Bella G. Babayan

bella.babayan@ysu.am

Research Institute of Biology
Ecological Monitoring Group
Scientific Worker

Faculty of Biology
Research Institute of Biology
Ecological Monitoring Group
Scientific Worker

Education

Faculty	Arts
Date	2019 - 2021
Degree name	Bachelor

Faculty	Microbiology, Blotechnology
Date	2017 - 2024
Degree name	Applicant

Faculty	Medical Blochemistry
Date	2008 - 2011
Degree name	PhD student

Institution	Yerevan State University
Faculty	Biology/ Biochemistry
Date	2006 - 2008
Degree name	Masters

Institution	Yerevan State University
Faculty	Biology/ Biochemistry
Date	2002 - 2006
Degree name	Bachelor

Scientific Rank/degree

Date	2024
Degree name	PhD
Scientific Supervisor	N.A. Hovhannisyan
Research Topic	The study of Multi-Drug Resistance in Bacteria of Pseudomonas, Stenotrophomonas, Xanthomonas Genera Several Species and The Overcoming of It by L-tartaric Acid Synthetic Derivatives.

Language skills

Русский English Հայերեն

Work experience

Institution	Yerevan State University
Period of time	2023 till now
Rank/degree	researcher

Membership

Institution	FENS
Period of time	2026 till now

Institution	SPELEOLOGICAL CENTER OF ARMENIA, Secretary, member of council,
Period of time	2019 till now

Institution	BAA
Period of time	2017 - 2024

Institution	BAA Secretary
Period of time	2017 - 2019

Institution	FEMS
Period of time	2018 till now

Institution	FEBS
Period of time	2023 till now

State awards and honorary titles

2026 "Stars of the World – Alexandra Princess Angel" annual international festival of arts and talents (Bulgaria), Honorary Jury Member

2025 Honorary member of the jury of "Constelația Talentelor" International Festival-Compettiton, UNESCO

2010 "Synopsys" foundation I prize in IT TEchnologies

2010 The Presidental Award "The Best PhD Student"

Other information

https://blog.eif.am/2021/08/02/phd-support-program-fellow-bella-babayan...
https://www.youtube.com/watch?v=xx43jI8dyQQ https://www.youtube.com/watch?v=dXEAYIZ7SLM
https://www.youtube.com/watch?v=D_y9sRjerR4 https://www.youtube.com/watch?v=pSNFKpiPRd8

Publications

Conference

GLOBAL CHALLENGES OF CLIMATE CHANGE INFLUENCE ON BIODIVERSITY IN ARMENIAN CAVES ECOSYSTEMS
Babayan B., Shahinyan S., Bagdasaryan S., Yesayan T., Sevoyan G., Yesayan A.

2026 28

https://sczhe.sci.am/conference26/

Article

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 - Online ISSN 2574-0334 Print ISSN 2769-2426 2025

269 – 278

Article

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

Article

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 - Online ISSN 2574-0334 Print ISSN 2769-2426 2025 422-431

Article

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

Conference

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

2025 1

https://www.greenconferencearmenia.com/

Conference

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

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

2025 1

https://www.greenconferencearmenia.com/

Conference

Carnivorous Fungi: Innovative Green Alternative Against the Worm-pests of Crops
Tigran A. Yesayan, Alexander H. Yesayan, Bella G. Babayan

2025 1

https://www.greenconferencearmenia.com/

Conference

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

2025 137-137

https://www.ysu.am/en/conference/869

Conference

Crops Biological Protection Based on Pseudomonas fluorescens: Prospectives for Green Agriculture
Marina Melkumyan, Bella Babayan, Alexander Yesayan, Tigran Yesayan

2025 90-90

https://www.researchgate.net/publication/396465991_Crops_Biological_Protection_...

Article

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.

Article

Crops biological protection: Phytopathogens growth inhibition by the entomopathogens
Marina Melkumyan, Bella Babayan, Anna Grigoryan, Alexander Yesayan

Bioactive Compounds in Health and Disease - Online ISSN 2574-0334 Print ISSN 2769-2426 2024 361-374

Article

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

Article

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

Article

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 - Online ISSN 2574-0334 Print ISSN 2769-2426 2024 489-499

Article

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 - Online ISSN 2574-0334 Print ISSN 2769-2426 2024 500-510

Article

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 - Online ISSN 2574-0334 Print ISSN 2769-2426 2024 525-535

Article

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

Article

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

Article

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

Article

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

Article

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 - Online ISSN 2574-0334 Print ISSN 2769-2426 2024 570-580

Conference

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
2024 1

https://ace.aua.am/projects/summit-on-the-future-of-lake-sevan/

Conference

“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

2024 1

https://ace.aua.am/projects/summit-on-the-future-of-lake-sevan/

Conference

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
2024 50-52

https://www.eurospeleo.eu/event/conference-man-and-karst-2024/

Conference

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

2024 54-55

https://www.functionalfoodscenter.net/registration-form_ffc32.html

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Article

THE STUDY OF PROTEOLYTIC ACTIVITY OF PHYTOPATHOGENIC RHODOCOCCUS, PSEUDOMONAS AND XANTHOMONAS SOME STRAINS
Melkumyan M., Babayan B.

EUROPEAN SCIENCE REVIEW 2023 3-7

Article

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

Article

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

Conference

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

2021 1-7

https://www.icarset.org/

Patent

Համակցված ազդեցության հակաբորբոքային քսուք
Գագիկ Ներսիսյան, Արամ Միքաելյան, Բելլա Բաբայան

2021

Article

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

Article

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

Article

RESISTANCE TO β-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

Article

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

Article

СОВРЕМЕННЫЕ ТЕНДЕНЦИИ В РАЗРАБОТКЕ ЭФФЕКТИВНЫХ КОМБИКОРМОВ ДЛЯ РЫБ
В. Ю. Агеец, А. Р. Микаелян, Ж. В. Кошак, Б. Г. Бабаян, С. М. Дегтярик

Proceedings of the National Academy of Sciences of Belarus Agrarian Series 2019 323–333

Conference

“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.

2019 24

https://www.pulsus.com/proceedings/study-on-stability-of-soil-pseudomonas-and-x...

Conference

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

2019 37-37

https://londoninstitutesd.co.uk/publication-and-proceedings/

Conference

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

2019 1-9

https://www.dpublication.com/proceeding/2nd-rsetconf/

Conference

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

2018 18

http://pharmconf2018.ysu.am/web/indexeng.html