



Ahram
Canadian
University



Research plan



Faculty Vision

Leadership in improving oral and dental health by innovation in teaching and learning, scientific research, and community health service on the regional and international level.

Faculty Mission

Faculty of Oral and Dental Medicine is committed to academic excellence preparing graduate capable to provide oral and dental comprehensive health care on national and regional level. The faculty is keen to internationalize knowledge through generating innovative and applied research as well as striving to improve dental public health.

Planning Methodology

1- Tracks of the research plan

1-1 Research enhancement plan (first track):

Faculty of Oral and Dental Medicine FODM Ahram Canadian University ACU is committed to enhance research activities in alignment with the University research strategy and the national strategy of science, technology, and innovation. During preparation of the strategic plan of FODM ACU, internal and external strategic factors that influence the faculty were identified using many tools. Questionnaire was used to collect feedback from large number target groups such as students in addition to brainstorming for small groups. **Quality assurance unit** was responsible for situational analysis (SWOT analysis) and the **committee of strategic planning** was responsible for identification of the most significant factors concerning strength (S), weakness (W), opportunities (O) and threats (T) based on the level of agreement of all stakeholders. Strategic objectives were formulated and published after participation of all stakeholders. Several activities were planned for achievement of each strategic objective and key performance indicators were identified. The time framework of all the activities was set by the team.

1-2 Research domains (second track):

Each department set its own research objectives in faculty domains (themes) according to the followings:

- The gap in the knowledge that was executed from the conclusion of systematic reviews.
- Reviewing the second track in the national strategy of science, technology, and innovation.
- Studying the community needs by searching for national health problems that need further research.

- Identification of research facilities in the faculty/University.
- Experience of the faculty members.

2- Communication:

- Collected data were disseminated electronically among the departments for feedback and adjustment
- Interdisciplinary research objectives were identified.

3-Approval:

- Research objectives were approved by the department council.
- Research plan was approved by the faculty council.

Strategic Objectives	Activities	KPI	Starting date	Completion date
1.Establishment of a research lab.	<ul style="list-style-type: none"> - Allocation of lab for a research activity. - Purchasing of research equipment according to specifications. 	The presence of an equipped laboratory in terms of furniture, electricity and water connections, and safety	March 2022	September 2022
2.Training faculty members and their assistants on the available devices	<ul style="list-style-type: none"> -Formation of the working group responsible for the laboratory (board of directors). -Addressing the supplying companies to organize training courses - Attracting qualified persons to work in the faculty to transfer expertise to researchers 	Training of (10) faculty members / their assistants	June 2022	September 2022
3.Publication of scientific research conducted using available devices	<ul style="list-style-type: none"> -Preparing brochures about the equipment available in the laboratory and their use -Preparing research projects for students, faculty members and their assistants in light of the available research capabilities -Publication of scientific research in refereed journals 	Publishing 20 research annually based on available resources	June 2022	Ongoing
4.Preparation of the faculty research plan	- Review of the National Plan for Science, Technology and Innovation 2030	A declared and approved research plan	June 2022	September 2022

	<ul style="list-style-type: none"> - Analysis of the current situation in terms of material and human capabilities in the faculty - Identifying the knowledge gap and community needs - Developing general frameworks for the themes of the faculty research plan - Determine the research areas of the different disciplines, while defining the fields of interdisciplinary research - Develop a mechanism to follow up the research plan 			
5. Encouraging faculty members to participate at international conferences and published in international periodicals	<ul style="list-style-type: none"> - Developing research and international publishing skills for faculty members - Distributing the workload to provide opportunities for the completion of scientific research - Providing equipment and research laboratories - Increasing the value of international publication rewards 	<ul style="list-style-type: none"> - Increase the value of the international publication reward - The number of research papers published annually in international and local journals 	May 2022	May 2023
6. Develop a declared mechanism to stimulate external scholarships for faculty members and their assistants and follow them up	<ul style="list-style-type: none"> - Mechanism approval - Approval by the faculty Council 	The number of delegates from faculty members and their assistants	September 2022	September 2022

7. Issuing a scientific journal	<ul style="list-style-type: none"> -Setting criteria for selecting the editor-in-chief and members of the board of directors of the scientific journal -Structuring of the Scientific Journal Board of Directors -Executive board training -Setting criteria for selecting reviewers -Create a platform for the scientific journal - Declaring the publishing controls in the journal - Announcing the magazine on the college website 	<ul style="list-style-type: none"> - ISSN number -The journal page on the website -Issuing the first issue of the magazine 	September 2022	September 2024
8. Organizing scientific days in the college	<ul style="list-style-type: none"> -Determine an annual schedule for scientific days. -Organizing scientific departments for inter-departmental/specialized scientific days. 	<ul style="list-style-type: none"> -Holding 5 scientific days annually 	March 2022	Ongoing
9. Organizing a scientific conference of the faculty	<ul style="list-style-type: none"> -Determining and announcing a date for holding a periodic scientific conference. -Preparing mechanisms and implementing the scientific conference -Nominating the conference committees and following up their work -Receiving and reviewing research -Preparing a website for the conference -Preparing and designing conference publications 	<ul style="list-style-type: none"> -Decision of the faculty Council to set the date of the conference -The number of faculty members participating in the conference -Conference programme -Announcing the conference on the website -Publications - Conducting the conference 	September 2023	

10.Establishing a unit to support researchers	<ul style="list-style-type: none"> - Holding training courses in the writing research projects to qualify faculty and TAs in the field of applying for funded projects - Formation of a support unit for distinguished researchers in the formulation of research projects 	- Holding a training course in formulating research projects annually	October 2022	Ongoing
11.Announcing funded research projects and providing the necessary support	<ul style="list-style-type: none"> -Listing local and international funding agencies -Follow up on the opening date of the funded projects - Sending the link/website of funding agencies to faculty members and their assistants after announcing the funding (calls) -Providing technical support to researchers in drafting funded projects 	Obtaining a funded project annually	January/February 2023	Ongoing

Faculty research Themes

Theme 1: Oral Microbiology

Oral infection is caused by variable microorganisms that elicit immunologic host response. Research will focus on the identification of microorganisms and the investigation of various antimicrobial agents including but not limited to natural products.

Division	Research Objectives
Conservative Dentistry	<ul style="list-style-type: none"> - Evaluation of the effect of different mouthwashes on the inhibition of streptococcus mutants and lactobacilli. CONS 1-1 - Evaluation of the antibacterial effect of different herbal extracts on streptococcus mutants and lactobacilli. CONS 1-2 - Evaluation of the antimicrobial effect of black and green tea on streptococcus mutans and Lactobacilli. CONS 1-3
Dental Public Health	<ul style="list-style-type: none"> - Evaluation of disinfection of Dental Unit Water Lines Using Aloe Vera. DPH 1-1 - Assessment of the effect of curcumin , myrrh and combination of both on salivary streptococci counts. DPH 1-2
Dental Materials	<ul style="list-style-type: none"> - Assessment of the effect of incorporation of natural or synthetic antimicrobial agents on the microstructure and chemo-physical characteristics of different classes of dental materials. DM 1-1
Fixed Prosthodontics	<ul style="list-style-type: none"> - Evaluation of the microbial growth and salivary PH in patients having a cemented fixed partial denture. FPD 1-1

	<ul style="list-style-type: none"> - Assessment the changes in oral microorganisms associated with fixed prosthodontics restorations. FPD 1-2 - Characterization of the changes in microflora profile of supragingival biofilm in patients with full-crown. FPD 1-3
Endodontics	<ul style="list-style-type: none"> - Assessment of microbial contamination of different newly dispatched unused niti rotary file. ENDO 1-1 - Assessment of post-autoclaving sterilization efficiency of endodontic files. ENDO 1-2 - Investigation of the isolation and prevalence of intracanal microbes from a group of Egyptians with asymptomatic necrotic teeth. ENDO 1-3 - Assessment different antimicrobial agents for management of immature teeth. ENDO 1-4
Oral and Maxillofacial Pathology	<ul style="list-style-type: none"> - Detection of the relations among different microbial species, their impact on the host and the influence of the environmental factors to evaluate the shift from good oral health to oral pathological conditions. OMFP 1-1
Oral Biology	<ul style="list-style-type: none"> - Evaluation of changes of oral microbiological environment under different hygienic conditions. OB 1-1
Orthodontics	<ul style="list-style-type: none"> - Study the influence of malocclusion and orthodontic appliances on oral microbiology. ORTH 1-1

Pediatric Dentistry	<ul style="list-style-type: none"> - Study the effect of different tooth restoration techniques and materials on oral microbiology. PED 1-1 - Study the impact on oral microbiology after different pediatric dentistry treatment. PED 1-2
Periodontology	<ul style="list-style-type: none"> - Evaluation of microbial changes following laser therapy as an adjunct to non surgical periodontal therapy (NSPT). PER 1-1
Removable Prosthodontics	<ul style="list-style-type: none"> - Study the microbial growth on different denture base materials. RPD 1-1 - Evaluation of microbial adhesions on different soft liner materials in maxillo-facial obturators cases. RPD 1-2 - Study the changes in ecology of oral flora with different materials used in construction of different types of removable prostheses. RPD 1-3 - Study the changes in ecology of oral flora with different techniques used in construction of different types of removable prostheses. RPD 1-4 - Comparative studies on candida growth on different removable prostheses cases in both diabetic and non diabetic patients using different materials and techniques. RPD 1-5 - Evaluation of the effect of different denture cleansers and denture disinfectant on microbial growth and on changes of oral flora quantity and quality. RPD 1-6

Theme 2: Laser Therapy

Laser technology in clinical dentistry practice has a bright future and is currently at an advanced stage of development. With the expanding use of lasers on both hard and soft tissue in clinical dentistry, treatment planning and prognosis have significantly improved. Further research is mandatory to enhance its thermal effects, and its wavelength monitoring could be added to the advanced research.

Division	Research Objectives
Conservative Dentistry	<ul style="list-style-type: none">- Evaluation of different methods for monitoring incipient carious using laser. CONS 2-1- Evaluation of the caries detection methods based on changes in optical properties between healthy and carious tissue. COND 2-2- Evaluation of efficacy of different surface treatment protocols by laser fluorescence. CONS 2-3- Investigation of soft tissue photobiomodulation and hard tissue decontamination lasers in esthetic dentistry. CONS 2-4- Comparative study of laser and power bleaching techniques in tooth color change. CONS 2-5
Dental Materials	<ul style="list-style-type: none">- Appraisal of laser interactions with different classes of dental materials. DMS 2-1

Fixed Prosthodontics	<ul style="list-style-type: none"> - Evaluation of the effect of soft laser in crown lengthening. FPD 2-1 - Evaluation of the effect of hard laser in osseous crown lengthening. FPD 2-2 - Evaluation of the effect of soft laser in gingivectomy for smile design of the anterior teeth. FPD 2-3 - Evaluation of the use of hard lasers in removing ceramic veneers by debonding and ablation of resin cements. FPD 2-4 - Evaluation of the effect of hard laser in removing the smear layer inside the root canal for improving bonding of glass fiber post. FPD 2-5 - Evaluation of the use of laser in preparation of oval pontic sites in the anterior ridge area for esthetics. FPD 2-6 - Evaluation of the effect of laser in teeth bleaching. FPD 2-7
Endodontics	<ul style="list-style-type: none"> - Assessment of the efficiency of intracanal decontamination using diode laser. ENDO 2-1 - Comparative study on the effect of soft laser Vs hard laser on sealing of dentinal tubules. ENDO 2-2 - Assessment of the efficacy of Laser photodynamic irrigation. ENDO 2-3 - Assessment of the efficacy of laser-activated intracanal medication. ENDO 2-4 - Assessment of the efficacy of laser application in reducing pulpal inflammation at different stages. ENDO 2-5
Oral and Maxillofacial Pathology	<ul style="list-style-type: none"> - Elucidating the effect of laser therapy in minimizing the oral complications after radiotherapy treatment in oral cancer patients. OMFP 2-1

Oral and Maxillofacial Radiology	<ul style="list-style-type: none"> - Evaluation of the effect of laser therapy on modifying dental hard structure and maxillofacial structures through using conventional or advanced imaging modalities. OMFR 2-1
Oral and Maxillofacial Surgery	<ul style="list-style-type: none"> - Evaluation of the effect of soft Laser in bone healing around dental implants. OMFS 2-1 - Evaluation of the effect of soft Laser in bone and soft tissue healing in surgical defects. OMFS 2-2 - Evaluation of the effect of soft Laser in management of temporomandibular joints pain. OMFS 2-3 - Evaluation of the effect of soft Laser in management of myofascial pain dysfunction syndrome. OMFS 2-4 - Evaluation of the effect of soft Laser in management of postoperative complications after surgical extraction of teeth. OMFS 2-5 - Evaluation of the effect of hard Laser in management of bony exostoses in the jaws. OMFS 2-6
Oral Biology	<ul style="list-style-type: none"> - Evaluation of laser radiation variable parameters on the integrity of soft and hard oral tissues: Animals experimental study. OB 2-1 - Evaluation of the effect of laser therapy on the healing of extraction sockets under different conditions. OB 2-2

Oral Medicine	<ul style="list-style-type: none"> - Evaluation of the efficacy of laser therapy in treatment of different oral lesions. OMED 2-1
Orthodontics	<ul style="list-style-type: none"> - Investigation of the effect of laser application on different aspects related to orthodontic treatment. ORTH 2-1
Pediatric Dentistry	<ul style="list-style-type: none"> - Evaluation of the effect of laser in saving vitality of permanent molar in young patient (10-14 years). PED 2-1 - Study the conservative treatment for deeply caries lesion. PED 2-2 - Evaluation of the overall success rate after laser application on different aspects related to pediatric dentistry. PED 2-3 - Assessment of the success of medicaments, materials and techniques with and without laser for pulp therapy of primary and permanent teeth. PED 2-4
Periodontology	<ul style="list-style-type: none"> - Assessment of inflammatory mediators and healing response following laser therapy as an adjunct to NSPT. PER 2-1
Removable Prosthodontics	<ul style="list-style-type: none"> - Evaluation of the effect of using LASER for disinfection and decontamination of denture base surfaces. RPD 2-1 - Evaluation of use of LASER for gingival contouring around different types of overdenture abutments. RPD 2-2

Theme 3: Dental materials

The technology of provisional and permanent restoration materials has evolved in recent years, giving rise to improvements in the basic chemical composition that have made it possible to obtain commercial products which can be used with good clinical and mechanical performance. This theme focuses on characterization and testing of the mechanical properties of currently introduced dental materials based on high quality research and standardized techniques.

Division	Research Objectives
Conservative Dentistry	<ul style="list-style-type: none">- Comparative study of the mechanical and physical properties of different emerging restorative materials. CONS 3-1- Comparative study of the bond strength and durability of different adhesives and adhesive restorative materials to tooth structure. CONS 3-2- Assessment of the nanotechnology based materials as emerging trend in caries prevention, tooth remineralization, management of dentin hypersensitivity and restorative applications. CONS 3-3
Dental Materials	<ul style="list-style-type: none">- Assessment of the different physical properties of currently introduced dental materials in all dental applications. DMS 3-1- Analysis of the preventive dental measures on the chemo-physical behavior of different classes of dental materials. DMS 3-2

Fixed Prosthodontics	<ul style="list-style-type: none"> - Evaluation of the fracture strength and mode of failure of recently introduced all-ceramic restorations. FPD 3-1 - Comparative study of the effect of different surface treatment of zirconia restorations on the bond strength to the corresponding abutment. FPD 3-2 - Evaluation of marginal integrity of recently introduced all-ceramic restorations. FPD 3-3 - Evaluation the marginal leakage of different types of all-ceramics in different restoration. FPD 3-4 - Studying the wear resistance of different all ceramic restoration. FPD 3-5 - Studying the biomechanics of different types of implants supported restorations. FPD 3-6 - Studying the effect of aging of different all-ceramic restorations. FPD 3-7 - Evaluation of recently advance digital technology. FPD 3-8
Endodontics	<ul style="list-style-type: none"> - Evaluation of the fracture strength of teeth obturated with partial Vs total bioceramic canal filling. ENDO 3-1 - Evaluation of the fracture resistance of different niti rotary files after repeated sterilization cycles. ENDO 3-2 - Evaluation of the effect of coronal seal filling material type and depth on fracture resistance of obturated teeth. ENDO 3-3

	<ul style="list-style-type: none"> - Evaluation of the flow dynamics of different irrigating solutions with different needle designs. ENDO 3-3
Oral and Maxillofacial Pathology	<ul style="list-style-type: none"> - Assessment of the importance of minimizing the amount of adverse chemicals and waste dental materials to achieve an eco-friendly dentistry. OMFP 3-1
Oral and Maxillofacial Radiology	<ul style="list-style-type: none"> - Detection of the effect of applying different material on dental hard structure and maxillofacial structures through imaging assessment either conventional or advanced. OMFR 3-1
Oral and Maxillofacial Surgery	<ul style="list-style-type: none"> - Evaluation of the effect of different bone grafting materials on healing of bone defects. OMFS 3-1 - Comparative studies between the effect of different bone grafts on soft and hard tissue healing. OMFS 3-2 - Evaluation of the effect of immediate loading on osseointegration of dental implants. OMFS 3-3 - Evaluation of osseointegration of dental implants with surface modification. (ex. Sandblasting, plasma sprayed). OMFS 3-4
Oral Biology	<ul style="list-style-type: none"> - In Vivo assessment of tissue biocompatibility of newly applied orodental biomaterials in experimental animals. OB 3-1 - Investigations of the anticancer effect of particular biomaterials on the healing of oral soft tissues. OB 3-2

Orthodontics	<ul style="list-style-type: none"> - Evaluation of the mechanical properties of new materials that can be used. ORTH 3-1
Pediatric Dentistry	<ul style="list-style-type: none"> - Study of different mechanical and physical properties of new materials used in pediatric dentistry. PED 3-1 - Evaluation of the overall success rate of recent materials to be used in pediatric dentistry. PED 3-2
Removable Prosthodontics	<ul style="list-style-type: none"> - Studies of different mechanical properties of different denture base materials in complete and partial dentures. RPD 3-1 - Studies of different mechanical properties of different telescopic crowns and telescopic supported and retained over dentures. RPD 3-2 - Studies of mechanical and physical properties of different tissue conditioning and soft liner materials used with –complete-partial- maxillofacial prosthesis. RPD 3-3 - Comparative studies and studies on the outcome of different impression materials regarding accuracy and survival of the provided appliances. RPD 3-4 - Comparative studies of the outcome of different jaw relation record materials. RPD 3-5 - Studies on different materials used in construction of stents and splints. RPD 3-6

	<ul style="list-style-type: none"> - Studies on different mechanical properties of different types and designs of precision attachments used with partial dentures, implant retained overdentures, tooth retained overdentures, intraoral maxillofacial obturators and extraoral maxillofacial obturators. RPD 3-7
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Theme 4: Oral Health and behavioral studies

Epidemiology in oral health is an increasing field of knowledge for scientific research, providing a tool that combines clinical dental care models to optimal protocols. Moreover, it deepens discussions about oral pathologies and the association with bio-psychosocial factors. Future research aims to identify, analyze, and predict changes in oral diseases and conditions.

Division	Research Objectives
Conservative Dentistry	<ul style="list-style-type: none"> - Detection of different risk factors involved in caries incidence and develop new methods for caries risk assessment. CONS 4-1 - Elucidating the risk factors involved in different non-carious lesions and develop new methods for its risk assessment. CONS 4-2 - Establishment of innovative preventive measures. CONS 4-3 - Evaluation and comparative studies of different biological approaches in managing incipient dental caries. CONS 4-4 - Assessment of different methods for prevention of dental non-carious lesions

	<ul style="list-style-type: none"> - Evaluation and comparative study of different approaches in managing dental non-carious lesions. CONS 4-5
Endodontics	<ul style="list-style-type: none"> - Study the prevalence of acute apical abscess of maxillary central incisor among a group of Egyptians. ENDO 4-1 - Study the prevalence of Phoenix abscess among a group of Egyptian patients. ENDO 4-2 - Study the prevalence of extraoral skin fistula among a group of Egyptian patients. ENDO 4-3 - Study the incidence of furcation perforation among dental student of ACU. ENDO 4-4 - Study the incidence of root perforations among dental students of ACU. ENDO 4-5 - Study the incidence of instrument separation during root canal treatment by dental students of ACU. ENDO 4-6
Oral and Maxillofacial Pathology	<ul style="list-style-type: none"> - Comparative study between the prevalence of the rare oral pathological conditions and their known associated risk factors in the Egyptian population. OMFP 4-1
Oral and Maxillofacial Radiology	<ul style="list-style-type: none"> - Assessment , follow up and monitor of the effects of different bio psychosocial factors using different imaging modalities. OMFR 4-1

Oral and Maxillofacial Surgery	<ul style="list-style-type: none"> - Detection of the incidence and prevalence of oral cancer in population of 6 October city. OMFS 4-1 - Detection of the incidence and prevalence of Temporomandibular joint disorders among dental students of ACU. OMFS 4-2 - Detection of the incidence and prevalence of traumatic injuries in patients of 6 October hospitals. OMFS 4-3
Oral Biology	<ul style="list-style-type: none"> - Establishment of the structural norms of variable oral tissues histologically, using different techniques, for the most commonly used experimental animals. OB 4-1 - Study oral manifestations as significant indicator of systemic problems. OB 4-2
Oral Medicine	<ul style="list-style-type: none"> - Assessment of the prevalence, risk factors and predisposing factors of premalignant and malignant oral lesions and oro-facial dysfunction. OMED 4-1 - Assessment of the awareness of Oral Medicine and oral premalignant and malignant lesions among the Egyptian population. OMED 4-2
Orthodontics	<ul style="list-style-type: none"> - Study the prevalence of malocclusion and analyze the etiologic factors and orthodontic treatment needs. ORTH 4-1
Pediatric Dentistry	<ul style="list-style-type: none"> - Study dental caries incidence in children and correlated etiological factors with possible recent solutions. PED 4-1

	<ul style="list-style-type: none"> - Study dental students and interns knowledge and attitude regarding infection control measures. PED 4-2
Removable Prosthodontics	<ul style="list-style-type: none"> - Assessment of completely and partially edentulous patient satisfaction regarding esthetics and functions of the provided complete or partial denture . RPD 4-1 - Comperative studies between diabetic and non diabetic patients regarding different techniques and different removable prosthesis treatment modalities. RPD 4-2 - Studies on psychologically induced habits as clenching and grinding habits using different types of appliances to control. RPD 4-3 - Study the effect of smoking habits on different treatment modality. RPD 4-4 - Study the prevalence of different types of TMJ disorders and appliances used to help in improvement of the condition. RPD 4-5

Theme 5: Translational Research

It includes clinical trials of repurposed drugs, novel diagnostics, novel drugs and devices, and improvements in treatment selection and evaluation of response.

Division	Research Objectives
Conservative Dentistry	<ul style="list-style-type: none">- Assessment of clinical performance of a new restorative material released as a translation of basic research findings to the clinical level. CONS 5-1- Monitoring the materials behavior under oral cavity challenging circumstances. CONS 5-2- Comparative evaluation of two different restorative materials in vivo studies facing the same conditions. CONS 5-3- Examination of the efficacy of nanotechnology based materials on caries prevention, remineralization, bleaching and dentine hypersensitivity on patient oriented researches. CONS 5-4- Evaluation of the durability and survival rate of recent restorative materials on long term follow up period. CONS 5-5- Estimation and comparative study on the validity of new diagnostic tools for caries assessment. CONS 5-6
Endodontics	<ul style="list-style-type: none">- Investigation of the effect of different analgesics combinations on post-obturation hypersensitivity. ENDO 5-1

Oral and Maxillofacial Pathology	<ul style="list-style-type: none"> - Assessment of the efficacy of novel sampling techniques for early detection of dysplastic alterations in oral mucosa. OMFP 5-1
Oral and Maxillofacial Radiology	<ul style="list-style-type: none"> - Assessment and evaluation of the response of dental hard structure and maxillofacial structures to different novel drugs using conventional and advanced imaging modalities. OMFR 5-1
Oral and Maxillofacial Surgery	<ul style="list-style-type: none"> - Evaluation of the effect of local anesthetic drugs in management of myofascial pain. OMFS 5-1 - Assessment of the effect of platelet rich plasma /Fibrin on soft tissue and bone healings. OMFS 5-2 - Evaluation of the effect of different analgesic drugs on management of postoperative pain.(Comparative study). OMFS 5-3 - Evaluation of the effect of corticosteroids in management postoperative complications after oral surgery. OMFS 5-4 - Evaluation of fixation devices (ex. plates, screws) on healing of jaw fractures. OMFS 5-5
Oral Biology	<ul style="list-style-type: none"> - Investigations of oral tissue response to different herbs extracts applications to treat some systemic conditions. OB 5-1

Oral Medicine	<ul style="list-style-type: none"> - Investigation of the efficacy and side effects of natural alternatives for treating oral lesions. OMED 5-1
Orthodontics	<ul style="list-style-type: none"> - Evaluation of the effects of stem cells and tissue engineering. ORTH 5-1
Pediatric Dentistry	<ul style="list-style-type: none"> - Study the novel drugs, devices and materials effect on success rate of different treatments used in pediatric dentistry (stem cells and tissue engineering). PED 5-1
Removable Prosthodontics	<ul style="list-style-type: none"> - Comparative studies between conventionally constructed complete denture and CAD-CAM manufactured complete denture. RPD 5-1 - Comparative studies between conventionally constructed partial denture and CAD-CAM manufactured partial denture. RPD 5-2 - Comparative studies between conventionally constructed overdenture and CAD-CAM manufactured overdenture. RPD 5-3 - Comparative studies between conventionally constructed surgical stents and CAD-CAM manufactured ones. RPD 5-4 - Comparative studies between conventional impression and digital impression. RPD 5-5 - Studies on PEEK material in removable prosthodontics. RPD 5-6 - Studies on flexible acrylic resin compared to conventional acrylic when used as denture base material. RPD 5-7