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| **لاین تحقیقاتی دانشکده دندان پزشکی** | | | |
| Field of research Research Lines | | | |
| |  |  | | --- | --- | | Diagnosis & periodontal disease risk factors | * Clinical and paraclinical techniques. * Epidemiology | | Periodontal microbiology & immunology | * Periodontal biofilm * Molecular biology. * Genetics in periodontal medicine. | | Periodontal medicine & systemic conditions | * Smoking * Pregnancy * Diabetes and metabolic conditions. * Geriatric periodontology. * Cardiovascular diseases * Pulmonary diseases * Stroke * Systemic markers | | Advanced periodontics. | * Regenerative periodontics and tissue engineering . * Soft tissue management & esthetics. * Biomaterials. | | Dental Implants | * Implant Biomechanics. * Implant surface. * Complications & management of implant complications. * Treatment plan and surgical protocols * Soft and hard tissue augmentation techniques | | پریودانتیکس (9) | 1 |
| |  |  | | --- | --- | | Fixed restorations | * Cer-fused to metal Alloys (Characterization, modifications, surface treatments, new materials development. * Cer-fused to metal ceramics (Characterization, modifications, new materials development. * All-ceramic restorations. * Resin-bonded restorations. * Lab. Procedures. * Tooth preparations: Biomechanics, esthetics, biocompatibility,…) | | Biomaterials | * Luting agents & cements. * Modification and development of dental ceramics. | | Interdisciplinary prosthodontics. | * Periodontal issues. * Operative dentistry and prosthodontics. * Oral surgery and tissue management. | | Color and optical properties in prosthodontics | * Color matching techniques, tools and software. * Dental photography | | Removable prosthodontics | * Management of complications. * Biomaterials. | | Interdisciplinary restorative dentistry. | * Endodontic issues. * Periodontal issus. * Orthodontic issues | | Advanced restorative dentistry. | * Digital restorative dentistry. * Tele-dentistry. * Bioceramics in restorative dentistry. * Laser assisted in restoration procedures. | | Biomimetic restorative dentistry | * Deep margins elevation. * Biomaterials. * Biomechanics. * Clinical studies. | | Bleaching | * Tooth whitening products. * Various application of bleaching materials. | | Restorative Dental Materials | * Direct restorations.(Amalgam, Composite, Glass ionomer, pulp cap materials, liner&bases) * Indirect restorations.(Metals, Ceramics) * Biocompatibility of restorative materials. | | ترمیمی و زیبایی (12) | 2 |
| |  |  | | --- | --- | | Fixed restorations | * Cer-fused to metal Alloys (Characterization, modifications, surface treatments, new materials development. * Cer-fused to metal ceramics (Characterization, modifications, new materials development. * All-ceramic restorations. * Resin-bonded restorations. * Lab. Procedures. * Tooth preparations: Biomechanics, esthetics, biocompatibility,…) | | Biomaterials | * Luting agents & cements. * Modification and development of dental ceramics. | | Interdisciplinary prosthodontics. | * Periodontal issues. * Operative dentistry and prosthodontics. * Oral surgery and tissue management. | | Color and optical properties in prosthodontics | * Color matching techniques, tools and software. * Dental photography | | Removable prosthodontics | * Management of complications. * Biomaterials. * Biomechanics | | Advanced prosthodontics | * Digital prosthodontics. * Tele-dentistry. * Full-mouth reconstruction. * Laser assisted in restoration procedures. | | Implant-supported fixed or removable prostheses | * Biomaterials. * Biomechanics * complications | | Occlusion | * Occlusal Disease * Vertical Dimension * Solving Occlusal Problem | | Temporomandibular joint | * Temporomandibular Disorders * Etiologic Factors * Parafunction * Bruxism &Clenching * Management * Appliance therapy | | پروتزهای دندانی (17) | 3 |
| |  |  | | --- | --- | | Diagnosis | * Radiographic interpretations in endodontic and non-endodontic lesions. * Pulp vitality tests in differential diagnosis. * Non-endodontic lesions. | | Pain and Pain control | * Diagnosis of non-endodontic origin pain. * Management of non-endodontic origin pain. * Post treatment pain and flare-ups. | | Endodontic anatomy | * Varieties in tooth anatomy in Iran. * Tooth anatomy and success of treatment. * Specified cleaning and obturation techniques. | | Cleaning, shaping & obturation of root canal | * Biomaterials: characterization, modification, and development * New Techniques and modifications. * Root canal irrigates and techniques. * Herbal extractions usage in irrigation. | | Management of accidents and failures | * Management of root perforations. * Non-surgical retreatments * Endodontic surgery. | | Regenerative endodontics | * Growth factors * Tissue scaffolds for pulp regeneration. * Revascularization. | | Dental trauma | * Vital pulp therapy * Non-vital pulp therapy * Biomaterials | | Advanced endodontics | * Root resorptions. * Vital pulp therapy. | | اندودانتیکس (13) | 4 |
| |  |  | | --- | --- | | OMFS post-op complications | * Prevention and management of post-op pain and other complications. * Management of wound healing | | Dentofacial Deformities | * Correction and reconstruction of dentofacial deformities. * Facial cosmetic surgeries. * Management of orofacial clefts. | | Management of pain | * Facial neuropathies. * TMJ disorders. | | Dental rehabilitation & implant dentistry | * Management of bone & socket preservation. * Techniques & biomaterials for correction of ridge deficiency. | | Biomaterials in OMFS | * New application techniques. * Development of new biomaterials. | | Orofacial malignancies and other pathologic lesions. | * Surgical techniques. * Management of complications. * Differential diagnosis and biopsy of lesions. | | Dentofacial Trauma | * Tooth & soft tissue management. * Facial fractures. | | جراحی دهان، فک و صورت (9) | 5 |
| |  |  | | --- | --- | | Diagnosis | * Radiographic interpretations in caries diagnosis. * Pulp vitality tests in differential diagnosis. * Clinical and paraclinical caries detection techniques. | | Dental Caries | * Etiology, Risk Assessment. * Nutrition and caries. * Prevention. | | Restorative pediatric dentistry | * Direct composite restorations. * Amalgam Restoration * Fissure sealants * Preventive resin restoration * Resin infiltration * Fragment Restoration * Stainless steel crown * Zirconia Crown | | Dental Trauma | * Storage media * Luxation trauma management * Preventive approach * Knowledge & attitude | | Advanced pediatric dentistry | * Digital dentistry. * Tele-dentistry. * Bioceramics in pediatric dentistry. * Hospital Dentistry | | Behavior guidance in pediatric dentistry | * Non pharmacologic approach * Pharmacologic approach | | Pulp therapy in pediatric and adolescent | * Tooth morphology * Vital pulp therapy * Non-vital pulp therapy | | دندانپزشکی اطفال (12) | 6 |
| |  |  |  | | --- | --- | --- | | * Dosimetry & radiation protection. * Technical errors. * Radiobiology. | Radiology physics |  | | * Bone lesions * Soft tissue lesions * Inflammatory conditions of oral & MF tissues. * Nasal & paranasal sinus disorders. * TMJ-related techniques & disorders. * OMF trauma. * Dental caries. | Oral & Maxillofacial lesions and conditions. |  | | * Sialography * Sonographic techniques. * Nuclear medicine. * MRI * CT-CBCT | Special radiographic technics in OMFR |  | | رادیولوژی دهان و فک و صورت (7) | 7 |
| |  |  | | --- | --- | | Histopathological evaluation of Oral & Maxillofacial lesions | * Immunohistochemistry * Molecular techniques | | Evaluation of clinicopathological parameters in malignant tumors of head and neck (SCC,…..) | * Survival analysis * Grading of malignant tumors * Staging of malignant tumors | | Morphological analysis of histological slides | * Histomorphometric analysis | | آسیب شناسی دهان و فک و صورت (9) | 8 |
| |  |  | | --- | --- | | Preventive dentistry | * Etiology of oral diseases and conditions * Impact of diet and nutrition on oral health. * Risk assessment among different community groups * Oral health preventive product assessment | | Special care dentistry | * Etiology and Risk Assessment * Oral health promotion for people with special care needs, such as: Blind people, deaf (impaired hearing), Autistic people with cerebral palsy, … * Geriatric oral health promotion | | Epidemiologic studies | * Prevalence and incidence of common oral diseases and conditions * Oral health indices | | Oral health economy | * Burden of oral diseases * Economic evaluation of interventions and services at community level( cost effectiveness, cost benefit, …) * Insurance | | Oral health care management | * Oral health care systems * Quality improvement of oral health care services. * Clinical governance * Development of Clinical Practice Guidelines * Developing Protocols | | Oral health promotion | * Designing and testing different oral health promotion interventions at community and population levels. | | Oral health education | * Increasing Knowledge and attitude of oral health behavior * Role of media in increasing oral health knowledge such as: social media, pamphlet, poster, and …. * Role of peer education in oral health | | Evidence based dentistry | * Designing quantitative and qualitative studies. * Critical appraisal | | Policy making | * Strategy planning for community oral health promotion and prevention * Manpower | | Ethics | * Ethics and professionalism | | سلامت دهان و دندانپزشکی اجتماعی (5) | 9 |
| |  |  | | --- | --- | | Diagnosis – Malocclusion and dentofacial deformities in Iranian society. | * Clinical and paraclinical techniques. * Epidemiology * Ecological related factors in malocclusion and dentofacial problems. | | Growth & development -related risk factors for dentofacial problems in Iranian society. | * Drug abuse and addictions. * Nutrition in pregnancy and early childhood. * Genetics * Orofacial clefts. | | Biomechanics & Biomaterials in orthodontics | * Orthodontic alloys * Orthodontic polymers and elastomers. * Orthodontic adhesion | | Preadolescent orthodontic management of dentofacial problems. | * Non-skeletal malocclusions. * Skeletal malocclusions. * Growth modification. | | Esthetic orthodontics | * Ortho-surgical treatments. * Smile design & restorative-orthodontics management of malocclusions and crowding. * Adjunctive orthodontic treatments. | | ارتودانتیکس(9) | 10 |
| |  |  | | --- | --- | | Methodology of lab research in dental materials | * Methods for adhesion strength studies. * Caries lesion quantification. | | Dental restorative materials | * Bio-functional composites * Bio-functional adhesive systems. * Functionally-graded materials | | Preventive materials | * Caries inhibitory peptides. * Nanomaterials in caries prevention. | | Bioceramics | * Endodontic bioceramics. * Bone substitution. | | Dental polymers | * Self-adhering monomers. * Stress of polymerization. | | مواد دندانی | 11 |
| |  |  | | --- | --- | | Diagnosis/treatment of common oral ulcers | * New treatment of oral lichen planus * New treatment of oral aphthous ulcers * Herbal treatment of oral ulcers * New treatment of oral vesiculobullous lesions * New treatment of Mronj/Bronj * New treatment of oral mucositis * Novel Strategies for diagnosis of oral ulcers * New genetic markers for oral diseases | | Early diagnosis of oral cancer | * New histopathologic markers for early diagnosis of oral cancers * New tools for early clinical diagnosis of oral dysplasia and malignancies | | Preventive strategies of oral cancers | * Detecting risk factors of oral cancers * Assessing people knowledge and attitude about oral cancer`s risk factors * Increasing people knowledge about oral cancer risk factors * Screening for early diagnosis of oral cancers * Detecting obstacles of early diagnosis of oral cancer * Tobacco and its effects on oral mucosae | | Laser therapy | * Co2/diode/low level laser applications in oral and maxillofacial region | | Nutrition in oral medicine | * Role of nutrition in developing of oral lesions * Assessing oxidative stress markers in oral diseases | | Treatment of systemic compromised patients | * Dental management of systemic diseases * Dental management of geriatric * Dental management of disabled people * Dental hospital practices | | Saliva as diagnosis tool | * Role of saliva as diagnostic tool for oral and systemic diseases | | Oral manifestations of systemic disease | * Prevalence of oral manifestations of systemic diseases * Oral lesions as early manifestations of systemic diseases | | Exophytic lesions of oral and maxilla facial | * New strategies for diagnosis and treatment | | Epidemiologic studies in oral medicine | * Prevalence of oral diseases * Prevalence of oral premalignancies and oral cancer * Other epidemiologic studies eg: Quality of life,… | | Etiologies and treatment of oral White/red and Pigmented lesions | * Risk factor and etiology of oral white and red lesions * New treatment of oral white/red and pigmented lesions | | Orofacial pain/TMJ disorders/sleep disorders | * Diagnosis/treatment of orofacial pain * Diagnosis and treatment of TMJ/sleep disorders | | Multidisciplinary researches | * Medical education, oral health, psychological assessment,… | | بیماریهای دهان و فک و صورت (10) | 12 |