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Vitesse Interdisciplinary Workshop

Biology for Biophotonics

February 22-25, 2005, Vancouver, BC

ABOUT THE PROGRAM

The Vitesse Interdisciplinary Workshop, is a first of its nature, knowledge-sharing forum aimed at enhancing the knowledge-base of highly qualified professionals at the interface of physics, photonics and biomedical engineering and the biosciences.

TARGETED AUDIENCE

- Physical scientists, photonics and biomedical engineers and researchers
- Ph.D. students and post-doctoral fellows
- Those interested in learning the basic concepts in biology
- Those willing to explore new interdisciplinary opportunities

BENEFITS FOR PARTICIPANTS

- A comprehensive initiation in biology and biochemistry;
- Acquire knowledge of the biological aspects of biophotonics applications;
- Explore the transfer of applied science concepts or techniques to biological systems;
- Discuss real-life examples (roundtable discussions involving speakers and participants);
- Opportunity to network, exchange knowledge and experiences;

LOCATION

VITESSE CANADA OFFICE
1170-666 BURRARD ST.
VANCOUVER, BC V6C 2X8

MAIN TOPICS

- INTRODUCTION TO BIOLOGY
- HIGH THROUGHPUT MOLECULAR BIOLOGY
- PRINCIPLES OF PHOTOBIOLOGY & TISSUE OPTICS
- BIOCHEMISTRY FOR OPTICAL BIOSENSORS
- APPLICATIONS OF NANO-PARTICLES FOR CANCER IMAGING
- NONLINEAR BIOPHOTONICS
- BIOPHOTONICS SIMULATIONS: LIGHT SCATTERING FROM BIOCELLS
- NEW OPTICAL TECHNOLOGIES FOR DETECTION OF CANCEROUS CELLS
- QUANTITATIVE MICROSCOPY INSTRUMENTATION

NOTE: DETAILED SCHEDULE ON BACK PAGE

CONTACTS FOR MORE INFORMATION

PROGRAM COORDINATORS:

NATALIA KAZAKOVA, M.SC.
T: 604.408.2583
E: NATALIA.KAZAKOVA@VITESSE.CA

IVAN PECUH, M.SC.
T: 604.408.2582
E: IVAN.PECUH@VITESSE.CA

STOYAN TANEV, PH.D.
T: 613.746.3595 EXT. 228
E: STOYAN.TANEV@VITESSE.CA

REGISTER ONLINE AT WWW.VITESSE.CA

Biology for Biophotonics

DETAILED PROGRAM

DATES: February 22 - 25, 2005

Time/Date	Tuesday February 22	Wednesday February 23	Thursday February 24	Friday February 25
08:00 - 08:30	Breakfast	Breakfast	Breakfast	Breakfast
08:30 - 12:00	*Introduction to Biology* Dr. Dave Ng	*Principles of Photobiology & Tissue Optics* Dr. Brian Wilson	*Nonlinear Biophotonics* Dr. David Cramb	*New Optical Technologies for Detection of Cancerous Cells* Dr. Calum MacAulay *Quantitative Microscopy Instrumentation* Dr. Pierre Lane Closing Remarks
12:00 - 13:00	Lunch	Lunch	Lunch	Lunch
13:00 - 16:30	*High Throughput Molecular Biology* Dr. Dave Ng	*Biochemistry for Optical Biosensors* Dr. Paul Piunno	*Nanoparticles for Cancer Imaging* Dr. Konstantin Sokolov	
16:30 - 17:30	*Roundtable Discussion: Where Do the Biosciences Need Photonics?*	*Roundtable Discussion: Photonic Technologies for the Biosciences*	*Biophotonics Simulations: Light Scattering from Biocells* Dr. Stoyan Tanev	
18:00 - 20:00			Cocktail & Networking	

LECTURERS

CALUM MACAULAY, PH.D.
Head, Cancer Imaging Department
BC Cancer Research Centre
Clinical Associate Professor
Pathology & Laboratory Medicine
University of British Columbia

DAVID CRAMB, PH.D.
Assistant Professor
Department of Chemistry
Adjunct Professor
Department of Pharmacology and Therapeutics, University of Alberta

DAVID NG, PH.D.
Director, Advanced Molecular Biology Laboratory (AMBL)
University of British Columbia

PAUL PIUNNO, PH.D.
Genome Canada Co-Principal Investigator
Research Associate and Instructor
Department of Chemical and Physical Sciences
University of Toronto at Mississauga, ON

BRIAN C. WILSON, PH.D.
Professor of Medical Biophysics, University of Toronto, ON
Division Head, Ontario Cancer Institute - University Health Network
Toronto, ON

PIERRE LANE, PH.D., P.ENG
Scientist, Cancer Imaging Department
British Columbia Cancer Research Center
Vancouver, BC

STOYAN TANEV, PH.D.
Program Manager - Photonics and Biophotonics Programs
Vitesse Re-Skilling™ Canada Inc.
Ottawa, ON

KONSTANTIN SOKOLOV, PH.D.
Professor
Department of Imaging Physics
M.D. Anderson Cancer Center
Houston, TX, USA

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