



BUKOVINIAN STATE  
MEDICAL UNIVERSITY

БУКОВИНСЬКИЙ ДЕРЖАВНИЙ  
МЕДИЧНИЙ УНІВЕРСИТЕТ



ȘTEFAN CEL MARE  
UNIVERSITY  
OF SUCEAVA  
СУЧАВСЬКИЙ УНІВЕРСИТЕТ  
ІМ. ШТЕФАНА ЧЕЛ МАРЕ

# АКТУАЛЬНІ ПИТАННЯ СУСПІЛЬНИХ НАУК ТА ІСТОРІЇ МЕДИЦИНИ

AKTUALINI PYTANNIA SUSPILINIH  
NAUK TA ISTORII MEDITSINI  
(APSNIM)

CURRENT ISSUES OF SOCIAL  
STUDIES AND HISTORY OF  
MEDICINE

АКТУАЛЬНЫЕ ВОПРОСЫ  
ОБЩЕСТВЕННЫХ НАУК  
И ИСТОРИИ МЕДИЦИНЫ

ENJEUX ACTUELS DES SCIENCES  
SOCIALES ET DE L'HISTOIRE DE  
LA MEDECINE

Спільний українсько-румунський науковий журнал  
Joint Ukrainian-Romanian scientific journal

2021, 2(30)

*Журнал засновано в 2013 р.  
Перереєстровано 27.07.2015 р. у Міністерстві  
юстиції України (Свід. № 21495-11295ПП – Сер. КВ)*

*Journal started publishing in 2013 year.  
Re-registered in the Ministry of Justice of Ukraine  
27.07.2015 p (Cert.of registr. № 21495-11295ПП – Ser. KB)*

*Журнал включено до Категорії "Б" Переліку  
наукових фахових видань України з історичних  
та філологічних наук (Наказ МОН України № 409  
від 17.03.2020р.).*

*Journal is on the List of Scientific Professional publication  
of the Ministry of Education and Science of Ukraine  
Category «B», entitled to publish main results of  
dissertations in different fields of Historical sciences and  
Philological sciences (order № 409 of 17.03.2020)*

**Honorary editor:** Dr. of Medicine, Prof. **Taras Boychuk** (Bukovinian State Medical University)

**Editors-in-Chief:** Dr. of History, Prof. **Antoniuy Moysey** (Bukovinian State Medical University)  
Dr. of History, Prof. **Stefan Purici** (Ștefan cel Mare University of Suceava)

**Executive Editors:** Ph.D., Assoc. Prof. **Antonina Anistratenko**, responsible for the electronic version of the journal  
Ph.D., Assoc. Prof. **Yulia Rusnak** (Bukovinian State Medical University)  
Ph.D., Lecturer **Tetyana Nykyforuk** (Bukovinian State Medical University)  
Ph.D., Lecturer **Harieta Mareci Sabol** (Ștefan cel Mare University of Suceava)

**Editors Assistants:** Ph.D., Associate Prof. **Inha Tymofijchuk** (Bukovinian State Medical University)  
Ph.D., Lecturer **Vasile M. Demciuc** (Ștefan cel Mare University of Suceava)

**Executive secretaries:** Lecturer **Iryna Kaizer**, Lecturer **Lidia Vylka**, Lecturer **Uliana Kemin**  
Responsible for the Bibliographic description of the references: **Svitlana Tulevska**

INDEXING: Index Copernicus – 73,78 (2016) | Infobase Index – 2,8 (2016) | MIAR – 2,8 (2016) | SRJIF – 3,98 (2017) | JICIndex – 0,110 (2017)

*Journal was registered in the international scientometric and bibliographical database Index Copernicus, Directory of Open Access Journals (DOAJ), Ulrichs Web, Erih Plus, Scientific Indexing Services, Index of Turkish Education, Infobase Index, OAJI, World Cat, DRJI, Sherpa/Romeo, MIAR, Journal Factor (JF), Root indexing, Science Research Journal Impact Factor was published in database: Google Scholar, SCIARY (World Wide Science Educational Library), Scientific periodicals of Ukraine, Central and Eastern European Online Library (Germany).*

## EDITORIAL BOARD:

## SOCIAL SCIENCES

**History:** Prof. *Onoriu Colăcel*, Dr. of History, Ștefan cel Mare University of Suceava (**Romania**); Assoc. Prof., *Serhiy Dobrshanskyi*, Ph. D., Yuriy Fedkovych Chernivtsi National University (**Ukraine**); Assoc. Prof. *Gennadii Kazakevych*, Dr. of History, Taras Shevchenko Kyiv National University (**Ukraine**); Prof. *Michel Kerautret*, Dr. of History, Ecole des Hautes études en sciences sociales (Paris, **France**); Prof. *Zenon Kohut*, Dr. of History, Alberta University (Edmonton, **Canada**); Prof. *Anatoliy Kotsur*, Dr. of History, Taras Shevchenko Kyiv National University (**Ukraine**); Prof. *Oleksandr Kurochkin*, Dr. of History, M. Rylskyi Institute of Art, Folklore and Ethnology, Academy of Sciences (Kyiv, **Ukraine**); Chief Research Worker *Elisaveta Kvilincova*, Dr. of History, Institute of Cultural Heritage, Academy of Sciences (Chisinau, **R. Moldova**); Prof. *Yuri Makar*, Dr. of History, Academician of the Ukrainian Academy of History, Yuriy Fedkovych Chernivtsi National University (**Ukraine**); Senior Research Associate *Paul Meerts*, Dr. of History, Institute of International Relations Clingendael (The Hague, **Netherlands**); Prof. *Olimpia Mitric*, Dr. of History, Ștefan cel Mare University of Suceava (**Romania**); Prof. *Gheorghe Onișoru*, Dr. of History, Ștefan cel Mare University of Suceava (**Romania**); Assoc. Prof. *Nataliya Petrova*, Ph. D., I. I. Mechnikov National University of Odesa (**Ukraine**); Assoc. Prof. *Florin Pintescu*, Dr. of History, Ștefan cel Mare University of Suceava (**Romania**); Acad. *Stepan Pavliuk*, Dr. of History, Director of the Institute of Ethnology, Academy of Sciences (**Ukraine**); Acad. *Anna Skrypnyk*, Dr. of History, Director of the Institute of Art Studies, Folklore and Ethnology, Academy of Sciences (Kyiv, **Ukraine**); Prof. *Andrzej Wawryniuk*, Dr. of History, Państwowa Wyższa Szkoła Zawodowa w Cholmie (**Poland**);

**Philologie:** Prof. *Bertrand Badiou*, Dr. of Philology, Ecole normale supérieure (Paris, **France**); Prof. *Piotr Borek*, Dr. of Philology, Head of the Polish Philology Institute Krakiv Pedagogical University (**Poland**); Assoc. Prof. *Carmen Dărăbuș*, Dr. of Philology, Kliment Ohridski University of Sofia (**Bulgaria**); Prof. *Mircea A. Diaconu*, Dr. of Philology, Ștefan cel Mare University of Suceava (**Romania**); Assoc. Prof. *Evelina-Mezalina Graur*, Dr. of Philology, Ștefan cel Mare University of Suceava (**Romania**); Prof. *Adam Falowski*, Dr. of Philology, Head of the East Slavic Philology Institute Jagiellonian University (**Poland**); Prof. *Roma Franko*, Dr. Of Philology, University of Saskatchewan (**Canada**); Assoc. Prof. *Anastasiya Lepetiukha*, Kharkiv national pedagogical university named after H. Skovoroda (**Ukraine**); Assoc. Prof. *Simona-Aida Manolache*, Dr. of Philology, Ștefan cel Mare University of Suceava (**Romania**); Chief Research Worker *Anna-Maria Sorescu-Marinkovich*, Dr. of Philology, Balkan Institute at Serbian Academy of Sciences and Art (Belgrad, **Serbia**); Prof. *Hanna Martynova*, Dr. of Philology, Bohdan Chmelnytskyi Cherkasy National University (Ukraine); Prof. *Ovidiu Morar*, Dr. of Philology, Ștefan cel Mare University of Suceava (**Romania**); Prof. *Mihaela Violeta Munteanu*, Dr. of Philology, Technical University of Cluj-Napoca (**Romania**); Prof. *Rodica-Măriora Nagy*, Dr. of Filology, Ștefan cel Mare University of Suceava (**Romania**); Prof. *Felix-Narcis Nikolau*, Dr. Of Philology, Lunds universitet (**Sweden**); Prof. *Antoaneta Olteanu*, Dr. of Philology, Bucharest University (**Romania**); Assoc. Prof. *Oleksandr Rak*, Ph. D. of Philology, Bukovinian State Medical University (**Ukraine**); Prof. *Nataliya Rusnak*, Dr. of Philology, Yuriy Fedkovych Chernivtsi National University (**Ukraine**); Dr. of Filology, Prof. *Svitlana Shabat-Savka*, Ph. D. of Philology, Yuriy Fedkovych Chernivtsi National University (**Ukraine**);

**Philosophy:** Prof. *Sorin Tudor Maxim*, Dr. of Philosophy, Ștefan cel Mare University of Suceava (**Romania**); Prof. *Diego Sanchez Mecka*, Dr. of Philosophy, National University of Distance Education (Madrid, **Spain**); Assoc. Prof. *George Neamțu*, Dr. of Philosophy, Ștefan cel Mare University of Suceava (**Romania**); Assoc. Prof. *Bogdan Popoveniuc*, Dr. of Philosophy, Ștefan cel Mare University of Suceava (**Romania**); Assoc. Prof. *Nina Zoriy*, Ph. D. of Philosophy, Bukovinian State Medical University (**Ukraine**).

## HISTORY OF MEDICINE:

Assoc. Prof. *Carmen Cornelia Bălan*, Dr. of Psychology, Ștefan cel Mare University of Suceava (**Romania**); Dr. med. Dipl.-Psych, MBA, *Gerhardt Dammann*, Chief of Psychiatrische Klinik Münsterlingen and the psychiatric services Thurgau (**Switzerland**); Prof. *Alexander Fediv*, Dr. of Medicine, Bukovinian State Medical University (**Ukraine**); Prof. *Oleksandr Ivashiuk*, Dr. of Medicine, Bukovinian State Medical University (**Ukraine**); Prof. *Alfred Prits*, Dr. of Psychology, President of World Psychology Union Head of Psychotherapy and Psychoanalysis Institute in Vienna (**Austria**); Assoc. Prof. *Nadia Laura Serdenciuc*, Dr. of Educational Sciences, Ștefan cel Mare University of Suceava (**Romania**); Prof. *Viktor Tashchuk*, Dr. of Medicine, Bukovinian State Medical University (**Ukraine**); Prof. *Dmytro Tyntyuk*, Dr. of Medicine, Chisinau State University of Medicine and Pharmacy N. Testemitsanu (**R. Moldova**); Prof. *Bohdan Vasylevskiy*, Dr. of Medicine, Chief of Psychosomatik Institute (Warsaw, **Poland**).

**Актуальні питання суспільних наук та історії медицини. Спільний українсько-румунський науковий журнал. Серія "Історичні науки" || Current issues of Social studies and History of Medicine. Joint Ukrainian-Romanian scientific journal. Series "Historical science"/ Редколегія: А. Мойсей, Ш. Пуріч. Чернівці-Сучава: БДМУ. 2021. № 2 (30). 120 с.**

ISSN: 2311-9896; EISSN 2411-6181

The actual problems of world history, history of Ukraine, history of religion, ethnogenesis and traditional culture of peoples, archeology, philosophy, linguistics, literature and history of medicine are investigated in the journal. The journal is the international edition according to the sphere of extension and geography of the authors.

ББК 60я53+5г.я43

*The journal is published in paper and electronic version with the resolution of the academic council of Bukovinian State Medical University (Decision № 9 . Date: 13.05.2021).*

The authors are responsible for the selection, accuracy of given information, citations, proper names, geographical names and other data.

Publishing: 2-4 issues a year. Languages: Ukrainian, Russian, English, French.

**Address:** Ukraine, 58000, Chernivtsi, Heroiv Maidanu str., 3, Department of Social Sciences and Ukrainian Studies.  
Tel.: (0372) 520871. **E-mail:** snim@bsmu.edu.ua; society@bsmu.edu.ua

*The electronic version of the journal is available on the Web sites: <http://apsnim.bsmu.edu.ua>; <http://doaj.org> (DOAJ); <http://www.irbis-nbu.gov.ua> (National V. Vernadskij library web-site); <http://e-apsnim.bsmu.edu.ua> (OJS); <https://journals.indexcopernicus.com/representative/issue/list> (Copernicus ICI).*

**ДОСВІД ВИКЛАДАННЯ ФІЗІОЛОГІЇ МЕДИЧНИМ ПСИХОЛОГАМ В МЕДИЧНОМУ УНІВЕРСИТЕТІ****Тетяна САВЧУК, Іванна ТИМОФІЙЧУК**

Буковинський державний медичний університет, Чернівці (Україна), savchuk519@ukr.net

**TEACHING PHYSIOLOGY TO STUDENTS OF MEDICAL PSYCHOLOGY FACULTY IN MEDICAL UNIVERSITY****Tetiana SAVCHUK, Ivanna Tymofichuk**

Bukovynian State Medical University, Chernivtsi (Ukraine), ORCID 0000-0001-5601-2244 Resercher I-1501-2016

**Савчук Татьяна, Тимофійчук Іванна. Опыт преподавания физиологии медицинским психологам в медицинском университете. Цель статьи.** В статье рассматриваются особенности преподавания физиологии студентам медицинских университетов специальности “Медицинская психология”. От будущего врача – медицинского психолога нужна солидная теоретическая подготовка в одной из самых сложных областей медицины – неврологии и психиатрии. Именно со второго курса, на уроках физиологии, начинается разработка теоретического материала и закладываются основы клинического мышления, необходимо уже на старших курсах, на стажировке для успешного овладения знаниями. Медицинская психология изучает психологические аспекты деятельности врача и поведения пациента. Он изучает психические проявления болезней, роль психики в их возникновении, течении, лечении, а также в укреплении здоровья человека. **Актуальность научного исследования.** Связи психологии и медицины настолько тесные, что для психологов, работающих в этой области, медицинские знания абсолютно необходимы. В то же время врачи все больше осознают необходимость психологических знаний для успешной медицинской работы. Итак, медицинская психология - это область научных знаний и область практических работ, которая в равной степени относится как к медицине, так и к психологии. При разработке проблем медицинской психологии сочетаются усилия психологов, физиологов и врачей. Актуальность медицинской психологии определяется основным положением медицины о том, что врач должен лечить не болезнь, а пациента. **Выводы.** Особое внимание преподавателям кафедры уделяется выработке практических навыков решения ситуационных задач, приобретению навыков проверки рефлекторной деятельности, измерению времени рефлекса. Решение ситуативных проблем ставит проблему для будущего врача, научить студента мыслить клинически и одновременно дает прекрасную теоретическую подготовку.

**Ключевые слова:** Медицинская психология, физиология, медицинский университет

**Problem statement and its connection with important scientific tasks.** The article discusses the features of teaching physiology to students of medical universities of the specialty “Medical Psychology”. From the future physician – medical psychologist requires a solid theoretical training in one of the most difficult areas of medicine – neurology and psychiatry. It is from the second course, in the lessons of physiology, the development of theoretical material begins and the foundations of clinical thinking are laid, which is necessary already at senior courses, at an internship for successful mastery of knowledge.

**Purpose of the article.** Medical psychology examines the psychological aspects of the doctor’s activities and patient behavior. It studies the mental manifestations of diseases, the role of the psyche in their occurrence, course, treatment, and also in promoting human health.

**The relevance of research.** The links of psychology and medicine are so close that for psychologists working in this field, medical knowledge is absolutely necessary. At the same time, physicians are becoming more and more aware of the need for psychological knowledge for successful medical work. Thus, medical psychology is a field of scientific knowledge and a field of practical work that equally applies to both medicine and psychology. In developing the problems of medical psychology, the efforts

of psychologists, physiologists, and doctors are combined. The relevance of medical psychology is determined by the basic position of medicine that a doctor should not treat a disease, but a patient. Medical psychology, as a branch of applied psychology, emerged as an independent science only in the 20th century. An important contribution to the development of medical psychology was made by Z. Freud, E. Krechmer, V. M. Bekhterev, S. S. Korsakov, I. Rosolimo. The first practical psychologists in medicine were doctors. As doctors, neuropathologists or psychiatrists began to work Z. Freud, E. Krechmer, G. Rorschach, V.M. Bekhterev, P. B. Gannushkin and other medical psychologists<sup>1</sup>.

**The main material presenting.** Modern medical psychology is divided into two main areas. The first is connected with the use of psychology in the clinic of neuropsychiatric diseases, where the main problem is the study of the influence on the patient's psyche of changes in the structure and functioning of the brain, due to in vivo acquired pathology or determined by congenital anomalies. Another area of medical psychology is associated with its application in the clinic of somatic diseases, where the main problem is the influence of mental states (factors) on somatic processes. Without knowledge of fundamental subjects, students of the specialty “Medical psychology” cannot master more complex disciplines, such as psychiatry,

<sup>1</sup> Diankina M. S. “Professionalizm prepodavatelya vysshey meditsinskoy shkoly. Psikhologo-pedagogicheskiy aspekt” [Professionalism of a higher medical school teacher. Psychological and pedagogical aspect], Moskva, Intel-universal, 2002, P. 70 [in Russian].

neurology. It is on physiology that students receive the foundation that they use at senior courses, as well as in practical activities.

The main tasks of the department are to familiarize students with the basics of the personality psyche based on courses in anatomy of the evolution of the central nervous system, physiology of the central nervous system and higher nervous activity<sup>2</sup>.

Physiology is a complex set of knowledge including information from various sciences. It uses knowledge from the biology of physics, chemistry, mathematics, cybernetics, anatomy, histology, biophysics, and immunology of genetics. The philosophical laws of the organization of material and ideal processes are used in the sensory physiology of higher nervous activity and the division of the general principles of the organization of living beings. Some sections of physiology are closely related to each other by similar laws. However, most sections of physiology describe the organization of body functions that is different from other sections. When analyzing some of the functions of the body, they use knowledge in the description of other sections — knowledge of physics, and third — knowledge of biophysics and molecular biology. For high-quality preparation for the exam in physiology, a student needs to know not only the functional processes of the body, but also basic sciences. The depth of studying physiology is significantly different in a medical university. Higher medical education forms the physiological thinking of the doctor. A physician may forget many of the parameters of homeostasis individual mechanisms of functional processes. But he should be able to analyze possible neurohormonal interactions of functions in the body and be able to predict the dynamics of changes in these functions during the development of the disease during the recovery of the patient.

Neurology, psychiatry and medical psychology are based on the physiology of the nervous system of sensory systems and higher nervous activity. The knowledge of the functions of the analyzers used in otolaryngology and ophthalmology.

Reflex theory played a significant role in the development of physiology. Its founder is considered René Descartes (1596–1650), a French thinker who postulated idealistic mechanical ideas about the body's reflected activity in response to irritations. At the beginning of the XIX century. Czech physiologist Jiří Procházka (1749–1820) replaced R. Descartes' mechanical ideas about regulatory processes in the body with biological ones. He was the first to extend the concept of reflex to all the activity of the nervous system, and not only to the activity of the spinal cord and brainstem. He believed that the purpose of the body's reflex reactions is the use of environmental influences useful for the survival of the organism and the elimination of the organism from harmful influences. He

called the reflex the “compass of life” that provides adaptation to the external environment of the organism. However, Procházka's views on physiology as a fundamental medical science were more important for medicine. In 1820 his last book translated 1922 into Russian was published. This book was published in St. Petersburg under the title *Physiology as a Science about the Human Being*. Until the end of the XIX in the book, J. Prokhazki was used in Russia as one of the textbooks for teaching physiology students.

The founder of the Russian physiological school, Ivan Mykhailovych Sechenov (1829–1905), justified the proposition that any involuntary and arbitrary processes in the body have a physiological basis. I. Sechenov's main contribution to physiology was to achieve the goal of his research, which he declared in his book *Brain Reflexes* “... to prove that all acts of conscious and unconscious life according to the mode of origin are reflexes”. He introduced to medicine the idea that all body functions – from the functions of individual organs to the mental functions of a person – have a physiological basis, regardless of the degree of knowledge of these functions at this stage of development of physiology. The scientific works of I. M. Sechenov showed the role of physiology as a basic medical science. Theoretical knowledge about the organization of normal and pathological functional processes of the body including human behavior<sup>3</sup>.

Until the end of the XIX century, physiological studies were carried out almost exclusively in the form of acute animal experiments. The founder of the theory of higher nervous activity, Ivan Petrovich Pavlov (1849–1936), was the first to point out the imperfection of acute physiological experiments. He believed that such experiments were a gross invasion of the organism, which was accompanied by an increase in some functions and inhibition of others. This means that acute experiments can lead to incorrect conclusions about the physiological processes in the body. I. Pavlov believed that animal studies using chronic experiments should be a constant method for studying the functions of the body<sup>4</sup>.

**Conclusions.** In the preparation of working curricula for students of different specialties at the Department of Physiology. Ya.D., Kirshenblata of the Bukovinian State Medical University take into account the peculiarities of the future specialty of students. So for students of the specialty “Medical Psychology” special attention is paid to the study of the sections “Physiology of the nervous system”, “Physiology of sensory systems”, “Physiology of higher nervous activity”. Particular attention is paid to the teachers of the department on the development of practical skills in solving situational problems, in acquiring the skills of testing reflex activity, measuring the time of reflex. The solution of situational problems poses a problem for the future doctor, to teach the student to think clinically and at

<sup>2</sup> Zyazyun I. A., Krivonos I. F., Tarasevich N. N. i dr. *Osnovy pedagogicheskogo masterstva: uchebnoye posobiye dlya ped. spets. ucheb. zavedeniy* [Fundamentals of pedagogical skills: a textbook for ped. specialist. study. institutions], pod red. I. A. Zyazyuna, Moskva, Prosveshcheniye, 1989, 376 p. [in Russian].

<sup>3</sup> Berebin M. A., Vasserman L. I. “Klinicheskiy (meditsinskiy) psikholog: realii i protivorechiya v organizatsii sluzhby i podgotovki kadrov” [Clinical (medical) psychologist: realities and contradictions in the organization of service and training], *Yaroslavskiy psikhologicheskiy vestnik* [Yaroslavl psychological bulletin], Yaroslavl, 2004, N 11, P. 89–92 [in Russian].

<sup>4</sup> Hryhoryshyn P. M. et al. “Dystantsiyni tekhnolohiyi navchannya: dosyahnennya, problemy ta perspektyvy rozvytku” [Distance learning technologies: achievements, problems and prospects of development], *Visnyk problem biolohiyi i medytsyny* [Bulletin of problems of biology and medicine], 2013, Vyp. 2 (100), P. 68–72, URL: [https://elibrary.ru/elibrary\\_20413099.pdf](https://elibrary.ru/elibrary_20413099.pdf) [in Ukrainian].

the same time gives a great theoretical preparation.

**Савчук Тетяна, Тимофійчук Іванна.** Досвід викладання фізіології медичним психологам в медичному університеті. У статті розглядаються особливості викладання фізіології студентам медичних університетів спеціальності “Медична психологія”. Від майбутнього лікаря – медичного психолога потрібна солідна теоретична підготовка в одній з найскладніших областей медицини – неврології та психіатрії. Саме з другого курсу, на заняттях з фізіології, починається розробка теоретичного матеріалу і закладаються основи клінічного мислення, що необхідно вже на старших курсах, на стажуванні для успішного оволодіння знаннями. Медична психологія вивчає психологічні аспекти діяльності лікаря та поведінки пацієнта. Він вивчає психічні прояви хвороб, роль психіки у їх виникненні, перебігу, лікуванні, а також у зміцненні здоров’я людини. Зв’язки психології та медицини настільки тісні, що для психологів, які працюють у цій галузі, медичні знання є абсолютно необхідними. Водночас лікарі все більше усвідомлюють необхідність психологічних знань для успішної медичної роботи. Отже, медична психологія – це область наукових знань і область практичних робіт, яка однаковою мірою стосується як медицини, так і психології. При розробці проблем медичної психології поєднуються зусилля психологів, фізіологів та лікарів. Актуальність медичної психології визначається основним положенням медицини про те, що лікар повинен лікувати не хворобу, а пацієнта. На кафедрі фізіології, де викладається студентам спеціальності “Медична психологія” викладається дисципліна “Фізіологія з основами нейрофізіології”, особлива увага приділяється вивченню розділів “Фізіологія нервової системи”, “Фізіологія сенсорних систем”, “Фізіологія вищої нервової діяльності”. Особлива увага викладачам кафедри

приділяється виробленню практичних навичок вирішення ситуативних задач, набуттю навичок перевірки рефлекторної діяльності, вимірюванню часу рефлексу. Вирішення ситуативних проблем ставить проблему для майбутнього лікаря, навчити студента мислити клінічно і одночасно дає чудову теоретичну підготовку.

**Савчук Тетяна** – кандидат медичних наук, асистент кафедри фізіології імені Я. Кіришенблата ВДНЗ України «Буковинський державний медичний університет». У доробку автора 18 наукових праць. Коло наукових інтересів: історія розвитку фізіології, історія медсестринства, фізіологія нервової системи.

**Savchuk Tatiana** – PhD, Assistant Professor of Physiology named after Ya. Kirshenblata of Bukovinian State Medical University. Author of 18 scientific works scientific research: history of physiology, history of nursing, physiology of the nervous system.

**Тимофійчук Іванна** – студентка 6 курсу медичного факультету №1 Буковинського державного медичного університету. Співавтор 8 наукових праць. Коло наукових інтересів: вплив патогенних чинників на структури і функції організму.

**Tymofiychuk Ivanna** – student of 6 year of medical faculty №1 of Bukovinian State Medical University. Co-author 8 scientific articles. Research interests: pathogenic factors influence on the structures and functions of the human organism.

Received: 16.05.2021

Advance Access Published: June, 2021

© T. Savchuk, I. Tymofiychuk, 2021