



2015 Spring Workshop Agenda
Low-Budget High-Payoff:
Techniques/Resources for Innovative Micro/Nano R&D
The Johns Hopkins Applied Physics Lab
Laurel, Maryland
April 6, 2015

The MAMNA Spring Workshop held on April 6, 2015 was well attended and received. Approximately 75 people attended from the local research community. Attendees were able to hear talks on a wide range of topics in the micro and nano fields. Approximately 20 student teams presented work during the poster session and two student poster awards we awarded. The grant from CERSI was instrumental in keeping registration prices to a minimum.

The event opened doors for collaboration with Northeastern University as one of the speakers offered to facilitate the use of some new and exciting fabrication tools being developed at the University. The event was attended by the Deputy Director of the National Nanotechnology Coordination Office. MAMNA hopes to work more closely with this office in order to expand our membership base and find new collaborations in the nanotech field. Several members also inquired about joining the MAMNA steering committee. These new additions are important for fresh ideas and perspectives and how MAMNA can achieve its goals.

The agenda for the meeting is attached below and shows the complete list of the events activities.

- 9:00 AM** **Registration and Welcome Reception**
- 9:45 AM** **Introductory Remarks: Auditorium**
- 10:00 AM** **Conference Plenary I: Auditorium**
Regulatory Science Relevant to Micro/Nano Innovative Products Development
Dr Subhas G. Malghan, FDA, CDRH/SEL/DBCMS*
- 10:45 AM** **Morning Break**
- 11:00 AM** **Morning Breakout Sessions**
Session I: Nano Room
CDRH's Perspective on Additive Manufacturing of Medical Devices
Dr. Matthew Di Prima, FDA, CDRH/SEL/DBCMS*
- Microfluidic Tools for Medical Device Regulatory Science of Biofilms and Nanotechnology*
Dr. Kenneth Phillips PhD, CDRH/OSEL/DBCMS
- Session II: Micro Room**
3D biomedical microdevices: From bionic organs to dust sized surgical tools
Professor David Gracias, The Johns Hopkins University
- Encapsulated Paper-Based Electroosmotic Microfluidic Device*
Deepa Sritharan, University of Maryland College Park
- 12:00 PM** **Lunch, Networking and Poster Session: Dining Area**
- 1:30 PM** **Afternoon Breakout Sessions**
Session I: Nano Room
Rapid Bio-Prototyping using 3D printing

*CDRH/OSEL/DBCMS – Center for Devices and Radiological Health, Office of Science and Engineering, Division of Biology, Chemistry and Material Science



2015 Spring Workshop Agenda
Low-Budget High-Payoff:
Techniques/Resources for Innovative Micro/Nano R&D
The Johns Hopkins Applied Physics Lab
Laurel, Maryland
April 6, 2015

Danny Cabrera, BioBot

Spinning Polymer Micro/Nano Fibers

Andrew Hankins, Georgetown

Session II: Micro Room

SMALSA: low-cost multi-functional additive (and subtractive) manufacturing machine

Mario Urdaneta PhD, Weinburg Medical Physics, Additive Electromagnetics

Additive Manufacturing Materials and Technology Development

Larry Holmes, Army Research Lab

2:30 PM

Afternoon Break

2:45 PM

Overview of Local Resources for Mico/Nano Research: Auditorium

3:00 PM

Conference Plenary II: Auditorium

Scalable High-rate Nanoscale Printing for Electronics, Sensors, Energy and Materials Applications

Professor Ahmed Busnaina, Northeastern University

3:45 PM

Networking and Poster Session (continued): Dining Area

4:15 PM

Conclusion and Announcement of Poster Prize: Dining Area