
INDEPENDENT STUDY IN MEDICAL BIOLOGY: KEYS TO PROGRESS AND PROFESSIONAL GROWTH

Daminov Akmal Okhunzhonovich .

*Candidate of Medical Sciences, Associate Professor of the Department
Tashkent Medical Academy*

Abstract. This article provides a detailed guide to self-study in the field of medical biology. Describes the key steps and techniques needed to effectively master the material, including setting goals, planning the learning process, using a variety of learning resources, and applying knowledge in practice. The importance of participation in professional communities, methods for assessing progress and continuous self-development are also discussed. This article will be useful to students, professionals, and anyone seeking an in-depth understanding of medical biology and professional development in this field.

Key words: progress assessment, self-development, self-directed learning, medical biology, skills, teaching methods, planning, scientific resources, practical application, professional communities.

Аннотация. В данной статье представлено подробное руководство по самостоятельному обучению в области медицинской биологии. Описываются ключевые этапы и методы, необходимые для эффективного освоения материала, включая постановку целей, планирование учебного процесса, использование разнообразных учебных ресурсов и практическое применение знаний. Также обсуждаются важность участия в профессиональных сообществах, методы оценки прогресса и постоянного саморазвития. Эта статья будет полезна студентам, специалистам и всем, кто стремится к углубленному пониманию медицинской биологии и профессиональному развитию в этой области.

Ключевые слова: оценка прогресса, саморазвитие, самостоятельное обучение, медицинская биология, навыки, методы обучения, планирование, научные ресурсы, практическое применение, профессиональные сообщества.

Annotatsiya. Ushbu maqola tibbiy biologiya sohasida mustaqil o'rganish uchun batafsil qo'llanmani taqdim etadi. Maqsadlarni belgilash, o'quv jarayonini rejalashtirish, turli o'quv resurslaridan foydalanish va bilimlarni amaliyotda qo'llashni o'z ichiga olgan materialni samarali o'zlashtirish uchun zarur bo'lgan asosiy bosqich va usullarni tavsiflaydi. Shuningdek, professional jamoalarda ishtirok etishning ahamiyati, taraqqiyotni baholash usullari va uzluksiz o'z-o'zini rivojlantirish masalalari muhokama qilinadi. Ushbu maqola talabalar, mutaxassislar va ushbu sohada tibbiy biologiya va kasbiy rivojlanishni chuqur tushunishga intilayotgan har bir kishi uchun foydali bo'ladi.

Kalit so'zlar: taraqqiyotni baholash, o'z-o'zini rivojlantirish, o'z-o'zini boshqarish, tibbiy biologiya, ko'nikmalar, o'qitish usullari, rejalashtirish, ilmiy manbalar, amaliy qo'llash, professional jamoalar.

Modern science requires specialists to have deep knowledge and the ability to constantly update their skills. Medical biology, being one of the most dynamically developing fields, is no exception. In a rapidly changing scientific landscape, independent work is becoming a key element of professional growth. In this article we will look at effective methods and practices that will help you organize independent work in medical biology [1,2].

1. Goal setting and planning

The first step to successful independent work is to clearly define your goals. What exactly do you want to learn or what skills do you want to develop? Perhaps you are interested in the latest discoveries in genetics, the mechanisms of cell biology, or methods for diagnosing diseases. Formulate specific goals and break them down into smaller tasks.

Example:

Learn the basics of genetics.

Understand DNA sequencing methods.

Master the skills of working with genetic information databases.

After setting your goals, develop an action plan. Determine how much time you are willing to devote to studying daily or weekly and create a schedule. Regularity and systematicity of classes play a key role in the successful mastery of the material.

2. Finding and using resources

Today there are a huge number of resources for self-study of medical biology. Key sources of information include:

Textbooks and monographs: Start with basic textbooks to gain fundamental knowledge, and move on to more specialized literature as you delve deeper into the topic [3].

Scientific Articles: Subscribe to key journals in your field, such as Nature, Science, Cell. Use databases such as PubMed to search for articles on topics that interest you.

Online courses and lectures: Platforms such as Coursera, edX, Khan Academy offer courses from leading universities in the world. This is a great way to get structured training [4].

Video lectures and podcasts: Many universities and research institutes post recorded lectures and seminars on YouTube and other platforms.

3. Practical application of knowledge

Theory without practice is ineffective. Therefore, it is important to find opportunities to apply the acquired knowledge:

Laboratory work: If you have access to a laboratory, complete experiments related to your learning goals [5].

Virtual Labs: Use online platforms that provide the ability to conduct virtual experiments.

Project work: Create your own project that will allow you to put the techniques you have learned into practice. This could be research work, data analysis or model creation [6].

4. Discussion and collaboration

Working independently doesn't have to mean isolation. Get involved in professional communities, participate in forums and discussions:

Scientific conferences and seminars: Attend events to stay up to date with the latest advances and share experiences with colleagues.

Online forums and groups: Join professional communities on social networks and specialized forums [7].

Mentoring and coaching: Find a mentor or seek help from more experienced colleagues. A mentor will help you master complex topics faster and give you valuable advice [8].

5. Assessing progress and adjusting the plan

Evaluate your progress regularly. This can be done through self-assessment tests, writing reports on topics studied, or participating in competitions and olympiads. Analyze the results and, if necessary, adjust your training plan [9].

Conclusion. Independent work in medical biology requires discipline, perseverance and proper organization. By following the methods and practices described above, you will be able to effectively master new knowledge and skills, which will help you become a sought-after specialist in this dynamically developing field. Remember that science does not stand still, and your success depends on constant self-development and the desire for new achievements.

Bibliography

1. Shigakova, L. A. "FORMS OF ORGANIZATION OF STUDENTS' LEARNING ACTIVITIES IN BIOLOGY LESSONS IN MEDICAL UNIVERSITIES." (2023).
2. Inogamova, D. R., and L. A. Shigakova. "Biologiya o'qitishda mustaqil ishlarni tashkil etishning metodik qirralari va nazorat qilishda test t o pshiriqlarini o'rni." (2023).
3. Shigakova, Lucia Anvarovna, et al. "DIDACTICAL MATERIAL–WORKBOOK IN TEACHING MEDICAL BIOLOGY." *Journal of Humanities and Sciences* 1 (2023): 101-106.
4. Anvarovna, Shigakova Lyutsiya. "DEVELOPMENT OF RESEARCH SKILLS WHEN TEACHING BIOLOGY TO STUDENTS USING VIRTUAL PROGRAMS." *PROSPECTS AND MAIN TRENDS IN MODERN SCIENCE* 1.5 (2023): 26-30.
5. Shigakova, Lucia Anvarovna. "DEVELOPMENT OF RESEARCH SKILLS IN TEACHING BIOLOGY USING DIDACTIC MEANS." *Journal of Integrated Education and Research* 7.1 (2023): 181-184.
6. Inogamova, Dilfuza Rakhmatulaevna, and Lucia Anvarovna Shigakova. "Methodological features of organizing independent work and the role of test tasks in teaching biology." (2023).

-
7. Anvarovna, Shigakova Lyutsiya. "PEDAGOGICAL POSSIBILITIES FOR IMPROVING METHODS OF USING VIRTUAL PROGRAMS." SCIENTIFIC ASPECTS AND TRENDS IN THE FIELD OF SCIENTIFIC RESEARCH 2.14 (2023): 13-17.
 8. Inogamova, Dilfuza Rakhmatullaevna, Lucia Anvarovna Shigakova, and Zulfiya Khosilovna Umarova. "THE PLACE OF THE VIRTUAL PROGRAM AND DIDACTIC TOOLS IN TEACHING MEDICAL BIOLOGY." (2023): 254-264.
 9. Inogamova, Dilfuza R., and Lucia A. Shigakova. "Efficiency of the implementation of modern virtual programs for teaching Biology." American Journal Of Social Sciences And Humanity Research 3.02 (2023): 100-107.