Methodological advances in molecular and structural biology I (MAMSB I)

Winter semester 2026/2027

LECTURE LANGUAGE	English
SCIENTIFIC COORDINATORS	Prof. Janusz M. Bujnicki, Prof. Andrzej Dziembowski, Prof. Gracjan Michlewski
ADMINISTRATIVE COORDINATOR	Dr Joanna Dodzian | jdodzian@iimcb.gov.pl
VENUE AND TIME	IIMCB lecture hall, 2 Hankiewicza Street | Tuesdays at 15:00-16:00

Lecture programme

Please note: Session 13 takes place on Monday, 18 January 2027. All other lectures are scheduled for Tuesdays.

NO.	DATE	LECTURE TITLE	LECTURER	AFFILIATION
01	**06 Oct 2026** Tuesday 15:00-16:00	Introduction to experimental design of wet-lab work with proteins and nucleic acids.	**A. Dziembowski**	IIMCB
02	**13 Oct 2026** Tuesday 15:00-16:00	Introduction to scientific methodology and reasoning.	**J. Bujnicki**	IIMCB
03	**27 Oct 2026** Tuesday 15:00-16:00	PCR, qPCR and modern techniques.	**K. Gewartowski**	Scope Fluidics
04	**03 Nov 2026** Tuesday 15:00-16:00	Principles for mouse line generation using CRISPR/Cas9 method.	**O. Gewartowska**	IIMCB
05	**10 Nov 2026** Tuesday 15:00-16:00	Sequencing with Illumina technology.	**A. Kołodziejczyk**	IIMCB
06	**17 Nov 2026** Tuesday 15:00-16:00	Single cell genomics.	**A. Kołodziejczyk**	IIMCB
07	**24 Nov 2026** Tuesday 15:00-16:00	From reads to results: Introduction to sequencing data analysis.	**J. Szymański**	IIMCB
08	**01 Dec 2026** Tuesday 15:00-16:00	Exome sequencing in medical diagnostics.	**R. Płoski**	WUM
09	**08 Dec 2026** Tuesday 15:00-16:00	Single-molecule DNA and RNA sequencing - data analysis.	**A. Czarnocka-Cieciura**	IIMCB
10	**15 Dec 2026** Tuesday 15:00-16:00	Origin of molecular biology, plasmids, restriction enzymes, ligases. Modern cloning techniques.	**A. Dziembowski**	IIMCB

NO.	DATE	LECTURE TITLE	LECTURER	AFFILIATION
11	**22 Dec 2026** Tuesday 15:00-16:00	One molecule at a time. Single molecule methods to study structural rearrangements of RNA, RNA-RNA and RNA-protein assembly.	**E. Małecka**	IIMCB
12	**12 Jan 2027** Tuesday 15:00-16:00	Methods to synthesise RNA, analyse structure and interactions in vitro.	**G. Michlewski**	IIMCB
13	**18 Jan 2027** **Monday** 15:00-16:00	Methods that rely on cell extracts towards studying interactions as well as RNA processing.	**G. Michlewski**	IIMCB
14	**26 Jan 2027** Tuesday 15:00-16:00	Preparation of macromolecular complexes for biochemical and structural analysis.	**W. Galej**	IIMCB
15	**16 Feb 2027** Tuesday 15:00-16:00	Methods that probe RNA structure and interactome in cells.	**S. Bresson**	IIMCB
	23 Feb 2027 **Tuesday**	**EXAMINATION (test)**		