Відповідність наукових праць наукових керівників кафедри біохімії та біотехнології темам дисертацій здобувачів наукового ступеня доктора філософії за ОНП Біохімія

№ п/ п	ПІП аспіранта	Рік вступу, форма навчання	Тема дисертації	ПІБ наукового керівника, науковий ступінь, вчене звання, посада	Перелік наукових праць наукового керівника, що відповідають темі дисертації (за останні п'ять років)
1.	**Ватащук Мирослава Володимирівна**	2020, денна форма навчання	Вплив альфа-кетоглютарату на вільнорадикальні та імунологічні параметри у мишей	Лущак Володимир Іванович, доктор біологічних наук, професор кафедри біохімії та біотехнології	**2023** *1.* Bayliak, M. M., Gospodaryov, D. V., & Lushchak, V. I. (2023). Homeostasis of carbohydrates and reactive oxygen species is critically changed in the brain of middle-aged mice: Molecular mechanisms and functional reasons. BBA advances, 3, 100077. https://doi.org/10.1016/j.bbadva.2023.100077 *(SCOPUS; Q3)* **2022** *2.* Vatashchuk, M. V., Bayliak, M. M., Hurza, V. V., Storey, K. B., & **Lushchak, V. I.** (2022). Metabolic syndrome: lessons from rodent and Drosophila models. BioMed research international, 2022, 5850507. https://doi.org/10.1155/2022/5850507 *(SCOPUS; IF = 3.246; Q2)* *3.* Bayliak, M. M., Sorochynska, O. M., Kuzniak, O. V., Drohomyretska, I. Z., Klonovskyi, A. Y., Hrushchenko, A. O., Vatashchuk, M. V., Mosiichuk, N. M., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2022). High stability of blood parameters during mouse lifespan: sex-specific effects of every-other-day fasting. Biogerontology, 23(5), 559–570. https://doi.org/10.1007/s10522-022-09982-x *(SCOPUS; IF = 4.284; Q3)* *4.* Kuzniak, O. V., Sorochynska, O. M., Bayliak, M. M., Klonovskyi, A. Y., Vasylyk, Y. V., Semchyshyn, H. M., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2022). Feeding to satiation induces mild oxidative/carbonyl stress in the brain of young mice. EXCLI journal, 21, 77–92. https://doi.org/10.17179/excli2021-4347 *(SCOPUS; IF = 4.022; Q1)* *5.* Bayliak, M. M., Vatashchuk, M. V., Gospodaryov, D. V., Hurza, V. V., Demianchuk, O. I., Ivanochko, M. V., Burdyliuk, N. I., Storey, K. B., Lushchak, O., & **Lushchak, V. I.** (2022). High fat high fructose diet induces mild oxidative stress and reorganizes intermediary metabolism in male mouse liver: Alpha-ketoglutarate effects. Biochimica et biophysica acta. General subjects, 1866(12), 130226. https://doi.org/10.1016/j.bbagen.2022.130226 *(SCOPUS; IF = 4.117; Q2)* **2021**

					6. Bayliak, M. M., Dmytriv, T. R., Melnychuk, A. V., Strilets, N. V., Storey, K. B., & **Lushchak, V. I.** (2021). Chamomile as a potential remedy for obesity and metabolic syndrome. EXCLI journal, 20, 1261–1286. https://doi.org/10.17179/excli2021-4013 *(SCOPUS; IF = 2.93; Q1)* 7. **Lushchak, V. I.**, Duszenko, M., Gospodaryov, D. V., & Garaschuk, O. (2021). Oxidative Stress and Energy Metabolism in the Brain: Midlife as a Turning Point. Antioxidants (Basel, Switzerland), 10(11), 1715. https://doi.org/10.3390/antiox10111715 *(SCOPUS; IF = 7.675; Q2)* 8. **Lushchak, V. I.**, & Storey, K. B. (2021). Oxidative stress concept updated: Definitions, classifications, and regulatory pathways implicated. EXCLI journal, 20, 956–967. https://doi.org/10.17179/excli2021-3596 *(SCOPUS; IF = 2.93; Q1)* 9. **Lushchak, V. I.**, & Lushchak, O. (2021). Interplay between reactive oxygen and nitrogen species in living organisms. Chemico-biological interactions, 349, 109680. https://doi.org/10.1016/j.cbi.2021.109680 *(SCOPUS; IF = 5.168; Q2)* 10. **Lushchak V. I.** (2021). Interplay between bioenergetics and oxidative stress at normal brain aging. Aging as a result of increasing disbalance in the system oxidative stress-energy provision. Pflugers Archiv : European journal of physiology, 473(5), 713–722. https://doi.org/10.1007/s00424-021-02531-4 *(SCOPUS; IF = 4.458; Q1)* 11. Bayliak, M. M., Mosiichuk, N. M., Sorochynska, O. M., Kuzniak, O. V., Sishchuk, L. O., Hrushchenko, A. O., Semchuk, A. O., Pryimak, T. V., Vasylyk, Y. V., Gospodaryov, D. V., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2021). Middle aged turn point in parameters of oxidative stress and glucose catabolism in mouse cerebellum during lifespan: minor effects of every-other-day fasting. Biogerontology, 22(3), 315–328. https://doi.org/10.1007/s10522-021-09918-x*(SCOPUS; IF = 4.284; Q2)* **2020** *12.* Bayliak, M. M., & **Lushchak, V. I.** (2020). Pleiotropic effects of alpha-ketoglutarate as a potential anti-ageing agent. Ageing research reviews, 66, 101237. https://doi.org/10.1016/j.arr.2020.101237 *(SCOPUS; IF = 10.895; Q1)* *13.* Bayliak, M. M., Sorochynska, O. M., Kuzniak, O. V., Gospodaryov, D. V., Demianchuk, O. I., Vasylyk, Y. V., Mosiichuk, N. M., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2020). Middle age as a turning point in mouse cerebral cortex energy and redox metabolism: Modulation by every-other-day fasting. Experimental

					gerontology, 145, 111182. https://doi.org/10.1016/j.exger.2020.111182 *(SCOPUS; IF = 4.032; Q2)* 14. Sorochynska, O. M., Bayliak, M. M., Gospodaryov, D. V., Vasylyk, Y. V., Kuzniak, O. V., Pankiv, T. M., Garaschuk, O., Storey, K. B., & **Lushchak, V. I.** (2020). Corrigendum: every-other-day feeding decreases glycolytic and mitochondrial energy-producing potentials in the brain and liver of young mice. Frontiers in physiology, 11, 864. https://doi.org/10.3389/fphys.2020.00864 *(SCOPUS; IF = 4.566; Q2)* **2019** *15.* Sorochynska, O. M., Bayliak, M. M., Gospodaryov, D. V., Vasylyk, Y. V., Kuzniak, O. V., Pankiv, T. M., Garaschuk, O., Storey, K. B., & **Lushchak, V. I.** (2019). Every-other-day feeding decreases glycolytic and mitochondrial energy-producing potentials in the brain and liver of young mice. Frontiers in physiology, 10, 1432. https://doi.org/10.3389/fphys.2019.01432 *(SCOPUS; IF = 3.367; Q2)* 16. 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. https://doi.org/10.1016/j.cbpa.2018.09.027 *(SCOPUS; IF = 2.353; Q2)* *17.* Bayliak, M. M., Lylyk, M. P., Gospodaryov, D. V., Kotsyubynsky, V. O., Butenko, N. V., Storey, K. B., & **Lushchak, V. I.** (2019). Protective effects of alpha-ketoglutarate against aluminum toxicity in Drosophila melanogaster. Comparative biochemistry and physiology. Toxicology & pharmacology : CBP, 217, 41–53. https://doi.org/10.1016/j.cbpc.2018.11.020 *(SCOPUS; IF = 2.897; Q2)*
2.	**Гурза Вікторія Володимирівна**				

2.	**Дем'янчук Олег Ігорович**	2021, денна форма навчання	Вплив альфа-кетоглютарату на фізіолого-біохімічні показники плодової мушки	Лущак Володимир Іванович, доктор біологічних наук, професор кафедри біохімії та біотехнології	**2023** ***1.*** Bayliak, M. M., Gospodaryov, D. V., & Lushchak, V. I. (2023). Homeostasis of carbohydrates and reactive oxygen species is critically changed in the brain of middle-aged mice: Molecular mechanisms and functional reasons. BBA advances, 3, 100077. https://doi.org/10.1016/j.bbadva.2023.100077 *(SCOPUS; Q3)* **2022** ***2.*** Vatashchuk, M. V., Bayliak, M. M., Hurza, V. V., Storey, K. B., & **Lushchak, V. I.** (2022). Metabolic syndrome: lessons from rodent and Drosophila models. BioMed research international, 2022, 5850507. https://doi.org/10.1155/2022/5850507 *(SCOPUS; IF = 3.246; Q2)* ***3.*** Bayliak, M. M., Sorochynska, O. M., Kuzniak, O. V., Drohomyretska, I. Z., Klonovskyi, A. Y., Hrushchenko, A. O., Vatashchuk, M. V., Mosiichuk, N. M., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2022). High stability of blood parameters during mouse lifespan: sex-specific effects of every-other-day fasting. Biogerontology, 23(5), 559–570. https://doi.org/10.1007/s10522-022-09982-x *(SCOPUS; IF = 4.284; Q3)* ***4.*** Kuzniak, O. V., Sorochynska, O. M., Bayliak, M. M., Klonovskyi, A. Y., Vasylyk, Y. V., Semchyshyn, H. M., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2022). Feeding to satiation induces mild oxidative/carbonyl stress in the brain of young mice. EXCLI journal, 21, 77–92. https://doi.org/10.17179/excli2021-4347 *(SCOPUS; IF = 4.022; Q1)* ***5.*** Bayliak, M. M., Vatashchuk, M. V., Gospodaryov, D. V., Hurza, V. V., Demianchuk, O. I., Ivanochko, M. V., Burdyliuk, N. I., Storey, K. B., Lushchak, O., & **Lushchak, V. I.** (2022). High fat high fructose diet induces mild oxidative stress and reorganizes intermediary metabolism in male mouse liver: Alpha-ketoglutarate effects. Biochimica et biophysica acta. General subjects, 1866(12), 130226. https://doi.org/10.1016/j.bbagen.2022.130226 *(SCOPUS; IF = 4.117; Q2)* **2021** **6.** Bayliak, M. M., Dmytriv, T. R., Melnychuk, A. V., Strilets, N. V., Storey, K. B., & **Lushchak, V. I.** (2021). Chamomile as a potential remedy for obesity and metabolic syndrome. EXCLI journal, 20, 1261–1286. https://doi.org/10.17179/excli2021-4013 *(SCOPUS; IF = 2.93; Q1)* **7. Lushchak, V. I.**, Duszenko, M., Gospodaryov, D. V., & Garaschuk, O. (2021). Oxidative Stress and Energy Metabolism in the Brain: Midlife as a Turning Point. Antioxidants (Basel, Switzerland),

					10(11), 1715. https://doi.org/10.3390/antiox10111715 *(SCOPUS; IF = 7.675; Q2)* **8.** **Lushchak, V. I.**, & Storey, K. B. (2021). Oxidative stress concept updated: Definitions, classifications, and regulatory pathways implicated. EXCLI journal, 20, 956–967. https://doi.org/10.17179/excli2021-3596 *(SCOPUS; IF = 2.93; Q1)* **9.** **Lushchak, V. I.**, & Lushchak, O. (2021). Interplay between reactive oxygen and nitrogen species in living organisms. Chemico-biological interactions, 349, 109680. https://doi.org/10.1016/j.cbi.2021.109680 *(SCOPUS; IF = 5.168; Q2)* **10.** **Lushchak V. I.** (2021). Interplay between bioenergetics and oxidative stress at normal brain aging. Aging as a result of increasing disbalance in the system oxidative stress-energy provision. Pflugers Archiv : European journal of physiology, 473(5), 713–722. https://doi.org/10.1007/s00424-021-02531-4 *(SCOPUS; IF = 4.458; Q1)* **11.** Bayliak, M. M., Mosiichuk, N. M., Sorochynska, O. M., Kuzniak, O. V., Sishchuk, L. O., Hrushchenko, A. O., Semchuk, A. O., Pryimak, T. V., Vasylyk, Y. V., Gospodaryov, D. V., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2021). Middle aged turn point in parameters of oxidative stress and glucose catabolism in mouse cerebellum during lifespan: minor effects of every-other-day fasting. Biogerontology, 22(3), 315–328. https://doi.org/10.1007/s10522-021-09918-x*(SCOPUS; IF = 4.284; Q2)* **2020** ***12.*** Bayliak, M. M., & **Lushchak, V. I.** (2020). Pleiotropic effects of alpha-ketoglutarate as a potential anti-ageing agent. Ageing research reviews, 66, 101237. https://doi.org/10.1016/j.arr.2020.101237 *(SCOPUS; IF = 10.895; Q1)* ***13.*** Bayliak, M. M., Sorochynska, O. M., Kuzniak, O. V., Gospodaryov, D. V., Demianchuk, O. I., Vasylyk, Y. V., Mosiichuk, N. M., Storey, K. B., Garaschuk, O., & **Lushchak, V. I.** (2020). Middle age as a turning point in mouse cerebral cortex energy and redox metabolism: Modulation by every-other-day fasting. Experimental gerontology, 145, 111182. https://doi.org/10.1016/j.exger.2020.111182 *(SCOPUS; IF = 4.032; Q2)* **14.** Sorochynska, O. M., Bayliak, M. M., Gospodaryov, D. V., Vasylyk, Y. V., Kuzniak, O. V., Pankiv, T. M., Garaschuk, O., Storey, K. B., & **Lushchak, V. I.** (2020). Corrigendum: every-other-day feeding decreases glycolytic and mitochondrial energy-producing potentials

					in the brain and liver of young mice. Frontiers in physiology, 11, 864. https://doi.org/10.3389/fphys.2020.00864 *(SCOPUS; IF = 4.566; Q2)* **2019** ***15.*** Sorochynska, O. M., Bayliak, M. M., Gospodaryov, D. V., Vasylyk, Y. V., Kuzniak, O. V., Pankiv, T. M., Garaschuk, O., Storey, K. B., & **Lushchak, V. I.** (2019). Every-other-day feeding decreases glycolytic and mitochondrial energy-producing potentials in the brain and liver of young mice. Frontiers in physiology, 10, 1432. https://doi.org/10.3389/fphys.2019.01432 *(SCOPUS; IF = 3.367; Q2)* **16.** 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. https://doi.org/10.1016/j.cbpa.2018.09.027 *(SCOPUS; IF = 2.353; Q2)* ***17.*** Bayliak, M. M., Lylyk, M. P., Gospodaryov, D. V., Kotsyubynsky, V. O., Butenko, N. V., Storey, K. B., & **Lushchak, V. I.** (2019). Protective effects of alpha-ketoglutarate against aluminum toxicity in Drosophila melanogaster. Comparative biochemistry and physiology. Toxicology & pharmacology : CBP, 217, 41–53. https://doi.org/10.1016/j.cbpc.2018.11.020 *(SCOPUS; IF= 2.897; Q2)*

4.	**Іваночко Мар'ян Васильович**	2022, денна форма навчання	Вплив проростків броколі на енергетичний статус мишей на тлі споживання кафетерійної дієти	Лущак Володимир Іванович, доктор біологічних наук, професор кафедри біохімії та біотехнології	**2023** **1.** Bayliak M.M., Gospodaryov D.V., **Lushchak V.I**. Homeostasis of carbohydrates and reactive oxygen species is critically changed in the brain of middle-aged mice: Molecular mechanisms and functional reasons. BBA Adv. 2023, 21;3:100077. https://doi.org/10.1016/j.bbadva.2023.100077 (SCOPUS) **2022** **2.** Vatashchuk M.V., Bayliak M.M., Hurza V.V., Storey K.B., **Lushchak V.I**. Metabolic Syndrome: Lessons from Rodent and Drosophila Models. Biomed Res Int. 2022, 22; 2022:5850507. https://doi.org/10.1155/2022/5850507 (SCOPUS) **3.** Bayliak M.M., Sorochynska O.M., Kuzniak O.V., Drohomyretska I.Z., Klonovskyi A.Y., Hrushchenko A.O., Vatashchuk M.V., Mosiichuk N.M., Storey K.B., Garaschuk, O., **Lushchak, V.I**. **4.** High stability of blood parameters during mouse lifespan: sex-specific effects of every-other-day fasting. Biogerontology. 2022, 23(5):559-570. https://doi.org/10.1007/s10522-022-09982-x (SCOPUS) **5.** Kuzniak O.V., Sorochynska O.M., Bayliak M.M., Klonovskyi A.Ya., Vasylyk Y.V., Semchyshyn H.M., Storey K.B., Garaschuk O., **Lushchak V.I**. Feeding to satiation induces mild oxidative/carbonyl stress in the brain of young mice. EXCLI J. 2022, 5; 21:77-92. https://doi.org/10.17179/excli2021-4347 (SCOPUS) **6.** Bayliak M.M., Vatashchuk M.V., Gospodaryov D.V., Hurza V.V., Demianchuk O.I., Ivanochko M.V., Burdyliuk N.I., Storey K.B., Lushchak O.V., **Lushchak V.I**. High fat high fructose diet induces mild oxidative stress and reorganizes intermediary metabolism in male mouse liver: Alpha-ketoglutarate effects. Biochim Biophys Acta Gen Subj. 2022, 1866(12):130226. https://doi.org/10.1016/j.bbagen.2022.130226 (SCOPUS) **2021** **7.** Bayliak M.M., Dmytriv T.R., Melnychuk A.V., Strilets N.V., Storey K.B., **Lushchak V.I**. Chamomile as a potential remedy for obesity and metabolic syndrome. EXCLI J. 2021, 26;20:1261-1286. https://doi.org/10.17179/excli2021-4013 **2020** **8.** Sorochynska O.M., Bayliak M.M., Gospodaryov D.V., Vasylyk Y.V., Kuzniak O.V., Pankiv T.M., Garaschuk O., Storey K.B., **Lushchak V.I**. Corrigendum: Every-Other-Day Feeding Decreases Glycolytic and Mitochondrial Energy-Producing Potentials in the Brain and Liver of Young Mice. Front Physiol.

					2020, 29;11:864. https://doi.org/10.3389/fphys.2020.00864 (SCOPUS) **2019** **9.** Bayliak M.M., Abrat O.B., Storey J.M., Storey K.B., **Lushchak V.I**. Interplay between diet-induced obesity and oxidative stress: Comparison between Drosophila and mammals. Comp Biochem Physiol A Mol Integr Physiol. 2019, 228:18-28. https://doi.org/10.1016/j.cbpa.2018.09.027 (SCOPUS) **10.** Sorochynska O.M., Bayliak M.M., Vasylyk Y.V., Kuzniak O.V., Drohomyretska I.Z., Klonovskyi, A. Ya., Storey J.M., Storey K.B., **Lushchak V.I**. Intermittent fasting causes metabolic stress and leucopenia in young mice. Ukrainian Biochemical Journal, 91(1), pp. 53–64. (SCOPUS)
5.	**Балацький Віталій Андрійович**				
6.	**Стефанишин Надія Петрівна**				