



# BioLIGHT 2003



## Canada's First Biophotonics Primer & Workshop

Four Points Sheraton Hotel, Gatineau, Quebec

November 13-16, 2003

Organized by: Vitesse Re-Skilling Canada Inc. & the Canadian Institute for Photonics Innovation

**Objective:** The objective of *the first and unique biophotonics forum in Canada - BioLIGHT 2003* – is to create a cross-disciplinary dialogue and knowledge exchange between physicists, photonics engineering professionals, biologists, medical scientists and medical practitioners. BioLIGHT 2003 will provide an opportunity to learn and share expert knowledge on the emerging biophotonics field.

**Key Topics:** The Primer and Workshop will focus on the sciences and technologies for biophotonics as it applies to:

***Medicine and Health, Biosciences, Environment, Security and Defence***

- Discussion of potential interplay among various disciplines as it relates to biophotonics
- Roundtable discussions for a deeper familiarization with the field
- Brainstorming sessions on new research directions, new technologies and business opportunities

**Key Speakers:** The following are outstanding and internationally recognized Canadian and US experts in medicine, biology, physics, photonics and biomedical engineering who will deliver lectures during the workshop:

**Dr. Brian Wilson**, Professor  
Ontario Cancer Institute, Toronto, Canada

**Dr. A.E. (Ted) Dixon**, CEO  
Biomedical Photometrics Inc., Waterloo, ON, Canada

**Dr. Ulrich J. Krull**, Professor  
University of Toronto, Canada

**Dr. Steven L. Jacques**, Professor  
Oregon Medical Laser Center, USA

**Dr. Rejean Munger**, Professor  
University of Ottawa Eye Institute, ON, Canada

**Dr. Michael Sowa**, Group Leader, Spectroscopy  
NRC-Institute for Biodiagnostics, Winnipeg, Canada

**Dr. Fred Milanovich**, Professor  
Lawrence Livermore National Laboratory, USA

**Dr. Eric Marcotte**,  
Regenerative Medicine, CIHR, Canada

**Dr. Susan Springthorpe**, Director of Research  
Centre for Research in Environmental Microbiology, Ottawa University

**Dr. Min Lin**, Research Scientist  
Canadian Food Inspection Agency, Ottawa, Canada

**Dr. Robert Weersink**, Director of Operations,  
Biophotonics Facility, Photonics Research Ontario, Canada

**Janet Walden**, VP Research Partnerships Programs  
Natural Sciences and Engineering Research Council of Canada

**Dr. Yves de Koninck**, Professor  
Centre de recherche Université Laval Robert-Giffard, QC, Canada

**Dr. David Cramb**, Professor  
University of Calgary, AB, Canada

**Dr. David Armstrong**, Executive VP  
IatroQuest Corporation, Ottawa, ON, Canada

**Dr. Richard Cline**, VP R&D  
Xillix Technologies Corporation, Richmond, BC, Canada

**Dr. Daniel Houde**, Professor  
Université de Sherbrooke, QC, Canada

**Dr. John Luong**, Group Leader, Biosensors  
NRC-Biotechnology Research Institute, Montreal, Canada

**Marc Wickham**, Vice-President  
Ventures West Management Inc., Ottawa, Canada

**Dr. Nils O. Petersen**, Professor, VP of Research  
University of Western Ontario, London, Canada

**Dr. Yin Yeh, Professor**  
Department of Applied Science, University of California, Davis, USA

**Richard Boudreault**, Vice President  
ART, Montreal, QC, Canada

**Who Will Benefit?** Researchers, engineers, medical professionals, technology executives and managers seeking to learn more about biophotonics as an emerging multi-disciplinary field.

**Sponsorship:** Sponsorship opportunities are available and welcome.

For more info, call Dr. Stoyan Tanev, Program Manager: (613) 746-3595 ext. 228 [stoyan.tanev@vitesse.ca](mailto:stoyan.tanev@vitesse.ca).

To register visit [www.vitesse.ca](http://www.vitesse.ca)

# BioLIGHT 2003: Timetable

	Thursday, Nov. 13	Friday, Nov. 14, 2003 Security, Environment, Defence Application	Saturday, Nov. 15, 2003 Medical Applications	Sunday, Nov. 16, 2003 Biosciences Applications
8:00-8:30		<b>Breakfast</b>	<b>Breakfast</b>	<b>Breakfast</b>
9:00-10:00		<b>Dr. Brian Wilson</b> The Biophotonics Landscape – Overview, Challenges and Opportunities	<b>Dr. Michael Sowa</b> Photonics Applications in Surgery and Trauma Assessment	<b>Dr. Daniel Houde</b> Biophotonics Applications in Radiobiology
10:00-11:00			<b>Dr. Yves de Koninck</b> Photonics: Challenges in Neurosciences	<b>Dr. Min Lin</b> Fluorescence polarization - a unique and powerful tool for the diagnosis of infectious diseases
11:00-12:00		<b>Dr. Ulrich J. Krull</b> Multi-channel Fiber Optic Nucleic Acid Biosensors for Rapid Detection of Pathogens	<b>Dr. David Cramb</b> Advances in Nonlinear Biophotonics	<b>Dr. Nils O. Petersen</b> Bioanalytics in Living Cells
12:00-14:00		<b>Executive Luncheon</b>  <b>Dr. A.E. (Ted) Dixon</b> How Did I Get Into Biophotonics?  <b>Richard Boudreault</b> Time Domain Biophotonics Commercial Applications	<b>Executive Luncheon:</b>  <b>Dr. Richard Cline</b> Transitioning of Biophotonics Research to a Medical Device <b>Robert Weersink</b> One path for Biophotonics Tech Transfer: The PRO Biophotonics IRL	<b>Executive Luncheon &amp; Closing Discussion</b> Biophotonics for the Biosciences – Challenges and Opportunities.  Biophotonics – Strategic Research and Business Opportunities
14:00-15:00	<b>Arrival and Registration</b>	<b>Dr. John Luong</b> Bio-Sensors Based on Optical Detection	<b>Dr. Rejean Munger</b> Biophotonics for Vision, Health and Care	
15:00-16:00		<b>Dr. David Armstrong</b> Biosecurity – A Growing Sector with Convergence Technologies	<b>Dr. Steven L. Jacques</b> Biophotonics - Diagnostic and Therapeutic Applications in Medicine	
16:00-17:00		<b>Dr. Fred Milanovich</b> Defence Against Bio-terror: Detection Technologies, Implementation, Strategies and Commercial Opportunities	<b>Mark Wickham</b> A VC's Perception of the Biophotonics Industry Sector <b>Janet Walden</b> NSERC's vision on converging science & technology sectors	
17:00-18:00	<b>Official Opening &amp; Welcome Reception</b> <b>Prof. Yin Yeh</b> Introductory Comments on the Accelerating Field of Biophotonics  <b>Dr. Eric Marcotte</b> The CIHR Initiatives in Regenerative Medicine – an Opportunity for Biophotonics	<b>Dr. Susan Springthorpe</b> On-line, real-time detection: the holy grail for drinking water microbiology  <b>Roundtable Discussion:</b> Biophotonics in Security and Defence – Challenges and Opportunities	<b>Roundtable Discussion:</b> Biophotonics in Medical Applications – Challenges and Opportunities	
19:00-				

## Key Sponsors



## Sponsors:



With the Contribution of: Optiwave Corporation, Xillix Technologies Corporation, IEEE-LEOS Ottawa Chapter