

*Center for Targeted Therapeutics and Translational
Nanomedicine (CT³N)
2015 Symposium*

**Wednesday, November 18, 2015
Perelman School of Medicine
University of Pennsylvania**

Smilow Center for Translational Research Lobby & Auditorium
3400 Civic Center Blvd., Philadelphia, PA 19104

8:15-8:45 a.m. Registration and Breakfast SCTR Lobby

8:45-9:00 a.m. **Welcome & Introduction**
Garret FitzGerald, MD, FRS, Chair, Department of
Systems Pharmacology and Translational Therapeutics,
McNeil Professor in Translational Medicine and
Therapeutics, Director, Institute for Translational Medicine
& Therapeutics, University of Pennsylvania

Vladimir Muzykantov, MD, PhD, Professor of Systems
Pharmacology and Medicine, Director, Center for Targeted
Therapeutics and Translational Nanomedicine, University
of Pennsylvania

Session I:

Keynote Lecture

Session Chair: Robert Levy, MD, William J. Rashkind
Endowed Chair in Pediatrics Cardiology, Professor of
Pediatrics, Children's Hospital of Philadelphia and
University of Pennsylvania

9:00- 9:50 a.m. **Polymer Nanoparticles for Drug Delivery, Gene Editing,
and Cell Targeting**

Mark Saltzman, PhD, Goizueta Foundation Professor of
Chemical and Biomedical Engineering, Yale University

9:50- 10:00 a.m. **COFFEE BREAK** SCTR Lobby

Session II:

Vascular Drug Delivery

Session Chair: Dave Eckmann, MD, PhD, Horatio C. Wood
Professor of Anesthesiology and Critical Care, Professor of
Bioengineering, University of Pennsylvania

10:00-10:30 a.m. **Platelet-inspired Biomedical Technologies: from
Hemostats to Drug Delivery Systems**

Anirban Sen Gupta, PhD, Associate Professor of
Biomedical Engineering, Case Western University

10:30-11:00 a.m.	Red Blood Cells as Drug Carriers	
	Carlos Villa, MD, PhD , Fellow of Transfusion Medicine and Therapeutic Pathology and Laboratory Medicine, Hospital of the University of Pennsylvania	
11:00-11:30 a.m.	Synthetic Blood Coagulation Modulators: Design and Discovery of Heparin Antidotes and Polyphosphate Inhibitors	
	Jayachandran Kizhakkedathu, PhD , Associate Professor of Pathology and Laboratory Medicine, University of British Columbia	
11:30- 12:00 p.m.	Engineered Hydrogel Design for Controlled Molecule Delivery to the Heart	
	Jason Burdick, PhD , Professor of Bioengineering at The University of Pennsylvania	
12:00- 1:00 p.m.	Lunch, Poster Session, and Competition Prizes for Trainees: First Prize - \$300; Second Prize- \$200; Third Prize- \$100 Organizers: Drs. Michael Chorny and Hans Huber	SCTR Lobby
1:00- 2:00 p.m.	Round Table Discussion – Matching Materials and Biomedicine Session Chairs: Vladimir Muzykantov, MD, PhD, and Anthony Green, PhD, Vice President, Technology Commercialization Group, Ben Franklin Technology Partners	Arthur H. Rubenstein Auditorium
<u>Session III:</u>	<u>New Drug Carriers and Targets</u> Session Chair: Andrew Tsourkas, PhD, Professor of Bioengineering, University of Pennsylvania	
2:00- 2:30 p.m.	Targeted Interference in Cellular Interactions at the Self-Non-Self-Interface Stanley Stachelek, PhD , Research Associate Professor of Pediatrics, University of Pennsylvania	
2:30- 3:00 p.m.	Targeted Delivery of Antioxidant Enzymes and Enzyme Mimetics Alexey Vertegel, PhD , Associate Professor of Bioengineering, Clemson University	
3:00- 3:30 p.m.	Supramolecular Strategies for Drug Delivery and Imaging Ivan Dmochowski, PhD , Professor of Chemistry and Undergraduate Chair, University of Pennsylvania	

3:30- 4:00 p.m.

Evolution of Dynamic Polyconjugates as Liver-Targeted RNAi Therapeutics: from the Lab to the Clinic

Vladimir Trubetskoy, PhD, Senior Principal Scientist of Imaging and Formulation, Arrowhead Research Corporation

4:00- 4:10 p.m.

COFFEE BREAK

SCTR Lobby

Session IV:

Keynote Lecture

Session Chair: Theresa Busch, PhD, Research Associate Professor of Radiation Oncology, University of Pennsylvania

Arthur H. Rubenstein Auditorium

4:10- 5:00 p.m.

Nanodiamonds: From Explosives to Nanotechnology and Nanomedicine

Yury Gogotsi, PhD, D.Sc. Dr.H.C., Professor and Trustee Chair of Materials and Science Engineering, Drexel University

5:00- 5:20 p.m.

Poster Awards Presentation

Michael Chorny, PhD., Research Associate Professor of Pediatrics, Associate Director, Center for Targeted Therapeutics & Translational Nanomedicine, University of Pennsylvania, and Hans Huber, Ph.D., Adjunct Associate Professor of Systems Pharmacology and Translational Therapeutics, University of Pennsylvania

5:20- 6:20 p.m.

Reception

SCTR Lobby