

**SPECIALTY TRAINING PROGRAM FOR NEUROLOGY  
SUMMARY**

| <b>SPECIALTY TRAINING PROGRAM</b> | <b>State code</b> |
|-----------------------------------|-------------------|
| <b>Neurology</b>                  | 733A30075         |

| <b>Academic Awarding Institution</b>  | <b>Language</b> |
|---|-----------------|
| Department of Neurology of Medical Academy, Lithuanian University of Health sciences, A. Mickevičiaus str. 9, LT-44307 Kaunas | Lithuanian      |

| <b>Type of Studies</b> | <b>Cycle</b>                    | <b>Level of qualification</b> |
|------------------------|---------------------------------|-------------------------------|
| University studies     | Postgraduate non-degree studies | VII                           |

| <b>Mode of studies and length of the program in years</b> | <b>Volume of the program in ECTS credits</b> | <b>Total hours of student work</b> | <b>Formal teaching hours</b> | <b>Independent self-directed learning hours</b> |
|---|--|------------------------------------|------------------------------|---|
| Full-time, 4 years  | 264  | 7040                               | 6121                         | 919   |

| <b>Major field of studies</b> | <b>Primary second level field of studies</b> | <b>Boderland second level field of studies</b> |
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| Biomedicine                   | Medicine                                     | -  |

| <b>Professional qualification awarded</b> |
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| Neurologist                               |

| <b>Program Director</b> | <b>Contacts</b>                                       |
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| <b>Acreditation organisation</b>                  | <b>Period of reference</b> |
|---|----------------------------|
| Centre for Quality Assessment in Higher Education | 2006-2014 years            |

| <b>Program purpose</b>   |
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| The overall purpose of Specialty training program for Neurology is to produce a specialist with the necessary competences for a licenced neurologist, innovations-minded, and ambitious for higher profesional qualification |

| <b>Program profile</b>  |   |   |
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| <b>Disciplines/subject areas</b>  | <b>Orientation of the program</b>   | <b>Distinctive features</b>   |
| Program consists of mandatory and elective study courses, which include lectures&seminars, clinical practice and independent self-directed learning.<br>Mandatory study courses are focused on improvement and further development of knowledge, skills and performance in general medicine, basic First Aid, basic life support and cardio-pulmonary resuscitation, on improvement and further development of knowledge, skills and performance in correct assessment, investigation and treatment of patients with illnesses across the broad spectrum of congenital and acquired neurological disease. Specific mandatory study courses cover neuroradiological, neurophysiological and neurosonological investigations as | Applicable type of program, orientated towards practical activities and improvement of skills in scientific research; providing the professional qualifications and licence of neurologist. | Program was constructed in respect of Lithuanian legislation system, Directive 2005/36/EC of the European Parliament and the Council, Consensus of the EFNS/EBN on the recommendations for a specialist training in Neurology (Pontes C. Eur J Neurol 2005;12:743-6), and requirements for the specialty Neurology produced by the European Union of Medical Specialists ( <a href="http://www.uems.net/Neurology">http://www.uems.net/Neurology</a> ).<br>Program is integrating both theoretical and practical training At the University hospital as well as at the other hospitals or outpatients clinics approved for that purpose both by the University and Ministry of Health. Knowledge, skills and performance is gained under the supervision of University teachers – |

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| <p>well as basics of neuropathology and Neurogenetics. Elective study courses are orientated towards further improvement of skills and performance in one of the specific areas of Neurology (i.e. Pain) or neurodiagnostics (i.e. Carotid ultrasound).</p> |  | <p>specialists working at the University or other approved hospital or outpatient clinic. Both two Kaunas city hospitals and all major hospitals across Lithuania (those located in Klaipeda, Panevezys, Siauliai) are approved for practical training in specific subject areas of the specialty training program „Neurology. University Hospital „Kauno klinikos“ serves as a major medical establishment for theoretical and practical training of future neurologists. It provides emergency medical care, in-patient hospital services and outpatient testing and services. At present more than 1200 medical doctors and 2500 nursing specialists are working at the Hospital. 35 departments with different clinical profiles are situated in 15 buildings. Over 2000 patients can be treated at in-patient departments at a time. There are 15 departments for Out Patient care. In 2009 there were about one million out - patients, 84 000 in-patients, 61 120 surgeries performed in the Hospital. Hospital of Lithuanian University of Health Sciences Kauno klinikos is well equipped with modern technologies for diagnostics and treatment. Trainees may choose a hospital for the practice according to the regulation of the University. Experience in Research may be acquired while taking part in the research projects at the Department of Neurology or other Departments of University or University Hospital. There is a possibility to perform part of the program (up to 1 year) at the University hospital of the foreign country.</p> |
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| <b>Admission requirements</b>   | <b>Recognition of previous learning</b>   |
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| <p>Master degree in Medicine and professional qualification of medicine physician is obligatory. There is a public competition to be admitted to specialty training programs. Construction of the competitive score is presented in „The Terms of Admission to the Study Programs of Lithuanian University of Health Sciences“. 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</p> | <p>The results of previous studies are accepted on the individual basis, taking into account the developed competencies and goals required by the specialty training (residency) program “Neurology“ and corresponding to it, with the guidance of procedures set by the LUHS Senate.</p> |

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| <p>residents. Scientific activities in the field of 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> |  |
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#### Further education

Third cycle degree studies may be an option (up to 10% of young neurologists choose to proceed to PhD).

#### Employability

Licensed neurologist may practice in all public and private institutions of health service system, which hold a licence to provided neurological care. Licence to practice as neurologist is given by State Health Care Accreditation Agency after all obligatory requirements are fulfilled (a diploma certifying successful completion of basic medical training, certificate of internship, and certificate of residentship). Neurologist has a possibility to look for a place as a researcher fellow and or assistant as well. Awarded professional qualification „Neurologist“ is recognised by all EC member states. All licensed neurologists are employed in Lithuania at the moment. In 2011, Ministry of Health reported that nearly a half of all practicing neurologists will leave their positions because of age during 2011-2025. Therefore, there is going to be a lot of free positions to take for a future neurologists.

| Learning and teaching approaches  | Assessment methods   |
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| <p>Learning and teaching includes formal teaching and work-based experiential learning. Formal teaching includes lectures&amp;seminars, consultations, case presentations, journal clubs, grand rounds, clinical skills demonstration and teaching using simulators, 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>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 their job as residents in Emergency Department, Neurology Department, other specialty departments, Outpatient Department; Head of the Department led word-rounds, personal word-rounds, Multi-disciplinary team meetings, licensed neurologist 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>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 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</p> |

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|  | <p>reviews on different topics and clinical case presentations during the morning conferences at the 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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| <b>Generic Competences</b>          |  | <b>Program learning outcomes</b> |  |
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| 1.                                  | Professional attributes                  | 1.1                              | Act fairly and honestly, apply ethical principles and national and European legislation to clinical care, apply good medical practice principles at work, think critically and self-critically, be emphatic, creative, take the initiative, be able to seek an objective.  |
| 2.                                  | Professional activity                    | 2.1                              | Be able to evaluate the ambit and ask for help when necessary, adapt to new situations and cope with them, work autonomously, solve problems and make decisions, communicate interpersonally and work in a multidisciplinary team, organise and plan activities, including work-time.  |
| 3.                                  | Doctor as an expert                      | 3.1                              | Be able to analyse and synthesize, to improve constantly via life-long learning, apply knowledge in practice and to teach others, to plan and carry out scientific research.   |
| 4.                                  | Global doctor                            | 4.1                              | Acknowledge the diversity and multiculturalism of the environment, be able to work in an international context and communicate in at least one foreign language, take an interest in every-day life and scientific achievements outside field of medicine.   |
| <b>Subject specific competences</b> |  | <b>Program learning outcomes</b> |  |
| 5.                                  | Consultation with a neurological patient | 5.1                              | Be able to take an appropriate, focussed and comprehensive history and carry out general physical examination, be able to understand and correctly elicit neurological symptoms, take an appropriate, focussed and comprehensive neurological history, to undertake an appropriate, focussed and comprehensive examination of mental and physical state (screening and thorough) of the patient (of unresponsive patient included), assess pain and mental state of a patient, construct syndromes and correct neurological diagnoses. |

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|    |  | 5.2 | Be able to provide explanation to a patient (and his caregiver(s)) regarding aims and significance of the investigations planned, clinical and investigational findings, advice and discuss possibilities of further investigations (if needed) and treatments, provide reassurance and support   |
| 6. | Making a management plan of the neurological patient                                     | 6.1 | Ability to recognise a neurological condition; ability to formulate an appropriately ordered differential diagnosis based on an appreciation of the patient, their past history and current problems and their likely causes; Ability to plan and administer pharmacological treatments safely and effectively, Ability to formulate a focussed and relevant series of investigations, Adopt assessments and interventions that are inclusive, respectful of diversity and patient-centred. Ability to plan and order appropriate observations, determine and prescribe immediate treatment, seek appropriate opinions and interventions and with others, develop an overall plan for the individual patient; administer adequate and proper treatment; select appropriate drugs and other methods of treatment on a clinical situation, and evaluate their potential benefit and harm. |
|    |  | 6.2 | Ability to communicate with critically ill patient and his relatives; Ability to listen and deal with complex patients (e.g. angry or distressed patient).  |
| 7. | Medical emergencies and resuscitation  | 7.1 | Ability to identify and systemically evaluate acute health disorders and start treating them; Ability to evaluate and manage (with others) people in ICU; provide basic First Aid; provide basic life support and cardio-pulmonary resuscitation; provide trauma care according to current European guidelines.   |
| 8. | Performing or requesting of appropriate investigations and interpretation of the results | 8.1 | Ability to perform lumbar puncture, dynamic tests of CSF and interpret CSF laboratory findings; ability to auscultate carotid arteries, to perform tests of a function of ANS, ability to perform myelography, ultrasound of cervical and cerebral vessels.   |
|    |  | 8.2 | Understand role and practice of neurophysiological and neuroradiological investigations in disorders of the nervous system; Understand the principles of genetics as applied to neurological disorder. Request, interpret and utilise neuro-radiological investigations appropriately; Ability to interpret a neurophysiology report. Ability to request and evaluate neuroradiological investigations and reports; Ability to appropriately request pathological investigations and interpret pathology reports. Ability to interpret a genetics report. Ability to counsel and consent patients and families prior to undergoing genetic testing.   |

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| 9. | Health promotion, engagement in population health issues and effective work in a health care system | 9.1 | Ability to assess and manage risk to patients to monitor the quality of equipment and safety of the environment relevant to the specialty, to ensure the correct and safe use of medical equipment, ensuring faulty equipment is reported appropriately |
|    |   | 9.2 | Taking part into health promotion programs at the population and the person level   |