

ФИО Аракелов Григор Галустович



Научная степень к.б.н.

Образование высшее, РАУ

Опыт работы 13 лет

Специализация структурная биоинформатика

Читаемые дисциплины структурная аннотация биополимеров, функциональная аннотация биополимеров, молекулярное моделирование, драг-дизайн.

Круг научных интересов структурная биоинформатика, моделирование структур белков, молекулярная динамика, драг-дизайн.

Повышение квалификации -

Награды, гранты

2019

In silico study of the pyrin inflammasome macromolecular complex formation.

HPC-Europa3 Transnational Access programme funded by European Commission's Horizon 2020 programme (HPC17M0PAK).

Centre for Computational Science, Department of Chemistry, University College London, London, UK

2019

In silico screening of complexation modulators of pyrin, caspase-1 and pro-IL-1 β .

Role in project: Principle investigator

Grant of the State Committee of Science of the Republic of Armenia (19YR-1F072)

2018

In silico study of the pyrin inflammasome macromolecular complex formation.

Role in project: Principle investigator

Grant of the Ministry of Education and Science of the Russian Federation

2016

Nuclear and mitochondrial genetic variants and molecular bases of mitochondrial OXPHOS diseases

Role in project: Individual Participant

Grant of the International Science And Technology Center (A-2151)

2013

De Novo modeling of pyrin tertiary structure and its

interaction dynamic with apoptosis proteins

Role in project: Principle investigator

Grant of the State Committee of Science of the Republic of Armenia (13A-1 f43)

Контакты/ адрес эл.почты grigor.arakelov@rau.am

ПУБЛИКАЦИИ

1. H. Sahakyan, N. Abelyan, V. Arakelov, **G. Arakelov**, K. Nazaryan, 2019. In silico study of colchicine resistance molecular mechanisms caused by tubulin structural polymorphism. // PloS one, 14(8), p.e0221532.
2. **G. Arakelov**, V. Arakelov, K. Nazaryan. Complex formation dynamics of native and mutated pyrin's B30.2 domain with caspase-1. // Proteins, Volume 86, Issue 6, pp. 676–683, 2018.
3. E. Arabyan, A. Hakobyan, A. Kotsinyan, Z. Karalyan, V. Arakelov, **G. Arakelov**, K. Nazaryan, A. Simonyan, R. Aroutiounian, F. Ferreira, H. Zakaryan. Genistein inhibits African swine fever virus replication in vitro by disrupting viral DNA synthesis. // Antiviral Research, Vol. 156, pp. 128–137, 2018.
4. H.K. Sahakyan, **G.G. Arakelov**, K.B. Nazaryan. In silico Search for Tubulin Polymerization Inhibitors. // Molecular Biology, Vol. 52, No. 4, pp. 604–608, 2018.
5. D.M. Rowczenio, H. Trojer, E. Omoyinmi, J.I. Aróstegui, **G. Arakelov**, A. Mensa-Vilaro, A. Baginska, C.S. Pilorz, G. Wang, T. Lane, P. Brogan, P.N. Hawkins, H.J. Lachmann. Brief Report: Association of Tumor Necrosis Factor Receptor–Associated Periodic Syndrome With Gonosomal Mosaicism of a Novel 24-Nucleotide TNFRSF1A Deletion. // Arthritis & Rheumatology, Volume 68, Issue 8, pp. 2044–2049, 2016.
6. H.K. Sahakyan, **G.G. Arakelov**, K.B. Nazaryan. Effect of mutations and phosphorylation on pyrin structure. Biological Journal of Armenia, Volume 68, Issue 3, pp. 76-80, 2016.
7. **G.G. Arakelov**, O.V. Osipov, K.B. Nazaryan. Effects of M680I and M694V pyrin mutations on the tertiary structure of domain B30.2 and its interaction with caspase-1: In silico analysis. // Molecular Biology, Volume 49 Issue 5, pp. 736-741, 2015.
8. **G. Arakelov**, K. Nazaryan. Molecular modeling of complete tertiary structure of pyrin and influence of mutations on it. 8th International Congress of Familial Mediterranean Fever and Systemic Autoinflammatory Diseases. Dresden, Germany, 30 September - 3 October 2015. // Pediatric Rheumatology 2015, 13(Suppl 1):O14.
9. **G.G. Arakelov**. Influence of the mutation on the stability of pyrin protein and development

of Familial Mediterranean Fever. // Journal of Experimental Biology and Agricultural Sciences, Volume 3, Issue 2, pp. 220 – 225, 2015.

10. K. Nazaryan, **G. Arakelov**. Mutations in PB30.2D and complexing with Caspase-1. // 7th Congress of ISSAID, International Society of Systemic Auto-Inflammatory Diseases, Lausanne, Switzerland, May 22-26, PW01-035, Pediatric Rheumatology 2013, 11(Suppl 1):A88
11. **G.G. Arakelov**, S.G. Jahangiryan, K.B. Nazaryan. Influence of M694I, K695R, V744S mutations on B30.2 tertiary structure and it's interaction with caspase-1. // Biological Journal of Armenia, Volume LXV, Supplement 1, Yerevan, pp. 33-34, 2013.
12. **G.G. Arakelov**, S.G. Jahangiryan, K.B. Nazaryan. Molecular modeling of the pyrin domains structure and their interaction dynamics with apoptosis proteins. // Vestnik RAU, №2, RAU, Yerevan, pp. 49-54, 2012.