Training PhD Molecular Life Sciences cycle 38

PhD Programme in Molecular Life Sciences

UNIVERSITÀ DEGLI STUDI DELLA CAMPANIA
Luigi Vanvitelli

DIPARTIMENTO DI SCIENZE E TECNOLOGIE AMBIENTALI BIOLOGICHE E FARMACEUTICHE

Training PhD Molecular Life Sciences cycle 38

PhD training activities will start on **March 7st**. This year all lessons will be virtual by using platform Microsoft Teams (access code: **b5dkj4c**). All lessons are in English and the attendance is mandatory for PhD students of cycle 38°.

Sections of theoretical courses on topics of interest for the doctorate program:

- 1. Structural biology and protein function
- 2. Cell biology
- 3. Molecular bases of Human diseases
- 4. Immunology and Microbiology
- 5. Cancer Biology and Therapy
- 6. Drug design and development
- 7. Bioinformatics

Training in English language (organized by the Vanvitelli PhD School in Life Sciences)

- Course of Scientific writing (Prof. Jerome Tessuto)

Courses organized by Agency for the Promotion of European Research APRE

"How to write MSC proposal" to be scheduled in June/July (to be defined)

"How to write ERC proposal" to be scheduled in June/July (to be defined)

"How to write Infrastructure proposal" to be scheduled June/July (to be defined)

"Open Science" to be scheduled for September/October (to be defined)

"General Data Protection Regulation" to be scheduled for September/October (to be defined)

Program

Month	Day	Time	Lecturer	Section*	Topic
March	7	9.30-11.30	Mehdi Totonchi	3. Molecular bases of Human diseases	Molecular bases of human infertility Lesson 1
March	7	11.30-13.30	Luigi Russo	1. Structural biology and protein functio	NMR in structural biology
March	14	9.30-11.30	Mehdi Totonchi	3. Molecular bases of Human diseases	Molecular bases of human infertility Lesson 2
March	14	11.30-13.30	Salvatore Di Maro	6. Drug design and development	PEPTIDES AS DRUGS: An old and new avenue for the treatment of human diseases
March	21	9.30-11.30	Erika Di Zazzo	5. Cancer Biology and Therapy	Steroid Hormone Receptors in cancer
March	21	11.30-13.30	Francesca Fusco	3. Molecular bases of Human diseases	Mosaicism in human diseases and complex phenotypes
March	28	9.30-11.30	Emilia Pedone	1. Structural biology and protein functio	The intrinsically disordered proteins world: the disorder-function paradigm
March	28	11.30-13.30	Rita Berisio	1. Structural biology and protein functio	Structural biology and human health

March → April → May → June

Program

Month	Day	Time	Lecturer	Section*	Topic
April	4	9.30-11.30	Simona Maria Monti	1. Structural biology and protein functio	Insights into the versatile world of recombinant proteins
April	4	11.30-13.30	Luigi Vitagliano	1. Structural biology and protein functio	X-ray Crystallography: principles and applications
April	18	9.30-11.30	Monica Scognamiglio	6. Drug design and development	Metabolomics in drug discovery and development
April	18	11.30-13.30	Remus Thei Dame	1. Structural biology and protein functio	Protein-DNA interaction Lesson 1
April	26	9.30-11.30	Claudia Angelini	7. Bioinformatics	Introduction to ChIPseq and ATACseq data analysis
April	26	11.30-13.30	Remus Thei Dame	1. Structural biology and protein functio	Protein-DNA interaction Lesson 2

March ▶ April ▶ May ▶ June

Program

Month	Day	Time	Lecturer	Section*	Topic
May	2	9.30-11.30	Maria Monticelli	1. Structural biology and protein functio	The role of missense mutations in diseases
May	2	11.30-13.30	Bruno Hay Mele	7. Bioinformatics	Machine learning-based and NLP-based approaches in protein structural predictions
May	9	9.30-11.30	Brunella Franco	3. Molecular bases of Human diseases	Ciliopathies
May	9	11.30-13.30	Fabio Iannotti	6. Drug design and development	Drug discovery and repurposing for rare diseases: What we know and what we don't
May	16	9.30-11.30	Sandro Banfi	3. Molecular bases of Human diseases	Noncoding RNAs in vertebrate genomes
May	16	11.30-13.30	Antonella Zannetti	5. Cancer Biology and Therapy	Molecular Imaging in cancer
May	23	11.30-13.30	Ivana d'Angelo	6. Drug design and development	Delivery Systems for the Controlled Release of Active Molecules: a Glimpse of Pharmaceutical Sciences
May	23	15.00-17.00	Daniele/Nigro	3. Molecular bases of Human diseases	Molecular diagnosis of polycystic kidney diseases through a NGS approach
May	30	9.30-11.30	Rosalba Senese	2. Cell biology	Impact of high-fat and high-sugar diets on tissue metabolic pathways
May	30	11.30-13.30	Nunzianna Doti	6. Drug design and development	Targeting protein-protein interfaces with peptides: the contribution of combinatorial approaches

March April May June

Program

Month	Day	Time	Lecturer	Section*	Topic
June	6	9.30-11.30	Sandro Cosconati	6. Drug design and development	Artificial intelligence in drug discovery
June	6	11.30-13.30	Elia Di Schiavi	3. Molecular bases of Human diseases	An invertebrate model organism for understanding the molecular bases of human diseases: Caenorhabditis elegans
June	13	9.30-11.30	Paola Italiani	4. Immunology and Microbiology	Innate Immune Memory
June	13	11.30-13.30	Rosa Marina Melillo	5. Cancer biology and therapy	Cancer immunity and immunotherapy
June	20	9.30-11.30	Stefania De Luca	6. Drug design and development	Spectroscopic approach to characterize bioactive molecules for biomedical applications
June	20	11.30-13.30	Alessia Ruggiero	1.structural biology and protein function	Protein engineering: form cloning to protein structure
June	27	9.30-11.30	Annamaria Carissimo	7. Bioinformatics	Introduction to RNAseq data analysis
June	27	11.30-13.30	Antonella Prisco	4. Immunology and Microbiology	Adaptive immunity and vaccination

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