

# PhD course in Life Sciences and Biotechnology

## Teaching Activities 2024-2025: seminars & courses schedule

### Please note:

- the teaching activities will be held in presence. The Teams links will be provided only upon request and for motivated reasons;
- the teaching activities calendar will be updated throughout the year with dates and times. You will find the updated version on the PhD Course website, so please check it out.

Here you will find the schedule of the coming online lectures and seminars:

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### November

Mon 4 <sup>th</sup> , 14.30-16.30	<b>Trends in Biomedical Sciences (0.25 CFU)</b> - organized by P. Campomenosi <b>“From the clinical need to diagnostic laboratories: the business processes that lead to the availability of an IVD device”</b> Erlet Shehi, Clonit (Italy)
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### December

Thu 12 <sup>th</sup> , 11.30-13.30	<b>Trends in Biomolecular Sciences (0.25 CFU)</b> - organized by G. Bernardini <b>“Epigenetics and Cardiovascular Homeostasis: Concepts and Applications”</b> <b>Part 1</b> Christina Pagiatakis, Università degli Studi dell’Insubria
Tue 17 <sup>th</sup> , 16.00-18.00	<b>Trends in Biomedical Sciences (0.25 CFU)</b> <b>“AI in ophthalmology: a preview of the innovation technology in medicine”</b> Simone Donati, Università degli Studi dell’Insubria
Fri 20 <sup>th</sup> , 14.30-16.30	<b>Transversal skills - Module C (0.5 CFU)</b> - organized by S. Sacchi <b>“How to make the most of your professionalism: former PhD students talk about their experience, inside and outside Academia”</b> Fabio Tonin Ilaria Mancini

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### January – May

30 <sup>th</sup> Jan – 12 <sup>th</sup> May	<b>Trends in Biomedical Sciences (1.25 CFU)</b> - organized by P. Battaglia <b>“ENTer Seminars in Ear, Nose and Throat surgery”</b> Mario Turri Zanoni, Università degli Studi dell’Insubria and other speakers
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**NB:** the program is being defined, you will find it in pdf format on the PhD web page in the “Teaching activity” section (at the top, Document, ENT<sub>er</sub>.pdf).

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### January – February

23 <sup>th</sup> Jan – 27 <sup>th</sup> Feb	<b>BIOINFORMATICS (3 CFU)</b> - <u>every Thursday</u> , 14.00-18.00 Gianluca Molla, Università degli Studi dell’Insubria
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**NB:** This course is mandatory and scheduled for the XXXIX cycle students

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### January

Thu 16 <sup>th</sup> , 11.30-13.30	<b>Trends in Biomolecular Sciences</b> (0.25 CFU) - organized by G. Bernardini <b>"Epigenetics and Cardiovascular Homeostasis: Concepts and Applications"</b> <b>Part 2</b> Christina Pagiatakis, Università degli Studi dell'Insubria
Thu 17 <sup>th</sup> , 14.30-16.30	<b>Trends in Biomedical Sciences</b> (0.5 CFU) - organized by M. Viola <b>"Biomarkers for risk assessment"</b> Francesco Gianfagna, Università degli Studi dell'Insubria
Thu 31 <sup>th</sup> , 10.00-12.00	<b>"Methods for meta-analysis"</b> Anwal Ghulam, Università degli Studi dell'Insubria
Tue 28 <sup>th</sup> , 15.30-17.30	<b>Trends in Biomedical Sciences</b> (0.5 CFU) - organized by P. Campomenosi <b>"Current approaches in cancer: the paradigmatic example of lung cancer"</b> <b>Lung cancer natural history: implications for early diagnosis and surgery</b> Andrea Imperatori, AO Circolo e Fondazione Macchi, Varese <b>Therapeutic approaches for the treatment of lung cancer</b> Francesco Grossi, AO Circolo e Fondazione Macchi, Varese <b>Leveraging Cancer Biology to Overcome Drug Resistance</b> Giorgia Foggetti, Dibit 2, San Raffaele, Milano <b>The Emerging Prognostic Role of Extracellular Vesicles and Platelets in NSCLC</b> Simona Coco, AO San Martino, Genova

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## February

4 <sup>th</sup> - 27 <sup>th</sup>	<b>BIostatISTICS</b> (3 CFU) Giorgio Binelli, Università degli Studi dell'Insubria <b>NB:</b> This course is mandatory and scheduled for the XL cycle students
Wed 19 <sup>th</sup> , 11.00-13.00 14.00-16.00	<b>Transversal skills - Module B</b> (0.5 CFU) – organized by S. Sacchi <b>Essential elements for high-impact scientific writing and communication</b> <b>"Science dissemination through new media"</b> Ivano Eberini, Università degli Studi di Milano, La Statale
Fri 21 <sup>th</sup> 14.30-16.30	<b>Trends in Biomolecular Sciences</b> (0.25 CFU) - organized by C. Vannini & E. Bossi <b>"cAMP-mediated signaling in plants and animals"</b> <b>Physiological roles of cyclic nucleotide-gated channels in excitable tissues</b> Mirko Baruscotti, Università degli Studi di Milano <b>Hidden mechanisms of ion channel regulation - discovery and characterisation</b> Christoph Andreas Gehring, Università degli Studi di Perugia
Fri 28 <sup>th</sup> , 11.30-13.30	<b>Transversal skills - Module B</b> (0.25 CFU) - organized by S. Sacchi <b>"Writing an application: Givens and Druthers"</b> Francesco Bonomi, Università degli Studi di Milano, La Statale

**Please note:** this activity has been planned and organized in collaboration with the PhD Course in Experimental and Translational Medicine.

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## March

Thu 13 <sup>th</sup> , 14.30-16.30	<b>Transversal skills – Module C</b> (0.25 + 0.25 CFU) - organized by M. Viola
Thu 20 <sup>th</sup> , 14.30-16.30	<b>“Quality, result indicators and performance evaluation in laboratories”</b> <b>“Levels of certifications for biomedical laboratories”</b> Claudia Placidi, ASST Sette Laghi
Tue 25 <sup>th</sup> , 14.30-16.30	<b>Introduction to plant functional types and strategies in ecological analysis</b> (0.75 CFU) - organized by B. Cerabolini
Wed 26 <sup>th</sup> , 14.30-16.30	<b>1) “Plant functional traits and the global spectrum of plant form and function”</b> <b>2) “Plant adaptative strategy theories”</b> Bruno Cerabolini, Università degli Studi dell’Insubria
Thu 27 <sup>th</sup> , 14.30-16.30	<b>3) “Applications of plant functional analysis: bioenergy use types, biodiversity and productivity assessments”</b> Michele Dalle Fratte, Università degli Studi dell’Insubria

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## April-June

9 <sup>th</sup> Apr – 27 <sup>th</sup> June	<b>Transversal skills – Module C: Project management</b> (1 CFU) <b>Innovation camp – Multidisciplinary activity</b> Mauro Fasano, Executive Deputy Chancellor for Innovation and Technology Transfer, University of Insubria
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**Please note:** A brief description of the planned activities is available on the PhD web page, while the program of the scheduled lectures and meetings will be available as soon as defined. The attendance of this activity is strongly suggested.

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## April

Thu 3 <sup>rd</sup> , 14.00-16.00	<b>Trends in Biomolecular Sciences</b> (0.25 CFU) – organized by E. Rosini <b>“Biocatalysis”</b> <b>Industrial plants as sources of robust enzymes</b> Salvatore Fusco, Industrial Biotechnology (BIB) Laboratory, Department of Biotechnology, University of Verona <b>From waste to value: a case study of full range exploitation of whey</b> Chiara Schiraldi, Università degli Studi della Campania "Luigi Vanvitelli", Dipartimento di Medicina Sperimentale
Thu 10 <sup>th</sup> , 14.30-16.30	<b>Trends in Biomedical Sciences</b> (0.5 CFU) – organized by M. Gariboldi <b>"Nutraceuticals, functional foods and novel foods: pharmacology, technology, and testing"</b> Alessandro Colletti, Dipartimento di Scienza e Tecnologia del Farmaco, Università di Torino Marzia Pellizzato, CAMP-Research e Presidente della Società italiana formulatori in nutraceutica (Sifnut)
Mon 24 <sup>th</sup> , 09.30-13.30	<b>Trends in Biomedical Sciences</b> (0.5 CFU) - organized by A. Montagnoli <b>“Computer Vision for Image Diagnosis (radiomics)”</b> Francesco Mercaldo, Università del Molise Seminar with practical activities (0.25+0.25 CFU)
Wed 30 <sup>th</sup> , 9.00-18.00	<b>Course on safety and good practice in the laboratory</b> (min 1 CFU)

**NB:** participation in this course is strongly recommended, especially for the XL cycle students. A certificate will be issued at the end of the course

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## May

- Wed 7<sup>th</sup>, 14.30-16.30    **Trends in Biomedical Sciences (0.25 CFU)** - organized by J. Karousou  
"Cellular matrix and tumors"  
Spyros S. Skandalis, Department of Chemistry, University of Patras, Greece
- Wed 14<sup>th</sup>, 14.30-16.30    **Trends in Biomolecular Sciences (0.5 CFU)** – organized by S. Sacchi & E. Bossi  
"At the crossroad between the nervous and immune system: how maternal immune activation shapes neurodevelopment in offspring"  
Davide Pozzi, Università Humanitas HUNIMED  
"Mechanisms for microbial regulation of psychostimulant abuse"  
Angela Carter, University of Alabama at Birmingham, USA (by remote)
- Please note:** this activity has been planned and organized in collaboration with the PhD Course in Experimental and Translational Medicine.
- Thu 15<sup>th</sup>, 14.30-16.30    **Trends in Biomolecular Sciences (0.25 CFU)** - organized by S. Sacchi and L. Pollegioni  
"Conventional and unconventional functions of amino acid transporters"  
"The serine shuttle in brain health and disease"  
Herman Wolosker, Technion-Israel Institute of Technology, Haifa, ISRAEL  
"The amino acid LAT1 transporter: structure/function relationships, regulation, human pathology and drug targeting"  
Cesare Indiveri, Università della Calabria e Istituto di Biomembrane, Bioenergetica e Biotecnologie Molecolari, CNR, Bari
- Tue 20<sup>th</sup>, 15.30-17.30    **Transversal skills – Module C: Crosslinking academia and industry for the creation of new professional opportunities (0.25 CFU)** - organized by S. Sacchi  
Discovery and development of new oncology drugs  
Claudia Perrera, Nerviano Medical Sciences  
Healthy, natural and functional products designed to improve the culture of food and life  
Federica Volontè, The Sacco System Group
- Thu 22<sup>th</sup>, 14.30-16.30    **Transversal skills – Module A (0.25 CFU)**  
"Scientific databases - How to use academic resources and services for the bibliographic research"  
Letizia Pelucchi – Università degli Studi dell'Insubria
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## June

- Tue 3<sup>rd</sup>, 10<sup>th</sup>, 17<sup>th</sup>    **Introduction to Systems Biology (1.5 CFU)**  
Mauro Fasano, Università degli Studi dell'Insubria

**NB:** these courses are borrowed from the PhD in Experimental and Translational Medicine and will provide credits for both the Trends in Biomolecular Sciences and Trends in Biomedical Sciences courses. Check the time slot contacting prof. Fasano directly at [mauro.fasano@uninsubria.it](mailto:mauro.fasano@uninsubria.it)

Tue 10<sup>th</sup>, 13.00-17.00 PhD School Transversal and Multidisciplinary educational activities with the collaboration of the Teaching and Learning Center

**Personal branding**

Caterina Farao, Dipartimento di Economia, Università degli Studi dell'Insubria

Mon 16<sup>th</sup>, 9.00-18.00 **Course on safety and good practice in the laboratory** (1 CFU)  
Ufficio Sicurezza e Sostenibilità, Università degli Studi dell'Insubria

**NB:** participation in this course is requested to students who did not attend the course on April 30<sup>th</sup>.

23<sup>th</sup>-27<sup>th</sup>, 14.00-18.00 **Transversal skills – Module B** (2.5 CFU) - organized by A. Montagnoli  
**"Data analysis by R"**  
Lesson 1: Introduction to R  
Lesson 2: Linear models 1 - Data exploration  
Lesson 3: Linear models 2 - Model fitting  
Lesson 4: Special cases of linear models - Generalized and mixed models  
Lesson 5: Practical work with own data  
Enrique Andivia, Department of Biodiversity, Ecology and Evolution, Faculty of Biological Sciences, Universidad Complutense de Madrid

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## July

Thu 3<sup>rd</sup>, 14.30-16.30 **Transversal skills – Module C: fellowships and grant applications** (0.5 CFU)  
**"Do you have plans (A, B, C...) for your career? Strategies and tips to help you find your way around international fellowship applications"**  
Uninsubria fellowships receivers:  
Ilaria Armenia

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## September

To be defined **Transversal skills – Module B: Essential elements for high-impact scientific writing** (0.25 CFU) - organized by L. Pollegioni and S. Sacchi  
**"Tips and tricks for writing a scientific manuscript"**  
Ref. Daniela Ruffel, FEBS Press Publisher

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## October

Tue 7<sup>th</sup>, 14.30-16.30 **Trends in Biomolecular Sciences** – organized by Paola Campomenosi  
**"The p53 family affair"**  
**"p53 Mutants, structure and function: are all mutants the same?"**  
Paola Monti, Ospedale San Martino, Genova  
**"p53 isoforms and their biological significance"**  
Yari Ciribilli, Cibio, Università degli Studi di Trento  
**"Targeting p53 for cancer therapy"**  
Paola Menichini, Ospedale San Martino, Genova

**Methods and techniques in life sciences and biotechnology**  
**"Microscopy and imaging, a theoretical and practical course"** (module 1, 1,5 CFU) – organized by G. Tettamanti, A. Grimaldi, M. Raspanti

Mon 13<sup>th</sup>, 14.00-16.00 In-class lectures: Microscopy and its Applications – Part A

Tue 14 <sup>th</sup> , 14.00-16.00	In-class lectures: Microscopy and its Applications – Part B
Wed 15 <sup>th</sup> , 14.00-18.00	Practical activities, sample preparation and images acquisition
Thu 16 <sup>th</sup> , 14.00-18.00	Practical activities, sample preparation and images acquisition

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