

2019 ESP-IUPB  
WORLD CONGRESS



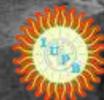
LIGHT & LIFE

BARCELONA  
AUGUST, 25-30

17<sup>th</sup> International Congress  
on Photobiology  
18<sup>th</sup> Congress of the European  
Society for Photobiology

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Hotel Crowne Plaza  
Barcelona - Fira Center  
Spain



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on Photobiology  
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Society for Photobiology

## Congress Chairs

**Prof. Santi Nonell**  
President, European Society for Photobiology  
IQS School of Engineering, University Ramon  
Llull, Barcelona, Spain

**Prof. John L. Spudich**  
President, International Union of Photobiology  
University of Texas Health Science Center at  
Houston, USA

## Organizers



European Society  
for Photobiology  
[photobiology.eu](http://photobiology.eu)



International Union  
of Photobiology  
[iuphotobiology.org](http://iuphotobiology.org)

## Organizing Committee

Santi Nonell (Barcelona, Spain)  
John Spudich (Houston, USA)  
Rex M. Tyrrell (Bath, UK)  
Evelyne Sage (Paris, France)  
Francesco Ghetti (Pisa, Italy)  
Franz Trautinger (St. Pölten, Austria)

## Congress Organization

MCI Spain Event Services  
C/ Tusset 32, 5th floor,  
08006 Barcelona, Spain  
[photobiology2019@mci-group.com](mailto:photobiology2019@mci-group.com)

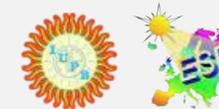
## Congress Venue

Hotel Crowne Plaza Barcelona Fira Center  
Av. de Rius i Taulet, 1, 08004 Barcelona, Spain  
[Hotel website](#)

## Website

[photobiology2019.org](http://photobiology2019.org)





## Program Overview

The program will include:

Plenary and Keynote Lectures  
60 Symposia  
Invited Lectures and Free Communications  
Poster Sessions  
Industry Sponsored Sessions  
Commercial Exhibitions  
Social Events

## Topics

### Photomedicine and Human Photobiology

UV, Visible and Near Infrared Effects on the Skin, Melanins, Vitamin D, DNA Damage and Repair, Photocarcinogenesis, Photoimmunology, UV-induced Skin Cancer, Photoaging, Photosensitivity Diseases, Topical and Systemic Photoprotection, Sunscreen Developments, Phototherapy, Eye Photodamage and Phototherapy, Photopharmacology, Photostability, Photodegradation and Phototoxicity of Drugs, Optogenetics, Light in Dentistry, Lighting Environment, Photodiagnosis

### Photodynamic Therapy

Clinical PDT, Antimicrobial Resistance and PDT, Oxygen in PDT, Role of PDT in Combination Therapies, New Excitation Strategies, New Photosensitizers, Photodynamic Diagnosis, Theranostics, Drug Delivery in PDT, Targeting in PDT, Tissue Bonding, Vascular PDT

### Plant Photobiology

Structure and Regulation in Photosynthesis, Light Harvesting Dynamics, Artificial

Photosynthesis, UVB Effects on Plants, Plant Defence, ROS Signalling, Plant Photoprotection, Photomorphogenesis, Plant Photoreceptors, Extremophiles, Optogenetics in Plants, Algae-based Photobiosynthesis and Biofuels, Light and Flowering

### Environmental Photobiology

Ozone and Climate Change, UV Monitoring, Human Health in Changing Climate, Effects on Food Quality and Crops, Aquatic Photobiology, Effect on Biogeochemical Cycles, Solar Fuels, Metagenomics of Photic Environments

### Physical and Chemical Photobiology

Molecular Imaging and Fluorescent Probes, Genetically-Encodable Probes, Illumination Strategies and Imaging in Optogenetics, Photoacoustic Imaging, Tetrapyrroles in Photobiology, Fullerenes in Photobiology, Upconversion Nanoparticles in Photobiology, Quantum Dots in Photobiology, Reactive Oxygen Species, Nanobioplasmonics, Time- and Space-Resolved Photobiological Techniques, Molecular Modelling, Femtobiology, Biophotonics, Bioluminescence

### Sensory Photobiology

Optogenetics, Vision in Microorganisms and Animals, Microbial Rhodopsins, Visual Pigments, Carotenoid- and Retinal-Binding Proteins, Flavoproteins, Phytochromes, Photosignal Transduction Mechanisms, Cryptochromes, UV Radiation and Magnetoperception in Animals,

Time-Resolved Nanocrystallography of Photoreceptors, Photoorientation and Photomovements of Microorganisms, Circadian Rhythms

### Industrial Photobiology

Industry-Sponsored Satellite Symposia, Live Demonstrations, Expert Meetings, Educational Events

