

11. Programos aprašas skelbimui internete anglų kalba

SPECIALITY TRAINING PROGRAM FOR CLINICAL TOXICOLOGY

Title of the residency study program	State code
CLINICAL TOXICOLOGY	733A30075

Academic awarding institution	Language
Lithuanian University of Health Sciences, Medical Academy, Nephrology Clinic, 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	4416	864

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

Professional qualification awarded
Clinical toxicologist

Study program director	Director's contact information
Professor dr. Inga Arūnė Bumblytė	El. paštas:ingabumblyte@gmail.com Tel.:(+370 37) 326189

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 clinical toxicologist professional qualification and able to apply acquired knowledge, skills and abilities in practical job in diagnostics, treatment and prophylaxis of poisonings. 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. Obligatory cycles are oriented in to profound knowleges and skills for clinical toxicologist. Initially two years the resident undergoes basics of internal diseases in cycles: pulmonology and alergology, cardiology, gastroenterology, reumatology,	Applied orientation program, oriented to practical activity and developing abilities for scientific research work, providing clinical toxicologist professional qualification.	Program is prepared taking into account LR legislation, LUHS valid documents and Directive of Europarlament and Board 2005/36/EB. Cumming AD, Ross MT. The Tuning Project (medicine) – learning outcomes / competences for udergraduate medical education in Europe. Edinburgh: The University of Edinburgh, 2008. Prieiga per internetą:

<p>nephrology, endocrinology, hematology, onkology, intensive care, emergency care.</p> <p>In the third year of program resident is studying theory and practical works in obligatory and optional cycles of clinical toxicology. Obligatory cycles are oriented to improve practical skills and knowledge in field of internal diseases, intensive care and resuscitation and in clinic, diagnostic, complications and different methods of treatment of acute poisonings: nonspecific methods of decontamination, antidotes and methods of extracorporeal detoxication of poisoned patient, symptomatic medicinal treatment. There are two obligatory cycles to improve knowledge in diagnostic and treatment of acute poisonings. Optional cycles are turned to profound studies of methods, equipment, technique and indications of extracorporeal detoxication.</p>		<p>http://www.tuning-medicine.com</p> <p>Program is based on theoretical studies and practical and scientific job integration. Practical skills are obtained and theory course is realised with the help of University professors – residency base specialists. For the clinical toxicology residency study cycles the main residency base – LUHS Hospital Public Institution “Kaunas Clinics” is accredited. This is the multiprofile hospital provided in modern equipment, laboratory diagnostic and qualified pedagogical staff. The competence of scientific studies are trained during scientific research in Nephrology clinic of LUHS Hospital Public Institution “Kaunas Clinics”.</p>
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Admission requirements	Recognition of previous learning
<p>Master degree in medicine and medical doctor professional qualification are obligatory. Special requirements for foreign students – good skills in Lithuanian language. 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 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.</p>	<p>Results of previous studies are accepted individually, taking into account the developed competencies and goals of program that correspond to “Clinical toxicology” 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 clinical toxicologist can do practical job in state as well as in private health care institutions, which have a licence to run clinical toxicology profile services, according to the licence obtained in Lithuania or abroad, can seek a scientific degree in doctoral studies, do pedagogical job. Clinical toxicologist 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. Certificate of completed residency and licence of professional speciality are acceptable in Europe Union countries.</p>

Learning and teaching approaches	Methods of assessment (of learning achievements)
<p>Various teaching and studying methods are applied: lectures, seminars, consultations, group discussions together with doctors-residents, councils of physicians, consultations in another departments, interdisciplinary considerations of patients, participation during hemodialysis, hemoperfusion and plasmapheresis procedures, visual learning during methodological films, care for patients, participation in visitations and</p>	<p>Permanent assessment of resident’s work by reviewing every-day activity logbook and realization of duties and validation by signet of resident chief. Records from residency base staff (physicians, nurses and others) about resident independent self-directed work at the end of every cycle (free form). At the end of every cycle resident has theoretic credit, during which reply in four theoretic questions. The</p>

<p>considerations of patients by staff chief and chief of the clinic every day and weekly, reports about patients during visitation and case presentations, duties in internal profil departments, participation in autopsies, every-day activity logbook writing, Activities of independent self-directed learning may include studies about treatment methodes, indications and contraindications of such methodes in poisoned patients, management of medical documentation, scientific investigation, material preparation for thesis and articles, participation in scientific and theoretic-practical conferences.</p>	<p>evaluation of answers in 10 degree system. Case reports preparation and presentation during general meetings. Review of scientific literature, analysis and preparation of clinical cases with literature review and its presentation during conferences. The finish of program of residences studies is examination. The final examination consists from two parts: practic and theoretic examination. Practical examination runs 7-3 days before theoretic examination. During this examination resident must examine new patient, prepare extensive plan of investigation and treatment, to performe differential diagnostic. In the case of fail of practical part of examination is forbidden to participate in theoretical part. Theoretical examination runs in writen form to replying in 5 accidentally selected questions from whole residence programe. Assesment in ten degree systems is turned four both parts of examination. The final evaluation of examination is the arithmetical mean of both parts.</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, 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 clinical toxicology, 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, prior with reanimatologists, nephrologists, psychiatrists and others, be able to organise work and to plan time properly.
3.	Doctor as an expert	3.1	Be able to analyse symptoms of poisonings and to obtain joint view of actual poisoning, constantly seek perfection in clinical toxicology while continuing lifelong learning, be able to apply theoretical knowledge in practice, to pass own knowledge and abilities to colleagues that have less practice, be able to plan and to do scientific research.
Subject-specific competences (knowledge, abilities, values and attitudes)		Aims (results) of residency study program	
4.	Examination of poisoned patient by reviewing: basics of etiology, pathogenesis of	4.1	To be able to perform general somatic evaluation of poisoned patient applying acquired knowledge about etiology, and pathogenesis of poisonings, variations of metabolism, elimination ways and time of poisons, and the influence of them in severity and clinical view of

	poisonings, toxicokinetic and toxicodynamic properties of poisons, the influence of them in severity and clinical view of poisoning, selection tactics of treatment.		poisoning and to selection tactics of treatment. To be able to ascertain and interpret symptoms of poisonings, to get the adjusted case history and interpret it, to make plan of examination and differential diagnostic of poisoned patient.
		4.2	To be able to clarify for patient and/or for his family the sense of the actions, to clarify for patient and/or for his family clinical disorders induced of poisoning and to consider further examination, to calm and motivate the patient.
5.	The diagnostic according the syndromes of poisoning and investigation plan making in poisonings	5.1	To recognize the typical syndromes and clinical manifestation and to evaluate the severity of poisoning, to make the diagnostic plan and to be able to interpret the results of investigation, to perform initial (according complains, case history, general examination) and secondary (interpreting the results of further investigations) differential diagnostic of patients symptoms.
		5.2	To be able to communicate with patient and/or his family in case of critical illness, to obtain the confidence and to get the written agreement of informed person, to be able communicate in written form, to communicate with aggressive patient.
6.	The treatment plan making, the dosing of medications and antidotes according schemes, the adjustment of general and special methods of decontamination and treatment.	6.1	To be able to make right individual treatment plan for poisoned patient according toxicokinetic and toxicodinamic properties of poison, type of metabolism, time and duration of poisoning, to be able to consider possibilities of general decontamination and extracorporeal detoxification methods, antidote treatment. To be able estimate all possible interactions between poisons and medications and possible late complications, to plan the duration and course of observation. To be able to consider with patient and/or his family the treatment plan, course, effectiveness and prognosis .
7.	The diagnostic and treatment of urgent states in poisonings	7.1	To be able to recognize an emergencies in poisonings, to provide first aid and first resuscitation measures according approved recommendations, to provide first aid measures in case of poisoning, to be able to treat urgent states induced by poisonings (hypovolemia, shock, coma, hypo- or hyperglycemia, hypo- or hyperkalemia etc.).

8.	The evaluation of patients for extracorporeal detoxification procedures and making plan of observation (according indications and contraindications).	8.1	To be able self-directed perform procedures of hemodialysis, plasmapheresis and other extracorporeal detoxification, to observe and asses the condition of patient5 during procedure, evaluate the effectiveness of procedure and to plan further requirement of procedures.
9.	The participation in health saving programs, propagation and promotion of health lifestyle.	9.1	To be able to estimate the risk for patient's health and to apply optimal and rational measures to reduce the risk. To apply the measures of infection control, to evaluate the professional health risk for him(her)self and to initiate actions for risk prevention.
		9.2	To participate in the programs of populations and individuals wellness