

# nanomedicine and drug delivery symposium - **NanoDDS'08** toronto

## ORGANIZING COMMITTEE

Christine Allen, Chair  
Alexander Kabanov, Co-Chair  
Kazunori Kataoka, Co-Chair

October 18-19, 2008

University of Toronto  
Toronto, Canada

## CONFIRMED SPEAKERS

Ruth Duncan, Cardiff University  
Rogério Gaspar, University of Lisbon  
Kam Leong, Duke University  
Yasuhiro Matsumura, National Cancer Center Hospital, Japan  
Shuming Nie, Emory University and Georgia Institute of Technology  
Kishor Wasan, University of British Columbia







# NANODDS'08 PROGRAM

Saturday, October 18, 2008

08:00 – 09:00 AM	<b>Registration / Breakfast</b> <b>Poster Mounting</b>	Atrium JackKay Apotex Meeting Room (Atrium) Apotex Resource Center (2 <sup>nd</sup> Floor) B150 OPA Lecture Hall (Basement)
09:00 – 09:10 AM	<b>Introductory Remarks</b> <b>Christine Allen</b> , <i>Symposium Chair</i> <b>Robert Macgregor Jr.</b> , <i>Associate Dean, Research</i> <i>University of Toronto, Canada</i>	
09:10 – 10:00 AM	<b>Keynote Presentation</b> Polymer Therapeutics as NanoMedicines: Treatment for Cancer and Promotion of Tissue Repair <b>Ruth Duncan</b> , <i>Cardiff University, United Kingdom</i>	
10:00 – 10:30 AM	<b>Coffee Break</b> <b>Poster Viewing</b>	Atrium JackKay Apotex Meeting Room (Atrium) Apotex Resource Center (2 <sup>nd</sup> Floor)

## SESSION 1A: PRECLINICAL DEVELOPMENT AND TRANSLATION OF NANOMEDICINES

**Session Chairs:** **Dusica Maysinger**, *McGill University, QC*  
**Daria Alakhova**, *University of Nebraska Medical Center, NE*

10:30 – 11:00 AM	A Preclinical, Clinical, and Translational Study on Micelle Carrier Systems in Oncology <b>Yasuhiro Matsumura</b> , <i>National Cancer Center Hospital, Japan</i>	B150 OPA Lecture Hall (Basement)
11:00 – 11:30 AM	Ratiometric Dosing <sup>TM</sup> of Anticancer Drug Combinations in Mice and Man <b>Lawrence Mayer</b> , <i>Celator Pharmaceuticals Inc., BC</i>	
11:30 – 12:00 PM	Nanoradiation – Discovery and Clinical Translation of Novel Auger Electron-Emitting Targeted Radiotherapeutics for Breast Cancer <b>Raymond M. Reilly</b> , <i>University of Toronto, ON</i>	
12:00 – 01:30 PM	<b>Lunch</b> <b>Poster Viewing</b>	Atrium JackKay Apotex Meeting Room (Atrium) Apotex Resource Center (2 <sup>nd</sup> Floor)

## SESSION 1B: PRECLINICAL DEVELOPMENT AND TRANSLATION OF NANOMEDICINES

**Session Chairs:** **David Jaffray**, *University Health Network, ON*  
**Devika Chithrani**, *University Health Network, ON*

01:30 – 02:00 PM	SPARC as a Target for Nanoparticle Albumin-bound (nab) Paclitaxel: Translation to the Clinic <b>Neil Desai</b> , <i>Abraxis Bioscience Inc., CA</i>	B150 OPA Lecture Hall (Basement)
02:00 – 02:30 PM	Imageable Liposomes as a Tool for Improved Characterization of Nanomedicines in Preclinical Models <b>Jinzi Zheng</b> , <i>University of Toronto, ON</i>	
02:30 – 03:00 PM	Challenges in the Development of a Nanopharmaceutical from Bench to Clinic – Lessons Learned from DOXIL <sup>®</sup> , a PEGylated Liposome <b>Tony Huang</b> , <i>Ortho Biotech, NJ</i>	
03:00 – 03:30 PM	<b>Coffee Break</b> <b>Poster Viewing</b>	Atrium JackKay Apotex Meeting Room (Atrium) Apotex Resource Center (2 <sup>nd</sup> Floor)

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## SESSION 1C: PRECLINICAL DEVELOPMENT AND TRANSLATION OF NANOMEDICINES

**Session Chairs:** Afsaneh Lavasanifar, *University of Alberta, AB*  
Ian Corbin, *University Health Network, ON*

03:30 – 04:00 PM	Targeted Polymeric Nanotherapeutics Jeff Hrkach, <i>BIND Bioscience Inc., MA</i>	B150 OPA Lecture Hall (Basement)
04:00 – 04:30 PM	The Manufacture of Liposome Formulations of Sparingly Soluble Compounds Thomas Redelmeier, <i>Northern Lipids Inc., BC</i>	
04:30 – 06:30 PM	Welcome Reception	Atrium
04:30 – 05:30 PM	Poster Session I: Poster numbers #1 to 55	JackKay Apotex Meeting Room (Atrium) Apotex Resource Center (2 <sup>nd</sup> Floor)
05:30 – 06:30 PM	Poster Session II: Poster numbers #56 to 108	

# NANODDS'08 PROGRAM

Sunday, October 19, 2008

07:30 – 08:30 AM    **Breakfast**  
**Poster Viewing**

Atrium  
JackKay Apotex Meeting Room (Atrium)  
Apotex Resource Center (2<sup>nd</sup> Floor)

## SESSION 2: ROLE OF NANOMEDICINE AND DRUG DELIVERY IN TISSUE ENGINEERING

**Session Chair:**    **Michael Sefton**, *University of Toronto, ON*

**08:30 – 09:00 AM**    Bioactive VEGF Release from Injectable, Low Viscosity Oligo-(Trimethyl Carbonate): A Delivery Approach for Angiogenesis  
**Brian Amsden**, *Queen's University, ON*    B150 OPA Lecture Hall (Basement)

**09:00 – 09:30 AM**    Localized Drug Delivery Strategies in Regenerative Medicine  
**Molly Shoichet**, *University of Toronto, ON*

**09:30 – 10:00 AM**    Dual Release of RHTGF-beta1 and RHBMP-2 Improves Bone Healing in a Rabbit Calvarial Defect  
**Abby Morgan**, *Virginia Polytechnique Institute and State University, VA*

**10:00 – 10:30 AM**    **Coffee Break**  
**Poster Viewing**

Atrium  
JackKay Apotex Meeting Room (Atrium)  
Apotex Resource Center (2<sup>nd</sup> Floor)

## SESSION 3: NEW DIRECTIONS IN NANOMEDICINE AND DRUG DELIVERY

**Session Chairs:**    **Patrick Lim Soo**, *Tempo Pharmaceuticals, MA*  
**Leyla Soleymani**, *University of Toronto, ON*

**10:30 – 11:00 AM**    Supra-Molecular Nanodevices for Gene and Drug Delivery – Challenge to Smart Molecular Therapy  
**Kazunori Kataoka**, *University of Tokyo, Japan*    B150 OPA Lecture Hall (Basement)

**11:00 – 11:30 AM**    Development and Evaluation of Novel Oral Amphotericin B Formulation for the Treatment of Systemic Fungal Infections and Drug-Resistant Visceral Leishmaniasis (VL)  
**Kishor M. Wasan**, *University of British Columbia, BC*

**11:30 – 12:00 PM**    Nanotechnology for Delivery of Non-Deliverable Drugs  
**Vladimir Torchilin**, *Northeastern University, MA*

**12:00 – 12:30 PM**    Small Interfering RNA as a Therapeutic Modality  
**Stanley Barnett**, *Merck & Co., Inc., USA*

**12:30 – 02:00 PM**    **Lunch**  
**Poster Viewing**

Atrium  
JackKay Apotex Meeting Room (Atrium)  
Apotex Resource Center (2<sup>nd</sup> Floor)

## SESSION 4: INTEGRATION OF NANOTECHNOLOGY AND BIOIMAGING

**Session Chairs:**    **Elizabeth Gillies**, *University of Western Ontario, ON*  
**Jinzi Zheng**, *University of Toronto, ON*

**02:00 – 02:30 PM**    Imaging of Disease Biomarkers using Sensing Probes  
**Alexei Bogdanov**, *University of Massachusetts Medical School, MA*    B150 OPA Lecture Hall (Basement)

**02:30 – 03:00 PM**    Block Ionomer Complexes as Nanocarriers for Drugs and Imaging Agents  
**Tatiana Bronich**, *University of Nebraska Medical Center, NE*

**03:00 – 03:30 PM**    A Viral Nanoparticle Platform for Targeted Molecular Imaging and Drug Delivery  
**John Lewis**, *London Regional Cancer Center, ON*

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## SESSION 5: ORAL PRESENTATIONS BY POSTER AWARDEES

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Session Chair: Christine Allen, *University of Toronto, ON*

03:30 – 04:00 PM Poster Awards and Presentations

B150 OPA Lecture Hall (Basement)

04:00 – 04:15 PM Closing Remarks

Christine Allen, *Symposium Chair*