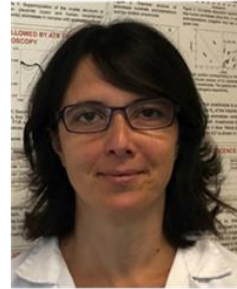


Welcome to the Master in CMB!



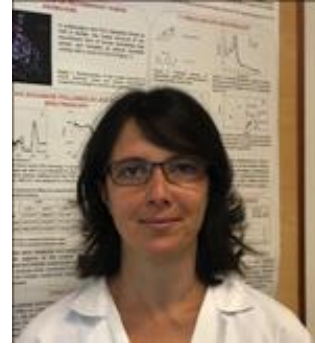
<https://cmb.campusnet.unito.it/do/home.pl>

Welcome to the Master in CMB!

Master's Degree President

Giovanna DI NARDO

giovanna.dinardo@unito.it



Didactic Manager

Elena MAZZI

elena.mazzi@unito.it



<https://cmb.campusnet.unito.it/do/home.pl>

BUDDY PROJECT

“Buddy” is a current student at UniTO assisting international students adapting in their new academic, cultural and linguistic environment.

Advanced Cell Biology and Biotechnology

Giovanna Gambarotta (7 ECTS)

Course coordinator

giovanna.gambarotta@unito.it

&

Isabelle Perroteau (2 ECTS)

isabelle.perroteau@unito.it



DSCB & NICO



Department of Clinical and Biological Sciences (DSCB)
Neuroscience Institute Cavalieri Ottolenghi (NICO)
@ San Luigi Gonzaga Hospital
Regione Gonzole, 10
10043 Orbassano (Torino)

<https://www.clinbio.unito.it/do/home.pl>

<https://www.nico.ottolenghi.unito.it/eng>



Course presentation

- Schedule
- Objective
- Syllabus
- Methodology
- Outcomes
- Assessments
- Tips
- Survey



Schedule

Isabelle Perroteau

Lectures (Aula Lenti):

-from October 4th to October 11th

Journal Club/other activities (Aula Marro, palazzo Campana):

-on November 29th and December 13th, in groups (morning/afternoon)

Giovanna Gambarotta

Lectures (Aula Lenti):

-on Monday October 11th

-on Wednesday and Friday from October 13th

Biotechnology project activities (Aula Morfologica, DBAU):

-on Monday, in groups (morning/afternoon) from October 18th

Attendance is not mandatory but highly recommended!!

Timetable

1° year Biomolecular and Biomedical

From October 4th, 2021					
	Monday	Tuesday	Wednesday	Thursday	Friday
8-9					
9-10		VIR	ACBB	VIR	ACBB
10-11		VIR	ACBB	VIR	ACBB
11-12		OMP	CF	CF	OMP
12-13		OMP	CF	CF	OMP
14-15	ACBB				
15-16	ACBB				
16-17	ACBB				
17-18	ACBB				

CLASSROOM LENTI, Via Michelangelo 27

From October 18th, 2021					
	Monday	Tuesday	Wednesday	Thursday	Friday
8-9					
9-10	ACBB	VIR	ACBB	VIR	ACBB
10-11	ACBB	VIR	ACBB	VIR	ACBB
11-12	ACBB	OMP	CF	CF	OMP
12-13	ACBB	OMP	CF	CF	OMP
14-15	ACBB				
15-16	ACBB				
16-17	ACBB				
17-18	ACBB				

ACBB = ADVANCED CELLULAR BIOLOGY AND BIOTECHNOLOGY

OMP = ONCOLOGY AND MOLECULAR PATHOLOGY

CF = CELLULAR PHYSIOLOGY

VIR = VIROLOGY

CLASSROOM LENTI, Via Michelangelo 27

MORPHOLOGICAL LABORATORY, via Accademia Albertina 13

1° year NEUROBIOLOGICAL

From October 4th, 2021					
	Monday	Tuesday	Wednesday	Thursday	Friday
8-9					
9-10		NEUROBIOLOGY	ACBB		ACBB
10-11		NEUROBIOLOGY	ACBB		ACBB
11-12		OMP		NEUROBIOLOGY	OMP
12-13		OMP		NEUROBIOLOGY	OMP
13-14					
14-15	ACBB	NEUROANATOMY		NEUROANATOMY	NEUROANATOMY
15-16	ACBB	NEUROANATOMY		NEUROANATOMY	NEUROANATOMY
16-17	ACBB	NEUROANATOMY			
17-18	ACBB	NEUROANATOMY			

From October 18th, 2021					
	Monday	Tuesday	Wednesday	Thursday	Friday
8-9					
9-10	ACBB	NEUROBIOLOGY	ACBB		ACBB
10-11	ACBB	NEUROBIOLOGY	ACBB		ACBB
11-12	ACBB	OMP		NEUROBIOLOGY	OMP
12-13	ACBB	OMP		NEUROBIOLOGY	OMP
13-14					
14-15	ACBB	NEUROANATOMY		NEUROANATOMY	NEUROANATOMY
15-16	ACBB	NEUROANATOMY		NEUROANATOMY	NEUROANATOMY
16-17	ACBB	NEUROANATOMY			
17-18	ACBB	NEUROANATOMY			

From November 9th, 2021					
	Monday	Tuesday	Wednesday	Thursday	Friday
8-9					
9-10	ACBB	NEUROBIOLOGY	ACBB		ACBB
10-11	ACBB	NEUROBIOLOGY	ACBB		ACBB
11-12	ACBB	OMP		NEUROBIOLOGY	OMP
12-13	ACBB	OMP		NEUROBIOLOGY	OMP
13-14					
14-15	ACBB	NEUROANATOMY		NEUROANATOMY	NEUROANATOMY
15-16	ACBB	NEUROANATOMY		NEUROANATOMY	NEUROANATOMY
16-17	ACBB				
17-18	ACBB				

CLASSROOM LENTI, Via Michelangelo 27

MORPHOLOGICAL LABORATORY, via Accademia Albertina 13

CLASSROOM Morpurgo, Corso Raffaello 30

Timetable

From October 4th, 2021					
	Monday	Tuesday	Wednesday	Thursday	Friday
8-9					
9-10			ACBB		ACBB
10-11			ACBB		ACBB
11-12					
12-13					
14-15	ACBB				
15-16	ACBB				
16-17	ACBB				
17-18	ACBB				
From October 18th, 2021					
	Monday	Tuesday	Wednesday	Thursday	Friday
8-9					
9-10	ACBB		ACBB		ACBB
10-11	ACBB		ACBB		ACBB
11-12	ACBB				
12-13	ACBB				
14-15	ACBB				
15-16	ACBB				
16-17	ACBB				
17-18	ACBB				

ACCB = ADVANCED CELLULAR BIOLOGY AND BIOTECHNOLOGY
 CLASSROOM LENTI, Corso Raffaello 30

MORPHOLOGICAL LABORATORY, via Accademia Albertina 13
 (29/11, 13/12: also in AULA MARRO, Via Carlo Alberto 10)



Course objective

- Master factual and conceptual knowledge in cell biology and biotechnology that will provide a **solid foundation** for success in **advanced training (PhD) and professional careers.**
- Use **scientific reasoning** to evaluate the potential for current research and new discoveries to improve our understanding of cell biology and neuroscience and their **relevance to human health and our society.**



Student Learning Outcomes

Ability to:

- **critically analyse** and **interpret** the scientific literature
- apply cell biology and biotechnology knowledge to afford new scientific questions
- set up a cell biology experiment
- communicate findings/information fully and effectively



Syllabus

ADVANCED CELL BIOLOGY

- Experimental design and controls
- Signal transduction pathways
- Cell communication
- Cell migration

APPLIED ADVANCED CELL BIOTECHNOLOGY

- Gene expression analysis (primers design, real-time PCR data analysis)
- Design of recombinant constructs (GFP- and FLAG-fusion proteins)
- Use of free web tools for lab activities



Teaching Methodology

ADVANCED CELL BIOLOGY

- face to face & streaming
- lectures, discussion, onsite and online activities

BIOTECHNOLOGY

- face to face & streaming
- theoretical and practical lab lessons

PERSONAL WORK

- readings (textbooks, scientific articles and complementary online resources)
- formative moodle quizzes
- teamwork



Student Learning Assessment

- ✓ Formative assessments (moodle quizzes, portfolio)
- ✓ Multidisciplinary activities (optional, but strongly suggested):
 - Midterm Multidisciplinary Test (MMT)
 - Multidisciplinary Research Essay (MRE)

MMT & MRE give rise to additional marks to the final grade of each of the four courses (*Advanced Cell Biology & Biotechnology, Cell Physiology, Oncology & Molecular Pathology and Virology*), provided the exam is passed in the first exam session (January-February 2022).
- ✓ ACBB final exam (mandatory): Moodle-quiz followed by an interview

Optional Multidisciplinary Activities

- MIDTERM MULTIDISCIPLINARY TEST - MMT
 - Moodle-based quiz of 32 questions (8 for each course):
28 closed questions with a variety of formats (multiple choice, true/false, filling in checklists....)
4 open questions (one for each course).
 - MMT will be planned in November.
- MULTIDISCIPLINARY RESEARCH ESSAY - MRE
 - Experimental design referring to methodologies and technical approaches relevant to at least three of the four courses.
 - Group (4-5 members) assignment (3000 characters + figures, tables and references) to be discussed in January 2022.
 - Further instructions in the moodle page dedicated to interdisciplinary activities.



ACBB final exam

- Moodle quiz: 20-25 questions (open questions, multiple choice quizzes, true/false, short answers, open-ended questions; interpretation of experimental data and resolution of exercises similar to those carried out during the biotechnology lab: attendance is strongly suggested).
- MMT and/or MRE points will be added to the final exam of the first exam session (January-February 2022 only).
- Honors (cum Laude) may be attributed with the agreement of all the components of the examination board.
- Final exam sessions will be carried out onsite (and/or online according to University recommendations).



www.cmb.i-learn.unito.it

✓ **CMB-enrolled students** (taxes paid, with UNITO email):

✓ **UNITO-bachelor students** (with UNITO email):

→ login using username and password from UNITO

admitted student, not yet formally enrolled (without UNITO email):

→ fill in the [form](#) to be granted access



Some Tips

- **attend seminars**



News, Events and Seminars

- seminars will be awarded as
“further training activities”
(8 hours=1 CFU)



Seminar Attendance Certificates

- **attend TED seminars**

<https://www.ted.com>

- **read** papers and reviews on different subjects

<https://www.ncbi.nlm.nih.gov/>

- **browse** and read printed scientific journals
(I will bring you some copies of Nature)



Some Tips

As UNITO students you can connect from home using your UNITO account at BIBLIOPASS and then to PubMed or other platforms to freely download papers, books, and JoVe videos:

<https://www.sba.unito.it/en/tools/campus-access>

Risorse disponibili

	CATALOGHI
→	AREA BIOMEDICA
→	AREA SCIENTIFICA
	AREA SOCIO-GIURIDICO-ECONOMICA
	AREA UMANISTICA

Users can consult the electronic materials of the University of Turin Library System outside the UniTo network with any browser and electronic device by using the new service **BIBLIOPASS**.

This service has been created by the Direction for Information Systems and the Direction for Organization Development - Innovation and Library Services. For any issue, please consult the Bibliopass [user guide](#) or contact its [helpdesk](#).

Besides Bibliopass, off-campus access is granted after configuring the **Unito Proxy** in your system.



Some Tips

→  Student forum, helpdesk of the course

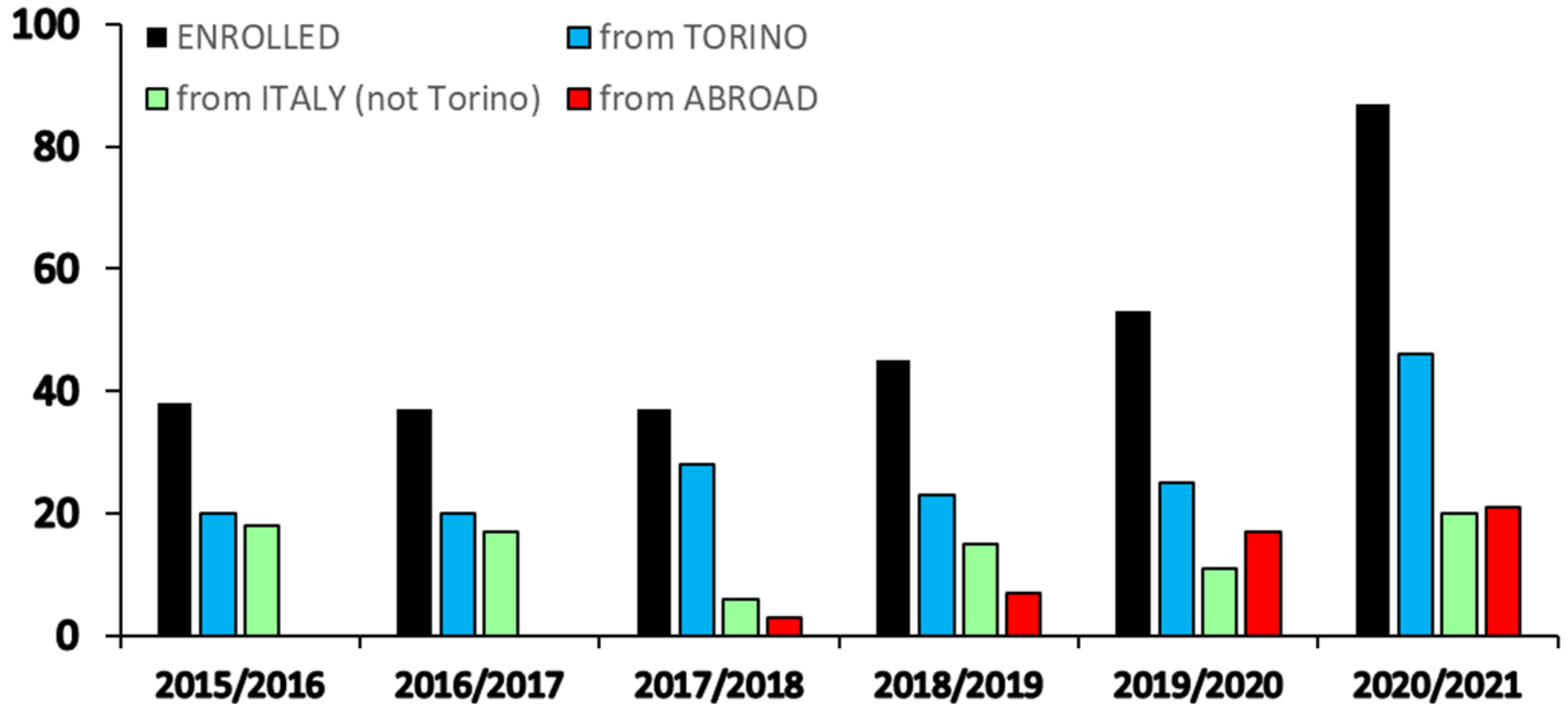
- please, **use the student forum** to ask questions, put answers, discuss problems (possibly, not private mails for questions about the course that may be of general interest)
- please, **insert your picture** in your profile in moodle!



Some Tips

- students with **Specific Learning Disability/SLD** (dyslexia, dyscalculia, ...)
- contact the professors at the beginning of the courses, not at the end (face-to-face or by mail)
- <https://en.unito.it/services/students-specific-learning-disability-sld>

Where are you from?



From academic year 2015-2016, entirely taught in English.

Where are you from?



Where are you from?

www.wooclap.com/WHERE2021

Please, write here from which country you come from. If you come from Italy, please write in which University you got your Bachelor degree.



www.wooclap.com/WHERE2021