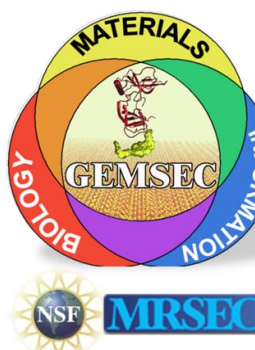


Biomimetics-IV –Peptide-Based Materials and Devices

An Annual GEMSEC, NSF-MRSEC, Supported Workshop
Friday Harbor Laboratory, San Juan Island, WASHINGTON, USA

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00-08:30		Breakfast	Breakfast	Breakfast	Breakfast
09:00-09:45		S. Unlu	C. Tamerler	A. Jen	D. Mayer
09:45-10:30		C. Wagner	D. Ratner	T. Kacar/ Y. Hayamizu	M.P. Anantram
10:30-10:45		Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45-11:30		J. Mougous	M. Gungormus/ M. Hnilova	S. Dunham	C. Luscombe
11:30-12:15	Arrive	R. Samudrala & E.E. Oren	M. Zhang	X. Gao	M. Rolandi
12:15-12:45	Lunch	Lunch	Lunch	Lunch	Lunch/Leave
02:30-03:15	G. Zhang	D. Ginger/ A. Fegan	W. Qian	S. Corni	
03:15-04:00	M. Biggs	B. Traxler	T. Walsh	C. So/ B. Wilson	
04:00-06:00	Poster	Poster	Poster	Poster	
06:00-06:30	Dinner	Dinner	Dinner	Dinner	
06:30-08:30	Free Time	Free Time	Free Time	Dinner	
08:30-09:15	M. Sarikaya	R. Latour	K. Sonmez	Free Time	
09:15-10:00		M. Hochberg			



Presentation Schedule

Monday, August 24th, 2009

02:30-03:15 Guigen Zhang
03:15-04:00 Mark Biggs
08:30-09:15 Mehmet Sarikaya

Interfacial Sensing by the Electrical Double Layer Capacitive Effect
The Hare and the Tortoise: A Tale of Peptide Binding Free Energy Prediction
Molecular Biomimetics: Molecular Design of Functional Materials and Systems

Tuesday, August 25th, 2009

09:00-09:45 M. Selim Ünlü
09:45-10:30 Carston Wagner
10:45-11:30 Joseph Mougous
11:30-12:15 Ersin Emre Oren
02:30-03:15 David Ginger

Optical Interference: Biological Imaging and Label-free Protein Microarrays
Chemical Biology of Pronucleotide Design
Methods for the Synthesis of Defined Protein Nanotubes
Knowledge Based Peptide Design
Surface Plasmons of Metal Nanoarrays: From Nanoengineering to Active Plasmonics
Chemically Controlled Assembly of Anti-CD3 Antibody Nanorings
Engineered Proteins for Nanomaterial Binding & Assembly
Problems and Solutions for the Development of Accurate Methods for the Atomistic Simulation of Protein-Surface Interactions
Integrated Nanophotonics in Silicon

Adrian Fegan
03:15-04:00 Beth Traxler
08:30-09:15 Robert A. Latour

09:15-10:00 Michael Hochberg

Wednesday, August 25th, 2009

09:00-09:45 Candan Tamerler
09:45-10:30 Daniel M. Ratner
10:45-11:30 Mustafa Gungormus

GEPI-Based Recombinant Fusion Proteins for BiFunctional Hybrid Systems
Carbohydrate Surface Modification for Label-Free Glycoarray Applications
Formation of a Cemento-Mimetic Layer using Hydroxyapatite-Binding Peptides for Periodontal Regeneration
Controlled Peptide-Mediated Formation of Hybrid Metallic Nanostructures
Multifunctional Nanoparticles for Cancer Diagnosis and Therapy
Application of Viruses and Assemblies in Nanomedicine and Tissue Engineering
Molecular Simulation of Peptide-Inorganics: The Challenge of More Realistic Interfaces
Modeling Of Organic-Inorganic Interface Functionalities via Frequency Domain Sequence Modeling

Marketa Hnilova
11:30-12:15 Miqin Zhang
02:30-03:15 Qian Wang

03:15-04:00 Tiff Walsh

08:30-09:15 Kemal Sönmez

Thursday, August 25th, 2009

09:00-09:45 Alex K.-Y. Jen

09:45-10:30 Turgay Kacar

Yuhei Hayamizu
10:45-11:30 Scott T. Dunham
11:30-12:15 Xiaohu Gao
02:30-03:15 Stefano Corni
03:15-04:00 Christopher R. So

Nanoengineering Surface Plasmons of Metal Nanoarrays to Active Plasmonics for Bio-nanotechnology
Bifunctional GEPIs for the Functionalization of Inorganic Surfaces towards Optically Active Hybrid Platforms
Electronic Transport through Solid-Binding Peptides
Approaches for Nanomaterials Modeling
Multimodality Imaging and Drug Delivery with Nanoparticles
Modelling Protein-Gold Interactions by Atomistic Simulations
Binding, Molecular Recognition, and Supramolecular Assembly of Solid Binding Peptides on Solid Surfaces: a Multi-Scale Perspective
Kinetics of Biomineralization of Hydroxyapatite Thin Film Using Bi-functional Solid Binding Peptides

Brandon Wilson

Friday, August 25th, 2009

09:00-09:45 Dirk Mayer

09:45-10:30 M. P. Anantram
10:45-11:30 Christine Luscombe
11:30-12:15 Marco Rolandi

Bidirectional Immobilization of Affinity-tagged Proteins on Electrode Surfaces for Molecular Bioelectronics
Modeling of Intra and Inter Base Conductance of DNA
Peptide Assisted Macromolecular Synthesis
Tip Induced Chemistries for Molecular Architectonics