

2026 NanoFlorida International Conference
October 2-4, 2026
University of South Florida & Florida Polytechnique University

Friday, October 2 (USF)

1.00– 4.30 PM University of South Florida, MDL 1003
Moderators: Drs. Shyam Mohapatra & Larry Hall

1:00 – 1:30 PM	Welcome and Introduction	
1:30-1:35 PM	Shyam Mohapatra	
1:35-1:45 PM	Dr. Mark Mosley’s Welcome Remarks	<i>Chairman of Department of Internal Medicine University of South Florida</i>
1:45-1:50 PM	Introduction to President Limayem	Dr. Shyam Mohapatra
1:50-2:00 PM	President Limayem’s Welcome Remarks	
2:00-3:00 PM	Keynote by Prof. Robert Langer, “From nanotechnology to mRNA vaccines: How overcoming skepticism and barriers led to new cancer treatments and ways to tackle a global health challenge”	<i>David H. Koch Institute Professor, Massachusetts Institute of Technology, Boston, MA</i>
3:00-3:30 PM	Dr. Larry Hall “AI & Health: Promises and Perils”	Professor & Assoc Dean of Research <i>University of South Florida, Bellini College of Artificial Intelligence, Tampa, FL</i>
3:30-4:00 PM	Dr. Yang Yang “Nanocarbon Technology for Advanced Biofuel & Chemical Conversion”	Professor, <i>University of Central Florida, Orlando, FL</i>
4:00-4:30 PM	Dr. Anworul Kabir “Survival-aware Representation Learning from Omics for Cancer Prognosis & Treatment”	Asst Professor <i>University of South Florida, Bellini College of Artificial Intelligence, Tampa, FL</i>

Travel to Florida Polytechnique University

6:00-7:30 PM	<i>Session 2: "Crossing the chasm from laboratory research to commercial deployment: Real world experiences in technology transfer and commercialization"</i>	Panel Discussion <i>Moderators: Drs. Jeff Whalen & Ajeet Kausik</i> <i>Chief Guest: Prof. Brad Theissen</i>
	Dr. Mike Sabo	<i>Chief Program Officer UN&UP</i>
	Mr. Eric Graban	<i>Founder & CEO Quarry Bio</i>
	Mr. Rob Britts	<i>Co-Founder Skyway</i>
	Dr. Jaspreet Dhau	<i>President, Research, Molekule, Inc</i>
	Dr. Chandra Dixit	<i>VP Research, Def EYE, Inc</i>
	Q & A	

7:30 - 8:30 PM Evening Reception at Florida Poly (BARC Commons)

Saturday, October 3

8:30 – 9:00 AM **Registration: BARC Main Entrance**
Breakfast: BARC Commons
Poster: BARC 2nd Floor

9:00 – 9:30 AM **Conference Inauguration**

9:00 – 9:10 AM *Opening Remarks - Dr. Shyam Mohapatra, President of FAN, Univ. of South FL*

9:10 – 9:30 AM Welcome Remarks - **Dr. Devin Stepenson**, President, FL Polytechnique University

9:30 - Noon Session 3: New Frontiers in Nanomedicine

Location: BARC #1142

Moderators: Drs. Subhra Mohapatra & Sylvia Daunert

9:30 – 9:50 AM **Dr. Shanta Dhar**, University of Miami, Miami
“Nanotechnology Leveraging Mitochondrial Biology”

9:50-10:10 AM **Dr. Dipanjan Pan**, The Pennsylvania State University, Pennsylvania
“Context Responsive Nanoparticles for Oxygen Delivery in Resuscitation: from Concept to Translation”

10:10- 10:30 AM **Dr. Murali Yallapu**, The University of Texas Rio Grande Valley, Texas
“Polyphenol as a versatile Molecule for Nanoformulations in Cancer Treatment”

10:30 -10:50 AM **Dr. Mustafa Culha**, Augusta University, Atlanta
“Hexagonal Boron Nitrides in Nanomedicine and Nanophotonics”

10:50-11:10 AM **Dr. Liebe Wang**, CEO, RWD Lifesciences Inc, Sugarland, Texas
“Integrated Pre-clinical Solutions for Cancer Research

11:10 -11:20 AM **Dr. Ryan Green**, University of South Florida, Tampa
“A novel Nanotherapy Against Drug Resistant Brain Tumors”

11:20 - 11:30 AM **Dr. Stephanie Makhoul**, McGill University, Canada
“Design and Optimization of Nanoparticles for MicroRNA-Mediated Stem Cell Engineering in Cardiac Repair”

11:30 - 11:40 AM **Dr. Mercedes Lozano-Garcia**, University of Miami, Miami
“Bio-inspired biopolymeric implantable platform for localized and sustained drug delivery in solid tumor treatment”

11:40 – 11:50 AM **Dr. Shreyasi Majumdar**, University of South Florida, Tampa
“Dendrimer shRNA Targeting CCL20–CCR6 Reduces Microglial Synaptic Pruning and Neuroinflammation After Repetitive Brain Injury”

11:50 - Noon **Q & A**

9:30-Noon	Parallel Session 4: Nanomaterials & Nanodevices <i>Location: BARC #1123</i> <i>Moderators: Drs. Sapna Deo & Ateet Dutt</i>
9:30 - 9:50 AM	Dr. Swaminathan Rajaraman , <i>University of Central Florida, Orlando</i> “Micro/Nanosystems for Organs on a Chip, Diagnostics, and Therapeutic Applications”
9:50 – 10:10 AM	Dr. Antonio Ruotolo, Professor , <i>College of Charleston, South Carolina</i> “2D-silicon heterojunctions for infrared sensing”
10:10 – 10:30 AM	Dr. Azhar Ali, Assistant Professor , <i>Virginia Tech, Virginia</i> “Printing the Future of Biosensing: From Nano-Biointerfaces to Integrated Health”
10:30 – 10:50 AM	Dr. Arash Takshi, Professor , <i>University of South Florida, Tampa</i> “VOC Selectivity Trend in Metalated and Non-metalated Phthalocyanines”
10:50 – 11:10 AM	Dr. Dmitri Voronine , <i>University of Central Florida, Orlando</i> “Novel Techniques for Nanoscale Cancer Imaging”
11:10 – 11:20 AM	Dr. Dilek Çökeliler Serdaroğlu , <i>Baskent University, Turkey</i> “Customizable and Modular Plasma-Beam Discharge Platform for Targeted Bio-Applications: From In-Situ Nanoparticle Fabrication to Direct Tissue Vaporization”
11:20 – 11:30 AM	Dr. Hyeyoung Cho , <i>Florida Polytechnic University</i> “Nanoconfinement-Induced Vapor Pressure Suppression of Hydrocarbons Revealed by Differential Scanning Calorimetry”
11:30 -11:40 AM	Dr. Nathan J. Dawson , <i>Florida Polytechnic University</i> “Biological Nanophotonic Structures as Laser Resonators”
11:40 – 11:50 AM	Dr. Tahniat Afsari , <i>Molecular Medicine, University of South Florida, Tampa</i> “The New Generation of Micronanorobots for Biomedical Applications”
11:50 - Noon	Q & A
Noon – 12:10 PM	PHOTO SESSION
12:10 – 12:45 PM	Lunch: BARC Commons
12:45 – 2:00 PM	NANOINNOVATION PITCH COMPETITION FINAL ROUND
2:00 – 2:15 PM	Break
2:15 – 4:05 PM	Session 5: Nanotechnology Applications <i>Location: BARC #1142</i> <i>Moderators: Drs. Nathan Dawson & Nathaniel Hermann</i>
2:15 – 2:35 PM	Dr. Jaspreet Dhau, Vice President of R&D , <i>Molekule Group Inc., Tampa</i> “Sustainable Class B Fire Suppression Using Ionic Liquid-Based Fluorine-Free Firefighting Foam”
2:35 – 2:55 PM	Dr. Jin He, Professor , <i>Florida International University</i> “Probing Molecular Interactions by a Glass Nanopipette”
2:55 – 3:15 PM	Dr. Ateet Dutt, Professor , <i>National Autonomous University of Mexico</i> “Nanowires for Health: Science and Applications”

3:15 – 3:35 PM	Dr. Bradford A. Barker FPU; <i>“Magnetic Anisotropy Energy Functions for All point Groups to Sixth Order”</i>
3:35 – 3:55 PM	Dr. Matthew Smyle , Hofstra University <i>“The importance of nanoscale defects in both applied and fundamental superconductivity research”</i>
3:55 – 4:05 PM	Dr. Sudip Majumder , Physics University of South Florida, Tampa <i>“Temperature-Dependent Spin Pumping in FeCoGd/Pt Bilayers”</i>
2:15 – 3:55 PM	Parallel Session 6: Nanotechnology Applications <i>Location: BARC #1123</i> <i>Moderator: Drs. Rishikesh RS Govindrajan & Dipanjan Pan</i>
2:15 - 2:35 PM	Dr. Beni Dangi , Florida A&M University <i>“Understanding Hydrocarbon Growth on Refractory Surfaces: Combined Experimental and DFT Studies”</i>
2:35 – 2:55 PM	Dr. Emadelden Fouad , Florida Polytechnic University <i>“Transfer-Matrix Design of a Ternary Photonic Crystal Nanocavity for Skin-Cancer Refractive-Index Discrimination”</i>
2:55 – 3:15 PM	Dr. Atiya Banerjee , University of Central Florida <i>“Computational Design of Nano-Agrochemicals: Insights into Interfacial Binding, Complexation and Assembly”</i>
3:15 – 3:25 PM	Dr. Joseph-Ramon Codina , University of Miami <i>“Screening Clamp Peptides Against Viruses”</i>
3:25 – 3:35 PM	Dr. Aakash Nathani , Florida A&M <i>“Multiplex cytokine and NK-associated secretome profiling demonstrates immune reprogramming by miR34a loaded lyophilized NK exosomes in lung cancer”</i>
3:35 – 3:45 PM	Dr. Nathaniel G. Hermann , Florida Polytechnic University <i>“Modeling Transport Phenomena for Dosing Control in Organ-on-a-Chip Devices”</i>
3:45 – 3:55 PM	Dr. Ahmed Abosalha , McGill Univ, Canada <i>“Nanoparticles-Mediated Anti-miRNA 21 Delivery: A Next-Generation Approach to Colorectal Cancer Therapy” (Virtual only)</i>
3:55 - 4:05 PM	Dr. Subhash C. Chauhan, Director , The University of Texas Rio Grande Valley - <i>“Targeted Therapies for Pancreatic Cancer” (Virtual Only)</i>
4:30 – 6:30 PM	Poster Sessions <i>Location: BARC #Second Floor</i>
6:00 – 7:00 PM	FAN Meeting

Sunday, October 4

8:30 – 8:45 AM **Registration: BARC Main Entrance**

Breakfast: BARC Commons

9:00–11:00 AM Session 7: Semiconductors Education & Research

Location: BARC #1142

Moderators: Drs. Swadeshmukul Santra & Swaminathan Rajaraman

9:00 – 9:20 AM **Dr. Ashok Kumar, Professor, University of South Florida, Tampa**
“Interdisciplinary Convergent Research and Education for Semiconductor Workforce Development”

9:20 – 9:40 AM **Dr. Sandeep Mittan, Director & Vice President, Amity University**
“AI-Enabled Biosensing and Biochip Technologies for Intelligent”

9:40 – 10:00 AM **Dr. Mohammadreza Shokouhimehr, Florida Polytechnic University**
“Magnetically retrievable nanocomposites for environmental remediation and rare-earth element recovery”

10:00 – 11:00 AM **LIGHTENING ROUND: Ten 3-minute Presentations**

9:00 – 11:00 AM Parallel Session 8: Semiconductors & Sensing Applications

Location: BARC #1123

Moderators: Drs. Emadelden Fouad & Arash Takshi

9:00 – 9:20 AM **Dr. Mubarak A Mujawar, Embry-Riddle Aeronautical University, Daytona Beach, Florida**
“Atmospheric Plasma-Assisted Synthesis of Gold Nanoparticles for SERS Applications”

9:20 – 9:40 AM **Dr. Rishikesh RS Govindrajan, Florida Polytechnic University**
“Multimodal Flexible Sensing of Strain and Temperature for wearable applications”

9:40 – 10:00 AM **Dr. Paria Gharavi, Materials Science and Engineering, University of Central Florida**
“Advanced Transmission Electron Microscopy for Nanoscale Characterization of Semiconductor Materials and Interfaces”

10:00 – 11:00 AM **LIGHTENING ROUND: Ten 3-minute Presentations**

11:00 - Noon Wrap up and Closing Remarks

Moderators: Dr. Ajeet Kaushik & Dr. Subhra Mohapatra

Location: BARC Commons