefront of a range of new developments in cosmetic and aesthetic practices.

Furthermore, the dental profession includes not only those who provide direct patient care, but those who teach, conduct research, and work in public and international health. All of these individuals are vital links in the health care delivery system, necessary to promote social and economic change as well as individual well-being. Dentists understand the importance of and have made contributions to serving both disadvantaged populations and populations with limited access to dental care. It is not surprising, then, that the dental profession is very involved in influencing current health care reform efforts to ensure that the importance of oral health is understood and that oral health care is available to everyone.

Faculty members in schools of dental medicine play an especially critical role because they influence an entire field of study and contribute to shaping the profession. Dental schools are responsible for bringing new discoveries into the classroom; they stimulate students' intellect and help determine the future of oral health care through dental medicine.

Opportunities for all individuals interested in becoming dentists are growing because of the intense national need to improve access to general health and oral care and the continuously increasing demand for dental services. Consequently, in response to the clear need for dentists to serve all citizens, dental schools are strengthening their efforts to recruit and retain all highly qualified students.

#### CARFFR OPTIONS

A career in dentistry has two key components: what the dentist does and how he or she does it. The "what" refers to the specific field of dentistry in which he or she practices; the "how" refers to the type of practice itself. These components offer many options for fulfilling one's professional and personal goals. If you choose to become a dentist, making decisions about these components will allow you to develop a career that suits your professional interests and fits your lifestyle. The following overviews of clinical fields and professional and research opportunities should help you decide.

#### CLINICAL FIFLDS

here are many clinical fields in dentistry. While most dentists in private practice are general practitioners, others choose to specialize in one particular field. Following is a brief description of the procedures dentists perform in each field, whether education beyond dental school (that is, postdoctoral or specialty education) is required and the length of programs.

#### 1. General Dentistry

General dentists use their oral diagnostic, preventive, surgical, and rehabilitative skills to restore damaged or missing tooth structure and treat diseases of the bone and soft tissue in the mouth and adjacent structures. They also provide patients with programs of preventive oral health care. Postdoctoral education is not required to practice as a general dentist.

However, general practice residencies (GPR) and advanced education in general dentistry (AEGD) are available in some universities and can expand the general dentist's career options and scope of practice. The length of these general dentistry postdoctoral programs varies, but most are 12 months long.

#### 2. Dental Public Health

Individuals who enter the dental public health field are involved in developing policies and programs, such as health care reform, that affect the community at large. Advanced dental education is required.

#### 3. Endodontics

Endodontists diagnose and treat diseases and injuries that are specific to the dental nerves and pulp (the matter inside the tooth) and tissues that affect the vitality of the teeth. Advanced dental education is required.

#### 4. Oral and Maxillofacial Pathology

Oral pathologists are dental scientists who study and research the causes, processes, and effects of diseases with oral manifestations. These diseases may be confined to the mouth and oral cavity, or they may affect other parts of the body. Most oral pathologists do not treat patients directly. However, they provide critical diagnostic and consultative biopsy services to dentists and physicians in the treatment of their patients. Advanced dental education is required.

#### 5. Oral and Maxillofacial Radiology

Oral radiologists have advanced education and experience in radiation physics, biology, safety, and hygiene related to the taking and interpretation of conventional, digital, CT, MRI, and allied imaging modalities of oral-facial structures and disease. Postgraduate studies are required.

#### 6. Oral and Maxillofacial Surgery

This specialty requires practitioners to provide a broad range of diagnostic services and treatments for diseases, injuries, and defects of the neck, head, jaw, and associated structures. Advanced dental education is required.

#### 7. Orthodontics and Dentofacial Orthopedics

Orthodontists treat problems related to irregular dental development, missing teeth, and other abnormalities. Beyond "straightening teeth," orthodontists establish normal functioning and appearance for their patients. Advanced dental education is required.

#### 8. Pediatric Dentistry

Pediatric dentists specialize in treating children from birth to adolescence. They also treat disabled patients beyond the age of adolescence. Postdoctoral education is required.

#### 9. Periodontics

Periodontists diagnose and treat diseases of the gingival tissue and bone supporting the teeth. Gingival tissue includes the gum, the oral mucous membranes, and other tissue that surrounds and supports the teeth. Advanced dental education is required.

#### 10. Prosthodontics

Prosthodontists replace missing natural teeth with fixed or removable appliances, such as dentures, bridges, and implants. Advanced dental education is required.

#### Postgraduate studies

With exception of the GDP, all other specialties require a postgraduate studies. Some programs offer certificates; others are degree programs at the master's or doctoral level. Students interested in academic dentistry generally prefer degree programs.

The length of programs varies, with training lasting between 12 and 36 months. Except for oral and maxillofacial surgery, for which the program length vary from three to six years within a residency program. Students interested in academic dentistry generally prefer degree programs. ■

# PRACTICE OPTIONS AND OTHER PROFESSIONAL OPPORTUNITIES

Dentistry offers an array of professional opportunities from which individuals can choose to best suit their interests and lifestyle goals. These opportunities include the following:

#### Self-Employed in Private Practice

Traditionally, most dentists engage in private practice either by themselves in solo practice or in partnership with other dentists. Although many recent dental school graduates begin their careers in salaried or associate positions in private practice, most choose to move to practice ownership within several years. Fewer dentists participate in dental health maintenance organizations (HMOs).

#### Practice as a Salaried Employee or Associate

Dentists who are not self-employed may work as salaried employees or associates for dentists who are in private practice. Other salaried situations include working for a corporation that provides dental care. Additional salaried opportunities are in managed health care organizations, such as health maintenance organizations (HMOs).

#### **Academic Dentistry and Dental Education**

Once you are in dental school you will see firsthand some of the opportunities that are open to dentists who choose a career in dental education and academic dentistry. Many dental academicians say the chief benefit of their career is the stimulation of working with outstanding colleagues and bright young students. But another significant benefit is the variety of activities, which can include teaching in didactic, clinical, and laboratory areas; patient care in the clinic or a faculty practice; designing and conducting research; writing for journals; exploring new technologies and materials; and administration .Many dental school faculty members combine their love for teaching and research with private practice. Should you choose to start your career in private practice, don't fear that you have closed the door on academic dentistry. The vast majority of new dental faculty members each year (both full and part time) enter academic dentistry after time spent in private practice.

#### **Dental Research**

Dentists trained as researchers are scientists who contribute significantly to improving health care nationally and internationally. Many researchers are faculty members at universities; others work in governmental facilities. In addition, some dental students and practicing dentists, at various points in their careers, may decide that they would benefit from participation in a research experience. For those individuals, postdoctoral fellowships and research opportunities are available in a variety of areas and are sponsored by public and private organizations.

#### BECOMING A DENTIST

#### Service in the Governmental Facilities

Dentists in the government may serve in varied capacities. Research opportunities have been described briefly above. In addition, the military enlists dentists to serve the oral health needs of military personnel and their families.

#### **Public Health Care Policy**

Dentists who become experts in public policy may work at universities, or they may be employed in government agencies. Other dentists who are experts in public policy work with associations, such as the ADA (American Dental Association) or ADEA (American Dental Education Association) and similar non-governmental organizations all over the world, or are employed by state and nationally elected officials to help them develop laws dealing with health care issues.

#### International Health Care

Dentists engaged in international health care provide services to developing populations abroad. They may work for agencies such as the World Health Organization (WHO). The International Federation of Dental Educators and Associations (IFDEA) offers numerous resources for those interested in international oral health care.

### Final Thoughts

You should note that some of these options overlap. Dentists who work in private practice, for instance, are often self-employed, but some are salaried employees in group practices. Dental researchers, on the other hand, often work in university settings, but may be employed by the government or private industry. This list of practice options is not exhaustive because the horizons of dentistry are expanding every year, especially at this dynamic time in health care. New areas in dental service are being created with opportunities for dental health care providers in practice, industry, government, dental societies, national scientific organizations, and educational institutions.

# ADEA STATEMENT ON PROFESSIONALISM IN DENTAL EDUCATION

he American Dental Education Association (ADEA) is committed to developing and sustaining institutional environments within the allied, undergraduate, and postgraduate dental education community that foster academic integrity and professionalism. Through its work, the Task Force sought to identify and clarify those personal and institutional values and behaviors that support academic integrity and professionalism in dental education and that are aligned with the existing values and codes of the dental, allied dental, and higher education professions.

The Task Force acknowledges and respects that each academic dental education institution has its own unique culture, institutional values, principles and processes, and in some cases, codes of conduct for institutional members. The Task Force hopes to provide guidance for individual and institutional behavior within dental education, and in so doing supports professionalism across the continuum of dental education and practice.

All the statements phrase and implementation should be in alignment with ADA Principles of Ethics and code of professional conduct, American Dental Hygienists Association (ADHA) Code for Dental Hygienists and American Student Dental Association (ASDA) code of ethics.

#### VALUES DEFINING PROFESSIONALISM IN DENTAL EDUCATION

The Task Force identified and developed the following six values-based statements defining professionalism in dental education\*:

- Competence.
- 2. Fairness.
- 3. Integrity.
- Responsibility.
- Respect.
- Service-mindedness. ■

<sup>\*</sup> This document was partially modified the reader can refer to the original document,

<sup>&</sup>quot;ADEA Statement on Professionalism in Dental Education" as Approved by the 2009 ADEA House of Delegates. www.adea.org

# OF VALUES

### Competence

Acquiring and maintaining the high level of special knowledge, technical ability, and professional behavior necessary for the provision of clinical care to patients and for effective functioning in the dental education environment...

To fulfill this concept the oral health professionals should commit to the following

- Keep current Knowledge of oral health care (having acquired the unique knowledge, skills, and abilities required for effective provision of clinical care to patients);
- Maintain knowledge about how people learn, as well as, skills for effective pedagogy (including developing curriculum and assessments).
- Keep knowledge and commitment of ethical principles and professional values
- Lifelong commitment to maintain skills and knowledge current and up-to-date.
- Modeling appropriate values as both an educator and a dental professional.
- Developing ability to communicate effectively with patients, peers, colleagues, and other professionals.
- Recognizing the limits of one's own knowledge and skills (knowing when to refer); and recognizing and acting upon the need for collaboration with peers, colleagues, allied professionals, and other health professionals.
- Recognizing the need for new knowledge (supporting biomedical, behavioral, clinical, and educational research) and engaging in evidence-based practice.

#### **Examples:**

#### For students:

Learning oral health care is a top priority. Develop the habits and practices of lifelong learning, including self-assessment skills. Accept and respond to fair negative feedback about your performance (recognize when you need to learn). Learn and practice effective communication skills. Know the limits of your knowledge and skills and practice within them; learn when and how to refer.

#### For faculty:

Engage in lifelong learning and evaluate and enhance your abilities in this area; model continuous professional development in oral health care and pedagogy. Ensure curricular materials are current and relevant. Model effective interactions with patients, colleagues, and students; accept and respond to constructive criticism about your performance (recognize when you need to learn). Know the limits of your skills and practice within them; model how and when to refer; acknowledge and act on the need for collaboration.

#### For researchers:

Generate new knowledge. Engage in lifelong learning and evaluate and enhance your abilities in this area; model continuous professional development. Model effective interactions with patients, colleagues, and students; accept and respond to fair negative feedback about your performance (recognize when you need to learn).

#### For administrators and institutions:

Set high standards. Learn and practice effective self-assessment skills; accept and respond to fair negative feedback (recognize the need for institutional learning and address it); acknowledge and act on the need for collaboration. Support the learning needs of all members of the institution and encourage them to pursue lifelong learning.

### Fairness

Demonstrating consistency and even-handedness in dealings with others.■

To fulfill this concept the oral health professionals should commit to the following

- Consideration of how to best distribute benefits and burdens (to each an equal share, to each according to need, to each according to effort, to each according to contribution, to each according to merit are some of the possible considerations);
- Encompasses even handedness and consistency; includes setting process standards, striving for just consideration for all parties, ensuring consistency and transparency in application of processes (following the rules) while recognizing that different outcomes are possible, transparency of process, and calibration; consistent, reliable, and unbiased evaluation systems;
- Commitment to work for access to oral health care services for underserved populations.

#### **Examples:**

#### For students:

Follow institutional rules and regulations. Promote equal access to learning materials for all students and equal access to care for the public.

#### For faculty:

Use appropriate assessment and evaluation methods for students; view situations from multiple perspectives, especially those that require evaluation; provide balanced feedback to students, colleagues, and the institution. Use evidence-based practices. Promote equal access to oral health care.

#### For researchers:

Set high standards for the conduct of research and use unbiased processes to assess research outcomes. Generate data to support evidence-based practice and education.

#### For administrators and institutions:

Set high standards and ensure fair, unbiased assessment and evaluation processes for all members of the institution, including applicants to educational programs. Ensure that institutional policies and procedures are unbiased and applied consistently; ensure transparency of process. Provide leadership in promoting equal access to care for the public.

## Integrity

Being honest and demonstrating congruence between one's values, words, and actions. ■

To fulfill this concept the oral health professionals should commit to the following

- Encompasses concept of wholeness and unity; congruence between word and deed;
- representing one's knowledge, skills, abilities, and accomplishments honestly and truthfully;
- · devotion to honesty and truthfulness,
- · keeping one's word, meeting commitments;
- dedication to finding truth, including honesty with oneself; willingness to lead an examined life; willingness to engage in self-assessment and self-reflection;
- willingness to acknowledge mistakes;
- commitment to developing moral insight and moral reasoning skills;
- recognizing when words, actions, or intentions are in conflict with one's values and conscience and the willingness to take corrective action;
- dedication and commitment to excellence (requires more than just meeting minimum standards), making a continual conscientious effort to exceed ordinary expectations;
- encompasses fortitude and willingness to suffer personal discomfort, inconvenience, or harm for the sake of a moral good.

#### **Examples:**

#### For students:

Strive for personal and professional excellence. Take examinations honestly; make entries in patients' records honestly.

#### For faculty:

Strive for personal and professional excellence in teaching, practice, research, or all of these. Represent your knowledge honestly.

#### For researchers:

Strive for personal and professional excellence. Report research outcomes honestly.

#### For administrators and institutions:

Strive for personal, professional, and institutional excellence. Use appropriate outcomes measures and acknowledge openly when improvements need to be made. Ensure institutional systems and structures are honest, open, and respectful and do not create undue conflicts.

# Responsibility

Being accountable for one's actions and recognizing and acting upon the special obligations to others that one assumes in joining a profession. ■

To fulfill this concept the oral health professionals should commit to the following

- Appreciation and compliance of the special relationship of trust between oral health professionals and patients, and the profession and society. This encompasses concepts of obligation, duty, and accountability;
- Accountability requires fulfilling the implied contract governing the patient-provider relationship as well as the profession's relationship to society; includes standard setting and management of conflicts of interest.
- Moral commitment to achieve a defensible balance between self-interest and the interest of those who place their trust in us, our patients and society.
- keeping one's skills and knowledge current and a commitment to lifelong learning;
   and embracing and engaging in self-regulation of the profession.

#### **Examples:**

#### For students:

Meet commitments; complete assignments on time; make your learning a top priority. Acknowledge and correct errors; report misconduct and participate in peer review.

#### For faculty:

Continuously improve as a teacher; stay current; set high standards. Respect time commitments to others; be available to students when assigned to teach; meet commitments. Acknowledge and correct errors; report and manage conflicts of interest or commitment. Ensure that all patient care provided is in the best interest of the patient; ensure that patient care provided is appropriate and complete; protect students, patients, and society from harm. Report misconduct and participate in peer review.

#### For researchers:

Know and practice the rules and regulations for the responsible conduct of research; stay current. Meet commitments; report and manage conflicts of interest or commitment; report scientific misconduct and participate in peer review.

#### For administrators and institutions:

Continuously improve as administrators. Use appropriate institutional outcomes assessments and continuously improve institutional systems and processes; acknowledge and correct errors. Report misconduct and support institutional peer review systems. ■

### Respect

Honoring the worth of others. ■

To fulfill this concept the oral health professionals should commit to the following

- Encompasses acknowledgment of the autonomy and worth of the individual human being and his/her belief and value system; sensitivity and responsiveness to diversity in patients' culture, age, gender, race, religion, disabilities, and sexual orientation; personal commitment to honor the rights and choices of patients regarding themselves and their oral health care,
- Obtaining informed consent for care and maintaining patient confidentiality and privacy and according the same to colleagues in oral health care and other health professions, students and other learners, institutions, systems, and processes.
- Includes valuing the contributions of others, inter-professional (oral and allied health care providers) and appreciating their effort.
- Acknowledging the different ways students learn and appreciating developmental levels and differences among learners.
- Maintaining vigilance about protecting persons from inappropriate over- or under treatment, abandonment, or both.

#### **Examples:**

#### For students:

Develop a nuanced understanding of the rights and values of patients; protect patients from harm; support patient autonomy; be mindful of patients' time and ensure timeliness in the continuity of patient care. Keep confidences; accept and embrace cultural diversity; learn cross-cultural communication skills; accept and embrace differences. Acknowledge and support the contributions of peers and faculty.

#### For faculty:

Model valuing others and their rights, particularly those of patients; protect patients from harm; support patient autonomy. Accept and embrace diversity and difference; model effective cross-cultural communication skills. Maintain confidentiality of student records; maintain confidentiality of feedback to students, especially in the presence of patients and peers.

#### For researchers:

Protect human research subjects from harm; protect patient autonomy. Accept, understand, and address the developmental needs of learners. Acknowledge and support the work and contributions of colleagues.

#### For administrators and institutions:

Recognize and support the rights and values of all members of the institution; accept and embrace cultural diversity and individual difference; model effective cross-cultural communication skills.

### Service-mindedness

Acting for the benefit of the patients and the public we serve, and approaching those served with compassion.■

To fulfill this concept the oral health professionals should commit to the following

- Encompasses beneficence (the obligation to benefit others or to seek their good as
  well as the primacy of the needs of the patient or the public, those who place their
  trust in us) the patient's welfare, not self-interest, should guide the actions of oral
  health care providers.
- Also includes compassion and empathy; providing compassionate care requires a sincere concern for and interest in humanity and a strong desire to relieve the suffering of others; empathic care requires the ability to understand and appreciate another person's perspectives without losing sight of one's professional role and responsibilities; extends to one's peers and co-workers.
- The expectation that oral health care providers serve patients and society is based on the autonomy granted to the profession by society.
- Commitment of oral health care providers to serve the profession is required in order for the profession to maintain its autonomy. The orientation to service also extends to encouraging and helping others learn, including patients, peers, and students.
- Dental education institutions are also expected to serve the oral health needs of society not only by educating oral health care providers, but also by being collaborators in solutions to problems of access to care.

#### **Examples:**

#### For students:

Contribute to and support the learning needs of peers and the dental profession. Recognize and act on the primacy of the well-being and the oral health needs of patients and society in all actions; provide compassionate care; support the values of the profession. Volunteer to work for the benefit of patients, society, colleagues, and the profession to improve the oral health of the public.

#### For faculty:

Model a sincere concern for students, patients, peers, and humanity in your interactions with all; volunteer to work for the benefit of patients, society, colleagues, and the profession to improve the oral health of the public. Model recognition of the primacy of the needs of the patients and society in the oral health care setting and, at the same time, support the learning needs of students. Contribute to and support the knowledge base of the profession to improve the oral health of the public.

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#### For researchers:

Generate new knowledge to improve the oral health of the public; contribute to and support the learning needs of students, colleagues, and the dental profession. Model the values of and service to the dental profession and to relevant scientific and research associations; volunteer to serve the public and the profession; engage in peer review.

#### Administrators and institutions:

Recognize and act on opportunities to provide oral health care for underserved populations. Encourage and support all members of the institution in their service activities; provide leadership in modeling service to the profession and the public. ■

### **Dental Education**

he purpose of undergraduate dental education is to produce a dentist who has demonstrated, on graduation, that he or she has met the outcomes required for registration with the General Dental Council (GDC).

#### **DURATION AND STRUCTURE OF THE PROGRAMME**

School of dentistry, College of Health Science, Moi University provides "BACHELOR OF DENTAL SURGERY (BDS)" Program. The dental program is organized into five academic years. Each of them is divided into three terms. The majority of the basic dental and biomedical courses are covered in first and second academic sessions. In the third academic year the student is introduced to the clinical dental education. In the fourth and fifth academic years all dental courses are clinical courses and the students carry on clinical procedures under the staff supervision. The curriculum adopted the problem based learning system as the mean method of delivery in addition to field attachment and out-reaches. The candidate should complete the program in a period not less than five years and not more than eight years.

#### **OBJECTIVES:**

- To explain the principles of medical and dental education and the concept of continuous professional development.
- 2. To describe the scientific concepts and principles of understanding of normal structure of the oral and maxillofacial region and other systems of the human body.
- 3. To describe the etiology, mechanism, diagnosis and management of common oral and maxillofacial diseases as well as the predisposing factors and prevention.
- 4. To describe the use of information and communication technology in different aspect of dentistry.
- 5. To demonstrate basic principles of research.
- 6. To exhibit oral and written communications skills, including presentation of clinical and scientific information and communication with patients, families and colleagues.
- 7. To understand the principles of dental ethics and the code of professional conduct.
- 8. To evaluate own performance, plan and implement own education for the maintenance and further development of own knowledge, skills and attitude.

#### LEARNING OUTCOMES:

At the end of the program the graduates shall be able to achieve the following: -

- Apply the knowledge of core concepts and principles of basic biomedical and social sciences.
- 2. Exhibit good clinical judgment and reasoning.
- 3. Practice medicine in a community/population context and contribute to the preven-

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- tion of health problems, promotion and maintenance of oral and general health and rehabilitation.
- 4. Manage common and other oral health disorders nationally, within the region and internationally
- 5. Carry out research activities and document their findings.
- 6. Communicate effectively in a culturally responsive manner with patients, families, other members of health care teams and other stakeholders.
- 7. Exhibit high ethical and professional standards and behavior.
- Demonstrate knowledge and understanding of the medical, legal and ethical considerations affecting the roles of dental and related health care personnel and their responsibilities in respect to health and safety.
- Demonstrate skills of self-directed and life-long learning incorporating the practice of evidence-based medicine.
- 10. Provide leadership and work collaboratively in multi-professional teams to continuously improve the quality of care and advocate for patient's rights. ■

# IN DENTAL SCHOOL

o achieve the previously mentioned objectives and learning outcomes you, as an undergraduate dental student, are required to study and satisfactory passes the following core courses in academic years (BDS) I to V.

#### Academic Year I

#### Introduction to biomedical sciences.

This course aims to introduce the student to the different aspects of biomedical science courses. The course prepares the students with the principles of studying the biomedical sciences.

#### **Neuro-locomotor System**

The purpose of this integrated course is to equip the student with adequate knowledge about anatomy, development, physiology and biochemistry of neurolocomotor system.

#### Cardio-Respiratory System.

The purpose of this integrated course is to equip the student with adequate knowledge about anatomy, development, physiology and biochemistry of Cardiovascular system.

#### **Endocrine, Reproductive and Urinary System**

The purpose of this integrated course is to equip the student with adequate knowledge about anatomy, development, physiology and biochemistry of Endocrine, Reproductive and Urinary Systems system.

#### Digestive system, Nutrition and Metabolism

The purpose of this integrated course is to equip the student with adequate knowledge about anatomy, development, physiology and biochemistry of digestive system, nutrition and metabolism to become capable to study and successfully pass the forgoing advanced clinical courses.

#### Haemopiotic system and Body Fluids

The purpose of this integrated course is to equip the student with adequate knowledge about anatomy, development, physiology and biochemistry of Haemopoitic and tissue fluids to become capable to study and successfully pass the forgoing advanced clinical courses.

#### **Human Dentition.**

The purpose of this integrated course is to equip the dental student with adequate knowledge about anatomy, morphology, chronology and physiology of human dentition.

In addition to this courses there are other courses that aim to equip the student with important medico-social information and other skills. These skills are mainly important to introduce the student to different options and methods of social health care services. For more information refer to school of dentistry undergraduate curriculum.

#### **ACADEMIC YEAR II**

#### Microbiology and immunology

To introduce the dental students to the science of microorganisms and to give them an understanding of microbial life, behaviour and interaction with the human immune system.

#### Pharmacology

To acquaint the dental students with working knowledge in the field of pharmacology. They cover areas of drug grouping and composition, mode of action, drug interaction and clinical pharmacology as related to dentistry.

#### General and systemic pathology.

This course will provide the dental students with knowledge concerning the reaction of human body to pathological conditions, control and prevention of different diseases. Also the student will be equipped with the basic techniques / procedures used in investigation of clinical problems.

#### **Oral Biology**

To equip students with adequate knowledge about anatomy, histology, embryology and physiology of the oral and paraoral structures that are essential for the forgoing courses.

#### **Dental materials**

To acquaint the dental student with the composition, properties and methods of manipulation of dental materials.

#### **ACADYMIC YEAR III**

#### Technology of operative dentistry

To introduce the dental student to the art and science of operative dentistry and give them the understanding of diagnosis, prevention, treatment, and prognosis of defects in tooth structure, as well as the principles of cavity preparation, and performing different teeth cavities preparation.

#### Technology of prosthetic dentistry

To introduce the dental student to the art and science of prosthetic and give them the understanding of diagnosis, management of replacing missing teeth.

#### BECOMING A DENTIST

#### Technology of crown and bridge

To introduce the dental student to the art and science of crown and b ridge and give them the understanding of diagnosis, treatment planning and prognosis of replacing missing teeth using fixed prosthesis

#### **Oral pathology**

To introduce the dental students to the field of pathology and give them the understanding of clinical and histopathological diagnosis, principles of treatment of pathological conditions that affect dental, oral and paraoral structures.

#### Infection control in dental practice

To introduce the student to the methods of infection control in dental practice, including methods of disease transmission and universal precautions for infection control in the dental clinic.

#### General medicine and dermatology

To equip the dental students with principles of medical history taking and examination, as well as, diagnosis management of medical and dermatological pathological conditions that are relevant to oral health.

#### General surgery, ENT and ophthalmology

To introduce the dental students to the general principles of surgery and infections, trauma and neoplasm of the ear, nose, pharynx and eye that are relevant to dental practice

#### Ethics and medico-legal issues

To introduce the dental students to the code of professional conduct and the medico legal aspect of dental practice.

#### ACADYMIC YEARS IV and V

#### Clinical Periodontology-I and II

To equip the dental students with knowledge and skills about diagnosis, prevention and management of pathological condition the affect the periodontum.

#### **Oral Surgery and Local Anesthesia**

To introduce the dental student **to** principles and fundamentals of oral surgery. To equip him with comprehensive knowledge and skills for local anaesthesia and minor oral surgical procedures.

#### Operative dentistry-I and II

To equip the dental student with knowledge and skills to deal with treatment of caries, the causes, discolored and malformed teeth, as well as, management of tooth fractures.

#### Prosthetic dentistry-I and II

To enable the dental students to handle prosthetic patients and perform simple clinical and dental laboratory procedures in order to construct a removable partial or complete dental prosthesis.

#### Crown and bridge-I and II

To equip th3 dental student with knowledge and skills to diagnose, treatment plane and treatment of patients with missing teeth and perform simple clinical preparation and dental laboratory procedures.

#### Endodontic-I and II

To introduce the dental student to the art and science of endodontics and practice encompass the biological and clinical sciences related to the normal, traumatized and diseased dental pulp and associated periradicular tissues.

#### Pediatric dentistry and orthodontics- I and II

The student will be equipped with knowledge and skills for diagnosis and management of common dental disorders of children. In addition the dental student will be introduced dento-oro-facial growth disturbances diagnosis and management.

#### **Oral Medicine and therapeutics**

To equip the dental students with knowledge and skills that enable them to deal with diagnosis and management of medical condition affection the oral and paraoral structures, as well as, the oral manifestation of systemic disease.

#### Oral radiology and imaging

To introduce the dental students to the art of imaging of the dental, oral and paraoral structures. To equip them with comprehensive knowledge in imaging interpretation.

In addition to these courses there are other courses that can be different in different dental schools and universities. These courses are essentially for improving personal skills of the student in different personal aspects like communication skills, medico-legal issues, emedicine and e-learning and community service management. 

■



he PYRAMIDS AWARD for best performing students was established as part of the continuous cooperation between MOI Universities and Egyptian Universities. Memorandum of understanding between MOI University and number of Egyptian Universities was established at 2008. These include collaboration in areas of staff and students training and exchange as well as joined research projects. Cooperation with nongovernmental organization was started in 2012. Egyptian Association of Oral and Maxillofacial Surgeons (EAMOS), Faraha Integrated Dental Clinics (FIDC) and Prof. M. Lotfy sponsor PYRAMIDS AWARD for best performing students since 2013.

**PYRAMIDS AWARD** will be given to students of school of Dentistry, School of Medicine, School of Public Health and School of Nursing. The award consist of a certificate and a cash prize. A trip to Egypt to visit some universities, for two students, is planed to take place in the future.

The vision of Pyramids Award is to encourage students to improve their performance both academically, socially and ethically, as well as, strengthen the Egyptian-Kenyan relationship

Pyramids Award aim to increase the inter-relationship activities between the people of our two countries, Egypt and Kenya. This is achieved by strengthen the bond between the students in the two countries.

#### **Terms and Conditions**

Best Performance Student" for each academic year: The student should:

- Not have any ethical or otherwise similar problems through the period of his study.
- Have the highest Weighted Total Marks\* (WTMs) for this year. (IRD courses not included)

#### "Best of the Best performance in OMS" (Dental School): The student should:

- Not have any ethical or otherwise similar problems through the period of his study.
- Have the highest WTMs in Oral Pathology (BDS III), Oral Radiology (BDS IV), Oral Surgery and Local Anaesthesia (BDS IV) and Oral and Maxillofacial Surgery (BDS V).

#### The Logo

The Arabic wards in the middle of the logo is part of sourat Al– Alaque (96) in Quran. The following is part of it: "READ IN THE name of your Lord who created, (1) Created man from an embryo; (2) Read, for your Lord is most beneficent, (3) Who taught by the pen, (4) Taught man what he did not know. (5)"

#### "Best of The Best Student" students legible for this award should:

- Not failed any course through the period of his study in the Dental/Medical school (IRD courses not included)
- Not have any ethical or otherwise similar problems through the period of his study.
- Have the highest sum of Weighted Total Marks (WTMs) in all academic years. (IRD courses not included)
- If one or more student have equal WTMs the award is given to the student how have the higher WTMs in the final year.

#### Notices:

**N.B.1:** The weighted total marks (WTMs) are the sum of the marks in each course multiplied by the number of units allocated to this course.

**N.B.2:** Students who won more than one award will be given only the cash prize of the highest award and certificate for the rest of the awards. The student next in ranking will be legible for the cash award and a certificate.

**N.B.3:** All the winners should not have any ethical or otherwise similar problems through the period of his study.

#### **List of Awards**

#### School of Dentistry:

- Best Performing Student, BDS I-IV (3000 Ksh)
- Best Performing Student, BDS V (4000 Ksh)
- Best performing students OMS (4000 Ksh)
- Best of the Best Performing Student (First 10000 Ksh, Second 5000 Ksh)

Total amount of cash prizes for dental students is 37000 Ksh.

#### School of Medicine:

- Best Performing Student, MED I-V (3000 Ksh)
- Best performing students MED VI (4000 Ksh)
- Best of the Best Performing Student (First 10000 Ksh, Second 5000 Ksh)

Total amount of cash prizes for dental students is 37000 Ksh.

#### School of Public Health:

- Best Performing Student, SPH I-IV (3000 Ksh)
- Best of the Best Performing Student (First 10000 Ksh, Second 5000 Ksh)

Total amount of cash prizes for dental students is 27000 Ksh.

#### School of Nursing:

- Best Performing Student, NUR I-IV (3000 Ksh)
- Best of the Best Performing Student (First 10000 Ksh, Second 5000 Ksh)

Total amount of cash prizes for dental students is 27000 Ksh.

#### TOTAL AMOUNT OF CASH PRIZES IS 125000 Ksh

# COLLABORATION BETWEEN MOI UNIVERSTY AND EGYPTIAN UNIVERSITIES

he collaboration was established on 2007 by a visit to the Egyptian Embassy in Nairobi. The visit was done through an invitation from the Ambassador to Prof. Richard Mebiy the VC, DVC and other members including Prof. Elbadawi as coordinator. A protocol of cooperation was signed by both sides announcing the start of a long standing and wide collaboration with number of Egyptian Universities to date.

The first MOU was signed in Eldoret with Suez Canal University on 2008 followed by a visit of a team from MOI leaded by the VC to Egypt where numbers of agreements were signed. This was followed by signing MOU with Portsaid, Alexandria and Suez Universities.

On 2010 and due to the fast growing collaboration with Alexandria University, HE the Vis President of the Republic of Kenya visited the University with a team from MOI University lead by the VC which gave a strong support to the collaboration process. On 2013, HE the Minister of Higher Education of Kenya accompanied with a team from many Kenyan Universities and MPs made another visit to Egypt and Alexandria University through the collaboration program.

Number of activities and projects took place since the beginning of the program in 2008 and here some examples:

- The Egyptian Embassy shared in the compensations with MOI University during the
  post elective indecencies in 2008 through the program.
- Training of number of doctors and nurses in the areas of Anesthesia and cardiac surgery.
- Numbers of Scholarships were offered by SCU and Alexandria University for Master and PhD degrees in different specialties, some of the students completed their degrees and are back to MOI University.
- Appointment of number of staff members at the Dental School through the program.
- The student exchange program is working very effectively for the last five years
  where students of final year from the Schools of Medicine, Dentistry and nursing
  spend around eight weeks of electives at Alexandria University. This year the number
  was around 35 students. A group od students of final year of Faculty of Medicine
  from Alexandria did their electives at MOI in the beginning of this year.
- Shared research projects were done between School of Medicine of both sides, some have been completed and others are being processed.
- Number of other projects is under discussion and study between both sides covering many areas of interest.

# DENTAL SOCITIES & ASSOCIATIONS AND OTHER PROFESSIONAL BODIES

A professional association (also called a professional body, professional organization, or professional society) is usually a nonprofit organization seeking to further interest of a particular profession, the interests of individua engaged in that profession and the public interest.

The roles of these professional associations have been variously defined: "A group of people in a learned occupation who are entrusted with maintaining control or oversight of the legitimate practice of the occupation;" also a body acting "to safeguard the public interest". Organizations which "represent the interest of the professional practitioners," and so "act to maintain their own privileged and powerful position as a controlling body."

Many professional bodies are involved in the development and monitoring of professional educational programs, and the updating of skills, and thus perform professional certification to indicate that a person possesses qualifications in the subject area.

Sometimes membership of a professional body is synonymous with certification, though not always. Membership of a professional body, as a legal requirement, can in some professions form the primary formal basis for gaining entry to and setting up practice within the profession. Many professional bodies also act as learned societies for the academic disciplines underlying their professions.

As a practical matter, most professional organizations of global scope (see List of professional organizations) are located in the United States. The U.S. has often led the transformation of various occupations into professions, a process described in the academic literature as professionalization.



he American Dental Education Association (ADEA) is The Voice of Dental Education. The mission of ADEA is to lead institutions and individuals in the dental education community to address contemporary issues influencing education, research and the delivery of oral health care for the overall health and safety of the public.

ADEA's activities encompass a wide range of research, advocacy, faculty development, meetings and communications, including the esteemed Journal of Dental Education.

www.adea.org ......www.jsentaled.org



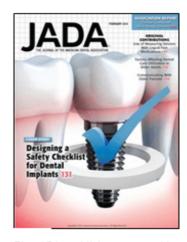
A merican dental association, representing more than 157,000 dentist members. Since then, the ADA has grown to become the leading source of oral health related information for dentists and their patients. The ADA is committed to its members and to the improvement of oral health for the public. The ADA's vision is to be the recognized leader on oral health with its mission to help all members succeed.

The ADA formally recognizes 9 specialty areas of dental practice: dental public health, endodontics, oral and maxillofacial pathology, oral and maxillofacial surgery, orthodontics and dentofacial orthopedics, pediatric dentis-

try, periodontics, prosthodontics, and oral and maxillofacial radiology.

The ADA library has an extensive collection of dental literature with approximately 33,000 books and 17,500 bound journal volumes. The ADA library also subscribes to more than 600 journal titles.

The ADA Foundation is the charitable arm of the Association. The Foundation provides grants for dental research, education, scholarships, access to care and charitable assistance programs such as relief grants to dentists and their dependents who are unable to support themselves due to injury, a medical condition or advanced age; and grants to those who are victims of disasters.



The ADA publishes a monthly journal of dental related articles named the <u>Journal of the</u> <u>American Dental Association</u>



American Association of Oral and Maxillofacial Surgeons (AAOMS) is the non-profit professional association serving the specialty of oral and maxillofacial surgery, the surgical arm of dentistry. Its headquarters are in Rosemont, Illinois.

Founded in 1918, AAOMS currently has an affiliation base of more than 9,000 fellows, members and residents in the United States, as well as 250 affiliate members from nations around the world. More than 90 percent of oral and maxillofacial surgeons in the United States belong to AAOMS. In addition to its membership, AAOMS has state component societies in each of the 50 states, the District of Columbia and the Commonwealth of Puerto Rico, and eight regional component societies.

AAOMS publishes the *Journal of Oral and Maxillofacial Surgery* and conducts the Daniel M. Laskin Award for an Outstanding Predoctoral Educator.



he American Student Dental Association (ASDA) is a national student-run organization that protects and advances the rights, interests, and welfare of students pursuing careers in dentistry. It introduces students to lifelong involvement in organized dentistry and provides services, information, education, representation and advocacy.

ASDA was established in 1971 to connect, support and advance the needs of dental students. ASDA represents 90 percent of all students from 65 U.S. dental schools. Since 2011, dental student membership has averaged more than 19,000. ASDA also welcomes hundreds of predental students each year

#### BECOMING A DENTIST



Kenya Dental Association was founded in 1977 with the objective of promoting the advancement of dental practice in Kenya. The Association has also acted as a welfare organ for Dental Practitioners as well as one of the key promoters of Oral health awareness in the country.

VISION: To be the leading organization in the development of the oral healthcare profession in Kenya

Mission: To promote the interest of oral healthcare professionals and the public in oral health matters and to set high standards of service delivery

Refer to Kenya Dental Association Principles of Ethics and Code of Professional Conduct.

www.kda.or.ke/



anzania Dental Association in acronym TDA, is a professional Association of Oral Health personnel in Tanzania. It was registered in Tanzania on the 2nd of April 1980 and its registration number is SO. 6167. TDA is affiliated to the Commonwealth Dental Association (CDA) and the World Dental Federation (FDI).

TDA has its headquarters based in Dar es Salaam currently located on the first floor of the School of Dentistry building, Muhimbili University of Health and Allied Sciences

www.tdadent.or.tz/



he Egyptian Dental Association is a free association of dentists dedicated to the advancement and betterment of scientific and social standards of dentists.

The scientific and cultural aspects are realized through holding scientific meetings at frequent intervals both in the EDA main office and in different branches of the Egyptian Dental Syndicate in various Provinces; by holding a biannual International Dental Congress in November of odd years, and by publishing a scientific journal, the Egyptian Dental Journal (EDJ) at quarterly intervals to publish scientific and clinical papers by dental researchers in Egypt and in different parts of the Arab world and the Middle East. The social aspect is realized by conducting gatherings of dentists and their families and trips and outings to various parts of the country.

The Egyptian Dental Association was established in 1937 when a group of dentists and dental educators got together and decided to establish a society for the advancement and spreading of updated scientific knowledge and practices among the growing body of Egyptian dental practitioners before higher education was made available in Egyptian Dental Schools.

The group soon founded the "Association" as a subdivision of the Egyptian Royal Medical Association, and elected Professor Amin Maher as its first president, and established its headquarters at "Daar El-Hekma" on "Kasr El-Eini" Street, the main building where the Egyptian Medical Syndicate, the Egyptian Dental Syndicate, and the Egyptian Pharmaceutical Syndicate have their headquarters.

The group soon started to hold scientific meetings and seminars to extend their knowledge and practical experience to the growing community of Egyptian General Dental Practitioners at the time.

In 1955, with the growth in Egyptian Dental Schools and their expanding staff members who started to conduct research work in their Universities, the EDA decided to establish a journal to publish the researches from the Egyptian Universities and other healthcare institutes, the first issue was published in April 1955. Then the EDA started including researches worldwide to be published.

The Egyptian Dental Association separated from the Egyptian Medical Association and became an independent entity in 1960.

In the 1970's, the EDA, in collaboration with the Federation of Arab Dentists, held their regional Congresses in Cairo in 1973 and 1975. These were then held in various other Arab Capitals, and in 1981 the EDA held their first "International Dental Congress" at the Hilton Hotel in Cairo.

#### BECOMING A DENTIST

The series of "International Dental Congresses" has continued to be held biannually in November of odd years at different venues. Starting from 1993 till 2007, the venue of the Congress was held at "Marriott Hotel" in Cairo, then in 2009, the venue was moved to the Intercontinental Hotel City Stars Cairo till now.

The EDA continues to hold lectures and seminars directed to the dental practitioners and oral & maxillofacial surgeons at regular intervals at their premises in Mat'haf El-Manial St., as well as in various provinces all over the country.

The EDA also organizes treatment caravans and social meetings and trips to various attractive as well as remote parts of the country, and has organized "Omra" trips in Ramadan from 1421H (2000 A.D.) until last year 1435H (2014 A.D.) as well as omra trip in April 2015.

www.eda-egypt.org



The

EGYPTIAN

ASSOCIATION OF

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SURGFONS

he "Egyptian Association of Oral and Maxillofacial Surgeons" (EAOMS) was established in 2000 and was accepted as a member of the International Association of Oral and Maxillofacial Surgeons in 2001. During the 3rd International Conference of EAOMS held in Cairo in 2004 the African Regional Association was established. The goal of EAOMS is to improve quality and safety of healthcare through the advancement of patient care, education and research in Oral and Maxillofacial Surgery. Toward this aim EAOMS organizes a biannual International Conference in which eminent international speakers participate. These Conferences include training courses in recent advances in technologies in the field of Oral and Maxillofacial Surgery, as well as a large commercial exhibit. EAOMS also organizes seminars in different cities in Egypt..

The mission of the Egyptian Association of Oral and Maxillofacial Surgeons is to promote, protect and advance oral and maxillofacial surgery to assure excellence for surgeons and their patients.

#### **Major Activities**

- Biannual international conference.
- Quarter annual publication of the Egyptian Journal of Oral and Maxillofacial Surgery
- Hands-on skills courses in different aspects of oral and maxillofacial surgery organized in different cities in Egypt
- Continuous professional educational programs

www.eaomsc.eg.net

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