

SPECIALITY TRAINING PROGRAM FOR ORTHODONTICS

Title of the residency study program	State code
Orthodontics	73308B1

Academic awarding institution	Language
Lithuanian University of Health Sciences, Medical Academy, Clinic of Orthodontics, A. Mickevičiaus g. 2, LT-44307 Kaunas, Lithuania	Lithuanian

Kind of studies	Cycle of studies	Level of qualification according to Lithuanian Qualification Structure (LKS)
University studies	Non-degree studies	7 th level

Mode of the studies and length in years	Volume of the program in ECTS credits	Total amount of student work	Formal teaching and practice hours	Independent self-direct learning hours
Full-time studies, 3 years	198	5280	4380	900

Area of studies	Main field of the study program	Parallel study program (if available)
Biomedical sciences	Odontology	-

Professional qualification awarded
Orthodontist

Study program director	Director's contact information
Professor dr. Antanas Sidlauskas	Office tel.: + 370 37 387598 E-mail: antanas.sidlauskas@ismuni.lt

Institution of accreditation	Accreditation until
Centre for Quality Assessment in Higher Education	Year 2014`

Aim of the residency study program
To prepare a specialist orthodontist universally educated, honest, initiative and ethically responsible. The graduate should acquire the appropriate knowledge, attitudes and skills as a specialist orthodontist. The trainees should possess a sense of professionalism, interest and enquiry. To be able to apply acquired knowledge, skills and abilities in clinical practice according to Lithuanian Medicine Norm "Specialist orthodontist". Rights, duties, competency, responsibility". These characteristics should encourage the specialist to maintain competency throughout their career by continuous pursuit of continuing professional development.

Program profile		
Disciplines/subject areas	Orientation of the program	Distinctive features of the residency study program
Program consists of obligatory and optional cycles including theory, practice and self-sustaining studies. Subject areas: <u>Biomedical sciences:</u> <ul style="list-style-type: none"> - growth and development ; - genetics; - cell and molecular biology; - oral physiology, immunology and microbiology; - biostatistics - research methodology. <u>Basic orthodontic subjects:</u> <ul style="list-style-type: none"> - Development of dentition; - Physiology of stomatognathic system; - Clinical aspects of the growth; 	Program orientated to prepare specialist orthodontist with modern evidence-based approach to orthodontic practice, achieved through research training, continuing professional and personal development.	The postgraduate (residency) program in Orthodontics is based on theoretical studies, clinical practice and scientific research integration. The programme is taking place for already more than 20 years. Practical skills are obtained and theory course is realised under supervision of experienced clinicians and University professors. There is an opportunity provided to accomplish part of the residency (up to one year) in accredited clinics abroad (for separate residency cycles studies). Program is prepared taking into account: <ol style="list-style-type: none"> 1. LR legislation, 2. LUHS valid documents;

<ul style="list-style-type: none"> - Biomechanics; - Dental radiology; - Orthodontic examination and treatment planning; - Cephalometrics; - Orthodontic materials; - Occlusion and TMJ; - Iatrogenic effects from orthodontics; <p><u>Special orthodontic subjects :</u></p> <ul style="list-style-type: none"> - Biomechanics and tooth movement; - Orthodontic techniques; - Class I malocclusion; - Class II malocclusion; - Class III malocclusion; - Vertical problems and maxillary constriction; - Facial asymmetries; - Cleft lip and/or palate treatment; - Interdisciplinary treatment; - Adult orthodontics; - Orthognathic surgery /orthodontics joint clinic; - Noncompliance orthodontic treatment; - TMD and orthodontics; - 3D techniques in orthodontics; - Temporary anchorage devices (TAD); - Practice management. 		<ol style="list-style-type: none"> 3. Order by LR Minister of Health of July, 1997 No 397 „,Lithuania Medicine Norm MN 47:1997 „Stomatologist orthodontist. Functions, duties, rights, competency and responsibility”(Valstybės žinios, 1997, Nr.:32-1032). 4. World Federation of Orthodontists (WFO). Guidelines For Postgraduate Orthodontic Education (World J Orthod 2009;10:153-166). 5. Advisory Committee on the training of dental practitioners report on the field of activity and training programmes for the dental specialists. 1986 European Commission Directive number III/D/1374/5/84-EN. 6. Draft Proficiencies of the Advisory Committee on the training of Dental Practitioners. 2004 European Commission Directive number 78/687/EEC. 7. The Joint Committee for Postgraduate Training in Dentistry. The Specialist Advisory Committee in Orthodontics. ”Curriculum and specialist training programme in Orthodontics” British Orthodontic Society, 2010. 8. Three years Postgraduate Programme in Orthodontics: The Final report of the Erasmus Project.FPGM van der Linden. European Journal of Orthodontics 1992. 14: 85-94. 9. Bulajeva T., Lepaite D., Sileikaite-Kaishauri D. Study program manual. Vilnius, 40 p., 2012 (prepared for project “National Concept Preparation for European Credit Transfer and Accumulation System (ECTS): Harmonisation of Credits as well as Creation and Implementation of the Learning Outcomes Based Study Programs Methodology“ (Nr. VP1-2.2-ŠMM-08-V-01-001).
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Admission requirements	Recognition of previous learning
<p>Master degree in odontology and professional qualification of a <i>doctor odontologist</i> are obligatory. Admission is accomplished due to general competition. Competitive score structure is define by the regulations for entrance to the LUHS residency programs. The main components of competitive score are - the average assessment of all subjects, studied during integral studies, final exam assessment, assessment of clinical practice of odontology, student’s scientific activities assessment (approved by Student Science Association (SMD)) and motivational interview scores. Motivational interview takes place according to the schedule set in advance. Motivation Committee is composed of academic staff members (orthodontists) and representatives of postgraduate students (residents). Scientific activities in the field of orthodontics as well as personal motivation for orthodontic studies are evaluated.</p>	<p>Results of previous studies are accepted individually, taking into account the developed competencies and equivalence of the completed studies (subjects and credits) to the LUHS residency program “Orthodontics“, with the guidance of procedures set by LUHS Senate.</p>
Access to further education	
<p>Third cycle degree studies (PhD study program) it is an option for further education .</p>	
Access to professional activities (employability)	
<p>The specialist orthodontist after graduation from residency program and obtaining licence for independent practice</p>	

from Lithuanian Dental Chamber can practice in private clinics as well as in the state health care institutions in Lithuania. The another options are academic career at the universities or practice in the other countries of the EU.

Learning and teaching approaches	Methods of assessment (of learning achievements)
<p>Learning and teaching approaches includes formal teaching and clinical practice and individual self-directed learning.</p> <p>Formal teaching includes lectures & seminars, consultations, case presentations, journal clubs, clinical skills demonstration and research projects.</p> <p>Practical skills and competences are acquired via their job as residents in the Clinic of Orthodontics and Multi-disciplinary team meetings.</p> <p>Activities of independent self-directed learning include reading of the speciality journals and textbooks, self-analysis of patients examination data, treatment planning and research projects.</p> <p>The number of new patients assigned to each resident is 50 and equal or more transferred patients will be assigned during the course of the studies. Clinical responsibilities of the residents also include supervision of retention patients.</p> <p>2 hours per week devoted to case presentation and 1 hour for review of the current literature in the form of journal club.</p>	<p>Evaluation of the residents takes place on a regular and prescheduled basis throughout the program, as well as on the completion. Resident assessment, according to LUHS Regulation on Student's Achievements Assessments (Decision by LUHS Senate, December 14th, 2012, No 25-07) consists of these assessment forms:</p> <p><i>Forming assessment.</i> Forming assessment is applied during the residential studies seeking to assess critically and to adjust residents' learning. In these parts of the residency study program, where practical and social skills are important (problem solutions in problematic learning studies, practice, residency programs etc.) with the goal to assess general competencies the forming assessment of theoretical knowledge is done by multiple-choice test or written essay. Practical evaluation of residents' capabilities is based on direct observation of clinical performance and at the problem –based seminars. This type of assessment enables continuous assessment of residents' performance, thus recognizing individuals' strengths and identifying areas of improvement through personal-development plans.</p> <p>The process of appraisal of all residents also includes an informal discussion between residents and their academic staff once per semester, during which they are encouraged to reflect on their progress and set goals for the remainder of the course.</p> <p><i>Final assessment.</i> This assessment summarises knowledge obtained by resident. It is done at the end of residency studies by final examination.</p>

General competencies (knowledge, abilities, values and attitudes)			Outcomes (results) of residency study program
1.	Professional attributes	1.1	Be honest and honourable with patients, follow medicine ethics norms and requirements for good odontology practice, be critical toward others and himself/herself, be able to feel compassion for the patient, be creative and initiative.
2.	Professional activity	2.1	Have ability to evaluate the boundaries of his/her competencies in orthodontics, to act independently, if there is a need, seek for a help, solve problems and take decisions, communicate and work in a team with specialists from other fields, be able to organise work and to plan time properly.
3.	Orthodontist as an expert	3.1	Be able to choose and to apply the most optimal methods orthodontic therapy, constantly seek perfection in his profession, while continuing lifelong learning, be able to apply theoretical knowledge in practice, to pass own knowledge and abilities to colleges that have less practice, abilities to plan and to do scientific research.

Subject-specific competences (knowledge, abilities, values and attitudes)		Aims (results) of residency study program	
4.	General principles of consultation with a patient	4.1.	Be able to explain to the patient and/or his/her relatives a goal and a meaning for the actions taken to the patient. To discuss further patients examination and treatment plan, to reassure and to motivate patient and/or his/her relatives for the necessary diagnostic and treatment procedures. To understand legal aspects regarding informing patient and/or his/her relatives.
5.	Consultation of orthodontic patient: to be able to perform orthodontic patient examination, to evaluate orthodontic treatment need in a complex dental patient's treatment planning	5.1.	To be able to perform dental patient's general status of teeth and the oral cavity evaluation.
		5.1.	To be able to assess the patient's facial organ and jaws functional disorder, and the potential impact of such dysfunction on dental arches and occlusion
		5.3.	To be able to diagnose the anomalies of the dental arches and occlusion, to assess the impact of orthodontic anomalies on the overall oral health.
		5.4.	To be able to explain to the patient (and the members of his family) the existing morphological and functional problems of the dental arches, jaws and occlusion, as well as their possible effects on occlusion and masticatory efficiency, facial aesthetics and oral health.
		5.5.	To be able to adequately inform dentists of other specializations about the possibility (necessity) to apply orthodontic treatment methods in a complex treatment, prophylaxis of the oral pathology or stabilization of the occlusion.
6.	Planning of the orthodontic patient's examination and treatment		
6.1.	Examination of an orthodontic patient and diagnostic assesment planning.	6.1.1.	To be able to malocclusion and estimate their level of difficulty during examination.
		6.1.2.	To be able to create the plan for obligatory diagnostic testing.
		6.1.3.	To be able to create an orthodontic patient's problem list.
		6.1.4.	To be able to formulate extended descriptive diagnosis of the malocclusion.
6.2.	Individualized orthodontic treatment planning.	6.2.1.	To be able to make an appropriate orthodontic treatment plan for the individual patient and to discuss it with the patient and his/her relatives.
		6.2.2.	To be able to assess the duration, effectiveness, potential complications of the intended treatment, and to suggest alternative treatment methods.
		6.2.3.	To be able to create a complex treatment plan working together with the other dental and medical specialists: general practice dentists, maxillofacial surgeons, periodontologists, pediatric dentist, orthopedists, dental technicians, dental hygienists, otolaryngologists.
		6.2.4.	To be able to create a plan for a retention period and choose appropriate measures.
		6.2.5.	To be able to choose the appropriate timing for the osseoplastics of the maxillary alveolar process and other treatment procedures for cleft lip and palate pacients.
		6.2.6.	To be able to communicate with the patients that are incapable to self- assessing the orthodontic treatment need and the potential risk to health refusing orthodontic treatment.
7.	Diagnostic procedures, evaluation and interpretation of the results		

7.1.	To be able to perform clinical examination of the orthodontic patient	7.1.1.	To be able to perform a clinical examination of the orthodontic patient : complaints, medical history, evaluation of facial aesthetics, oral examination, morphological and functional assessment of the occlusion, the evaluation of the temporomandibular joint, determination of the index of orthodontic treatment need.
	To be able to perform laboratory and computer based (digital technology) diagnostic procedures of the orthodontic patient	7.1.2.	To be able to perform a laboratory diagnostic procedures of teh orthodontic patients: an objective assessment of facial aesthetics and proportionality using clinical photographs, analysis of the diagnostic dental arch models (plaster and digital), analysis of the lateral cephalography (conventional and digital) and other methods, assessment of 3D facial scans. To be able to assess and interpret the results of clinical and laboratory diagnostic procedures.
8.	Treatment procedures		
8.1.	To be able to control and manage orthodontic treatment and retention periods by the biomechanics set in a treatment plan .	8.1.1.	To be able to choose the most biomechanically efficient orthodontic appliance or system.
		8.1.2.	To be able to control the anchorage using the intraoral, extraoral appliances and orthodontic mini-implants.
8.2.	To be able to treat malocclusion with removable, extraoral, functional and fixed appliances	8.2.1.	To be able to select an individual construction of the removable appliance, to adjust it and to correct it during the orthodontic treatment.
		8.2.2.	To be able to select an individual construction of the extraoral appliance, to adjust and correct it during the orthodontic treatment.
		8.2.3.	To be able to apply and adjust functional appliances and appliances combined with the extraoral appliances during the orthodontic treatment.
		8.2.4.	To be able to treat malocclusion by using different fixed appliances systems.
		8.2.5.	To be able to work in a team with the other specialists: oral, maxillofacial surgeons, periodontologists, prostodontists.
9.	Promotion and encouragement of a healthy life-style	9.1.	To be able to assess the risk to the patient's health and to apply the appropriate and rational measures to reduce this risk; to apply the measures of infection control; to assess the risks of the professional actions to own health and to take to take precautions to avoid this risk.