Emerson Center Lectureship Award Symposium

Multi-Functional Materials in Chemistry, Biology and Medicine

October 05, 2015, Harland Cinema, Dobbs University Center, Emory University

AWARD WINNER &:
KEYNOTE SPEAKER

Prof. Chad A. Mirkin,
Northwestern University

Nanotechnology: Revolutionary Force behind Today's Advances in Biology and Medicine

Nanotechnology is transforming the world and holds the promise to solve some of the world's most pressing problems. It is especially poised to make a large impact on biology and medicine. Nanomaterials are the ideal size to efficiently interact with biological structures and thus useful for both *in vivo* and *in vitro* biomedical research and applications. Indeed, some of the biggest breakthroughs are being made in the field of medicine revolutionizing the ways to newly diagnose, treat and monitor the world's most debilitating diseases, including cancer, cardiovascular disease, and Alzheimer's disease. This presentation will discuss the development of highly sensitive and selective, point-of-care medical diagnostic tools, the first ways of detecting and genetically identifying circulating tumor cells, and a powerful new nanomedicine platform for therapeutics, using novel nanostructures called spherical nucleic acids (SNAs).

INVITED SPEAKERS

Khalid Salaita
Department of Chemistry, Emory University

Shuming Nie
Department of Biomolecular Engineering Emory University

Oleg Prezhdo
Department of Chemistry, Univ. of Southern California

Tim Lian
Department of Chemistry Emory University

EVENTS SCHEDULE

10:00–12:30	**POSTER PRESENTATIONS**
1:00 – 1:30	**OPENING CEREMONY & AWARD PRESENTATION**
1:30 – 2:30	**Chad Mirkin**: *Nanotechnology: Revolutionary Force behind Today's Advances in Biology and Medicine*
2:30 – 3:20	**Khalid Salaita**: *Using the Force: Multifunctional Materials to Study Mechanochemistry at Interfaces*
3:20 – 4:10	**Shuming Nie:** *Designing Smart Nanomaterials for Targeting the Tumor Microenvironments*
4:10 – 4:30	**COFFEE BREAK**
4:30 – 5:20	**Oleg Prezhdo:** *Excited state dynamics at complex interfaces time-domain ab initio studies*
5:20 – 6:10	**Tim Lian:** *Exciton Dynamics in 0D, 1D and 2D Quantum Confined Semiconductor Nanoheterostructures for Photocatalysis*
6:10	**CLOSING**
6:30 – 9:00	**DINNER (by invitation)**

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REGISTRATION: http://www.emerson.emory.edu/conferences/form/register.html

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Registration is free. Please register to attend