

<i>Surname</i>	<i>First name</i>	<i>Title</i>	<i>Date of birth</i>	<i>Gender</i>
<b>Abrat</b>	<b>Oleksandra</b>	<b>Ph.D.</b>	<b>16.05.1983</b>	<b>Female</b>

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#### ACADEMIC EDUCATION/ (WITH DEGREE)

<i>Field of study</i>	<i>College / University (Country)</i>	<i>Degree</i>	<i>Advisor</i>
Biology (2000-2005)	Vasyl Stefanyk Precarpathian National University (Ukraine)	Diploma with distinction	

#### SCIENTIFIC DEGREES

<i>Degree</i>	<i>Field of study</i>	<i>College / University (Country)</i>	<i>Y.r of Graduation</i>	<i>Advisor</i>
Ph.D.	Biochemistry	Yurij Fed'kovych Chernivtsi National University (Ukraine)	2009	Prof. Lushchak V.I

#### TEACHING EXPERIENCE

<i>Period</i>	<i>Activity (teaching courses etc.).</i>	<i>Institution</i>
2018-present	"Immunology", general course – lectures & practice	Precarpathian National University, Ivano-Frankivsk, Ukraine
2014-present	"Molecular endocrinology", special course – lectures & practice	Precarpathian National University, Ivano-Frankivsk, Ukraine
2008-present	"Biochemistry", general course – lectures & practice	Precarpathian National University, Ivano-Frankivsk, Ukraine
2008-present	"Microbiology", general course – lectures & practice	Precarpathian National University, Ivano-Frankivsk, Ukraine

#### PROFESSIONAL (INCLUDING TEACHING/RESEARCH) EXPERIENCE

<i>Period</i>	<i>Position / Function</i>	<i>Institution</i>
2019	Associate Professor	Kielanowski Institute of Animal Physiology and Nutrition, Jablonna, Poland
2018-present	Associate Professor	Precarpathian National University, Ivano-Frankovsk, Ukraine
2013-2017	Research Assistant	Precarpathian National University, Ivano-Frankovsk, Ukraine
2012-2013	Head of Laboratory	Precarpathian National University, Ivano-Frankovsk, Ukraine
2009-2011	Senior laboratory assistant	Precarpathian National University, Ivano-Frankovsk, Ukraine

## MISCELLANEOUS

2022-2024	Grant program from the German academic exchange service DAAD "Ukraine digital: Ensuring academic success in times of crisis (2022, 2023, 2024)" to support the education of Ukrainian students during the war. Blended course "Integrative Life Sciences" and "Microbes, viruses and infections" for Ukrainian biology students.
2020 -2023	Associate researcher in the project "Personalized prevention tools in obesity and diabetes – a joint Romanian-Ukrainian Programme of health education (PrePOD)" (EMS ENI Code 2SOFT / 4.1 / 56)
2019	Internship: "Testing the stability of enteric coating delay release ALLN-346 tablets along gastrointestinal tract in fed and fasted state, ALLN-346 PK study in the gut" (Lund University, Lund, Sweden)
2019	POLLASA courses on proper breeding, maintenance, and usage of laboratory animals (Polish laboratory animal science association, Warsaw, Poland)
2019	Theoretical training (total credits 2 ECTS) "Perspectives in Biomedicine with a Focus on Cancer Immunotherapy" (DAAD, Ivano-Frankivsk, Ukraine)
2019 - present	Jury member of National Tournament for Young Biologists
2018 -2020	Researcher in in the project funded by Ministry of Education and Science of Ukraine: "Development of new non-medicinal methods for correction of metabolic syndrome: normalization of physiological and biochemical indices in animals" (#0118U003477).
2018 - present	Jury member of National Biological Olympiads (III-IV stage)
2015 - 2018	Deputy Director of the Institute of Natural Sciences, PNU
2013-present	Member of Organizing Committee and Lecturer at Autumn School for Young Biochemists held annually at Department of Biochemistry and Biotechnology, PNU
2013 - 2018	Activity manager of Organizing Committee and Lecturer at Carpathian Summer School in Biochemistry held annually at Department of Biochemistry and Biotechnology, PNU
2013	The Queen Jadwiga Fund scholar (Jagiellonian University, Krakow, Poland)
2007	The Queen Jadwiga Fund scholar (Jagiellonian University, Krakow, Poland)

## MOST IMPORTANT PUBLICATIONS (total documents – 76, in scopus – 12, times cited – 112, h-index– 5)

**Aburat O.** "A Comparative Analysis of Neurohumoral Regulation and Hormonal Dynamics in Post-Traumatic Stress Disorder (PTSD) Between Human and Mouse Models." *Journal of Vasyl Stefanyk Precarpathian National University. Biology*, 11 (2024), 33-43. <https://doi.org/10.15330/jpubio.11.33-43>.

Lushchak, V. I., Covasa, M., **Aburat, O. B.**, Mykytyn, T. V., Tverdokhlib, I. Z., Storey, K. B., & Semchyshyn, H. (2023). Risks of obesity and diabetes development in the population of the Ivano-Frankivsk region in Ukraine. *EXCLI Journal*, 22, 1047-1054. DOI: <https://doi.org/10.17179/excli2023-6296>

Bayliak M., **Aburat O.**, Shmihel H., Lushchak V. and Shvadchak V. (2023). Interuniversity Online Courses as Possible Approach to Improve Teaching During Crisis: a Ukrainian Case Study. *Journal of Vasyl Stefanyk Precarpathian National University*. 10, 1 (Apr. 2023), 49-60.

Bayliak, M. M., Demianchuk, I., Gospodaryov, D. V., **Aburat, O. B.**, Lylyk, M. P., Storey, K. B., & Lushchak, V. I. (2020). Mutations in genes *cnc* or *dKeap1* modulate stress resistance and metabolic processes in *Drosophila melanogaster*. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 248, 110746.

Bayliak, M. M., & **Aburat, O. B.** (2020). Role of Nrf2 in oxidative and inflammatory processes in obesity and metabolic diseases. In *Nrf2 and its modulation in inflammation* (pp. 153-187). **Springer, Cham**.

Bayliak, M. M., **Aburat, O. B.**, Storey, J. M., Storey, K. B., & Lushchak, V. I. (2019). Interplay between diet-induced obesity and oxidative stress: Comparison between *Drosophila* and mammals. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology*, 228, 18-28.

- Abrat, O. B.**, Storey, J. M., Storey, K. B., & Lushchak, V. I. (2018). High amylose starch consumption induces obesity in *Drosophila melanogaster* and metformin partially prevents accumulation of storage lipids and shortens lifespan of the insects. **Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology**, 215, 55-62.
- Semchyshyn, H. M., **Abrat, O. B.**, Miedzobrodzki, J., Inoue, Y., & Lushchak, V. I. (2011). Acetate but not propionate induces oxidative stress in bakers' yeast *Saccharomyces cerevisiae*. **Redox Report**, 16(1), 15-23.
- Lushchak, V., **Abrat, O.**, Miedzobrodzki, J., & Semchyshyn, H. (2008). Pdr12p-dependent and-independent fluorescein extrusion from baker's yeast cells. **Acta Biochimica Polonica**, 55(3), 595-601.