Hosted by the
International Photodynamic Association
The University of British Columbia
British Columbia Cancer Agency
Vancouver Hospital & Health Sciences Centre

Sponsors

Platinum

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Contributors

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On behalf of the University of British Columbia, the British Columbia Cancer Agency, and the Vancouver Hospital and Health Sciences Centre, it is a pleasure to welcome you to Vancouver and the 8th IPA World Congress of Photodynamic Medicine.

The broad range of abstracts combined with our international panel of distinguished plenary speakers has allowed us to create a program that essentially covers the entire spectrum of photodynamic medicine today. We are truly grateful for the tremendous support we have been fortunate to receive from the PDT community.

In addition to the scientific program, we continue the IPA tradition of fabulous social functions where you will have the opportunity to network informally with long-time colleagues as well as new friends. We look forward to seeing you at both the reception and the closing banquet.

Finally we would like to recognize and thank our sponsors. It is through their generous support that a meeting such as this can be convened. We thank you for taking the time to join us in Vancouver, and look forward to an exciting exchange of science and medicine.

Welcome to Vancouver!

Stephen Lam, MD, FRCPC  
Congress President  

Harvey Lui, MD, FRCPC  
Scientific Program Chair
Key Addresses and Contacts

Congress and Exhibition Secretariat

Events by Design Inc.
601 – 325 Howe Street
Vancouver, BC
Canada V6C 1Z7

Phone 604.669.7175
Fax 604.669.7083
Email info@ebd.bc.ca

Congress Web Site

www.dermweb.org/pdt2001

Honorary Presidents

Yoshihiro Hayata
Thomas Dougherty

Congress President
Stephen Lam

Congress Vice-President
Harvey Lui

Scientific Committee

Harvey Lui
(Chair, Canada)

Rox Anderson (USA)

Kazuhiko Atsumi (Japan)

Patrick Barron (Japan)

Robert Bissonnette (Canada)

Stephen Bown (UK)

Neil Bressler (USA)

Stanley Brown (UK)

Denis Cortese (USA)

David Crumb (Canada)

Eric Edell (USA)

Frank Gasparro (USA)

Charles Gomer (USA)

Tayyaba Hasan (USA)

York Hsiang (Canada)

Steven Jacques (USA)

Dieter Jocham (Germany)

Giulio Jori (Italy)

Harubumi Kato (Japan)

Andrew Kaye (Australia)

Jim Kennedy (Canada)

David Kessel (USA)

Mladen Korbelik (Canada)

Herwig Kostron (Austria)

Glenn M. LaMuraglia (USA)

Goh Chee Leok (Singapore)

Clifford Leznoff (Canada)

Norman Marcon (Canada)

David McLean (Canada)

Johan Moan (Norway)

Ronald Moore (Canada)

Paul Muller (Canada)

Shigeru Okuda (Japan)

Thierry Patrice (France)

Michael Patterson (Canada)

Roy Pottier (Canada)

Philip Rosenfeld (USA)

Willem Star (Netherlands)

Katarina Svanberg (Sweden)

Tom Sutedja (Netherlands)

John Tulip (Canada)

Michael Unger (USA)

Hubert Van den Bergh (Switzerland)

Johan van Lier (Canada)

Brian Wilson (Canada)
### Schedule at a Glance

<table>
<thead>
<tr>
<th>DATE</th>
<th>Tuesday, June 5</th>
<th>Wednesday, June 6</th>
<th>Thursday, June 7</th>
<th>Friday, June 8</th>
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<td>07:00</td>
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<td>Interest Group</td>
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<td>07:30</td>
<td></td>
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<td>Breakfast</td>
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<tr>
<td>08:00</td>
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<td></td>
<td>07:00 – 08:15</td>
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<tr>
<td>08:30</td>
<td>Satellite Meeting</td>
<td>08:30 – 10:00</td>
<td>Plenary 3</td>
<td>08:30 – 10:00</td>
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<tr>
<td>09:00</td>
<td></td>
<td></td>
<td>Break/Exhibits/</td>
<td>Plenary 5</td>
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<tr>
<td>09:30</td>
<td>hosted by Berlex Laboratories Inc.</td>
<td>Welcome Plenary</td>
<td>Plenary 4</td>
<td>08:30 – 10:00</td>
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<tr>
<td>10:00</td>
<td>The Emerging Role of 5-Ala PDT in Dermatology</td>
<td></td>
<td>Break/Exhibits/</td>
<td>Plenary 6</td>
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<tr>
<td>10:30</td>
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<td></td>
<td>Posts</td>
<td>10:00 – 10:30</td>
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<tr>
<td>11:00</td>
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<td></td>
<td>Lunch Break</td>
<td>Plenary 8</td>
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<tr>
<td>11:30</td>
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<td>Exhibits/Posts</td>
<td>10:00 – 12:00</td>
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<td>12:00</td>
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<td>12:00 – 13:30</td>
<td>Lunch Break/Exhibits/Posts</td>
<td>12:00 – 13:30</td>
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<td>12:00 – 13:30</td>
<td>Plenary 2</td>
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<tr>
<td>13:00</td>
<td>13:00 – 15:00</td>
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<td>Break/Exhibits/</td>
<td>Plenary 7</td>
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<td></td>
<td>Posts</td>
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<tr>
<td>14:00</td>
<td>Photodynamic Therapy: Gastrointestinal Applications</td>
<td></td>
<td>Lunch on the Exhibit Floor, and IPA AGM with lunch</td>
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<tr>
<td>14:30</td>
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<td>15:30</td>
<td>Satellite Meeting</td>
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<td>16:00</td>
<td>16:00 – 18:00</td>
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<tr>
<td>16:30</td>
<td>hosted by QLT Inc.</td>
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<td>17:00</td>
<td>Expanding Horizons in PDT</td>
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<td>Evening</td>
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<tr>
<td></td>
<td>Welcome Reception</td>
<td>18:45 Buses leave from Melville St. entrance</td>
<td></td>
<td>Banquet</td>
<td>19:00</td>
</tr>
</tbody>
</table>
**Congress Badges and Tickets**

Official Congress badges will be required for admission to all scientific and social functions. If you are bringing a guest to either the Welcome Reception or the Closing Banquet, they will require a ticket, but not a badge. If you require a ticket please check with the Congress Registration Desk for availability.

**Key Contacts**

**Hyatt Regency Vancouver**

655 Burrard Street  
Telephone: 604.683.1234  
Hotel Guest Fax: 604.689.3707

**Messages**

Please call the Hyatt and ask for the IPA Registration Desk

**General Travel Information**

- Vancouver Bus Depot: 482.8747  
- Weather Information: 664.9010  
- BC Ferries: 1.888.223.3779  
- Vancouver Airporter Bus: 946.8866  
- Tourism Vancouver: 683.2000

**Delegate Services**

**Registration Desk**

The Congress Registration Desk will be open the following hours:

- Tuesday: 8:00 AM – 6:00 PM  
- Wednesday: 7:30 AM – 6:00 PM  
- Thursday: 7:30 AM – 5:00 PM  
- Friday: 7:30 AM – 5:00 PM  
- Saturday: 7:30 AM – 10:00 AM

**Speaker Centre**

If you are giving an oral presentation, please check in with the Speaker Centre prior to your presentation. The Speaker Centre is located in the King George Room and will be open the following hours:

- Tuesday: 11:00 AM – 6:00 PM  
- Wednesday: 7:30 AM – 5:00 PM  
- Thursday: 7:30 AM – 5:00 PM  
- Friday: 7:30 AM – 5:00 PM  
- Saturday: 7:30 AM – 12:00 NOON

**Exhibit**

All refreshment breaks will take place inside the exhibit area beside the Plenary Room when it is open.

- Wednesday: 9:30 AM – 4:00 PM  
- Thursday: 9:30 AM – 4:00 PM  
- Friday: 9:30 AM – 11:00 AM

**Poster Viewing**

Posters highlighting the latest developments and ongoing research from around the world will be available for viewing throughout Wednesday and Thursday, and until noon on Friday. All posters will be on the 3rd Floor of the Hyatt Regency Vancouver.

**CME Accreditation**

The Division of Continuing Medical Education (CME), University of British Columbia is accredited to sponsor continuing medical education for physicians by both the Committee on Accreditation of Canadian Medical Schools (CACMS) and the Accreditation Council for Continuing Medical Education (ACCME) of the United States.
Meals and Snacks

There are a wide range of restaurants and food fairs located throughout the downtown core including Royal Centre Mall and Food Fair which is attached to the host hotel. You will find a range of choices from inexpensive snacks to fine dining in close proximity to the hotel. The Congress Registration Desk and the hotel concierge will both be pleased to assist you.

Banking/Foreign Exchange

Several major financial institutions and currency exchanges are available within blocks of the hotel and are easily found. Automatic Teller Machines are available at nearby banks for those delegates wishing to use bank cards.

The Canadian monetary system is decimal-based. One hundred cents equals one dollar. Visitors are advised to exchange their currency at a bank or foreign exchange outlet, to ensure they receive the prevailing rate of exchange. Most shops and services will cash travelers cheques, exchange US$ currency, and accept all major credit cards, but it is advisable to have Canadian cash on hand for taxis and other incidentals. Due to continuously fluctuating rates of exchange we encourage you to check with the Foreign Exchange service or a bank for the current rate.

Lost and Found

Please contact the Registration Desk where staff will assist you in connecting with lost items.

Message Centre

Messages may be left for delegates on the Message Board in the Registration area or by calling (604) 683-1234 and asking for the Congress Registration Desk during the registration hours.

Tourism Vancouver

For extensive information on the Vancouver area, please visit the Tourism Vancouver Visitor Centre located 4 blocks from the hotel at 200 Burrard Street.

Transport to/from the Airport

Airport Express

Buses depart from various major downtown hotels for the Vancouver International Airport on a regular basis. The ride takes 20 - 40 minutes depending on traffic and your starting point. Current cost is $10 one way or $17 return (return tickets are valid for six months from time of purchase). Please check with your hotel concierge or call 946.8866 for more information.

Dress

Vancouver has developed a reputation for being a casual city, making most forms of clothing acceptable for almost any occasion. Suitable Conference attire could be characterized as business or smart-casual. For the Closing Banquet, business or cocktail attire is suggested.

Time Zone

In June, Vancouver’s clocks are on Pacific Daylight Time, Greenwich Mean Time (GMT) plus 8 hours.

<table>
<thead>
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<th>Time Difference</th>
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<tr>
<td>Toronto</td>
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<tr>
<td>Tokyo</td>
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<td>+17</td>
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<tr>
<td>Cairo</td>
<td>+10</td>
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</tbody>
</table>
Electric Current

Electricity is supplied at 110V - 60Hz AC. Remember to use adapters if required.

Smoking Policy

Vancouver by-laws specify that smoking is not permitted in public places including restaurants. Smoking is not permitted in the Conference venues. However, many outdoor terraces and concourses are available close to Conference events.

GST Rebates

The Goods and Services Tax (GST) is a seven percent tax on most goods and services sold or provided in Canada. Under the Visitor Rebate Program, non-resident visitors may qualify for a foreign tourist rebate of the tax for short-term accommodation and goods that you take home (up to CDN$500.00). Refund Applications for visitors will be available at Canada Customs offices, most tourism information centres as well as some hotels and retail stores.

Airport Improvement Fee

Passengers departing Vancouver International Airport are required to purchase an Airport Improvement Fee (AIF) ticket. AIF tickets can be purchased from the automatic teller sales machines or AIF Passenger Booths located throughout the airport. Payment can be made in cash (Canadian or American) or by VISA, MasterCard or by some bank debit cards. Travelers are charged $5 for travel within British Columbia, $10 for travel to other N. American destinations and $15 for travel outside N. America.

Shopping

Most stores, boutiques and department stores are open from 9:00 or 9:30AM to 6:00PM on weekdays. On Thursdays and Fridays, most stay open until 9:00PM and on Saturdays until 5:00PM. Most stores are open on Sundays from 12:00 to 5:00PM.

Vancouver, with its unique cultural and ethnic diversity, offers a wide variety of exciting shopping opportunities. Native Westcoast Indian arts and crafts, including gold and silver jewellery, carved in traditional native motifs, are among the more unique artistic products. Also renowned are jade sculptures and jewellery, whalebone scrimshaw carvings and Cowichan Indian sweaters. Specially prepared and packaged seafood, particularly smoked salmon, are popular gift items. Our Chinatown, the second largest in North America, is a bustling community with hundreds of shops and curios where merchants sell authentic Chinese crafts and products. Vancouver also offers high fashion clothing and jewellery boutiques, representing some of the most famous designers in the world. Many of these are centred on Robson Street adjacent to major downtown hotels, the Sinclair Centre adjacent to the cruise ship dock and convention centre, and other downtown areas. For an alternative shopping experience, Vancouver has a number of public markets. Granville Island Market, Lonsdale Quay in North Vancouver and New Westminster Quay all offer local produce, fresh seafood and products fashioned by local artisans. Inquire at the Congress Desk for more details.
The Emerging Role of 5-ALA PDT in Dermatology

Chairs: Colin A. Morton & Allan Oseroff

5-aminolevulinic acid has been investigated in dermatological indications for many years. Now, the first commercially available topical photosensitizer 5-ALA solution (Levulan®) has been registered for the treatment of actinic keratoses. This symposium will present an overview of the clinical data of Levulan and will give an outlook on the broad range of potential applications of 5-ALA PDT in dermatology.

Stan B. Brown – The Advantages of 5-Ala and 5-Ala its Derivatives in Dermatology

Rolf-Markus Szeimies – Institutional Overview of PDT (and PD) in Dermatology: The Regensburg Experience

Edward W.B. Jeffes III – Levulan®, the First Topical Photosensitizer for the Treatment of Aks

Colin A. Morton – Is PDT Superior to Standard Treatments?

Allan Oseroff – Future Applications of PDT in Dermatology: The Roswell Park Experience

Photodynamic Therapy: Gastrointestinal Applications

Chair: Prof. François Martin, MD

This symposium will present efficacy and safety data of photodynamic therapy with Photofrin® in gastrointestinal indications. In addition some candidate application will be presented.

B.F. Overholt, MD – Long-term Follow-up on Photofrin/PDT Treatment of Barrett’s Esophagus

Charles Lightdale, MD – Photofrin/PDT in the Treatment of Obstructive Esophageal Cancer

Maria Anne E.J. Ortner, MD – Photofrin/PDT in the Treatment of Cholangiocarcinoma

Greg Haber, MD – Future Applications of Photofrin/PDT in Other GI Conditions

Expanding Horizons in PDT

Chair: Mohammad Azab

Over the past several years, extensive research has been conducted to evaluate photodynamic therapy for treatment of conditions in oncology, ophthalmology, autoimmunity and cardiology. This symposium is designed to acquaint PDT researchers and practitioners from a broad spectrum of fields with the wide-ranging research and development efforts that have been undertaken using verteporfin and other photosensitizers.

Dr. Mohammad Azab, MD and Senior Vice-President, Clinical Research and Medical Affairs for QLT will chair this symposium, during which a panel of distinguished physicians and scientists will present information on preclinical and clinical studies that have recently been conducted within these four areas.

The presentation agenda is as follows:

16:00 – 16:30
Michael J. Potter, MD – Visudyne™ Therapy for the Treatment of Classic and Occult Choroidal Neovascularization in Age-related Macular Degeneration

The wet form of age-related macular degeneration (AMD) is the leading cause of legal blindness in people over the age of 50 in the Western world. Results from the TAP and VIP studies have demonstrated a significant treatment effect for verteporfin therapy in patients with predominantly classic and occult CNV lesions. Two year follow-up from both trials will be presented.

16:30 – 16:50
David Saperstein, MD – Clinical Trials Using Visudyne™ Therapy for Choroidal Neovascularization Secondary to Pathologic Myopia (VIP - PM Trial) and Ocular Histoplasmosis Syndrome (VOH Trial)

In this session, the effects on visual acuity of patients with subfoveal choroidal neovascular membranes (CNV) in pathologic myopia (PM) and ocular histoplasmosis syndrome (OHS) who were treated with verteporfin will be presented.
One of the potential advantages of photodynamic therapy over other types of cancer treatment is its ability to enhance the host anti-tumor immune response. Studies that have sought to exploit the ability of PDT to enhance tumor immunogenicity by using PDT-generated tumor cell lysates as tumor vaccines have shown that PDT vaccines are effective at suppressing subsequent tumor growth via the generation of tumor specific T-cells.

Photodynamic therapy produces localized oxidative damage in cells at or near the intracellular site of photosensitizer binding, resulting in oxidative stress that is highly efficient at activating cellular signaling pathways and prompt apoptosis. This presentation will review the evidence for the intersection of constitutive and PDT-regulated pathways in PDT-induced apoptosis.

Researchers have explored photodynamic therapy as a modality for the reduction and stabilization of atherosclerotic plaques and the inhibition of intimal hyperplasia, and a number of clinical trials are underway. This presentation will first summarize the scientific rationales for PDT in cardiovascular applications before reviewing the approaches being investigated today by the groups actively working in this field.

Historically PDT was first used for treating patients with skin tumors, and this has been the case with verteporfin as well. Early studies of patients with non-melanoma skin cancer confirmed the short duration of systemic photosensitivity with verteporfin, while demonstrating the potential for effective control of primary and metastatic skin tumors. More recent studies have been designed to explore the role of verteporfin-based PDT in patients with multiple skin tumors in terms of both tumor eradication and cosmetic outcome.

Each morning will feature two plenary sessions, each highlighting a clinical or basic aspect of photodynamic medicine. These talks will be given by leaders in the field, many of whom pioneered groundbreaking research. We will also look to the future expectations in this exciting field.

The afternoon sessions will provide in-depth information for specialists as we focus on specific areas of photodynamic medicine and its uses, challenges and successes.

Join colleagues for this informal gathering over breakfast and share your experiences. Tickets are available at the Congress Registration Desk.
Social Program

Welcoming Reception: A Taste of Vancouver
Wednesday June 6

Buses leave from 6:45pm to 7:10pm at the Melville Street entrance of the Hyatt Regency Vancouver

The Vancouver Aquarium and Marine Science Centre is spectacular. You can look forward to an evening of fine food while exploring the exhibits and meeting new friends and old colleagues. Delegate registration includes this evening, if you require guest tickets please see the Congress Registration Desk.

Exposition Dates
June 6 – 8
(Wednesday morning to Friday at 13:00)

List of Exhibitors

Axcan Scandipharm Inc. 22 Inverness Center Parkway
Birmingham, AL 35242
Tel: 205.991.8085
www.photofrin.com

Berlex Laboratories Inc. PO Box 1000
Montville, NJ 07045-2470
Tel: 888.237.5392
www.berlex.com

biolitec Inc 515 Shaker Road
East Longmeadow, MA 01028
Tel: 413.525.0600
www.biolitec.com

Charles River Laboratories 251 Ballardvale Street
Wilmington, MA 01887
Tel: 978.658.6000
www.criver.com

Diomed Limited Cambridge Research Park
Ely Road, Cambridge UK
Tel: 44.1223.729300
US: 23 Main Street, Suite 240
Andover, MA 01810
Tel: 1.978.475.7771
www.diomed-lasers.com

LumaCare™ Ci-Tec UK Ltd.
78 York Street
London UK
Fax: 44.207.724.7675

Optiscan PO Box 1066
Mt. Waverley MDC
Victoria 3149, Australia
Tel: 61.3.9538.3333
www.optiscan.com

QLT Inc. 887 Great Northern Way
Vancouver, BC, Canada
V5T 4T5
Tel: 604.872.7881
www.qltinc.com

Official Gala Banquet
Friday June 8, 7:00PM

Hyatt Regency Ballroom

Our traditional banquet will take place at the Hyatt and will feature a sumptuous Chinese Banquet, entertainment and dancing. Delegate registration includes this special evening and guest tickets may be purchased at the Registration Desk until Wednesday at 5:00PM.
Congress Program • Wednesday, June 6

08:15 – 10:00  Official Introduction / Welcome Plenary  
Regency Ballroom  

Chair: Stephen Lam  

08:15 – 08:25  Welcome  
Stephen Lam  

08:25 – 08:45  Opening Overview  
John Cairns  
Brian Schmidt  
Bernie Bressler  

08:45 – 09:00  Establishment of the IPA  
Yoshihiro Hayata  

09:00 – 09:30  Keynote Address  
Stephen Bown  

09:30 – 10:00  AE Profoio Memorial Lecture  
Bruce Tromberg  

10:00 – 10:30  Refreshment Break/Exhibits/Posters  
Regency East  

10:30 – 12:00  Plenary 2  
Regency Ballroom  

10:30 – 11:00  Regulatory Issues in Photodynamic Therapy  
Richard Felten  

11:00 – 11:30  Clinical Applications of PDT in Ophthalmology  
Neil Bressler  

11:30 – 12:00  Gynecology  
Pius Wyss  

12:00 – 13:30  Lunch Break/Exhibits/Posters  
Regency East  

13:30 – 15:00  Concurrent Symposia  

Plaza East  
Cardiovascular (1 of 2)  

Chairs: Kathryn Woodburn & Robert Grove  

13:30 – 13:50  Intracoronary Photopoint™ Therapy for Restenosis  
Ian Leitch  

13:50 – 14:10  Antrin Photoangioplasty: Initial Human Experience and Results of a Phase I Trial as Adjuvant Therapy to Intracoronary Stent Implantation  
T.M. Chou  

Abstract Chairs: Glenn M. Lamauraglia & York Hsiang  

14:10 – 14:20  The PhotoPoint Catheter Based System for the Treatment of Intimal Hyperplasia  
Steve Rychnovsky  

14:20 – 14:30  Photodynamic Inhibition of Intimal Hyperplasia in a Swine Arteriovenous Fistula Model  
Beth Allison  

14:30 – 14:40  Endovascular Photodynamic Therapy with Aminolaevulinic Acid Inhibits Balloon Induced Stenosis in Rat Iliac Arteries  
Edward E.E. Gabeler  

14:40 – 14:50  Arterial-Type Dependent Differences in the Aminolaevulinic-Acid-Induced Accumulation of Protoporphyrin IX Determine the Timing For Photodynamic Therapy  
Edward E.E. Gabeler  

14:50 – 15:00  Tips Plus PDT: A Pilot Study of Intimal Hyperplasia Prevention  
P. Jack Hoopes  

Plaza Centre  
Light Sources and Delivery (1 of 2)  

Chairs: Willem Star & Dan Doiron  

Satoko Kawauchi  

13:45 – 14:00  A Novel Diode Laser System for Photodynamic Therapy  
Eva Samsoee Andersen  

14:00 – 14:15  The Effect Of Pulsed Laser In PDT In Vitro  
J.Y. Chen  

14:15 – 14:30  Dynamic Behaviour of Photosensitizers After Multiphoton Excitation  
David T. Cramb
### Balmoral Room

**Ophthalmology (1 of 2)**

*Chairs:* Neil Bressler & Michael J. Potter

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>14:20 – 14:35</td>
<td>Optimized Light Dosimetry in Photodynamic Therapy of Choroidal Neovascularization</td>
<td>Reginald Birngruber</td>
</tr>
<tr>
<td>14:35 – 14:50</td>
<td>Development of Verteporfin for the Treatment of Neovascular Age-Related Macular Degeneration (AMD): Lessons Learned</td>
<td>Julia G. Levy</td>
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<tr>
<td>14:50 – 15:05</td>
<td>Modulation of Photodynamic Therapy with Anti-Angiogenic Agents and Other Strategies</td>
<td>Reem Z. Renno</td>
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### Plaza West

**Thoracic**

*Chairs:* Tetsuya Okunaka & Tom Sutedja

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<thead>
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<th>Time</th>
<th>Session</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>13:45 – 14:00</td>
<td>PDT with Nd-YAG Laser Therapy for Lung Cancer</td>
<td>J.S. McLaughan Jr.</td>
</tr>
<tr>
<td>14:00 – 14:10</td>
<td>Phase II Clinical Trial of PDT Using ME2906 and Diode Laser in the Treatment of Central Type Early Stage Lung Cancer in Japan</td>
<td>Kinya Furukawa</td>
</tr>
<tr>
<td>14:10 – 14:20</td>
<td>Intrathoracic Photodynamic Therapy on Pleural-Based Mesothelioma in Rats</td>
<td>Thorsten Krueger</td>
</tr>
<tr>
<td>14:20 – 14:30</td>
<td>10 Years Experience In Endoscopic Photodynamic Therapy (PDT) For Inoperable Cancer Of The Aero-Digestive Tract: The Lesson Learnt</td>
<td>Keyvan Moghissi</td>
</tr>
<tr>
<td>14:30 – 14:40</td>
<td>Has Bronchoscopic Photodynamic Therapy (PDT) Any Place In Bronchopulmonary Cancer Treatment?</td>
<td>Keyvan Moghissi</td>
</tr>
<tr>
<td>14:40 – 14:50</td>
<td>Photodynamic Therapy: An Integral Component of Multi-Modality Treatment for Bronchogenic Carcinoma</td>
<td>Patrick Ross</td>
</tr>
<tr>
<td>14:50 – 15:00</td>
<td>Clinical Experience with Safe 1000 Pentax Auto-fluorescence Bronchoscopy system in Early and Invasive Lung Cancer (First year experience)</td>
<td>Lamberto Toniolo</td>
</tr>
<tr>
<td>15:00 – 15:10</td>
<td>Auto-fluorescence-Guided Bronchoscopic Biopsy for Localization of Pre-Malignant Lesions and Cancer Foci within Bronchi</td>
<td>Mariusz Adamek</td>
</tr>
</tbody>
</table>

### Regency Ballroom

**Mechanisms of Action (1 of 3)**

*Chairs:* Barbara W. Henderson & Nancy L. Oleinick

<table>
<thead>
<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>13:30 – 13:50</td>
<td>Tissue Responses to PDT</td>
<td>Barbara W. Henderson</td>
</tr>
<tr>
<td>13:50 – 14:10</td>
<td>Mechanisms of PDT Cell Killing</td>
<td>Nancy L. Oleinick</td>
</tr>
<tr>
<td>14:10 – 14:22</td>
<td>A Mathematical Evaluation of Dose Dependent PpIX Fluorescence Kinetics In Vivo</td>
<td>HJCM Sterenborg</td>
</tr>
<tr>
<td>14:22 – 14:34</td>
<td>Tissue Temperature and Po2 Measurements Using Planar Optical Sensors In Vivo</td>
<td>Christoph Abels</td>
</tr>
<tr>
<td>14:34 – 14:46</td>
<td>Fas (CD95) Dependent Mechanisms of Cell Death Following DNA Damage in Human Nasopharyngeal Carcinoma Cells Using Hypocrellins</td>
<td>S.M. Ali</td>
</tr>
<tr>
<td>14:46 – 15:00</td>
<td>Analyses of Cellular Activity After PDT with AlPcS4</td>
<td>Renato Amaro Zângaro</td>
</tr>
</tbody>
</table>

### Afternoon Break/Exhibits/Posters

Regency East
### Concurrent Symposia

#### Balmoral Room  
**Ophthalmology (2 of 2)**

*Chair:* Michael J. Potter

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<thead>
<tr>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>15:30 – 15:45</td>
<td>2. Generation of PDT-Lasers for the Treatment of Wet AMD                                 Stefan Spaniol</td>
<td></td>
</tr>
<tr>
<td>15:45 – 16:00</td>
<td>In Vitro Photodynamic Effects of ATX-S10(Na) and Mode of Cell Death on Vascular Endothelial Cells Yuko Gohto</td>
<td></td>
</tr>
<tr>
<td>16:00 – 16:15</td>
<td>Subcellular Localization of Three Photosensitizers in Vascular Endothelial Cells Akira Obana</td>
<td></td>
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<tr>
<td>16:15 – 16:30</td>
<td>Evaluation of New Photosensitizer MV6401 In a Series of Ophthalmic Neovascularization Models Wendy J. Snyder</td>
<td></td>
</tr>
<tr>
<td>16:30 – 16:45</td>
<td>Improvements in Laser Technology for Ocular Photodynamic Therapy with Verteporfin Hubert van den Bergh</td>
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</tbody>
</table>

#### Plaza East  
**ENT**

*Chairs:* Phillipe Monnier & Colin Hopper

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</thead>
<tbody>
<tr>
<td>15:30 – 15:40</td>
<td>Experimental Animal Study of 5-Aminolevulinic Acid Induced Photodynamic Therapy of Oral Cancer B. Rings</td>
<td></td>
</tr>
<tr>
<td>15:40 – 15:50</td>
<td>Clinical Effects of Treating Recurrent Laryngeal Papillomatosis With Photodynamic Therapy Using m-TIPC (FOSCAN) Allan L. Abramson</td>
<td></td>
</tr>
<tr>
<td>15:50 – 16:00</td>
<td>Combined Fluorescence Diagnosis (Autofluorescence and 5-ALA Induced PPIX-Fluorescence) for the Detection and Demarcation of Oral Cancer Christian Betz</td>
<td></td>
</tr>
<tr>
<td>16:00 – 16:10</td>
<td>The Use of Intravenous 5-Aminolaevulinic Acid in Photodynamic Therapy and in Fluorescence Imaging for Head and Neck Cancer and Precancer Hiroaki Nakanishi</td>
<td></td>
</tr>
<tr>
<td>16:10 – 16:20</td>
<td>Targeting the Treatment Volume in Head and Neck Cancer Graham D. Putnam</td>
<td></td>
</tr>
<tr>
<td>16:20 – 16:30</td>
<td>Raman Spectroscopy as a Means of Optical Biopsy in Normal and Cancerous Tissue of the Nasopharynx David Lau</td>
<td></td>
</tr>
<tr>
<td>16:30 – 16:40</td>
<td>Photofrin-Mediated Photodynamic Therapy for Treatment of Early Stage Oral Cavity and Laryngeal Malignancies Vanessa Gayl Schweitzer</td>
<td></td>
</tr>
<tr>
<td>16:40 – 16:50</td>
<td>Performance Characteristics of Laser-Induced Fluorescence Endoscopy in Detection of Head and Neck Cancers Vipa Boonkitticharoen</td>
<td></td>
</tr>
<tr>
<td>16:50 – 17:00</td>
<td>Fluorescence-Guided Biopsy in the Diagnosis of an Unknown Primary Cancer in Patients with Metastatic Cervical Lymph Nodes Boonchu Kulapaditharom</td>
<td></td>
</tr>
<tr>
<td>17:00 – 17:10</td>
<td>Clinical Response to Photodynamic Therapy of Premalignant Lesions and Advanced Head and Neck Carcinomas Maciej Misiolek</td>
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</tbody>
</table>

#### Regency Ballroom  
**Advances in PDT**

*Chairs:* Heinrich Walt & Thierry Patrice

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>15:30 – 15:50</td>
<td>Oral Aminolevulinic Acid for Systemic Breast Tumor Diagnosis Heinrich Walt</td>
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<tr>
<td>15:50 – 16:10</td>
<td>Why is ALA-PDT Tumor-Selective? Li-Wei Ma</td>
<td></td>
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<tr>
<td>16:10 – 16:20</td>
<td>Quantification and Specification of Postischemic Reperfusion Injury of Human Allogenic Kidney and Pancreas Transplants Helmut P. Arbogast</td>
<td></td>
</tr>
<tr>
<td>16:20 – 16:40</td>
<td>Fluorescence Diagnosis with ALA-Induced Porphyrins (FDAP) in Dermatology Clemens Fritsch</td>
<td></td>
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<tr>
<td>16:40 – 17:00</td>
<td>Optimizing the Esters of ALA – in Vitro and in Organ Culture Hubert van den Bergh</td>
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<tr>
<td>17:00 – 17:12</td>
<td>Anti-Tumor Vascular Effects of Photodynamic Therapy MV6401 Dennis Dolmans</td>
<td></td>
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</tbody>
</table>
**Plaza West**

**Photosensitizers (1 of 3)**

*Chairs:* Stan Brown & David Kessel

- **15:30 – 15:50** Thiazine Photosensitizers  
  Stan Brown
- **15:50 – 16:10** Photosensitizers - A Review of the Options  
  David Kessel
- **16:10 – 16:20** Clinical Application of a New Surgical Strategy Using Photodynamic Therapy With Acridine Orange to Malignant Soft Tissue Tumors  
  Katsuyuki Kusuzaki
- **16:20 – 16:30** A Photodynamic Pathway to Apoptosis Induced by Polycyclic Aromatic Ketone (Hypericin) in Human Mucosal Cell Lines: Possible Relevance to Photodynamic Therapy  
  S.M. Ali
- **16:30 – 16:40** In Vitro and In Vivo Behaviour of BPD Related Compounds  
  Ron Boch
- **16:40 – 16:50** Hydroxy Diphenyl Chlorins and Bacteriochlorins – Versatile PDT Photosensitizers  
  R.W. Boyle
- **16:50 – 17:00** Enhanced Phototoxicity of Cationic Sulfonamide Derivatives of Benzochlorin and Porphycene With Nasopharyngeal Cancer Cells  
  C.K. Chang

**Plaza Centre**

**Light Sources and Delivery (2 of 2)**

*Chairs:* Tom Mang & David Cramb

- **15:30 – 15:42** Model Calculation on the Efficiency of PDT by Pulsed Laser Application  
  Hans-Jochen Foth
- **15:42 – 15:54** Photodynamic Therapy Using Lowly Sinusoidal Modulated Thermal Red Light  
  Heinrich Kolbabek
- **15:54 – 16:06** Interstitial Photodynamic Therapy – Results from Treatments and Dosimetry Measurements  
  Stefan Andersson-Engel
- **16:06 – 16:18** Novel System for Integrated Interstitial Photodynamic Therapy, Dosimetry Measurements and Prediction of Treatment Outcome  
  Marcelo Soto Thompson
- **16:18 – 16:30** Reinforcement of Therapeutic Efficacies for Malignant Tumors Using Low Power Laser Preirradiation – Preliminary Report  
  Hideaki Shimatani
- **16:30 – 16:42** Local NPE6 Sensitized PDT for Inhibiting Intimal Hyperplasia in Experimental Balloon Injured Arteries  
  Tsuneyuki Nagae

**19:00**

**Welcome Reception**

*Buses depart from Melville Street entrance 18:45 – 19:10.*
Congress Program • Thursday, June 7

07:00 – 08:15  Interest Group Breakfast (tickets required)  Plaza Ballroom

08:30 – 10:00  Plenary 3  Regency Ballroom

  Chair: Harvey Lui

  08:30 – 09:00  Photosensitizers  Kevin Smith
  09:00 – 09:30  Optical Measurements for Quality Control During PDT  Steven Jacques
  09:30 – 10:00  Smart Dosimetry  Brian Wilson

10:00 – 10:30  Refreshment Break/Exhibits/Posters  Regency East

10:30 – 12:00  Plenary 4  Regency Ballroom

  Chair: Harvey Lui

  10:30 – 11:00  Clinical Applications of PDT in Thoracic Medicine  Harubumi Kato
  11:00 – 11:30  Clinical Applications of PDT in Dermatology  Harvey Lui
  11:30 – 12:00  Photodynamic Diagnosis and Photodynamic Therapy of Brain Tumors  Herwig Kostron

12:00 – 13:30  Lunch Break/Exhibits/Posters  Regency East

12:00 – 13:00  Annual General Meeting  Regency East

13:30 – 15:00  Concurrent Symposia  Regency Ballroom

  Plaza East  Dermatology (1 of 2) Non-Oncolgic  

  Chairs: Robert Bissonnette & Rolf-Markus Szeimies

  13:30 – 13:50  PDT for the Treatment of Psoriasis  Robert Bissonnette
  13:50 – 14:10  Photodynamic Therapy for Non-Oncolgic Indications in Dermatology – Scleroderma, Sarcoidosis and HPV Related Dermatoses  Rolf-Markus Szeimies
  14:10 – 14:20  Effect of Irradiance and Fluence on the Epidermal Phototoxicity of ALA-PDT in Hairless Mouse Skin  Robert Bissonnette
  14:20 – 14:30  Quantitative Model Calculation of the Time Dependent Protoporphyrin Concentration in Normal Human Epidermis After Delivery of ALA By Passive Topical Application or Iontophoresis  Willem M. Star
  14:30 – 14:40  Induction of Collagenases in Human Dermal Fibroblasts by 5-Aminolevulinic Acid and Light  Sigrid Karrer
  14:40 – 14:50  In Vivo Evaluation of Human Melanin by Non-Invasive Raman Spectroscopy In Vitiligo  Iltefat Hamzavi
  14:50 – 15:00  Experiences of Studies on PDT for Port Wine Stains  Jun-Heng Li

  Regency Ballroom  Mechanisms of Action (2 of 3)  

  Chair: Victor Fingar

  13:30 – 13:40  Phthalocyanines: Structure Activity Relationship and Their Efficiency in the Photoinactivation of Microbial Pathogens  Gabrio Roncucci
  13:40 – 13:50  Photodynamic Therapy with Hypericin Induces Vascular Damage and Apoptosis in the RIF-1 Mouse Tumour Model  Chen Bin
  13:50 – 14:00  The Role of Complement in the Response of Tumors to Photodynamic Therapy  Ivana Cecic
  14:00 – 14:10  Effect of Fluence Rate on Photodynamic Therapy (PDT) Efficacy and Tumor Oxygenation in Meta-Tetra (Hydroxyphenyl)Chlorin (MTHPC) Sensitized Tumor-Bearing Mice  Stephanie Coutier
### 13:30 – 15:00

**Concurrent Symposia**

**Regency Ballroom**

**Mechanisms of Action (2 of 3) continued**

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<tr>
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<tbody>
<tr>
<td>14:10 – 14:20</td>
<td>Oxygen Levels During Continuous and Fractionated 5-Aminolaevulinic Acid (ALA) – Induced Photodynamic Therapy (PDT) of the Normal Rat Colon</td>
<td>Alison Curnow</td>
</tr>
<tr>
<td>14:20 – 14:30</td>
<td>The Role of Reperfusion Injury in 5-Aminolaevulinic Acid (ALA) – Induced Photodynamic Therapy (PDT) of the Normal Rat Colon</td>
<td>Alison Curnow</td>
</tr>
<tr>
<td>14:30 – 14:40</td>
<td>The Role of Neutrophils in ALA-PDT</td>
<td>Henriette S. de Brujin</td>
</tr>
<tr>
<td>14:40 – 14:50</td>
<td>Scavenger Receptor-Targeted Photodynamic Therapy of Murine Tumors In Vivo</td>
<td>Michael R. Hamblin</td>
</tr>
<tr>
<td>14:50 – 15:00</td>
<td>Elevation of HSP27 in PDT Induced Resistant Cancer Cells</td>
<td>John G. Hanlon</td>
</tr>
<tr>
<td>15:00 – 15:10</td>
<td>Rapid Impairment of Serca2 and Emptying of Endoplasmic Reticulum Calcium Stores During PDT-Induced Apoptosis is Not Prevented by BCL-2</td>
<td>David W.C. Hunt</td>
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</table>

**Plaza Centre**

**Upper GI (1 of 2)**

**Chairs:** Laurence Lovat & Bergein F. Overholt

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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>13:30 – 13:50</td>
<td>Should We Treat Barrett’s Esophagus with PDT?</td>
<td>Laurence Lovat</td>
</tr>
<tr>
<td>13:50 – 14:07</td>
<td>Combined Photodynamic Therapy and Hyperbaric Oxygenation in Carcinoma of the Esophagus and the Esophago-Gastric Junction</td>
<td>Udo Anegg</td>
</tr>
<tr>
<td>14:07 – 14:24</td>
<td>Photodynamic Therapy in Early Oesophageal Cancer and Long Term Survival</td>
<td>Luigi Corti</td>
</tr>
<tr>
<td>14:41 – 15:01</td>
<td>PDT for Barrett’s Dysplasia – Results of Multicenter and Long Term Studies</td>
<td>Bergein F. Overholt</td>
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**Plaza West**

**Dosimetry (1 of 2)**

**Chairs:** Haishan Zeng & Willem Star

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<tr>
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<tbody>
<tr>
<td>13:30 – 13:40</td>
<td>Correcting Relative Fluorescence Measurements for Optical-Property-Dependent Variations on the Optical Fiber Collection Efficiency</td>
<td>Paulo R. Bargo</td>
</tr>
<tr>
<td>13:40 – 13:50</td>
<td>Fluorescence Photobleaching During 5-aminolevulinic Acid-Induced Protoporphyrin IX Photodynamic Therapy of the Normal Rat Liver</td>
<td>W. Johannes de Wolf</td>
</tr>
<tr>
<td>13:50 – 14:00</td>
<td>Implicit Dosimetry: Relationship Between MTHPC Photobleaching and Cell Viability during In Vitro Photodynamic Therapy</td>
<td>Jonathan S. Dysart</td>
</tr>
<tr>
<td>14:00 – 14:10</td>
<td>New Techniques for Determination of In Vivo Photosensitizer Concentration Using Diffuse Fluorescence and Reflectance Spectroscopy</td>
<td>Robert A. Weersink</td>
</tr>
<tr>
<td>14:10 – 14:20</td>
<td>Multitasking Optical Fibre Probes for PDT Treatment Monitoring and Treatment Planning</td>
<td>Lothar Lilge</td>
</tr>
<tr>
<td>14:20 – 14:30</td>
<td>Effect Monitoring of Neoadjuvant Therapy of Rectal Cancer by Delayed Laser-Induced Endogenous Fluorescence Detection</td>
<td>Tim Handke</td>
</tr>
<tr>
<td>14:30 – 14:40</td>
<td>Inner-Filter Perturbations of Bacteriochlorin Fluorescence Photobleaching Measurements</td>
<td>Emma C.A. Pittard</td>
</tr>
<tr>
<td>14:40 – 14:50</td>
<td>A Two-Phase Illumination Scheme in ALA-PDT: Improved Clinical Outcome?</td>
<td>Peter D. Siersema</td>
</tr>
<tr>
<td>14:50 – 15:00</td>
<td>Investigation of Low Power Light and Light Fractionation for Enhancing PDT with mTHPC</td>
<td>Hidemitsu Tsutsui</td>
</tr>
<tr>
<td>15:00 – 15:10</td>
<td>Spectrally Resolved Reflectance Imaging: Tissue Characterization and Non-Invasive Monitoring of Photodynamic Treatment of Cancer</td>
<td>Sol Kimel</td>
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**Balmoral Room**

**Urology/Gynecology (1 of 2)**

**Chair:** Ron Moore

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<tbody>
<tr>
<td>13:30 – 13:50</td>
<td>Prostate Light Dosimetry</td>
<td>John Tulip</td>
</tr>
<tr>
<td>13:50 – 14:02</td>
<td>In Vivo Photodynamic Activity of Hypericin in Heterotopic Transitional Cell Carcinoma Bladder Tumors</td>
<td>Appolinary Kamuhabwa</td>
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</table>
**Congress Program • Thursday, June 7**

**13:30 – 15:00 Concurrent Symposia**

**Balmoral Room**  
**Urology/Gynecology (1 of 2) continued**

14:02 – 14:14 Photodynamic Therapy (PDT) For Prostate Cancer: A Phase I Study in Locally Recurrent Disease After Radiotherapy  
Timothy R. Nathan

14:14 – 14:26 Biodistribution of Hypericin in Orthotopic Transitional Cell Carcinoma Bladder Tumors: Implication for its Photodynamic Therapy  
Appolinary Kamuhabwa

14:26 – 14:38 Phase I/II Clinical Test of Photodetection of Early Bladder Cancer with the Hexyl Ester of ALA  
Patrice Jichlinski

14:38 – 14:50 Phase III Trials for Early Bladder Cancer with h-ALA  
Bjorn Klem

**15:00 – 15:30 Afternoon Break/Exhibits/Posters**

**15:30 – 17:00 Concurrent Symposia**

**Regency Ballroom**  
**Optical Diagnosis (1 of 2)**

*Chairs:* Calum MacAulay & Kinya Furukawa

15:30 – 15:40 Bacteria-induced Fluorescence as a Disturbant Factor of Protoporphyrin IX - Fluorescence Diagnosis in the Oral Cavity  
W. Zenk

15:40 – 15:50 Fluorescence Diagnostic of Malignant Oral Lesions After Local ALA-Appllication  
W. Zenk

15:50 – 16:00 Localization of Small Non-Malignant and Malignant Lesions of the Colon by Laser-Induced Fluorescent Endoscopic (LIFE) Imaging  
Wojciech Cebula

16:00 – 16:10 Fluorescence Detection of Bladder Carcinoma After Intravesical Instillation With Hypericin  
Marie-Ange D’Hallewin

16:10 – 16:20 Simultaneous Prompt and Delayed Pulsed Laser-Induced Fluorimetry Quantifies Protoporphyrin IX Autofluorescence in Gastrointestinal Tumours  
Tim Handke

16:20 – 16:30 Measurements of NIR Raman Spectra of Skin In Vivo Using a Rapid Fiber Optic Raman Spectroscopy System  
Zhiwei Huang

16:30 – 16:40 Development and Clinical Application of High-Sensitive Fluorescence Detection System to Detect Cancer Lesion Using Fiber-Optic Endoscope  
Yoshinobu Ohsaki

16:40 – 16:50 Fluorescence Visualization with Blue Light More Accurately Estimates the Histopathologic Margins of Basal Cell Carcinoma as Compared to Clinical Examination Alone  
Harvey Lui

**Plaza East**  
**Biliary/Pancreatic/Lower GI**

*Chairs:* Norman Marcon & Stephen Hahn

15:30 – 15:50 PDT for Biliary Cancer  
Marianne Ortner

15:50 – 16:10 Phase II Study of Intraperitoneal Photodynamic Therapy for Patients with Overtly Disseminated Intraperitoneal Malignancies  
James M. Metz

16:10 – 16:22 Enhanced Mucosal Selectivity with m-THPC Using a Short Drug-Light Interval in the Rat Colon  
Neil F. Jamieson

16:22 – 16:34 Photodynamic Therapy for Cholangiocarcinoma  
Ian G. Renner

**Balmoral Room**  
**Neurosurgery**

*Chairs:* Paul Muller & John Hill

15:30 – 15:50 Clinical Trials in the Photodynamic Therapy of Primary Malignant Supratentorial Brain Tumors - Phase 2 and Phase 3 Studies  
Paul Muller

15:50 – 16:00 Human U87 Glioma Response to Photodynamic Therapy Using Photofrin in Combination with Buthionine Sulfoxine (BSO)  
Michael Chopp
15:30 – 17:00  
**Concurrent Symposia**

### Balmoral Room  
**Neurosurgery continued**

16:00 – 16:10  
**Experimental Basis and Development of a Novel Intracranial Indwelling Balloon Light Applicator: Implications for Photodynamic Therapy in the Brain**  
Henry Hirschberg

16:10 – 16:20  
**High-Dose Laser Irradiation and 5-Aminolevulinic Acid (5-ALA) for Photodynamic Therapy of Glioblastomas**  
Albrecht Hochstetter

16:20 – 16:30  
**Intraoperative Photodynamic Diagnosis of Human Malignant and Benign Gliomas Using ALA Induced PpIX**  
Sadao Kaneko

16:30 – 16:40  
**PDT Induced Apoptosis in the 9L Rat Glioma Model**  
Lothar Lilge

16:40 – 16:50  
**Intraoperative Detection Of Malignant Brain Tumors By A Multispectral Fluorescence Guidance System**  
Victor Yang

### Plaza West  
**Photosensitizers (2 of 3)**

**Chairs:** Johan van Lier & Ravindra K. Pandey

15:30 – 15:50  
**PDT Tumor Response in the Rat: Real-Time Monitoring by FDG-PET Imaging**  
Johan van Lier

15:50 – 16:10  
**HPPH-Aminophenyl DTPA [Gd(III)]-Conjugate: A Potential Tumor Diagnostic Agent for MRI and Photosensitizer for PDT**  
Ravindra K. Pandey

16:10 – 16:20  
**Novel Strategies for the Construction of Targeted PDT Agents Using Porphyrin Isothiocyanates**  
Oliver J. Clarke

16:20 – 16:30  
**The Application of Combinatorial Techniques in the Synthesis of Novel Photosensitizers**  
Kerry J. Elgie

16:30 – 16:40  
**Acetylene-Substituted Phthalocyanine Analogues As New Photosensitizers For Photodynamic Therapy**  
Rudiger Faust

16:40 – 16:50  
**Studies on Photodynamic Effects of Hydrophilic Photosensitizers, ATX-S10Na(II) and PAD-S31**  
Eiji Kohno

16:50 – 17:00  
**Improvement of PDT with Esterification of ALA: Influences on PPIX Accumulation, - Kinetics and - Phototoxicity**  
René C. Krieg

17:00 – 17:10  
**MV6401: A New Potent Photosensitizer for Photodynamic Therapy**  
Byron C. Robinson

### Plaza Centre  
**Upper GI (2 of 2)**

**Chairs:** Ken Wang & Herbert Wolfsen

15:30 – 15:40  
**Photodynamic Therapy for Dysplastic Barrett’s Oesophagus: Long Term Follow Up**  
Clive J. Kelty

15:40 – 15:50  
**Long-Term Survival After Photodynamic Therapy With Photofrin® For Early Gastric Cancer**  
Seishiro Mimura

15:50 – 16:00  
**Endoscopic Photodynamic Therapy (PDT) in Inoperable Oesophageal Cancer**  
Keyvan Moghissi

16:00 – 16:10  
**EMR-PDT for Gastric Cancer**  
Hirojuki Narahara

16:10 – 16:20  
**Photodynamic Therapy for Gastric Cancer**  
Yoshihiro Nishiwaki

16:20 – 16:30  
**Optimization of Light Dosimetry During Photodynamic Therapy in the Esophagus: An Animal Study**  
Alexandre Radu

16:30 – 16:40  
**Laser Therapy of Colorectal Cancer: Is There a Role for Photodynamic Therapy?**  
Allan Weiss

16:40 – 16:50  
**P53 Mutations in Barrett’s Esophagus Predict Poor Response to Photodynamic Therapy**  
Kenneth K. Wang

16:50 – 17:00  
**Photodynamic Therapy for Dysplastic Barrett’s Esophagus and Mucosal Esophageal Adenocarcinoma**  
Herbert C. Wolfsen
### Congress Program • Friday, June 8

<table>
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<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>08:30 – 10:00</td>
<td><strong>Plenary 5</strong> &lt;br&gt;<strong>Chair:</strong> David McLean &lt;br&gt;<strong>Regency Ballroom</strong>&lt;br&gt;08:30 – 09:00 <em>Mechanisms of Action of PDT – Cellular Mechanisms</em> &lt;br&gt;David Kessel &lt;br&gt;09:00 – 09:30 <em>Molecular Mechanisms Moving to Clinical Treatments</em> &lt;br&gt;Charles Gomer &lt;br&gt;09:30 – 10:00 <em>Cardiovascular PDT</em> &lt;br&gt;Jean McEwan</td>
<td>Regency Ballroom</td>
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<tr>
<td>10:00 – 10:30</td>
<td><strong>Refreshment Break/Exhibits/Posters</strong> &lt;br&gt;<strong>Regency East</strong></td>
<td>Regency East</td>
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<tr>
<td>10:30 – 12:00</td>
<td><strong>Plenary 6</strong> &lt;br&gt;<strong>Chair:</strong> David McLean &lt;br&gt;<strong>Regency Ballroom</strong>&lt;br&gt;10:30 – 11:00 <em>PDT in Urology</em> &lt;br&gt;Ronald Moore &lt;br&gt;11:00 – 11:30 <em>Clinical Applications of PDT in Biliary and Pancreatic Diseases</em> &lt;br&gt;Stephen Bown &lt;br&gt;11:30 – 12:00 <em>Head and Neck Cancer</em> &lt;br&gt;Merrill Biel</td>
<td>Regency Ballroom</td>
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<tr>
<td>12:00 – 13:30</td>
<td><strong>Lunch Break/Exhibits/Posters</strong> &lt;br&gt;(lunch on own)</td>
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<td>12:00 – 13:15</td>
<td><strong>Visudyne™ Session</strong> (closed workshop) &lt;br&gt;<strong>Grouse</strong>&lt;br&gt;<em>Visudyne™ Therapy for the Treatment of Wet Age-Related Macular Degeneration</em> &lt;br&gt;Michael J. Potter &lt;br&gt;This session will be of interest to general ophthalmologists and those wishing to become familiarized with Visudyne™ therapy for the treatment of wet age-related macular degeneration. Several clinical examples will be reviewed, including diagnosis by fluorescein angiogram and narration of a Visudyne™ treatment.</td>
<td>Grouse</td>
</tr>
<tr>
<td>13:30 – 15:00</td>
<td><strong>Concurrent Symposia</strong>&lt;br&gt;&lt;br&gt;<strong>Plaza East</strong> &lt;br&gt;<strong>Dermatology (2 of 2)</strong> &lt;br&gt;<strong>Chairs:</strong> Colin A. Morton &amp; Allan Oseroff</td>
<td>Plaza East</td>
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<td>13:30 – 13:45 <em>Indications for ALA-PDT in Cutaneous Malignancy</em> &lt;br&gt;Colin A. Morton</td>
<td>Plaza East</td>
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<td></td>
<td>13:45 – 14:00 <em>Skin PDT: Outcomes, Treatment, Parameters and Metrics</em> &lt;br&gt;Allan Oseroff</td>
<td>Plaza East</td>
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<td></td>
<td>14:00 – 14:10 <em>Photodynamic Therapy of Non-Melanoma Skin Cancers with Verteporfin and Red Light Tumor Response and Cosmetic Outcome</em> &lt;br&gt;Lori Hobbs</td>
<td>Plaza East</td>
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<td></td>
<td>14:10 – 14:20 <em>Topical ALA-Mediated Photodynamic Therapy of Superficial Basal Cell Carcinoma Using Two Light Fractions With a Two Hour Interval</em> &lt;br&gt;Willem M. Star</td>
<td>Plaza East</td>
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<td></td>
<td>14:20 – 14:30 <em>Kinetics of ALA-Induced Fluorescence of Human Skin Tumors In Vivo</em> &lt;br&gt;Christoph Abels</td>
<td>Plaza East</td>
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<td></td>
<td>14:30 – 14:40 <em>Long-Time Follow-up after ALA-PDT of Superficial Basal Cell Carcinoma</em> &lt;br&gt;Sigrid Karrer</td>
<td>Plaza East</td>
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<td>14:40 – 14:50 <em>Late Recurrence of Superficial Basal Cell Carcinoma Following ALA-PDT</em> &lt;br&gt;Joyce A. Leman</td>
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<td></td>
<td>14:50 – 15:00 <em>Photofrin Photodynamic Therapy for Nevoid Basal Cell Carcinoma Syndrome</em> &lt;br&gt;Sherry Shieh</td>
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<td></td>
<td>15:00 – 15:10 <em>Photodynamic Therapy for Chest Wall Progression from Breast Cancer is an Underutilized Treatment Modality</em> &lt;br&gt;Thomas S. Mang</td>
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<td></td>
<td><strong>Plaza Centre</strong> &lt;br&gt;<strong>Infectious Diseases /Topical PDT (1 of 2)</strong> &lt;br&gt;<strong>Chairs:</strong> Tayyaba Hasan &amp; Jun-Heng Li</td>
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<td>13:30 – 13:42 <em>Photodynamic Therapy for Wound Infections</em> &lt;br&gt;Michael R. Hamblin</td>
<td>Plaza East</td>
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<td>13:54 – 14:08 <em>Photodynamic-Ultrasound Therapy of Infected Wound</em> &lt;br&gt;Vladimir P. Zharov</td>
<td>Plaza East</td>
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<td>14:08 – 14:20 <em>Oncological Applications of Photodynamic Therapy and Selective Laser Hyperthermia</em> &lt;br&gt;Mark L. Gelfond</td>
<td>Plaza East</td>
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13:30 – 15:00  Concurrent Symposia

**Plaza Centre**  Infectious Diseases / Topical PDT (1 of 2) continued

14:20 – 14:32  Photodynamic Therapy and Topical Application of the New Photosensitizer MV6401  
Stephanie F. Greene

14:32 – 14:44  ALA Penetration in Cutaneous Tumors: Measurement by Protoporphyrin IX Fluorescence and Correlation with Peripheral Benzodiazepine Receptor Expression  
Janet Morgan

14:44 – 14:56  Photodynamic Therapy for MRSA  
Nobuyuki Sakaniwa

**Balmoral Room**  Optical Diagnosis (2 of 2)

Chairs: Reinhold Baumgartner & Stefan Andersson-Engels

Reinhold Baumgartner

13:50 – 14:00  Endoscopic Detection of Dysplasia and Early Cancer in Barrett’s Esophagus after Sensitization with 5-Aminolevulinic Acid  
Thomas Stepinac

14:00 – 14:10  Barrett’s Esophagus: High Detection Rate for Dysplasia and Early Adenocarcinoma by Combined Screening with 4-Quadrant Biopsies and Photodynamic Detection  
Gian O. Dorta

14:10 – 14:20  The Use of An Optical Biopsy System in Barrett’s Esophagus  
Kenneth K. Wang

14:20 – 14:30  Quantitative Fluorescence Imaging  
Annette McWilliams

14:30 – 14:40  Spectroscopic Diagnosis of Bladder Tumours Using Fluorescence Excitation-Emission-Matrix  
Wei Zheng

14:40 – 14:50  Detection of Superficial Extension of Central Type Lung Cancer by Photodynamic Diagnosis Assisted with Fluorescent Endoscopy  
Takaaki Tsuchida

**Plaza West**  Photosensitizers (3 of 3)

Chairs: Clifford Leznoff & Kevin Smith

13:30 – 13:39  Photodynamic Therapy (PDT) of a Gastric Cancer Cell Line Using Indocyanine Green (ICG) and a Low Power Laser Diode  
Christopher Russell

Sarah Gerhardt

Snezana Andrejevic-Blant

13:57 – 14:06  Clinical Evaluation of a Promising New Chlorin E6 Derivative – Photochlorin 1  
E. Ph. Stranadko

14:06 – 14:15  Photodynamic Inactivation of a Human Glioblastoma Cell Line Using 5-Aminolevulinic Acid-Induced Protoporphyrin IX – Modulation by Iron and Differentiating Agents  
Wolfgang Strauss

14:15 – 14:24  Evaluation of the Potential of Pyropheophoride-a Methyl Ester (MPa) as a New Photosensitizer: A Comparison of its Photodynamic Efficacy and Yield of Oxygen Singlet with mTHPC  
X. Sun

14:24 – 14:33  Photodynamic Therapy on Normal Rat Colon Using Tookad (WST09), a Bacteriochlorophyll Derivative  
Josephine Woodhams

14:33 – 14:42  Symmetrical Phenothiazine Dyes as Potential Therapeutic Agents for Use in Photodynamic Therapy  
Andrea L. Bell

14:42 – 14:51  Tookad – A Novel Palladium-Bacteriochlorophyll Sensitizer for Photodynamic Therapy: Synthesis and Characterization  
Avigdor Scherz
13:30 – 15:00  Concurrent Symposia

**Plaza West**  Photosensitizers (3 of 3) continued

14:51 – 15:00  Photodynamic Therapy (PDT) of Rat C6 Glioma Xenografts With Pd-Bacteriopeophorbide (Tookad) Leads to Decreased Metastases and Increased Animal Cure Compared to Surgery  Smadar Schreiber

15:00 – 15:09  The Photochemical and Photophysical Mechanism Initiated by Excited PD-Bacteriochloropyll Derivative  Vakrat Yahel

**Stanley Room**  Urology/Gynecology (2 of 2)

34th Floor  Chair: Dieter Jocham

13:30 – 13:50  Long Term Results of PDT of Bladder Tumors  Dieter Jocham

13:50 – 14:02  Simultaneous Auto- and Xenofluorescence in the Diagnosis of Cervical Intraepithelial Neoplasia  Peter Hillemans

14:02 – 14:14  Application and Perspective of PDT and Chemotherapy to Stage Ib1 Cervical Cancer  Tetsuya Muroya


14:26 – 14:38  Autofluorescence Analysis of Bladder Cancer Using Laser Confocal Microscopy and Spectroscopy  Malini Olivo

14:38 – 14:50  Macro-Microscopic Fluorescence Analysis of Bladder Cancer Using ALA Induced Fluorescence Cystoscopy and Laser Confocal Microscopy  Malini Olivo

14:50 – 15:00  Photodetection of Ovarian Cancer with h-ALA  Attila Major

15:00 – 15:30  Afternoon Break

15:30 – 17:00  Concurrent Symposia

**Plaza Centre**  Regulatory Issues & Outcomes Research in PDT

Chairs: Michael Unger & Eric Edell

15:30 – 15:45  Evaluating Clinical Outcomes of Palliative PDT  Teresa Goodell

15:45 – 16:00  Quality of Life as an Outcome of PDT for Barrett’s Esophagus  Kathy B. Wright

16:00 – 16:15  Regulatory Issues Facing PDT Investigations  John Hill

16:15 – 16:30  Selective Porphyrin Synthesis in Chemically Induced Skin Tumours: Implications in Cutaneous Photosensitisation  Alcira Batlle

16:30 – 16:40  Our Experience in PDT with Photosensitzers of Different Groups  Evgueni Ph. Stranadko

**Plaza East**  Topical PDT (2 of 2)

Chairs: Roy Pottier & Qian Peng

15:30 – 15:50  Topical Photodynamic Therapy in Dermatology: The How’s, The Why’s and the Why Not’s  Alexis Sidoroff

15:50 – 16:10  PDT of BCC & AK with Metvix  Trond Warloe

16:10 – 16:20  Photodynamic Diagnosis, Therapy and Real-Time Treatment Control  Arie Orenstein

16:20 – 16:30  Superficial Temperature and Perfusion Measurements in Connection with PDT of Basal Cell Carcinomas  Sara Palsson

16:30 – 16:40  Optimising Illumination Protocols for ALA-PDT  Dominic J. Robinson

16:40 – 16:50  Effect of Photodynamic Treatment With Superficial Application of 5-Aminolaevulinic Acid (ALA) on Implantable Breast Cancer in Mice  Miroslaw Stec
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<th>Title</th>
<th>Speaker</th>
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<tr>
<td>15:30 – 17:00</td>
<td>Concurrent Symposia</td>
<td>Plaza East</td>
<td><strong>Topical PDT (2 of 2) continued</strong></td>
<td>David I. Vernon</td>
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<td>16:50 – 17:00</td>
<td>A Study on the Penetration of 5-Aminolaevulinic Acid and its Methyl and Hexyl Esters Through Normal and UVB Treated Hairless Mouse Skin</td>
<td>Stanley Room, Topical PDT (2 of 2) continued</td>
<td>Sandra Gollnick</td>
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<td>15:30 – 17:00</td>
<td>Immunomodulation</td>
<td>34th Floor</td>
<td><strong>Plaza East</strong></td>
<td>Sandra Gollnick &amp; Mladen Korbelik</td>
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<td>16:10 – 16:20</td>
<td>Increased Cytotoxic Effects of Photodynamic Therapy in IL-6 Gene Transfected Cells via Induced Apoptosis</td>
<td>Chairs: Sandra Gollnick &amp; Mladen Korbelik</td>
<td>Increased Cytotoxic Effects of Photodynamic Therapy in IL-6 Gene Transfected Cells via Induced Apoptosis</td>
<td>Shuji Ichinose</td>
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<tr>
<td>16:20 – 16:30</td>
<td>Topical ALA-PDT Modifies Cytokine Levels in Serum of Patients with Skin Tumours</td>
<td>Chairs: Sandra Gollnick &amp; Mladen Korbelik</td>
<td>Topical ALA-PDT Modifies Cytokine Levels in Serum of Patients with Skin Tumours</td>
<td>Mariusz Adamek</td>
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<tr>
<td>16:40 – 16:50</td>
<td>Effect of PDT With QLT0074 on Cytokine Release From Human Endothelial Cells</td>
<td>Chairs: Sandra Gollnick &amp; Mladen Korbelik</td>
<td>Effect of PDT With QLT0074 on Cytokine Release From Human Endothelial Cells</td>
<td>Anthea Tench Stammers</td>
</tr>
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<td>16:50 – 17:00</td>
<td>Potentiation of Therapeutic Efficacy of PDT by In Vivo Administration of Cyclophosphamide and Lymphokine Activated Killer Cells on Rat Ascites Tumor Cells</td>
<td>Chairs: Sandra Gollnick &amp; Mladen Korbelik</td>
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<td>Dima F. Vasile</td>
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<td>17:00 – 17:10</td>
<td>Pre-Clinical Trials of h-ALA for PDT of Rheumatoid Arthritis</td>
<td>Chairs: Sandra Gollnick &amp; Mladen Korbelik</td>
<td>Pre-Clinical Trials of h-ALA for PDT of Rheumatoid Arthritis</td>
<td>Norbert Lange</td>
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<td>Balmoral Room</td>
<td><strong>Mechanisms of Action (3 of 3)</strong></td>
<td>Barbara Henderson &amp; Nancy Oleinick</td>
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<tr>
<td>15:40 – 16:00</td>
<td>Combination Therapy of a Cultivated Leukemia Cell with Photoradiation and Sonolysis</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
<td>Combination Therapy of a Cultivated Leukemia Cell with Photoradiation and Sonolysis</td>
<td>Norio Miyoshi</td>
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<tr>
<td>16:00 – 16:10</td>
<td>Carrier Protein of Water-Soluble Tumor Localizing Porphyrin-Attn-2, Attn-S10 (Na)</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
<td>Carrier Protein of Water-Soluble Tumor Localizing Porphyrin-Attn-2, Attn-S10 (Na)</td>
<td>Susumu Nakajima</td>
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<td>16:10 – 16:20</td>
<td>Oxygen Dynamics During PDT: Comparison of In Vivo and In Vitro Effects for Vascular Versus Cellular Targeting Sensitizers</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
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<td>Brian W. Pogue</td>
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<td>16:20 – 16:30</td>
<td>Involvement of the Tumour Microcirculation in Aminolaevulinic Acid (ALA) Based Photodynamic Therapy (PDT) In Vivo</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
<td>Involvement of the Tumour Microcirculation in Aminolaevulinic Acid (ALA) Based Photodynamic Therapy (PDT) In Vivo</td>
<td>F. Ruth Potter</td>
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<td>16:30 – 16:40</td>
<td>Influence of Oxygen Level on Aminolevulinic Acid (ALA) Mediated Protoporphyrin IX (PPIX) Accumulation and Photodynamic Damage</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
<td>Influence of Oxygen Level on Aminolevulinic Acid (ALA) Mediated Protoporphyrin IX (PPIX) Accumulation and Photodynamic Damage</td>
<td>Joachim Rauch</td>
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<td>16:40 – 16:50</td>
<td>Confocal Laser Scanning Microscopy to Investigate Dose Dependent Cell Death Mechanisms During ALPCS4 - PDT in Adherent Cells</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
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<td>Angelika Ruck</td>
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<tr>
<td>16:50 – 17:00</td>
<td>Subcellular Time-Resolved Microspectrofluorometry of ALA-PPIX and mTHPC Using Short Pulsed Diode Lasers</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
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<td>Angelika Ruck</td>
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<tr>
<td>17:00 – 17:10</td>
<td>Influence of Steroid Hormones and Steroid Hormone Antagonists on Photodynamic Inactivation In Vitro</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
<td>Influence of Steroid Hormones and Steroid Hormone Antagonists on Photodynamic Inactivation In Vitro</td>
<td>Reinhard Sailer</td>
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<tr>
<td>17:10 – 17:20</td>
<td>Mechanism Underlying the Potentiating Effect of a Transient Thrombocytopenia on Photofrin-Based Photodynamic Therapy</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
<td>Mechanism Underlying the Potentiating Effect of a Transient Thrombocytopenia on Photofrin-Based Photodynamic Therapy</td>
<td>Wim Sluiter</td>
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<td>17:20 – 17:30</td>
<td>Endogenous Protoporphyrin IX (PPIX) Production in Rat Pancreatoma Cells from δ-Aminolaevulinic Acid (ALA) and N-Pentyl ALA Ester</td>
<td>Chairs: Barbara Henderson &amp; Nancy Oleinick</td>
<td>Endogenous Protoporphyrin IX (PPIX) Production in Rat Pancreatoma Cells from δ-Aminolaevulinic Acid (ALA) and N-Pentyl ALA Ester</td>
<td>Caroline J. Whitaker</td>
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**Concurrent Symposia**

**Plaza West**  
**Dosimetry (2 of 2)**

*Chair:* Michael Patterson

15:30 – 15:50 Progress in PDT Dosimetry  
Michael Patterson

15:50 – 16:00 Detection of PDT-Generated Singlet Oxygen in In Vitro and In Vivo by Near-Infrared Luminescence  
Brian C. Wilson

16:00 – 16:10 Monitoring Photoproduction Formation and Photobleaching by Fluorescence Spectroscopy Improves PDT Dosimetry  
Haishan Zeng

16:10 – 16:20 Long-Term Stability of Silicon Photodiode Calibration for In Vivo Dosimetry in Photodynamic Therapy  
Timothy C. Zhu

16:20 – 16:30 The Effect of PDT on In Vivo Oxygen Saturation and Microvascular Circulation  
Josephine Woodhams

16:30 – 16:40 Observation of the Binding State Between Human Serum Albumin and Mono-L-Aspartyl Chlorin E6 Using the Surface Plasmon Resonance Phenomenon  
Taichiro Ishizumi

16:40 – 16:50 Measuring Blood-Flow Changes of Tumor Implanted in Mice by Noninvasive Optical Multichannel Oxygen Monitor  
Junichi Nitadori

**Banquet**  
Regency Ballroom

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**Congress Program • Saturday, June 9**

**08:30 – 10:00 Plenary 7**  
*Chair:* Harvey Lui

08:30 – 09:00 Upper GI PDT  
Helmut Messman

09:00 – 09:30 Immune Modulation  
Craig Elmets

**09:30 – 10:00 Refreshment Break**

**10:00 – 12:00 Plenary 8**  
*Chairs:* Hubert van den Bergh & Steven Jacques

10:00 – 12:00 Drug Discovery and Clinical Trials  
Industry Representative
Poster viewing will be available Wednesday through Friday in the Regency Foyer.

**Cardiovascular**

1. Sustained Benefit During 2 Year Follow Up in a Pilot Study of Adjuvant Photodynamic Therapy and Angioplasty for Restenosis of the Superficial Femoral Artery
   - Richard Mansfield
2. Effects of Photodynamic Therapy on Elastic Fiber Networks in the Atheroma of Rabbits Using NPe6 and a Long Wavelength Diode Laser
   - Junichi Hayashi
3. Photodynamic Therapy of PIG Coronary Arteries Induces Apoptosis of Endothelial and Vascular Smooth Muscle Cells
   - Richard Mansfield

**Dermatology**

4. The Problems and Complications of Photodynamic Therapy in the Treatment of Skin Neoplasms
   - Edward Stanowski
5. Cutaneous Consequences of Gastroesophageal Photodynamic Therapy
   - Christine S. Ng
6. Photodynamic Therapy Using Topical Methyl-5-Aminolevulinate (Metvix) is as Efficacious as Cryotherapy in Actinic Keratosis, but with Superior Cosmetic Results and High Patient Satisfaction. A Prospective, Randomized Study
   - Rolf-Markus Szeimies
7. Topical Photodynamic Therapy: The Nurses Perspective
   - Michael Dean
8. Malignant Melanoma: A New Type of Sensitizers for its PDT and a New Method for Early Diagnostics
   - Dieter Leopold
9. Combination Effect of Photodynamic and Sonodynamic Therapy on Experimental Skin Squamous Cell Carcinoma in C3H/Hen Mice
   - Norio Miyoshi

**ENT**

10. Pharmacokinetics of Protoporphyrin IX in Human Blood and Skin Following Oral Rinsing of 5-Aminolevulinic Acid
    - Christian S. Betz

**Gynecology**

12. Photodynamic Therapy of Vulvar Dystrophy with 5-ALA
    - Marija Hillemanns
13. Angiosarcoma After Radiotherapy of Breast Cancer PDT as a Therapeutic Option for this Unusual Tumor
    - Peter Urban

**Immunomodulation**

    - Leslie G. Ratkay
15. Adoptive Immunotherapy with Genetically Altered Natural Killer Cell Line Increases the Cure Rate of PDT-Treated Tumors
    - Jингhai Sun

**Light Sources and Delivery**

16. In Vivo Determination of Tumor Optical Parameters in Esophageal Carcinoma
    - Udo Anegg
17. Cylindrical Diffusing Tips for PDT Light Delivery Based on Type 2 Bragg Grating
    - Lothar Lilge
18. Laser Devices for PDT with Chlorin E6 Derivative
    - Evgueni Ph. Stranadko
Lower GI
19 Tumor Reduction Before Photodynamic Therapy: New Technique of Endoscopic Treatment for Advanced Rectal Cancer
   Tetsuya Nakamura
20 Outcome of Patients with Cholangiocarcinoma After Local Treatment with Photodynamic Therapy
   Thomas Nesbigall
21 Photodynamic Effect for Chemically Induced Hepatocellular Carcinoma in a Rat Model
   Masako Nishiwaki
22 Selective Accumulation of Protoporphyrin IX in Chemically Induced Hepatocellular Carcinoma in a Rat Model
   Mamiko Otake

Mechanisms of Action
23 Threshold for PDT Induced Cell Destruction Measured in Human Cancer Cell Embedded in the Hen’s Egg Model
   Hans-Jochen Foth
24 Chlorine e6 Induced Photosensitized Increase of Cells Passive K+-Permeability
   Grigor V. Gyulkhandanyan
25 Detection of 1.27um Emission from Singlet Oxygen in Photodynamic Therapy
   Toru Hirano
26 Anti-Invasion Effects of Low Dose PDT With Photofrin on U251n Human Glioma Cells and 9L-Gliosarcoma Cells
   Feng Jiang
27 Clinical and Experimental Evidence of bcl-2 Involvement in Response to Photodynamic Therapy
   Michael I. Koukourakis
28 Hypoxia Inducible Factor (HIF-1a and HIF-2a) Expression in Early Esophageal Cancer and Response to Photodynamic Therapy and Radiotherapy
   Michael I. Koukourakis
29 Generation of Reactive Oxygen Species by Tookad Depends on the Sensitizer Microenvironment
   Brian W. McIlroy
30 Aminolaevulinic Acid Hexyl Ester (Alahe) Based Photodynamic Therapy (PDT) – The Role of the Tumour Microcirculation In Vivo
   F. Ruth Potter
31 A Microfluorescence Technique for the Study of Intracellular PpIX Photobleaching
   Caroline Sudworth
32 Role of the Extracellular Signal-Regulated Kinases in the Sensitivity of Human Cells to Photofrin-Mediated PDT
   Zhimin Tong
33 Photodynamic Therapy (PDT) of Human Tumor Xenografts Lacking Caspase-3
   Cecilia M. Whitacre
34 Action of δ-Aminolevulinic Acid and δ-Aminolevulinic Acid Methyl Ester on Human Cancer Cells
   Christina M.N. Yow
35 Spectroscopic Properties and Time Evolution of PPIX in a Mammary Adenocarcinoma M2 after δ-ALA Administration. An In Vivo Fluorescence Study
   Patricia del V. Repossi

Neurosurgery
36 Photodynamic Therapy With Photofrin Plus BSO Reduces Invasiveness of UI87 Human Glioma Cells
   Feng Jiang
37 Photodynamic Therapy Of Recurrent Intracranial Metastatic Cancer: Report Of 8 Cases
   Paul Muller

Ophthalmology
38 Prevention of Posterior Capsule Opacification by Photodynamic Therapy with Localized Verteporfin for Injection (Benzoporphyrin Derivative Monoacid) in a Euthanized Rabbit Surgical Model
   Howard E. Meadows

Optical Diagnosis
39 Fluorescence diagnosis of Papillomas and Early Stage Cancer of Larynx and Bronchus: Combination of Autofluorescence and 5-ALA Induced Fluorescence Imaging with In Situ Spectrophotometry
   Victor Sokolov
40 Technical Note on Intraoperative MTHPC-Mediated Fluorescence Diagnosis of Malignant Brain Tumors
   Andreas Zimmermann
41 Influence of the PH Value on the Absorption and Fluorescence Properties of MTHPC
   Andreas Zimmermann
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<td>42  Anticancer Effect of Photodynamic Therapy Using 9-Hydroxypheophorbide-a and 660nm Diode Laser on Squamous Cell Carcinoma Cell Line</td>
<td>Phil-Sang Chung</td>
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<td>43  Aggregation of Water-Soluble Diaminoacid Protoporphyrin Derivatives - PP(AA)2Arg2</td>
<td>Mariusz Czuba</td>
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<td>44  Building An Arsenal of Tumoricidal Porphycene Photosensitizers From a Single Precursor</td>
<td>Wilson Sum Wai Lam</td>
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<td>45  Synthesis and Modifications of Benzochlorin Photosensitizer for PDT</td>
<td>Yan Kin Lau</td>
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<td>46  Veterinary Clinical Application of PDT with PAD-S31 (New Photo Sensitizer)</td>
<td>Saburo Minami</td>
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<td>47  Photosan - A Porphyrin Sensitizer up to Date</td>
<td>Hans Mueller von der Haegen</td>
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<td>48  Second Generation Photosensitizer ATX-S10 for Photodynamic Therapy</td>
<td>Yoshihara Nakae</td>
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<td>49  Development of New PDT-Drugs Based on Nonsteroidal Antiprogestins of Marine Origin</td>
<td>Mario Wurglics</td>
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<td>50  Optimal Tissue Retention Property of New Photosensitizer: PAD S31</td>
<td>Yoshiharu Okamoto</td>
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<td>51  Determination of the Peak Absorption Wavelength and Disaggregation Kinetics of Tookad In Vivo Using Dynamic, Spatially-Resolved Diffuse Reflectance Spectroscopy in a Rabbit Model</td>
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<td>52  Determination of Singlet Oxygen Quantum Yield of Diaminoacid Protopophyrin Derivatives -PP(AA)2Arg2</td>
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<td>53  Md-YAG Laser and PDT in Paliative Therapy in Advanced Bronchial Carcinoma</td>
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<td>54  Does Combined Photodynamic Therapy and Hyperbaric Oxygenation Influence the Acute Relief of Poststenotic Symptoms in Lung Cancer?</td>
<td>Birgit Fell</td>
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<td>55  No Systemic Contribution to New In vivo Protoporphyrin IX Fluorescence Following Photobleaching</td>
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<td>56  Does New Photosensitizer Improve Photodynamic Therapy in Advanced Esophageal Carcinoma</td>
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<td>57  In Vivo Light Dosimetry During Photodynamic Therapy of Barrett's Oesophagus With 5-Aminolevulinic Acid</td>
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<td>58  Photodynamic “Brachy” Therapy</td>
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