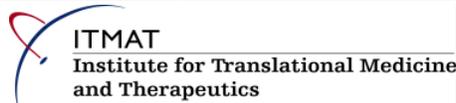




# Center for Targeted Therapeutics and Translational Nanomedicine

## CT<sup>3</sup>N Symposium 2017



**Tuesday, December 5, 2017**  
**Perelman School of Medicine**  
**University of Pennsylvania**  
**Biomedical Research Building, Gaulton Auditorium and Lobby**  
**421 Curie Boulevard, Philadelphia, PA 19104**

### Tuesday, December 5, 2017

8:15- 8:45 a.m.

**Registration and Breakfast**

Gaulton Lobby

8:45- 9:00 a.m.

**Welcome & Introduction**

Gaulton Auditorium

**Andrew Tsourkas, Ph.D.**, CT<sup>3</sup>N Co-Director, Professor of Bioengineering and Radiology, University of Pennsylvania

### Session I:

#### **Keynote Lecture**

*Session Chair: Andrew Tsourkas, Ph.D., CT<sup>3</sup>N Co-Director, Professor of Bioengineering and Radiology, University of Pennsylvania*

9:00- 9:50 a.m.

#### ***Biomimetic Materials for Drug Delivery***

**Suzie H. Pun, Ph.D.**, Robert F. Rushmer Professor of Bioengineering, Adjunct Professor of Chemical Engineering, University of Washington

### Session II:

#### **Nanoengineering**

*Session Chair: Theresa Busch, Ph.D., Research Professor of Radiation Oncology, University of Pennsylvania*

9:50- 10:20 a.m.

#### ***Photoacoustic Ultrasound as a Tool to Image Disease and Therapy***

**Jesse V. Jokerst, Ph.D.**, Assistant Professor, Department of NanoEngineering, Adjunct Faculty, Department of Radiology, University of California, San Diego

10:20- 10:50 a.m.	<b><i>Nanoscale Thermal Cancer Therapy with Magnetic Nanoparticles</i></b>	
	<b>Carlos Rinaldi, Ph.D.</b> , Charles A. Stokes Term Professor, Interim Chair, Department of Chemical Engineering and Professor, J. Crayton Pruitt Family Department of Biomedical Engineering, Herbert Wertheim College of Engineering, University of Florida, Gainesville	
10:50- 11:05 a.m.	<b>COFFEE BREAK</b>	Gaulton Lobby
11:05- 11:35 a.m.	<b><i>Targeting Glioblastoma with CAR T Cells: Current Challenges and Perspectives</i></b>	Gaulton Auditorium
	<b>Irina V. Balyasnikova, Ph.D.</b> , Associate Professor, Department of Neurological Surgery, Feinberg School of Medicine, Northwestern University	
11:35- 12:05 p.m.	<b><i>RBC – Hitchhiking Boosts Delivery of Nanocarriers to Chosen Organs by Orders of Magnitude</i></b>	
	<b>Jake Brenner, M.D., Ph.D.</b> , Attending Physician, Pulmonary and Critical Care, University of Pennsylvania	
12:05- 1:25 p.m.	<b>Lunch, Poster Session and Competition</b> Prizes for Trainees: First Prize - \$300; Second Prize- \$200; Third Prize- \$100 Organizers: Drs. Michael Chorny and Hans Huber	Gaulton Lobby
<b><u>Session III:</u></b>	<b><u>Targeted Delivery of Nucleic Acids</u></b> <i>Session Chairs: Michael Chorny, Ph.D., CT<sup>3</sup>N Associate Director, Research Associate Professor of Pediatrics, Division of Cardiology of Children’s Hospital of Philadelphia and Hans E. Huber, Ph.D., CT<sup>3</sup>N Associate Director, Adjunct Associate Professor of Systems Pharmacology, University of Pennsylvania</i>	Gaulton Auditorium
1:25- 1:55 p.m.	<b><i>Disrupting Physical Interactions between Multiple Myeloma and the Bone Marrow Microenvironment In Vivo via Nanoparticle-Mediated RNAi</i></b>	
	<b>Michael J. Mitchell, Ph.D.</b> , Burroughs Wellcome Fund CASI Fellow, NIH NCI Ruth L. Kirschstein Postdoctoral Fellow, MIT, David H. Koch Institute for Integrative Cancer Research, Department of Chemical Engineering	

1:55- 2:25 p.m.	<p><b><i>Vaccination against Neoantigens Induced in Future Tumors for Patients in Remission and for Individuals at Risk for Developing Cancer</i></b></p> <p><b>Eli Gilboa, Ph.D.</b>, Dodson Professor of Microbiology &amp; Immunology; Director, Dodson Interdisciplinary Immunotherapy Institute; University of Miami, Miller School of Medicine</p>	
2:25- 2:55 p.m.	<p><b><i>Boosting Intracellular Nucleic Acid Delivery</i></b></p> <p><b>Gaurav Sahay, Ph.D.</b>, Assistant Professor, College of Pharmacy, Oregon State University/Oregon Health Science University</p>	
2:55- 3:10 p.m.	<b>COFFEE BREAK</b>	Gaulton Lobby
3:10- 3:40 p.m.	<p><b><i>Designed FN3 Domains as a Universal Targeting Platform</i></b></p> <p><b>Vadim Dudkin, Ph.D.</b>, Director, Discovery Sciences, Janssen R&amp;D</p>	Gaulton Auditorium
3:40- 4:10 p.m.	<p><b><i>From Concept to Clinic: Development of Two Platforms for Systemic Delivery of Investigational RNAi Therapeutics</i></b></p> <p><b>Kevin Fitzgerald, Ph.D.</b>, Sr. Vice President and Head of Research, Alnylam Pharmaceuticals, Cambridge</p>	
<b><u>Session IV:</u></b>	<p><b><u>Keynote Lecture</u></b>  <i>Session Chair: Vladimir Muzykantov, M.D., Ph.D., CT<sup>3</sup>N Co-Director, Professor of Systems Pharmacology and Translational Therapeutics and Medicine, University of Pennsylvania</i></p>	
4:10- 5:00 p.m.	<p><b><i>Biomaterial Strategies to Modulate Inflammation</i></b></p> <p><b>Kam W. Leong, Ph.D.</b>, Samuel Y. Sheng Professor, Department of Biomedical Engineering and Department of Systems Biology, Columbia University</p>	
5:00- 5:10 p.m.	<p><b>Poster Awards Presentation</b>  Michael Chorny, Ph.D., and Hans Huber, Ph.D., CT<sup>3</sup>N Associate Directors</p>	
5:10- 5:20 p.m.	<p><b>Closing Remarks</b>  <b>Vladimir Muzykantov, M.D., Ph.D.</b>, CT<sup>3</sup>N Co-Director, Professor of Systems Pharmacology and Translational Therapeutics and Medicine, University of Pennsylvania</p>	
5:20- 6:20 p.m.	<b>Reception</b>	Gaulton Lobby