P4. SPECIALITY TRAINING PROGRAM FOR ENDOCRINOLOGY

Title of the residency study program	State code
Endocrinology	733A30061

Academic awarding institution	Language
Lithuanian University of Health Sciences (LUHS), Medical Academy, Clinic of Endocrinology, 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	7th 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, 4 years	264	7230	6648	582

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

Professional qualification awarded
Endocrinologist

Director of study program	Director's contact information
Professor dr. Rasa Verkauskienė	Office phone no.: 8 37 327097 E-mail: endokrinologijos.klinika@kaunoklinikos.lt

Institution of accreditation	Accreditation untill
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 endocrinologist professional qualification and able to apply acquired knowledge, skills and abilities in practical job.

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. Obligatory cycles orientated on improving knowledge and abilities in internal medicine and resuscitation, diagnostic, drug and surgical treatment as well as prophylaxis of congenital and acquired pathologies of endocrine system. Separate obligatory cycles are formed for paraclinical diagnostical methods – radiology, ultrasonography.	Applied orientation program, orientated to practical activity and developing abilities for scientific research work, providing anaesthesiologist-reanimatologist professional qualification.	Program is prepared taking into account: LR legislation, directive of European parliament and council 2005/3/EB, European Union of Medical Specialists. Chapter 6, Charter on Training of Medical Specialists in the EU. Requirements for the speciality Endocrinology, Diabetes and Metabolism. UEMS 2007; Cumming AD, Ross MT. The Tuning Project (medicine) – learning outcomes/ competences for udergraduate

Optional cycles are meant to inquire one particular field such as treatment using insulin pump, alternative treatment.		medical education in Europe. Edinburgh: The University of Edinburgh, 2008; 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). Program of endocrinology is based on theoretical studies, practical and scientific job integration from the first year of studies. Practical skills are obtained and theory course is realised with the help of professors LUHS – residency base specialists. For the anaesthesiology-reanimatology residency study cycles the main residency base – LUHS Hospital Public Institution "Kaunas Clinics" is accredited. LUHS Kaunas Clinics is the main residency base for the residence of endocrinology as there are all laboratories and subunits in the same department: Unit of Endocrinology in the multiprofile hospital (85 beds), ambulatory care (8 consulting rooms), diabetic foot care (1 room), diabetes school (1 room), Unit of Pediatric Endocrinology in the multiprofile hospital (22 beds), ambulatory care consulting rooms, ultrasonography room, room of puncture aspiration and biopsy of thyroid gland. Tretiary care of endocrinologist is available 24 hours/day for inpatients. Facilities of radiology, laboratory medicine, intensive care and pathology are available 24 hours/day Institution for residency is shosen according to the regulations of the Counsil of LUHS residency. Scientific and research skills are improved while studying in the Clinics and Institute of Endocrinology.

Admission requirements	Recognition of previous learning
Master degree in medicine and medical doctor professional qualification and licence for medical practice are obligatory. Admission by the way of general competition. Competitive score structure is given in the conditions for entrance to the LUHS residency programs. The main components of competitive score is the average	Results of previous studies are accepted individually, taking into account the developed competencies and goals of program that correspond to Endocrinology residency study program, with the guidance of procedures set by LUHS Senate.

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 endocrinologists staff and residents representatives. Scientific activities in the field of endocrinolgy as well as voluntary clinical practice in the unit of endocrinolgy profle and 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.	

Access to further education
Degree providing third cycle doctoral studies.

Access to professional activities (employability)
Doctor with endocrinology speciality can do practical job in state as well as in private health care institutions, which have a licence to run endocrinology profile services, according to the licence obtained in Lithuania or abroad, can seek a scientific degree in doctoral studies, do pedagogical job. License of endocrinolgist 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. Certificate of completed residency and qualification of endocrinologist is accepted in the Europan Union. According to the aging of population, increasing number of endocrine pathologies and demand of endocrinologists as well as increasing average age of endocrinologist the need of doctors with the qualification of endocrinologist does not decrease and the perspective of emloyability is positive after residency of endocrinology.

Learning and teaching approaches	**Methods of assessment *(of learning achievements)***
Various teaching ant studying methods are applied: lectures, seminars, consultations, group discussions together with doctors-residents, every-day activity logbook writing, introduction of case reports in corporate patients' considerations of endocrinology department, in medical conferences, preview of educational videos, pictures, cytological samples, creation and performing of the personal improvement plan.	Participation in lectures, seminars, consultations and group discussions is marked in a separate sheet. It is obligatory to accomplish 75% of theoretical themes. There is possibility to work off either individually or with the residents that are studying a certain subject. Oral and writing examination are taken in the end of each cycle. Writing examinations consists of questions from the cycle material. The score is 1-10. Oral practical examination: examination of patient clinical state, filling of medical documentation with the complains, description of the clinical state, plan of examination and treatment with supervision of head residency tutor. Total evaluation of each cycle is the average of oral and writing examinations evaluation.
Skills are aquired during examination and treatment of therapeutic and surgical patients of Endocrinology and other departments, participation in everyday and week visitations, patients' considerations, observation of patients, working night shifts with a supervision of the head of residency or licensed doctor.	Permanent evaluation of clinical work, preparation and intepretation of diagnotic procedures is performed weekly and approved by the stamp of the head of resinedcy. Evaluation of individual clinical case analysis and presentation is performed during weekly visitations and marked in the sheet of everyday activities and approved by the stamp of the head of residency. References about the everyday work of the resident written by residency base stuff (doctors, young researchers, etc.) by letter or questionaire are used as attachments together with everyday activity sheet. Practical skills are assessed 1-10 and written in the credit

	book of resident and everyday activity sheet. Presentation of review of scientific literature and clinical case with literature review in the conference of doctors are performed according to the schedule and registered in everyday activity sheet and aproved by the tutor of resident twice a year. Final work of residency should be original and meet the requirements of published scientific work. Theme and aim are suggested by the tutor of the resident or by the resident himself in the end of the first year of residency. Final work is presented in the conference of Edocrinology clinic if not published as well as all the printed text in the 2nd semester of 4th year. The program of residency is completed when practical and theoretical exams are taken. When the program of residency is fulfilled, final work thesis defended, the everyday activity sheet and characteristic of coordinator of residency delivered, the final exam is taken and the resident is evaluated by the commitee of qualification. Final exam consists of practical exam with the patient supervised by the commitee member and theoretical exam when answers to 4 questions should be writen. Final score is average of practical and theoretical exam evaluations.

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, 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 endocrinology, to act independently, if there is a need, seek for a help of, solve problems and take decisions, communicate and work in a team with specialists from other fields, especially radiologists, cardiologists, psychiatrists, obstetrician and gynecologists, be able to organise work, to plan time properly and evaluate their competence.
3.	Doctor as an expert	3.1	Have ability to analyse endocrine symptoms and syndromes, constantly seek perfection in endocrinology 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.	Patient endocrinological consultation	4.1	Have ability of clinical evaluation, clarification and interpretation of endocrine symptoms and syndromes as well as anamnesis interpretation, clinical examination of the patient and formulation of 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.	Patient's diagnostics and formation of treatment plan	5.1	Recognise clinical endocrine pathology, evaluate its severity, 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 reasons; to make a relevant treatment plan and method 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; to inform properly and objectively about possible complications, about treatment and its efficacy.
		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.
7.	Executing procedures, evaluation and interpretation of results	7.1	Be able to perform and evaluate ulstrasonography, puncture and aspiration, biopsy of thyroid gland as well as neurotensiomety and eye fundus examination. Perform farmacological specimens.
		7.2	Be able to evaluate rentegonological, radiological, examinations with radioisotopes, electrophysiological and genetic examination data.
8.	Participation in health preservation, promoting and encouraging a healthy lifestyle	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, asses 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.