# VANCOUVER NOMEDICINE DAY 2018

Nanomedicine is an interdisciplinary research area within the scope of Nanotechnology. It has recently become increasingly important because it promises to develop medical technologies at the nanoscale, ranging from drug delivery carriers and imaging agents to nanomaterials and nanoelectronic biosensors. With Vancouver Nanomedicine Day 2018, we would like to raise awareness of the current work being done in the nanomedicine field and establish a collaborative network between researchers, postdoctoral fellows, graduate students, life science and startup biotechnology companies. We hope that this yearly event will catalyze and stimulate research collaborations in and around Vancouver in this important field.

### 08:30 REGISTRATION, COFFEE

09:00 Urs Hafeli - Welcome to the 4th Vancouver Nanomedicine Day 2018

09:10 Roland Boettger - Individually Optimized Release of Therapeutic

Peptides from PEGylated Prodrugs

09:30 INVITED TALK: Imaging-Assisted Design of an Inhalable Tuberculosis Vaccine

Prof. Camilla Foged, University of Copenhagen, Department of Pharmacy, Denmark

### 10:20 BREAK

- 10:40 Ali Shademani A Magnetic Sponge as an On-demand Drug Delivery Device
- 11:00 Marc Lammers Magnetic targeting of stem cells towards the cochlea
- 11:20 Weilun Tang Systemic Study of Solvent-Assisted Active Loading of Gambogic Acid into Liposomes
- 11:40 James Baylis Increasing the efficacy of surgical and battlefield hemostatic agents using self-propelling particles

#### 12:00 LUNCH

- 01:00 Christian Buchwalder Evaluation of In Vivo Stability of Zr-89-Chelates by Conjugation to Hyperbranched Polyglycerol (HPG) Nanocarriers
- 01:15 Evan Haney Influence of Non-Natural Amino Acids on the Biological Activity Profile of Synthetic Host Defence Peptides
- 01:30 Andrew Brown Size Tuning of Liposomes Encapulating Highly Hydrophobic Drug Verteporfin using NanoAssemblr™ Microfluidic Platform
- 01:45 Mohsen Ramezanpour Ionizable Amino Lipids Confined in Hydrophobic Parts of Lipid Nanoparticles: A Potential Obstacle for siRNA Release

### 02:00 COFFEE BREAK

- 02:15 Dominik Witzigmann The Zebrafish: An Emerging Preclinical Screening Tool for Nanomedicine Development
- 02:30 Cynthia Shaheen Single Molecule Imaging of DNA Structure: CLiC Microscopy Powers Mechanistic Insights for Drug Development
- 02:45 Brent Page Using Cellular Target Engagement Techniques to Quantify Drug-Target Interactions and Evaluate the Efficacy of Drug Delivery
- 03:00 Courtney van Ballegooie Microfluidics: An Effective Tool in Modulating the Physical Parameters of Protein Nanoparticles
- 03:15 INVITED TALK: Nanotechnology Approaches for **Inhalation Treatment of Lung Diseases** Prof. Tamara Minko, Rutgers University, NJ, USA
- POSTER SESSION / BEER AND PRETZELS 04:05
- 05:15 POSTER PRIZES
- **End of Meeting**

# TUESDAY SEPTEMBER 11

# **FVFNT DFTAILS**

Date: Tuesday, September 11, 2018

Time: 9 AM - 5:30 PM

Location: Vancouver Alpen Club 4875 Victoria Drive @ W 33rd

Access: Bus #33 directly from UBC Bus #20 from downtown

(9 stops from Broadway station)

# POSTER SESSION

There will be a poster session after the talks. We will hand out two cash prizes of \$200 and \$100.

### FREE REGISTRATION

Please register online at www.nanomedicine.ubc.ca Everybody is invited!

We very much appreciate our sponsors who make this Nanomedicine Day possible by providing food and sponsoring the invited talks. Thank you!



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**NEED MORE INFO?** 

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