



UNIVERSITÀ
CATTOLICA
del Sacro Cuore

SUMMER 2025

From molecules to cells: a translational path towards novel therapeutics

Instructors: Wanda Lattanzi, Alessandro Arcovito, Lorena Di Pietro, Federica Tiberio, Elvira Ragozzino, Giorgia Canini, Martina Salvati

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Week 1	JUNE 9	JUNE 10	JUNE 11	JUNE 12	JUNE 13	JUNE 14	JUNE 15
	9:30 – 12:30 Orientation session <i>classroom: aula Lazzati@Polo</i> 14:30-16:30 Course introduction (Wanda Lattanzi, Alessandro Arcovito) <i>classroom: Aula 2@Polo</i> 16:30-18:30 Introduction to macromolecules (Lorena Di Pietro) <i>classroom: Aula 2@Polo</i>	9:30-11:30 Basics of cell signaling and disease mechanisms (Wanda Lattanzi) <i>classroom: Aula 1@Polo</i> 11:30-13:30 Drug design and delivery tools (Alessandro Arcovito) <i>classroom: Aula 1@Polo</i>	9:30-11:30 Introduction to Molecular Docking and Molecular Dynamics (Giorgia Canini) <i>classroom: Lazzati@Polo</i> 11:30-13:30 Nanotechnology and Drug Design: Innovations and Applications in Modern Medicine (Martina Salvati) <i>classroom: Aula 1@Polo</i> 14:30-16:30 Virtual laboratory on macromolecules (Federica Tiberio) <i>classroom: lab informatica@Polo</i>	9:30-11:30 Gene silencing approaches (Federica Tiberio) <i>classroom: Aula 5@Polo</i> 11:30-13:30 Introduction to molecular Docking (Giorgia Canini) <i>classroom: Lazzati@Polo</i>	9:30-11:30 Nanotechnology Workshop: Preparation and Characterization of Polymeric Nanoparticles (Martina Salvati) <i>classroom: Lab L3@Istituti Biologici</i> 14:30-16:30 Interactive Molecular Docking Workshop (Giorgia Canini) <i>classroom: lab informatica@Polo</i>	FREE	FREE

Week 2	JUNE 16	JUNE 17	JUNE 18	JUNE 19	JUNE 20	JUNE 21	JUNE 22
	9:30-13:30 Virtual laboratory on gene silencing and cell signaling (Elvira Ragozzino) <i>classroom: lab informatica@Polo</i>	9:30-11:30 Stem cells – part 1 (Lorena Di Pietro) <i>classroom: Aula 6@Polo</i> 11:30-13:30 Stem cells – part 2 (Wanda Lattanzi) <i>classroom: Aula 6@Polo</i> 14:30-16:30 Drug Design and Delivery synergies. (Giorgia Canini) <i>classroom: Lab L1@Istituti biologici</i>	9:30-11:30 Cell-based disease models (Wanda Lattanzi) <i>classroom: Aula 5@Polo</i> 11:30-13:30 Drug Delivery: Potential Applications (Martina Salvati) <i>classroom: lab informatica @Polo</i> 14:30-16:30 Drug Design: Potential Applications (Giorgia Canini) <i>classroom: Lab L1@Istituti biologici</i>	14:30-16:30 Drug Design and Delivery Workshop (Giorgia Canini, Martina Salvati) <i>classroom: lab informatica@Polo</i>	14:00-16:00 Final assessment (Alessandro Arcovito, Wanda Lattanzi) <i>classroom: aula informatica@Polo</i>	FREE	FREE