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**Fellowship in Orthodontics & Dentofacial Orthopedics**

**Department of Preventive Dental Sciences College of Dentistry**

**Imam Abdulrahman Bin Faisal University**

**Program name:** Fellowship

**Name of the degree awarded:** Fellowship inOrthodontics & Dentofacial Orthopedics

**Objectives of the program:**

Upon completion of the Fellowship program, graduates will:

1. Be clinically competent professionals, able to practice orthodontics independently drawing on their in-depth understanding of the art and science of the specialty.
2. Be able to demonstrate an understanding of all areas of orthodontics consistent with advanced education standards.
3. Be able to integrate the basic sciences with diverse clinical experience in managing common and advanced orthodontic cases.
4. Be able to demonstrate professionalism and ethics among residents and when dealing with patients.
5. Be able to demonstrate in-depth knowledge of basic sciences behind malocclusion and tooth movement as they relate to the clinical diagnosis and treatment of occlusal problems in primary, mixed, and young permanent dentition.
6. Be able to formulate a proper treatment plan, predict its outcome, perform simple and complex orthodontic procedures, evaluate the progress of treatment, and implement proper post-orthodontic retention protocol.
7. Be able to explain the growth and development of the stomatognathic system and apply this knowledge to provide treatment aimed at allowing optimal development of this system.
8. Be able to communicate and function effectively with other health care professionals in formulating a multidisciplinary treatment plan for orthognathic cases, cleft lip and palate cases, medically compromised patients, and other craniofacial anomalies.
9. Acquire a versatile of mechanics and able to apply biomaterials science to optimize treatments that reflect patient needs.
10. Cope with the latest technology and advances in orthodontics and practice management.
11. Be able to diagnose and manage post-operative complications and orthodontic emergencies.
12. Demonstrate the expertise to design, implement, and oversee an appropriate retention protocol and patient recall program.
13. Independently access and appraise relevant scientific literature and evaluate new orthodontic treatment modalities using critical thinking skills.
14. Be able to understand the implications of scientific research conclusions for individual patients, elicit patients’ preferences, and formulate an appropriate treatment based on the gathered data.
15. Satisfy and, where possible, exceed the performance indicators created for the program learning outcomes.
16. Join local, regional, national, and international organizations in support of dentistry, in general, and orthodontics, in particular.
17. Remain engaged in research efforts independently as well as collaborate with dental generalists and specialists as well as other health professionals.
18. Adopt the philosophy of making a commitment to “life-long learning.”
19. Be able to provide clinical and didactic instruction in orthodontics for undergraduate students and young researchers.
20. Serve as role models for pre-doctoral and other Fellowship students.

 **Justification for the program’s provision:**

The rationales for the establishment of the Fellowship in Orthodontics & Dentofacial Orthopedics program can be summarized by the following points:

1. The expansion and depth of knowledge, growth in technology and breadth of clinical skills required in dentistry today has rapidly surpassed the scope of the general dental practice. As in many fields of medicine, specialization in different areas of dentistry is a requirement for the College of Dentistry to mirror the levels of education currently provided at other leading universities throughout the world.

2. As the leading institution for providing graduate training in the Eastern Province, the Fellowship in Orthodontics & Dentofacial Orthopedics program will enable the College of Dentistry to expand the levels and quality of dental services currently being provided, aid in the development and progress of other graduate-level dental programs and permit the College to provide additional interdisciplinary patient services.

3. The availability of advanced orthodontics services will reduce waiting times for patients in need of complex treatment.

4. The Fellowship in Orthodontics & Dentofacial Orthopedics program, therefore, will train generations of clinicians in the specialty and address any shortage of orthodontists in different health institutes in the Eastern Province. It will also encourage graduates to consider careers in academia.

5. The Program also will stimulate the interest of the Saudi dental community in terms of continuing professional development.

6. The program will also serve to fulfill the Kingdom vision 2030 by increasing the number of postgraduate programs and postgraduate graduates.

7. The availability of a Fellowship in Orthodontics & Dentofacial Orthopedics program at the Imam Abdulrahman Bin Faisal University will also offer qualified Saudi dentists an alternative to external scholarships. This, in turn, will provide for an improved pool of qualified candidates for the program and also have positive implications for the Saudi economy.

8. The creation of this program not only will provide for the training of local graduates, it also will lead to increased employment for Saudi nationals.

**Study plan:**

The Fellowship in Orthodontics & Dentofacial Orthopedics program consists of a comprehensive, 4-year curriculum of full-time study composed of 8 academic semesters along with four (3) short, summer sessions.

The curriculum has been designed to graduate students with an in-depth knowledge and the technical skills required for the practice of Orthodontics, prepare them for teaching and provide them with experience and training in research methods. To achieve these goals students will work in an exciting, contemporary, and fast-paced educational environment.

The program is structured with the following allocations of activity and time:

|  |  |
| --- | --- |
| 39% | Didactics |
| 50% | Clinical/Laboratory |
| 8% | Research |
| 3% | Teaching |

**General overview of the program:**

The Fellowship in Orthodontics & Dentofacial Orthopedics program can best be described in the following year-by-year overview:

Year 1 – The program begins with preclinical training semester to learn the basic technical aspects of Orthodontics to assess the individual knowledge of students and calibrate their technical skills to the standards of the College of Dentistry. Core and specialty courses are provided along with clinical training. The clinical care course continues into the summer semester.

Year 2 - Students will enroll in additional core and specialty courses, continue with advanced patient care in clinical courses and are introduced to advanced research through courses in research methodologies as well as biostatistics. Students are expected to begin their search for and selection of an appropriate research project by the end of the second year. A research project should be selected, prepared as a research protocol and submitted for approval in this year.

Year 3 - At this stage in the program students will be expected to begin completing some of their advanced clinical cases begun in Year 1 and Year 2, and expand their engagement in core and specialty courses as well as research. Aside from completion of any remaining core and specialty courses, students will continue enrollment in research to complete their project by year’s end. Students will be required to prepare a manuscript and submit for publication. Also, in Year 3, students may enroll in special 1-hour courses, entitled Directed Study, to provide them with experience in a wide variety of areas related to dental education, teaching and research. The following is a partial list of topics from which students may select areas of interest: Accreditation, accreditation reporting, academic affairs, committee structure and management, clinic administration, competencies, electronic patient records, faculty development, faculty promotions, electronic educational media, interdisciplinary interaction (referrals), scientific writing, strategic planning, technology in dentistry and trends in dental education and private practice.

Students are expected to enroll in at least two (2) units of directed study course per academic year (1 unit per semester) with the approval of the supervising faculty member and the proposed plan for each term by the Program Director.

Year 4 – In the fourth and final year students will fulfill all remaining didactic core and specialty course requirements, may take up to four (4) additional Directed Study courses, complete their clinical cases (by the end of the academic year) and submit proof of acceptance or published article from their research project in a peer-reviewed journal.

Summer Sessions – Students will enroll in Clinical Orthodontics to provide ongoing patient care during the summer months given the complex nature of the treatment they will be providing. They also will provide emergency services on an as needed basis for their patients for the interval between the end of the Semester II and the start of Semester I of their next year. Summer sessions also will provide additional time for research writing.