

SPECIALITY TRAINING PROGRAM FOR SURGERY

Title of the residency study program	State code
Surgery	733A30057

Academic awarding institution	Language
Lithuanian University of Health Sciences, Medical Academy, Clinic of Surgery, A. Mickeviciaus 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, 5 years	330	8778	7783	991

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

Professional qualification awarded
Surgeon

Study program director	Director's contact information
Mindaugas Kiudelis	Clinic of Surgery

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

Aim of the residency study program
To prepare a doctor specialist, universally educated, honest, initiative, self-sufficient but responsible ethically, creative, interested in science innovations, upholding democracy, able to solve problems and work in a team, having surgeon professional qualification and able to apply acquired knowledge, skills and abilities in practical job, correspondent to Lithuanian Medicine Norm "Surgeon: Rights, duties, competency, responsibility". 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-sustaining job. Theoretical work includes studies in following fields: surgical anatomy, histology, embryology, pathology (cellular, biochemical and immunological mechanisms of diseases), and pharmacological and surgical treatment methods. To obtain knowledge residents are studying the newest literature, preparing presentations for special seminars. Optional cycles are meant to inquire one particular field.	Applied orientation program, orientated to practical activity and developing abilities for scientific research work, providing surgeon professional qualification.	Residency program of surgery is based on theoretical studies and practical and scientific job integration. These residency studies are taking place for already more than 20 years. Practical skills are obtained and theory course is realised with the help of University professors – residency base specialists. For the surgery residency study cycles the main residency base – LUHS Hospital Public Institution "Kaunas Clinics" is accredited. 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; 3. Order by LR Minister of Health of

		<p>December 21, 2009 No V-1054 „About Lithuania Medicine Standard MN 25:2009 „Surgeon. Functions, duties, rights, competency and responsibility” (2009-12-28, Valstybės žinios, 2009, Nr.: 154 -6996).</p> <p>4. Cumming AD, Ross MT. The Tuning Project (medicine) – learning outcomes / competences for undergraduate medical education in Europe. Edinburgh: The University of Edinburgh, 2008. (http://www.tuning-medicine.com)</p> <p>5. 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).</p>
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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 surgeons staff and residents representatives. Scientific activities in the field of surgery as well as qualities of human being 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 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 „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.</p>

Access to professional activities (employability)
<p>Doctor with surgeon speciality can do practical job in state as well as in private health care institutions, which have a licence to run surgical profile services, according to the licence obtained in Lithuania or abroad, can seek a scientific degree in doctoral studies, do pedagogical job. 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 (of learning achievements)
<p>Trainee, led by supervisor of residency, is working as a doctor and keeps the internal work rules of every department. When the trainee has theoretical knowledge they can progress in difficulty of surgeries and surgical procedures they are performing that are suitable for residency of surgery. When trainee acquires general clinical knowledge and practical skills in the first 2 years he can clinically investigate patients, make and utilise investigations and treatment plans for patient, can</p>	<p>Acquired knowledge and clinical skills are tested every day in wards, bandaging rooms, operating theatre. Trainees are checked by their supervisors. Head of the clinic is evaluating trainee’s ability to gather and present relevant information about the patient, to explain necessity of investigations and prescribed management plan during ward rounds. Theoretical knowledge is being tested during seminars. Every rotation is finished with a sign off at which trainee’s theoretical knowledge and</p>

<p>perform emergency aid. Trainee's decisions are checked and have to be signed by supervisor. Trainee can work independently although his work is overlooked by supervisor in his third and fourth year. The number of operations to be performed by a surgical trainee during his residency is written in the programme. Theoretical part of residency is read by university lecturers. Work practice that is needed to acquire adequate clinical practice is done in the hospitals chosen for specific residency programmes and supervisor looks after them.</p>	<p>clinical skills are evaluated with a mark (10 points system) by trainees and rotational supervisors. Residency of surgery is based on knowledge and skills acquired in continuous university studies. While studying in surgical profile rotations the trainee gathers theoretical knowledge about diagnostics and treatment of surgical diseases and basic surgical skills. After two years trainees are taking theoretical and practical exams. After five years they take the final exam that is marked by the examination board after the trainee finishes residency programme, presents their research work, has the work timesheets and characterisation signed by residency co-ordinator. The dates of final exams and the examination board members are confirmed by the rector and published one month before the exam. Practical exam is held 1-3 weeks before the theoretical exam. A trainee performs a planned surgery (rarely urgent surgery is performed). Examination is done by the board members that consist of lecturers of Lithuanian University of Health Sciences. Exam results are fixed in protocols. Practical skills are marked in 10points system. During practical exam trainee is tested on ability to diagnose the correct disease, the knowledge of indications and contraindications of the surgery, pre-operative care, decision on method of surgery and etc. until going to operating theatrand exam finishes on post-operative care knowledge. Close attention is paid to trainee's preparation for surgery, knowledge of applied anatomy, variety of surgery methods and trainees ability to choose the correct method for the case. Surgical technique (patients position on operating table, preparation of surgery field, selection of the cut, how tissues are separated an sutured, stopping of the bleeding, if instruments are used and held correctly and so on) is checked during performed surgery. Also trainee is checked on his action's sequence, treatment of tissues, how they are watching and evaluating patient's condition during the surgery, what knowledge they have on dangers and complications of surgery, prevention of complications and if there are complications what to do to fix them. Notes and evaluation is written in the protocol of practical exam, where there is also written conclusion if the examinee passed the exam and if they can to take theoretical exam. Theoretical exam is done in written form. Trainee answers 5 questions. Answers are marked in 10 point system by the prepared standard. Examination is done by the board members that consist of lecturers of Lithuanian University of Health Sciences. Results of the exam are written downin protocol. If the trainee does not pass the practical exam, they cannot take theoretical part of the exam.</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 medicine ethics norms and requirements for good medicine practice, follow aseptic conditions in the operating room, explain surgical acts intelligibly and properly, be critical toward others and himself/herself, be able to feel compassion for the patient, be creative and initiative.

2.	Professional activity: ability to apply knowledge and skills in planing, organising and accomplishing the task.	2.1	Have ability to evaluate the boundaries of his/her competencies, to act independently, if there is a need, seek for a help, solve problems and take decisions, to acclimatise to volatile conditions and urgent situations, communicate and work in a team with specialists from other fields and operating-room staff, be able to organise work and to plan time properly.
3.	Doctor as an expert/Global doctor: ability to analise, rate and pass the knowledge nationally or internationally.	3.1	Have ability to analise, improve abilities with learning all lifetime, apply academic knowledge in practice, give knowledge and abilities to junior colleagues, plan and do scientific research.
Subject-specific competences (knowledge, abilities, values and attitudes)		Aims (results) of residency study program	
4.	Consultation of a patient	4.1	To do somatic evaluation of a patient, assess the influence of existing pathology to surgery course, to evaluate and interpret patient history, to do objective and purposive patient (also unconscious) examination, to evaluate pain, to formulate diagnosis considering the syndrome.
		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, research results, to reassure and to motivate patient and/or his relatives, to understand legal aspects regarding informing patient and/or his relatives.
5.	Patient's diagnostics and formation of treatment plan	5.1	To evaluate patient's condition and it's severity level, to recognise surgical symptoms and/or syndromes, to make a plan for necessary diagnostic tests, be able to interpret test results, to perform primary (complaints, anamnesis, total examination) and secondary (interpreting tests' results and planning, performing and interpreting complementary tests' results) differential diagnostics on patients symptoms, to make a relevant treatment plan for an individual patient, to discuss it with a patient and/or his relatives, be able to evaluate possible pharmaceutical mutual interactions and possible side effects as well as evaluate affectivity of prescribed treatment.
		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 surgical treatment, provide first aid, provide intensive care according to the valid recommendations, provide aid in case of trauma, intoxication or other emergency cases, have abilities to treat conditions that require surgical emergency assistance.
7.	Diagnostic procedures, evaluation and interpretation of results.	7.1	Be able to perform emergency ultrasound (eFAST) in trauma cases, to interpret blood test results, to perform total patient's examination (inspection, palpation, percussion etc), to perform endoscopy of upper digestive tract and to interpret it's findings and rezults.
		7.2	Be able to evaluate X-ray of skull, backbone, berast, abdomen, pelvis, long bones and CT scans of internal organs and bones.

8.	The performance of surgical procedures	8.1	Be able to evaluate preoperative risk to patient health and apply appropriate and rational help to avoid possible complications.
		8.2	Be able to explain the patient and/or his relatives about surgical intervention, risk and possible outcomes
		8.3	Be able to perform operations and other surgical procedures involved in surgeon's qualification.
9.	Participation in health preservation, promoting and encouraging a healthy lifestyle	9.1	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.
		9.2	To participate in health programs on the level of population and of an individual.