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University of Rochester

**Biophysics, Structural and
Computational Biology**

Program Retreat

Monday, October 8, 2012

Memorial Art Gallery

500 University Avenue

Rochester, New York 14607

Faculty Organizers: Drs. Clara Kielkopf and Joseph Wedekind
Student Organizers: Anant Agrawal, M.S. and Karl Smith
Staff Organizers: Aleksandra Jaskowiak and Melissa Vera

8:30 – 9:00 a.m.	Registration, Breakfast & Poster Set-Up	1:40 – 2:00 p.m.	Regine Choe, Ph.D. (Assistant Professor) Department of Biomedical Engineering <i>Towards an Early Prediction of Neoadjuvant Therapeutic Efficacy with Diffuse Optics</i>
9:00 – 9:05 a.m.	Introduction Clara Kielkopf, Ph.D., BSCB Retreat Organizer		
9:10 – 9:30 a.m.	Kathleen Clark, Ph.D. (Advisor: Dr. Dumont) Department of Biochemistry & Biophysics <i>The Structure of a Transmembrane Protease Catalyzing Processing of Isoprenylated Proteins</i>	2:05 – 2:25 p.m.	Joseph Liberman, M.S. (Advisor: Dr. Wedekind) Department of Biochemistry & Biophysics <i>A Knotty Switch: A Novel Mode of Purine Recognition by a Class 2 PreQ₁ Riboswitch</i>
9:35 – 9:55 a.m.	Sina Ghaemmaghami, Ph.D. (Assistant Professor) Department of Biology <i>Conformational Adaptation of Synthetic Prions</i>	2:30 – 2:50 p.m.	Doros Petasis, Ph.D. (Associate Professor) Department of Physics, Allegheny College <i>Rare Earth Crystals as Temperature Probes and Quantitation Standards for Metalloprotein EPR</i>
10:00 – 10:15 a.m.	Morning Break	2:55 – 3:05 p.m.	Afternoon Break
10:20 – 10:40 a.m.	Stanislav Bellaousov (Advisor: Dr. Mathews) Department of Biochemistry & Biophysics <i>Accelerating Nucleic Acid Design Using Pre-selected Sequences</i>	3:10 – 4:15 p.m.	Career Panel Discussion Dr. Matthew Benning, Bruker-AXS, Inc. Dr. Barry Goldstein, University of Rochester Dr. Hong Li, Florida State University Dr. Doros Petasis, Allegheny College Dr. Chris Strohsahl, CellTraffix, Inc. Carmen Marshall, GE Healthcare, Inc.
10:45 – 11:05 a.m.	David Condon, M.S. (Advisor: Dr. Turner) Department of Chemistry <i>Parameterization of AMBER LNA Chi Torsion Improves Agreement between MD and NMR Spectra for L(CAAU)</i>	4:20 – 4:25 p.m.	BSCB Mixer Award Presented by Anant Agrawal & Karl Smith
11:10 – 11:30 a.m.	Michael Gleghorn, Ph.D. (Advisor: Dr. Maquat) Department of Biochemistry & Biophysics <i>Human Staufen1 Dimerization via Swapping a Conserved Motif and a Degenerate dsRBD Augments UPF1 Binding and mRNA Decay</i>	4:30 – 4:45 p.m.	Michael Milano, M.D., Ph.D. Department of Radiation Oncology Introduced by Barry Goldstein, M.D., Ph.D. <i>Remembering Dr. William (Bill) Bernhard</i>
11:35 – 12:30 p.m.	Lunch/Photography Presentation Barry Goldstein, M.D., Ph.D. <i>What's Your Hypothesis? A Decade Behind the Camera</i>	4:50 – 5:00 p.m.	Elena Gilde Grossfield Trainee Presentation Award Alan Grossfield, Ph.D. Department of Biochemistry & Biophysics
12:35 – 1:35 p.m.	Poster Session	5:00 p.m.	Closing Remarks David Mathews, M.D., Ph.D. BSCB Program Director