

## ARTIGO DE PERSPETIVA

# Residency in Anaesthesiology and Reanimatology in Latvia

## *Programa de Formação em Anestesiologia e Reanimação na Letónia*

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### Afiliação

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### Palavras-chave

Anestesiologia/educação; Competência Clínica; Cuidados Intensivos; Currículo; Letónia

## ADMISSION PROCESS

Every year, until April 1, the Ministry of Latvian Health provides some state-funded study places for residency training in Anaesthesiology and Reanimatology. Admission to the residency program is competitive. The competition is organized taking into account Law on Higher Education Institutions, Medical Treatment Law and legal acts of the Republic of Latvia. The competition is based on the developed uniform admission rules and organized by a single selection committee, and it takes place in two stages. First the applicant submits an application electronically, where the future specialist selects a specialty and submits all the necessary documents. At the second stage, the applicant undergoes an interview.

- The applicant must provide his/her Diploma and Diploma supplement where the weighted average grade will be taken into account, including the grade obtained in the state exam, and scientific work;
- A motivation letter, which explains why he/she has chosen the particular specialty, tells about himself/herself and his/her previous work experience, as well as volunteering. It is necessary to provide a letter of recommendation from a specialist;
- Evidence of scientific activity is also required. This could be participation in a university scientific workshop, oral presentation at a scientific event, publications in peer-reviewed scientific journals, thesis in a scientific publication, article in a popular science publication, participation in an international conference.

style, presentation and argumentation skills are evaluated.

After passing these two stages, the applicant individually receives the admission result in electronic form.

Then the resident chooses the university and hospital where he/she will undergo theoretical and practical training, respectively.

## ORGANIZATION OF TRAINING

In Latvia, two universities provide theoretical training in Anaesthesiology, Reanimatology. There are Riga Stradiņš University and the University of Latvia. Every university has a program director. There is a slight difference in the programs of the two universities, but the purpose of the programs is the same – to provide theoretical knowledge and practical skills in accordance with the specialty – anesthesiologist, reanimatologist – requirements, and prepare a specialist for certification following the regulatory documents of the Republic of Latvia.

The university develops the curriculum, and the medical institution implements the program.

The training lasts five (5) years (Table 1). The workload includes 40 hours a week on a rotational basis in various Clinical Base Units with additional seminars and problem lectures. Residents can study with certified professionals who have completed at least one certification (five years after receiving the certificate).

In the first year of training, the resident studies and repeats theoretical disciplines. The studies also include an introduction to general anaesthesiology, adult and pediatric intensive care, and advanced Cardiopulmonary Resuscitation. The second year of training is devoted to anaesthesiology in abdominal surgery, gynecology, urology, neurosurgery, orthopedics, ophthalmology, pediatrics, and angiology. Adult intensive care also continues.

In the third year, students undergo rotations such as

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**Table 1. The training lasts five (5) years**

Distribution of required courses by year				
1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year
Anatomy, Physiology, Pharmacology, Physics and statistics, General surgery, Thoracic surgery, Obstetrics, Neurology and neurosurgery, Cardiology, ECG, Introduction to general anaesthesiology, Introduction to adult and pediatric Intensive Care, Advanced CPR	Anaesthesia in abdominal surgery, Anaesthesia in gynecology, Anaesthesia in urology, Anaesthesia neurosurgery, Anaesthesia in orthopedics, Anaesthesia in ophthalmology, Anaesthesia in pediatrics, Anaesthesia in angiology. Adult Intensive Care.	Emergency care medicine, Anaesthesia in thoracic surgery, Anaesthesia in obstetrics, Anaesthesia and Intensive Care in pediatrics, Bronchoscopy, Peripheral nerve blocks, Clinical microbiology and hospital epidemiology.	Patient consultation in outpatient hospital, Anaesthesia in plastic surgery and microsurgery, Anaesthesia in otolaryngology, Anaesthesia in Dentistry, oral and maxillofacial surgery, Anaesthesia in endocrine surgery, Anaesthesia for emergency surgery, Anaesthesia in ambulatory surgery, Anaesthesia for diagnostic procedures. Intensive Care in cardiology, Intensive Care in neurosurgery, Intensive Care in toxicology, Introduction in renal replacement therapy, Transfusiology.	Anaesthesia and intensive care in cardiology, Anaesthesia in neonatology and pediatrics, Intensive Care in neonatology and pediatrics, Anaesthesia and intensive care for patients with burns. Anaesthesia for organ transplant and donor management, Pain medicine, Prolonged neuraxial blocs technics, Advanced CPR.

emergency care, anaesthesia in thoracic surgery, obstetrics and pediatrics, and intensive care in pediatrics. Training includes manipulations such as bronchoscopy and peripheral nerve blocks, and theoretical course in clinical microbiology and hospital epidemiology.

In the fourth year, the introduction to anaesthesiology continues, and during residency the course of anaesthesiology in plastic and microsurgery, otolaryngology, endocrine anaesthesiology and anaesthesiology for diagnostic procedures is completed. In the year the resident also works in intensive care – cardiology, neurosurgery, toxicology. Introduction in renal replacement therapy. The resident completes the year with a theoretical course in transfusiology. In the fifth year, the resident studies in-depth anaesthesia and intensive care in cardiac surgery, pediatrics, and patients with burns. The resident continues to develop the Qualification paper.

The study process includes:

- Theoretical education – problem lectures, seminars, case report, pedagogical work, etc;
- Practical training – study courses in hospitals and outpatient institutions, simulations;
- Independent work – practical work, literature research, scientific research, and developing a qualification paper.

## ASSESSMENT AND EVALUATION

Theoretical and practical knowledge is assessed at the end of each study course. Each resident must provide a report on the practical and scientific work done in the year. Upon approval, the university will transfer the resident to the next year.

After the second year, each university conducts an exam. The exam consists of MCQ tests and discussion.

Questions related to general anaesthesiology, intensive care in adults, anaesthesiology and intensive care in pediatrics.

The final examination consists of an MCQ test, discussion and presentation of a qualification paper.

Representatives of the Society of Anaesthesiologists and Reanimatologists of Latvia takes part in the final exams.

## RECERTIFICATION FOR ANAESTHESIOLOGISTS AND REANIMATOLOGISTS

The Latvian Medical Association oversees the professional standards and certification processes for anaesthesiologists and reanimatologists in the country, following the law Procedures for Certification of Medical Practitioners. Each specialty has its certification commission.

Anaesthesiologists and reanimatologists must undergo regular recertification every 5 years to maintain their credentials, which typically involve:

- 250 continuing medical education (CME), out of which at least 60% are in anaesthesiology, reanimatology specialty;
- Description of your clinical practice, number of manipulations performed;
- Recommendations from the head of the department and from the hospital;
- CME are obtained from local and international congresses, seminars, workshops, publications, teaching work.

The Society of Anaesthesiologists and Reanimatologists of Latvia and both Faculties of Medicine (Rīga Stradiņš University and University of Latvia) are actively involved in the organization of educational processes and motivated to participate in international activities (ESAIC, ESICM, ESRA, ESPNIC, ESPA, etc.). There is active cooperation between the Baltic States in holding congresses too.

The theoretical exam must be taken if CME is not collected.

In summary, the recertification process in Latvia for anaesthesiologists is comprehensive, involving continuous education and obligate clinical practice to provide safe, effective care to patients. In my opinion, our curriculum has three big advantages. The first and most important thing is Simulation-based medical teaching and learning.

This is especially important for first and second-year residents. Simulation is safe for patients and provides the opportunity to make mistakes and work on them.

Secondly, EDAIC Part I center has been located in Latvia for many years. I would like to note that every year the number

of residents passing the first part of the exam in our center is increasing. This is because our leaders actively propose to do so. As the residents themselves note, this is a good opportunity to prepare for exams after the second and fifth years. But if we talk about the second part of EDAIC, then not everything is so good. The percentage of those who passed or tried is much lower. This may be due to several factors, firstly, a very good knowledge of English is required. Secondly, the price of this exam is quite high for our country and, finally, the centers are far away.

And finally, the training program provides an opportunity to work and gain experience not only in large medical centers in the capital, but also in regional hospitals.

## CONTRIBUTORSHIP STATEMENT / DECLARAÇÃO DE CONTRIBUIÇÃO

OZ, ID: Conception, design, writing, supervision and critical revision of the manuscript

Todos os autores contribuíram de igual forma para o desenho e escrita do manuscrito. Todos aprovaram a versão final a ser publicada

*OZ, ID: Conceção, desenho, redação, supervisão e revisão crítica do manuscrito*

*All the authors contributed equally to the design and writing of the manuscript. All approved the final version to be published*

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