

SPECIALITY TRAINING PROGRAM FOR ENDODONTOLOGY

Title of the residency study program	State code
Endodontology	73308B111

Academic awarding institution	Language
Lithuanian University of Health Sciences, Medical Academy, Clinic of Dental and Oral Pathology, Eivenių g. 2, LT-50009 Kaunas, Lithuania	Lithuanian

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

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	180	4800	4129	671

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

Professional qualification awarded
Dentist-endodontist

Study program director	Director's contact information
Vita Mačiulskienė professor, dr.med.sciences	Office tel.: (+370 37) 32 66 81, E-mail: vita.maciulskiene@lsmuni.lt

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

Aim of the residency study program
To educate a dental specialist, universally literate, honest, initiative, self-sufficient but responsible ethically, creative, interested in science innovations, upholding democracy, able to solve problems and work in a team, having professional qualification of an endodontist and able to apply acquired knowledge, skills and abilities in practical job. To provide knowledge and skills in scientific research and public presentation of professional matters.

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-education. Compulsory cycles are oriented in acquiring a specified knowledge and skills in the diagnosis and treatment of pulp and apical periodontal pathology by means of conservative and and surgical techniques, particularly in teeth with complex anatomy, expressed curvature of the roots, calcification or, internal resorption. Further on : management of endodontic complications (apical surgery with retrograde filling, root amputation,	Development of high practical skills as well as learning basics of research, providing professional qualification of an endodontist.	The program is designed according to the Lithuanian legislation, the European Parliament and Council Directive 2005/36/EC and the European Union requirements for postgraduate dental training; LR Dental Practice Act 2005 06 30, I-1246, Dental Practice Act 2, 3, 4 and Annex XI of the Law-498, 2009 11 19; Quality guidelines for endodontic treatment: consensus report of the European Society of Endodontology; Int Endod J; 2006:39: 921–930; Accreditation of postgraduate speciality training programmes in Endodontology. Minimum criteria for training Specialists in Endodontology within Europe. Int Endod J;2010;43:725-737. The program is based on the theoretical

<p>hemisection); endodontic retreatment; treatment of traumatic dental injury and their early and late complications; diagnosis and treatment of complex endo-periodontal pathology; management of cases of endodontic infection in patients with high-risk systemic (accompanying heart disease, diabetes, etc.), preparation of endodontically treated teeth for prosthetic restorations.</p>		<p>studies and practical integration already at the first year of the course. Practical skills and the theoretical knowledge is acquired under the guidance of the University staff.</p> <p>Practical exercise is performed in the premises of Clinic of Dental and Oral Pathology Kaunas University Hospital. The patients are consulted by qualified endodontists, and if necessary, certain dental procedures are appointed to perform for the residents. The Clinic of Dental and Oral Pathology at LUHS Kaunas Hospital and the "Old Town Dental Clinic" are accredited for education of residents in endodontics.</p>
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Admission requirements	Recognition of previous learning
<p>Master degree in odontology and professional qualification of an odontologist are obligatory. Admission is performed by general competition. Competitive score structure is described in the rules for entrance to the LUHS residency programs. The main components of the competitive score are: the mean assessment score of all the subjects studied during integral studies, the final exam assessment, the clinical practice evaluation, the student's research activities evaluation (approved by Students Research Association (SMD)), motivational interview assessment. Motivational interview takes place according to the schedule set in advance. Motivation Committee is composed of academic staff of the Clinic of Dental and Oral Pathology. Scientific and practical activities in the field as well as personal characteristics are evaluated. Competition is public and takes place separately to every residential study program in two stages (main and additional). Second or additional stage can be organised when vacant places are still available after the first competition stage.</p>	<p>Results of previous studies are accepted individually, taking into account the developed competencies and goals of program that correspond to „Endodontology“ residency study program, with the guidance of procedures set by LUHS Senate.</p>

Access to further education
<p>Doctoral studies .</p>

Access to professional activities (employability)
<p>After graduation, endodontists can practice in public or in private health care institutions, with a license to provide services in endodontics. The license is provided by the Licencing Body at Lithuanian Dental Chamber, based on the obtained certificate of the completed residency programme.. The certificate of programme is recognized in the EU.</p>

Learning and teaching approaches	Methods of assessment (of learning achievements)
<p>There is a variety of learning methods: lectures, seminars, consultations, group discussions together with other residents, daily activities such as description of cases, presentations at seminars and conferences, treatment planning and execution.</p>	<p>Participation in lectures, seminars and group discussions is identified in separate log.</p> <p>Writing test takes place in the form presented in open and closed-ended questions / tasks in the clinical situation. Graded ten-point grading system.</p>

<p>Practical skills are acquired during examination and treatment of patients, participation in patients consultations in Dental and Oral Pathology Clinic. Practical skills of work with a dental microscope or other special equipment are acquired on phantom models, before applied on patients..</p>	<p>Practical skills and abilities, gained during the cycle, are assessed by a mark ten-point grading system , and recorded in the resident credits booklet.</p> <p>Lliterature reviews and clinical case presentations are performed during regular seminars. Performance of small research projects is an integral part of the study program, and is guided by the supervisors of the programme.</p> <p>Residency program concludes with the practical and theoretical examinations. The practical test is performed in the outpatient surgery, during one of the stages of treatment. The theoretical examination consists of an oral presentation and open discussion of cases.</p>
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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 norms of ethics in medicine as well as requirements for good 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 endodontology, to act independently, seek for help if necessary, 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.	Professional expertise	3.1	Be able to choose and to apply the most appropriate treatment methods, constantly seek perfection in profession while continuing lifelong learning, be able to apply theoretical knowledge in practice, to pass own knowledge and abilities to less experienced colleagues, be able to critically read scientific research.

Subject-specific competences (knowledge, abilities, values and attitudes)		Aims (results) of residency study program	
4.	Communication with patients	4.1	be able to: <ul style="list-style-type: none"> - analyze and interpret the pulp and apical periodontitis pathological features; - collect case history and interpret it correctly; - clarify the mechanism of pain - determine pulp vitality; - determine the degree of risk of the disease; - inform the patient about the purpose and meaning of the procedures, consequences or, possible complications and risks; - explain the meaning of personal oral hygiene and the importance of prophylactic measures - formulate the diagnosis. - collect accurate medical history of dental trauma or complications, and to interpret it
		4.2	be able to: <ul style="list-style-type: none"> - explain to the patient actions performed ; - To explain the condition of the patient and discuss the next steps to reassure and motivate the patient.
5.	Patient's diagnostics and formation of treatment plan	5.1	be able to: <ul style="list-style-type: none"> - On the basis of the patient's medical history perform additional diagnostic methods and interpret their results; - Based on the diagnostic results, make the treatment plan and explain it to the patient ; - To explain the potential complications, and treatment prognosis.
		5.2	Ability to communicate with the patient in case of critical condition; to gain confidence and written agreement from the informed person, communicate in writing (filling up medical documents), communicate with difficult patients.
6.	Emergency cases	6.1	<ul style="list-style-type: none"> - On the basis of case description, clinical findings and evaluation of inflammatory process, the patient's general condition, immediate assistance to relieve pain and prevent further complications. Take necessary steps if assistance of other specialists is needed.
7.	Pain and infection control	8.1	be able to: <ul style="list-style-type: none"> - Conduct all types of dental anesthesia; - Choose the method of anesthesia, leading to an effective result; - To assess the risk of infection, the inflammatory process and to ensure infection control; - Diagnose the inflammatory complications of dental origin, and provide ways to avoid them; - The indication for antibiotics, anti-inflammatory and pain-relieving medications.

9.	Primary endodontic treatment	9.1	<p>be able to:</p> <ul style="list-style-type: none"> - perform the pulp and apical periodontal treatment for teeth with simple anatomy - perform direct and indirect pulp therapy, , to - perform mechanical root canal cleaning and shaping manual and with mechanical endodontic instruments, perform chemical root canal preparation using medication, fill properly root canals, using different root canal obturation techniques, different types of fillers.
10	Instrumentation of root canals using endodontic rotary instruments	10.1	<ul style="list-style-type: none"> -Be aware of different types of rotary instrumentation and different tools - Know the nickel-titanium alloy properties of the alloys, the pros and cons and the main principles of work and the potential complications of working with them; - be able to select the right root canal instrumentation techniques and tools in different clinical situations.
11	Working with a dental microscope	11.1	<p>Be aware of:</p> <ul style="list-style-type: none"> - Types of optical systems, technical data;; - The principles, rules, and ergonomics of the microscope. <p>be able to:</p> <ul style="list-style-type: none"> - use of endodontic microscope at work for diagnostic purposes as well as for routine treatment procedures.
12	Retreatment of root canals	12.1	<ul style="list-style-type: none"> - explain to the patient possible causes of endodontic treatment failures, endodontic retreatment indications and contraindications, and suggest alternative methods of treatment; - Follow the basic rules of endodontic treatment that are in place to prevent failures or reduce the number of it, appropriate choice of methods, instruments and materials suitable for various retreatment cases.

13	tooth restoration after endodontic treatment	13.1	Importance and main principles of dental restorations after endodontic treatment; right choice of materials and methods of restoration.
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