**Department**

Department of Clinical Immunology and Allergology, N.V. Sklifosovsky Institute of Clinical Medicine, Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University)

Alexander Karaulov, Academician of the Russian Academy of Sciences, Doctor of Medical Sciences, Professor

<https://www.sechenov.ru/univers/all/2194/>

**Scientific interests:** Clinical Medicine and Public Health. Biology and Biotechnology

**Research project:**

Development of a vaccine against allergies to dogs

**Topics and content of the research project:**

Discovering Key B-Cell Epitopes for a Dog Allergy Vaccine

Supervisor - A.V. Karaulov, Academician of the Russian Academy of Sciences, Doctor of Medical Sciences, Professor, Head of the Department

<https://www.sechenov.ru/univers/all/2194/>

Immunology

Working languages: Russian, English

**Aims and Objectives of the research project:**

Discovering key B-cell epitopes for a dog allergy vaccine

Methods used:

Production of synthetic peptides, epitope mapping, enzyme immunoassay and other experimental work

**Position Description:**

Conducting experiments, data evaluation, writing papers

Salary, position, contract term: 0.5-1.0 of the rate; senior research fellow; 1 year.

Salary: based on interview results

Requirement for a postdoc: • PhD or equivalent in life sciences (preferably medicine, biology, chemistry)

• Advanced knowledge in immunology

• Fluency in English – speaking and writing

• Motivation and dedication

• Laboratory work experience.

Expected work results: At least 2 first author publications in Q1-Q2 journals based on the results of the project, presentation of the results of the work at national and international congresses



Alexander Karaulov,

Ph.D., D.Sc., Academician, Head of the Department

Scientific and pedagogical experience of 40 years.

Scientific interests: Immunology

<https://scholar.google.ru/scholar?hl=de&as_sdt=0%2C5&q=karaulov+alexander&oq=karaulov>

<https://www.elibrary.ru/author_profile.asp?authorid=82680>

https://www.scopus.com/authid/detail.uri?authorId=58046945000

**Topics and content of research project and educational activities**

Allergen-specific immunotherapy and prevention

**Supervisor’s main publications (from the total of 385 peer-reviewed articles)**

1. Sukhanova, A., Bozrova, S., Sokolov, P., Berestovoy, M., KARAULOV, A.\*, Nabiev, I. (2018)

Dependence of nanoparticle toxicity on their physical and chemical properties . Nanoscale

Research Letters 13, 1-21. Top 10% Q1. Cited 1030 times: <https://doi.org/10.1186/s11671-018-2457-x>

2. Skevaki, C., Karsonova, A., KARAULOV, A.\*, Xie, M., &amp; Renz, H. (2020). Asthma-associated

risk for COVID-19 development.  JACI, 146(6), 1295-1301. Top 10% Q1. Cited 164

times:  https://www.jacionline.org/article/S0091-6749(20)31328-2/fulltext

3. Miethe, S., Karsonova, A., KARAULOV, A.\*, Renz, H. (2020) Obesity and asthma .

JACI, 146 (4), 685–693.  Top 10% Q1. Cited 144 times:

https://www.jacionline.org/article/S0091-6749(20)31167-2/fulltext

4. Valenta, R., KARAULOV, A.\*, Niederberger, V., Gattinger, P., van Hage, M., Flicker, S., ... &amp;

Pickl, W. F. (2018). Molecular aspects of allergens and allergy. Advances in

immunology, 138, 195-256. Cited 134 times:

https://www.sciencedirect.com/science/article/pii/S2213219818305695

5. Valenta, R., KARAULOV, A.\*, Niederberger, V., Zhernov, Y., Elisyutina, O., Campana, R., ... &amp;

Khaitov, M. (2018). Allergen extracts for in vivo diagnosis and treatment of allergy: is there

a future?. The Journal of Allergy and Clinical Immunology: In Practice, 6(6), 1845-1855. Q1.

**Patents**

1. Method for assessing the course of urogenital infections in pregnant women

Patent for invention ru 2651707 c1, 23.04.2018. Application No. 2017119234 dated 02.06.2017.

2. Method for assessing the health status of women when predicting the physiological and complicated course of pregnancy in the early stages of gestation

Patent for invention ru 2578028 c1, 20.03.2016. Application No. 2014152100/15 dated 23.12.2014.

3. Method for assessing the state of mucosal immunity of mucous membranes of open cavities of various localizations when predicting the course of infectious and inflammatory processes and a method for correcting infectious and inflammatory processes

Patent for invention ru 2556958 c1, 20.07.2015. Application No. 2014111834/15 dated 28.03.2014.

4. Composition containing bacterial waste products useful for the human body

Patent for invention ru 2535152 c1, 10.12.2014. Application No. 2013122412/15 dated 16.05.2013.

5. Method for enrichment of human regulatory cd4+cd25+foxp3+t-cells ex vivo

Patent for invention ru 2437933 c1, 27.12.2011. Application No. 2010131841/10 dated 29.07.2010.

6. Method for genotyping chlamydia trachomatis

Patent for invention ru 2443782 c1, 27.02.2012. Application No. 2010132294/10 dated 03.08.2010.

7. Method for predicting manifest or latent form of chlamydial infection in humans or monkeys and kit for its implementation

Patent for invention ru 2385945 c1, 10.04.2010. Application No. 2008151548/13 dated 26.12.2008.

8. Method for diagnosing chlamydial infection in humans or monkeys and a kit for implementing it

Patent for invention ru 2385946 c1, 10.04.2010. Application No. 2008151550/13 dated 26.12.2008.

9. Method for assessing human health when predicting the course of an infectious disease

Patent for invention ru 2595863 c2, 27.08.2016. Application No. 2014152102/15 dated 23.12.2014.

10. Derivatives of muramic acid

Patent for invention ru 2181729 c1, 27.04.2002. Application No. 2000124015/04 dated 20.09.2000.

11. Method for predicting the effectiveness of hypoxic therapy in patients with broncho-obstructive syndrome

Patent for invention ru 2098823 c1, 10.12.1997. Application No. 96108864/14 dated 13.05.1996.

12. Method for managing pregnant women with infectious pathology of the urogenital tract

Patent for invention ru 2649127 c1, 29.03.2018. Application No. 2017113702 dated 20.04.2017.

13. Method for assessing the effectiveness of infectious disease therapy

Patent for invention ru 2615417 c1, 04.04.2017. Application No. 2015154397 dated 12/18/2015.

14. Aseptic isolated block

Patent for invention ru 2615432 c1, 04.04.2017. Application No. 2015147663 dated 11/06/2015.

15. Method for personalized management of pregnant women with infectious pathology of the urogenital tract in the early stages of gestation

Patent for invention ru 2632435 c1, 10/04/2017. Application No. 2016136459 dated 09/12/2016.

16. Method and kit for gene diagnostics of whooping cough and whooping cough-like diseases

Patent for invention ru 2702240 c1, 07.10.2019. Application No. 2018136084 dated 12.10.2018.

17. Method for assessing the state of mucosal immunity in urogenital infection in pregnant women

Patent for invention ru 2715618 c1, 02.03.2020. Application No. 2019114012 dated 08.05.2019.

18. Method for assessing the severity of the infectious process in urogenital infection in pregnant women

Patent for invention ru 2715626 c1, 02.03.2020. Application No. 2019114010 dated 08.05.2019.

19. Method for predicting the course of pregnancy in case of urogenital infection

Patent for invention ru 2720135 c1, 24.04.2020. Application No. 2019111494 dated 17.04.2019. 0

20. Method for predicting the development of colon neoplasms

Patent for invention ru 2746379 c1, 12.04.2021. Application dated 30.10.2019. 0

21. Method for determining the degree of cervical dysplasia

Patent for invention ru 2758330 c1, 28.10.2021. Application No. 2020120982 dated 06/25/2020.**Experience of scientific supervision**

Under the supervision of Karaulov A.V., 18 doctoral and more than 30 candidate dissertations were defended. In 2023-2024, 3 postgraduate students are working under his supervision.

**Teaching Experience**

Course list:

Clinical immunology and allergology; Research activities and preparation of scientific qualification works; Preparation of publications and applications for patents and state registration certificates