



ISPP2018

Vic, Barcelona - 1 - 2 November

**II INTERNATIONAL
SYMPOSIUM on
PHOTOPHARMACOLOGY**

Innovative therapeutics and research tools using light

Second International Symposium on Photopharmacology (ISPP2018)

Innovative therapeutics using light

Place	Vic (70 Km from Barcelona)
Dates	1-2 November 2018
Format	2-day Symposium
Scope	International
Expected number of attendants	150-200
Main topics	Chemical biology, Biomedicine, Pharmacology, Dermatology, Ophthalmology, Photoelectronics, Neuroscience, Cardiology

1. Presentation of the event

Photopharmacology is an emerging branch of science based in the administration of a photosensitive compound in combination with illumination to provide a high degree of local and temporal control of compound activity, which makes it useful both for therapeutic applications and as a research tool.

In the last 10 years photopharmacology, a polyhedric science involving biology, pharmacology, chemistry, physics, engineering and medicine, has flourished and achieved a critical mass of researchers and resourceful methods in chemistry and optics, raising hopes for clinical trials of the most advanced compounds.

The First International Symposium on Photopharmacology took place at the University Medical Center Groningen on February 16th, 2017. Topics covered in this First Symposium ranged from photochemistry and organic synthesis to vision restoration and brain research.

This Second Symposium is planned as a forum to gather the worldwide experts in photopharmacology to debate and present their advances to the medical and pharmaceutical community, facilitate partner interaction, foster cooperativity and open discussions to delimitate problems, define solutions, delineate strategies and envision future developments.

2. Target audience

This Symposium intends to bring opinion leaders in the field including scientists, clinicians, engineers and technologists with medical practitioners and members of the industrial sectors related to light (photonics, spectroscopy, optics), molecular therapeutics (pharma industry, biotechnology, medicinal chemistry) and medical devices.

3. Organizing Committee

Name	Entity
Amadeu Llebaria	Institute for Advanced Chemistry of Catalonia (IQAC-CSIC)
Pau Gorostiza	Institute for Bioengineering of Catalonia (IBEC)
Xavier Rovira	Universitat de Vic - Universitat Central de Catalunya

4. Scientific Committee

Name	Entity
Ben Feringa	University of Groningen, winner of the 2016 Chemistry Nobel Prize
Martin Lohse	Max Delbrück Center for Molecular Medicine, Germany
Jean-Philippe Pin	Institut de Génomique Fonctionnelle, France
Francisco Ciruela	UB-IDIBELL
Santi Nonell	IQS-URL
Andrés G Fernández	Ferrer Advanced Biotherapeutics (FAB)
Jesús Giraldo	UAB-Institut de Neurociències

5. Invited speakers

Name	Entity
Ben Feringa	University of Groningen, winner of the 2016 Chemistry Nobel Prize
Dirk Trauner	New York University
Wiktor Szymanski	University Medical Center Groningen
Michael Decker	University of Würzburg
Andrew Woolley	University of Toronto
David Hodson	Imperial College London
Francisco Ciruela	UB-IDIBELL
Michael Hamblin	Harvard Medical School
Gooitzen van Dam	University of Groningen
Vasilis Ntziachristos	Technische Universität München
Ehud Isacoff	University of California Berkeley
Michael Bruchas	Washington University in St. Louis
Cyril Goudet	Institut de Génomique Fonctionnelle (IGF)
Richard Kramer	University of California Berkeley
Oliver Thorn Sheshold	Ludwig-Maximilians-Universität München
Romain Quidant	ICFO-ICREA

Ferruccio Pisanello	Istituto Italiano di Tecnologia
Edith C. Glazer	University of Kentucky
Anja Hoffmann-Röder	Ludwig-Maximilians-Universität Munich
Burkhard König	Universität Regensburg

6. Program

First day 1 November 2018

8:00-9:00	Registration
9:00-9:10	Welcome speech
9:10-10:00	Ben Feringa Opening-overview Photoresponsive Biomolecular Systems <i>"Photoresponsive biomolecular systems"</i>
10:00-10:30	Michael Bruchas <i>"Wireless in vivo pharmacology and optogenetics"</i>
10:30-11:00	Andrew Woolley <i>"Photo-control of affinity reagents"</i>
11:00-11:30	Coffee break
11:30-12:00	Burkhard König <i>"Let there be light: modulation of enzyme activity and triggering of receptor and ion channel response by photochromic compounds"</i>
12:00-12:30	Wiktor Szymanski <i>"Photopharmacology and imaging: towards a theranostic approach"</i>
12:30-13:00	1st session short presentations
13:00-15:00	Lunch with poster session
15:00-15:30	Dirk Trauner <i>"Photoswitches and lipids"</i>
15:30-16:00	Anja Hoffmann-Röder <i>"Peptidomimetics for photopharmacology and structural biology applications"</i>
16:00-16:30	Romain Quidant <i>"Recent progress in targeted photothermal therapy"</i>
16:30-17:00	Coffee break
17:00-17:30	Vasilis Ntziachristos <i>"Optoacoustic imaging of tissue dynamics"</i>
17:30-18:00	Ferruccio Pisanello <i>"Tapered optical fibres for multifunctional optical neural interfaces"</i>
18:00-18:30	2nd session short presentations
20:00	Symposium dinner

Second day 2 November 2018

9:00-9:30	Ehud Isacoff <i>"Light-controlled GPCRs"</i>
9:30-10:00	Oliver Thorn-Seshold <i>"Non-azobenzene photopharmaceuticals: potential for cell biology"</i>
10:00-10:30	Edith C. Glazer <i>"Metal complexes for the protection and delivery of bioactive ligands"</i>
10:30-11:00	Michael Decker <i>"Photopharmacology in Alzheimer research: chemical tools to investigate the functions of enzymes and GPCRs"</i>
11:00-11:30	Coffee break
11:30-12:00	Cyril Goudet <i>"Pain neuromodulation through deep brain photopharmacological manipulation"</i>
12:00-12:30	David Hodson <i>"Shining a light on pancreatic beta cell function using optical"</i>
12:30-13:00	3rd session short presentations
13:00-15:00	Lunch with poster session
15:00-15:30	Michael Hamblin <i>(to be determined)</i>
15:30-16:00	Francisco Ciruela <i>"Illuminating adenosine receptors in movement disorders"</i>
16:00-16:30	Gooitzen van Dam <i>"Current and future aspects of fluorescence guided healthcare for surgery, pathology, endoscopy - the next frontier activatable therapeutics"</i>
16:30-17:00	Richard Kramer <i>"Light-sensitive drugs that act on endogenous ion channels for re-inventing phototransduction in the blind retina"</i>
17:00-17:30	Closing speech