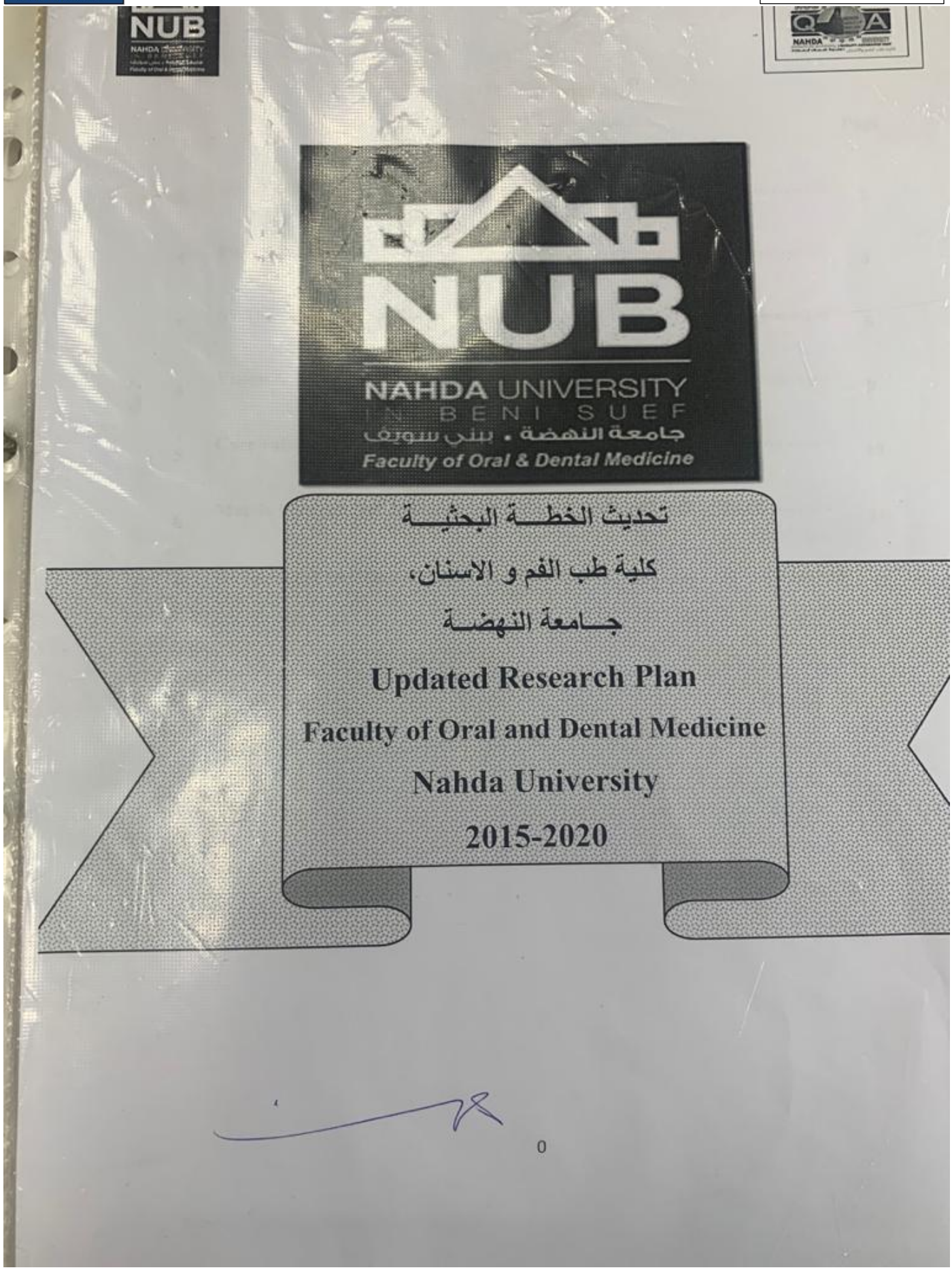
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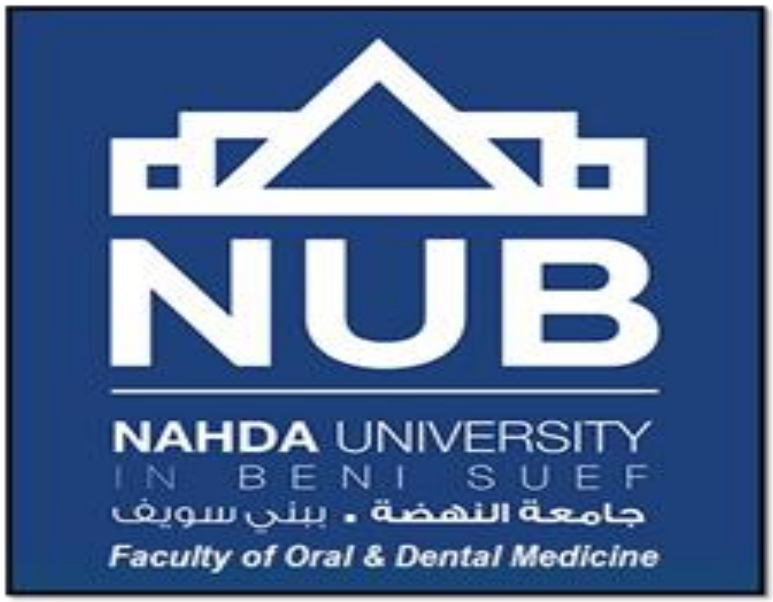
جامعة النهضة • بنى سويف
Faculty of Oral & Dental Medicine
تحديث الخطة البحثية
كلية طب الفم و الاسنان،
جامعة النهضة
Updated Research Plan
Faculty of Oral and Dental Medicine
Nahda University
2015-2020



تحديث الخطـــة البحثيـــة

كلية طب الفم و الاسنان،

جـــامعة النـهضـــة

Updated Research Plan

Faculty of Oral and Dental Medicine

Nahda University

2015-2020

Contents

Introduction:

Faculty of Oral and Dental Medicine, Nahda University developed in 2007 and begins with 160 students and now has **1400** students. Many students are now graduating from the faculty and start their postgraduate studies. In turn, it was mandatory to design a research plan to find the areas of interest for each department to be followed. Accordingly, a research committee team work constituted from representatives of all scientific departments in the faculty develop research objectives matching with the goals of Nahda University health care sector research plan. In support for implementing the research plan is the qualified human expertise as well as infrastructure resources including labs and clinics. Furthermore, there are policies in the university encourage the research activities through financial incentive. The research plan of the faculty was updated with the agreement of Faculty Council in May 2016 to link the research with the community where Beni Suef City is characterized with herbs so an additional goal was formulated for application of herbal products in dental field.


Health care
Sector
Research plan
Nahda
University
Faculty of
Oral and Dental
Medicine
Research plan
Department
Research plan

Phases of planning:

1- A faculty research committee team work constituted from representatives of all scientific departments in the faculty revise Nahda University health care sector research plan to match its goals and ensure their achievements.

2- Through brain storming, SWOT analysis was done to search for strength and weak points in the internal environment and opportunities and threats or challenges in the external environment.

3- Vison and mission were settled for research plan.

4- Research plan goals were increased from 10 to 11 goals after addition of “application of herbal products in dental field” and then objectives were selected for each scientific department and action plans were developed to achieve these objectives.

5- Evaluation system were agreed upon to follow up the research plan where there is monitoring at departmental level then at faculty level.

6- Delivery of research begin in the scientific departments to achieve their research objectives that will collectively achieve the faculty research goals to finally achieve Nahda University research plan for health care sector.

SWOT Analysis:

Strengths:

- Qualified staff members in dental field recruited from well-known universities.
- Updated infrastructure facilities for research in dental field including labs and clinics.
- Presence of continuous education and professional development unit providing workshops to enhance the research skills as well as to update the knowledge for the most recent advances in dental field.
- Advanced IT structure facilitating storage and retrieval of data bases.
- Graduated junior assistant staff members willing to perform evidence based research.
- Continued increasing number of registered assistant staff members in postgraduate studies through cooperation with that increase the demand of research plan.

Weaknesses:

- **Absence of Faculty of Oral and Dental Medicine, Nahda University postgraduate bylaws.**
- Absence of Faculty of Oral and Dental Medicine, Nahda University periodic scientific dental journal.

- **Lack of organized Faculty of Oral and Dental Medicine, Nahda University scientific dental conference.**
- Increased workload for staff members may interfere with their flow of research production.
- Absence of trained team for how to get funded projects.
- Lack of life long contract for maintenance of dental equipment which may affect their durability.
- Deficiency of instruction guidelines for equipment usage which may affect its sustainability.
- No integration of research outcome in undergraduate educational curriculum.

Opportunities:

- Centralized well-equipped Research Center.
- Centralized animal house built on international standards.
- Established strong administrative university system.
- Rewarding university policies that encourage national and international publications as well as conferences in name of Nahda University.
- Actual support of Nahda University leaders for innovations from students or staff members.

- Central library full with research periodicals and recent textbooks.
- Central Professional Development Center that conduct advanced workshops for enhancement of research skills.
- Research in health problems is one of the top priorities in Academy of Scientific Research and Technology research plan.
- Availability of national and international funding agencies which provide financial support advanced research projects.
- Accessibility to scientific data bases offered by Supreme Council of Universities-Egypt.
- Enforcement of faculty members to get certain number of workshop for professional development including empowering research skills.
- National and international scientific conferences held by different faculties and research centers.
- Conducting certain number of nationally and internationally published research papers are compulsory for staff members to get a higher career post.
- Presence of Faculty of Postgraduate for Advanced Science, Beniswafe, University nearby Nahda University which is equipped with advanced research requirements; for instance; for nanotechnology research.

Threats or challenges:

- No policies for financial for support for scholarship junior researchers to complete their dental studies.
- Research is not linked to industry in dental field , in turn no beneficial from research outcome.
- No support from civil society organizations for research.
- Increased competitive researchers in dental field in other universities.
- Decreased appreciation of in depth basic research in dental field compared to applied one.
- No legation enforce professors to conduct scientific research.
- Limited access to international data bases through digital library.

Vision:

Being leaders in scientific research in dental field.

Mission:

Enhance research skills of staff members in Faculty of Oral and Dental Medicine, Nahda University to conduct community based, innovative, multidisciplinary and applicable high quality research in dental field.

Core Values:

- **Respect research ethics**

- **Work in a team**
- **Innovate not imitate**
- **Mastering research skills**

Matrix between Nahda University Health Care Sector and Faculty of Oral & Dental Medicine Research Plan Goals

	Nahda University	Faculty of Oral & Dental Medicine
I	Enhance scientific research skills for junior staff members of medical faculties in Nahda University	I.1- Enhance scientific research skills for junior staff members of Faculty of Oral and Dental Medicine, Nahda University.
II	Conduct community based applicable research solving common health problems	II.2. Conduct community based applicable research solving common dental problems.
III	Develop scientific research following ethical guide lines	III.3. Develop Dental scientific research following ethical guide lines.
IV	Encourage multidisciplinary scientific research between medical and allied faculties.	IV.4. Encourage multidisciplinary scientific research between dental departments.
V	Rewarding the innovative scientific research in health care sector.	V.5. Rewarding the innovative scientific research in specialty of dental field.
VI	Assess and invent new materials and medicine for treating common health diseases.	VI.6. Assess and invent new materials and medicine for treating common dental diseases.
VII	Apply novel treatment and diagnostic modalities for common health diseases	VII.7 Apply novel treatment and diagnostic modalities for common dental diseases
VIII	Integrate advanced technology in health care scientific research.	VIII.8 Integrate advanced technology in dental scientific research.
IX	Link health care scientific research with industry.	IX.9. Link dental scientific research with industry.
X	Incorporate health care scientific research outcomes in educational curriculum.	X.10. Incorporate dental scientific research outcomes in educational curriculum.

Goals and departmental research objectives:

Goal I.1: Enhance scientific research skills for junior staff members of Faculty of Oral and Dental Medicine, Nahda University.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
	Dental Anatomy	Fixed Prosthodontics	Endodontics	Local and General Anesthesia	Pedodontics	Periodontics
	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD I.1**	**PD I.1**	**CD I.1**	**OS I.1**	**OP I.1**	**MPD I.1**
	Enhance scientific research skills for junior staff members of basic dental Science Department	Enhance scientific research skills for junior staff members of Prosthetic Dentistry Department	Enhance scientific research skills for junior staff members of Conservative Dentistry Department	Enhance scientific research skills for junior staff members of Oral and Maxillofacial Surgery Department	Enhance scientific research skills for junior staff members of Orthodontics and Pedodontics Department	Enhance scientific research skills for junior staff members of Oral medicine, Periodontology, Diagnosis and Oral Radiology Department

Goal II.2: Conduct community based applicable research solving common dental problems.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
	Dental Anatomy	Fixed Prosthodontics	Endodontics	Local and General Anesthesia	Pedodontics	Periodontics
	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD II.2**	**PD II.2**	**CD II.2**	**OS II.2**	**OP II.2**	**MPD II.2**
	Conduct community based applicable research solving abnormalities in chronology and oral tumors.	Conduct community based applicable research solving retention problems in partial and complete dentures as well as fixed prosthesis.	Conduct community based applicable research solving caries problems and periapical pathosis	Conduct community based applicable research solving implantology problems	Conduct community based applicable research solving crowding of teeth in children	Conduct community based applicable research solving periodontal diseases and diagnose them through recent advances in oral radiology

Goal III.3: Develop Dental scientific research following ethical guide lines.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
	Dental Anatomy	Fixed Prosthodontics	Endodontics	Local and General Anesthesia	Pedodontics	Periodontics
	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD III.3**	**PD III.3**	**CD III.3**	**OS III.3**	**OP III.3**	**MPD III.3**
	Develop Dental scientific research following ethical guide lines when dealing with experimental animals	Develop Dental scientific research following ethical guide lines when dealing with experimental animals as well as human being				

Goal IV.4: Encourage multidisciplinary scientific research between dental departments.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
	Dental Anatomy	Fixed Prosthodontics	Endodontics	Local and General Anesthesia	Pedodontics	Periodontics
	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD IV.4**	**PD IV.4**	**CD IV.4**	**OS IV.4**	**OP IV.4**	**MPD IV.4**
	Encourage multidisciplinary scientific research between oral biology and oral pathology	Encourage multidisciplinary scientific research between removable, fixed prosthesis and biomaterial	Encourage multidisciplinary scientific research between operative, endodontics and occlusion	Encourage multidisciplinary scientific research between oral & maxillofacial surgery and implantology	Encourage multidisciplinary scientific research between orthodontics, pedodontics and preventive & community dentistry	Encourage multidisciplinary scientific research between oral medicine, periodontics, diagnosis and oral radiology

Goal V 5: Rewarding the innovative scientific research in specialty of dental field.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
	Dental Anatomy	Fixed Prosthodontics	Endodontics	Local and General Anesthesia	Pedodontics	Periodontics
	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD V.5**	**PD V.5**	**CD V.5**	**OS V.5**	**OP V.5**	**MPD V.5**
	Rewarding one innovative scientific research, Mater or Doctoral thesis in specialty of dental field every year.					

Goal VI.6. Assess and invent new materials and medicine for treating common dental diseases.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
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	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD VI.6**	**PD VI.6**	**CD VI.6**	**OS VI.6**	**OP VI.6**	**MPD VI.6**
	Assess and invent new materials and medicine for treating oral cancer	Assess and invent materials for prosthetic appliances retention	Assess and invent new materials and medicine for treating dental caries and periapical pathosis	Assess and invent new materials for improvement of dental implants	Assess and invent new materials for orthodontic appliances in children	Assess and invent new medicine for treating oral lesions and new grafting materials for periodontal diseases

VII.7: Apply novel treatment and diagnostic modalities for common dental diseases						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
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	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD VII.7**	**PD VII.7**	**CD VII.7**	**OS VII.7**	**OP VII.7**	**MPD VII.7**
	Apply novel treatment and diagnostic modalities for oral cancer as flow cytometry and real time PCR	Apply novel treatment and diagnostic modalities for fabrication of dental prosthesis	Apply novel treatment and diagnostic modalities for dental caries and periapical pathosis	Apply novel treatment and diagnostic modalities for improvement of dental implants	Apply novel treatment and diagnostic modalities for orthodontic problems in children	Apply novel treatment and diagnostic modalities for treating oral lesions and periodontal diseases.

<u>Goal VIII.8</u> Integrate advanced technology in dental scientific research.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
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	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD VIII.8**	**PD VIII.8**	**CD VIII.8**	**OS VIII.8**	**OP VIII.8**	**MPD VIII.8**
	Integrate advanced technology in oral cancer therapy as targeting	Integrate advanced technology in prosthetic dentistry as	Integrate advanced technology in of dental caries restoration and eradication of periapical pathosis	Integrate advanced technology in insertion of dental implants.	Integrate advanced technology in orthodontic diagnosis in children using dolphin software	Integrate advanced technology in oral medicine and periodontal diseases scientific research using cone beam and other oral radiology digital systems.

	cancer stem cells	CAD/CAM and milling machine				

Goal IX.9. Link dental scientific research with industry.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
	Dental Anatomy	Fixed Prosthodontics	Endodontics	Local and General Anesthesia	Pedodontics	Periodontics
	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
Research objectives	**BD IX.9**	**PD IX.9**	**CD IX.9**	**OS IX.9**	**OP IX.9**	**MPD IX.9**
	Link oral cancer scientific research with development of	Link dental prosthetic research with development of	Link dental caries and periapical pathosis research with development	Link dental implants research with development of new bone	Link orthodontic in children research with development of	Link oral lesions and periodontal diseases research with development of new medication and grafting materials.

	new targeting therapeutic agents.	new adhesion materials.	of new inlay and grafting materials	integrating materials	new appliance devices.	

Goal X.10. Incorporate dental scientific research outcomes in educational curriculum.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
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	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
	BD X.10	**PD X.10**	**CD X.10**	**OS X.10**	**OP X.10**	**MPD X.10**

Research objectives	Incorporate stem cell scientific research outcomes in oral biology and oral pathology curriculum.	Incorporate improvement of prosthetic retention research outcomes in prosthetic curriculum.	Incorporate recent advances of dental caries restoration and endodontic research outcomes in conservative curriculum.	Incorporate recent advances of dental implants research outcomes in oral and maxillofacial surgery curriculum.	Incorporate recent advances of orthodontic problem management research outcomes in orthodontics and pedodontics curriculum	Incorporate cone beam and recent advances of oral medicine and periodontal diseases research outcomes in the curriculum
<u>Goal XI.11.</u> Application of herbal products in dental field.						
Departments	**Basic Dental Sciences**	**Prosthetic Dentistry**	**Conservative Dentistry**	**Oral and Maxillofacial Surgery**	**Orthodontics and Pedodontics**	**Oral medicine, Periodontology, Diagnosis and Oral Radiology**
Branches	Oral Biology	Removable Prosthodontics	Operative Dentistry	Oral and Maxillofacial Surgery	Orthodontics	Oral Medicine
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	Oral Physiology	Dental Biomaterials	Occlusion	Implantology	Preventive and Community Dentistry	Diagnosis
	Oral Pathology					Oral Radiology
	BD XI.11	**PD XI.11**	**CD XI.11**	**OS XI.11**	**OP XI.11**	**MPD XI.11**

Research objectives	Test the biological effects, biocompatibility and side effects (if present) resulted from application of herbs in therapy of dental lesions.	Test the properties of dental biomaterials integrated with herbal products and study the possibility of their incorporation in prosthetic appliances.	Apply the herbal products in the restorative materials for conservative dentistry or in endodontic filling materials**.**	Apply the herbal products in sedations used in anesthesia and augmentation materials around the implants.	Apply the herbal products in restorative materials used for children or as anti-inflammatory agents around orthodontic appliances.	Apply the herbal products as inflammatory agents in gingival inflammation and periodontitis.