



PALERMO

DEPARTMENT BIOLOGICAL, CHEMICAL AND PHARMACEUTICAL SCIENCES AND TECHNOLOGIES



Molecular And Health Biology Master degree

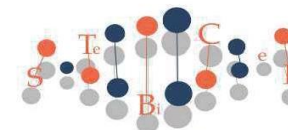


**Università
degli Studi
di Palermo**



Coordinator: Rosa Alduina

Email: valeria.alduina@unipa.it



DIPARTIMENTO DI SCIENZE E TECNOLOGIE
BIOLOGICHE CHIMICHE E FARMACEUTICHE (STEBICEF)

www.unipa.it/dipartimenti/stebicef/cds/biologiamolecolareedellasalute2195

Department of Biological Chemical and Pharmaceuticals Sciences and Technologies

TYPE OF COURSE

Master Degree

CLASS

LM-6

ATTENDANCE METHOD

In presence

TYPE OF ACCESS

Planned

QUALIFYING COURSE

No

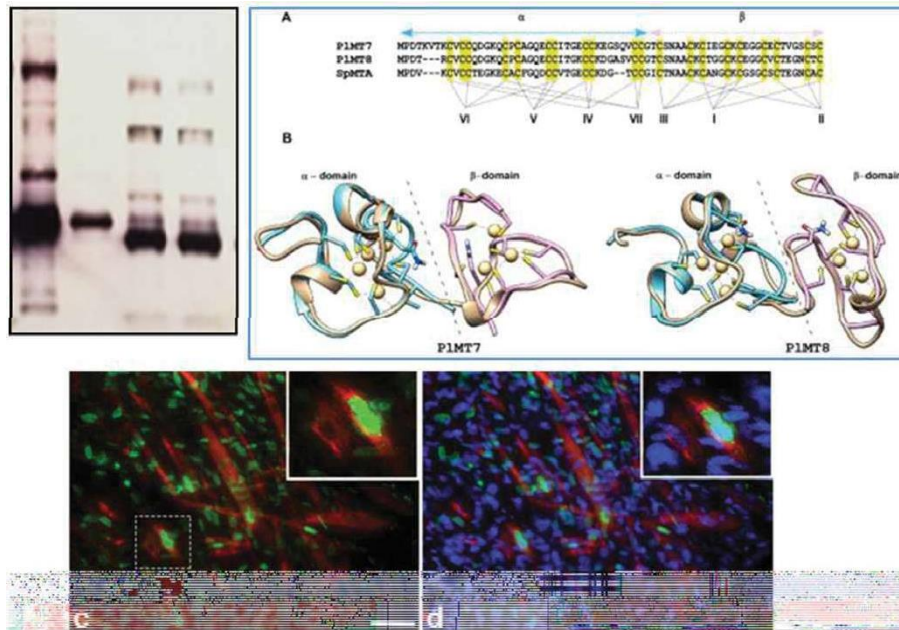
SEAT OF INTERNATIONAL AGREEMENTS

- Aveiro (PT)
- Heidelberg (DE)
- La Coruña (ES)
- Liegi (BE)
- Madrid (ES)
- Salford (UK)
- Suffolk (UK)
- Tenerife (ES)
- Würzburg (DE)



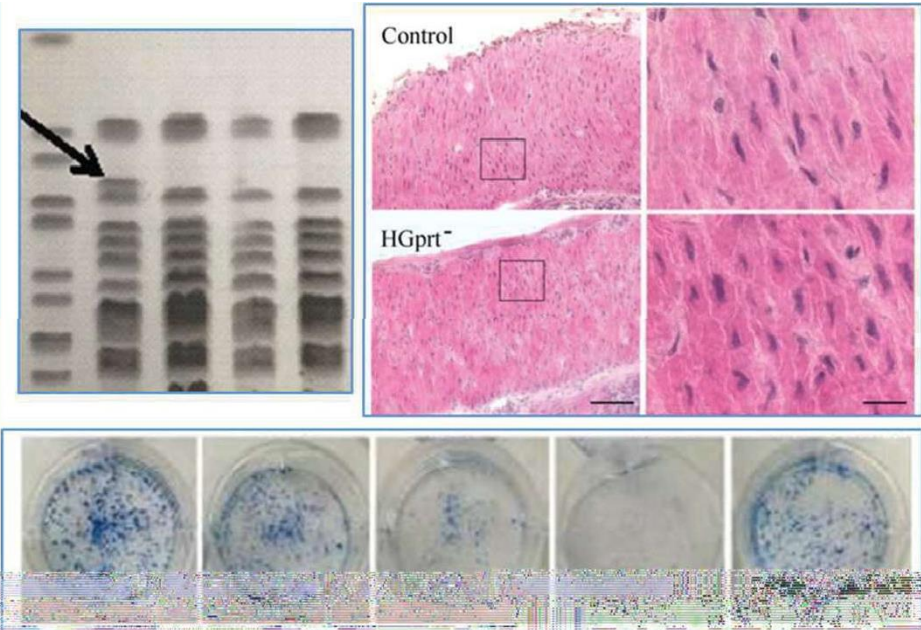
Curriculum in Molecular Biology

Biochemical, genetic, and molecular mechanisms involved in the regulation of cellular processes of prokaryotic and eukaryotic organisms.



Curriculum in Health Biology

Genetic, biochemical, and physiological aspects affecting human health and the physiological basis of food-related disorders



Access mode

- **Direct access to**
Graduates in
Biological sciences
Biotechnology
- **Subordinate access to**
Graduates in **other**
disciplines with
specific requirements



Programmed local number: 80

What is the objective of the course? What is it?

What does it train you for?



Master's Degree in Molecular and Health Biology completes the training in biology begun with the Bachelor's Degree in Biological Sciences.

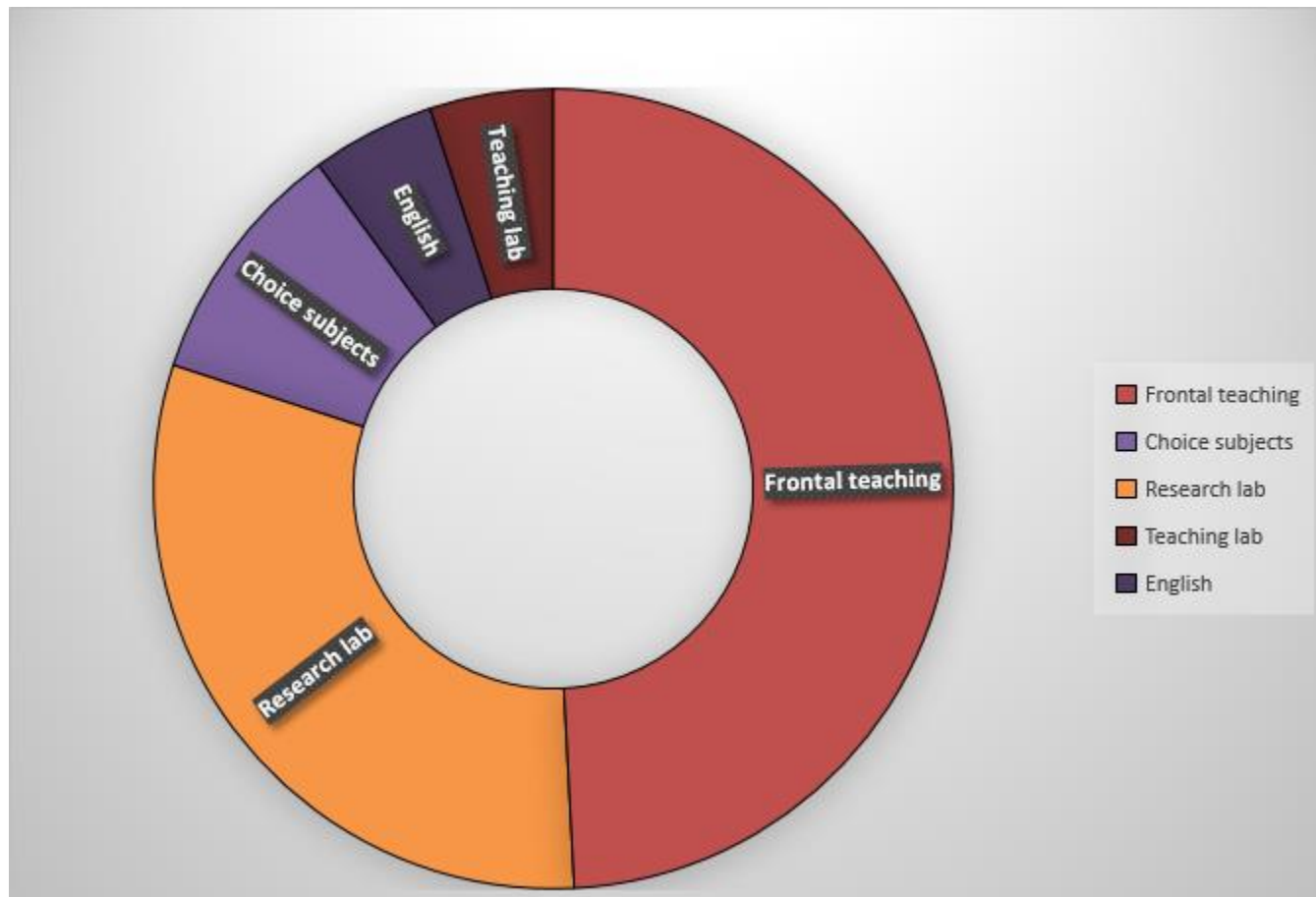


Master's Degree trains graduates with an advanced preparation program to give scientifically and professionally comprehensive answers to various biological problems using modern biomolecular techniques.



Master's Degree offers the **opportunity to acquire skills** regarding **cellular, biochemical, and physiological processes** in prokaryotes and eukaryotes, **including humans**, as well as related to the causes of **human health** alterations at the molecular, cellular, and organ levels.

- Teaching organized in semesters



Two years
120 CFU

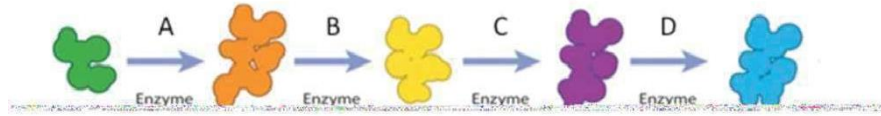
59 CFU frontal teaching

43 CFU laboratory

12 CFU subjects of your choice

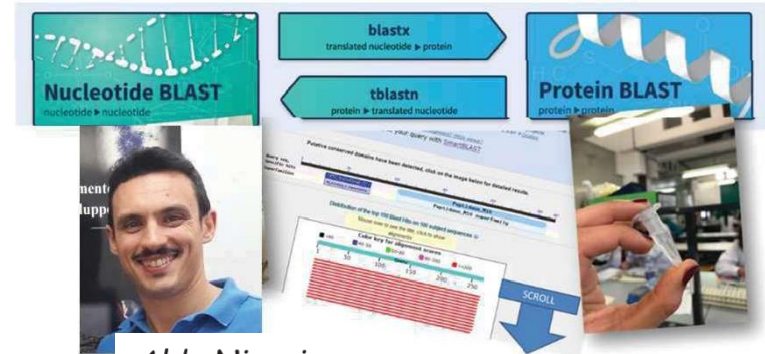
6 CFU English

Curriculum in Health Biology



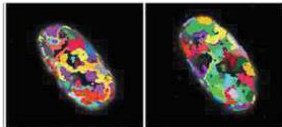
Anna De Blasio

Advanced Biochemistry

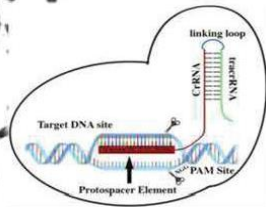
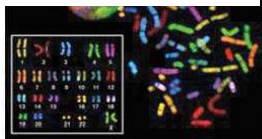


Aldo Nicosia

Biomolecular and
bioinformatics
methodologies



Fabio Caradonna

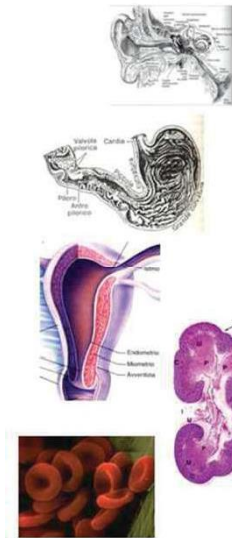


Human Genetics and
Cytogenetics

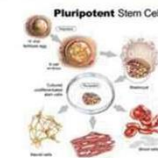


Sara Baldassano

Physiology
of Nutrition
and Eating
Behaviour

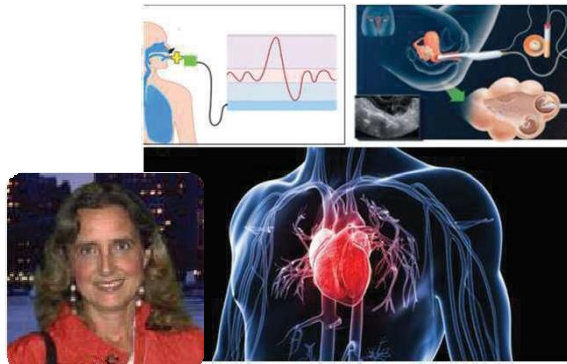


Claudio Luparello



Complements of cytology
and histology

Curriculum in Health Biology



Flavia Mulè

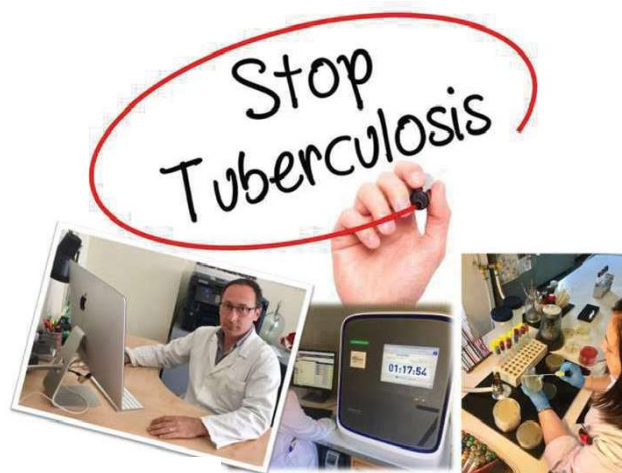


Rossella Serio



Paola Poma

Systems pathophysiology and neurobiology



Carmelo Maida

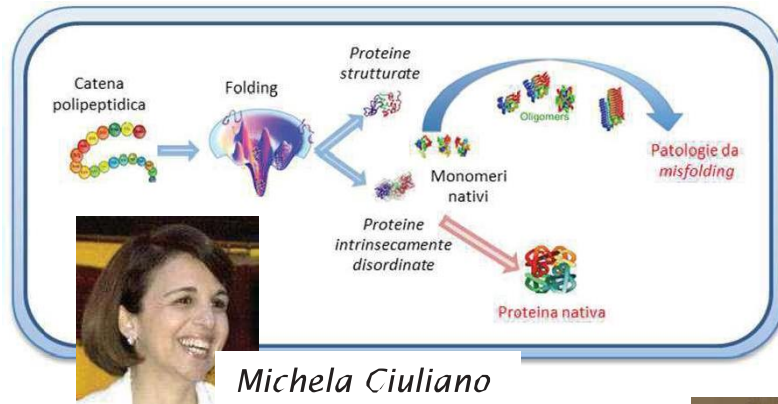


Elena Carra

Cellular biotechnology applied to forensic sciences

Hygiene

Curriculum in Molecular Biology



Michela Ciuliano

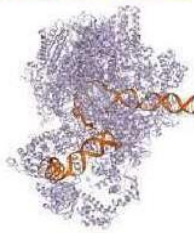
Biochemical Mechanisms



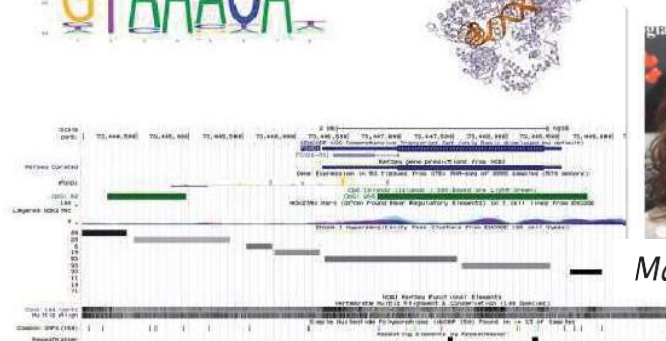
Alessandro Attanzio

TAGTCGGTTAAGCGTCACGTGATCGACAATTGGCCTGAATGTAGTCTGTAAAG

GTAAACA



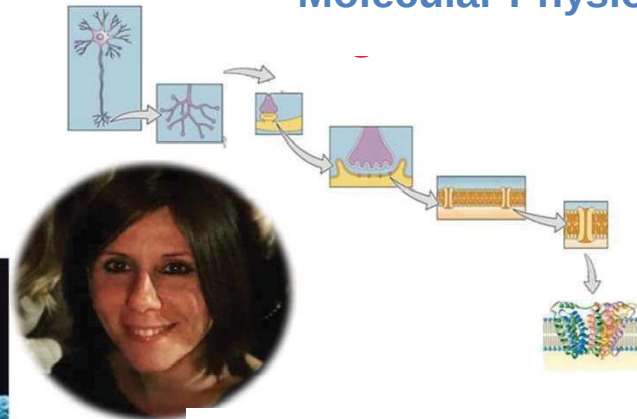
Biochemical Methodologies



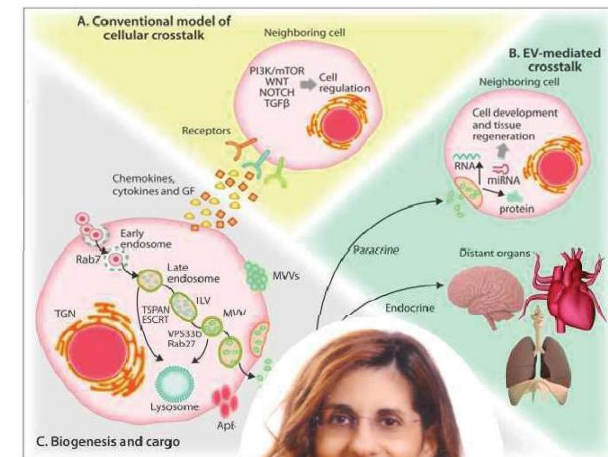
Maria Ragusa

Functional Genomics

Molecular Physiology



Maria Grazia Zizzo

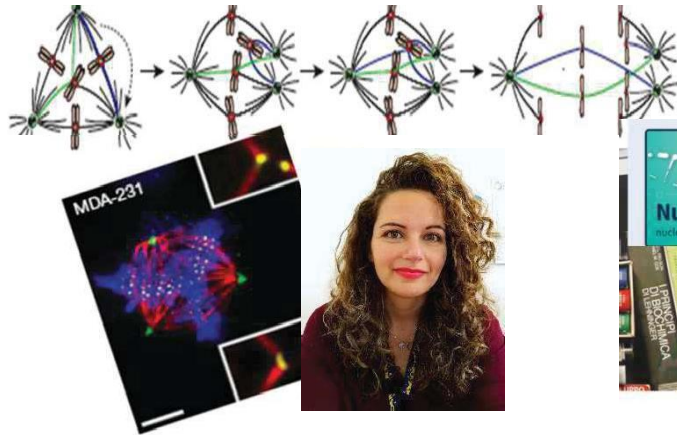


Fabiana Geraci

Cell Biology

Curriculum in Molecular Biology

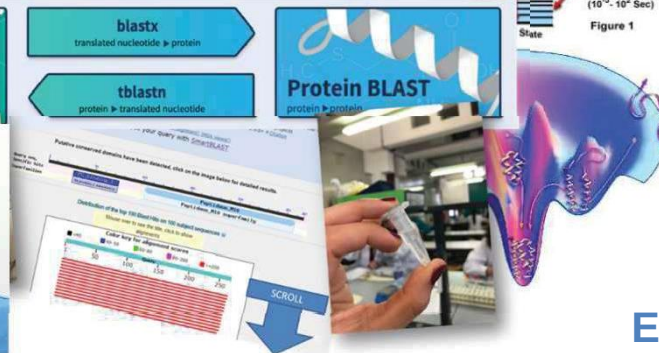
Cytogenetic, genetic and epigenetic methodologies



Viviana Barra



Aldo Nicosia

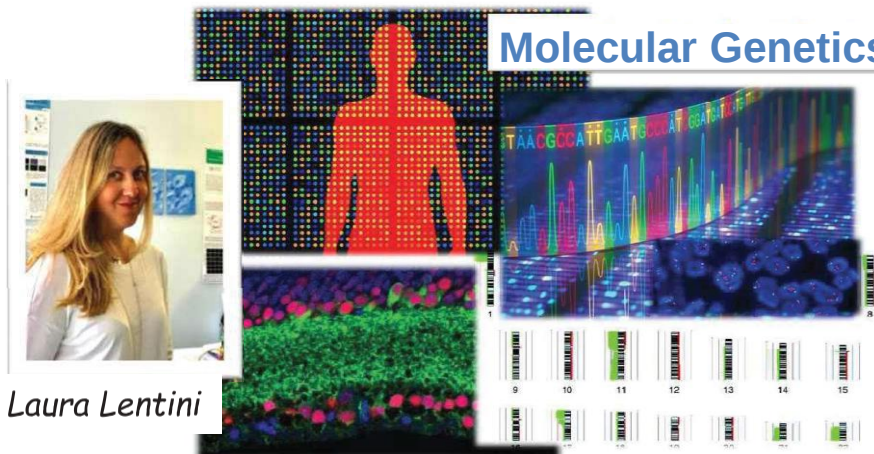


Grazia Cottone

Elements of Biophysics

Biomolecular and bioinformatics methodologies

Molecular Genetics



Laura Lentini

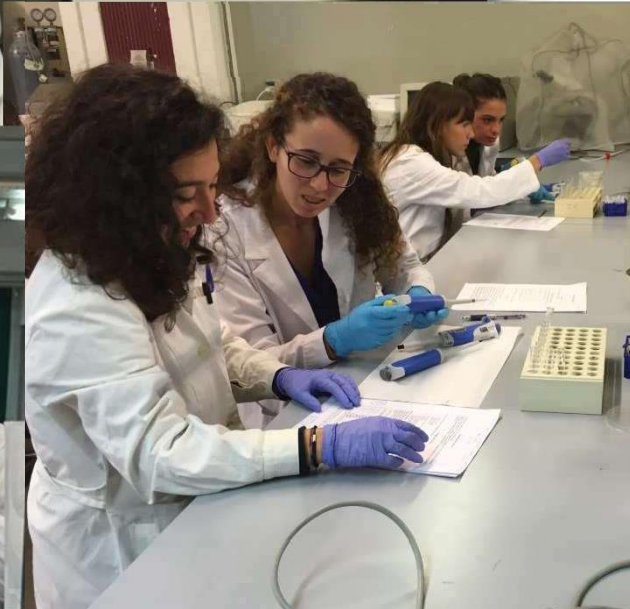
Microbiota e salute umana



Valeria Alduina

Molecular Microbiology

Lab activity



Study of the *potential* cytotoxic, anti-inflammatory, anti-diabetic and anti-lipogenic effects of extracts from marine organisms on human cells in culture.

Regulatory mechanisms and proteins controlling antibiotic biosynthesis and morphological differentiation in Actinomycetes.

Identification and design of active molecules for the treatment of rare genetic diseases: in vitro and in vivo

Neurotransmitters, hormones and paracrine agents regulating the gastrointestinal motility.

Research topics

Functional food, nutraceuticals and phytochemicals in the prevention-/of the non-communicable chronic diseases

Study of DNA methylation involvement in genome instability, and in vitro application of site-directed RNA editing for therapy of Cystic Fibrosis



Analysis of genetic polymorphisms of genes encoding drug targets and biotransformation enzymes related to drug response.

Analysis of new prognosis factors and possible therapeutic targets in different neoplastic models.

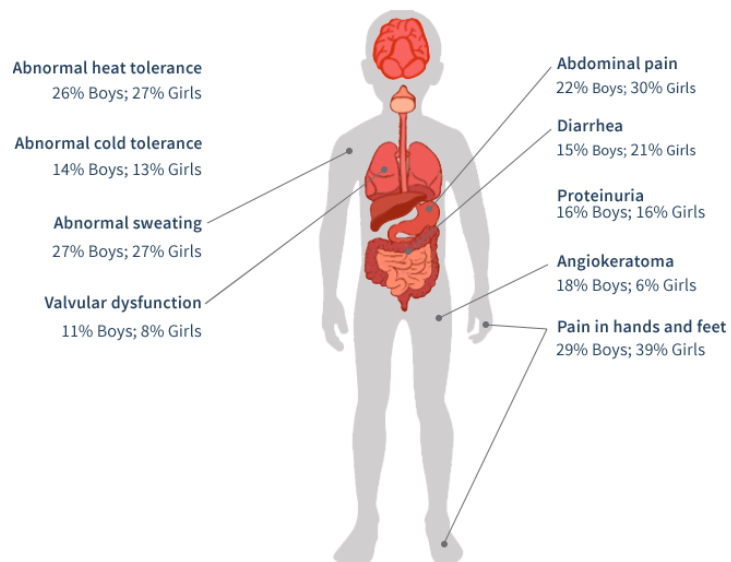
Study of the antitumor effects of natural, synthetic compounds and drug carriers in tumor models of innate and acquired multidrug resistance.

Research on synthetic or natural molecules with potential anticancer, anti-inflammatory and antieryptotic activity.

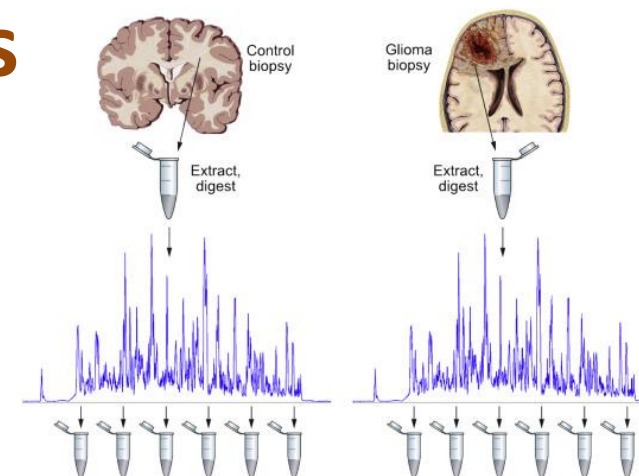
Fabry-disease molecular pathogenesis, Y-microchimerism in neurologically-affected women

In vitro glioma study-model, epigenomic/proteomic changes-based.

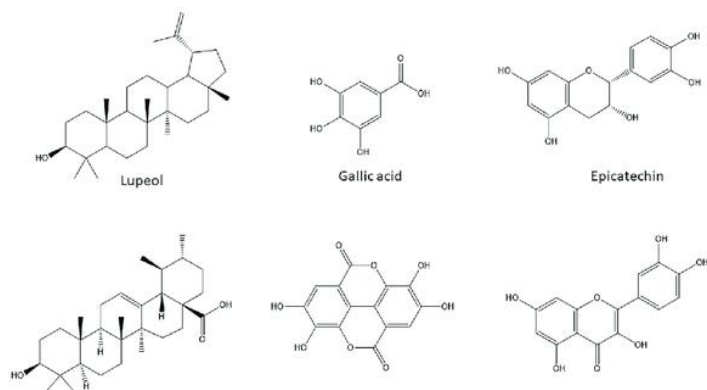
Fabry-disease molecular pathogenesis, Y-microchimerism in neurologically-affected women



Research topics



Functional food, nutraceuticals and phytochemicals in the prevention-/of the non-communicable chronic diseases



Research on synthetic or natural molecules with potential anticancer, anti-inflammatory and antieryptotic activity.

JOINT DEGREES

Health Biology

MsC in Biomedical Sciences
Bonn, Germany



Molecular Biology

MsC in Cellular and Molecular Biology
and Genetics. Coruna, Spain



UNIVERSIDADE DA CORUÑA







Research, Clinic, Industry



- Biotech
- University Lab
- Private Lab
- Quality control
- Pharmaceutical industry
- Nutrition
- Scientific police

