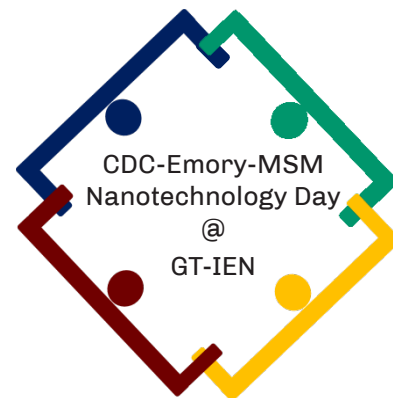


CDC-Emory-Morehouse School of Medicine Nanotechnology Day

Opportunities for Research Collaborations & Using
the IEN's Shared User Lab Resources



Thursday, July 14, 2016, 10 AM—3 PM
Marcus Nanotechnology Building Conference Room 1117-1118
345 Ferst Drive NW, Atlanta, GA 30318

10:00 – 10:10 Welcome/ IEN Overview: Oliver Brand, IEN Director

10:10 – 10:15 Meeting Format & Goals: Paul Joseph, Principal Research Scientist, GT-IEN

10:15 – 10:45 Research Area 1: Novel Vaccine Development

- a. Protein Nanoparticle Vaccines: Associate Prof. Julie Champion, ChBE, GT
- b. Skin Vaccination Using a Microneedle Patch: Prof. Mark Prausnitz, ChBE, GT

10:45 – 11:30 Research Area 2: Immunological Studies via Micro-fluidic Systems

- a. Using Microfluidic Devices to Understand the Biophysical Mechanisms of Leukocyte and Hematopoietic Stem Cell Trafficking: Meredith Fay (for Prof. Wilbur Lam), GRA, BME, GT
- b. High Throughput Cellular Analysis via Microfluidics: Asst. Prof. Fatih Sarioglu, ECE, GT
- c. Biomechanical Identification and Sorting of Single Cells: Associate Prof. Todd Sulchek, ME, GT

11:30 – 12:00 Research Area 3: Infectious Disease Detection Technologies using Microsensors

- a. Micro-Cilia Capture Using Magnetically Actuated Biosensors: Prof. Peter Hesketh, ME, GT
- b. Micro-Sensor Technologies for Bio Applications: Prof. Oliver Brand, ECE, GT-IEN

12:00 – 12:30 Lunch Break

12:30 – 1:00 Research Area 4: Bio-metrology for Immune Cell Interactions

- a. Molecular Biomechanics and Mechanobiology: Prof. Cheng Zhu, BME, GT
- b. High Throughput Analysis of Dendritic Cell Responses to Gold Nanoparticles: Prof. Julia Babensee, BME, GT

1:00 – 1:30 Research Area 5: Pharmaceutical Forensics

- a. Combating the Influx of Falsified Anti-Malarial Pharmaceuticals via Mass Spectrometry: Matthew Bernier, (for Prof. Facundo Fernandez), Post-doctoral associate, Chem & Biochem., GT
- b. Extreme Capabilities for Biomedical Diagnostics Enabled by Integration of Micro Nanotechnologies: Prof. Andrei Fedorov, ME, GT

1:30 – 2:30 Discussion on Potential Areas for Collaboration: Representatives from CDC, Emory, MSM, & GT

2:30 – 2:40 Closing Remarks – Oliver Brand

2:40 – 3:00 IEN Shared User Labs Tour

To make Lunch reservation (no cost), register at:
<http://cdc-emory-msm-nanoday.doattend.com/>
before July 12.

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