## **Syllabus**

## of postgraduate professional study program "Residency in medicine" In Faculty of continuing education of Riga Stradiņš University

## **Speciality programm in Genetics**

- 1. Level of the study program: professional study program
- 2. Credit points: 330 ECTS
- 3. Duration of program 220 wk.
- 4. Program manager: Rita Lugovska, Assoc.Prof., Dr.med.
- 5. Goal of the program: to provide the acquisition and improvement of theoretical knowledge and practical skills according to regulations of specialty to prepare the doctor for certification in the specialty of medical genetics. To obtain bases of classical medical genetics, to get used with results of cytogenetic, biochemical and molecular analyses, to get skills for treating patients affected with inborn disorders.
- 6. Content of the program:

Theoretical education: seminars, problematic lectures, teacher's work, research work, presentation of results of scientific work.

Practical skills

- <u>1<sup>st</sup> year</u> rotations in internal medicine and pediatrics: general pediatrics and neonatology – 8 wk, children psychiatry – 3 wk, ophthalmology – 2 wk, pathological anatomy – 3 wk, intensive therapy – 3 wk, nephrology – 3 wk, children infections – 2 wk, children surgery – 4 wk, children neurology – 4 wk, otorhinolaryngology – 2 wk, dermatology – 3 wk, children cardiology – 3 wk, psychosomatc medicine – 4 wk.
- $2^{nd}$  year Structure and aims of medical genetics service, inborn errors of metabolism – 10 wk, genetic counseling, classification of genetic diseases – 14 wk, family planning for families with elevated risk of inborn or hereditary defects – 15 wk, indications for genetic consultation, prenatal consultation, cytogenetic and molecular analysis – 5 wk.
- <u>3<sup>rd</sup> year</u> indications for genetic consultation, prenatal consultation, cytogenetic and molecular analysis 5 wk, clinical biochemical genetics 25 wk, postnatal clinical cytogenetics 14 wk.
- $4^{\text{th}}$  year clinical molecular genetics 8 wk, ethical issues of genetic counseling 4 wk, genetic counseling 8 wk, dysmorphology 8 wk, antenatal management of families with elevated risk of inborn or hereditary defects 8 wk, prenatal clinical cytogenetics 8 wk.
- $5^{\text{th}}$  year clinical genetics 44 wk.
- 7. Eligibility: graduated higher education in medicine (physician)
- 8. Study outcomes
  - Knowledge

In accordance with the recommendation of ESHG (European Society of Human Genetics) "Core competences in genetics for health professionals in Europe: Suggested core competences for health professionals who are specialists in genetics, 2008", physician acquires knowledge in medical genetic counseling; in diagnosis, treatment and prevention of genetic disorders. The physician is capable to independently prepare the scientific material for the publication.

Physician develops general skills in diagnosis, treatment and prevention of genetic disorders, is capable to use all of genetic testing technologies in the medical genetic practice in collaboration with all other medical specialists.

- Competences

Physician will function independently and as part of multi-disciplinary team within a specialist genetic service. Physician is capable to critically evaluate the results of his work, to constantly increase his qualification and knowledge, is trained for the future studies in doctoral programme.

9. Kind of test

Examination of theoretical knowledge by test questions.

The presentation of scientific research, which preliminarily will be given to the commission in the written form.

10. Study language: Latvian

Manager of study program:

Rita Lugovska, Assoc.prof., Dr.med. Head of Medical Genetics Clinic State Ltd. Children's University Hospital