

SPECIALITY TRAINING PROGRAM FOR PEDIATRICS AND PEDIATRIC NEUROLOGY

Title of the residency study program	State code
Pediatrics and Pediatric Neurology	733A300A2

Academic awarding institution	Language
Lithuanian University of Health Sciences (LUHS), Medical Academy, A. Mickevičiaus str. 9, 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
Permanent, 6 years	396	10560	8070	2490

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

Professional qualification awarded
Pediatrician and pediatric neurologist

Study program director	Director's contact information
Prof. Milda Endzinienė	Tel.: (8 37) 326811, e-mail: endziniene@gmail.com

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

The aims of the Residency Program
The aims of the residency study program „ Pediatrics and Pediatric Neurology “ are to raise a medical specialist who is universally-educated, honest, proactive, self-sufficient, ethically responsible, creative, and capable of inculcating the acquired knowledge, skills and competences into practice; able to absolutely perform all tasks related to diagnostics, management, monitoring, prophylaxis and rehabilitation issues in the field of pediatrics and pediatric neurology; also, to be highly motivated and interested in recent scientific achievements; following the principles of democracy; able to solve problems, and efficient as a team member.

Program profile		
Disciplines/subject areas	Orientation of the program	Distinctive features of the residency study program
The Program consists of mandatory and elective study courses, which include lectures&seminars, clinical practice and independent self-directed learning. Mandatory study courses are focused on the improvement and further development of knowledge, skills and competences in general pediatric medicine, clinical diagnostics, conservative and surgical management, prophylaxis in the fields of	Applicable type of program, orientated towards practical activities and improvement of skills in scientific research; providing the professional qualifications and two licences: pediatrician and pediatric neurologist.	The Program gives the opportunity to get two different medical licences: pediatrician and child neurologist. The Program has been constructed taking into consideration the legislation system of the Republic of Lithuania, the directives of the European Parliament and Council, „The Norm of a Pediatrician“ officially approved within the Republic of Lithuania (MN 66:1999 „Gydytojas pediatras“. Teisės, pareigos, kompetencija ir atsakomybė), the Requirements for the Speciality Paediatrics (U.E.M.S. , 1995); European Board of Paediatrics, Basic Paediatric Training, J.Ramet, 2005; European Paediatric Neurology Training Programme (U.E.M.S., 2013 http://www.uems.net/fileadmin/user_upload/uems_documents/old_website_documents_admin/125.pdf).

<p>general pediatrics and pediatric intensive care, broad spectrum of congenital and acquired neurological childhood disorders. Special Obligatory cycles are devoted to child psychiatry, neurosurgery, adult neurology, also instrumental diagnostic methods: radiology, clinical neurophysiology, ultrasound.</p> <p>Specific mandatory study courses cover a specific field of child neurology (e.g., early intervention and rehabilitation of children).</p>		<p>The Program is based on the integrated process of the acquisition of theoretical knowledge and practical skills since the very beginning of the studies. Practical skills and theoretical knowledge are acquired with the help and under the mentorship of University professorship, specialists working at the University Hospital or other hospitals or outpatient clinics approved by the University and Ministry of Health, and under the guidance of Residency Program Directors.</p> <p>The Hospital of Lithuanian University of Health Sciences Kauno klinikos serves as the main medical establishment for theoretical and practical training of future pediatric neurologists. It provides emergency medical care, in-patient and outpatient healthcare services, with more than 1200 medical doctors and 2500 nursing specialists as the staff members. Thirty-five departments with different clinical profiles are situated in 15 buildings. Healthcare services may be provided to over 2000 patients at a time. There are 15 departments for out-patient care. The Hospital of Lithuanian University of Health Sciences Kauno klinikos is well equipped with modern technologies for diagnostics (radiological, electrophysiological, functional, laboratory) and treatment of childhood disorders.</p> <p>The major part of the theoretical and practical studies take place at the Hospital of Lithuanian University of Health Sciences Kaunas Clinics: Department Pediatrics Department and Neurology Department (Pediatric unit I-II, Pediatric Neurology unit, Childhood Intensive Care Unit, Outpatient Clinic, Unit for Urgent Medical Care, units of Neurology, also Neurosurgery, Psychiatry, Radiology, Rehabilitation Departments. The staff at the hospitals accredited for the Residency Program is highly qualified in the field of conservative and surgical treatment of childhood disorders, is skilled in providing multidisciplinary and comprehensive care and counselling for sick children and their family members, also in smooth transferring to adult specialists in late adolescence. The broad geographic distribution patients (extending beyond the Kaunas District) and the great number of cases with different disorders ensure good conditions for the acquisition of practical skills. For certain courses of the Pediatric part of the Program, two city hospitals and two outpatient clinics of Kaunas city have been accredited in addition.</p> <p>Experience in research may be acquired while taking part in the research projects at the Department of Neurology or other Departments of the University or the University Hospital. There is a possibility to perform a part of the program (up to 1 year) at a University hospital in foreign country.</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. Construction of the competitive score is presented in „The Terms of Admission to the Study Programs of Lithuanian University of Health Sciences“. There is a public competition to be</p>	<p>The results of previous studies are accepted on the individual basis, taking into account the developed competencies and goals required by the Residency Program “Pediatrics and Pediatric</p>

<p>admitted to specialty training programs. The components of the competitive score consist of the mean score of the assessment of all subjects studied during integral studies, the final exam score, the clinical medicine practice assessment score, student's scientific activities assessment (provided by the Student Science Association, SMD), motivational interview assessment. Motivational interview takes place according to the schedule set in advance. The Motivation Committee is composed of the academic staff of Neurology Department and a representative of residents. Scientific activities in the field of pediatrics and neurology as well as the personality qualities are evaluated. A Letter of Motivation is being provided to the Motivation Committee one day ahead of the competition. The competition is public and takes place separately to every residential study program in two stages (main and additional). The Second or Additional stage may be organised if after the main admission free places are still available.</p>	<p>Neurology" and corresponding to it, with the guidance of procedures set by the LUHS Senate.</p>
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Access to further education

<p>Laipsnį suteikiančios trečios pakopos studijos doktorantūroje (pasirenka apie 5-10% įgyjusiųjų gydytojų vaikų neurologo profesinę kvalifikaciją) Degree-providing third cycle doctoral studies (chosen by 5-10% with obtained pediatric neurology professional qualification).</p>

Access to professional activities (employability)

<p>A pediatrician and a pediatric neurologist may be employed at state or private healthcare institutions which have the licence to provide healthcare services in the field of pediatrics and/or pediatrics. Pediatric neurologist may also be employed at specialized educational institutions for children with neurological and/or mental disabilities, or the relevant expertise commissions. The licences of a Pediatrician and a Pediatric Neurologist are provided by the State Accreditation Service by the Ministry of Healthcare of the Republic of Lithuania after the submission of the diplomas certifying the accomplishment of the intergal medical studies, the internship studies, and the residency studies. In addition, a pediatrician and pediatric neurologist may proceed with scientific research and educational activities at the university level. The diploma and the licence of the Pediatrician and the Pediatric Neurologist are recognized within the the European Union. All pediatricians and pediatric neurologists after the accomplishment of the study Residency Program are successfully employed.</p> <p>According to the data provided by the Lithuanian Society of Medical Doctors, out of 1057 medical doctors having just the qualification of a pediatrician, 312 (29.5%) have reached the retirement age, and within the next 5 years 227 will reach this age, in addition. Thus, the prognosis tells that around 540 (51.1%) pediatricians (excluding sub-specialties) may stop practicing in 2017. Even the most pessimistic scenario prompts that around 20 pediatricians and around 2 pediatric neurologists should graduate annually, thus the employability perspectives for pediatricians and pediatric neurologists remain quite satisfactory.</p>
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Learning and teaching approaches	Methods of assessment (of learning achievements)
<p>Formal teaching includes lectures, seminars, consultations, case presentations, journal clubs, group discussions with fellow-residents, viewing of educational videos, routine case and theoretical presentations during the morning medical conferences and other professional meetings, grand rounds, clinical skills demonstration and teaching using simulators, also everyday independent self-directed learning including studies of medical scientific literature, maintenance of personal portfolio (Resident's Log-book, self-assessment, reflective learning, personal educational development plan), research projects.</p>	<p>Lecture attendance, personal activity during seminars, consultations and group discussions are being assessed in a separate sheet. It is required to attain at least 75% of the required annual scores planned in the schedule of theoretical lectures, seminars and group discussions on different topics. The missing scoring may be fulfilled on individual basis or by joining another group of peer residents.</p> <p>Assessment of knowledge in 10-score system in verbal or written form take place by the end of each course in the form of a test, with open-ended or closed questions/tasks or clinical cases.</p>
<p>Skills and competences are acquired via the clinical activities as residents at every clinical unit according to the local rules and within the framework of the Program. Residents have supervised responsibility for the care of</p>	<p>Regular weekly assessment of the clinical activities, including the performance and interpretation of diagnostic procedures, by review of the Resident's Log-book and signed/stamped confirmation by the Head of</p>

<p>in-patients. This includes day-to-day review of patients' clinical conditions, elaboration of investigation and management plan, note keeping, participation during grand rounds and investigational procedures (radiological, electrophysiological, laboratory, etc.), providing relevant medical information to patients and caregivers, and the initial management of the acutely ill patient with referral to and liaison with clinical colleagues as necessary.</p>	<p>the Residency course.</p> <p>Evaluation of clinical case presentations during the weekly grand rounds by making remarks in the Resident's Log-book confirmed by signature/stamp of the Head of the Residency course.</p> <p>The opinion of colleague staff members (doctors, nursing personnel, etc.) provided by the end of each course in free written form or by filling out a questionnaire regarding the personal qualities and competences of the resident. The response forms are being kept as supplements to the Resident's Log-book.</p> <p>The practical skills and competences obtained during the course are evaluated in the 10-score system and recorded in the Resident's Log-book and the Resident's course credit book.</p> <p>Preparation and presentation of scientific literature reviews on different topics and clinical case presentations during the morning conferences at the Department of Pediatrics and Department of Neurology according to the individual schedule. All presentations are being recorded in the Resident's Log-book and confirmed by the Head of the Residency course twice per year.</p> <p>The topic for the scientific research may be suggested by the Resident or by the Head of a Residency. The preliminary topic, subjects and methods are being discussed and confirmed at the meeting of the Neurology Department. The results of the research are presented during the conference of Neurology Department no later than 1 month prior to the Final Exam.</p> <p>The Residency Program is accomplished by the practical and theoretical Final Exam. The practical part of the Final Exam takes place at the bedside, while the theoretical part takes place by providing written responses to five given questions which is followed by discussion with the members of the Final Exam Committee.</p>
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General competencies (knowledge, abilities, values and attitudes)			Aims (results) of residency study program
1.	Professional attributes	1.1	To be honest and honourable with patients and their caregivers, follow the norms of medical ethics and the requirements for good medical practice, to be critical towards others and himself/herself, to be able to feel compassion for the patient, be creative and initiative.
2.	Professional activity	2.1	To be able to evaluate the boundaries of his/her competencies in the fields of pediatric and pediatric neurology, to act independently, and in case of a need, to seek for help, to solve problems and make decisions, to communicate and work in team with specialists from other fields (especially pediatricians, psychiatrists, neurosurgeons, radiologists, etc.), to be able to organise work and to plan the working time properly.
3.	Doctor as an expert	3.1	To be able to recognize, interpret and differentiate the somatic and neurological signs and symptoms in children, to solve ethical and legal

			<p>issues related to pediatric and neurological/developmental disorders, to plan smooth transfer of a chronically neurologically ill child to adult neurologists;</p> <p>to constantly seek perfection in pediatrics and child neurology while continuing lifelong learning, be able to apply theoretical knowledge in practice, to share own knowledge and abilities with colleagues, abilities to plan and to perform scientific research and present the results, to collaborate with Lithuanian and international colleagues in the field of pediatric neurology.</p>
4.	Global doctor	4.1	To recognize the multinational and multicultural diversity, to be able to work within international context, to be fluent in at least one foreign language, to be interested in overall (cultural, scientific, etc.) life beyond the limits of medical field, to participate in social non-governmental activities.
5.	Patient and caregiver counselling	5.1	To get precise targeted clinical and family history and to clinically interpret the data.
		5.2	To be able to explain the patient and his/her caregivers the aims and the sequence of the investigational and treatment procedures, to discuss the management plan, to reassure and to motivate the patient and caregivers, to be aware of the legal issues regarding informing patient/caregivers.
6.	Making a diagnostic and management plan	6.1	To have the competence of self-sufficient inpatient and outpatient healthcare of children; to evaluate the somatic and neurological/neurdevelopmental health status of healthy and sick children; to perform the medical examination, to recognize and interpret somatic and neurological signs and symptoms in children of different ages; to make a diagnostic plan in search of etiology, differential diagnostics and/or complications; to make and justify the clinical diagnosis to make the management and follow-up plan; to recognize effects and adverse reactions of the treatment.
		6.2	To be able to communicate with patient and caregivers in cases of critical conditions; to gain reliance and get written informed consent from caregivers; to communicate in writing (filling out medical documentation), to communicate with aggressive patient/caregivers, to positively solve conflicts with patients/caregivers, to plan palliative care.
7.	Medical emergencies and resuscitation	7.1	To be able to recognize somatic and neurological conditions in children that need emergency medical intervention, to provide first medical aid in somatic and neurological emergent cases; to provide resuscitation procedures according to the valid recommendations, provide aid in cases of trauma, to have the competences to make manipulations in cases requiring emergency assistance (respiratory insufficiency, cardiac arrhythmias, intoxication, seizures, coma); to be able to perform sedation, puncture and catheterisation of peripheral veins, lumbar and medullar puncture, injections (intravenous, intrathecal, intramuscular, subcutaneous).
8.	Execution and evaluation of diagnostic procedures, interpretation of results	8.1	To be able to measure body temperature, pulse oximetry, non-invasive monitoring of hemodynamics, respiration, blood gas, neurological symptoms; to evaluate the results of spirometry. To have the skills to perform pharyngoscopy and otoscopy in children of different ages and to interpret the results. To have the skills of getting the pharyngeal and tonsillar smear, urine and fecal samples and to interpret the laboratory results; To perform and interpret the skin test for tuberculosis, fast streptococcus antigen test. To be able to perform lumbar puncture and to interpret the results. To be able to make peripheral vein puncture; to evaluate the laboratory results of hematology, biochemistry, microbiology, serology,

			<p>immunology, genetics.</p> <p>To have skills to perform the catheterisation of trinary bladder, to get the urine sample and to interpret the laboratory results of general and bacteriological laboratory investigation.</p> <p>To have competences to interpret the conclusions of specialists' consultations.</p>
		8.2	<p>To have competence to evaluate and interpret the results of radiological investigations of lungs, heart, abdomen, scull and bones, brain, spinal cord, peripheral nerves, muscles.</p> <p>To have the competence to diagnoze brain death.</p>
		8.3	<p>To have skills to registre ECG and EEG and to interpret the results. To interpret the results of ENMG, SPECT.</p>
		8.4	<p>To have competence on preparation of the child and caregiver for medical procedures and specialist consultations according to the child's age, mental and behavioural abilities.</p>
9.	Health promotion, engagement in population health issues and effective work in health care system	9.1	<p>To have competence in estimating the health-related risks including lifestyles in individual cases and to take precautions to avoid this risks and to prevent complications; to stimulate the collaboration of patients, caregivers and health professionals and other specialists related to the child's healths or education/social integration; to monitor child's developmental status.</p>
		9.2	<p>To educate children, caregivers and general society in healthy lifestyles and nutrition.</p>
		9.3	<p>To evaluate the impact of pollution, smoking on child's health and help to avoid it; to evaluate the risks of professional factors to personal health and take precautions to avoid them.</p>
		9.4	<p>To participate in health programs on the level of population and of an individual basis.</p>