

JSC "SOUTH-KAZAKHSTAN MEDICAL ACADEMY"

" APPROVE "



Recttor of SKMA, professor

M. Rysbekov

202 2 y.



SOUTH KAZAKHSTAN
MEDICAL
ACADEMY

RESIDENCE EDUCATIONAL PROGRAM
7R01103
« ALLERGOLOGY AND IMMUNOLOGY ADULTS, CHILDREN »

Shymkent 2022



The educational program of the residency 7R01103 "Allergology and immunology for adults, children" has been updated in accordance with the requirements of the order of the Minister of Health of the Republic of Kazakhstan "On approval of State mandatory standards for levels of education in the field of healthcare" dated July 4, 2022 No.KDSM-63

Job title	Full name.	Signature
Developed		
Teaching staff of the Department of Microbiology, Virology and Immunology		
Head of department , candidate of medical sciences, professor	Seytkhanova B.T.	
Allergist of the highest category	Zhanzhigitova Zh.T.	
Minutes of the meeting of the department No. 14 dated " 03 " " 08 " 2022y		
Discussed at a meeting of the KOP residency		
COP Chairman Protocol No. 5 ⁹ from " 4 " 08 2022y	Kauyzbai Zh.A.	
Agreed on the Clinical Council		
Chairman of the Clinical Council Protocol No. 5 ⁹ dated " 5 " 08 2022y	Kauyzbai Zh.A.	
Approved by the first vice-rector of JSC SKMA JSC SKMA First Vice-Rector Protocol № _____ dated 8. 08 2022 y	Esirkepov M.M.	
Approved by the Academic Council		
Protocol No. 12 dated " 08 " 08 2022 y		

1. Mission of the educational program

To be a recognized leader in the field of training competitive personnel , meeting the needs of resident doctors to achieve learning outcomes, providing the healthcare system and society with highly qualified allergists and immunologists.

2. Aim of educational program

Training of a highly qualified allergist-immunologist, including a pediatric allergist, who has a system of universal professional competencies, capable of providing assistance to patients with allergic diseases and pathologies of the immune system, both at the level of primary health care and specialized medical care, in accordance with the principles of evidence-based medicine.

3. Rationale for EP

The discipline "Allergology and Immunology" –is a science that studies the patterns of functioning of the immune system, the occurrence, development and outcome of immunopathological processes; features and nature of dynamic changes in the functions of the immune system in various pathological conditions of the body.

Immunology and allergology stand next to each other in medicine, as they are connected by the same tasks. Immunology and allergology studies the body's reactions to environmental influences. Only immunology more extensively studies diseases of the immune system, while allergology is a branch of immunology that studies inadequate reactions of the human immune system to substances coming from outside.

The main task of allergists and immunologists is the diagnosis and treatment of allergic diseases and pathological conditions of the human immune system. Prevention of diseases of the immune system and allergic conditions is also the responsibility of immunologists. The need for allergists and immunologists in the Republic of Kazakhstan at all levels of medical care is very high. Allergology-immunologist is an expert in the field of new methods of diagnosis and treatment of immunopathologies. Proper treatment and rehabilitation of patients with allergies and pathologies of the immune system reduces the level of disability in the population.

The need of medical organizations for allergists and immunologists is the rationale for the opening and training of specialists in this profile, primarily at the regional level, taking into account the main strategies and programs for the development of the healthcare system of the Republic of Kazakhstan.

4. Professional standard on the basis of which the educational program was developed

- Professional standard "Allergology and immunology"
- Standard for organizing the provision of allergy and immunological care in the Republic of Kazakhstan dated June 26, 2017 year № 446

5. Area of professional activity. Healthcare

6. Objects of professional activity.

Medical organizations providing outpatient and inpatient care, healthcare systems of the Republic of Kazakhstan.

General information

№	Name fields	Note
1	Registration number	7R01100261
2	Code and classification of field of education	7R01 Healthcare (medicine)
3	Code and classification of areas of training	7R011 Healthcare
4	Group of educational programs	R003
5	Name educational programs	7R01103 "Allergology and immunology adults, children"
6	Type of EP	Updated
7	Level according to ISCED	7
8	Level according to NRC	7
9	Level according to ORK	7
10	Distinctive features of EP	No
11	List of competencies	<p>CC1 Patient supervision: Able to independently formulate a clinical diagnosis for patients, prescribe a treatment plan for patients with allergic diseases and immunopathology in accordance with scientific concepts and achievements of world and domestic science in the field of allergology and immunology and clinical protocols of the Republic of Kazakhstan</p> <p>CC2 Communication and Collaboration: The ability to communicate and collaborate productively with the patient, his environment and medical staff in order to optimize the overall well-being of the patient and treatment results.</p> <p>CC3 Safety and quality: Able to apply modern methods of using drugs, medical devices and nutritional therapy for allergic diseases and immunopathology in patients in accordance with the current procedure for the provision of medical care, clinical recommendations (diagnosis and treatment protocols).</p> <p>CC4 Public Health: Able to apply knowledge in practice on the basics of organizing care within their specialization, the principles of rehabilitation of patients with allergic and (or) immunological diseases, and collaborate with interprofessional groups to develop policies that promote the health of the nation.</p> <p>CC5 Research: Able to conduct and effectively use international databases in daily activities, organize and participate in research work and projects.</p> <p>CC6 Training and development: Able to learn independently and train other members of a professional team.</p>
12	Learning outcomes	<p>LO1 able to formulate a clinical diagnosis, prescribe a treatment plan for patients with allergic and immunopathological diseases and evaluate its effectiveness based on evidence-based practice at all levels of medical care;</p> <p>LO 2 Able to effectively interact with the patient, his environment, and healthcare professionals in order to achieve the best results for the</p>



		<p>patient.</p> <p>LO3 Able to assess risks and use the most effective methods to ensure a high level of safety and quality of care during therapy.</p> <p>LO 4 Able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in the specialty "Allergology and Immunology", provide basic and advanced care in critical and emergency situations, work as part of interprofessional teams to implement policies to improve the health of the nation.</p> <p>LO5 Able to formulate adequate research goals and objectives, critically evaluate specialized literature on allergy and immunology, effectively use international databases in their daily activities, and participate in the work of a research team.</p> <p>LO 6 Able to learn independently and teach other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development.</p>
13	Form training	Day time
14	Language training	Kazakh and Russian
15	Volume of credits	140 credits
16	Training period	2 years
17	Degree awarded	Allergist and immunologist adult, child
18	Availability of an annex to the license for the direction of personnel training	KZ36LAA00011387
	Availability accreditation of EP	Reaccreditation
	Name accreditation organ	IAAR
20	Term actions accreditation	06/10/2022-06/09/2027
	Information about disciplines	VK/KV, DB, PD (Appendix 1.2)

Appendix 1.1.

**Matrix for correlating learning outcomes for the educational program as a whole
with developing competencies**

	LO 1	LO 2	LO3	LO 4	LO5	LO 6
CC1	+	+	+			
CC2		+		+		
CC3			+		+	
CC4				+		
CC5					+	
CC6						+

Appendix 1.2.

Competency/learning outcome attainability matrix

№	Name of the discipline	Brief description of the discipline	Cycle	Component	Amount of credits	Formed LO (codes)
Cycle of profiling disciplines						
1	Clinical immunology and allergology outpatient, children's	Organization of outpatient pediatric allergy service in the Republic of Kazakhstan. Age-related changes in the immune system in children. Features of the fetal immune system. Immunopathology in various childhood diseases. Epidemiology, etiology, pathogenesis, clinic of allergic and immunological diseases in children.	PD	MC	34	LO1, LO2, LO4
2	Clinical immunology and allergology on an outpatient basis, adult	Principles and levels of organization of allergy services. Algorithm for diagnosis and management of patients with allergies. Definition and tasks of clinical immunology. Immunoecology. Immunodeficiencies. Autoimmune disorders. Immunopathology in various diseases. Principles, methods and methodology of the survey. Protocols for the diagnosis and treatment of patients with allergic diseases and diseases of the immune system. Diagnosis and treatment of emergency allergic and immunological conditions.	PD	MC	34	LO1, LO2, LO4
3	Clinical immunology and allergology in a hospital, adults	Specialized and highly specialized care for children with allergic and immunological diseases. Modern ideas about allergic	PD	MC	33	LO3, LO5, LO6

		diseases of the respiratory tract, gastrointestinal tract, skin; indications contraindications to nonspecific techniques; principles of immunotherapy for immunodeficiency states, laboratory methods for diagnosing immunity.				
4	Clinical immunology and allergology in hospital, children's	Current issues in pediatric immunology and allergology. Differential diagnosis of allergic diseases in children. Principles of diagnosing allergic diseases in children. Modern methods of treating allergic diseases. Immunization and prevention of post-vaccination complications. Protocol for the diagnosis and treatment of allergic diseases and diseases of the immune system in children.	PD	MC	33	LO3, LO5, LO6
Cycleofprofiling disciplines Component of choice						
5	Differential diagnosis of allergic dermatoses	The discipline develops knowledge in the clinical pharmacology of drugs, medical clinical and pharmacological thinking skills in substantiating and conducting rational pharmacotherapy using data from evidence-based medicine, in the proper use of clinical guidelines based on a personalized approach to the selection of drugs and their doses, taking into account the pathological and physiological profile of the patient	PD	OC	2	LO1, LO2, LO6
6	Innovations in allergology. Molecular	The discipline develops knowledge on molecular allergy diagnostics , methods	PD	OC	2	LO1, LO6



	allergology	of molecular component allergic diagnostics that increase the accuracy of diagnosis, the development of recombinant allergens for accurate diagnosis and effective allergy vaccination using the method of allergen-specific immunotherapy (ASIT), which allows you to increase the sensitivity of the method several times compared to other methods and will provide the opportunity towards more precise allergen-specific immunotherapy				
7	Clinical pharmacology in allergology and immunology	The discipline develops knowledge in the clinical pharmacology of drugs, medical clinical and pharmacological thinking skills in substantiating and conducting rational pharmacotherapy using data from evidence-based medicine, in the proper use of clinical guidelines based on a personalized approach to the selection of drugs and their doses, taking into account the pathological and physiological profile of the patient	PD	OC	2	LO3, LO5,
8	Modern aspects of diagnosis and treatment of allergic diseases	Programs and algorithm for laboratory diagnostics, differential diagnosis and modern therapy of allergic diseases. Immunological research methods and their significance in the diagnosis of allergic diseases. Modern immunological analyzers and equipment. Quality management of laboratory	PD	OC	2	LO1, LO3, LO6

Matrix of compliance of LO with assessment methods

LO (codes)	Methods assessments									
	Verbal response	Testing	Essay	Patient examination demonstration	DOPS - assessment of mastery of practical	Analysis of records in the medical history and outpatient card (diagnostic procedures, prescribed therapy)	Standardized patient	360° score	Abstract/presentations Publications	Portfolio Clinical records Self-esteem
LO1	+	+		+	+	+	+	+		
LO2				+	+	+	+	+		
LO3				+	+	+	+			
LO4					+	+	+			
LO5	+		+						+	+
LO6	+			+					+	+

Work plan for the entire period of study

Cycle of disciplines	Discipline code	Name of disciplines/modules	Amount of credits	General hours	Classroom	RIC		1 year of study	2nd year of study	The form of control	FE
						CPPH	RTIC				
PD	Cycle of profiling disciplines		138	4140							
	Mandatory component		134	4020							
PD MC	R-CIAOA	Clinical immunology and allergology on an outpatient basis outpatient, adult	34	1020	204	663	153	34		Exam	
	R-CIAOC	Clinical immunology and allergology on an outpatient basis outpatient, children's	34	1020	204	663	153	34		Exam	
	R-CIAHA	Clinical immunology and allergology in a hospital, adults	33	990	198	643	149		33	Exam	
	R-CIAHC	Clinical immunology and	33	990	198	643	149		33	Exam	

		allergology in hospital, children's									
HF	Component of choice		4	120	24	78	18	2	2		
	R-MADTAD	Modern aspects of diagnosis and treatment of allergic diseases									
	R-IAMA	Innovations in allergology. Molecular allergology	2	60	12	39	9	2		Exam	
	R-DDA	Differential diagnosis of allergic dermatoses									
	R - CPAI	Clinical pharmacology in allergology and immunology	2	60	12	39	9		2	Exam	
	R - TI	Transplant immunology									
	TOTAL		138	4140	828	2691	621				
PA	INTERMEDIATE CERTIFICATION										
IA	FINAL EXAMINATION		2	60					2		60
	TOTAL		140	4200	828	2691	621	70	70		60