

SPECIALTY TRAINING PROGRAM FOR CARDIAC SURGERY

Title of the residency study program	State code
Vascular surgery	73307B1**

Academic awarding institution	Language
University of Health Sciences, Academy of Medicine, Clinic of Cardio-thoracic and Vascular surgery. A. Mickevičiaus str. 2, LT-44307 Kaunas	Lithuanian

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

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, 5 years	330	9040	6913	2127

Area of studies	Main field of study program	Parallel study program (if available)
Biomedical science	Medicine	-

Personal qualification awarded
Vascular surgeon

Study program director	Director's contact information
Dr. Linas Velička	Office tel.: (+370 37) 326631, mobile: +370 686 05723 E-mail: lvelicka@gmail.com

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

Aim of residency program study
Basic aim of vascular surgery residency program is to prepare a specialist doctor having qualification of vascular surgeon with interest in scientific innovations, reaching a higher scientific qualification studies

Program profile		
Disciplines/subject areas	Orientation of the program	Distinctive features of the residency study program
Program consists of obligatory (1-2 nd year: General and urgent surgery, Orthopedics-Traumatology, Urology, Burns, plastic and reconstructive surgery, Cardiac surgery, Urgent neurosurgery, Thoracic surgery, Intensive therapy and anaesthesiology, Vascular surgery. 3-5 th year: Acute and chronic vascular diseases, Aortic and arterial	Applied program is focused on practical activities evolving research work and gives the doctor vascular surgeon's professional qualification.	The program is designed according to the legislation of the Republic of Lithuania, LR sveikatos apsaugos ministro įsakymas. Dėl Lietuvos medicinos normos MN 139:2010 „Gydytojas kraujagyslių chirurgas. Teisės, pareigos, kompetencija ir atsakomybė“ patvirtinimo. Valstybės žinios, 2010-08-03, Nr. 92-4880 Europos Parlamento ir Tarybos

<p>aneurysms, Complications in vascular surgery, Vascular traumas, Venous diseases, inflammation, postphlebotic syndrome, Interventional angiology and vascular surgery cycle, Diagnostic angiology) and Optional cycles including theory, practice and self-sustaining job.</p> <p>Obligatory cycles are orientated to the development of vascular surgeon's knowledge and practical skills, acquisition of knowledge, skills and abilities in clinical diagnostics, diagnostic methods, conservative, interventional and surgical treatment, conservative and surgical prevention of acute and chronic arterial, venous, congenital and acquired diseases of vascular system.</p> <p>There is a separate obligatory cycle for paraclinical diagnostic methods – radiology.</p> <p>Optional cycles are meant to inquire one particular field in vascular surgery.</p>		<p>Direktyvą 2005/36/EB; European Union of Medical Specialists. Division of Thoracic surgery. Prieiga per internetą: http://www.uems.net/;</p> <p>Cumming AD, Ross MT. The Tuning Project (medicine) – learning outcomes / competences for undergraduate medical education in Europe. Edinburgh: The University of Edinburgh, 2008. Prieiga per internetą: http://www.tuning-medicine.com ;</p> <p>Bulajeva T., Lepaitė D., Šileikaitė-Kaishauri D. Studijų programų vadovas. Vilnius, 40 p., 2012 (parengtas vykdamas projektą „Europos kreditų perkėlimo ir kaupimo sistemos (ECTS) nacionalinės koncepcijos parengimas: kreditų harmonizavimas ir mokymosi pasiekimais grindžiamų studijų programų metodikos kūrimas bei diegimas“ (Nr. VP1-2.2-ŠMM-08-V-01-001).</p> <p>The program is based on the theoretical study and practical integration from the first year of study. Practical skills are obtained and theory course is realized with the help of University professors - residency base specialists.</p> <p>For the vascular surgery residency study cycles the main residency base – LUHS Hospital Public Institution “Kaunas Clinics” is accredited. LUHS Hospital “Kaunas Clinics” has all the facilities and equipment that is used for the diagnosis and treatment of vascular pathology (departments of vascular surgery, radiology, interventional radiology, intensive care) located in one area:</p> <p>Vascular surgery residency base - Lithuanian University of Health Sciences Clinic has all the structural units required for vascular surgical pathology diagnosis and treatment.</p> <p>Residency base is selected in university's medical residency Regulation. Scientific work skills are developed doing research in the Department of Cardiothoracic and Vascular Surgery or other University departments. There is an opportunity provided to accomplish part of the residency (up to one year) in</p>
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	accredited clinics abroad (for separate residency cycles studies).
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Admission requirements	Recognition of previous learning
<p>Master degree in medicine and medical doctor professional qualification are obligatory. Admission by the way of general competition. Competitive score structure of is given in the conditions for entrance to the LUHS residency programs. The main components of competitive score is the average assessment of all subjects, studied during integral studies, final exam assessment, clinical medicine practice assessment, student's scientific activities assessment (appointed by Student Science Association (SMD)), motivational interview assessment. Motivational interview takes place according to the schedule set in advance. Motivation Committee is composed of academic vascular surgery staff and residents representatives. Scientific activities in the field of vascular surgery, clinical voluntary activity in departments that provide vascular surgery services as well as qualities of human being are evaluated. Motivation letter addressed to the Commission, provided one day before the scheduled motivational interview. 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 if after the main admission free places are still available.</p>	<p>Results of previous studies are accepted individually, taking into account the developed competencies and goals of program that correspond to vascular surgery residency study program, with the guidance of procedures set by LUHS Senate.</p>

Access to further education
<p>Degree providing third cycle doctoral studies (are chosen by 10% with obtained vascular surgery professional qualification).</p>

Access to professional activities (employability)
<p>Doctor with vascular surgery speciality can do practical job in state as well as in private health care institutions, which have a licence to run vascular surgery profile services, according to the licence obtained in Lithuania or abroad, can seek a scientific degree in doctoral studies, do pedagogical job. Vascular surgeon licence is given by the State Health Care Accreditation Agency under the Ministry of Health of the Republic of Lithuania, after submitting diploma of completed medical studies program, internship certificate and certificate of completed residency.</p>

Learning and teaching approaches	Methods of assessment
<p>Learning and teaching includes formal teaching and work-based experiential learning. Formal teaching includes lectures and seminars, consultations, case presentations, journal clubs, grand rounds, clinical skills demonstration and teaching using angiography and ultrasound devices, research projects.</p> <p>Activities of independent self-directed learning may include reading, maintenance of personal portfolio (log-book, self-assessment, reflective learning, personal Development plan), research projects, reading journals.</p>	<p>Participation in lectures, seminars, consulting activity and group discussions. It is required, that during the annual lectures, seminars and group discussions at least 75% of the theoretical sessions of the topics would be covered. It is possible to take levelling course with the previous year residents or by individual schedule.</p> <p>There are examinations (written and oral) after each cycle. Written examination includes test with open and closed-ended questions / tasks and clinical situation. Results are evaluated by 10 point grading system.</p>
<p>Skills and competences are acquired via their job as residents in Emergency Department, Intensive Care department, Vascular surgery department other specialty</p>	<p>Evaluation of continuous clinical work, performing and interpreting diagnostic procedures, operations is done every week by reviewing Daily activity diary which is</p>

<p>departments, Outpatient Department; Head of the Department led word-rounds, personal word-rounds, Multi-disciplinary team meetings, licensed vascular surgeons led night shifts. Residents have supervised responsibility for the care of in-patients. This includes day-to-day review of clinical conditions, note keeping, and the initial management of the acutely ill patient with referral to and liaison with clinical colleagues as necessary.</p>	<p>signed by the Head of residency.</p> <p>Analysis and presentation of individual clinical cases during weekly word-rounds that are reviewed in Daily activity diary which is signed by the Head of residency studies on weekly visits signed by head of residency.</p> <p>Reviews (written in free form or questionnaire -based) of Residency Base staff (doctors and junior medical staff, other employees) on the activities of a resident are recorded at end of each cycle. They are added to the daily activity diary.</p> <p>Practical skills and abilities gained in cycle are assessed by 10-point grading system, and recorded in the Daily activity diary and Residents credit book.</p> <p>Literature and clinical cases reviews are presented in morning medical conferences by individual schedule. Presentations are recorded in daily activity diary and approved by the head of residency once every six months.</p> <p>Research work subject can be offered by the resident himself or by the Head of residency. Preliminary scientific subject, the subject matter and methods are discussed and approved in department's meeting. Research work and results are presented in Cardiothoracic and Vascular Surgery Clinic at the conference no later than one month before the final exam.</p> <p>Vascular surgery residency program concludes with the practical and theoretical examinations. The practical test takes place in the operating theatre. The theoretical test is 5 questions in writing form, discussing them orally after.</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, honorable with patients, follow medicine ethics norms and requirements for good medicine 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 vascular surgery, 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.	Doctor as an expert	3.1	Be able to analyze and synthesize, constantly seek perfection in vascular surgery 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.	Consultation with a patient	4.1	Be able to make an overall assessment of the patient's vascular system, analyze and interpret symptoms of a vascular pathology, collect vascular history and interpret it, to perform selective and targeted evaluation of the patient's vascular system, to formulate vascular pathology diagnosis.
		4.2	Be able to explain to the patient and/or his relatives a goal and a meaning for the actions taken to the patient, to discuss further actions, to reassure and to motivate patient and/or his relatives, to understand legal aspects regarding informing patient and/or his relatives.
5.	Making a management plan	5.1	Recognize vascular pathology and to evaluate level of difficulty, to make a plan for necessary diagnostic tests, to be able to interpret test results, perform primary (complaints, anamnesis, examination of the vascular system) and secondary (interpreting tests' results, planning and interpreting additional tests' results) differential diagnostics on patients symptoms to make a relevant conservative and/or interventional and /or surgical treatment plan for an individual patient to discuss it with the patient and/or his relatives, be able to evaluate potential pharmaceutical mutual interactions and possible side effects as well as evaluate affectivity of prescribed treatment; to inform properly and objectively about possible complications and alternatives for interventional and surgical treatment, be able to evaluate efficacy of prescribed treatment, be able to perform main/basic vascular surgery operations.
		5.2	Ability to communicate with patient and his/her relatives in case of critical condition; to gain confidence and written agreement from informed person, communicate in writing (filling up medical documents), communicate with aggressive patient.
6.	Medical emergencies and resuscitation	6.1	Be able to recognise conditions that need emergency medical treatment, provide first aid, provide intensive care according to the valid recommendations, provide aid in case of trauma, have abilities to treat conditions that require emergency assistance also treat vascular pathology that require emergency assistance.
7.	Performing or requesting of appropriate investigations and interpretation of the results	7.1	To be able to perform angiography, ultrasound examination of vascular system of the neck, abdomen and limbs.
		7.2	To be able to evaluate the results of radiological tests'

8.	Health promotion: engagement in population health issues and effective work in health care system	8.1	Be able to assess risk for patient's health and apply proper and rational remedies to lower the risk, apply infection control precautions, assess professional activities risk for his/her own health and take precautions to avoid this risk
		8.2	To participate in health programs on the level of population and of an individual.