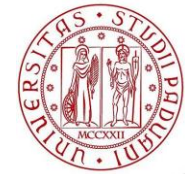




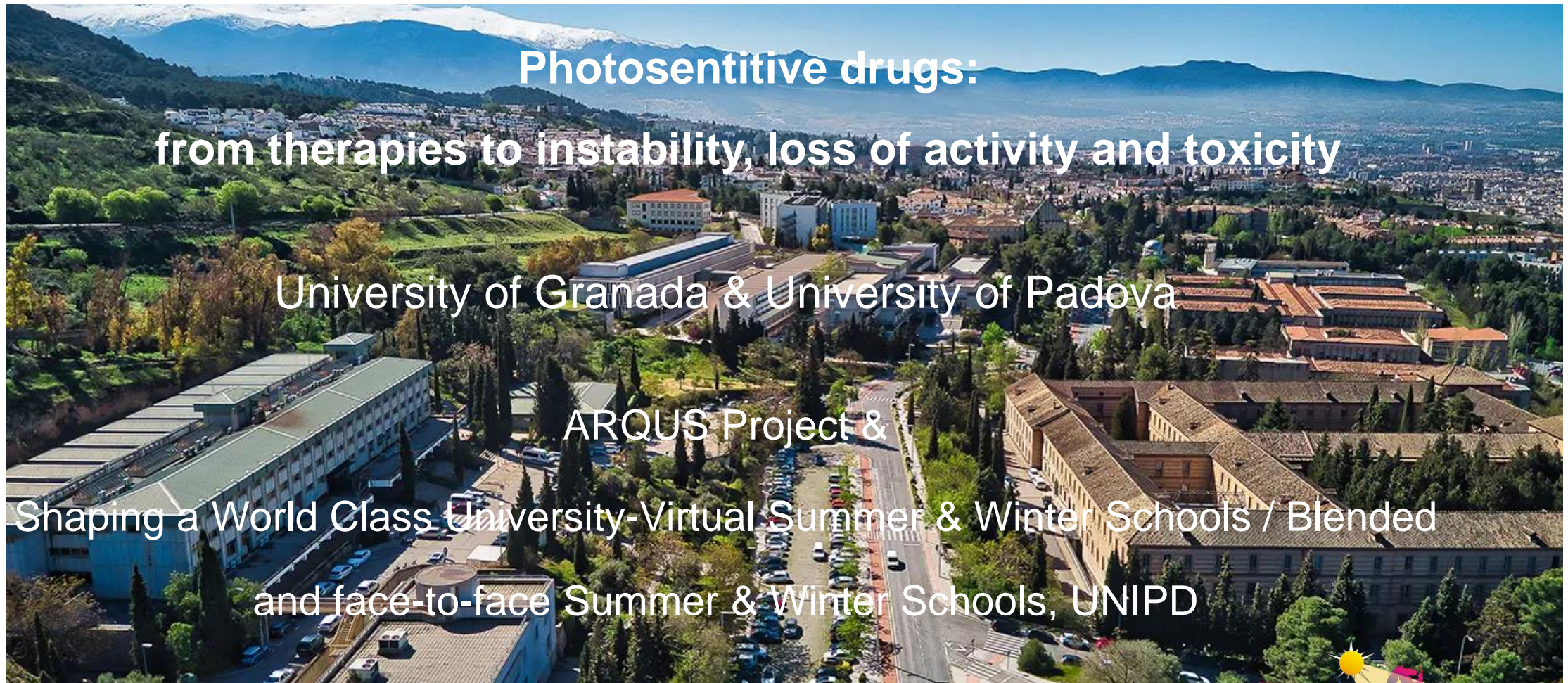
UNIVERSIDAD
DE GRANADA

Summer School - Granada 2023

July 17th-21st 2023



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



**Photosensitive drugs:
from therapies to instability, loss of activity and toxicity**

University of Granada & University of Padova

ARQUS Project &

Shaping a World Class University-Virtual Summer & Winter Schools / Blended
and face-to-face Summer & Winter Schools, UNIPD

And under the patronage of the European Society for Photobiology (ESP)



Address of home university/organization/institute/department

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The **Summer School** in “**Shaping a World Class University**-Virtual Summer & Winter Schools / Blended and face-to-face Summer & Winter Schools” for the year 2023 is organized by the two Faculties of Pharmacy involved of the University of Padova and University of Granada on behalf the Arqus project and the funds of the University of Padova for a Summer-Winter school.

The school will provide the basic principles of photobiology and photochemistry of photosensitizing biomolecules as well as their applications in drug phototherapy and photodiagnosis. In particular, the lectures will be focused on UV light (from cells to skin tissue, DNA damage, Vit. D effects); Photomedicine; Photodynamic therapy and fluorescence diagnosis; Photopharmacology; Photodermatology; Photoprotection; Biochemistry upon light; Photostability of drugs.

The school will be open to MSc students in Pharmacy and Biology and to PhD-students interested in the field of Drugs, Pharmacology, Biochemistry, Medicinal Chemistry, Therapies and Diagnosis.

Most of the lecturers are teachers of the two Departments involved and experts of the European Society for Photobiology (www.photobiology.eu), a stimulating community of photobiologists belonging to a European scientific association that promotes photobiology among members and scientists all around the world.

At the end of the school,, a certificate of participation will be given to the students who have passed the final test.

Photosensitive drugs: from therapies to instability, loss of activity and toxicity

Program

Monday, July 17th 2023

h. 9.00 Opening Lecture:

Prof. Alessandra Pattanaro (UNIPD): *Light / dark and art*

Monday, July 17th 2023

9.45-14.00 Workshop 1

Basic principles of photochemistry and photobiology

Luis Crovetto (Universidad de Granada) and Santi Nonell (ESP): *Basic photochemistry*

Coffee Break

Giorgia Miolo (UNIPD): *Drug photobiology: issues and applications*

Luca Menilli (UNIPD): *Biological tests for assessing phototoxicity and photo-antiproliferative activity of drugs*

Tuesday, July 18th 2023

9.00-10.00 Donatella Carbonera (UNIPD): *Methodologies in Photochemistry*

10.00 -14.00 Workshop 2

Are you afraid of the light? Photodynamic Therapy: chemistry, principles and applications

Francesca Giuntini (ESP): *Photosensitizers – how do they work?*

Amparo Faustino (ESP): *Basics of PDT and approaches for photosensitizer delivery*

Coffee break

Kristjan Plaetzer (ESP): *Antimicrobial PDT to fight resistant microorganisms*

Salvatore Sortino (UNICT): *Light Controlled drug delivery systems*

Wednesday, July 19th 2023

9.00-10.00 Davide Rossi (UNIPD) : *Surface Tensiometry and application to drugs under light*

10.00 -14.00 Workshop 3

Photostability of drugs

Virginie Lhiaubet (ESP): *Photostability of drugs*

Coffee Break

Patrizia Polverino de Laureto (UNIPD) : *Analytical methods for protein drugs photostability*

Francesca Mastrotto (UNIPD): *Photostability and phototoxicity and sun filters in Cosmetic*

Stefano Dall'Acqua (UNIPD): *Light Controlled Plants and Nutraceutical systems*

Thursday, July 20th 2023

9.00-10.00 Giampietro Frison (Aulss3Veneto, Mestre Venezia, IT): *High resolution MS in drug analysis*

10.00-14.00 Workshop 4

Illicit drugs: from pharmacology to photostability

Fabrizio Schifano (Hertfordshire University, UK): *Illicit drugs, mechanism and SAR*

Coffee Break

Donata Favretto (UNIPD): *Analysis of illicit drugs and therapeutic drugs and their photostability:
waters and hair*

Manuela Liberi (Bruker): *Pharmaceutical Applications of EPR: From evaluating degradation, to optimizing
product stability and Shelf-Life, and other measurements in the pharmaceutical
processes*

Friday, July 21st 2023

17.00-18.30 Final test (multichoice questions) ONLINE

END of the School