



Programme Titles Presenters Topics

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5-ALA-PDT Induces RIP3-Dependent Necrosis in Glioblastoma

Jacques Piette¹, Isabelle Coupienne¹, Noemi Rubio¹, Gregory Fettweis¹, Patrizia Agostinis²

¹University of Liège, Belgium, ²KUL, Belgium

Monday, June 25, 2012: Microenvironment and Protein Kinase Signaling in Photobiology - 2:15-4:15
03:17-03:36

A 3D Platform to Evaluate Factors Influencing PDT Efficacy and Model Determinants of Tumor Growth

Sriram Anbil*, Imran Rizvi, Nermina Alagic, Jonathan Celli, Lei Zheng, Akilan Palanisami, Michael Glidden III, Tayyaba Hasan
Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

A Biocompatible Polyacrylamide Nanoplatfom That Does It All

Anurag Gupta¹, Munawwar Sajjad², Shouyan Wang³, Yihui Chen¹, Raoul Kopelman³, Ravindra K. Pandey¹

¹Roswell Park Cancer Institute, USA, ²State University of New York, USA, ³University of Michigan, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

A Call for Certification of Tanning Salon Employees

Michael Caswell

Consumer Product Testing Company, Inc., USA

Tuesday, June 26, 2012: Indoor Tanning: Previously Unasked Questions - 1:15-3:15
02:30-02:45

A Clinical Study Evaluating Singlet Oxygen Luminescence and Photosensitizer Fluorescence as Predictors in ALA-PDT Treatment

Srivalleesha Mallidi¹, Sriram Anbil¹, Seonkyung Lee², Stefan Elrington¹, Sarika Verma¹, Bryan Spring¹, Steven Davis¹, Dieter Manstein¹, Tayyaba Hasan¹

¹Wellman Center for Photomedicine, USA, ²Physical Sciences Inc, USA

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00
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A Model of Intracellular Trafficking of the Lipid Ceramide

Kentaro Hanada

National Institute of Infectious Diseases, Japan

Tuesday, June 26, 2012: Sphingolipids Mediators in Photobiology - 3:45-5:45
04:45-05:15

A Multi-Source Spectroscopic Fluorescence Probe System for PDT Dosimetry of BPD and PPIX

Scott Davis*, Martin Isabelle, Brian Pogue

Dartmouth College, USA

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00
12:40-12:50

A Multi-Targeting Approach to Effectively Treat Pancreatic Cancer Using Nanotechnology-based Combination Therapy

Lei Z. Zheng¹, R Bryan Sears¹, Bryan Q. Spring¹, Tayyaba Hasan¹

¹Wellman Center for Photomedicine, USA, ²Massachusetts General Hospital, USA

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45
04:15-04:25

A Pilot Study of Phototoxic Protein KillerRed as Genetically Encoded Photosensitizer for PDT

Marina Shirmanova¹, Ekaterina Serebrovskaya³, Ludmila Snopova¹, Marina Sirotkina¹, Ilya Turchin², Vladislav Kamensky², Marina Bugrova¹, Konstantin Lukyanov³, Sergey Lukyanov³, Elena Zagaynova¹

¹Nizhny Novgorod State Medical Academy, Russia, ²Institute of Applied Physics RAS, Russia, ³Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry RAS, Russia

Tuesday, June 26, 2012: Modulation of Cellular Responses in PDT - 1:15-3:15
02:55-03:05

A Rapid Photometric Assay for Simultaneous Determination of Antibiotic Susceptibility and Beta-Lactamase Resistance

Shazia Khan¹, Ulysses W. Sallum¹, Bryan Sears¹, Xiang Zheng¹, Sarika Verma¹, Gerard J. Nau², Tayyaba Hasan¹

¹Harvard Medical School and Massachusetts General Hospital, USA, ²University of Pittsburg School of Medicine, USA
Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Advances in OCT Imaging of Skin

Benjamin Vakoc

Harvard Medical School/ MGH, USA

Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00

12:12-12:30

Agents Intended for Optimizing PpIX Synthesis in ALA-PDT of Tumors may Expand Tumor Populations with Inherent Resistance to Cancer Therapies

Janet Morgan*, Nadine Pershyn, Nathalie Zeitouni

Roswell Park Cancer Institute, USA

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

05:5-05:15

ALA-Photodynamic Therapy: Targeting Disturbed Onco-Metabolism of the Heme Pathway in the Single Tumor Cell

Zvi Malik

Life Sciences Faculty, Israel

Monday, June 25, 2012: Cell or Vessel: A Debate on Effective Photobiology - 4:45-6:15

05:05-05:15

An Unexpected Source of Skin Cell Photo-Oxidative Stress: Pyruvate and Methylglyoxal, Glycolytic Metabolites Containing an A-Dicarbonyl-Chromophore, are UVA-Photosensitizers

Shuxi Qiao, Sarah D. Lamore, Jessica L. Lesson, Georg T. Wondrak*

Pharmacology and Toxicology, College of Pharmacy and Arizona Cancer Center, University of Arizona, USA

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15

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Analysis of Fluorescence Delivery Differences Between Epidermal Growth Factor (EGFR) Targeted Affibodies and Cetuximab (EGFR Targeted Antibody) in Murine Orthotopic Glioma Model with Implications for Fluorescence Guided Surgery

Kristian Sexton*¹, Kim Samkoe², Kenneth Tichauer¹, Brian Pogue¹

¹Dartmouth College, USA, ²Dartmouth Medical School, USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

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Angiogenic and vasculogenic Effects Associated with Photodynamic Therapy

Charles Gomer*¹, Angela Ferrario², Marian Luna², Sophia Lim²

¹University of Southern California, USA, ²Children's Hospital Los Angeles, USA

Sunday, June 24, 2012: Vascular Effects of Light - 4:00-5:30

04:15-04:30

Anti Thymine Photodimer Formation in Human Telomeric G-Quadruplexes and Putative G-Quadruplex Forming Sequences in Promoter Sequences

Jillian Smith, John-Stephen Taylor*

Washington University, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Antimicrobial PDT for the Prevention of Ventilator Associated Pneumonia and Chronic Sinusitis

Merrill Biel¹

¹Ondine Biomedical, Inc, Canada, ²Ear, Nose and Throat SpecialtyCare of MN, USA, ³University of Minnesota, USA

Monday, June 25, 2012: Antimicrobial PDT - 4:45-6:15

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Antimicrobial Photodynamic Therapy in Treatment of Aggressive Periodontitis

VERONIQUE BENHAMOU

McGill University, Canada

Monday, June 25, 2012: Antimicrobial PDT - 4:45-6:15

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Apoptosis and Autophagy in the Death of Cancer Cells from Photodynamic Therapy

Nancy Oleinick

Case Western Reserve University, USA

Sunday, June 24, 2012: Mechanisms of Cell Death - 11:00-12:30

11:00-11:15

Assessment of the Tissue Oxygenation in Vivo by Measuring the Luminescence Lifetime of Ru(Phen)₃2+ as Poorly Photosensitizing Probe

Veronika Huntosova, Sandrine Gay, Rajendran Senthilkumar, Cedric Paulou, Patrycja Nowak-Sliwinska*, Georges Wagnieres
Medical Photonics Group, Institute of Chemical Sciences and Engineering, Swiss Federal Institute of Technology (EPFL), Switzerland

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Autocrine Regulation of High-Mobility Group Box 1 in Tumor Angiogenesis and Sustained Photodynamic Efficacy

Judy R van Beijnum, Patrycja Nowak-Sliwinska*, Arjan W Griffioen

Angiogenesis Laboratory, Department of Medical Oncology, VU University Medical Center, The Netherlands
Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Beyond TMPyP: Derivatives and Analogues with Altered Attachment Properties to Bacterial Cell Walls

Andreas Späth*, Wolfgang Bäuml, Tim Maisch, Ariane Felgenträger
Department of Dermatology, University of Regensburg, Germany
Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Bioactive Sphingolipids in the Regulation of Inflammation and Cancer

Lina Obeid¹

¹*Northport VA medical Center, USA*, ²*Stony Brook University, USA*
Tuesday, June 26, 2012: Sphingolipids Mediators in Photobiology - 3:45-5:45
04:15-04:45

Biological Effects of Longwave UVA (UVA-1) on Human Reconstructed Skin

Claire Marionnet*, François Lejeune, Cécile Pierrard, Françoise Bernerd
L'Oreal Research and Innovation, France
Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Biological Effects of Polychromatic Light: Compound Dose Response Functions for Cellular Survival

John Sutherland¹

¹*East Carolina University, USA*, ²*Brookhaven National Laboratory, USA*
Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15
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Biomedical Opportunities for New Porphyrin Nano-Architectures

Jonathan Lovell

University at Buffalo, USA

Sunday, June 24, 2012: Frontiers of Drug Delivery in Photomedicine - 4:00-5:30
04:20-04:40

Blue Iridescence in the Tropical Fern *Microsorium thailandicum*

Holly Gorton¹, Ariana Albano², Carolyn Wetzel²

¹*St. Mary's College of Maryland, USA*, ²*Smith College, USA*
Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Broader Photobiological Implications of Solid-State Lighting

Naomi Miller

Pacific NW Natl Lab, USA

Wednesday, June 27, 2012: Applied Photobiology - Lighting Health and Safety Issues - 2:15-4:15
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Cardiovascular Effects of Sunlight

Richard Weller

University of Edinburgh, UK

Tuesday, June 26, 2012: UVA/B Release of Nitric Oxide from Dermal Stores: Systemic Benefits - 1:15-3:15
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Cell Death Pathways after Lysosomal Photodamage

David Kessel¹, John J. Reiners, Jr²

¹*Wayne State University School of Medicine, USA*, ²*Wayne State University IEHS, USA*
Sunday, June 24, 2012: Mechanisms of Cell Death - 11:00-12:30
11:15-11:30

Cellular Modulation in Photodynamic Therapy

Robert Bissonnette

Innovaderm Research Inc., Canada

Tuesday, June 26, 2012: Modulation of Cellular Responses in PDT - 1:15-3:15
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Cellular Versus Vascular-Targeted PDT for Colon, Lung and Melanoma Tumors using Photostable Sulfonamide Bacteriochlorins

Janusz Dabrowski¹, Martyna Krzykawska², Luis Rocha³, Krystyna Urbanska², Mariette Pereira⁴, Grazyna Stochel¹, Luis G. Arnaut¹

¹*Faculty of Chemistry, Jagiellonian University, Poland*, ²*Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University, Poland*, ³*Bluepharma S.A., Portugal*, ⁴*Chemistry Department, University of Coimbra, Portugal*
Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45
04:05-04:15

Challenges in Developing Microendoscopy-Guided Photoimmunotherapy and Online Monitoring of Micrometastases
Bryan Spring*, Akilan Palanisami, Adnan Abu-Yousif, Xiang Zheng, R. Bryan Sears, Imran Rizvi, Zhiming Mai, Lawrence Mensah, Sriram Anbil, Tayyaba Hasan
Wellman Center for Photomedicine, USA
Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30
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Changes in Sun Exposure from Before to after a Diagnosis of Cutaneous Malignant Melanoma: Estimated by Developments in Serum Vitamin D, Skin Pigmentation and Interviews
Luise Winkel Idorn*, Peter Alshede Philipsen, Hans Christian Wulf
Bispebjerg Hospital, University of Copenhagen, Dermatological Research Department, Denmark
Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00
11:20-11:30

Characterization and Spectroscopic Properties of a Fluorogenic Ubiquinone/Ubiquinol Probe
Lana Greene*, Katerina Krumova, Gonzalo Cosa
McGill University, Canada
Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00
11:20-11:30

Characterization and Testing of Hemoglobin-Based, Folate-Targeted Photodynamic Therapy Agents
RoJenia Jones*, Marco Palomo, Muhammed Khan, Laura Donahue, Andrew Canning, Rachel Kooistra, David Crumine, Eric Schroeter, Stefan Kanzok, Ken Olsen
Loyola University Chicago, USA
Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Chronic UVA Exposure Causes Autophagic-Lysosomal Blockade in Dermal Fibroblasts by Dual Inactivation of Cathepsin B and L
Sarah D. Lamore*, Georg T. Wondrak
Pharmacology and Toxicology, College of Pharmacy and Arizona Cancer Center, University of Arizona, USA
Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15
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CLIC4 Involved in the Decreased Invasion of Cancer Cells Induced by Photodynamic Therapy
Chin-Tin Chen*¹, Pei-Chi Chiang²
¹*National Taiwan University, Taiwan*, ²*National Taiwan University, Taiwan*
Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Clinical and Histologic Results from Phase 2 Trial of Vascular Targeted Photodynamic Therapy for Localized Prostate Cancer
Jonathan Coleman
Memorial Sloan Kettering Cancer Center, USA
Monday, June 25, 2012: Cell or Vessel: A Debate on Effective Photobiology - 4:45-6:15
04:45-05:05

Collection, Validation and Analyses of Personal UVR Exposure
Peter A Philipsen
Department of Dermatology, Bispebjerg Hospital, Denmark
Monday, June 25, 2012: Impact of Climate and Environmental Factors on Personal UVR Exposure and Human Health - 2:15 - 4:15
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Combination of Vascular-Targeted Photodynamic Therapy (VTP) with Bortezomib Enhances Endothelial Cell (SVEC) Response to Photodynamic Therapy
Zhuzhu Li*, BEN CHEN
University of the Sciences in Philadelphia, USA
Monday, June 25, 2012: Microenvironment and Protein Kinase Signaling in Photobiology - 2:15-4:15
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Compared to UVC, UVB Irradiation Generates in Cellulo more Cyclobutane Pyrimidine Dimers at CC Dipyrimidine Sites
Nathalie Bastien¹, Jean-Philippe Therrien², Regen Drouin*¹
¹*Div Genet, FMHS, Univ de Sherbrooke, Canada*, ²*Stiefel Laboratories Inc., USA*
Sunday, June 24, 2012: DNA Damage - 2:00-3:30
02:20-02:40

Complications and Nuances of Quantifying Cancer Biomarker Expression in Vivo with Targeted Imaging Agents
Kenneth Tichauer*¹, Kimberley Samkoe¹, W. Spencer Klubben¹, Kristian Sexton¹, Tayyaba Hasan², Brian Pogue¹
¹*Dartmouth Collge, USA*, ²*Massachusetts General Hospital, USA*
Sunday, June 24, 2012: Frontiers of Drug Delivery in Photomedicine - 4:00-5:30
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Conditional Control of Protein Activity Using Optical Dimerizers
Chandra Tucker
University of Colorado Denver, USA
Sunday, June 24, 2012: Optogenetics and Biotechnological Applications of Biological Photoreceptors - 11:00-12:45
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Correlation of Ophthalmological Observations and Histopathological Findings of Phototoxicity in Preclinical Drug Development

Douglas Learn¹, Julia Baker², Mary Dougherty¹, Shawna Jackman¹, Alan Hoberman¹

¹Charles River Laboratories Preclinical Services, USA, ²Charles River Pathology Associates, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Cutaneous Leishmaniasis - An Attractive Target for Photodynamic Therapy

Claes D. Enk

Hadassah-Hebrew University Medical School, Israel

Monday, June 25, 2012: Photochemical Inactivation of Pathogens - Medical and Environmental Applications - 2:15-4:15
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Cytoprotective and Pro-growth Effects of Stress-induced Nitric Oxide in a Prostate Cancer Photodynamic Therapy Model

Reshma Bhowmick*, Albert Girotti

Medical College of Wisconsin, USA

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

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Dermoscopic, Histological and Immunohistochemical Evaluation of Cancerous Features in Acquired Melanocytic Nevi that have been Repeatedly Exposed to UVA or UVB

Piergiacomo Calzavara-Pinton*, Marina Venturini, Maria Teresa Rossi, Raffaella Sala

Dermatology Department, University of Brescia, Italy

Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00

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Designing Light-Dependent Molecular Tools to Study Cytoskeletal Dynamics and Regulation

Jason Yi*, Klaus Hahn

University of North Carolina at Chapel Hill, USA

Sunday, June 24, 2012: Optogenetics and Biotechnological Applications of Biological Photoreceptors - 11:00-12:45

12:30-12:45

Detecting PDT-Induced Immune Response by Real-Time FDG-PET in a Mouse Tumor Model

Nicole Cauchon¹, Eric Turcotte¹, Roger Lecomte¹, Haroutioun M. Hasséssian², Johan E. van Lier¹

¹Université de Sherbrooke, Canada, ²Université de Montréal, Canada

Monday, June 25, 2012: Photoimmunology and PDT-Induced Immunology - 8:30-10:30

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Development and Optimization of LOV-Based Photosensors

Kevin Gardner

UT Southwestern Medical Center, USA

Sunday, June 24, 2012: Optogenetics and Biotechnological Applications of Biological Photoreceptors - 11:00-12:45

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Development of Folate-Targeted Protein-Based Photodynamic Therapy Agents

Ken Olsen*, Rojenia Jones, Marco Palomo, Muhammed Khan, Laura Donahue, Andrew Canning, Rachel Kooistra, David Crumrine, Eric Schroeter, Stefan Kanzok

Loyola University, USA

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

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Development of Photodynamic Therapy for Parasitic Filarial Nematodes

Jeremy Foster¹, Ulysses Sallum², Barton Slatko¹, Tayyaba Hasan²

¹Molecular Parasitology Division, New England Biolabs, USA, ²Wellman Center for Photomedicine, Massachusetts General Hospital, USA

Monday, June 25, 2012: Photochemical Inactivation of Pathogens - Medical and Environmental Applications - 2:15-4:15

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Differential Therapeutic Response and Altered Activation of Cell Death Pathways in 2D Versus 3D Tumor Models

Iqbal Massodi¹, Jonathan Celli², Imran Rizvi¹, Tayyaba Hasan¹

¹Massachusetts General Hospital, USA, ²Harvard Medical School, USA

Sunday, June 24, 2012: Mechanisms of Cell Death - 11:00-12:30

Direct Visualization and Characterization of the Bone Marrow Hematopoietic Stem cell Niche In Vivo

Charles Lin

Massachusetts General Hospital, USA

Sunday, June 24, 2012: Kendric C. Smith Symposium: Emerging Light Technologies (Magnetomotive Imaging; Optogenetics; & Imaging Stem Cell Niche) - 9:00-10:30

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Directional Ultraviolet Radiometry on the Different Ground Coverage for Evaluation of Solar Ultraviolet Exposure to Humans

Shu Takeshita*, Masako Sasaki

Tokai University, Japan

Monday, June 25, 2012: Impact of Climate and Environmental Factors on Personal UVR Exposure and Human Health - 2:15 - 4:15

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Distinct Local Photodynamic Therapy Doses of Head and Neck Lesions in the Oral Cavity

Ulas Sunar*, Nestor Rigual, Daniel Rohrbach, Erin Tracy, Andrew Kowalechki, Kenneth Keymel, Michele Cooper, Heinz Baumann, Barbara Henderson

Roswell Park Cancer Institute, USA

Wednesday, June 27, 2012: Translational Photobiology: Bidirectionally Informed Therapeutic Parameters & Model Development - 2:15-4:15

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Disulfonated Meso-Tetraphenylporphyrin (TPPS2a) Potentiates the Cytotoxicity of saporin Both as a Monotherapy and in Combination with Mitoxantrone in Breast Cancer Cells

Derick Adigbli*, Jason Seebaluck, Marilena Loizidou, Alexander MacRobert

National Medical Laser Centre, UCL, UK

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Diverse Effects of UVB-Generated Oxidized Glycerophosphocholine Platelet-Activating Factor Agonists

Jeffrey Travers

Indiana University School of Medicine, USA

Monday, June 25, 2012: Photoimmunology and PDT-Induced Immunology - 8:30-10:30

08:30-08:50

Effect of 830 nm Illumination on Pancreatic Cancer Cells and Fibroblasts

Davy Vanderweyen*, Parth Patel, Samuel Elcik, Linda Jones

College of Charleston, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Effect of Hypothermia on the Intracellular PPIX and Porphyrinogen synthesis and the Resulting PDT Effect in Brain Tumour Cell Lines

Benjamin Lai¹, Carl Fisher², Carolyn Nui², Lothar Lilge^{*1}

¹University of Toronto, Canada, ²Ontario Cancer Institute, Canada

Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30

09:10-09:25

Effect of Methylation, Sequence Context, Protein Binding, and Nucleosome Position on DNA Cyclobutane Pyrimidine Dimer Formation and Deamination that Leads to C to T Mutations

Qian Song, Vincent Cannistraro, John-Stephen Taylor*

Washington University, USA

Sunday, June 24, 2012: Mechanisms of Mutagenesis - 4:00-5:30

05:00-05:30

Effect of Oxygen Stimulation on Dynamic Bioluminescence Pattern on Luminous Colony

Hajime Karatani^{*1}, Hajimu Kawakami²

¹Kyoto Institute of Technology, Japan, ²Ryukoku University, Japan

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Effect of Photochemically Prepared Collagen Protected Silver Nanoparticles on the Antiseptic Activity of Collagen Based Hydrogels for Tissue Regeneration

Emilio Alarcon^{*1}, Madeline J Simpson¹, Christopher W Noel¹, Chyan-Jang Lee⁴, Nadja Karamehmedovic², Mårten Skog³, Klas Udekwu², Juan C Scaiano¹, May Griffith³

¹University of Ottawa, Chemistry Department, Canada, ²Karolinska Institute, Swedish Medical Nanoscience Centre, Sweden, ³Linköping University, Department of Clinical and Experimental Medicine, Sweden, ⁴University of Ottawa Eye Institute, Canada

Sweden, ³Linköping University, Department of Clinical and Experimental Medicine, Sweden, ⁴University of Ottawa Eye Institute, Canada

Tuesday, June 26, 2012: Free Radical Chemistry and Applications - 3:45-5:45

04:45-05:05

Effect of Solar Radiation on Photosynthesis and Pigments in the Cyanobacterium, *Lyngbya Majuscula*

Joseph Nana Annan

UNIVERSITY OF EDUCATION, Ghana

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15

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Effect of Supernatants from UV-Irradiated Epidermal Cells on Mycobacterium Bovis BCG Vaccination in Guinea Pigs

Amminikutty Jeevan*, Cathryn Formichella, Vijaya R. Dirisala

Texas A& M Health Science Center, USA

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15

02:15-02:25

Effective Elimination of Bio-Hazards using Multifunctional Nanoparticles

Eon Pil Shin*, Jing Li, Yong-Rok Kim

Dept. Chemistry, Yonsei Univ., Republic of Korea

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Effective Tumor Imaging and Photodynamic Therapy (PDT) via FRET Minimization of Photosensitizer-Fluorophore Conjugates

Nadine James^{*1}, Penny Joshi¹, Tymish Ohulchanskyy², Paras Prasad², Janet Morgan¹, Ravindra K. Pandey¹

¹Roswell Park Cancer Institute, USA, ²State University of New York, USA
Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Effects of Blue Light Irradiation on Human Dermal Fibroblasts

Christian Opländer*¹, Frauke Werners¹, Leonie Taflinski Taflinski¹, Matthias Born², Norbert Pallua¹, Christoph V. Suschek³
¹Department of Plastic and Reconstructive Surgery, Hand Surgery, and Burn Center, Medical Faculty, RWTH Aachen University, Germany, ²Philips Technology Research Laboratories, Germany, ³Department of Trauma and Hand Surgery, Medical Faculty of the Heinrich-Heine-University, Germany
Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00
12:30-12:40

Effects of Photodynamic Therapy with Hypericin in the Treatment of Induced Periodontal Disease In Vivo. Preliminary Results

Livia Perussi*¹, Sâmara Tfaile¹, Bruno Segnini¹, Anderson Ribeiro³, Janice Perussi², Rosemary Adriana Marcantonio¹
¹Universidade Estadual Paulista, Brazil, ²Universidade de São Paulo, Brazil, ³Universidade Federal do ABC, Brazil
Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Enhanced Tumor Cell Death by Combination of 5-Fluorouracil with Aminolevulinic Acid-Based Photodynamic Therapy Involves the p53-MDM2 pathway in murine tumors

Sanjay Anand*¹, Nikoleta Brankov¹, Kishore Rollakanti¹, Tayyaba Hasan², Edward Maytin¹
¹Cleveland Clinic, USA, ²Harvard Medical School, USA
Tuesday, June 26, 2012: Modulation of Cellular Responses in PDT - 1:15-3:15
02:35-02:55

Enhanced Tumor Development in CHOP/gadd153 Knockout Mice after UVB Exposure Involves p53 Mutation and Down Regulation of p21 and MDM2

Sanjay Anand*, Kishore Rollakanti, Nikoleta Brankov, Edward Maytin
Cleveland Clinic, USA
Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15
04:05-04:15

Enhancement of Antimicrobial Photodynamic Therapy by Pseudohalides: Evidence for Direct Formation of Thiocyanate and Selenocyanate Radical Species

Tyler G. St. Denis*¹, Liyi Huang², Andrzej Zadlo³, Anna Kozinska³, Tadeusz Sarna³, Michael R. Hamblin⁴
¹Department of Chemistry, Columbia University, USA, ²Wellman Center for Photomedicine, Massachusetts General Hospital, USA, ³Department of Biophysics, Jagiellonian University, Poland, ⁴Department of Dermatology, Harvard Medical School, USA
Monday, June 25, 2012: Antimicrobial PDT - 4:45-6:15
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Enhancement of Topical PDT using Temperature Modifications and Other Physical Methods

Asta Juzeniene*, Johan Moan
The Norwegian Radium hospital, Oslo University Hospital, Norway
Tuesday, June 26, 2012: Modulation of Cellular Responses in PDT - 1:15-3:15
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Epigenetic Effects of UVB Irradiation

Christoph Lahtz, Sang-In Kim, Gerd Pfeifer*
City of Hope, USA
Monday, June 25, 2012: Epigenetics Effects of UVB Irradiation - 11:00-1:00
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Evaluation of Solar Radiation-Induced Photodamage and Apoptosis in a New Skin Tissue Model

Daniel Bacqueville*, Laure Duprat, Chloé Belles, Béatrice Guiraud, Sandy Mas, Sandrine Bessou-Touya, Hélène Duplan
Centre R&D; Pierre Fabre - Département Pharmacologie in vitro - Laboratoire de Pharmacologie tissulaire et Pharmacocinétique cutanée, France
Sunday, June 24, 2012: DNA Damage - 2:00-3:30
03:10-03:20

Excited-State Dynamics of Folic Acid and 6-Carboxypterin upon UVA Excitation

Carlos E. Crespo-Hernandez*, Huijuan Huang
Case Western Reserve University, USA
Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Expression of Inducible NO-synthase During UV-Exposure of Human Skin: Friend or Foe?

Victoria Kolb-Bachofen*¹, Christoph Suscheck², Nicole Fitzner¹
¹Immunobiology, Med. Fac., heinrich-Heine-University, Germany, ²Hand- u. Unfallchirurgie, Med. Fac. Heinrich-Heine-University, Germany
Tuesday, June 26, 2012: UVA/B Release of Nitric Oxide from Dermal Stores: Systemic Benefits - 1:15-3:15
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Facultative Pigmentation in Human Skin Induced with Ultraviolet Radiation or with Visible Light

Nikiforos Kollias
n/a, USA

Tuesday, June 26, 2012: Indoor Tanning: Previously Unasked Questions - 1:15-3:15
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Feasibility of Photodynamic Therapy for Treating Infected Abscesses

Constantine Haidaris*, Thomas Foster, Steven Gill, David Waldman, Edward Mathes, Timothy Curran
University of Rochester Medical Center, USA

Monday, June 25, 2012: Antimicrobial PDT - 4:45-6:15
04:45-05:05

Five Case Reports of Xeroderma Pigmentosum Group D Without Neurological Symptoms

Eiji Nakano*, Ryusuke Ono, Seiji Takeuchi, Chikako Nishigori
Kobe University, Japan

Monday, June 25, 2012: DNA Repair of Chromatin - 8:30-10:30
10:10-10:20

Fluorescence Imaging Guided Therapy using Near-Infrared Absorbing Photosensitizers

Nayan Patel*, Paula Pera, Joseph Missert, Janet Morgan, Ravindra K. Pandey
Roswell Park Cancer Institute, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Fluorescence-Guided Resection of Glioma: Challenges and Success in Translating Preclinical Systems to the OR

Samuel
University of Dundee, UK

Wednesday, June 27, 2012: Translational Photobiology: Bidirectionally Informed Therapeutic Parameters & Model Development - 2:15-4:15
02:55-03:15

From NO to Nitrite and Nitrate....and Back Again: Novel Insights into NO-Homeostasis and Therapeutics

Rakesh Patel
University of Alabama at Birmingham, USA

Tuesday, June 26, 2012: UVA/B Release of Nitric Oxide from Dermal Stores: Systemic Benefits - 1:15-3:15
01:15-01:45

Gender Differences Modulate Photoimmune Responses of 1,25 Dihydroxy Vitamin D

Wannit Tongkao-on*, Clare Gordon-Thomson, Anthony Ryan, Gary Halliday, Vivienne Reeve, Rebecca Mason
The University of Sydney, Australia

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Generating Singlet Oxygen Bubbles: Aiming for PDT and Wound Disinfection Application

Dorota Bartusik¹, David Aebisher¹, BiBi Ghafari², Alan Lyons², Alexander Greer*¹
¹*CUNY Brooklyn College, USA*, ²*CUNY Staten Island, USA*

Wednesday, June 27, 2012: Photoinduced Phenomena in Chemistry and Physics - 11:00-1:00
12:00-12:15

Generation of Reactive Oxygen Species Via Type I and Type II Photochemistry of WST11 in Different Microenvironments

Tomasz Oles¹, Iddo Pinkas², Avigdor Scherz², Tadeusz Sarna*¹
¹*Jagiellonian University, Poland*, ²*The Weizmann Institute of Science, Israel*

Monday, June 25, 2012: Cell or Vessel: A Debate on Effective Photobiology - 4:45-6:15
05:15-05:35

Genetic and Environmental Regulation of UV-Induced DNA Damage Repair

Yu-Ying He
University of Chicago, USA

Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15
03:15-03:35

Genotoxic Effect of UVA : From DNA Damage Formation to Impaired DNA Replication Machinery

Evelyne Sage*¹, Pierre-Marie Girard¹, Dany Graindorge¹, Stefania Francesconi¹, Jérôme Guitton²
¹*Institut Curie, CNRS, France*, ²*Centre Hospitalier, France*

Sunday, June 24, 2012: DNA Damage - 2:00-3:30
02:40-03:00

Ground UVR Measurements for the ICEPURE Project

John O'Hagan*¹, Katarzyna Baczynska¹, Andrew Pearson¹, Paul Eriksen²
¹*Health Protection Agency, UK*, ²*Danish Meteorological Institute, Denmark*

Monday, June 25, 2012: Impact of Climate and Environmental Factors on Personal UVR Exposure and Human Health - 2:15 - 4:15
02:25-02:45

Histone H3 lysine 79 Methylation and Nucleotide Excision Repair

Danielle Tatum, Shisheng Li*
Louisiana State University, USA

Monday, June 25, 2012: DNA Repair of Chromatin - 8:30-10:30
09:00-09:30

Holiday Studies: Behaviour, UVR-Exposure and Vitamin-D Formation Among Sun Worshippers and Skiers

Bibi Petersen*¹, Peter Philipsen¹, Elisabeth Thieden¹, Antony Young², Hans Christian Wulf¹

¹*Bispebjerg Hospital, Denmark*, ²*Kings College, UK*

Monday, June 25, 2012: Impact of Climate and Environmental Factors on Personal UVR Exposure and Human Health - 2:15 - 4:15
03:25-03:45

How Does Sunlight Protect us from Autoimmune Diseases?

Scott Byrne*¹, Sarah Leighton², LaiFong Kok², Gary Halliday¹

¹*Royal Prince Alfred Hospital, Australia*, ²*The University of Sydney, Australia*

Monday, June 25, 2012: Photoimmunology and PDT-Induced Immunology - 8:30-10:30
08:50-09:10

Hypericin as a Theranostic Agent for Malignant Brain Tumor

Kyuha Chong*, Kyungsun Choi, Junghwa Cha, Eun Chun Han, Taeyun Ku, Jonghee Yoon, Jungsul Lee, Ji Ho Park, Chulhee Choi
KAIST, Republic of Korea

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45
05:35-05:45

Hypericin-Loaded Solid Lipid Nanoparticles for Photodynamic Therapy use

Adriel M. Lima¹, Carine Dal Pizzol², Tania B. Creczynski-Pasa², Gislaine P. Andrade³, Anderson O. Ribeiro³, Janice R. Perussi*¹

¹*Universidade de São Paulo, Brazil*, ²*Universidade Federal de Santa Catarina, Brazil*, ³*Universidade Federal do ABC, Brazil*
Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

IARC's Estimate of Melanoma Risk from Sunbed use in Young Adults

David Hoel

Medical University of South Carolina, USA

Tuesday, June 26, 2012: Indoor Tanning: Previously Unasked Questions - 1:15-3:15
02:00-02:15

Image-Based Photosensitizer Uptake, Localization, and Photobleaching (iPULP) Assay: a Theranostic Tool for Informed Optimization of PDT Parameters

Michael Glidden*¹, Iqbal Massodi¹, Jonathan Celli², Tayyaba Hasan¹

¹*Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, USA*, ²*University of Massachusetts - Boston, USA*

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Imaging and Treating Hypoxic Tumor Cell Populations

Conor Evans

Massachusetts General Hospital, USA

Monday, June 25, 2012: Oxygen Effects and New Optical Probes - 11:00-1:00
12:25-12:45

Imaging Chemistry at the Single Molecule Level

Gonzalo Cosa

Department of Chemistry, McGill University, Canada

Tuesday, June 26, 2012: New Investigator Award Lecture - 8:30-9:30
08:40-09:30

Impact of Chromatin Structure on Accessibility to DNA Repair Enzymes

Michael Smerdon*, Mingrui Duan, Peng Mao

Washington State University, USA

Monday, June 25, 2012: DNA Repair of Chromatin - 8:30-10:30
08:30-09:00

Improved Bowel Repair by Light-Activated Sealing of Anastomotic Site

Prabhu Senthil-Kumar*¹, Tao Ni², Mark Randolph¹, George Velmahos³, Irene Kochevar⁴, Robert Redmond⁴

¹*Department of Surgery, Massachusetts General Hospital, USA*, ²*Department of Burns and Plastic Surgery, No.3 People's Hospital, and Institute of Traumatic Medicine; School of Medicine, Shanghai Jiao Tong University, China*, ³*Division of Trauma, Emergency Surgery and Surgical Critical Care, Department of Surgery, Massachusetts General Hospital, USA*, ⁴*Wellman Center for Photomedicine, Harvard Medical School, Massachusetts General Hospital, USA*

Tuesday, June 26, 2012: Free Radical Chemistry and Applications - 3:45-5:45
05:25-05:45

In Vitro Comparative Study Between the Photosensitizers Photofrin®, Temoporfin and a Sulfonamide Bacteriochlorin for Photodynamic Therapy of Cancer

Luís B. Rocha*¹, Artur R. Abreu², Luís G. Arnaut², Sérgio Simões³

¹*Luzitin, SA, Portugal*, ²*Chemistry Department, University of Coimbra, Portugal*, ³*Bluepharma, SA, Portugal*

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

In Vitro Photodynamic Inactivation of Candida Species and Mouse Fibroblasts with Phenothiazinium Photosensitisers and red Light

Gabriela Rodrigues¹, Marcelo Dias-Baruffi¹, Natalie Holman², Mark Wainwright², Gilberto Braga*¹

¹Universidade de São Paulo, Brazil, ²Liverpool John Moores University, UK

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

In vitro Structure Activity Relationship (SAR) of Positional Isomers Related to Near Infra-Red Bacteriopurpurinimide

Aimee Marko*¹, Penny Joshi¹, Paula Pera¹, Tymish Ohulchanskyy², Jant Morgan², Ravindra K Pandey¹

¹Rowell Park Cancer Institute, USA, ²State University of New York, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

In Vivo Measurement of PpIX Delayed Fluorescence Lifetime to Monitor Tissue Oxygen During Photodynamic Therapy

Fillippo Piffaretti, Anna-Maria Novello, Rajendran Senthilkumar, Eddy Forte, Cedric Paulou, Hubert van den Bergh, Patrycja Nowak-Sliwinska*, Georges Wagnières

Swiss Federal Institute of Technology (EPFL), Switzerland

Monday, June 25, 2012: Oxygen Effects and New Optical Probes - 11:00-1:00

12:50-01:00

In Vivo Near Infrared Fluorescence Imaging of Efficient Systemic siRNA Delivery with HDL-Mimicking Peptide Lipid Nanoparticles

Qiaoya Lin*¹, Juan Chen¹, Zhihong Zhang³, Gang Zheng²

¹Campbell Family Cancer Research Institute and Ontario Cancer Institute, University Health Network, Canada, ²Department of Medical Biophysics, University of Toronto, Canada, ³Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics-Huazhong University of Science & Technology, China

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part II - 2:00-3:30

03:00-03:10

Indoor Tanning Equipment 2012 Versus 1992: Improved Salon Controls That Changed an Industry

Greg Henson

Henson, Heartland Tanning, USA

Tuesday, June 26, 2012: Indoor Tanning: Previously Unasked Questions - 1:15-3:15

01:30-01:45

Indoor Tanning Salon Operation and Management 2012 versus 1992: Improved Salon Controls That Changed an Industry

Rob Quinn

Indoor Tanning Association, United States Minor Outlying Islands

Tuesday, June 26, 2012: Indoor Tanning: Previously Unasked Questions - 1:15-3:15

01:45-02:00

Induction of Anti-Tumor Immune Response after PDT with Sulfonamide Bacteriochlorins

Luis Arnaut*¹, Luis Rocha², Janusz Dabrowski³, Mariette Pereira¹, Raquel Saavedra¹

¹University of Coimbra, Portugal, ²Luzitin SA, Portugal, ³Jagiellonian University, Poland

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

03:55-04:05

Integration of Physical and Stromal Influences with 3D Tumor Models to Inform PDT-based Combination Regimens

Imran Rizvi*¹, Jonathan Celli¹, Umut Gurkan², Nermina Alagic¹, Savas Tasoglu², Sriram Anbil¹, Iqbal Massodi¹, Michael Glidden¹, Utkan Demirci², Tayyaba Hasan¹

¹Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, USA, ²Bio-Acoustic-MEMS Laboratory, Brigham and Women's Hospital, Harvard Medical School, USA

Wednesday, June 27, 2012: Translational Photobiology: Bidirectionally Informed Therapeutic Parameters & Model Development - 2:15-4:15

02:35-02:55

Investigating the Delivery of m-THPC Incorporated in Pegylated PLGA Nanoparticles for In Vivo PDT

Melissa Bovis*¹, Josephine Woodhams¹, Matija Rojnik¹, Petra Kocbek¹, Janko Kos¹, Marilena Loizidou¹, Stephen Bown¹, Alexander¹

¹University College London, UK, ²University of Ljubljana, Slovenia

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part II - 2:00-3:30

02:40-02:50

Lasers in Dermatology

Fernanda H. Sakamoto*¹, Apostolos G. Doukas¹, William A. Farinelli¹, Zeina Tannous¹, Michelle Shinn², Steve Benson², Gwyn P. Williams², Joseph F. Gubeli III², H. Frederick Dylla², R. Rox Anderson¹, William F. Lewis¹

¹Wellman Center for Photomedicine, Massachusetts General Hospital, Harvard Medical School, USA, ²Thomas Jefferson Laboratory, Free Electron Laser Facility, USA

Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00

11:36-11:54

Light Interaction With the Peripheral Nervous System: In Vivo and In Vitro Models of Nerve Injury and Neuropathic Pain

Juanita Anders

Uniformed Services University of the Health Sciences, USA

Sunday, June 24, 2012: Low Level Light Therapy - 2:00-3:30
02:20-02:40

Light-Mediated Non-Enzymatic NO-Formation and its Consequences for Human Physiology

Christoph V. Suschek

Department of Trauma and Hand Surgery, University Hospital of the Heinrich-Heine-University Düsseldorf, Moorenstr. 5, Germany

Tuesday, June 26, 2012: UVA/B Release of Nitric Oxide from Dermal Stores: Systemic Benefits - 1:15-3:15
02:15-02:45

LLLT Skin Preconditioning: Preliminary Results in a Porcine Model

Daniel Barolet²

¹McGill University, Canada, ²RoseLab Skin Optics Laboratory, Canada

Sunday, June 24, 2012: Low Level Light Therapy - 2:00-3:30
02:40-03:00

Longwave ultraviolet light (UVA) accelerates intrinsic aging by inducing progerin and by impairing shape and function of nuclear membranes.

Thomas M. Ruenger¹, Hirotaka Takeuchi²

¹Boston University School of Medicine Department of Dermatology, USA, ²Dermatological R&D; Skin Research Department, POLA CHEMICAL INDUSTRIES, INC., Japan

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15
02:35-02:45

Luminescence Enhancement of Singlet Oxygen in an Aqueous Environment: Effects of Surface Plasmons of Gold Nanoparticles

Beate Roeder^{*1}, Tobias Bornhuetter¹, Robert Fenger¹, Klaus Rademann¹, Volkhard May¹

¹Humboldt-Universitaet zu berlin, Germany, ²Humboldt-Universitaet zu Berlin, Germany, ³Humboldt-Universitaet zu berlin, Germany, ⁴Humboldt-Universitaet zu Berlin, Germany, ⁵Humboldt-Universitaet zu Berlin, Germany

Wednesday, June 27, 2012: Photoinduced Phenomena in Chemistry and Physics - 11:00-1:00
11:00-11:20

Magnetomotive Molecular Probes for Targeted Contrast Enhancement, Elastography, and Therapy

Stephen Boppart

University of Illinois at Urbana-Champaign, USA

Sunday, June 24, 2012: Kendric C. Smith Symposium: Emerging Light Technologies (Magnetomotive Imaging; Optogenetics; & Imaging Stem Cell Niche) - 9:00-10:30
09:15-09:35

Mast Cell-Dependent Neonatal Immune Tolerance and UV Melanoma

Heather Poetschke-Klug¹, Jesse Bahn¹, M. Raza Zaidi², Miriam Anver³, Agnieszka Wolnicka-Glubisz¹, Jesse Damsker¹, Stephanie Constant¹, Glenn Merlino², Edward De Fabo¹, Frances Noonan^{*1}

¹Department of Microbiology, Immunology and Tropical Medicine, The George Washington University, USA, ²Laboratory of Cancer Biology and Genetics, NCI, NIH, USA, ³Pathology/Histotechnology Laboratory, SAIC-Frederick, NCI, USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00
11:30-11:40

Measurement Of Light Exposure On The Retina For Photobiological Applications

Tongsheng Mou*, Liyan Song, Jianping Wang

Zhejiang University, China

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15
01:55-02:05

Mechanism of Light-Induced Dimerization in Neurospora LOV Protein Vivid

Anand Vaidya^{*1}, Chen-Hui Chen², Jay Dunlap², Jennifer Loros², Brian Crane¹

¹Cornell University, USA, ²Dartmouth Medical School, USA

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00
12:00-12:10

Mechanism of ROS Generation in Solution and in Cell Cultures

Elsa Silva^{*1}, Carlos Serpa¹, Brian Wett², Janusz Dabrowski³, Peter Ogilby², Luis Arnaut¹

¹Department of Chemistry, University of Coimbra, Portugal, ²Center for Oxygen Microscopy and Imaging, Department of Chemistry, Aarhus University, Denmark, ³Faculty of Chemistry, Jagiellonian University, Poland

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Mechanisms of Action of Transcranial Laser Therapy for Traumatic Brain Injury and Beyond

Michael Hamblin^{*3}, Weijun Xuan¹, Liyi Huang², Takahiro Ando¹, Qiuhe Wu¹

¹Massachusetts General Hospital, USA, ²Harvard Medical School, USA, ³Harvard-MIT Division of Health Science and Technology, USA

Sunday, June 24, 2012: Low Level Light Therapy - 2:00-3:30
02:00-02:20

Mechanisms of the Influence of UV Irradiation on Collagen

Nunu Metreveli¹, Louisa Namicheishvili¹, Eduard Chikvaidze², Anna Kuchava¹, Marika Chankvetadze¹

¹Iliia State University, Institute of Biophysics, Georgia, ²Javakhsishvili Tbilisi State University, Faculty of Exact and Natural Sciences, Georgia

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Mechanistic Studies of Photoinduced Bacterial Killing Using Tat-conjugated Quantum Dots

Elnaz Yaghini¹, Francesca Giuntini¹, Ludovic Bourre¹, Ian M. Eggleston¹, Michael Wilson¹, Alexander J. MacRobert¹

¹National Medical Laser Centre, University College London, UK, ²University of Bath, UK, ³National Medical Laser Centre, University College London, UK, ⁴University of Bath, UK, ⁵Eastman Dental Institute, University College London, UK,

⁶National Medical Laser Centre, University College London, UK

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Medical Image Processing with Thin Films of a Biomaterial

D.V.G.L.N. Rao

University of Massachusetts, USA

Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30

08:30-08:50

Metronomic Photodynamic Therapy in Mouse Brain Tumors Using Organic Light Emitting Diode

Han-Wen Guo¹, Liang-Ting Lin², Yi-Jang Lee², Meng-Huan Ho³, Wan-Ting Huang³, Shih-Hwa Chiou⁴, Hsing-Wen Wang^{*1}

¹Institute of Biophotonics, National Yang-Ming U, Taiwan, ²Department of Biomedical Imaging and Radiological Science, National Yang-Ming U., Taiwan, ³AUO, Taiwan, ⁴Taipei Veteran General Hospital, Taiwan

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00

12:30-12:40

Metronomic Photodynamic Therapy: A Model of 2-way Translation Between the Lab and the Clinic

Brian Wilson

Ontario Cancer Institute/University of Toronto, Canada

Wednesday, June 27, 2012: Translational Photobiology: Bidirectionally Informed Therapeutic Parameters & Model Development - 2:15-4:15

03:15-03:35

Microbial Photoreceptors - Essentials for Bacterial Lifestyle and Trendy Applications

Wolfgang Gaertner

Max-Planck-Institute for Bioinorganic Chemistry, Germany

Sunday, June 24, 2012: Optogenetics and Biotechnological Applications of Biological Photoreceptors - 11:00-12:45

11:00-11:15

Mitochondrial DNA Common Deletion in Human Eye: A Biomarker of Ocular Solar Exposure?

Sébastien P. Gendron*, Justin D. Mallet, Nathalie Bastien, Patrick J. Rochette

LOEX/CUO-Recherche, Centre de Recherche du CHA and Département d'Ophtalmologie, Université Laval, Canada

Sunday, June 24, 2012: DNA Damage - 2:00-3:30

03:00-03:10

Mitochondrial Iron Uptake Through Mitoferrin2 Sensitizes Human Head and Neck Cancer Cells to Photodynamic Therapy.

Hsin-I Hung, Justin Schwartz, Eduardo Maldonado, John Lemasters, Anna-Liisa Nieminen*

Medical University of South Carolina, USA

Sunday, June 24, 2012: Mechanisms of Cell Death - 11:00-12:30

11:30-11:45

Modifications of Glycoproteins in Bruch's Membrane Via Nitration, Glycation and Photoaddition: Model Systems for Inflammation and Aging in the Human Retina

Mai Thao¹, Elizabeth Gaillard¹, James Dillon²

¹Northern Illinois University, USA, ²Columbia University, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Modulating Photodynamic Therapy Responsiveness by Targeting the Tumor Microenvironment

Charles Gomer^{*2}, Angela Ferrario¹, Marian Luna¹, Sam Wong¹, Natalie Rucker¹

¹University of Southern California, USA, ²Children's Hospital Los Angeles, USA

Monday, June 25, 2012: Microenvironment and Protein Kinase Signaling in Photobiology - 2:15-4:15

02:58-03:17

Modulation of PI3K Pathway to Enhance PDT Response

Bin Chen*, Babasola Fateye, Zhuzhu Li

University of the Sciences, USA

Sunday, June 24, 2012: Vascular Effects of Light - 4:00-5:30

04:45-05:00

Molecular Consequences of Combining Photodynamic Therapy and Inhibition of Epidermal Growth Factor Receptor

Shannon Gallagher-Colombo*, Joann Miller, Amanda Maas, Shirron Carter, Min Yuan, Theresa Busch

University of Pennsylvania, USA

Wednesday, June 27, 2012: Translational Photobiology: Bidirectionally Informed Therapeutic Parameters & Model Development - 2:15-

4:15

03:48-04:01

Multifunctional Nanoparticles for Vascular-Targeted Interstitial Photodynamic Therapy of Brain Tumors Guided by Real-Time MRI

Céline Frochet¹, Vanderesse Régis³, Tillement Olivier⁴, Mordon Serge⁵, Bastogne Thierry², Barberi-Heyob Muriel²

¹LRGP CNRS-Lorraine University, France, ²CRAN-CAV CNRS-Lorraine University, France, ³LCPM CNRS-Lorraine University, France, ⁴LPCML CNRS-Lyon University, France, ⁵U703 INSERM, France

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part I - 11:00-12:30

11:40-12:00

Multimodal Nonlinear Optical Imaging of Breast Cancer Microenvironments and Gold Nanorods by Pulse-Shaping Fiber Supercontinuum

Yuan Liu*, Haohua Tu, Stefano Buolos, Eric Chaney, Catherine Murphy, Stephen Boppart

University of Illinois at Urbana-Champaign, USA

Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30

10:16-10:28

Multiplexed UVC-Induced Sequence-Dependent DNA Damage Detection in 96-Well Plates

Sindhu Nair*, Glen Loppnow

University of Alberta, Canada

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Nanocrystals as tunable Platforms for Chemical Reactions and Biological Imaging

Hedi Mattoussi

Chemistry and Biochemistry, USA

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part II - 2:00-3:30

02:20-02:40

Nanoparticles Enhance Sensitivity of Cancer Cells to Radiation

Petras Juzenas¹, Andrius Kleinauskas¹, Wei Chen², Ya-Ping Sun³, Manuel Coelho⁴

¹Radiumhospital, Oslo University Hospital, Norway, ²University of Texas at Arlington, USA, ³Clemson University, USA,

⁴University of Porto, Portugal

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part II - 2:00-3:30

03:10-03:20

Near Infra-Red Cyanine Dye Based Fluorophores for Tumor Imaging

Manivannan Ethirajan*, Nayan Patel, Penny Joshi, Ravindra K. Pandey

Roswell Park Cancer Institute, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

New Design of Targeted Photosensitizer Dimers for One-Photon and Two Photon Photodynamic Therapy

Guillaume Garcia*, Fabien Hammerer, Florent Poyer, Sylvain Achelle, Marie-Paule Teulade-Fichou, Philippe Maillard

Institut Curie, France

Sunday, June 24, 2012: Frontiers of Drug Delivery in Photomedicine - 4:00-5:30

05:00-05:10

Novel Fluorogenic Tocopherol Analogues for Visualizing Peroxyl Radicals in Model Lipid Membranes and in Live Cells

Katerina Krumova, Lana Greene, Robert Godin, Gonzalo Cosa*

McGill University, Canada

Tuesday, June 26, 2012: Free Radical Chemistry and Applications - 3:45-5:45

04:15-04:45

Nuclear Analysis of Translesion DNA Synthesis Across UV-Light DNA Damage in Human Cells

Sigal Shachar, Gilad Landan, Shira Amram, Amos Tanay, Zvi Livneh*

Weizmann Institute of Science, Israel

Sunday, June 24, 2012: Mechanisms of Mutagenesis - 4:00-5:30

04:30-05:00

Optical Dosimetry and Spectroscopy in Clinical Intraoperative PDT

Jarod Finlay

University of Pennsylvania, USA

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00

11:00-11:20

Optical Monitoring of the Immediate LLLT Biochemical Effects Using Cytochrome C as Target in ex vivo Model Systems

Lothar Lilge*, Daniel Huynh, Li Qian

University of Toronto, Canada

Sunday, June 24, 2012: Low Level Light Therapy - 2:00-3:30

03:00-03:20

Optimization and Evaluation of Nanophotoactivatable Liposomes for Combinatorial Drug Delivery to Pancreatic Cancer

Shifalika Tangutoori¹, Zhiming Mai¹, Bryan Sears^{*1}, Tayyaba Hasan¹

¹Massachusetts General Hospital, USA, ²Harvard Medical School, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Optimizing Array-Based Delivery of Photodynamic Therapy of Multiple Organs in a Large Animal Model

Simon Kimm¹, Tatum Tarin¹, Avigdor Scherz², Jonathan Coleman¹

¹Memorial Sloan-Kettering Cancer Center, USA, ²The Weizmann Institute, Israel

Monday, June 25, 2012: Cell or Vessel: A Debate on Effective Photobiology - 4:45-6:15

05:55-06:05

Optogenetics: Elucidating and Treating Neural Circuit Dysfunction with Light

Brian Chow

University of Pennsylvania, USA

Sunday, June 24, 2012: Kendric C. Smith Symposium: Emerging Light Technologies (Magnetomotive Imaging; Optogenetics; & Imaging Stem Cell Niche) - 9:00-10:30

09:35-09:55

Optogenetics: Tools for Controlling Neural Circuits

Yongku Cho*, Edward

MIT, USA

Sunday, June 24, 2012: Optogenetics and Biotechnological Applications of Biological Photoreceptors - 11:00-12:45

11:55-12:15

Overexpression and Functional Characterization of Two Members of the photolyase-Cryptochrome Family from the UV-Resistant Gamma-Proteobacteria, Acinetobacter sp. Ver3

Virginia Helena Albarracin¹, Gopal Pathak¹, Lorena Valle³, Claudio Borsarelli³, Maria Eugenia Farias², Wolfgang Gärtner¹

¹Max-Planck Institute for Bioinorganic Chemistry, Germany, ²Lab of Microbial Research on Andean Lakes-PROIMI-CONICET, Argentina, ³Laboratorio de Cinética y Fotoquímica (LACIFO) Facultad de Agronomía y Agroindustrias Universidad Nacional de Santiago del Estero, Argentina, ⁴Facultad de Ciencias Naturales e IML, Universidad Nacional de Tucumán, Argentina

Tuesday, June 26, 2012: Photobiology of Extremophiles - 3:45-5:45

05:15-05:45

Oxygen and Nitroxide Radicals Drive Tumor Ablation by Vascular Targeted Photodynamic Therapy with Tookad®-Soluble

Avigdor Scherz*, Yoram

Weizmann Institute, Israel

Monday, June 25, 2012: Cell or Vessel: A Debate on Effective Photobiology - 4:45-6:15

05:35-05:55

Paradoxical Potentiation of Antimicrobial Photoinactivation by Sodium Azide using Seven Phenothiazinium Photosensitizers

Kamola Kasimova², Liyi Huang¹, Andrzej Zadło¹, Tadeusz Sama¹, Rasul Sadykov³, Michael R. Hamblin¹

¹Wellman Center for Photomedicine, Massachusetts General Hospital, USA, ²Republican Research Center of Emergency

Medicine of Uzbekistan, Uzbekistan, ³Tashkent Medical Academy, Uzbekistan

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

03:45-03:55

PDT-Induced Fluorescence Yield and Lifetime Changes Assessed by Time-gated Fluorescence Tomography

Ulas Sunar*, Weirong Mo, Daniel Rohrbach

Roswell Park Cancer Institute, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

PEGylated Dual-Effect Liposome Containing Cisplatin and Ce6 Enhances the Therapeutic Effect in C-26 Tumor Model

Po-Chun Peng¹, Hsiung-Fei Chien², Tsuimin Tsai³, Chin-Tin Chen¹

¹Department of Biochemical Science and Technology, College of Life Science, National Taiwan University, Taiwan,

²Department of Surgery, National Taiwan University College of Medicine, Taiwan, ³Graduate Institute of Biomedical

Materials and Engineering, Graduate School of Dentistry, Taipei Medical University, Taiwan

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Penetration of Optical Radiation into Tissue

Mantas Grigalavicius¹, Børge Hamre², Jakob Stamnes², Asta Juzeniene¹, Vladimir Iani¹, Johan Moan¹

¹Department of Radiation Biology, The Norwegian Radium Hospital, Norway, ²Department of Physics and Technology, University of Bergen, Norway

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Perspectives of off label MAL-PDT

Piergiacomo Calzavara-Pinton*, Marina Venturini, Raffaella Sala, Maria Teresa Rossi

Dermatology Department, University of Brescia, Italy

Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00

11:54-12:12

Pharmacologically Antagonising the CXCR4-CXCL12 Chemokine Pathway with AMD3100 Inhibits Sunlight-induced Skin Tumour Formation

Scott Byrne¹, Seri Sarchio², Gary Halliday¹

¹Royal Prince Alfred Hospital, Australia, ²The University of Sydney, Australia

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

11:00-11:10

Phosphorescence Quenching Technology for Oxygen Imaging

Sergei Vinogradov

University of Pennsylvania, USA

Monday, June 25, 2012: Oxygen Effects and New Optical Probes - 11:00-1:00

11:05-11:25

Photobiological Safety Assessments of Entertainment Lighting

John O'Hagan*, Marina Khazova

Health Protection Agency, UK

Wednesday, June 27, 2012: Applied Photobiology - Lighting Health and Safety Issues - 2:15-4:15

03:35-03:50

Photobiological Safety Evaluation of UV Fingernail Polish Curing Lamps

John C. Dowdy*, Robert M. Sayre

Rapid Precision Testing Laboratories, USA

Wednesday, June 27, 2012: Applied Photobiology - Lighting Health and Safety Issues - 2:15-4:15

03:50-04:05

Photobiological Safety Implications of the Revolution in Lighting

David Sliney

Consulting Medical Physicist, USA

Wednesday, June 27, 2012: Applied Photobiology - Lighting Health and Safety Issues - 2:15-4:15

02:15-02:35

Photobiological Safety of LEDs in Toys

John O'Hagan*, Michael Higlett, Marina Khazova

Health Protection Agency, UK

Wednesday, June 27, 2012: Applied Photobiology - Lighting Health and Safety Issues - 2:15-4:15

03:05-03:20

Photobleaching and Tissue Blood Oxygenation Measurements of ALA-Metronomic Photodynamic Therapy in Mouse Brain Tumors

Han-Wen Guo¹, Po-Hsiung Chen¹, Yei-San Hsieh², Hsing-Wen Wang*¹

¹Institute of Biophotonics, National Yang-Ming U, Taiwan, ²Tao-Yuan General Hospital, Department of Health, Taiwan

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Photochemical Crosslinking Stabilizes Protein Hydrogels for Cartilage Regeneration

Mark Omobono*¹, Mark Randolph¹, Xing Zhao¹, Robert Redmond²

¹Plastic Surgery Research Laboratory, Department of Surgery, Massachusetts General Hospital, USA, ²Wellman Center for Photomedicine, Harvard Medical School, Massachusetts General Hospital, USA

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

11:30-11:40

Photochemical Internalization. From Bench To Bedside With A Novel Technology For Site-Specific Drug Delivery

Kristian Berg*¹, Anette Weyergang¹, Ole-Jacob Norum¹, Colin Hopper², Michael G. Rosenblum³, Anders Høgset⁴, Pål K. Selbo¹

¹The Norwegian Radium Hospital, Oslo University Hospital, Norway, ²University College Hospital, UK, ³M.D. Anderson Cancer Center, USA, ⁴PCI Biotech, Norway

Wednesday, June 27, 2012: Kendric C Smith Innovation Lecture: Photochemical Internalization - 8:30-9:30

08:40:09:30

Photochemistry of 4 Nitrofluorathene Isomers

Salvador Gavaldá Corchado*, Rafael Arce Quintero

University of Puerto Rico-Río Piedras Campus, Puerto Rico

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

11:40-11:50

Photo-Crosslinking Corneal Collagen to Treat Keratoconus

Irene Kochevar*¹, Eri Verter¹, Daniel Cherfan¹, Thomas Gisel¹, Robert Redmond¹, Samir Melki²

¹Wellman Center for Photomedicine, Massachusetts General Hospital, USA, ²Boston Eye Group, USA

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

11:50-12:00

Photocrosslinking Proteins for Tissue Repair

Irene Kochevar*, Robert Redmond

Wellman Center for Photomedicine, Massachusetts General Hospital, USA

Tuesday, June 26, 2012: Free Radical Chemistry and Applications - 3:45-5:45

03:45-04:15

Photodegradation Mechanisms of 1-Nitropyrene, an Environmental Pollutant

Zulma I Garcia-Berrios*, Rafael Arce

University of Puerto Rico - Rio Piedras Campus, Puerto Rico

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Photodegradation of all-trans-Retinal Explains the Action Spectra of Acute Photodamage to the Retina

Malgorzata Rozanowska*¹, Anna Pawlak², Bartosz Rozanowski³

¹*School of Optometry and Vision Sciences, Cardiff University, UK*, ²*Department of Biophysics, Jagiellonian University, Poland*, ³*Department of Genetics and Cell Biology, Institute of Biology, Poland*

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

12:30-12:40

Photodynamic action of Anthraquinone at Ambient UV-R: A Mechanistic Study

Syed Faiz Mujtaba*, Ashish Dwivedi, Neera Yadav, Ratan Singh Ray

Indian Institute of Toxicology Research (IITR), India

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

12:40-12:50

Photodynamic Control of Malaria and Schistosomiasis Vectors In Infested Africa Swamps. Mahmoud H. Abdel-Kader Faculty of Pharmacy and Biotechnology, German University in Cairo, New Cairo City, Egypt

Mahmoud Abdelkader

German University In Cairo, Egypt

Monday, June 25, 2012: Photochemical Inactivation of Pathogens - Medical and Environmental Applications - 2:15-4:15

03:45-04:15

Photodynamic Drug Delivery

Hubert van den Bergh*¹, Elodie Debefve¹, Yabo Wang², Thorsten Krüger², Hans-Bit Ris²

¹*Medical Photonics Group, Swiss Federal Institute of Technology (EPFL), Switzerland*, ²*Thorassic Surgery, University Hospital (CHUV), Switzerland*

Sunday, June 24, 2012: Frontiers of Drug Delivery in Photomedicine - 4:00-5:30

04:00-04:20

Photodynamic Processes as a Tool for the Prevention and Control of Vector-Borne Diseases

Giulio Jori

Department of Biology, University of Padova, Italy

Monday, June 25, 2012: Photochemical Inactivation of Pathogens - Medical and Environmental Applications - 2:15-4:15

02:45-03:15

Photodynamic Therapy and Anti Tumor Immunity

Sandra Gollnick*, Craig Brackett

Roswell Park Cancer Institute, USA

Monday, June 25, 2012: Photoimmunology and PDT-Induced Immunology - 8:30-10:30

09:50-10:10

Photodynamic Therapy Induced Chromatin Modification Involved in the Increased Expression of COX-2

Yi-Chen Tsai*¹, Tsuimin Tsai², Chin-Tin Chen¹

¹*Department of Biochemical Science and Technology, College of Life Science, National Taiwan University, Taiwan*, ²*Graduate Institute of Biomedical Materials and Engineering, Graduate School of Dentistry, Taipei Medical University, Taiwan*

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Photodynamic Therapy Light Dose Verification

Michael Jermyn*¹, Brian Pogue¹, Hamid Dehghani¹, Matthew Huggett³, Stephen Pereira³, Tayyaba Hasan²

¹*Thayer Engineering, Dartmouth College, USA*, ²*Wellman Center for Photomedicine, MGH, USA*, ³*Institute of Hepatology, UCL, UK*

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00

12:50-01:00

Photodynamic Therapy: A Bridge Between Photobiology, Photochemistry and Technology

Tayyaba Hasan

Wellman Center for Photomedicine, USA

Tuesday, June 26, 2012: President's Lecture - 11:00-12:00

11:10-12:00

Photodynamic Therapy-Induce Immunosuppression in Humans

Diona Damian*, Sula Thanos, Gary Halliday

University of Sydney, Australia

Monday, June 25, 2012: Photoimmunology and PDT-Induced Immunology - 8:30-10:30

09:30-09:50

Photoimmunology in the Age of Biologics

Stefan Beissert

University Hospital Carl Gustav Carus, Germany

Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00

11:18-11:36

Photooxidation of Hydrazones for the Photorelease of N-Nitrosoamines

Ashwini Ghogare, Alvaro Castillo, Benjamin Rudshiteyn, Nahed Sawwan, Alexander Greer*

Brooklyn College of CUNY, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Photophysical Properties of Pheophorbide-a Derivatives and Their Photodynamic Therapeutic Effects on a Cancer cell line in-vitro

Kang-Kyun Wang*, Bong-Jin Kim, Yong-Rok Kim

Dept. Chemistry, Yonsei Univ., Republic of Korea

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Photopolymerization in Tissue Engineering and Controlling Stem Cell Behavior

Murat Guvendiren*, Jason Burdick

University of Pennsylvania, USA

Tuesday, June 26, 2012: Free Radical Chemistry and Applications - 3:45-5:45

05:05-05:25

Photosensitizer Quantification with Fluorescence Ratio Method

Pooja Patel*¹, Alexandra Gotshall¹, Linda Jones¹, Nathan Towles¹, Herbert Wolfson², Michael Wallace²

¹*College of Charleston, USA*, ²*Mayo Clinic, USA*

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Photostability of Epigallocatechin-3-gallate in Topical Formulations: Effect of Sunscreen and Antioxidant Agents

Santo Scalia*¹, Anna Bianchi¹, Nicola Marchetti²

¹*Department of Pharmaceutical Sciences, University of Ferrara, Italy*, ²*Department of Chemistry, University of Ferrara, Italy*

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Photosynthesis in Extreme Environments: Hot, Cold, Salty, Deep and Dark

Robert Blankenship

Washington Univ. in St. Louis, USA

Tuesday, June 26, 2012: Photobiology of Extremophiles - 3:45-5:45

04:45-05:15

Photosynthetic Activity Under UVR Exposure and Nutrient Addition of Phytoplankton from Coastal Sites off São Francisco do Sul, Santa Catarina (Southern Brazil)

Gilmar Sidnei Erzinger*¹, Virginia Villafaña², Sebastian M. Strauch², Carla Keite Machado¹, Eduardo Walter Helbling²

¹*Universidade da Região de Joinville - Univille, Brazil*, ²*Estación de Fotobiología Playa Unión, Argentina*

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Phototherapy - Decline or Revival

Bernhard Ortel

University of Chicago, United States Minor Outlying Islands

Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00

11:00-11:18

Photothermal Effect in Vascular Targeted Photodynamic Therapy

Tatum Tarin*¹, Simon Kimm¹, Avigdor Scherz², Jonathan Coleman¹

¹*Memorial Sloan-Kettering Cancer Center, USA*, ²*The Weizmann Institute, Israel*

Wednesday, June 27, 2012: Translational Photobiology: Bidirectionally Informed Therapeutic Parameters & Model Development - 2:15-4:15

04:01-04:14

Photothermal Microspectroscopy with Femtosecond Lasers, Quantum Cascade Lasers on Plasmonic Metamaterials and Biological systems

Shyamsunder Erramilli

Boston University, USA

Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30

08:50-09:10

Phthalocyanine-Peptide Conjugates: Receptor-Targeted Bi-Functional Agents for Imaging and Photodynamic Therapy

Nicole Cauchon*¹, Elena Ranyuk¹, Brigitte Guérin¹, Klaus Klarskov², Johan E. van Lier¹

¹*Université de Sherbrooke, Canada*, ²*Université de Sherbrooke, Canada*

Sunday, June 24, 2012: Frontiers of Drug Delivery in Photomedicine - 4:00-5:30

05:10-05:20

Physiological Response of hTERT-RPE Cells in Vitro Following Illumination with Low Levels of Red Light

Jeffrey Wigle*¹, Larry Estlack², Kurt Schuster³, Donna Clarkson³, Adam Schenk¹, Benjamin Rockwell¹

¹*US Air Force Research Laboratory, USA*, ²*Conceptual MindWorks, Inc., USA*, ³*TASC, Inc., USA*

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Plasmonic Biomaterials for Drug Delivery and Laser Tissue Welding

Huang-Chiao Huang*, Alisha Nanda, Candace Rae Walker, Kaushal Rege

Arizona State University, USA

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part II - 2:00-3:30

02:00-02:20

Platelet Activating Factor, Mast Cells and Immune Suppression

Stephen Ullrich

Univ of Texas, MD Anderson Cancer Center, USA

Monday, June 25, 2012: Photoimmunology and PDT-Induced Immunology - 8:30-10:30

09:10-09:30

Porphysome Nanotechnology: A New Paradigm to Detect, Decide and Destroy Cancer

Gang Zheng

University of Toronto, Canada

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part I - 11:00-12:30

11:00-11:20

Porphysomes: Intrinsically Multifunctional Nanovesicles for Photothermal Therapy

Cheng Jin*, Jonathan F. Lovell, Gang Zheng

University of Toronto, Canada

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part I - 11:00-12:30

12:10-12:20

Porphysomes: Multifunctional Nanovesicles to Treat Hypoxic Tumour by Photothermal Therapy

Cheng Jin¹, Jonathan F. Lovell¹, Gang Zheng²

¹*University of Toronto, Canada*, ²*Ontario Institute for Cancer Research, Canada*

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part II - 2:00-3:30

02:50-03:00

Potential for Using Sensitizer-free Photodynamic Treatment to Inhibit Phototrophic Biofilms on Historic Monuments

Paul Hsieh¹, Jens, Z. Pedersen², Patrizia Albertano¹

¹*Laboratory of Biology of Algae, Department of Biology, University of Rome, Tor Vergata, Italy*, ²*EPR Laboratory, Department of Biology, University of Rome, Tor Vergata, Italy*

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15

01:45-01:55

Potential Risk of Beta-Carotene Supplementation as a Mean to Reduce Skin Cancer Incidence

Homer Black

Baylor College of Medicine, USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

11:10-11:20

Preferential Repair of UV-Induced Cyclobutane Pyrimidine Dimers in the Human Corneal Epithelium

Justin D. Mallet*, Nathalie Bastien, Patrick J. Rochette

LOEX/CUO-Recherche, Centre de Recherche du CHA and Département d'Ophtalmologie, Université Laval, Canada

Monday, June 25, 2012: DNA Repair of Chromatin - 8:30-10:30

10:00-10:10

Probe - Superresolution Dye Duality: Intrinsic Photophysical Processes of Bodipy Cores Uncovered at the Single Molecule Level

Robert Godin*, Hsiao-Wei Liu, Katerina Krumova, Gonzalo Cosa

Department of Chemistry, McGill University, Canada

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Progress with CIE and IEC Photobiological Lamp Safety Standards

Werner Horak

Siemens AG, Germany

Wednesday, June 27, 2012: Applied Photobiology - Lighting Health and Safety Issues - 2:15-4:15

02:50-03:05

Radicals and Photocages

Anna Gudmundsdottir

University of Cincinnati, USA

Wednesday, June 27, 2012: Photoinduced Phenomena in Chemistry and Physics - 11:00-1:00

11:40-12:00

Rational Design and Synthesis of Phthalocyanines for Photodynamic Therapy

Fabienne Dumoulin*, Vefa Ahsen

Gebze Institute of Technology, Turkey

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

04:55-05:05

Relationship Between Personal UVR Exposure and Biological Outcomes in Field and Laboratory Studies

Antony Young

Kings College London, UK

Monday, June 25, 2012: Impact of Climate and Environmental Factors on Personal UVR Exposure and Human Health - 2:15 - 4:15

03:55-04:15

Role of *C. albicans* Heat Shock Protein 70 (HSP70) to Photodynamic Therapy

Fernanda Pereira Gonzales*, Tim Maisch

University Hospital Regensburg, Germany

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Role of Ceramide Synthase in Cell Death after PDT

Duska Separovic¹, Paul Breen¹, Nicholas Joseph¹, Jacek Bielawski², Tatyana Gudz²

¹Wayne State University, USA, ²Medical University of South Carolina, USA

Tuesday, June 26, 2012: Sphingolipids Mediators in Photobiology - 3:45-5:45

05:15-05:30

Role of miRNAs in Malignant Melanoma

Anja Bosserhoff

University of Regensburg, Germany

Monday, June 25, 2012: Epigenetics Effects of UVB Irradiation - 11:00-1:00

11:40-12:20

Role of Mitochondrial ROS in the Spatio-Temporal Autophagic Degradation of Oxidatively Damaged Organelles After Endoplasmic Reticulum-Initiated Photodynamic Stress

Noemi Rubio¹, Isabelle Coupienne¹, Emmanuel Di Valentin¹, Ingeborg Heirman², Johan Grooten², Jacques Piette¹, Patrizia Agostinis³

¹University of Liège, Belgium, ²Ghent University, Belgium, ³KU Leuven, Belgium

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15

01:35-01:45

Role of PDT-Mediated Disruption of Autophagy in the Efficacy of Treatment of NVP-BE7235-Resistant Cells

Babasola Fateye*, Bin Chen

University of the Sciences in Philadelphia, USA

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

05:25-05:35

Role of Survivin and HSP-90 in Cellular Responses to PDT

Charles Gomer¹, Marian Luna², Angela Ferrario²

¹University of Southern California, USA, ²Children's Hospital Los Angeles, USA

Tuesday, June 26, 2012: Modulation of Cellular Responses in PDT - 1:15-3:15

01:55-02:15

Routes to Achieving "Bright" Near-Infrared Fluorescing Nanoparticles: Controlling Chromophore Aggregation

Ragini Jetty¹, Yuriy Bandera¹, Venkat Ramshesh², Hsin-I Hung², Anna-Liisa Nieminen², John Lemasters², Stephen Foulger¹

¹Clemson University, USA, ²Medical University of South Carolina, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Selective Photodynamic Occlusion of Lymphatic Vessels

Patrycja Nowak-Sliwinska¹, Witek W Kilarski², Melody A Swartz²

¹Urology Department, University Hospital (CHUV), Switzerland, ²Laboratory of Lymphatic and Cancer Bioengineering (LLCB), Swiss Federal Institute of Technology (EPFL), Switzerland

Sunday, June 24, 2012: Vascular Effects of Light - 4:00-5:30

04:30-04:45

Sensitizer Photorelease Behavior of a Fiber-Optic Implement Bearing a Fluorinated Probe Tip

Dorota Bartusik, David Aebisher, Goutam Ghosh, Mihaela Minnis, Alexander Greer*

CUNY Brooklyn College, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Serosal PDT: Lessons from the Clinic and the Laboratory for the Treatment of Pleural and Peritoneal Malignancies

Keith Cengel*, Joseph Friedberg, Arjun Yodh, Douglas Fraker, Theresa Busch, Stephen Hahn, Eli Glatstein

University of Pennsylvania, USA

Wednesday, June 27, 2012: Translational Photobiology: Bidirectionally Informed Therapeutic Parameters & Model Development - 2:15-4:15

02:15-02:35

Shedding some Light on the Binding of Fluoroquinolones to Proteins: Importance of Inner Filter Effect in Fluorescence Quenching Studies.

Francisco Bosca

Consejo Superior de Investigaciones Cientificas / Universidad Politecnica de Valencia, Spain

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

12:20-12:30

Signaling Events Associated with Stress Upregulation of Cytoprotective Nitric Oxide Synthase in a Photodynamic Therapy Model

Reshma Bhowmick, Albert Girotti*

Medical College of Wisconsin, USA

Monday, June 25, 2012: Microenvironment and Protein Kinase Signaling in Photobiology - 2:15-4:15

03:36-03:55

Simple Methods for DNA and RNA Damage Detection

Glen Loppnow

University of Alberta, Canada

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Singlet Oxygen in Mammalian Cells: Controlling its Photosensitized Production and Monitoring its Removal

Peter R. Ogilby

Aarhus University, Denmark

Monday, June 25, 2012: Oxygen Effects and New Optical Probes - 11:00-1:00

12:05-12:25

Singlet Oxygen Luminescence Originating from Polymeric Matrices

Ariane Felgenträger*, Johannes Regensburger, Tim Maisch, Lisa De Jonge, Wolfgang Bäuml

University of Regensburg, Germany

Wednesday, June 27, 2012: Photoinduced Phenomena in Chemistry and Physics - 11:00-1:00

12:30-12:45

Singlet Oxygen: The Scarlet Pimpernel of PDT Dosimetry

Brian Wilson

Ontario Cancer Institute/University of Toronto, Canada

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00

12:00-12:20

Skin Tumors Induced by Narrowband UVB Have Higher Frequency of p53 Mutations than Tumors Induced by Broadband UVB Independent of the OGG1 Genotype

Flandiana Yogiandi¹, Makoto Kunisada¹, Ryusuke Ono¹, Kunihiro Sakumi², Yusaku Nakabeppu², Chikako Nishigori¹

¹Division of Dermatology, Department of Internal Related, Graduate School of Medicine, Kobe University, Japan, ²Division of Neurofunctional Genomics, Medical Institute of Bioregulation, Kyushu University, Japan

Wednesday, June 27, 2012: Light Effects in Dermatology - 11:00-1:00

12:40-12:50

Solar Radiation Melanomagenesis: Development of a UV-Mutator Phenotype

William Kaufmann

UNC-CH, USA

Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15

02:35-02:55

Solid-state Lighting for the UV Photosensitive Patient

Robert M. Sayre¹, Maureen Poh-Fitzpatrick¹, Victoria P. Werth², John C. Dowdy³, David H. Sliney⁴, Dee L. Sayre³

¹Division of Dermatology, Department of Medicine, University of Tennessee Health Science Center, USA, ²University of Pennsylvania, USA, ³Rapid Precision Testing Laboratories, USA, ⁴Consulting Medical Physicist, USA

Wednesday, June 27, 2012: Applied Photobiology - Lighting Health and Safety Issues - 2:15-4:15

03:20-03:35

Some Might Like it Cold: Antarctic UV Photobiology

Wade Jeffrey

University of West Florida, USA

Tuesday, June 26, 2012: Photobiology of Extremophiles - 3:45-5:45

03:45-04:15

Sphingolipid Activity in Tumors Treated by Photodynamic Therapy and its Exploitation for Therapeutic Gain

Mladen Korbelik

British Columbia Cancer Agency, Canada

Tuesday, June 26, 2012: Sphingolipids Mediators in Photobiology - 3:45-5:45

05:30-05:45

Sphingomyelinases and Ceramide in Cell Regulation

Yusuf Hannun¹

¹MUSC, USA, ²Stony Brook University, USA

Tuesday, June 26, 2012: Sphingolipids Mediators in Photobiology - 3:45-5:45

03:45-04:15

Strand Displacement and Binary FRET-Based Fluorescent Gene Expression Imaging Agents for iNOS mRNA in vivo

Zhenghui Wang, John-Stephen Taylor*

Washington University, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Study on the Cytosolic Delivery Mechanism of HDL-Mimicking Peptide-Phospholipid Scaffold (HPPS) By Confocal Microscopy

Qiaoya Lin¹, Juan Chen¹, Zhihong Zhang³, Gang Zheng²

¹Campbell Family Cancer Research Institute and Ontario Cancer Institute, University Health Network, Canada, ²Department of Medical Biophysics, University of Toronto, Canada, ³Britton Chance Center for Biomedical Photonics, Wuhan National Laboratory for Optoelectronics-Huazhong University of Science & Technology, China

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Sunscreens Tested Outdoors in The 1980s and 2011

Robert M. Sayre*¹, Dennis L. Lott², John C. Dowdy¹, Sherriel Wallace²

¹Rapid Percision Testing Laboratories, USA, ²Florida Suncare Testing, Inc., USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

12:50-01:00

Suppression of Contact Hypersensitivity Induced by Psoralen Photooxidation Products is Realized Through Depression of Proliferative Activity and Alteration in the Cytokine Balance of Lymphocytes

Iliia Pyatnitskiy*, Svetlana Pavlova, Diana Albegova, Ludmila Kozir, Alexander Potapenko, Alla Kyagova

Russian National Research Medical University named after N.I. Pirogov, Russia

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Surface Vimentin a Novel Target for Drug Delivery to the Tumor Endothelium

Arjan Griffioen*, Patrycja Nowak-Sliwinska, Judy van Beijnum

Angiogenesis Laboratory, The Netherlands

Sunday, June 24, 2012: Vascular Effects of Light - 4:00-5:30

04:00-04:15

Susceptibilities of the Dermatophytes Trichophyton mentagrophytes and T. Rubrum Microconidia to Photodynamic Antimicrobial Chemotherapy with Phenothiazinium Photosensitizers and Red Light

Gabriela Rodrigues¹, Liana Ferreira¹, Mark Wainwright², Gilberto Braga*¹

¹Universidade de São Paulo, Brazil, ²Liverpool John Moores University, UK

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Synthesis of a Photosensitizer for Photodynamic Therapy

Laura Donahue*, RoJenia Jones, Marco Palomo, Muhammed Khan, Andrew Canning, Rachel Kooistra, Ken Olsen, Eric

Schroeter, Stefan Kanzok, David Crumrine

Loyola University, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Synthesis, Photophysical and in-vitro Photodynamic Efficacy of Ketobacteriochlorins Derived from Ring-B and Ring-D Reduced Chlorins

Penny Joshi*, Manivannan Ethirajan, Avinash Srivatsan, Joseph Missert, Ravindra K. Pandey

Roswell Park Cancer Institute, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Synthetic, Bacteriophytochrome-Based Photoregulatory Systems

Min-Hyung Ryu, Jessica Siltberg-Liberles, Mark Gomelsky*

University of Wyoming, USA

Sunday, June 24, 2012: Optogenetics and Biotechnological Applications of Biological Photoreceptors - 11:00-12:45

11:15-11:35

Targeted PDT Combination Therapies with Receptor Tyrosine Kinases Inhibitors

Lawrence Mensah*, Imran Rizvi, Bryan Sears, Shifalika Tangutoori, Tayyaba Hasan

Harvard Medical School, Massachusetts General Hospital, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Targeted Photodynamic Cancer Therapy using Bio-Functionalised Nanoparticles

David Russell*, Girgis Obaid, Tanya Stuchinskaya

University of East Anglia, UK

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part I - 11:00-12:30

11:20-11:40

Targeting of Cancer Stem Cells by Photochemical Internalization

Pål Selbo*¹, Monica Bostad³, Marius Eng³, Svein Angel¹, Anette Weyergang¹, Anders Høgset², Kristian Berg¹

¹Oslo University Hospital, Norwegian Radium Hospital, Norway, ²PCI Biotech AS, Norway, ³Cancer Stem Cell Innovation Center, Norwegian Radium Hospital, Norway

Monday, June 25, 2012: Microenvironment and Protein Kinase Signaling in Photobiology - 2:15-4:15

02:39-02:58

Targeting Pancreatic Tumor-Stroma Interactions with PDT: Insights from Imaging-Based Quantification of Therapeutic Response in 3D Tumor Models

Jonathan Celli*¹, Michael Glidden¹, Imran Rizvi², Iqbal Massodi², Tayyaba Hasan²

¹University of Massachusetts, USA, ²Massachusetts General Hospital, USA

Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30

09:25-09:40

The Circadian Control of Skin and Cutaneous Photodamage

Joshua Desotelle, Melissa Wilking, Nihal Ahmad*

University of Wisconsin, USA

Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15

02:55-03:15

The Dry Limit of Photosynthesis on Earth and the Possibility of Life on Mars

Alfonso Davila*¹, Carmen Ascaso², Jacek Wierchos²

¹NASA Ames Research Center, USA, ²Museo Nacional de Ciencias Naturales, CSIC, Spain

Tuesday, June 26, 2012: Photobiology of Extremophiles - 3:45-5:45

04:15-04:45

The E2F1 Transcription Factor Promotes DNA Repair by Inducing Histone Acetylation at Sites of Damage.

Ruifeng Guo, Jie Chen, Anup Biswas, Sreerupa Ray, Renier Velez-Crua, David Mitchell, David Johnson*

The Virginia Harris Cockrell Cancer Research Center at The University of Texas MD Anderson Cancer Center Science Park, USA

Monday, June 25, 2012: DNA Repair of Chromatin - 8:30-10:30

09:30-10:00

The Effect of UVR Exposure on Epigenetic Mechanisms that Govern Photoaging in Human Skin Cells

Lisa Passantino*¹, Yana Chervona¹, Max Costa¹, Mary Matsui²

¹Nelson Institute of Environmental Medicine, New York University School of Medicine, USA, ²R&D, Estee Lauder Inc, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

The Effects of Singlet Oxygen Quencher Concentration and Depletion on the Efficiency and Dosimetry of Photodynamic Therapy.

Mark Weston*¹, Michael Patterson¹

¹McMaster University, Canada, ²Juravinski Cancer Centre, Canada

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

The ICH S10 DRAFT Guidance on Photosafety Evaluation of Pharmaceuticals: Potential Changes in Photosafety Testing

Douglas Learn*, Mary Dougherty, Shawna Jackman, Alan Hoberman

Charles River Laboratories Preclinical Services, USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

12:10-12:20

The Influence of Extracorporeal Photochemotherapy on Global gene Expression Profiles in Lymphocyte Subsets

Ulrike Just¹, Gabriele Klosner¹, Florian Klinglmueller², Martin Bilban³, Robert Knobler*¹, Zoya Kuzmina⁴, Hildegard Greinix⁴, Franz Trautinger⁵

¹Dept of Dermatology, University of Vienna, Austria, ²Center for Medical Statistics, Informatics and Intelligent Systems, University of Vienna, Austria, ³Department of Laboratory Medicine, University of Vienna, Austria, ⁴Department of Internal Medicine, University of Vienna, Austria, ⁵Karl Landsteiner Institute for Dermatological Research, Austria

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

The need for Access to Raw Data Used In Reports and Publications- QUI TAM, A Radiobiology Case In Point

Helene Hill*¹, Joel Pitt¹

¹NJ Medical School, USA, ²Georgian Court University, USA

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

The Resveratrol Induces Expression of β -Defensin 2 in Keratinocytes

Nevena Karaman-Jurukovska*, Ahmed Eldib, Earl Goyarts, Daniel Yarosh, Nadine Pernodet

Estee Lauder Research Laboratories, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

The Role of PDT Dosimetry in Clinical Decision Making

Dominic Robinson

Erasmus MC, The Netherlands

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00

11:40-12:00

The Use of Ultrafast Quenching Phenomena in Biomedical Optics

Norbert Lange

University of Geneva, Switzerland

Wednesday, June 27, 2012: Photoinduced Phenomena in Chemistry and Physics - 11:00-1:00

12:15-12:30

Three-Dimensional Imaging of Microvascular Oxygen Tension during Stroke

Andrew Dunn*, Shams Kazmi, Anthony Salvaggio

University of Texas at Austin, USA

Monday, June 25, 2012: Oxygen Effects and New Optical Probes - 11:00-1:00

11:45-12:05

Time-Lapse Multi-Modal Microscopy of Bone Marrow Derived Cell Dynamics During Cutaneous Wound healing and Regeneration

Benedikt Graf*, Eric Chaney, Marina Marjanovic, Michael De Lisio, Steven Adie, Marni Boppart, Stephen Boppart

University of Illinois at Urbana-Champaign, USA

Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30

09:40-09:52

Tissue Phantom for Fluorescence and Reflectance Experiments

Alexandra Gotshall*, Linda Jones, Pooja Patel, Michael Carnohan, Jane Duplantis, Nathan Towles
College of Charleston, USA

Monday, June 25, 2012: Poster session with Refreshments - 06:00-09:00

Toll-Like Receptor 10 (TLR10) Expression Protects Against UV-Induced Cell Damage

Nicole Fitzner¹, Hedda-Marie Jansen¹, Sabine Zahn², Joerg Wenzel², Victoria Kolb-Bachofen*¹

¹Immunobiology, Med. Fac. Heinrich-Heine-University, Germany, ²Dept. Dermatology and Allergology, Med. Fac. University of Bonn, Germany

Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15

03:55-04:05

Towards Quantitative Fluorescence Spectroscopy in Localized Tissue Volumes for Photodynamic Therapy Dosimetry: Correction for Scattering and Absorption Effects

Stephen Kanick*¹, Scott Davis¹, Martin Isabelle¹, Henricus Sterenberg², Arjen Amelink², Dominic Robinson², Brian Pogue¹

¹Thayer School of Engineering, Dartmouth College, USA, ²Center of Optical Diagnostics and Therapy, Erasmus Medical Center, The Netherlands

Wednesday, June 27, 2012: Optical Dosimetry - 11:00-1:00

11:20-11:40

Towards Understanding the Photoreaction Mechanism of Photosensitizer Dyes in Presence of Alkylating Quinones Using Nanosecond Laser technique

Yisaira Diaz-Espinosa*¹, Rafael Arce-Quintero¹, Antonio E. Alegria², Carmelo Garcia²

¹University of Puerto Rico-Rio Piedras Campus, Puerto Rico, ²University of Puerto Rico-Humacao Campus, Puerto Rico

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Transformer Materials for Dynamic UV Protection

René Scheurich*, Thomas Rudolph, Junyou Pan

Merck KGaA, Germany

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

11:10-11:20

Tumour-Targeted SERS Probes using Novel Raman Active Metallo-Porphyrin Gold Nanoparticles

Arash Farhadi*², Gang Zheng¹

¹Ontario Cancer Institute, Campbell Family Cancer Research Institute, University Health Network, Canada, ²Department of Medical Biophysics, University of Toronto, Canada

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

Two UV Pathways to Melanoma

Frances Noonan¹, M. Raza Zaidi², Agnieszka Wolnicka-Glubisz¹, Miriam Anver³, Jesse Bahn¹, Albert Wielgus⁴, Jean Cadet⁵, Thierry Douki⁵, Stephane Mouret⁵, Margaret Tucker⁶, Anastas Popratiloff⁷, Glenn Merlino², Edward De Fabo*¹

¹Dept Microbiology, Immunology and Tropical Medicine, The George Washington University, USA, ²Lab of Cancer Biology and Genetics, NCI, NIH, USA, ³Pathology/Histotechnology Laboratory, SAIC-Frederick, NCI, NIH, USA, ⁴Laboratory of Pharmacology, NIEHS, NIH, USA, ⁵DSM/INAC/SCIB UMR-E 3 CEA/UJF FRE CNRS 3200/Laboratoire "Lésions des Acides Nucléiques", France, ⁶Division of Cancer Epidemiology and Genetics, NCI/NIH, USA, ⁷Center for Microscopy and Image Analysis, The George Washington University, USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

11:40-11:50

Ultrafast Excited-State Dynamics in Biological Environments

Eric Vauthey*, Alexandre Fürstenberg, Oksana Kel

University of Geneva, Switzerland

Wednesday, June 27, 2012: Photoinduced Phenomena in Chemistry and Physics - 11:00-1:00

11:20-11:40

Ultraviolet Radiation and Oral Cancer Incidences in the United States.

Dianne Godar*¹, Eli Shindell², Rong Tang¹

¹Food and Drug Administration, USA, ²University of Maryland, USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00

12:00-12:10

Ultraviolet Radiation Reflection in the Built Environment: Relating Surface Orientation and Season

Joanna Turner*, Alfio V Parisi

University of Southern Queensland, Australia

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15

02:05-02:15

Ultraviolet-Induced DNA Damage in the Anterior Ocular Structures

Justin Mallet, Sebastien Gendron, Nathalie Bastien, Patrick Rochette*

LOEX/CUO-Recherche, CHA research center and Ophthalmology department, Laval University, Canada

Sunday, June 24, 2012: DNA Damage - 2:00-3:30

02:00-02:20

Unraveling the Role of the Autophagic Adaptors p62/SQSTM1 and NBR1 in the Activation of Autophagic Pathways After Hypericin-Sensitized Photodynamic Stress

Noemi Rubio¹, Julien Verrax², Michael Dewaele², Jacques Piette¹, Patrizia Agostinis²

¹University of Liège, Belgium, ²KU Leuven, Belgium

Sunday, June 24, 2012: Mechanisms of Cell Death - 11:00-12:30

11:45-12:00

Unsensitized Phototherapy with Visible Light and its Application, and Mechanism, for Prevention of Keratinocytes

Antony McDonagh

University of California San Francisco, USA

Tuesday, June 26, 2012: Research Award Lecture - 9:30-10:30

09:40-10:30

Use of occupation to determine role of solar UVB in reducing risk of cancer in Nordic countries

William Grant

Sunlight, Nutrition and Health Research Center, USA

Tuesday, June 26, 2012: Indoor Tanning: Previously Unasked Questions - 1:15-3:15

02:45-03:00

Use of Vitamin D and Other Small Molecules to Enhance PDT Outcome

Edward Maytin

Cleveland Clinic, USA

Tuesday, June 26, 2012: Modulation of Cellular Responses in PDT - 1:15-3:15

01:35-01:55

Using Nanotechnology for Multi-Compartmentalized Delivery of Photosensitizer and c-Met Inhibitor to Enhance Treatment of Cancer

R Bryan Sears*, Lei Zheng, Tayyaba Hasan

Massachusetts General Hospital, USA

Sunday, June 24, 2012: ASP/ESP Joint Symposium: Nanotechnology - Part I - 11:00-12:30

12:00-12:10

Utilization of Vascular Targeted Photodynamic Therapy with WST-11 in Hollow Organs in a Large Animal Model: A Feasibility Study

Tatum Tarin¹, Simon Kimm¹, Avigdor Scherz², Jonathan Coleman¹

¹Memorial Sloan-Kettering Cancer Center, USA, ²The Weizmann Institute, Israel

Monday, June 25, 2012: Cell or Vessel: A Debate on Effective Photobiology - 4:45-6:15

06:05-06:14

UV Radiation Regulates Grape Quality in New Zealand Sauvignon Blanc

James Shinkle¹, Jason Wargent⁴, Scott Gregan², Linlin Liu², Rainer Hofmann², Chris Winefield², Mike Trought³, Brian Jordan²

¹Department of Biology, Trinity University, USA, ²Centre for Viticulture and Oenology, Faculty of Agriculture and Life Sciences, Lincoln University, New Zealand, ³Plant & Food Research, Marlborough Wine Research Centre, New Zealand,

⁴Institute of Natural Resources, Massey University, New Zealand

Tuesday, June 26, 2012: Photobiology and Environmental Photobiology - Offered Papers - 01:15-03:15

02:55-03:05

UVA1 Induces Distinct and Different Epidermal Changes to UVB Associated with p53, p63 and Keratin Differentiation in Human Skin in Vivo

Angela Tewari*, Kasia Grys, Robert Sarkany, Antony Young

St John's Institute of Dermatology, King's College, and NIHR Biomedical Research Centre, UK

Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15

03:35-03:45

UVA-Induced Dynamics in Sulfur-Substituted Nucleosides

Carlos Crespo*, Christian Reichardt, Cao Guo

Case Western Reserve University, USA

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

11:00-11:10

UVA-Induced Epigenetic Regulation of Tumor Suppressor and miRNA Gene Expression

Ruediger Greinert*, I Peng Chen, Alexandra Faust, Stefan Henning, Beate Volkmer

Elbektiniken Stade/Buxtehude, Germany

Monday, June 25, 2012: Epigenetics Effects of UVB Irradiation - 11:00-1:00

11:00-11:40

UVB Exposures Can Increase Risks for Oral Cancers.

Dianne Godar¹, Eli Shindell², Larissa Baeva¹, Fredrick Jordan¹, Joyce Breger³

¹Food and Drug Administration, USA, ²University of Maryland, USA, ³Johns Hopkins, USA

Monday, June 25, 2012: Photomedicine and Photoimmunology - Offered Papers - 11:00-1:00
11:50-12:00

UVB Radiation Generates not only Singlet Oxygen but is also able to Change Endogenous Photosensitizers - Potential New Pathways of Cell Damage?

Alena Knak*, Johannes Regensburger, Tim Maisch, Wolfgang Bäumler
University Hospital Regensburg, Germany

Sunday, June 24, 2012: Poster Session with Refreshments - 6:00-9:00

UVB-Induced and cNOS-Mediated NF-κB Activation

Lingying Tong, Shiyong Wu*

Ohio University, USA

Wednesday, June 27, 2012: Impact of UVA-UVB on Cell Signaling - 2:15-4:15

02:15-02:35

UVB-Induced Mutagenesis

Gerd Pfeifer

City of Hope, USA

Sunday, June 24, 2012: Mechanisms of Mutagenesis - 4:00-5:30

04:00-04:30

UVB-Induced Psoralen Photoadducts and their Rapid Detection by Surface-Enhanced Laser Desorption Ionization Time of Flight (SELDI-TOF) Mass Spectrometry

Alexandru Buhimschi*, Francis Gasparro

Hamden Hall Country Day School, USA

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

12:30-12:40

UVR Population Studies in the ICEPURE Project

Elisabeth Thieden

Bispebjerg Hospital, Denmark

Monday, June 25, 2012: Impact of Climate and Environmental Factors on Personal UVR Exposure and Human Health - 2:15 - 4:15

03:05-03:25

Variation in Pre-Vitamin D3 Effective Irradiance of UV Tanning Devices

John C. Dowdy*¹, Robert M. Sayre², James G. Shepherd³

¹Rapid Precision Testing Laboratories, USA, ²Division of Dermatology, Dept of Medicine, University of Tennessee Health Science Center, USA, ³The UV Foundation, USA

Tuesday, June 26, 2012: Indoor Tanning: Previously Unasked Questions - 1:15-3:15

02:15-02:30

Vascular and Cellular Damage Photoinduced in Chorioallantoic Membrane Model by Foslip® and Fospeg® : Influence of mTHPC Release from Liposomes

Julie Garrier*¹, Vadzim Reshetov¹, Aurélie François¹, Susanna Gräfe², Vasco Filipe³, Wim Jiskoot³, François Guillemin¹, Vladimir Zorin⁴, Lina Bezdetnaya¹

¹Centre Alexis Vautrin, CRAN laboratory, Université de Lorraine, CNRS UMR 7039, France, ²Biolitec GmbH, Research & Development, Germany, ³Division of Drug Delivery Technology, Leiden/Amsterdam Center for Drug Research, Leiden University, The Netherlands, ⁴Laboratory of Biophysics and Biotechnology, Physics Faculty, Belarusian State University, Belarus

Tuesday, June 26, 2012: PDT - Offered Papers - 03:45-05:45

05:5-05:25

Vascular Effects of Verteporfin PDT in Pancreatic Cancer

Kimberley Samkoe*¹, Julia O'Hara¹, Jason Gunn¹, Tayyaba Hasan¹, Brian Pogue¹

¹Dartmouth Medical School, USA, ²Thayer School of Engineering, Dartmouth College, USA, ³Wellman Center for Photomedicine, USA

Sunday, June 24, 2012: Vascular Effects of Light - 4:00-5:30

05:00-05:15

Vascular Microenvironment: How and Why It Can Change Response to Photodynamic Therapy

Theresa Busch*, Amanda Maas, Rickson Mesquita, Shannon Gallagher-Colombo

University of Pennsylvania, USA

Monday, June 25, 2012: Microenvironment and Protein Kinase Signaling in Photobiology - 2:15-4:15

02:15-02:39

Verteporfin-PDT in Combination with Tyrosine Kinase Inhibitors on Human Ovarian Carcinoma Model

Andrea Weiss¹, Hubert van den Bergh¹, Arjan W Griffioen², Patrycja Nowak-Sliwinska*³

¹Medical Photonics Group, Swiss Federal Institute of Technology (EPFL), Switzerland, ²Angiogenesis Laboratory, Department of Medical Oncology, VU University Medical Center, The Netherlands, ³Urology Department, University Hospital (CHUV), Switzerland

Wednesday, June 27, 2012: Photochemistry - Offered Papers - 11:00-01:00

Visualization of Mitochondria in Living Cells Using a Redox Yellow Fluorescent Protein with a Mitochondrial Targeting Signal

Hajime Karatani^{*1}, Yuki Namikawa¹, Naomi Mori¹, Yutaka Ihara¹, Kengo Kitadokoro¹, Hiroshi Oyama²

¹*Kyoto Institute of Technology, Japan*, ²*Setsunan University, Japan*

Monday, June 25, 2012: Imaging and Spectroscopy - 8:30-10:30

09:52-10:04