



ESP Photobiology School
June 10 – 16, 2018
Brixen/Bressanone

Programme
Abstracts

European Society for Photobiology **Photobiology School**

Organizing Committee

Kristian Berg (NO, Chair)
Santi Nonell (ES, ESP President)
Francesco Ghetti (IT, ESP Treasurer)
Giorgia Miolo (IT, Local Organizer)

Faculty

Stefan Anderson-Engels (IR), Matteo Ballottari (IT), Kristian Berg (NO), Janet Bornman (AU), Giovanni Checcucci (IT), Luca Dall'Osto (IT), Thierry Douki (FR), Francesca Giuntini (UK), Tim Maisch (DE), Giorgia Miolo (IT), Miguel Miranda (ES), Carlo Musio (IT), Santi Nonell (ES), Valentina Rapozzi (IT), Lesley Rhodes (UK), Evelyne Sage (FR), Herbert Stepp (DE), Franz Trautinger (AU), Massimo Trotta (IT), Rex M. Tyrrell (UK), Christiano Viappiani (IT), Georges Wagnieres (CH), Peter Wolf (AU)

Important locations in Brixen/Bressanone

School venue:

Casa della Gioventù, Università di Padova,

Address:

via Rio Bianco 6.

39042 Bressanone BZ, Italy

Accommodation:

Academia Cusanus

Address:

Via del Seminario 2, 39042 Bressanone BZ, Italia

Sponsor

European Society for Photobiology

ESP Photobiology School - Time Schedule

Sunday 10 June	Monday 11 June	Tuesday 12 June	Wednesday 13 June	Thursday 14 June	Friday 15 June	Saturday 16 June
	8.30 Registration at Casa della Gioventù Universitaria					
	9.00 Introductory Remarks (from 8:45)					
	9.00 Basic photophysics and photochemistry	9.00 Basic photophysics and photochemistry	9.00 PDT and fluorescence diagnosis	9.00 Photomedicine: phototherapy, phototoxicity and photoprotection	9.00 UV radiation DNA damage to skin	9.00 Parallel special lectures
	10.30 <i>Santi Nonell</i>	10.30 <i>Santi Nonell</i>	10.30 <i>Kristian Berg</i>	10.30 <i>Franz Trautinger</i>	10.30 <i>Thierry Douki</i>	11.00 PDT- preclinical
		11.00 Light dosimetry in biological tissues	11.00 continuation PDT and fluorescence diagnosis	11.00 Coffee break	11.00 Coffee break	11.00 F. Giuntini
	11.00 Coffee break	11.00 Coffee break	12.00 Antimicrobial PDT	11.00 continuation	11.00 continuation	11.30 Coffee break
	12.30 Environmental photobiology	12.30 Light dosimetry in biological tissues	12.00 continuation PDT and fluorescence diagnosis	12.30 Photomedicine	12.30 UV radiation	11.30 Coffee break
	11.00 <i>Janet F. Bormann</i>	12.30 <i>Sofjan Andersson-Engels</i>	12.00 Antimicrobial PDT	12.30 <i>Giorgia Miolo</i>	12.30 UV radiation	12.30 Microscopy
			13.00 <i>Tim Maltich</i>	13.00 Lunch break - School venue	12.30 Lunch break - downtown	12.30 Lunch break - downtown
	12.30 Lunch break - downtown	12.30 Lunch break - downtown	16.30 Walking tour to Abbazia di Novacella with lunch	14.30 Parallel special lectures PDT	14.30 Lunch break - downtown	14.30 Lunch break - downtown
	14.30 Environmental photobiology	14.30 Photosensory biology		14.30 PDT	14.30 Photosynthesis	14.30 Exam
	16.00 Light dosimetry in biological tissues	16.00 <i>Carlo Masio</i>		16.00 <i>V. Rapazzi</i>	16.00 <i>Luca Dall'Osto</i>	16.30 Exam
		16.00 <i>Giovanni Checucci</i>		16.00 <i>H. Stapp</i>	16.30 <i>Martino Ballottari</i>	
	16.00 Coffee break	16.00 Coffee break	16.30 Poster session with coffee	16.00 Coffee break	16.30 continuation	
	16.30 Parallel special lectures	16.30 Parallel special lectures		16.30 Parallel special lectures	16.30 continuation	
	18.00 Environmental photobiology	18.00 Biophotonics		18.00 cont. PDT	18.00 Photosynthesis	
	18.00 Photochemistry	18.00 Photochemistry		18.00 Photosynthesis	18.00 Photosynthesis	
	<i>J.F. Bormann</i>	<i>G. Wagnieres</i>		<i>Peter Wolf</i>	<i>L. Dall'Osto</i>	
	<i>S. Nonell</i>	<i>S. Andersson-Engels</i>		<i>M. Miranda</i>	<i>Martino Ballottari</i>	
	<i>M. Tratta</i>					
	19.30 Welcome reception at Casa della Gioventù Universitaria			20.00 Official Dinner		

17.00 Registration at Accademia Cusanus

Light green:
plenary lectures
Dark green:
special lectures

ESP PHOTOBIOLOGY SCHOOL
SCIENTIFIC PROGRAMME

Sunday June 10

Time: 17:0-19:00:

Registration - at Academia Cusanus

Monday June 11

Time: 8:30-9:00: Registration

Time: 8:45-9:00: Welcome and Introductory remarks

Time: 9:00-10:30

Topic, plenary: Basic photophysics and photochemistry

Santi Nonell, Institut Químic de Sarrià, Universitat Ramon Llull, Barcelona, Spain.

Time: 10:30-11:00: Coffee break

Time: 11:00-12:30

Topic, plenary: Environmental photobiology

Janet Bornman International Institute of Agri-Food Security (IIAFS), Curtin University, Perth, Australia.

12:30 – 14:30 Lunch

Time: 14:30-16:00

Topic, plenary: Environmental photobiology

Massimo Trotta, Institute for Chemical-Physical Processes, Italian National Research Council (CNR), Bari, Italy

Topic, plenary: Light dosimetry in biological tissues

Georges Wagnieres, Institute of Chemical Sciences and Engineering, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.

Time: 16:00-16:30: Coffee break

Time: 16:30-18:00

Parallel sessions

I. Topic, special: Environmental photobiology

Janet Bornman International Institute of Agri-Food Security (IIAFS), Curtin University, Perth, Australia.

Massimo Trotta, Institute for Chemical-Physical Processes, Italian National Research Council (CNR), Bari, Italy

II. Topic, special: Photophysics and photochemistry

Santi Nonell, Institut Químic de Sarrià, Universitat Ramon Llull, Barcelona, Spain.

Time: 19:30:

Welcome reception - at the School venue

Tuesday June 12

Time: 9:00-10:30

Topic, plenary: Basic photophysics and photochemistry

Santi Nonell, Institut Químic de Sarrià, Universitat Ramon Llull, Barcelona, Spain.

Topic, plenary: Light dosimetry in biological tissues

Georges Wagnieres, Institute of Chemical Sciences and Engineering, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.

Time: 10:30-11:00: Coffee break

Time: 11:00-12:30

Topic, plenary: Light dosimetry in biological tissues

Stefan Andersson-Engels, Irish Photonic Integration Centre (IPIC), Tyndall National Institute; Department of Physics, University College Cork, Cork, Ireland

12:30 – 14:30 Lunch

Time: 14:30-16:00

Topic, plenary: Photosensory biology

Giovanni Checcucci, Istituto di Biofisica, Consiglio Nazionale delle Ricerche, Pisa Italy

Carlo Musio, Consiglio Nazionale delle Ricerche - Istituto di Biofisica Fondazione Bruno Kessler, Trento, Italy

Time: 16:00-16:30: Coffee break

Time: 16:30-18:00

Parallel sessions

I. Topic, special: Biophotonics

Stefan Andersson-Engels, , Irish Photonic Integration Centre (IPIC), Tyndall National Institute; Department of Physics, University College Cork, Cork, Ireland.

Georges Wagnieres, Institute of Chemical Sciences and Engineering, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland.

II. Topic, special: Photophysics and photochemistry: Measurement, simulation, and analysis of spectroscopic data

Santi Nonell, Institut Químic de Sarrià, Universitat Ramon Llull, Barcelona, Spain.

Wednesday June 13

Time: 9:00-10:30:

Topic, plenary: Photodynamic therapy and fluorescence-based diagnosis

Kristian Berg, Oslo University Hospital - Radium Hospital, Department of Radiation Biology, Oslo, Norway

Time: 10:30-11:00: Coffee break

Time: 11:00-12:00:

***Topic, plenary: Photodynamic therapy and fluorescence-based diagnosis
continuing***

Topic, plenary: Antimicrobial photodynamic therapy

Tim Maisch, Department of Dermatology, University Medical Center Regensburg, Regensburg, Germany

Time: 12:00 – 16:30: Walking tour to Abbazia di Novacella with lunch

Time: 16:30 – 18:00: Poster session with coffee

Thursday June 14

Time: 9:00-12:30

Topic, plenary: Photomedicine (Phototherapy, phototoxicity and photoprotection)

Time: 9:00-10:30 **Basic photodermatology**

Franz Trautinger, Karl Landsteiner Institute for Dermatological Research, St. Poelten, Austria

Time: 10:30-11:00 Coffee break

Time: 11:00-12:30 **Basic photodermatology, continuation**

Photoreactivity and phototoxicity of drugs

Giorgia Miolo, Department of Pharmaceutical Sciences, University of Padova, Padova, Italy.

13:00 – 14:30 Lunch

Time: 14:30-18:00

Parallel sessions

I. **Topic, special: PDT/Photodiagnosis – preclinical/clinical**

PDT – cell signaling

Valentina Rapozzi, Department of Medical and Biological Sciences, University of Udine, Udine, Italy

PDT/Photodiagnosis – clinical experience

Herbert Stepp, Laser-Forschungslabor, Klinikum der Universität München, München, Germany.

II. **Topic, special: Photomedicine (Phototherapy, phototoxicity and photoprotection)**

Phototherapy: Specific treatment modalities

Franz Trautinger, Karl Landsteiner Institute for Dermatological Research, St. Poelten, Austria

Time: 16:00-16:30 Coffee break

I. **Topic, special: PDT – clinical**

Photodynamic Therapy in Dermatology

Peter Wolf, Research Unit for Photodermatology, Department of Dermatology, Medical University of Graz, Graz, Austria.

Impact of immunology on the outcome of photodynamic therapy

Peter Wolf, Research Unit for Photodermatology, Department of Dermatology, Medical University of Graz, Graz, Austria.

II. *Topic, special: Photooxidative reactions of drugs with biomolecules*

Miguel Miranda, Universidad Politecnica de Valencia, Departamento de Quimica,
Valencia, Spain

Time: 20:00: Official dinner

Friday June 15

Time: 9:00-12:30

Topic, plenary: UV (from cells to skin tissue)

Time: 9:00-10:30

Thierry Douki, Laboratoire Lesions des Acides Nucleiques, CEA-Grenoble, France.

Evelyne Sage, Institut Curie – Recherche, Centre Universitaire, Orsay – France

Time: 10:30-11:00 Coffee break

Time: 11:00-12:30

Rex Tyrrell, Department of Pharmacy & Pharmacology, University of Bath, United Kingdom

Lesley Rhodes, Photobiology Unit, Dermatological Sciences, Salford Royal Foundation Hospital, University of Manchester, Manchester - United Kingdom.

12:30 – 14:30 Lunch

Time: 14:30-16:30

Topic, plenary: Photosynthesis

Time: 14:30-16:00:

Luca Dall'Osto Department of Biotechnology, University of Verona, Italy

Time: 16:00-16:30: Coffee break

Time: 16:30-18:00:

Matteo Ballottari, Department of Biotechnology, University of Verona, Italy

Saturday June 16

Time: 09:00-11:00

I. Topic, special: PDT

Photosensitizers in Photodynamic Therapy

Francesca Giuntini, School of Pharmacy and Biomolecular Sciences, Liverpool John Moores University, Liverpool, UK.

Photochemical internalization (PCI) – from photodynamic targeting of lysosomes to clinical utilization of PCI

Kristian Berg, The Norwegian Radium Hospital, Department of Radiation Biology, Oslo, Norway

II. Topic, special: UV (from cells to skin tissue)

Formation and repair of DNA damage induced by solar UV radiation in human cells

Thierry Douki, Laboratoire Lesions des Acides Nucleiques, CEA-Grenoble, France.

A role for UVA on skin cancer

Evelyne Sage, Institut Curie – Recherche, Centre Universitaire, Orsay – France

Endogenous and exogenous protection against UV generated oxidative stress

Rex Tyrrell, Department of Pharmacy & Pharmacology, University of Bath, United Kingdom

Balancing the benefits and risks of solar UVR exposure

Lesley Rhodes, Photobiology Unit, Dermatological Sciences, Salford Royal Foundation Hospital, University of Manchester, Manchester - United Kingdom.

Time: 11:00-11:30 Coffee break

Time: 11:30-12:30

Topic, plenary: Microscopy

Christiano Viappiani, Dipartimento di Fisica e Scienze della Terra, Università di Parma, Parma, Italy

12:30 – 14:30 Lunch

Time: 14:30-17:30

EXAM