

Education programme at the International Doctoral School in Biological Sciences and Translational Medicine [Bio4Med]

§ 1

Education at the International Doctoral School in Biological Sciences and Translational Medicine [Bio4Med] (hereinafter: 'the School') is carried out within the following disciplines:

- Biological sciences – conducted by Nencki Institute of Experimental Biology of the Polish Academy of Sciences (Nencki Institute of the Polish Academy of Sciences),
- Medical sciences – conducted by the Institute of Psychiatry and Neurology (IPiN).

§ 2

The heads of individual disciplines are representatives of the following institutes: Nencki Institute of the Polish Academy of Sciences – biological sciences, IPiN – medical sciences.

§ 3

Education at the Doctoral School lasts 8 semesters and creates conditions for:

- conducting scientific research and preparing a doctoral dissertation in an interdisciplinary scientific environment
- consolidating and expanding knowledge in the field of exact and biomedical sciences
- acquiring practical skills useful in scientific work
- presenting the results of scientific research as part of individual doctoral students' research plans at the 8th level of the Polish Qualification Framework (PRK).

§ 4

Education at the School is conducted by 4 groups of classes:

Specialised lectures – classroom classes related to the School's specialisations.

Specialised training – practical classes teaching skills, methods or research tools and procedures related to the School's specialisations.

Specialised seminars – scientific seminars related to the School's specialisations.

Non-specialised classes – classes developing research skills, independent of the chosen specialisation.

§ 5

1. The basic list of **specialisation classes** is included in Appendix 1 to this Education Programme.
2. The basic list of non-specialisation classes organised by the School is included in Appendix 2 to this Education Programme.
3. Periodic extensions or modifications to the lists referred to in 1 and 2 above shall be posted on the website of the relevant School Institute no later than 7 days before the start of the relevant semester.
4. Classes credited by attendance require the doctoral student to attend at least 70% of the classes.
5. The School's Programme Council may specify the minimum number of registered students required for a given class to take place.

§ 6

1. Detailed requirements for the selection of specialisation classes referred to in § 5(1) above are set out separately for each discipline of the School in Appendices 3 and 4 to this Education Programme.
2. The individual research plan provides a detailed list of classes and a credit plan established for a given doctoral student.

§ 7

Any interpretative doubts arising from this Education Programme or any unregulated issues shall be resolved by the School's Programme Council.

§ 8

This Education Programme shall enter into force on 1 October 2026.

Appendix No. 1 to the education programme

List of specialisation classes

refers to the classes referred to in § 5(1) of the education programme

Name	Type	Institution	Hours	Learning outcomes
Interdisciplinary lectures on contemporary issues in science	L	Nencki Institute	10	P8S_WK P8S_WG P8Z_WO P8Z_WZ P8S_KO P8S_KK
Neurobiology I	L	Nencki Institute	30	P8S_WG P8S_UW P8S_KK
Neurobiology II	L	Nencki Institute	30	
Biochemistry I	L	Nencki Institute	30	
Biochemistry II	L	Nencki Institute	30	
Statistics for biologists	L	Nencki Institute	15	P8S_UW
Bioethics	L	Nencki Institute	15	P8S_WG2 P8S_KO1 P8S_KO2 P8S_KR1
Advanced methods of biology (updated list available on the School's website)	L	Nencki Institute	15	P8S_WG P8S_UW P8S_KK
Institute Seminar	S	Nencki Institute/	15/sem	P8S_UK
Neuroanatomy workshop	T	Nencki Institute	30	P8S_WK P8S_KK P8S_KR
Individual training under the supervision of a supervisor	T	Nencki Institute/	30/sem	P8S_UU
Molecular medicine	L	IPiN	15	P8S_WG P8S_UW P8S_KK P8s-UO
Neurogenetics	L	IPiN	10	P8S_WG P8S_UW P8S_KK
Epidemiology of nervous system diseases	L	IPiN	5	P8S_WG P8S_UW P8S_KK
Neurobiological basis of nervous system diseases	L	IPiN	15	P8S_WG P8S_UW P8S_KK
Preclinical research in nervous system diseases	L	IPiN	5	P8S_WG P8S_UW P8S_KK

On-the-job/clinical training in research methodology	T	IPiN	10	P8S_WG P8S_UW P8S_KK P8S_KO
Individual training under the supervision of a supervisor	T	IPiN		P8S_UU
Doctoral seminar/Scientific seminars IPiN	S	IPiN	20	P8S_UK, P8S_UW P8S_KK
Selected lectures as part of the series 'Training for doctors'	L	IPiN	10	P8S_WG P8S_UW P8S_KK

Abbreviations used above:

- L – Specialised lectures
- T – Specialised training
- S – Specialised seminars

Appendix No. 2 to the education programme

Non-specialised classes

(applies to classes referred to in § 5(2) of the education programme)

Workshops or lectures developing scientific research methodology and scientific workshops organised by the School:

- Preparing grant applications (lecture/workshops) [learning outcomes: P8S_UU, P8S_UO]
- Patenting research results and protecting intellectual property (lecture/workshops) [learning outcomes: P8S_KR, P8S_WK, P8S_KO, P8Z_KP]
- Writing scientific publications (lecture/workshops) [learning outcomes: P8S_UK]
- The art of public speaking (lecture/workshops) [learning outcomes: P8S_UK]
- Ethics in scientific research (lecture/workshops) [learning outcomes: P8S_WK, P8S_KK, P8S_KR]
- Critical reading of scientific papers - (workshops) [learning outcomes: P8S_WG, P8S_UW, P8S_KK]
- Research methodology (lecture/workshops) [learning outcomes: P8S_WK, P8S_KK, P8S_KR]

Doctoral students may choose non-specialised classes organised at any research centre.

Appendix No. 3 to the education programme

Specific requirements for the Biology specialisation

regarding the classes referred to in § 5(1) of the education programme

A. Specialised lectures

a) Profile lectures conducted at Nencki Institute of the Polish Academy of Sciences in Warsaw. It is required to pass an exam for both lectures in Neurobiology or both lectures in Biochemistry).

- Neurobiology I (30 hours)
- Neurobiology II (30 hours)
- Biochemistry I (30 hours)
- Biochemistry II (30 hours)

b) Statistics for biologists (15 hours)

c) Bioethics (15 hours)

B. Specialised training

Training may take place as part of classes organised by Nencki Institute of the Polish Academy of Sciences. A list of training courses is available on the Nencki Institute website.

C. Specialised seminars

Regular attendance at the Nencki Seminar (8 semesters) and an annual presentation at the conference of doctoral students of the Nencki Institute of the Polish Academy of Sciences or an oral presentation at a selected conference are mandatory. This requirement may be fulfilled, in whole or in part, by participating in another seminar of the School.

**Appendix No. 4
to the education programme**

Specific requirements for the Medicine specialisation

regarding the classes referred to in § 5(1) of the education programme

A. Specialised lectures

Epidemiology of nervous system diseases,	5 hours
Neurogenetics,	10 hours
Neurobiological basis of nervous system diseases,	15 hours
Preclinical research in diseases of the nervous system,	5 hours
Molecular medicine,	15 hours

Other specialisation lectures on topics related to the subject of the doctoral dissertation as part of the series 'Training for doctors at the Institute of Psychiatry and Neurology' 10 hours

B. Specialised training

On-the-job/clinical training in research methodology
Individual training under the supervision of a supervisor

C. Specialised seminars

Doctoral seminar
IPiN scientific seminars

These requirements may be met, in whole or in part, by participating in another seminar offered by the School.