



The National Institute for Pharmaceutical Technology & Education

Achieving Technological Leadership in Advanced Pharmaceutical Manufacturing

**NIPTE 2023 Research Conference November 13 –
15, 2023**

The Bush School of Government & Public Service, Washington, DC
1620 L St NW, Washington, DC 20036

Monday, November 13, 2023

All times listed in EST

Conference Open & Keynote Speeches

8 a.m. – 11 a.m.

8:00 a.m.	Welcome and Introductions	Vadim Gurvich, Ph.D Executive Director, NIPTE
8:10 a.m.	TBA	James Coburn CDR Manufacturing Innovation Lead for Pandemic Preparedness, Office of Science and Technology White House
8:55 a.m.	Q&A	
9:05 a.m.	The Advanced Manufacturing Technologies Designation Program	Ranjani Prabhakara, Ph.D Policy Lead CDER/FDA
9:50 a.m.	Q&A	
10:00 a.m.	Advanced Manufacturing: Translating Promise to Progress	Eric Edwards, MD, Ph.D Chief Executive Officer Phlow USA
10:45 a.m.	Q&A	
10:55 a.m.	SESSION END	

NIPTE Distinguished Scholars

11 a.m. - 12:35 p.m.

11:00 a.m.	Introduction and Presentation of 2023 Awards will occur at the beginning of each presentation	Vadim Gurvich, Ph.D Executive Director, NIPTE
11:10 a.m.	Advances in Pharmaceutical Manufacturing	Mansoor Khan, Ph.D Texas A&M University <i>Michael J. Pikal Distinguished Scholar in Pharmaceutical Processing</i>
11:40 a.m.	Effect of Processing and Cosolutes on Mannitol Phase Behavior in Frozen Solutions	Chaowang Zeng University of Minnesota <i>2023 NIPTE - Rigaku Scholar</i>
12:10 p.m.	The Implications of the Halogen Atom on the Physical Stability of Amorphous Solid Dispersions	Mustafa Bookwala, Ph.D Senior Scientist, Materials and Biophysical Characterization Group, Merck <i>2023 Outstanding Student Researcher</i>
12:40 p.m.	SESSION END	

Student Research Poster Session

1:15 p.m. – 2:15 p.m.

Students from NIPTE Institutions will present their research posters.

Closed Working Session

2:30 p.m. – 5:30 p.m.

Special Session: Stephen R. Byrn Career Celebration

5:30 p.m. – 7:00 p.m.

5:30 p.m.	Welcome, tribute & Introductions	Vadim Gurvich, Ph.D Executive Director, NIPTE
5:40 p.m.	Tribute	Mansoor Khan, Ph.D Texas A&M University
5:55 p.m.	Tribute	Kenneth Morris, Ph.D
6:10 p.m.	Tribute	Eyal Barash Barash Law LLC
6:20 p.m.	Remarks	Stephen R. Byrn, Ph.D Purdue University
6:40 p.m.	Memory sharing/toast/open dialogue	<i>All Participants</i>
7:00 p.m.	SESSION END	

Tuesday, November 14, 2023

All time listed in EST

Talks – NIPTE Faculty Research Spotlights on Achieving Technological Leadership in Advanced Pharmaceutical Manufacturing

8:00 a.m. – 10:30 a.m.

8:00 a.m.	Session & Speaker introduction,	Peter Wildfong, Ph.D NIPTE - Immediate Past Chair of the Faculty Duquesne University
8:05 a.m.	Keynote: Patents and Pharmaceutical Innovation – the Special Case of Solid Form Patents	Eyal Barash Barash Law LLC
8:50 a.m.	Q&A	
9:00 a.m.	An Integrated Workflow using Continuous Manufacturing for Nanoparticle Therapeutics	Antonio Costa, Ph.D University of Connecticut
9:30 a.m.	Challenges and advances in gene therapy Biomanufacturing	Seongkyu Yoon, Ph.D, MBA University of Massachusetts Lowell
10:00 a.m.	3D and 4D Printing to Advance Drug Delivery	Mo Maniruzzaman, Ph.D University of Mississippi
10:30 a.m.	SESSION END	

SPECIAL SESSION: Updates from Major Projects (Knowledge Management Project/USP System AND Biologics/Biosimilars Project AND BAAs)

10:45 a.m. – 12:50 p.m.

10:45 a.m.	Session & Speaker introduction	Rodolfo Romanach, Ph.D University of Puerto Rico NIPTE Chair of the Faculty
10:50 a.m.	A NIPTE-USP Knowledge Center: Project Overview and Update	Gerardo Callegari, Ph.D Rutgers University Kaitlin Baumer, CAE, PMP USP
11:20 a.m.	Platform for Reliable Characterization and Evaluation of Comparability of Biosimilar Drug Products in Lyophilized and Liquid Formulations	Raj Suryanarayanan, Ph.D University of Minnesota Anurag Rathore, Ph.D Indian Institute of Technology, Delhi Reza Nejadnik, Ph.D University of Iowa

11:50 a.m.	Pharmaceutical Manufacturing and Sustainability	Torsten Stelzer, Ph.D University of Puerto Rico, Crystallization Design Institute
12:20 p.m.	BAA 2: End-to-end continuous manufacturing	James Ferri, Ph.D Virginia Commonwealth University Ravendra Singh, Ph.D NSF-ERC, USA, Rutgers University
12:50 p.m.	SESSION END	

Closed Working Session

1:30 p.m. – 5:00 p.m.

Wednesday, November 15, 2023

All time listed in EST

Closed Working Session

8:00 a.m. – 10:15 a.m.

Break

10:15 a.m. – 10:30 a.m.

Spotlight Session: New NIPTE Schools and the Center of Excellence Initiative

10:40 a.m. – 12:00 p.m.

10:40 a.m.	Injectables Workshop 2024	Eric Munson, Ph.D Purdue University
11:00 a.m.	Drug Development Process – Moving on from Workshop January 2023	Xiuling Lu, Ph.D University of Connecticut
11:20 a.m.	Opportunities for Academia to Address Drug Development, Distribution & Disparities	Michael Kinch, Ph.D Long Island University
11:40 a.m.	Conference Closing thoughts	Rodolfo Romanach, Ph.D University of Puerto Rico NIPTE Chair of the Faculty
12:00 p.m.	SESSION END	