

Near and Far-Field Interfaces to DNA-Guided Nanostructures from RF to Lightwave: Exploiting the Spectrum

Annual MURI Review Meeting Agenda

Prince William & Fairfax Room
Hyatt Regency Crystal City
2799 Jefferson Davis Highway,
Arlington, Virginia, USA 22202

February 10, 2014

Time	Speaker	Presentation Title	MURI Thrust Area
8:00am	Joe Qiu (ARO)	Welcome & Introduction	
8:15am	Peter Burke (UCI)	Research Theme & Teaming Overview	
TEST BEDS OVERVIEW			
9:00am	Mark Reed (Yale)	Silicon Nanowire Electronics	Test bed 1: Silicon Nanoelectronics
9:45am	Ritesh Agarwal (Penn)	Light-Matter Coupling in Semiconductor Nanowires	Test bed 3: Nano-optics
10:30am	Coffee break		
11:00am	Peter Burke (UCI)	Carbon Nanoelectronics	Test bed 2: Carbon Nanoelectronics
FUNCTIONALIZATION SCHEME I: ION CHANNELS + ELECTROPHYSIOLOGY			
11:15am	Peter Burke (UCI)	Charging the Quantum Capacitance of Graphene with Biological Ion Channels	Ion channels + Graphene, Nanotubes, Si Nanowires, Nanooptics Test Beds 1,2,3
12:00pm	Lunch		
FUNCTIONALIZATION SCHEME II: DNA			
1:00pm	Ned Seeman (NYU)	DNA Nanotechnology	DNA + Nano-optics + NPs (Test Bed 3)
1:45pm	M. Stroschio (UIC)	DNA-based Aptamer Sensors and Nanophotonics	DNA+graphene+aptamers (Test Bed 2&3)
2:30pm	Elliott Brown (Wright)	High Resolution Sensing of DNA Nanostructures & Bioparticles in the THz Region	THz characterization + graphene (Test Bed 2)
3:15pm	M. Norton (Marshall)	Directed DNA Origami Assembly on Surfaces	DNA+ Si nanowires (Test Bed 1) & graphene (Test Bed 2)
4:00pm	M. Reed (Yale)	Multiplexing of Biosensors: Challenges and Opportunities	
PROGRAM REVIEW			
4:15pm	Scientific Advisory Board	Advisory board executive session	
4:45pm	Joe Qiu (ARO)	Advisor board feedback	
5:15pm	Adjourn for the Day	Adjourn for the Day	