

# Anush Roland's Babayan

## Faculty of Biology

Office of the Faculty of Biology

Specialist on Administrative Affairs

☎ 45-02  
(060) 71-05-02

✉ a.babayan@ysu.am



## Education

|                    |                          |
|--------------------|--------------------------|
| <b>Institution</b> | Yerevan State University |
| <b>Faculty</b>     | Biology                  |
| <b>Date</b>        | 2020 - 2022              |
| <b>Degree name</b> | Masters                  |

|                    |                          |
|--------------------|--------------------------|
| <b>Institution</b> | Yerevan State University |
| <b>Faculty</b>     | Biology                  |
| <b>Date</b>        | 2016 - 2020              |
| <b>Degree name</b> | Bachelor                 |

## Work experience

|                       |  |
|-----------------------|--|
| <b>Institution</b>    | Yerevan State University, Faculty of Biology |
| <b>Period of time</b> | 2023 till now                                |
| <b>Rank/degree</b>    | Administrative specialist                    |

|                       |   |
|-----------------------|---|
| <b>Institution</b>    | Yerevan State University, Faculty of Biology, Chair of Biochemistry, Microbiology and Biotechnology |
| <b>Period of time</b> | 2023 - 2023   |
| <b>Rank/degree</b>    | senior laboratory assistant (clerk)   |

|                       |  |
|-----------------------|--|
| <b>Institution</b>    | Biology Research Institute, Yerevan State University |
| <b>Period of time</b> | 2022 till now  |
| <b>Rank/degree</b>    | Junior Scientific Researcher                         |

|                       |  |
|-----------------------|--|
| <b>Institution</b>    | Biology Research Institute, Yerevan State University |
| <b>Period of time</b> | 2021 - 2022  |
| <b>Rank/degree</b>    | senior Assistant                                     |

## Participation in international conferences and seminars

|                                    |  |
|------------------------------------|--|
| <b>09/07/2023 -<br/>13/07/2023</b> | Конференция FEMS по микробиологии<br>Germany |
|------------------------------------|--|

30/06/2022 - FEMS Conference on Microbiology  
02/07/2022 Serbia

---

20/10/2021 - FEMS Conference on Microbiology  
22/10/2021 Armenia

---

## Publications

---

### Article

#### **Escherichia coli FocA/B-dependent H<sup>+</sup> and K<sup>+</sup> fluxes: Influence of exogenous versus endogenous formate**

Lilit Grigoryan, Anush Babayan, Anait Vassilian, Anna Poladyan, Gary Sawers, Karen Trchounian

Biophysical Reports 2025 100225

---

### Article

#### **Role of the Escherichia coli FocA and FocB formate channels in controlling proton/potassium fluxes and hydrogen production during osmotic stress in energy-limited, stationary phase fermenting cells**

Anush Babayan, Anait Vassilian, Anna Poladyan, Karen Trchounian

Biochimie 2024 91-98

---

### Article

#### **Osmotic stress as a factor for regulating E. coli hydrogenase activity and enhancing H<sub>2</sub> production during mixed carbon sources fermentation**

Anush Babayan, Anahit Vassilian, Karen Trchounian

AIMS Microbiology 2023 724-737

---

### Conference

**ՕՐԳԱՆԱԿԱՆ ԹԱՓՈՆՆԵՐԻՑ ԿԵՆՍԱԶԱՆԳՎԱԾԻ ԵՎ ԿԵՆՍԱԶԵՆԵՐԳԻԱՅԻ ՓՈԽԱԿԵՐՊՄԱՆ ԿԵՆՍԱԶԻՄԻԱԿԱՆ ՈՒՂԻՆԵՐԻ ԲՆՈՒԹԱԳՐՈՒՄԸ ԵՎ ՕՔՍԻԴԱԿԵՐԱԿԱՆԳՈՂԱԿԱՆ ԿԱՐԳԱՎՈՐՈՒՄԸ**  
Փոլադյան Ա.Ա., Գևորգյան Հ.Խ., Վանյան Լ.Մ., Բաբայան Ա.Ռ., Բաղդասարյան Լ.Հ., Վասիլյան Ա.Վ.,  
Պետրոսյան Հ.Հ.

---

### Conference

#### **HYDROGEN PRODUCTION DURING GLUCOSE AND FORMATE UTILIZATION IN OSMOTIC STRESSED CELLS OF ESCHERICHIA COLI AT ALKALINE PH**

Anush Babayan, Karen Trchounian

---

### Conference

#### **Influence of osmotic stress on H<sub>2</sub> production in Escherichia coli during fermentation of mixed carbon sources at acidic pH**

Anush Babayan, Karen Trchounian

---

### Conference

#### **The role of the Escherichia coli FocA and FocB formate channels in proton flux during fermentation of mixed carbon sources**

Anush Babayan, Anait Vassilian, Anna Poladyan, Karen Trchounian

---