**Residency Training Program accredited**

**at the Tbilisi State Medical University**

***1.“Internal Medicine“***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

* 1. Respiratory diseases - 2 months;
  2. Diseases of digestive system - 2 months;
  3. Geriatrics - 1 month;
  4. Renal diseases - 2 months;
  5. Hematologic disorders - 2 months;
  6. Rheumatologic diseases - 2 months.

***Third year of residency training:***

* 1. Endocrine diseases - 1 month;
  2. Allergology and clinical immunology - 1 month;
  3. Dermatologic diseases - 1 month;
  4. Phthisiology - 1 month;
  5. Infectious diseases - 2 months;
  6. Oncologic diseases - 2 months;
  7. Medical rehabilitation - 1 month;
  8. Neurologic diseases - 1 month;
  9. Palliative medicine - 1 month.

***2. “Allergology-Immunology”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1. Revision of basic knowledge in the field of anatomy and physiology (Anatomy and physiology of organs and systems of allergic manifestations. Basic concepts and criteria of allergy and immunity. Allergy and immunity. Modern classification of allergic reactions - 4 months;

2.2. Diagnosis of allergic diseases. The concept and stages of a specific allergodiagnostics. Allergodiagnostics in vivo; Allergodiagnostics in vitro - 5 months;

2.3. Bronchial asthma - 2 months;

***Third year of residency training:***

3.1. Allergic rhinitis, non-allergic rhinitis, concomitant diseases of allergic rhinitis (acute and chronic sinusitis, otitis), atopic eczema, food allergy, oral allergy syndrome - 3 months;

3.2. Stinging Insect Reactions, urticaria, angioedema, hereditary and acquired deficiencies of C1 inhibitor, allergic reaction to drugs, contact dermatitis, occupational allergy, exogenous allergic alveolitis, mastocytosis - 4 months;

3.3. Antihistamines, glucocorticosteroids, β2-agonists, anticholinergic and membrane stabilizing agents, methylxanthines, leukotriene modifiers, calcineurin inhibitors, monoclonal anti-IgE drugs - 2 months;

3.4. Immunotherapy, cost-effectiveness of drugs and risk-benefit, side effects and interaction between drugs; Use of information resources, patient redirection. Immunodeficiency diseases: hereditary and acquired; cellular (T cell), antibody (B-cell) and combined immunodeficiency - 2 months.

***3. “Cardiology”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1. Clinical cardiology - 5 months;

2.2. Functional diagnostic: ECG Stress Test, 24-hr ECG (Holter) monitoring- 1 month;

2.3. Rhythmology - 1 month;

2.4. Angiology - 2 weeks;

2.5.Cardiovascular Prevention - 2 weeks;

2.6. Outpatient Cardiology - 3 months,

***Third year of residency training:***

3.1 Non-Invasive imaging of cardio-vascular diagnostic: Ultrasound diagnostic- 5months;

3.2 Non-Invasive imaging of cardio-vascular diagnostic: CT (computed tomography, MRI- Magnetic resonance imaging, basic of the radioisotopic imaging)- 2 weeks;

3.3 Invasive imaging of the cardio-vascular diagnostic- 2 weeks;

3.4 Clinical Cardiology- 5months;

***IV Year of Professional Training***

4.1. Intensive care in Cardiology - 5 Months

4.2 Interventional Cardiology - 1 Month

4.3.Cardiac surgery  - 1 Month;

4.4. Clinical cardiology - 2 months

4.5. Elective course - 2 months (for example: stress-echocardiography, transesophageal echocardiography, etc.).

***4.“ Gastroenterology“***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

1. Anatomy and physiology of the GI-tract. Signs and symptoms of the liver and GI diseases - 1 month;
2. Upper GI tract diseases – 3 months;
3. Intestinal diseases – 2 months;
4. Liver diseases – 3 months;
5. Diseases of the pancreas and biliary tree - 2months;

***Third year of residency training:***

3.6. Psychosocial factors of the GI-tract pathology. Dietary habits for the patients with GI-tract disease - 1 month

3.7. Ultrasound diagnostic of the liver and GI-tract diseases – 3 months

3.8. Endoscopic investigation methods of GI-tract - 2 months

3.9. Imaging (radiology diagnostic) of the liver and GI-tract – 2 months

3.10. Laboratory examination methods of the liver and GI-tract diseases -3 months;

***5.” Endocrinology”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1.Theoretical bases of endocrinology and methods of examination of endocrine glands in the clinic - 2 months;

2.2.Diseases of the hypothalamic-pituitary system -2 months;

2.3.Diseases of the thyroid gland - 3 months;

2.4.Iodine deficiency disorders and other diseases of the thyroid gland in childhood -1 month;

2.5.Diabetes mellitus and metabolic syndrome - 3 months; (Part I)

***Third year of residency training:***

3.1.Diabetes mellitus and metabolic syndrome -2.5 months; (Part II)

3.2.Obesity, diabetes and other manifestations of metabolic syndrome in childhood - 2.5 months; (Part II)

3.3.Nutritionology aspects of metabolic and endocrine disorders in childhood and adults -0.5 months;

3.4.Diseases of the adrenal glands - 2 months;

3.5.Endocrinological aspects of the pathology of the reproductive system -2 months;

3.6.Endocrinological aspects of the pathology of the epiphysis and thymus- 1 month;

3.7.Polyendocrine syndromes - 1 month;

3.8.Endocrinological aspects of pathology of bone system and calcium metabolism- 1 month;

***6.”*** ***Infectious Diseases”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1 main principles of the management of infectious diseases 1 month

2.2 bacterial infections and main principles of antibiotic therapy 3.5 months

2.3 viral infections and main principles of viral therapy 2.5 months

2.4 parasitic infections 1 month

2.5 main syndromes of infectious diseases 1.5 months

2.6 C.N.S. infections 1.5 months

***Third year of residency training:***

3.1 infections of liver and biliary tract 3 months

3.2 gastrointestinal tract infections 2 months

3.3 sepsis, cardiovascular, intraabdominal, bone and joints, skin and soft tissue infections 1.5 months

3.4 fever of unknown origin 1.5 months

3.5 hospital infections and infection control 1 month

3.6 mycosis 2 weeks

3.7 HIV infections, AIDS 1.5 months

***7. “Phthisiatry and Pulmonology”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1. Drug Susceptible Tuberculosis -4 month;

2.2. Drug Resistant Tuberculosis - 4 month;

2.3. Extrapulmonary Tuberculosis - 1.5 month;

2.4. Pediatric Tuberculosis - 1.5 month;

***Third year of residency training:***

3.1. Infectious Pulmonary Diseases (Primary and Secondary) - 2 month;

3.2. Chronic Obstructive Pulmonary Diseases, Allergic Diseases, Breathing Pattern Disorders - 4 month;

3.3. Diffuse Lung Diseases and Genetic Disorders Influencing Lung Formation and Function at Birth - 4 month;

3.4. Rehabilitation and Prevention of Respiratory Disorders – 1 month.

***8. „ Physical Medicine, Rehabilitation and Health Resort Therapy”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1. Drug Susceptible Tuberculosis -4 month;

2.2. Drug Resistant Tuberculosis - 4 month;

2.3. Extrapulmonary Tuberculosis - 1.5 month;

2.4. Pediatric Tuberculosis - 1.5 month;

***Third year of residency training:***

3.1. Infectious Pulmonary Diseases (Primary and Secondary) - 2 month;

3.2. Chronic Obstructive Pulmonary Diseases, Allergic Diseases, Breathing Pattern Disorders - 4 month;

3.3. Diffuse Lung Diseases and Genetic Disorders Influencing Lung Formation and Function at Birth - 4 month;

3.4. Rehabilitation and Prevention of Respiratory Disorders – 1 month.

***9.“Nephrology”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1. Assessment of Kidney Disease -1 month;

2.2. Primary and secondary glomerulopathies -4 months;

2.3. Tubulo-interstitial kidney disease; inherited kidney diseases-1 month;

2.4. Kidney disease in pregnant women and onconephrology -1 month;

2.5. Acid base and water-electrolytes disorders -1 month;

2.6. Acute Kidney Injury -1 month;

2.7. Chronic Kidney Disease CKD – 2 months;

***Third year of residency training:***

**3.1. Hemodialysis - 4 months;**

**3.2. Peritoneal dialysis – 3 months;**

**3.3. Kidney Transplantation -4 months;**

***Nephrology Residency Program -***

***10.“ Rheumatology“***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

The second academic year of three year professional preparation;

2.1. Theoretical basis of Rheumatology and methods of research – 2 months;

2.2. Disease of bone and joint system – 2 months;

2.3. Arthrosis and metabolic diseases – 3 months;

2.4. Punction of joint: Diagnostic and medical arthrocentesis – 1 month;

2.5. Periarthritis, Tendovaginites, Fasciitis and the other out joint soft tissues diseases – 3 months;

***Third year of residency training:***

3.1. Arthritis – 4 months;

3.2. Systematic rheumatologic diseases – 3 months;

3.3. Systematic vasculites – 3 months;

3.4. Arthropathies and Spondilopathies – 1 month;

***11.“ Hematology and Hemotransfusion“***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1 Acquired and congenital anemia.Anemia assosiated with various diseases - 2 months;  
2.2  Modern principles of diagnosis and treatment of acute leukemia - 3 months;  
2.3 Chronic myeloproliferative diseases - 3 months;  
2.4 Hemostasis system disorders (congenital and acquired coagulopathy, hemorrhagic diathesis, thrombosis and hemorrhagic in clinical practice, Dick syndrome) - 3 months;  
***Third year of residency training:***

3.1 Adenopathy, splenomagaly, lymphoproliferative diseases. 3 months  
3.2 Modern principles of diagnosis and treatment of lymphoma (Hodgkin and Nonhogkin) - 3 months;  
3.3 Basics of clinical and industrial transfusion - 3 months;  
3.4 Hemotransfusion complications, causes, treatment, prophylaxis, alternatives to transfusion therapy - 2 months;

***12.“ Sports Medicine”***

***First year of residency training:***

* 1. Outpatient care - 4 months;
  2. Inpatients care - 3 months;
  3. Emergency medicine - 2 months;
  4. Cardiovascular diseases - 2 months.

***Second year of residency training:***

2.1 Sport and medicine (interrelatetion). The basics of sports training - 1 month;

2.2. Physiology and Biochemistry ofExercise- 2 months;

2.3. Diagnostics of Human Physical Growth and Development - 1 Month;

2.4. Functional diagnostics insports medicine (intradisciplinary diagnostics) -3 months;

2.5. The essentials of medical rehabilitation, the modern model. Methods ofphysical rehabilitation (kinezotherapy, sports massage, manual therapy and other) -3 months;

2.6. Methods ofphysicalrehabilitations: Physical therapy, Balneology and Resortology - 1 months;

***Third year of residency training:***

3.1. Medical and Pedagogical Monitoring in sport - 1 month;

3.2.Functional Disorders of Organs and Systemsin athletes and Physically Trainedindividuals- 2 months;

3.3. Sports injuries and their prevention. First aid in life threatening situations --1 months;

3.4. Muscle-skeletal injuries - microtraumas during in exercise - 2 months;

3.5.Special Considerations in Female and Children athletes- 1 Month;

3.6.Recovery in sports and enhancingof performance (sportsmen'sdiet, sports pharmacology, sports psychology and doping control) - 2 months;

3.7. Medical service of sports teams during such external influence line travel, competitions and fees of athletes- 1 month;

3.8.Recreational systems and sports services for disabled persons - 1 month;

***13*.“ *Pediatrics*“**

***First year of residency training:***

* 1. Developmental and Behavioral Pediatrics – 3 months;
  2. Adolescent Medicine – 2 months;
  3. Outpatient and Preventive Pediatrics – 6 months;

***Second year of residency training:***

2.1 Emergency Pediatrics – 3 m.

2.2 Maternity Hospital – 1 m.

2.3 Neonatal Hospital – 2 m.

2.4 Pediatric Intensive Care Unit – 3 m.

2.5 Pediatric Radiology – 2 m.

***Third year of residency training:***

3.1 Pediatric Hospital – 11 m.

***14.“ Neonatology “***

***First year of residency training:***

* 1. Developmental and Behavioral Pediatrics – 3 months;
  2. Adolescent Medicine – 2 months;
  3. Outpatient and Preventive Pediatrics – 6 months;

***Second year of residency training:***

2.1 Medical Genetics-1 months;

2.2 Delivery room/Neonatal unit-2 months;

2.3 NeonatalRadiology-2 months;

2.4 Neonatal Surgery-1 months;

2.5 Neonatal Department at Hospital-4 months;

2.6 Neonatal Neurology-1 months;

***Third year of residency training:***

3.1Management of Neonatal Diseases at Maternity House-1months;

3.2Management of Neonatal Diseases at Hospital-2 months;

3.3Management of Congenital Heart Pathology at Neonatal Unit-1 months;

3.4Neonatal Critical Medicine(NICU)-7 months;

***15.“Children’s Neurology“***

***First year of residency training:***

1.1. General Pediatrics – 5 month;

1.2. Maternity department/ Neonatal Care - 1month;

1.3. Neonatal hospital - 1month;

1.4. Children’s Emergency Care- 2month;

1.5. Children’s reanimation and Intensive Care Unit- 2 month;

***Second year of residency training:***

2.1. Neurological examination -1 month;

2.2. Headache- 1 month;

2.3. Intracranial hypertension, coma, death of brain- 1 month;

2.4. Epilepsy, non-epileptic paroxysm and sleep disorders -2 month;

2.5. Infections of nervous system- 1 month;

2.6. Tumors, malformations and vascular disorders of nervous system -1 month;

2.7. Ataxia and Movement disorders- 1 month;

2.8. Genetic and metabolic disorders associated with lesions of Nervous System -1 month;

2.9. Traumatic and Anoxic lesions of Spinal cord and Brain -1 month;

2.10. Neurodevelopmental disorders- 1 month;

***Third year of residency training:***

3.1. Neuro-behavioral disorders -1 month;

3.2. Neuro-muscular disorders -1 month;

3.3. Autonomic nervous system, neuroendocrine and systemic diseases with associated Neurological Clinical Manifestation -1 month ;

3.4. Neonatal Neurology- 1 month;

3.5. Basics of Neurorehabilitation -5 month;

***16*.“ *Pediatric Emergency Medicine*“**

***First year of residency training:***

* 1. Developmental and Behavioral Pediatrics – 3 months;
  2. Adolescent Medicine – 2 months;
  3. Outpatient and Preventive Pediatrics – 6 months;

***Second year of residency training:***

2.1. Pediatric emergency medicine – 6 month;

2.2. Medical intensive care unit – 5 month;

***Third year of residency training:***

3.1. Anesthesiaand pain management – 1 month;

3.2. Trauma and pediatric emergency surgical conditions – 3 month;

3.3. Toxicology – 1 month;

3.4. Radiology in pediatric emergency department – 1 month;

3.5. Pediatric emergency medicine – 5 month;

***17*.“ *Cardio-Rheumatology of Children*“**

***First year of residency training:***

* 1. Developmental and Behavioral Pediatrics – 3 months;
  2. Adolescent Medicine – 2 months;
  3. Outpatient and Preventive Pediatrics – 6 months;

***Second year of residency training:***

2.1. Cardio-Vascular and Rheumatic Disease Management and Control at Children's Age Fundamentals of Evidence Medicine and Medical Statistics in Cardiology-Rheumatology in Children - 4 Months;  
2.2.Detection and diagnosis of cardiovascular and rheumatic diseases in children at age 4 months;  
2.3. Congenital heart defects: diagnostics, management, rehabilitation; Feta fetal cardiopathy. Newborn cardiomyopathy - 3 months;

***Third year of residency training:***

3.1. Management of arrhythmia, cardiac automatism, excitation and conductivity, ECG diagnosis and control in children's age. Management, prevention and rehabilitation of cardiac inflammatory and non-infectious diseases Cardiovascular system in metabolic, somatic, surgical and infectious diseases (congenital infections and their role in etiopathogenesis in cardiovascular diseases, post-vaccine cardiomyopathy) - 4 months;

3.2. Rheumatic fever; Heart beats bought; Diseases of connective tissue diffuse lesions: management, prevention and rehabilitation at children 's age (juvenile rheumatoid arthritis; systemic red wig; scleroderma;Dermatomyositis Allergic vasculitis; Kawasaki disease; Systemic vasculitisSigen disease Antipsophageal syndrome Rheumatic polymalgia Reactive arthritis; Rheumatic polymalgia). Methods of Rheumatic Laboratory and Instrumental Diagnostic Diseases - 4 Months

3.3. Urgent situations in cardio-rheumatology, principles of management. Psycho-social, legal and ethical aspects in children's cardiovascular science - 3 months;

***18.*“Pediatric endocrinology”**

***First year of residency training:***

* 1. Developmental and Behavioral Pediatrics – 3 months;
  2. Adolescent Medicine – 2 months;
  3. Outpatient and Preventive Pediatrics – 6 months;

***Second year of residency training:***

2.1. General principles of endocrine system organisation and function - 1 month;

2.2. Endocrine diseases semiotics, laboratory and instrumental methods of diagnostic of endocrinopathies - 1 month;

2.3. Pathology of hypothalamic and pituitary system – 3 month;

2.4. Thyroid diseases – 3 month;

2.5. Diabetes Mellitus – 3 month;

***Third year of residency training:***

3.1. Adrenal diseases – 2 month;

3.2. Syndrome of hypoglacemia – 1 month;

3.3. Sex development diseases – 2 month;

3.4. Calcium and bone matabolism, parathyroid glands pathology – 2 month;

3.5. Obesity and metabolic syndrom – 1 month;

3.6. Multiple endocrine neoplasia and autoimmune polyglandular syndromes – 1 month;

3.7. Urgent conditions in pediatric endocrinology – 2 month;

***19*.“** ***PediatricI nfectious Diseases* “**

***First year of residency training:***

* 1. Developmental and Behavioral Pediatrics – 3 months;
  2. Adolescent Medicine – 2 months;
  3. Outpatient and Preventive Pediatrics – 6 months;

***Second year of residency training:***

2.1. Basics of infectious diseases - 1 month;

2.2. Basics of reanimational measures and Intensive therapy of Infectious pathologies - 1 month;

2.3. Viral and Bacterial infections of gastrointestinal tract- 3 months;

2.4. Most frequent viral infections of childhood - 5 months;

2.5. Viral Hepatitis - 1 month;

***Third year of residency training:***

3.1. Bacterial infections - 4 months;

3.2. CNS-infections - 3 months;

3.3. Parasitic infections - 2 months;

3.4. HIV / AIDS - 1 month;

3.5. Hemorrhagic fevers - 2 weeks;

3.6. Mycoses- 2 week;

***20. „Pediatric Phthisitry-Pulmonology”***

***First year of residency training:***

* 1. Developmental and Behavioral Pediatrics – 3 months;
  2. Adolescent Medicine – 2 months;
  3. Outpatient and Preventive Pediatrics – 6 months;

***Second year of residency training:***

2.1.Basic – Anatomy, Physiology and Pat physiology of Respiratory System – 2 month;

2.2. Functional Examination of Respiratory System; Tests of Pulmonary Function – 2 week;

2.3.Pediatric Radiology – Chest X-ray and Ultrasonography – 1 month;

2.4.Computed Tomography of the chest, Magnetic-resonance Imaging – 2 week;

2.5.Bronchoscopy - 2 week;

2.6.Acute and Chronic Respiratory Disorders – 1,5 month;

2.7.Non-Infection Lung Diseases – 2,5 month;

2.8. Allergic and Immunological Lung Diseases – 2 month;

2.9. Genetic Diseases – 2 week;

***Third year of residency training:***

3.1. Respiratory Development Fetus and congenital anomalies – 2 week;

3.2. Respiratory Complications of Neuromuscular diseases –1 month;

3.3. Pediatrics Reanimation and Emergency Care – 2 month;

3.4. Etiology, Pathogenesis, Epidemiology and Diagnosis of Tuberculosis. Characteristics and Prevention of Pediatric Tuberculosis. Congenital TB; TB in Immunosupressive Patients – 2 month;

3.5. Pulmonary Tuberculosis – 2,5 month;

3.6. Lymphohematogenous and other forms of Tuberculosis – 3 month.

***21.” Family Medicine”***

The first stage of the programme includes 4 stages and lasts for 6 months. During these 6 months the training takes place in primary care settings.

***First year of residency training:***

* 1. Fundamentals of Specialty and Professionalism – 2 months;
  2. Health Care System and Practice Organization - 1.5 months;
  3. Evidence Based Medicine and Introduction to Biomedical Research - 1.5 months;
  4. Practical Skills and Fundamentals of Pain Management – 1 months;

***Second year of residency training:***

1. Cardiology - 1 months;
2. Lung diseases and tuberculosis - 1 months;
3. Endocrinology – 1 months;
4. Infectious diseases – 1 months;
5. Haematology – 1 months;
6. Palliative medicine – 1 months;
7. Emergency medicine and trauma - 2 months;
8. Children’s diseases - 3 months;
9. Women’s health - 2 months;
10. Mental health - 1 months;
11. Narcology (substance abuse) - 1 months;

**Elective Modules – 15 months**

1. Elective module 1 - 1 months;
2. Elective module 2 - 1 months;

Elective modules:

1. *Neurology,*
2. *Oncology,*
3. *Ophthalmology,*
4. *Surgery,*
5. *Orthopaedics,*
6. *ENT,*
7. *Dermatology*

***Third year of residency training:***

**Module III.1. “Prevention and management of diseases in primary are” - 5 months**

Topic 1. Health promotion and preventive programmes in primary care - 1 months;

Topic 2. Management of chronic diseases - 1 months;

Topic 3. Care of older adults -- 1 months;

Topic 4. Palliative care - 1 months;

Topic 5. Rational drug prescribing - 1 months;

**Module III.2. “Family and Community in Practice of Family Doctor” - 2 months**

Topic 1. Family as the unit of care - 1 months;

Topic 2. Community oriented primary care - 1 months;

**Module III.3. “Quality Assurance and Research” – 3 months**

Topic 1. Quality assurance - 1 months;

Topic 2. Patient Satisfactions and Audit - 1 months;

Topic 3**.** Research - 1 months;

***22. “Dermatovenerology”***

***I year of professional training***

1.1.Ambulatory care - 1 month;

1.2.Management of therapeutic patients in hospital – 1 month;

1.3. Outpatient surgery – 1 month;

1.4 Urology – 1 month;

1.5 Ginecology –1 month;

1.6 General aspects of Dermatology and Venerology.Principles of diagnosis and treatment of the skin diseases–2 months;

1.7 Skin manifestations of internal diseases–1 month;

1.8 Immunodermatology-Dermatoses of autoimmune, allergic and multifactoric nature– 3 months;

***II year of professional training***

2.1 Infectious and parasitic diseases of the skin –2 months;

2.2 Pediatric Dermatology – 2 months;

2.3 General aspects of pathology.Dermatopathology – 2 months;

2.4 Geriatric dermatology,Thedermatoses of pregnancy,Genodermatoses,Manifestation of rare diseases and syndromes on the skin, Skin pigmentation disorders – 1 month;

2.5 Conditions of the skin appendages.Diagnosis and treatment of the skin adjacent mucous membranes,includingproctal diseases – 1 month;

2.6 Dermatosurgery – 2 months;

2.7 Dermato-Oncology:Oncologic and paraneoplasticdermatoses – 1 month;

***III year of professional training***

3.1 Tropical Dermatology – 1 month;

3.2 Vascular skin lesions, Dermatology related to professional and environmental factors 1 month

3.3 Sexually transmitted infections, Genital dermatoses – 5 months;

3.4 Resorts and physical factors in Dermatology and Venerology, Photodermatology and Phototherapy – 1 month;

3.5 Aesthetic medicine, Dermato-Cosmetology – 2 months;

3.6 Psychodermatology and social aspects of Dermatology. Management in Dermatology and Venerology.Emergency Dermatology – 1 month;

***23. „Neurology“***

**The first year of the professional training**

* 1. Internal Medicine -6 months;
  2. Neurology-2 months;
  3. Pediatrics-2 months;
  4. Emergancy state management -1 month;

**The specific part of the program**

**The Second year of the professional training**

**2**.1. Adults’ clinical neurology-10 months; 2.2. Clinical Neurophysiology- 1 month;

**The third year of the professional training**

3.1. Adults’ clinical Neurology; Inpatient and outpatient service-5 months. 3.2. Intensive and Emergency Neurology-1 month;

3.3. Clinical Pediatric Neurology-1 month; 3.4. Psychiatry-1 month; 3.5. Neurosurgery-1 month; 3.6. Stroke medicine - 2 weeks; 3.7. Neuroradiology -2 weeks;

**Elective Modules: -1 month**

*1. Clinical Epileptology-1 month;*

*2. Neuromyology (neuromuscular diseases)-1 month;*

*3. Neurooncology-2 weeks;*

*4. Neuroophtalmology -1 week;*

*5. Headaches – 2 weeks;*

*6. Sleep Medicine- 2 weeks:*

*7. Multiple Sclerosis and Demyelinating Diseases – 2 weeks;*

*8. Clinical Neurophysiology-1 month;*

*9. Neuroradiology – 2 weeks;*

*10. Movement Disorders -2 weeks;*

*11.Neurootology - 1 week;*

*12. Stroke Medicine- 2 weeks;*

*13. Neuropsychiatry -2 weeks;*

***24. „***Psychiatry***“***

***I year of professional training***

* 1. General psychopathology – 3 months;
  2. Methodic of examination persons with mental disorders – 1 month;
  3. Classification of mental disorders according to ICD-10 and diagnostic of mental disorders – 1 month;
  4. Psychopharmacology - 1 month;
  5. Neurology - 2 months;
  6. Internal medicine - 1 month;
  7. Structure and organization of the psychiatric service. legislation regulating psychiatry. Torture, principles of Istanbul protocol. issues of expertise in psychiatry (labor, military, forensic) - 1 month;
  8. Mental and behavioral disorders due to psychoactive substances use - 1 month;

***II year of professional training***

2.1. Organic mental disorders - 1 month;

2.2.Etiopathogenesis, clinical presentations treatment and prognosis of schizophrenia, schizorypal delusional, schizoffective disorders and affective (mood) disorders - 3 months;;

2.3. Anziety, stress-related and somatoform disorders; Behavioral syndromes related to physiological impermanent and physical factors - 3 months;

2.4. Adult personality and behavioral disorders: ethiopathogenesis, clinic presentations, treatment and prognosis - 1 month;

2.5. Issues of urgent psychiatry - 1 month;

2.6. Psychotherapy for 2 months;

***III year of professional training***

3.1. Psycho-social rehabilitation - 1 month

3.2. Children and adolescents Psychiatry - 1 month;

3.3. Outpatient psychiatric care - 2 months;

3.4. Practical skills of in patient psychiatric clinic - 4 months;

3.5. Specific outpatient servies of adult psychiatry (crisis Intervention, etc.) -1 Month;

3.6. Special practice in adults psychiatric hospital - 2 months;

***25. „Narcology“***

***I year of professional training***

General part of the program

* 1. General psychopathology – 3 months;
  2. Methodic of examination persons with mental disorders – 1 month;
  3. Classification of mental disorders according to ICD-10 and diagnostic of mental disorders – 1 month;
  4. Psychopharmacology - 1 month;
  5. Neurology - 2 months;
  6. Internal medicine - 1 month;
  7. Structure and organization of the psychiatric service. legislation regulating psychiatry. Torture, principles of Istanbul protocol. issues of expertise in psychiatry (labor, military, forensic) - 1 month;
  8. Mental and behavioral disorders due to psychoactive substances use - 1 month

***II year of professional training***

2.1 General narcology – 2months;

2.2 Neurobiology of addiction (neurophysiologic and neurochemistry basics) - 1 month;

2.3 Clinical toxicology - 1 month;

2.4 Clinical pharmacology - 1 month;

2.5 Etiology and pathogenesis of alcoholism, treatment and rehabilitation - 2 months;

2.6 Alcoholism, clinical symptoms and treatment of alcoholic psychoses - 2 months;

2.7 Mental and behavioral disorders due to use of opioids – clinical symptoms and treatment –2 months;

***III year of professional training***

3.1 Opioid substitution therapy and prevention of diseases related to injecting drugs consumption - 1 month;

3.2 Mental and behavioral disorders due to use of cannabinoids – clinical symptoms and treatment - 1 month;

3.3 Mental and behavioral disorders due to use of sedatives and hypnotics– clinical symptoms and treatment - 2 month;

* Mental and behavioral disorders due to use of CNS stimulants ;
* Mental and behavioral disorders due to use of hallucinogens and phencyclidine;

3.4 Mental and behavioral disorders due to use of volatile solvents – 2 weeks;

3.5 Mental and behavioral disorders caused by simultaneous use of narcotic and psychoactive substances from different groups – 2 weeks;

3.6 Laboratory investigations of addictive patients – 1 month

3.7 Significance of electric and magnetic phenomena for diagnostic and treatment in narcologic practice. Methods of electrical and magnetic stimulation – 1 month

3.8 Psychology of drug addiction, psychodiagnostics and basics of psychotherapy – 1 month

3.9 Rehabilitation of drug addicts – 1 month;

3.10 Georgian legislation due to legal and illegal drug trafficking and organization of the narcological service – 1 month;

3.11 Principles of narcologicalforensic investigation – 1 month;

***26*.“ *Anesthesiology and Reanimatology*“**

***First year of residency training:***

1.1. The Basics of Anesthesiology - 4 months;

1.2. Regional Anesthesia - 2 Months;

1.3. Outpatient Anesthesiology - 1 Month;

1.4.Anesthesiological Provision of Obstetrics and Gynecology - 1 Month;

1.5. Anesthesiology of Trauma - 1 month;

1.6. Neuroanesthesiology - 1 month;

1.7.The Basic Principles of Transfusive Therapy for Blood and Blood Products - 1 month;

***Second year of residency training:***

2.1. Adult Reanimatology - 8 months;

2.2. Children's Reanimatology - 5 months (3 + 2);

***Third year of residency training:***

The module of Children's Reanimatology continues for another 2 months.

3.1. Children's Anesthesiology - 3 Months;

3.2. Anesthesia in Planned and Emergency Surgery - 3 months;

3.3. Cardiovascular and Thoracic Surgical Anesthesiology - 2 Months;

3.4. ElectiveModule - 1 Month;

**27*.“ General Surgery”***

***I year of professional education***

1.1. General surgery I-10 months;

1.2. Laparascopic surgery (basic part) - 1 month.

***II year of professional education***

2.1 General surgery II (general surgery part 3 months + oncosurgery2 months) -5 months;

2.2.Intensive therapy - 2 months;

2.3.Endoscopy 1 month;

2.4 Radiology - 1 month;

2.5 Combustiology - 1 month;

2.6.Maxillofacial surgery -1 weeks;

2.7 Forensic medicine - 3 weeks;

***III year of professional education***

3.1 General surgery III (general surgery part 4 months + coloproctotology with oncology 2 months) -6 months;

3.2.Traumatology - Orthopedics - 1 Month;

3.3 Vascular surgery - 1 month;

3.4.Urology - 1 Month;

3.5.Neurosurgery - 1 Month;

3.6 Plastic Surgery - 1 Month;

***IV year of professional education***

4.1.Cardiac surgery - 1 month;

4.2 Pediatric surgery - 2 months;

4.3 Gynecology-1 month;

4.4.Transplantology - 1 Month;

4.5.Laparascopic surgery (clinical course) -1 months;

4.6 General surgery IV (general surgery part 4 months + endocrine surgery with surgical oncology 1 month) -5 month;

**28*.“ Plastic and Reconstructive Surgery“***

***I year of professional education***

1.1. General surgery I-10 months;

1.2.Laparascopic surgery (basic part) - 1 month.

***II year of professional education***

2.1.Traumatology -orthopedics -1 Month;

2.2.Maxillofacial surgery -1 week;

2.3 Intensive therapy - 1 month;

2.4.Neurosurgery - 1 Month;

2.5. Plastic surgery - 2 months;

2.6.Combustiology - 2 months and 3 weeks;

2.7 Pediatric surgery - 1 month;

2.8 Vascular surgery - 2 months;

***III year of professional education***

3.1.Reconstructive microsurgery - 5 months;

3.2.Peripheral nervous system Microsurgery - 3 months;

3.3 Microsurgery of the flaps -3 months;

***IV year of professional education***

4.1. Basics of aesthetic surgery - 3 months;

4.2.Facial and cranial plastic - 3 months;

4.3 Contour plastic of the body - 3 months;

4.4.Combustiologic surgery - 2 months;

**29*.“ Pediatric Surgery”***

***I year of professional education***

1.1. General surgery I- 10 months.

1.2. Laparascopic surgery (basics)- 1 month.

***II year of professional education***

2.1. Basics of pediatric surgery, caring out researches and principals of  treatment for surgery  patients – 1 month.

2.2. Surgical infectionsIn pediatric patients- 2 months.

2.3. General description of thoracic abnormalities and their treatment modalities.Bacterial destructions of lungs- 2 months.

2.4. Musculoskeletal System trauma - 2 months.

2.5. Thoracic deformities, trauma, suppurative inflammatory diseases.- 2 months.

2.6. Diagnostic and treatment principles in urologic patients, Nephrolithiasis – 2 months.

***III year of professional education***

3.1. Planned surgery for pediatric patients – 3months.

3.2. Urgent abdominal surgery in pediatric patients.- 3 months.

3.3. Gastrointestinal bleeding with surgical diseases – 1month.

3.4. Congenital defects of lung and mediastinum, Cystic and cancerous lesions, Foreign bodies of respiratory tract and esophagus.  – 2 months.

3.5. Abnormalities and traumas of urinary tract., Nephrolithiasis, dysuria . Suppurative andinflammatory disease of urinary tract. – 2 months.

***IV year of professional education***

4.1. Congenital and acquired anomalies of esophagus.Diaphragmatic hernias. – 2 months.

4.2. Abdominal wall defects of newborn and congenital organic pathologies – 2 months.

4.3. Congenital and acquired pathologies of anorectal region and colon. – 2 months.

4.4. Pediatric Endoscopy, abilities of modern endoscopic surgeries. – 2 months.

4.5. Outpatient surgery, Postoperative rehabilitation for surgical patients – 2 months.

4.6. postoperative intensive therapy, Urgent medical care in critical conditions. – 1 month.

**30*.“ Vascular Surgery”***

***I year of professional education***

1.1 General surgery I- 10 months.

1.2. Laparascopic surgery ( basic part) -1 month

***II year of professional education***

2.1. General surgery II (General surgery 3 months + oncosurgery 2 months)- 5 months.

2.2. Combustiology - 1 months.

2.3. Maxifacial surgery -1 week.

2.4. Forensic medicine- 3 weeks.

2.5 Radiology – 1 month.

2.6 Traumatology and Orthopedics – 1 month.

2.7. Plastic surgery. – 1 month.

2.8. Thoracic surgery – 1 month.

***III year of professional education***

3.1. Vascular surgery (emergency )- 3 months.

3.2.Urology/Nephrology -2 months.

3.3. Transplantology.- 1 month.

3.4 Pediatric surgery- 1 month.

3.5. Vascular surgery (elective) -2 months.

3.6. Gynecology – 1month.

3.7 Neurosurgery – 1 month.

***IV year of professional education***

4.1. Vascular surgery ( elective)- 5 months.

4.2. Cardiosurgery – 2 months.

4.3. Intensive therapy – 2 months.

4.4. Interventional Radiology – 2months.

Residency Year 5.

5.1. Interventional radiology – 3 months;

5.2. Vascular surgery – 8 months.

**31*.“ Proctology ”***

***I year of professional education***

1.1 General surgery I -10 months.

1.2 Laparoscopic surgery ( basics)- 1 month.

***II year of professional education***

2.1. general surgery II –(3 months of General surgery + 2 months of Oncosurgery) – 5 months;

2.2 Vascular surgery- 1 month.

2.3. Urology - 1 month.

2.4. Pediatric surgery – 2 months.

2.5 Gynecology 1 month.

2.6. Laparoscopic surgery (clinical part)- 1 month.

***III year of professional education***

3.1Anorectal surgery.- 11 months.

***IV year of professional education***

4.1 Endoscopy (Sigmoidoscopy , Colonoscopy) -2.5 months.

4.2. Radiology( irrigoscopy; Defecography; MRI of pelvic organs, Endorectal ultrasound)- 1 month.

4.3. Gastroenterology – 2 weeks.

4.4 Inflammatory diseases of large bowl – 1 month.

4.5. Surgery of large bowl (with oncosurgery) -5 months.

4.6. Laparoscopic colorectal surgery – 3 weeks.

4.7. Criteria for conducting scientific research according to modern requirements – 1 week.

***32.“Obstetrics and Gynecology“***

***First year of professional training.***

1.1- Antenatal Care. Duration 4 months;

1.2 The Basic ultrasound in OB/GYN—2 months;

1.3 Extragenital disease during pregnancy-5 months;

***Second year of professional training***

2.1-Fisiological and pathological pregnancy-9months;

2.2- postpartum care and puerperium -2months;

***Third year of professional training***

3.1-Conservativ and Surgical Gynecology-11 months;

***Fort year of professional training***

4.1-Posoperavive Care-1month;

4.2- Pelvic Floor Disorders – 2months;

4.3-Sexual and Reproductive Health- 3months;

4.4-Infertility and Reproductive Technologies -4 months;

4.5- Breast disease- 1 month.

**33*.“Cardiac Surgery”***

***I year of professional education***

* 1. General Surgery – 11 month;

***II year of professional education***

2.1 Critical Care Medicine and Postoperative Management -1 month;

2.2 Extracorporeal Circulation (ECC) – 1 month;

2.3 Myocardial Protection – 1 month;

2.4 Blood Circulation Support – 1 month;

2.5 Ischemic Heart Disease – 1 month;

2.6 Heart Valve Disease – 1 month;

2.7 Aortic-vascular Disease – 1 month;

2.8 General Management of the Thoracic Surgery Patient -1 month;

2.9 Pericardial Injuries -1 month;

2.10 Congenital Heart Disease - 2 month;

***III year of professional education***

3.1 Critical Care Medicine and Postoperative Management -1 month;

3.2 2 Extracorporeal Circulation (ECC) – 1 month;

3.3 Myocardial Protection – 1 month;

3.4 Blood Circulation Support – 1 month;

3.5 Ischemic Heart Disease – 1 month;

3.6 Heart Valve Disease – 1 month;

3.7 Aortic-vascular Disease – 1 month;

3.8 General Management of the Thoracic Surgery Patient -1 month;

3.9 Pericardial Injuries -1 month;

3.10 Congenital Heart Disease - 2 month;

***IV year of professional education***

4.1 Critical Care Medicine and Postoperative Management -1 month;

4.2 Extracorporeal Circulation (ECC) – 1 month;

4.3 Myocardial Protection – 1 month;

4.4 Blood Circulation Support – 1 month;

4.5 Ischemic Heart Disease – 3 month;

4.6 Heart Valve Disease – 4 month;

***V year of professional education***

5.1 Aortic-vascular Disease – 4 month;

5.2 General Management of the Thoracic Surgery Patient -1 month;

5.3 Pericardial Injuries -1 month;

5.4 Congenital Heart Disease -5 month;

***34.,,Neurosurgery’’***

**Professional Training I Year**

**General part of the program**

* 1. Neuroanatomy-2 month;
  2. Neurology-2 month;
  3. Micropathology- 1 month
  4. Reanimation- 2 month
  5. Neuroradiology- 2 month
  6. Traumatology-Orthopedics- 2 month

**Professional Training II Year**

2.1 General Surgery- 5 month;

2.2 Oncology- 2 month;

#### 2.3Anesthesiology-2 month;

#### 2.4 Vascular Surgery- 2 month;

**Professional Training III Year**

3.1 General Neurosurgery- 11 month

**Professional Training IV Year**

**Specific part of the program**

4.1 Neurotrauma- 6 month;

4.2 Vascular NeuroSurgery- 5 month;

**Professional Training V Year**

5.1 Peripheral Nerves Surgery- 1 month;

5.2 NeuroOncology- 9 month;

5.3 Child Neurosurgery- 1 month;

**Professional Training VI Year**

6.1Child Neurosurgery- 1 month (prolong)- 3 month;

6.2 Spinal Neurosurgery- 4 month;

6.3 Endoscopic Neurosurgery- 4 month;

***35. „Urology“***

**First year of professional studying**

1.1. General surgery basics 6 months

1.2 General Urology 3 months

1.3. Urgency cases in urology - 2 months;

**Second year of professional studying**

***Specific part of program***

2.1. Diagnostic methods of urology, urodynamic studies, morphology, Urological procedures with X-ray and ultrasound-3 months

2.2. Urolithiasis: theoretical basics,litholisis, metaphalaxsia and less invasive treatment methods(extracorporal lithotripsy, endourology)4 months;

2.3. ambulatory urology, uro-genitary tract infections, andrology,sexuali transmitted disieases. 4 months;

***Third year of professional studying***

3.1. Low urinary tract diseases in male (BPH, intravesical obstruction) – 4 months;

3.2. Onco-urology -5 months;

3.3. Voiding dysfunction, neuro-urology, urinary tract fistulas, urine incontinence. -2 months;

***Fourth year of professional studyng***

4.1. Basics ofUrology,special surgical techniques in urology, work in hospital-6months;

4.2. Renal insufficiency, extra corporal detoxication methods and kidney transplantation-2months

4.3. Congenital anomalies of Genitourinary tract/pediatric urology-3 months;

***36.“ Otorinolaryngology“***

***First year of professional studying***

1.1 General Surgery -6months;

1.2. The course of outpatient admission and treatment of patients with otorhinolaryngology profiles is – 5 months;

***Second year of professional studying***

2.1 Training course of the necessary diagnostic methods, for otolaryngologists working in the hospital-5 months;

2.2. The training course for in-patient treatment of ear, nose and throat diseases - 6 months;

***Third year of professional studying***

3.1. The study of the clinical vision of topographic anatomy of the ear, throat and nose and the initial course of operating technique for a 5-month course of light reception.

3.2. The course of operation of moderate difficulty in otorhinolaryngology is 6 months;

***Fourth year of professional studyng***

4.1. Audiology, vestibulology-1.5. months;

4.2. Oncological diseases of the head, neck and upper respiratory tract - 4,5 months;

4.3. The course for the development of IV and V complexity of otorhinolaryngology operations is 5 months;

***37.„Ophthalmology“***

**The first year of professional training**

1.1 Anatomy of the eye, functions, examination. – 3 months;

1.2 Diseases, injuries of the anterior segment of the eye, their prevention and treatment. – 5 months;

1.3 Pediatric ophthalmology – developmental anomalies, congenital diseases, strabismus, amblyopia – 3 months;

**The second year of professional training**

2.1 Refractive anomalies, diagnostics, correction, treatment – refractive surgery – 11 months;

**The third year of professional training**

3.1 Cataract – classification, secondary cataract, methods of cataract surgery, aphakia and methods of its correction – 11 months;

**The fourth year of professional training**

4.1 Glaucoma – classification, diagnostics, methods of laser and surgical treatment, principles of monitoring – 5 months;

4.2 Diseases of the posterior segment of the eye, diagnostics, manifestation, treatment – 6 months;

***38.„Orthopedics and Traumatology“***

**General part of the program**

**First Year**

1.1. Post-traumatic reanimation / Intensive care unit/Pain management – 1 month

1.2 Neurotrauma -1 month

1.3. General surgey ( acute trauma) - 2 months

1.4. Vascular surgery- 1 month

1.5. Burn, skin grafting - 1 month

1.6 Radiology - 1 month

1.7. Orthopedic trauma - 4 months

**Specific Part of the program**

**Second year**

2.1. Orthopedic trauma - 5 months

2.2.Trauma of the hand and foot - 2 months

2.3.Trauma of the vertebral column and pelvis - 1 month

2.4. Pediatric trauma - 1 month

2.5. Sports trauma - 2 months

**Third year**

3.1. Adult’s Orthopedics - 5 moths

3.2. Joint Replacement surgery- 2 months

3.3.Orthopedics of the chest wall and vertebral column- 2 months

3.4. Pediatric orthopedics - 2 months

**Fourth year**

4.1. Adult’s Orthopedics - 3 moths

4.2. Joint Replacement surgery- 2 months

4.3.Musculoskeletal oncology, Joint Replacement surgery - 3 months

4.4. Arthroscopy surgery - 3 months

***39.“ Emergency Medicine “***

1. 3 month- Legal aspects in emergency medicine, Ethics and end of life issues.

* Neurology
* Psychiatry
* Geriatric

1. 3 month

* Cardio-vascular diseases

1. 3 month

* General medicine

1. 1.5 month

* Pediatric

1. 1.5 month

* Obstetrics’ and gynecology

1. 2 month

* Orthopedics/extremity trauma

1. 2 month

* Ophthalmology,
* INT
* Dermatology
* Urology
* General surgery

1. 1 month

* Wound management

1. 4 month

* Trauma patient care

1. 2 month

* Toxicology
* Environmental emergency’s

1. 2 month

* Anesthesiology

1. 6 month

* Critical Care

1. 2 month

* Awarding of PHD degree

***40.“ Clinical toxicology“***

***First Year of Professional retraining***

1.1.Introduction (Basics of Emergency Medicine, Administration, Ethics, Scientific Studies, PrehospitalService) Neurology, Psychiatry, Geriatrics -3 Months;

1.2.Cardiovascular diseases - 3 months;

1.3.Internal diseases - 3 months;

1.4. Pediatrics - 2 months;

***II Year of Professional retraining***

2.1.General reanimation – 1 month;

2.2.Neurology and neuroreanimation - 1 month;

2.3.Narcology -1 month;

2.4.Toxicological express- analysis -1 months;

**Clinical toxicology**

2.5.General toxicology-Past and present.Poisons and body interaction - 1 month;

2.6.Classification of acute poisoning. Basic toxicological syndromes - 1 month;

2.7.Diagnosis of acute poisoning - 1 month;

2.8.General principles of treatment of acute poisoning - 1 month;

2.9.Antidote treatment of acute poisoning. Extracorporeal detoxification -1 month;

**Particularytoxicology**

2.10. Acute poisoning with aspirin, paracetamol, baclofen and clophelin-1 month;

2.11.Acute poisoning with psychotropic drugs - 1 month;

***III Year of Professional retraining***

3.1.Acute poisoning with alcohol and ethylene glycol-1 month;

3.2.Acute poisoning with phosphoric acid compounds -1 month;

3.3.Acute poisoning with synthetic pyrolytes and other toxic chemicals - 1 month;

3.4.Acute poisoning with dioxin and other chlorine compounds. Acute Poisoning with Oil Processing Products - 1 Month;

3.5.Acute poisoning with corrosion poisons; Acute poisoning with heavy metals compounds -1 month;

3.6.Acute poisoning withCO and Methymoglobin producers – 1 month;

3.7.Acute poisoning with plant and Animal toxins-1 month;

3.8.Military toxicology. Acute Poisoning by Police Gases -1 month;

3.9.Toxicology of children and adults – 2 months

3.10.Professional intoxications - 1 month;

**41. „ *Radiology* “**

***First year of residency training:***

* 1. X-ray general aspects - 1 month;
  2. X-ray of chest diseases - 2.5 months;
  3. X-ray of urinary tract diseases - 2 months;
  4. X-ray of musculoskeletal diseases - 2 months;
  5. X-ray of abdominal diseases - 2.5 months;
  6. X-ray of female reproductive system diseases - 1 month;

***Second year of residency training:***

1. Physics of ultrasonography, use of sonography in medical practice, sonography of abdominal diseases - 1month;
2. Sonography of diffuse liver diseases - 1.5 months;
3. Sonography of focal liver diseases (benign and malignant) - 1.5 months;
4. Sonography of gallbladder and the biliary truct acute and chronic (gallstones, biliary truct stones) diseases - 1.5 months;
5. Sonography of acute and chronic pancreas diseases. Diagnosis of complications - 2 months;
6. Sonography of acute and chronic kidney diseases - 1.5 months;
7. Sonography of bladder, prostate gland, uterus, ovaries - 2 months;

***Third year of residency training:***

3.1. Sonography of breast, thyroid gland, peripheral lymph nodes - 1 months;

3.2.Doplerography of cerebrovascular diseases (extra cranial and intracranial arteries, veins, venous sinuses)- 2.5 months;

3.3.Doplerography of abdominal and peripheral blood vessels (abdominal aorta, visceral brunches, inferior vena cava and their brunches, arteries and veins of upper and lower extremities) - 2 months;

3.4.Echocardiography - 4 months;

3.5.Basics of Magnetic Resonance Imaging - 2 weeks;

3.6.Basics of Computer Tomography - 2 weeks;

3.7.Basics of Radioisotope scanning - 2 weeks;

***42. „Clinical Oncology“***

**Professional training I Year**

* 1. Molecular biology, immunology, etiology and pathogenesis of malignant tumors. Modern concepts of

cancerogenesis. Classification of malignant tumors – 1 month

1.2. Cancer epidemiology. Research tools of descriptive and analytical cancer epidemiology;Cancer registry. Prevention and screening of malignant tumors – 2 months;

1.3. Emergency medicine - 2 month;

1.4. Theoretical basics of cancer disease diagnostics. Methods and specifics of diagnostics: verification (cytology, pathomorphology, immunohistochemistry), image diagnostics (X-Ray, Ultrasound, CT, MRI, PET ), cancer markers. Clinical classification and clinical stages of malignant tumors – 4 months;

1.5. Methods of treatment of malignant tumors and specifics of patients’ management. Principles of selection of treatment modalities (considering TNM staging, verification, patient’s general health status, age and individual approach)- 2 months;

**Professional training II Year**

2.1. Inpatient care of cancer patients – 1 month;

2.2 Principles, indications, contraindications and complications of pharmaceutical treatment of malignant tumors (chemotherapy, immunotherapy, hormone therapy), their prevention and treatment – 4 months;

2.3. Principles and methods of radiotherapy treatment of malignant tumors. Complications of radiotherapy treatment - 2 months;

2.4. Epidemiology, clinic, diagnostics and treatment of hematological malignant tumors (Hodgkin’s disease and malignant lymphoma) - 2 months;

2.5. Epidemiology, clinical symptoms, diagnostics and treatment of immune and myeloproliferative diseases, acute and chronic leukemia – 2 months;

**Professional training III Year**

3.1. Epidemiology, clinical symptoms, diagnostics and treatment of malignant tumors of lungs, pleura, mediastinum and thorax - 1 month;

3.2. Epidemiology, clinical symptoms, diagnostics and treatment ofhead and neck malignant tumors - 1 months ;

3.3. Epidemiology, clinical symptoms, diagnostics and treatment of breast cancer -2 months;

3.4. Epidemiology, clinical symptoms, diagnostics and treatment ofmalignant tumors of gastrointestinal tract and retroperitoneal organs - 1 month; 3.5. Epidemiology, clinical symptoms, diagnostics and treatment of gynecological malignant tumors - 1 months;

3.6. Epidemiology, clinical symptoms, diagnostics and treatment of malignant tumors of kidneys, urinary bladder, testicles, penis - 1month;

3.7. Epidemiology, clinical symptoms, diagnostics and treatment of melanoma and malignant tumors of skin, bone, and soft tissues - 1 month;

3.8. Modern principles in diagnostics and treatment of main pediatric cancer diseases – 2 months

3.9. Care of cancer incurable patients and symptom control (symptomatic treatment) (palliative care) – 1 month;

***43.“*** Radiation Oncology***“***

***Ist year of training***

1.1. Molecular biology, immunology, etiology and pathogenesis of malignant tumors. Modern concept of cancerogenesis. Clasification of malignant tumors – 1 month;

1.2.Oncoepidemiology. Study methods of descriptive and analytic oncoepidemiology. Cancer register. Prevention and screening of malignant tumors – 2 months;

1.3. Emergency medicine - 2 months;

1.4. Theoretical basis of malignant tumor diagnostic. Diagnostic methods and their special features: verification (cytology, pathomorphology, immunohystochemistry), imaging diagnostic (X-ray, Ultrasound, CT, MRI, PET), oncomarkers. Clinical clasification of malignant tumors and clinical groups – 4 months;

1.5. Treatment methods of malignant tumors and patient management peculiarities. Treatment tactic selection principles (based on TNM staging, verification, general condition of the patient, age and indiviadual approach concerning specific case) - 2 months;

***2nd year of training***

2.1. Medical physics – 2 months;

2.2. Radiobiology – 1 month;

2.3. 3-D planning in radiotherapy based on CT imaging – 4 months;

2.4. Fusion of MRI and CT images for radiotherapy planning - 2 months;

2.5. Radiotherapy planning based on PET images - 2 months;

***3rd year of training***

3.1. Radiotherapy of Head and Neck malignant tumors - 3 months;

3.2. Radiotherapy of the GI system malignant tumors - 2 months;

3.3. Radiotherapy of the Respiratory system malignant tumors - 2 months;

3.4. Radiotherapy of the Thoracic organ malignant tumors - 3 months;

3.5. Radiotherapy of the Bone, Joint, Soft and Connective tissues malignant tumors - 2 weeks;

3.6. Radiotherapy of the skin malignant tumors - 2 weeks;

***4th year of training***

4.1. Radiotherapy of the Breast tumors - 2 months;

4.2. Radiotherapy of the Gynecologic malignant tumors - 2 months;

4.3. Radiotherapy of the Male genital system malignant tumors -1month;

4.4. Radiotherapy of the Urinary system malignant tumors - 1month;

4.5. Radiotherapy of the CNS tumors - 2 months;

4.6. Radiotherapy of the Endocrine system malignant tumors - 2 weeks;

4.7. Radiotherapy of the Lymphatic and Hematologic system malignant tumors - 1 month;

4.8. Principles of Palliative radiotherapy - 2 weeks;

4.9. Specificity of Pediatric radiotherapy - 1 month;

***44.“ Pathological Anatomy - Clinical Pathology “***

***First year of preparation***

1.1 Pathology as subject, medical documentations, cell injury, cell death, adaptation, tissue reparation, hemodynamic disorders - Duration 1 month;

1.2. Inflammation, disease on immune system, tumor, genetic diseases - Duration 1 month

1.3. Histopathology diagnostic -2 months;

1.4. Autopsy pathology, role of pathology in control of medical help and cure. Corpse covering - 3 months;

1.5. Molecular pathology - 2 months;

1.6. Cytopathologic diagnosis - 2 months;

***Second year of preparation***

2.1. Forensic medicine -2 months;

2.2 Gastrointestinal tract pathology - 2 months;

2.3. Heart and blood vessels pathology, respiratory system pathology, urinary tract pathology -3 months;

2.4. Female genital system and Breast pathology, gestational trophoblastic disease - 3 months;

2.5. Head and neck pathology - 1 month;

***Third year of preparation***

3.1. Nervous and endocrine systems pathology - 2 months;

3.2. Bones, joints and soft tissue pathology - 3 months;

3.3. Infectious disease and skin pathology - 2 months;

3.4. Pathology of infancy and childhood age. Blood and hematopoietic system pathology -3 months;

3.5. Eye and Ear pathology - 1 month;

***45.“ Forensic Medicine“ – 33 months;***

**First Year of Professional Training**

1.1. Legal Aspects of Medical Practice -0,5 months -2 weeks

1.2. Biochemistry and Molecular Biology -1 month -4 weeks 1.3. Topographic Anatomy and Operative Surgery -1.5 months -6 weeks 1.4. Pathology - 5 months - 20 weeks 1.5. Forensic Medicine -3 months -12 weeks;

**Second Year of Professional Training**

2.1. Traumatology -0.5 months - 2 weeks; 2.2. Obstetrics and Gynecology -0.5 months -2 weeks; 2.3. Neurology -0.5 months -2 weeks; 2.4. Forensic Psychiatry - 0.5 months -2 weeks; 2.5. Forensic Toxicology - 0.5 months -2 weeks; 2.6. Forensic Medicine (with rotations) – 8.5 months;

**Third Year of Professional Training**

3.1 Forensic Medicine (with rotations) – 11 months.

***46. "Laboratory Medicine"***

**I year of professional training;**

1.1 General (theoretical) module -  2 months;

1.2 Hematological examination - 3 months;

1.3 General clinical  examination - 2 months;

1.4 Biochemical examination - 2 months;

1.5 Hemostaziological examination - 2 months;

**II year of professional training;**

2.1 Microbiological examination I (bacteriology, virusology,  micology) - 3 months;

2.2  Microbiological examination  II (parazitology) - 1 month;

2.3 Cytological examination - 1 month;

2.4 Immunological and allergological  examination - 2  months;

2.5 Molecule-genetic examination I (cytogenetic  examination)  -  1 month;

2.6 Molecule-genetic examination II (methods of molecular diagnostics) -  1 month;

2.7 Organization of laboratory service. Independent practical work with simultaneous application of different laboratory examinations -  2 months.

***47. „Therapeutic Dentistry“***

1. Operative Odontology for adults and children and restoration of teeth (4 months);

2. Adult and Child Endodontist (4 months);

3. Parodontology of adults and children and compulsions of mucous membrane (3 months).

***48. „Orthopedic Dentistry*** - ***Prosthodontics“***

1. Propedeutics in prosthodontics - 1 month;

2. Fixed prosthodontics - 7 months;

3. Removable prosthodontics - 7 months ;

***49. „Orthodontics“***

***The first year of the professional training***

1. Development of the Chewing System disorders; clinic, diagnostics, inspection and treatment of primary, mixed and permanent dentition. Adult Orthodontics – 11 months.

***The second year of the professional training***

2.Etiology, classification, clinic, diagnostics, treatment, and prosthetics in children with Temporomandibular Joint Disorders, congenital anomaly and traumas of jaw bones – 11 months.

***50. „Maxillofacial Surgery“***

***I year of professional education***

1.1.   Assessment of surgical patients; Anesthesia in 0ral and maxillofacial surgery; Tooth extraction surgery - 4 months

1.2.   Inflammatory processes of the oral cavity and maxillofacial area– 7months;

***II year of professional education***

2.1 Disorders and injuries of salivary glands - 1 month;

2.2 Traumatic injuries of maxillofacial region - 5 months;

 2.3 Nerve injuries of maxillofacial region 0,5 months;

2.4 Temporomandibular joint diseases- 0.5 months;

2.5. Benning tumors and tumor-like growth of maxillofacial region - 2

months;

2.6 Neoplastic diseases of maxillofacial region -  2 months;

***III year of professional education***

3.1. Oral reconstructive surgery 4 months;

3.2. Oral implantology-1 Month;

3.3 Local anesthesia of oral cavity, deciduous and permanent teeth extraction in children and adults. -0,5 months;

3.4 Maxillofacial region Inflammatory processes of bones and soft tissues in children and adults. -0,5 months;

3.5Maxillofacial regional traumatic injuries in children and adults. -0,5 months;

3.6 Temporomandibular joint disorders in children and adults. -0,5 months;

3.7. maxillofacial region benign tumors and tumor-like growth in children and adults. -1,5 months;

3.8 Maxillofacial congenital malfunctions and anomalies in children and adults. -2,5 months;