

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

Address Department of Biochemistry and Biotechnology
Vasyl Stefanyk Precarpathian National University
Shevchenko 57, 76018 Ivano-Frankivsk

Telephone +38 068 03-80125
E-Mail-Address oleksandra.abrat@pnu.edu.ua
Position Associate Professor
ORCID 0000-0003-4477-3032



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 – 71, in scopus – 12, times cited – 105, h-index– 4)

- Lushchak, V. I., Covasa, M., **Abrat, 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., **Abrat 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., **Abrat, 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., & **Abrat, 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., **Abrat, 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.