

# Белла Гагиковна Бабаян

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## Научно-исследовательский институт биологии

Եկոլոգիական մշտադիտարկման խումբ

Научный сотрудник

## Образование

Учреждение	Ереванский Университет Культуры
Факультет	искусство
Дата	2019 - 2021
Степень / Звание	Бакалавр

Учреждение	НПЦ "Армбиотехнология" НАН РА
Факультет	Микробиология, Биотехнология
Дата	2017 - 2024
Степень / Звание	Соискатель

Учреждение	Российско-Армянский Университет
Факультет	медицинская биохимия
Дата	2008 - 2011
Степень / Звание	Аспирант

Учреждение	Ереванский Государственный Университет
Факультет	Биологический / Биохимия
Дата	2006 - 2008
Степень / Звание	Магистр

Учреждение	Ереванский Государственный Университет
Факультет	Биологический / Биохимия
Дата	2002 - 2006
Степень / Звание	Бакалавр

## Ученое звание/Ученая степень

Учреждение	НПЦ "Армбиотехнология" НАН РА
Дата	2024
Степень / Звание	Аспирант
Научный руководитель	Н.А. Оганесян
Научная тема	Изучение мультирезистентности некоторых видов бактерий родов <i>Pseudomonas</i> , <i>Stenotrophomonas</i> , <i>Xanthomonas</i> и ее преодоление синтетическими производными L-винной кислоты

## Знание языков

Русский English Հայերեն

## Опыт работы

Учреждение	Ереванский Государственный Университет
Период времени	2023 до настоящего времени
Звание/степень	Научный сотрудник

## Научные интересы

- Биохимия, биотехнология, экология, молекулярная биология, генетика, токсикология, фармакология, микробиом пещер, искусство, музыка

## Членство

Учреждение	SPELEOLOGICAL CENTER OF ARMENIA, Secretary, member of council,
Период времени	2019 - 2023

Учреждение	BAA
Период времени	2017 - 2024

Учреждение	BAA secretary
Период времени	2017 - 2019

Учреждение	FEMS
Период времени	2018 - 2024

Учреждение	FEBS
Период времени	2023 - 2024

## Государственные награды и почетные звания

2025 Почетный член жюри Международного Конкурса-Фестиваля "Constelația Talentelor", UNESCO.  
2010 Первая премия фонда "Синопис" в области ИТ  
2010 Президентская премия "Лучшая Аспирантка года"

## Дополнительная информация

<https://blog.eif.am/2021/08/02/phd-support-program-fellow-bella-babayan...>  
<https://www.youtube.com/watch?v=xx43jl8dyQQ> <https://www.youtube.com/watch?v=dXEAYIZ7SLM>

## Публикации

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Статья

### **Genetic Changes In Common Dandelion (*Taraxacum officinale*) Induced by High Concentrations of Heavy Metals in Soil**

Bella Babayan, Alexander Yesayan, Garegin Sevoyan, Tigran Yesayan

Functional Foods in Health and Disease 2025 625-633

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Статья

### ***Pseudomonas fluorescens*: Prospective green antimicrobial for crops cultivation**

Marina Melkumyan, Bella Babayan, Alexander Yesayan, Tigran Yesayan, Sevoyan Garegin,

Armen Grigoryan, Anna Grigoryan

Bioactive Compounds in Health and Disease 2025 269 - 278

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Статья

### **Artificial fragrances and semisynthetic perfumes: The hidden health risks**

Bella Babayan, Tigran Yesayan, Marina Melkumyan, Gagik Mikaelyan, Samvel Bagdasaryan,

Silviana Elbakyan, Anzhelika Avanesyan, Alexander Yesayan, Garegin Sevoyan

Functional Food Science 2025 621-632

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Статья

### **Therapeutic utilization of tetrodotoxin for treating carcinomas: a comparative molecular docking and dosage adjustment study**

Anna Grigoryan, Hamlet Karayan, Samvel Bagdasaryan, Tatevik Evadzhyan, Peri Ghukasyan,

Marina Melkumyan, Bella Babayan

Bioactive Compounds in Health and Disease 2025 422-431

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Статья

### **Tartaric acid new derivatives as prospective and safe alternative to antimicrobials for food products packing**

Mikaelyan A.R., Babayan B.G., Grigoryan A.L., Grigoryan A.M., Asatryan N.L., Melkumyan M.A.

Functional Foods in Health and Disease 2024 33-50.

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Статья

### **Carnivorous fungi application for pesticide-free vegetable cultivation**

Alexander Yesayan, Tigran Yesayan, Bella Babayan, Syuzanna Esoyan, Ani Hayrapetyan,

Garegin Sevoyan, Armine Chakhmakhchyan, Siranush Nanagulyan, Marina Melkumyan

Functional Food Science 2024 325-336

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Статья

### **Strategic food reserves storage, safety and risk minimization: Problems and perspectives**

Samvel M. Shahinyan, Ani Yu. Badasyan, Bella G. Babayan, Marina A. Melkumyan, Tigran A. Yesayan,

Alexandr H. Yesayan

Functional Foods in Health and Disease 2024 615-629

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Статья

### **Crops biological protection: Phytopathogens growth inhibition by the entomopathogens**

Marina Melkumyan, Bella Babayan, Anna Grigoryan, Alexander Yesayan  
Bioactive Compounds in Health and Disease 2024 361-374

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*Статья*

**Traditional vegetarian food products in villages of Syunik, Armenia: Technogenic contamination risks assessment**

Garegin G. Sevoyan, Karen A. Ghazaryan, Tigran A. Yesayan, Ani K. Hayrapetyan, Seyran H. Minasyan, Bella G. Babayan, Ivan G. Gabrielyan, Syuzanna S. Esoyan, Armine D. Chakhmakhchyan, Anna M. Grigoryan, Marina A. Melkumyan, Alexander H. Yesayan  
Functional Food Science 2024 380-389

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*Статья*

**Impact of ceramic packaging on the quality and safety of Armenian fermented dairy product Matsoun**

Syuzanna S. Esoyan, Ani K. Hayrapetyan, Tigran A. Yesayan, Armine E. Sargsyan, Armine D. Chakhmakhchyan, Bella G. Babayan, Garegin G. Sevoyan, Aleksandr H. Yesayan  
Functional Food Science 2024 370-379

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*Статья*

**The safety of animal-derived food products in areas of technogenic pollution**

Garegin G. Sevoyan, Seyran H. Minasyan, Tigran A. Yesayan, Bella G. Babayan, Syuzanna S. Avetisyan, Alexander H. Yesayan  
Functional Foods in Health and Disease 2024 704-712

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*Статья*

**The preliminary study of antifungal and antibacterial properties of wine by-products**

Ani K. Hayrapetyan, Tigran A. Yesayan, Armine D. Chakhmakhchyan, Bella G. Babayan, Garegin G. Sevoyan, Alexander H. Yesayan, Syuzanna S. Esoyan  
Bioactive Compounds in Health and Disease 2024 570-580

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*Статья*

**Colamine and tartaric acid based innovative antioxidant and anti-spoilage food additive for fish product industry**

Aram R. Mikaelyan, Tigran Soghomonyan, Bella G. Babayan, Samvel A. Bagdasaryan, Nona L. Asatryan, Anna M. Grigoryan, Marina A. Melkumyan  
Bioactive Compounds in Health and Disease 2024 489-499

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*Статья*

**New functionally substitutes cyclopropanecarboxylic acids as ethylene biosynthesis innovative regulators**

Aram Mikaelyan, Samvel Bagdasaryan, Bella Babayan, Nona Asatryan, Marina Melkumyan, Anna Grigoryan  
Bioactive Compounds in Health and Disease 2024 500-510

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*Статья*

**The epigenetic impact of daily diet food choices on human health and chronic diseases**

Yesayan A. H., Chetta M., Babayan B. G., Yesayan T. A., Esoyan S. S., Sevoyan G. G.  
Functional Foods in Health and Disease 2024 739-750

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Статья

**Sustainable methods for producing food-derived bioactive compounds**

Aram R. Mikaelyan, Samvel A. Bagdasaryan, Alexander H. Yesayan, Tigran A. Yesayan,  
Ani K. Hayrapetyan, Bella G. Babayan, Marina A. Melkumyan, Vardan Sargsyan  
Bioactive Compounds in Health and Disease 2024 525-535

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Статья

**THE STUDY OF PROTEOLYTIC ACTIVITY OF PHYTOPATHOGENIC RHODOCOCCUS,  
PSEUDOMONAS AND XANTHOMONAS SOME STRAINS**

Melkumyan M., Babayan B.

EUROPEAN SCIENCE REVIEW 2023 3-7

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Статья

**Assessment of 'Complex-co' preparation efficiency for some cereal crops growth stimulation**

H.S. Martirosyan, A.R. Mikaelyan, N.L. Asatryan, B.G. Babayan

Agronomy Research 2023 1213-1220

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Статья

**Tartaric acid synthetic derivatives effect on phytopathogenic bacteria**

A.R. Mikaelyan, B.G. Babayan, A.A. Vartanyan, H.V. Tokmajyan

Agronomy Research 2022 644-659

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Статья

**Analysis of genome sequence and trehalose lipid production peculiarities of the  
thermotolerant Gordonia strain**

Yanina Delegan, Armen Sargsyan, Nelli Hovhannisyan, Bella Babayan, Kirill Petrikov, Mikhail Vainstein

Journal of Basic Microbiology 2020 14-21

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Статья

**Исследования стабильности плазмид антибиотикорезистентности у почвенных условно-  
патогенных штаммов Stenotrophomonas и Pseudomonas**

Бабаян Б.Г., Саргсян А.С., Багдасарян С.А, Мелкумян М.А., Давидян Т.С, Оганесян Н.А,

Оганесян А.М.

Авиценна 2019 13-17

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Статья

**RESISTANCE TO  $\beta$ -LACTAM ANTIBIOTICS IN SOME SOIL STENOTROPHOMONAS AND  
PSEUDOMONAS.**

Hovhannisyan A.M., Hovhannisyan N. A., Babayan B.G., Sargsyan A.S., Davidyan T.S.

The scientific heritage 2019 32-38

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Статья

**Inactivation of *Macrovipera lebetina obtusa* snake venom by enzymes of multidrug resistant  
*Pseudomonas***

Bella G. Babayan, N.A. Hovhannisyan, M.A. Melkumyan, A. Sargsyan

Toxicon 2019 S20

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Статья

**СОВРЕМЕННЫЕ ТЕНДЕНЦИИ В РАЗРАБОТКЕ ЭФФЕКТИВНЫХ КОМБИКОРМОВ ДЛЯ РЫБ**

В. Ю. Агеец, А. Р. Микаелян, Ж. В. Кошак, Б. Г. Бабаян, С. М. Дегтярик

*Конференция*

**The Research of Aminoglycoside Resistance Spread in Non-Pathogenic Strains of Pseudomonas Isolated From Soil**

A.Hovhannisyan, N. Hovhannisyan, A.Sargsyan, B. Babayan, M. Kinosyan, T.Davidyan, S. Bagdasaryan, M.Melkumyan, G.Oganezova

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*Конференция*

**“Study on stability of soil Pseudomonas and Xanthomonas plasmids possessing antibiotic resistance genes”**

Hovhannisyan N.A., Babayan B.G., Sargsyan A.S., Bagdasaryan S.A, Hovhannisyan A.M.

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*Конференция*

**Antimicrobial Activity of Newly Synthesized Derivatives of Tartaric Acid Against the Multidrug Resistant Soil Strains of Pseudomonas and Stenotrophomonas**

Aram R. Mikaelyan, Nona L. Asatryan, Samvel A. Bagdasaryan, Bella G. Babayan

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*Патент*

**Համակցված ազդեցության հակաբորբոքային քսուլը**  
Գազիկ Ներսիսյան, Արամ Միքայելյան, Բելլա Բաբայան

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*Конференция*

**The Effect of Tartaric Acid New Derivatives Against the Multidrug Resistant Opportunistic Pathogenic Soil Strains of Pseudomonas Fluorescens**

Bella G. Babayan, Aram R. Mikaelyan, Nona L. Asatryan, Samvel A. Bagdasaryan, Marina A. Melkumyan

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*Конференция*

**Tartaric Acid New Synthetic Derivatives Antibacterial Activity against the Phytopathogenic Pseudomonas syringae**

Bella G. Babayan, Aram R. Mikaelyan, Nona L. Asatryan, Marina A. Melkumyan, Samvel A. Bagdasaryan,

Anna M. Grigoryan

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*Конференция*

**Carnivorous Fungi: Innovative Safe Alternative Against The Agricultural Worm Pests**

A. H. Yesayan, T. A. Yesayan, B. G. Babayan, G. G. Sevoyan, S. S. Esoyan, A. K. Hayrapetyan,

A. D. Chakhmakhchyan

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**“Complex-Co” Innovative Ecologically Safe Agropreparation**

A.R. Mikaelyan, B.G. Babayan, M.A. Melkumyan, T.M. Soghomonyan, N.L. Asatryan, A.M. Grigoryan,

S.A. Bagdasaryan, H.S. Martirosyan, A.S. Melikyan

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**The Preliminary Research of Magellan’s Cave Microbiome**

Samvel M. Shahinyan, Bella G. Babayan, Smbat Davtyan, Tigran A. Yesayan, Alexander H. Yesayan,

Marina A. Melkumyan

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*Конференция*

## **CARNIVOROUS FUNGI APPLICATION PERSPECTIVES FOR PESTICIDE- FREE VEGETABLES CULTIVATION**

Alexander Yesayan, Tigran Yesayan, Bella Babayan, Syuzanna Esoyan, Ani Hayrapetyan, Garegin Sevoyan, Armine Chakhmakhchyan, Siranush Nanagulyan, Marina Melkumyan

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### **The prospectives of crops biological protection based on *Pseudomonas fluorescens* non-pathogenic bacteria**

Marina A. Melkumyan, Bella G. Babayan, Marina H. Kinosyan, Tamara S. Davidyan

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### **Innovative Green Agents Against the Pathogens of Crops Based On *Brevibacillus Laterosporus***

Bella G. Babayan, Marina A. Melkumyan, Gagik S. Mikaelyan

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### **Carnivorous Fungi: Innovative Green Alternative Against the Worm-pests of Crops**

Tigran A. Yesayan, Alexander H. Yesayan, Bella G. Babayan

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### **Antimicrobial Resistance of Native Bacteria and The Spread of It out of Clinics**

Bella G. Babayan, Marina A. Melkumyan, Marina H. Kinosyan, Tamra S. Davidyan, Alexander H. Yesayan, Garegin G. Sevoyan, Tigran A. Yesayan

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*Конференция*

### **Crops Biological Protection Based on *Pseudomonas fluorescens*: Prospectives for Green Agriculture**

Marina Melkumyan, Bella Babayan, Alexander Yesayan, Tigran Yesayan

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