

2009 Foundations of Nanoscience Conference Snowbird, Utah, April 20-24

Date	Time	Who	Affiliation	Event	Talk title	Author list	Presenter email
20-Apr	5-9 pm	Registration (outside Ballroom 1)					
	5:30-7 pm	Snacks at registration table					
21-Apr	7:30-8:10 am	Coffee (outside Ballroom 1)					
	8:10-8:15 am	John Reif (conference chair)	Duke	Welcome (Ballroom 1)			
	8:15-8:20 am	Marya Lieberman (program chair)	Notre Dame	Open conference (Ballroom 1)			
21-Apr	Track on Self-assembled Computer Circuit and System Architectures Session 1 (Ballroom 1); Track chair Chris Dwyer, Department of Electrical and Computer Engineering, Duke University, Durham NC, cdwyer@ece.duke.edu						
	8:20-8:45 am	Constantin Pistol	Duke	Self-assembled Computer Circuit and System Architectures Session 1	<u>Invited talk: Nanoscale Integrated Sensing and Processing: Architectures for a New Computational Domain</u>	Constantin Pistol Duke University	costi@cs.duke.edu
	8:45-9:05 am	Lulu Qian	Caltech	Self-assembled Computer Circuit and System Architectures Session 1	<u>Contributed talk: A simple DNA gate motif for synthesizing large-scale circuits</u>	Lulu Qian Caltech Erik Winfree Caltech	luluqian@caltech.edu
	9:05-9:30 am	Si-ping Han	Caltech	Self-assembled Computer Circuit and System Architectures Session 1	<u>Invited talk: Self-Assembly of Carbon Nanotube Devices Directed by 2D DNA Nanostructures</u>	Si-ping Han Caltech, Hareem Maune IBM Almaden Research Center Robert Barish Caltech, Marc Bockrath Caltech, William Goddard III California Institute of Technology Paul Rothemund California Institute of Technology Erik Winfree, California Institute of Technology	si-ping@wag.caltech.edu

21-Apr	9:30-10:15 am Breakfast and Morning Poster Session (outside Ballroom 1)				
Yuhui Lu	Notre Dame	Self-assembled Computer Circuit and System Architectures Tuesday poster	<u>Poster session A: STM investigation of molecular quantum dot cellular automata</u>	Yuhui Lu University of Notre Dame Rebecca Quardokus University of Notre Dame Song Guo University of Notre Dame S. Alex Kandel University of Notre Dame skandel@nd.edu	
Alexey Koyfman	Biochemistry and Molecular Biology, Baylor College of Medicine, Houston TX	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Self-Assembly of DNA Arrays into Multilayer Stacks</u>	Alexey Koyfman - Baylor College of Medicine, Sergei Magonov - Agilent Technologies, and Norbert Reich - UC -Santa Barbara koyfman@bcm.edu	
Amanda Pascoe	School of Mathematics, Georgia Institute of Technology, Atlanta, GA	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Self-Assembly and Convergence Rates of Heterogeneous Reversible Growth Processes</u>	Amanda Pascoe and Dana Randall, Georgia Institute of Technology apascoe3@math.gatech.edu	
Harish Chandran	Department of Computer Science, Duke University, Durham, NC	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: A Dendritic DNA Nanostructure for Target DNA Detection</u>	Thomas LaBean, Geetha Shetty, Peng Yin, Erik Schultes, Harish Chandran, and John Reif - Duke University harish@cs.duke.edu	
Miho Tagawa	Department of Life Sciences and Institute of Physics, The University of Tokyo, Tokyo, Japan	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: New photoligation method and strand phosphorylation to construct improved fully-addressed DNA scaffolds</u>	Miho Tagawa - Japan Science and Technology Agency (JST) PRESTO, Tadashi Ohtani - The University of Tokyo, Koh-ichiroh Shohda - The University of Tokyo, Kenzo Fujimoto - Japan Advanced Institute of Science and Technology, and Akira Suyama - The University of Tokyo tagawa@genta.c.u-tokyo.ac.jp	
Nadrian Seeman	Department of Chemistry, New York University, New York, NY	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Exploring the Rigidity of DNA Nanotubes</u>	Tong Wang - NYU, Sergio Martinez - UC -Santa Barbara, Deborah Kuchnir Fygenon - UC -Santa Barbara, and Nadrian Seeman, NYU ned.seeman@nyu.edu	
Nadrian Seeman	Department of Chemistry, New York University, New York, NY	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: The Rational Design and Structural Analysis of a Self-Assembled Three-Dimensional DNA Crystal</u>	Jianping Zheng - NYU, Jens J. Birktoft - NYU, Ruojie Sha - NYU, Tong Wang - NYU, Pamela E. Constantinou - NYU, Yi Chen - Purdue University, Chengde Mao, Purdue University, Stephen L. Ginnell - Argonne National Laboratory, and Nadrian C. Seeman, NYU ned.seeman@nyu.edu	
William Shih	Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Site-directed insertions and deletions control curvature, shear, and twist in DNA bundles</u>	Hendrik Dietz, Shawn Douglas, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School William_Shih@dfci.harvard.edu	
Shogo Hamada	Tokyo Institute of Technology, Tokyo, Japan	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Design of Interconnected Single Duplex DNA Nanostructures</u>	Shogo Hamada and Satoshi Murata - Tokyo Institute of Technology hamada@mrt.dis.titech.ac.jp	

21-Apr	Track on Self-assembled Computer Circuit and System Architectures Session 2 (Ballroom 1); Track chair Chris Dwyer, Department of Electrical and Computer Engineering, Duke University, Durham NC, cdwyer@ece.duke.edu					
	10:15-10:50 am	Stanley Williams	Hewlett Packard	Self-assembled Computer Circuit and System Architectures Session 2	<u>Keynote: Nanoelectronics and Alternative Logic Systems</u>	Stanley Williams HP
21-Apr	10:50-11:15 am	Wolfgang Porod	Notre Dame	Self-assembled Computer Circuit and System Architectures Session 2	<u>Invited talk: Magnetic Logic Based on Field-Coupled Nanomagnets: Clocking Structures and Power Analysis</u>	M. Tanvir Alam University of Notre Dame Steve Kurtz University of Notre Dame Michael T. Niemier University of Notre Dame Sharon X. Hu University of Notre Dame Gary H. Bernstein University of Notre Dame Wolfgang Porod University of Notre Dame porod@nd.edu
	11:15-11:20 am	Break				
21-Apr	11:20-12:00 am	Teri Odom	Northwestern	Chair's special talk (Ballroom 1)	<u>Keynote: Designing Research-based Courses for Undergraduates, Nanoscience Modules for High School Students, and Hands-on Activities for the Developing World</u>	Teri Odom (Northwestern) todom@northwestern.edu
	12:00-1:30 pm	Lunch (location TBA)				
	Track on Nanoplasmonics & Nanophotovoltaics (Ballroom 1); Track chair Eray Aydil, Department of Chemical Engineering and Materials Science, University of Minnesota, MN, aydil@tc.umn.edu					
21-Apr	1:30-2:05 pm	Yi Cui	Stanford	Nanoplasmonics & Nanophotovoltaics	<u>Keynote talk: Amorphous Si and CuIn(Ga)Se₂ Nanowire Solar Cell</u>	Yi Cui (Stanford) yicui@stanford.edu
	2:05-2:25 pm	Andrea Tao	UCB	Nanoplasmonics & Nanophotovoltaics	<u>Contributed talk: Self-Assembled Plasmonic Crystals</u>	Andrea Tao UC Berkeley Daniel Ceperley UC Berkeley Andrew Neureuther UC Berkeley Peidong Yang UC Berkeley tao@lifesci.ucsb.edu
	2:25-2:30	Break				
21-Apr	2:30-2:50	Päivi Törmä	Department of Applied Physics, Helsinki University of Technology, Helsinki, Finland	Nanoplasmonics & Nanophotovoltaics	<u>Contributed talk: Vacuum Rabi splitting and strong coupling dynamics for surface plasmon polaritons and organic molecules</u>	Päivi Törmä - Helsinki University of Technology, Tommi Hakala - University of Jyväskylä, Anton Kuzyk, Helsinki University of Technology, Jussi Toppari - University of Jyväskylä, Mika Pettersson - University of Jyväskylä, and Henrik Kunttu - University of Jyväskylä paivi.torma@hut.fi
	2:50-3:15	Sang-Hyun Oh	Department of Electrical and Computer Engineering, University of Minnesota, Minneapolis, MN	Nanoplasmonics & Nanophotovoltaics	<u>Invited talk: Periodic Plasmonic Nanostructures for Biosensing and Photovoltaics</u>	Nathan Lindquist, Antoine Lesuffleur, Hyungsoon Im, Si Hoon Lee, and Sang-Hyun Oh - University of Minnesota sang@umn.edu

21-Apr	3:15-4:15	Refreshments and afternoon posters (outside Ballroom 1)				
	Khawla Khashan	School of Applied Sciences, University of Technology, Baghdad, Iraq	Nanoplasmonics & Nanophotovoltaics Tuesday poster	<u>Poster: Optoelectronic properties of ZnO nanoparticles deposition on porous silicon</u>	Khawla Salah - School of Applied Sciences, University of Technology, Baghdad, Iraq	khawla_salah@yahoo.com
	Turgay Kacar	Materials Science and Engineering, University of Washington, Seattle, WA	Nanoplasmonics & Nanophotovoltaics Tuesday poster	<u>Poster: Quartz Binding Peptides as Molecular Linkers</u>	Turgay Kacar, Mustafa Gungormus, Marketa Hnilova, Christopher So, Ersin E. Oren, Candan Tamerler, Mehmet Sarikaya -Genetically Engineered Materials Science and Engineering Center, UW	kacart@u.washington.edu
	Bin Liu	Department of Chemical Engineering and Materials Science, University of Minnesota, Minnesota, MN	Nanoplasmonics & Nanophotovoltaics Tuesday poster	<u>Poster: Titanium dioxide nanowires for dye sensitized solar cells</u>	Bin Liu, Janice E. Boercker, Emil Enache-Pommer, and Eray S. Aydil - University of Minnesota	aydil@tc.umn.edu
	David Zhang	California Institute of Technology, Pasadena, CA	Molecular Motors Tuesday poster	<u>Poster: Kinetics of DNA Strand Displacement Reactions based on Toehold Exchange</u>	David Zhang and Erik Winfree - California Institute of Technology	dzhang@dna.caltech.edu
	Richard Muscat	Department of Physics, Oxford University, Oxford, England	Molecular Motors Tuesday poster	<u>Poster: A Linear Motor constructed from DNA</u>	Richard A. Muscat, Jonathan Bath, and Andrew J. Turberfield - Oxford University	richard.muscat@wadh.ox.ac.uk
	Shelley Wickham	Department of Physics, Oxford University, Oxford, England	Molecular Motors Tuesday poster	<u>Poster: A DNA origami-based track for a DNA nanomotor</u>	S.Wickham, J. Bath, and A.J. Turberfield - University of Oxford	shelley.wickham@new.ox.ac.uk
	Nadrian Seeman	Department of Chemistry, New York University, New York, NY	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: A Seventh DNA Helix Sequestered within a DNA Six-Helix Bundle: Prototype for the Control of Nanorods</u>	Risheng Wang and Nadrian C. Seeman - NYU	ned.seeman@nyu.edu
	Petr Cigler	The Scripps Research Institute, La Jolla, CA	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: DNA-guided crystallization of virus-like particles</u>	Petr Cigler - The Scripps Research Institute, Sung Yong Park - Northwestern University, and M. G. Finn, The Scripps Research Institute	cigler@scripps.edu
Thomas Sobey	Physics Department, Technical University Munich, Garching, Germany	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Single Molecule Fluorescence on DNA Origami</u>	Thomas Sobey - Technical University of Munich, Christian Steinhauer - Ludwig Maximilians University Munich, Ralf Jungmann - Technical University of Munich, Philip Tinnefeld - Ludwig Maximilians University Munich, and Friedrich Simmel - Technical University of Munich	thomas.sobey@ph.tu.m.de	
21-Apr	Track on Molecular Motors Session 1 (Ballroom 1); Track chair Andrew Turberfield, Department of Physics, University of Oxford, Oxford, UK, a.turberfield1@physics.ox.ac.uk					

4:15-4:50 pm	Wolfgang Baumeister	Max-Planck-Institute of Biochemistry, Martinsried, Germany	Molecular Motors Session1	<u>Keynote: Mapping molecular landscapes inside cells by cryoelectron tomography</u>	Wolfgang Baumeister - Max-Planck-Institute of Biochemistry	baumeist@biochem.mpg.de
4:50-5:10 pm	Tosan Omabegho	Department of Chemistry, New York University, New York, NY	Molecular Motors Session1	<u>Contributed talk: A Unidirectional Autonomous Bipedal DNA Nanorobot with Coordinated Legs</u>	Tosan Omabegho - Harvard University, Ruojie Sha - NYU, and Nadrian Seeman - NYU	ned.seeman@nyu.edu
5:10-5:15 pm	Break					
5:15-5:40 pm	Petr Kral	Department of Chemistry, University of Illinois at Chicago, Chicago, IL	Molecular Motors Session1	<u>Invited talk: Rotary molecular motion at the nanoscale: Motors, propellers, wheels</u>	Petr Kral - University of Illinois at Chicago	pkral@uic.edu
5:40-6:00 pm	Roman Boulatov	Department of Chemistry, University of Illinois, Urbana, IL	Molecular Motors Session1	<u>Contributed talk: Maximum force obtainable from a molecular</u>	Roman Boulatov - University of Illinois	boulatov@illinois.edu
6-8 pm	Break					
7:30-8 pm	Poster setup for Combined Poster Session A presenters: Eagle Cliff Room					
Presentation of ISNSCE Nanoscience Award : Ballroom 1						
8-8:45 pm	Paul Alivisatos	Depts. Of Chemistry and Materials Science, UCB and Deputy	ISNSCE Nanoscience Award Address	Nanocrystal molecules with applications in single molecule biological imaging	Paul Alivisatos, UCB and LBL	kemarchese@lbl.gov
21-Apr	8:45-10 pm	Combined Poster Session A and Dessert Reception (Eagle Cliff Room)				
		Yuhui Lu	Notre Dame	Self-assembled Computer Circuit and System Architectures Tuesday poster	<u>Poster Session A: STM investigation of molecular quantum dot cellular automata</u>	Yuhui Lu, Rebecca Quardokus, Song Guo, and S. Alex Kandel-- University of Notre Dame
		Turgay Kacar	Genetically Engineered Materials Science and Engineering Center, Materials Science and Engineering, University of Washington, Seattle, WA	Nanoplasmonics & Nanophotovoltaics Tuesday Poster	<u>Poster: Optoelectronic properties of ZnO nanoparticles deposition on porous silicon</u>	Turgay Kacar, Mustafa Gungormus, Marketa Hnilova, Christopher So, Ersin E. Oren, Candan Tamerler, Mehmet Sarikaya - UW

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	Nadrian Seeman	Department of Chemistry, New York University, New York, NY	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: A Seventh DNA Helix Sequestered within a DNA Six-Helix Bundle: Prototype for the Control of Nanorods</u>	Risheng Wang and Nadrian C. Seeman - NYU	ned.seeman@nyu.edu
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	Thomas Sobey	Physics Department, Technical University Munich, Garching, Germany	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Single Molecule Fluorescence on DNA Origami</u>	Thomas Sobey - Technical University of Munich, Christian Steinhauer - Ludwig Maximilians University Munich, Ralf Jungmann - Technical University of Munich, Philip Tinnefeld - Ludwig Maximilians University Munich, and Friedrich Simmel - Technical University of Munich	thomas.sobey@ph.tum.de
	William Shih	Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Site-directed insertions and deletions control curvature, shear, and twist in DNA bundles</u>	Hendrik Dietz, Shawn Douglas, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School	William_Shih@dfci.harvard.edu
	Shogo Hamada	Tokyo Institute of Technology, Tokyo, Japan	Self-Assembled DNA Nanostructures Tuesday poster	<u>Poster session A: Design of Interconnected Single Duplex DNA Nanostructures</u>	Shogo Hamada and Satoshi Murata - Tokyo Institute of Technology	hamada@mrt.dis.titech.ac.jp
22-Apr	7:30-8 am	Coffee				
22-Apr	Track on Self-Assembled DNA Nanostructures Session 1 (Ballroom 1); Track chair Nadrian Seeman, Department of Chemistry, New York University, NY, ned.seeman@nyu.edu					
8:00-8:35 am	Chengde Mao	Department of Chemistry, Purdue University, West Lafayette, IN	Self-Assembled DNA Nanostructures Session 1	<u>Keynote: A route to DNA polyhedra and cages</u>	Chengde Mao - Purdue University	mao@purdue.edu
8:35-9:00 am	William Sherman	Brookhaven National Laboratory, Upton, NY	Self-Assembled DNA Nanostructures Session 1	<u>Invited talk: Bringing the Full Strength of Branched DNA Nanostructures to the Scaffolding of Nanoparticles</u>	Thilak Mudalige, Oleg Gang, and William Sherman - Brookhaven National Laboratory	wsherman@bnl.gov
9:00-9:25 am	Tim Liedl	Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA	Self-Assembled DNA Nanostructures Session 2	<u>Invited talk: Two- and three-dimensional prestressed DNA Tensegrity structures</u>	Tim Liedl - Dana-Farber Cancer Institute and Harvard Medical School, Donald Ingber - Harvard Medical School, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School	

22-Apr	9:25-9:55 am	Breakfast and part 1 of morning poster session (outside Ballroom 1)			
Akinori Kuzuya	RCAST, The University of Tokyo, Tokyo Japan	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Streptavidin Nanoarray Formed on a Tape-Like DNA Nanostructure Equipped with Nanometer-Sized Wells</u>	Akinori Kuzuya, Kentaro Numajiri, Mayumi Kimura, and Makoto Komiyama - The University of Tokyo	kuzu@mkomi.rcast.u-tokyo.ac.jp
Akio Nishikawa	Fuji University	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Photo-control experiments on DNA tiles with photo-controllable sticky ends</u>	Akio Nishikawa - Fuji University, Kazumasa Ohtake - Univ. of Tokyo, Fumiaki Tanaka - Univ. of Tokyo, and Masami Hagiya - Univ. of Tokyo	akio-nishikawa@nifty.com
Daniel Lubrich	Department of Physics, National University of Singapore, Singapore	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Kinetically Controlled Self-Assembly of DNA Oligomers</u>	Daniel Lubrich - National University of Singapore, Simon Green - Oxford University, and Andrew Turberfield - Oxford University	phyld@nus.edu.sg
Hao Yan	The Biodesign Institute, Arizona State University, Tempe, AZ	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Toward the Goal of Engineering Complex 3D DNA Nanoarchitecture</u>	Jaswinder Sharma - ASU , Rahul Chhabra - ASU , Anchi Cheng - Scripps Research Institute, Yan Liu - ASU , and Hao Yan - ASU	hao.yan@asu.edu
Harish Chandran	Department of Computer Science, Duke University, Durham, NC	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Target DNA Detection by Strand Displacement and Deoxyribozymogen Amplification</u>	Thomas LaBean, Geetha Shetty, Hao Yan, Erik Schultes, Harish Chandran, and John Reif - Duke University	harish@cs.duke.edu
Kasper Jahn	University of Aarhus, Aarhus, Denmark	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: The use of DNA assembly to base-specifically modify RNA</u>	Kasper Jahn, Morten Nielsen, Eva Olsen, Reza M. Zadeegan, Kurt Gothelf, and Jorgen Kjems - University of Aarhus	kj@inano.dk
Linda Stearns	Center for BioOptical Nanotechnology, ASU Biodesign Institute, Tempe, AZ	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Hybrid DNA-Peptide Nanostructures for Templating Inorganic Materials Assembly</u>	Linda A. Stearns, Rahul Chhabra, William T. Petuskey, Hao Yan, and John C. Chaput - ASU	linda.stearns@asu.edu
Philip Lukeman	Department of Chemistry, Cal Poly Pomona, Pomona, CA	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Orthogonal Organochemical Control of DNA Nanoswitches</u>	Vikram Savani, Jonathan Perez, and Philip Lukeman - Cal Poly Pomona	psl@csupomona.edu
William Shih	Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Folding of three-dimensional DNA-origami shapes with two different scaffold sequences</u>	Franziska Graf, Bjorn Hogberg, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School	William_Shih@dfci.harvard.edu
William Shih	Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Towards custom-topology tracks for myosin molecular motors</u>	Hendrik Dietz, Nathan Derr, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School	William_Shih@dfci.harvard.edu

	Yan Liu and Hao Yan	The Biodesign Institute, Arizona State University, Tempe, AZ	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Study of Photonic Interactions between Gold nanoparticles and Fluorecent Molecules using DNA as Scaffolds</u>	Rahul Chhabra - ASU , Jaswinder Sharma - ASU , Haining Wang - University of Central Florida, Shengli Zou - University of Central Florida, Stuart Lindsay - ASU , Hao Yan - ASU , and Yan Liu - ASU	yan_liu@asu.edu
	Kurt Gothelf	Centre for DNA Nanotechnology, Department of Chemistry, Aarhus University, Aarhus, Denmark	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Single Molecule Chemical Reactions on DNA Origami Templates and Formation of a 3D DNA Box</u>	Ebbe Andersen, Alexandru Rotaru, Flemming Besenbacher, Jørgen Kjems, and Kurt Gothelf - Aarhus University	kvg@chem.au.dk
22-Apr	Track on Self-Assembled DNA Nanostructures Session 2 (Ballroom 1); Track chair Nadrian Seeman, Department of Chemistry, New York University, NY, ned.seeman@nyu.edu					
9:55--10:20 am	Sebastian Lyonnais	Muséum National d'Histoire Naturelle, Paris, France	Self-Assembled DNA Nanostructures Session 2	<u>Invited talk: DNA nanostructures made of monomolecular G-Wires</u>	Sébastien Lyonnais - Muséum National d'Histoire Naturelle, Olivier Pietrement - CNRS, Laboratoire de Microscopie Moléculaire et Cellulaire, Eric Lecam - CNRS, Laboratoire de Microscopie Moléculaire et Cellulaire, and Jean-Louis Mergny - Muséum National d'Histoire Naturelle	slyonnais@mnhn.fr
10:20-10:45 am	Ebbe S. Anderson	Department of Molecular Biology, University of Aarhus, Aarhus, Denmark	Self-Assembled DNA Nanostructures Session 2	<u>Invited talk: Self-assembly of a nano-scale DNA box with a controllable lid</u>	Ebbe Andersen, Mingdong Dong, Morten Nielsen, Flemming Besenbacher, Kurt V. Gothelf, and Jørgen Kjems - Aarhus University	esa@mb.au.dk
10:45-11:20 am	Breakfast and part 2 of morning poster session (posters same as part 1), outside Ballroom 1					
22-Apr	Track on Protein and Peptide Design and Assembly Session 1 (Ballroom 1); Track chair Todd Yeates, Department of Chemistry and Biochemistry, UCLA, CA, yeates@mbi.ucla.edu					
11:20-11:55 am	Lynne Regan	Yale University	Protein and Peptide Design and Assembly Session 1	Keynote: Designing and assembling repeat proteins with novel structures and properties	Lynne Regan, Aitziber Cortajarena, Tijana Grove, Meredith Jackral, and Lenka Kundrat, Yale University,	lynne.regan@yale.edu
11:55-12:15	Ronald N. Zuckermann	Molecular Foundry, Lawrence Berkeley National Laboratory	Protein and Peptide Design and Assembly Session 1	<u>Contributed talk: Extremely Thin Crystalline Sheet Assembly from</u>	Ki Tae Nam, Tammy K. Chu, Amanda B. Marciel, Sarah. A. Shelby, Philip H. Choi, Ritchie Chen, Byoung-Chul Lee, Michael D. Connolly, Ryan A. Mesch, and Ronald N. Zuckermann	rnzuckermann@lbl.gov
12:15-1:15	Lunch (location TBA)					

22-Apr	Track on Protein and Peptide Design and Assembly Session 2 (Ballroom 1); Track chair Todd Yeates, Department of Chemistry and Biochemistry, UCLA, CA, yeates@mbi.ucla.edu				
1:15-1:40	Jean Chmielewski	Purdue University	Protein and Peptide Design and Assembly Session 2	<u>Invited talk: Collagen Peptide-Based Biomaterials: Designing D Structures through Metal Chelation</u>	Jean Chmielewski Purdue University Marcos Pires Purdue University David Przybyla Purdue University chml@purdue.edu
1:40-2:05	Todd Yeates	UCLA	Protein and Peptide Design and Assembly Session 2	<u>Invited talk: Progress in the Design of Protein Shells, Layers,</u>	Todd O. Yeates, G. Jason Forse, Neil P. King, Toni M. Lee, Tobias Sayre, and Christopher S. Crowley yeates@mbi.ucla.edu
2:05-2:10	Break				
22-Apr	Track on Top-down meets Bottom-up, Session 1 (Ballroom 1); Track chair Mark Stoykovich, Department of Chemical and Biological Engineering, University of Colorado, Boulder, CO, mark.stoykovich@colorado.edu				
2:10-2:35	Zhiyong Li	HP Labs	Top-down Meets Bottom-up Session 1	<u>Invited talk: Top-down Meets Bottom-up: Rational Approach towards SERS Engineering</u>	Zhiyong Li
2:35-3:00	Charles T. Black	Brookhaven National Laboratory	Top-down Meets Bottom-up Session 1	<u>Invited talk: Polymer Self Assembly in Semiconductor Microelectronics</u>	Charles T. Black
3:00-3:20	Tomoji Kawai	ISIR-Sanken, Osaka University, Mihogaoka, Ibaraki, Osaka, Japan	Top-down Meets Bottom-up Session 1	<u>Contributed talk: Emergent Programmed Self-organization for the Creation of Advanced NanoBio-devices</u>	Tomiji Kawai - Osaka University kawai@sanken.osaka-u.ac.jp
22-Apr	3:20-4:00	Refreshments and Afternoon Posters (outside Ballroom 1)			
	Baoquan Ding	Molecular Foundry Lawrence Berkeley Lab	Top-down Meets Bottom-up Wednesday poster	<u>Poster session B: Precise Placement of a Single Quantum Dot in a Bowtie Nanoantenna Gap</u>	Baoquan Ding , Alan Chang , Ronald Zuckermann , James Chuck , Stefano Cabrini , bding@lbl.gov Jeffrey Bokor Molecular Foundry, Lawrence Berkeley
	Anton Kuzyk	Helsinki University of Technology	Top-down Meets Bottom-up Wednesday poster	<u>Poster session B: DNA Origami as a Nanobreadboard</u>	Anton Kuzyk University of Jyväskylä / Helsinki University of Technology Bernard Yurke Boise State University Jussi Toppari University of Jyväskylä Veikko Linko University of Jyväskylä Päivi Törmä Helsinki University of Technology ankuzyk@cc.hut.fi
	Kirill Afonin	Department of Chemistry and Biochemistry, University of California-Santa Barbara, Santa Barbara, CA	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Construction of Artificial RNA Nano-Switches Based on Attenuation of Loop-Receptor Interactions through the Formation of Intramolecular Pseudoknots</u>	Kirill Afonin, Yen-Ping Lin, and Luc Jaeger - UC - Santa Barbara kafonin@chem.ucsb.edu
	Lila Kari	Department of Computer Science, University of Western Ontario, London, Ontario	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Simulating Arbitrary-Neighborhood Tilings by Polyominoes</u>	Lila Kari and Benoit Masson - University of Western Ontario lila@csd.uwo.ca

	Steven Kautz	Department of Computer Science, Iowa State University, Ames, IA	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Tiling the Sierpinski carpet and related fractals</u>	Steven Kautz and James Lathrop - Iowa State University	smkautz@cs.iastate.edu
	Morgan Bishop	Air Force Research Laboratory/RITC, Rome, NY	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Structural Optimization of Dendritic DNA Self-Assembly</u>	Morgan Bishop - Air Force Research Laboratory, Clare Thiem - Air Force Research Laboratory, Thomas Renz - Air Force Research Laboratory, Erik Schultes - Duke University, Harish Chandran - Duke University, and John Reif - Duke University	Morgan.Bishop@rl.af.mil
	David Doty	Department of Computer Science, Iowa State University, Ames, IA	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Random Number Selection in Self-Assembly</u>	David Doty - Iowa State University, Jack Lutz - Iowa State University, Matthew Patitz - Iowa State University, Scott Summers - Iowa State University, and Damien Woods - University of Seville, Spain	pexatus@gmail.com
22-Apr	Track on Top-down meets Bottom-up, Session 2 (Ballroom 1); Track chair Mark Stoykovich, Department of Chemical and Biological Engineering, University of Colorado, Boulder, CO, mark.stoykovich@colorado.edu					
4:00-4:25	Song Jin	Department of Chemistry, University of Wisconsin-Madison, Madison, WI	Top-down Meets Bottom-up Session 2	<u>Invited talk: Bio-inspired Assembly of Functional Nanomaterials</u>	Song Jin - University of Wisconsin-Madison	jin@chem.wisc.edu
4:25-4:50	T. Andrew Taton	Department of Chemistry University of Minnesota	Top-down Meets Bottom-up Session 2	<u>Invited talk: Lithographically patterned colloids as cell surface mimics</u>	Alexi J. Young, Min-Woo Jang, Stephen C. Jameson, Stephen A. Campbell, T. Andrew Taton	taton@chem.umn.edu
4:50-4:55	Break					
22-Apr	Track on Principles and Theory of Self-Assembly (Ballroom 1); Track Chair Paul W. K. Rothmund, Departments of Computer Science, Bioengineering, and Computation and Neural Systems, Caltech, Pasadena CA, pwkr@dna.caltech.edu					
4:55-5:20	David Soloveichik	California Institute of Technology, Pasadena, CA	Principles and Theory of Self-Assembly	<u>Invited talk: Programmable Chemical Kinetics</u>	David Soloveichik - California Institute of Technology	dsolov@caltech.edu
5:20-5:40	Rebecca Schulman	Liphardt Lab, University of California-Berkeley, Berkeley, CA	Principles and Theory of Self-Assembly	<u>Contributed talk: Non-Biological Sequence Replication and Evolution Using DNA Crystals</u>	Rebecca Schulman - UC -Berkeley, Bernard Yurke - Boise State University, and Erik Winfree - California Institute of Technology	rschulman@berkeley.edu
5:40-5:45	Break					
5:45-6:10 pm	Radhika Nagpal	Harvard University, Cambridge, MA	Principles and Theory of Self-Assembly	<u>Invited talk: Global-to-Local Programming and Theory for Spatial Multi-Agent Systems</u>	Radhika Nagpal, Harvard University	rad@eecs.harvard.edu
6:10-6:45 pm	Thomas Mason	Dept. of Chemistry and Biochemistry, University of California-Los Angeles, Los Angeles, CA	Principles and Theory of Self-Assembly	<u>Keynote: Directing colloidal self-assembly using roughness-controlled depletion attractions</u>	Thomas Mason and Kun Zhao - UC -Los Angeles	mason@chem.ucla.edu

22-Apr	6:45-7:45 pm	Combined Poster Session B and Reception (Eagle Cliff Room)			
Akinori Kuzuya	RCAST, The University of Tokyo, Tokyo Japan	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Streptavidin Nanoarray Formed on a Tape-Like DNA Nanostructure Equipped with Nanometer-Sized Wells</u>	Akinori Kuzuya, Kentaro Numajiri, Mayumi Kimura, and Makoto Komiyama - The University of Tokyo	kuzu@mkomi.rcast.u-tokyo.ac.jp
Akio Nishikawa	Fuji University	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Photo-control experiments on DNA tiles with photo-controllable sticky ends</u>	Akio Nishikawa - Fuji University, Kazumasa Ohtake - Univ. of Tokyo, Fumiaki Tanaka - Univ. of Tokyo, and Masami Hagiya - Univ. of Tokyo	akio-nishikawa@nifty.com
Daniel Lubrich	Department of Physics, National University of Singapore, Singapore	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Kinetically Controlled Self-Assembly of DNA Oligomers</u>	Daniel Lubrich - National University of Singapore, Simon Green - Oxford University, and Andrew Turberfield - Oxford University	phylid@nus.edu.sg
Hao Yan	The Biodesign Institute, Arizona State University, Tempe, AZ	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Toward the Goal of Engineering Complex 3D DNA Nanoarchitecture</u>	Jaswinder Sharma - ASU , Rahul Chhabra - ASU , Anchi Cheng - Scripps Research Institute, Yan Liu - ASU , and Hao Yan - ASU	hao.yan@asu.edu
Harish Chandran	Department of Computer Science, Duke University, Durham, NC	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Target DNA Detection by Strand Displacement and Deoxyribozymogen Amplification</u>	Thomas LaBean, Geetha Shetty, Hao Yan, Erik Schultes, Harish Chandran, and John Reif - Duke University	harish@cs.duke.edu
Kasper Jahn	University of Aarhus, Aarhus, Denmark	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: The use of DNA assembly to base-specifically modify RNA</u>	Kasper Jahn, Morten Nielsen, Eva Olsen, Reza M. Zadeegan, Kurt Gothelf, and Jorgen Kjems - University of Aarhus	kj@inano.dk
Linda Stearns	Center for BioOptical Nanotechnology, ASU Biodesign Institute, Tempe, AZ	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Hybrid DNA-Peptide Nanostructures for Templating Inorganic Materials Assembly</u>	Linda A. Stearns, Rahul Chhabra, William T. Petuskey, Hao Yan, and John C. Chaput - ASU	linda.stearns@asu.edu
Philip Lukeman	Department of Chemistry, Cal Poly Pomona, Pomona, CA	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Orthogonal Organochemical Control of DNA Nanoswitches</u>	Vikram Savani, Jonathan Perez, and Philip Lukeman - Cal Poly Pomona	psl@csupomona.edu
William Shih	Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Folding of three-dimensional DNA-origami shapes with two different scaffold sequences</u>	Franziska Graf, Bjorn Hogberg, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School	William_Shih@dfci.harvard.edu
William Shih	Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Towards custom-topology tracks for myosin molecular motors</u>	Hendrik Dietz, Nathan Derr, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School	William_Shih@dfci.harvard.edu

Yan Liu and Hao Yan	The Biodesign Institute, Arizona State University, Tempe, AZ	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Study of Photonic Interactions between Gold nanoparticles and Fluorecent Molecules using DNA as Scaffolds</u>	Rahul Chhabra - ASU , Jaswinder Sharma - ASU , Haining Wang - University of Central Florida, Shengli Zou - University of Central Florida, Stuart Lindsay - ASU , Hao Yan - ASU , and Yan Liu - ASU	yan_liu@asu.edu
Kurt Gothelf	Centre for DNA Nanotechnology, Department of Chemistry, Aarhus University, Aarhus, Denmark	Self-Assembled DNA Nanostructures Wednesday poster	<u>Poster session B: Single Molecule Chemical Reactions on DNA Origami Templates and Formation of a 3D DNA Box</u>	Ebbe Andersen, Alexandru Rotaru, Flemming Besenbacher, Jørgen Kjems, and Kurt Gothelf - Aarhus University	kvg@chem.au.dk
Armin Knoll	IBM Zurich Research Laboratory	Top-down Meets Bottom-up Wednesday poster	<u>Poster session B: Nanometer-Scale Direct-Write 3D-Patterning using</u>	A. Knoll, D. Pires, U. Drechsler, J. Hedrick, B. Gotsmann, M. Despont, and U. Duerig	ark@zurich.ibm.com
Baoquan Ding	Molecular Foundry Lawrence Berkeley Lab	Top-down Meets Bottom-up Wednesday poster	<u>Poster session B: Precise Placement of a Single Quantum Dot in a Bowtie Nanoantenna Gap</u>	Baoquan Ding, Alan Chang, Ronald Zuckermann, James Schuck, Stefano Cabrini, and Jeffrey Bokor; bding@lbl.gov Molecular Foundry, Lawrence Berkeley Lab	
Anton Kuzyk	Helsinki University of Technology	Top-down Meets Bottom-up Wednesday poster	<u>Poster session B: DNA Origami as a Nanobreadboard</u>	Anton Kuzyk University of Jyväskylä / Helsinki University of Technology Bernard Yurke Boise State University Jussi Toppari University of Jyväskylä Veikko Linko University of Jyväskylä Päivi Törmä Helsinki University of Technology	ankuzyk@cc.hut.fi
Kirill Afonin	Department of Chemistry and Biochemistry, University of California-Santa Barbara, Santa Barbara, CA	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Construction of Artificial RNA Nano-Switches Based on Attenuation of Loop-Receptor Interactions through the Formation of Intramolecular Pseudoknots</u>	Kirill Afonin, Yen-Ping Lin, and Luc Jaeger - UC - Santa Barbara	kafonin@chem.ucsb.edu
Lila Kari	Department of Computer Science, University of Western Ontario, London, Ontario	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Simulating Arbitrary-Neighborhood Tilings by Polyominoes</u>	Lila Kari and Benoit Masson - University of Western Ontario	lila@csd.uwo.ca
Steven Kautz	Department of Computer Science, Iowa State University, Ames, IA	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Tiling the Sierpinski carpet and related fractals</u>	Steven Kautz and James Lathrop - Iowa State University	smkautz@cs.iastate.edu
Morgan Bishop	Air Force Research Laboratory/RITC, Rome, NY	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Structural Optimization of Dendritic DNA Self-Assembly</u>	Morgan Bishop - Air Force Research Laboratory, Clare Thiem - Air Force Research Laboratory, Thomas Renz - Air Force Research Laboratory, Erik Schultes - Duke University, Harish Chandran - Duke University, and John Reif - Duke University	Morgan.Bishop@rl.af.mil
David Doty	Department of Computer Science, Iowa State University, Ames, IA	Principles and Theory of Self-Assembly Wednesday Poster	<u>Poster: Random Number Selection in Self-Assembly</u>	David Doty - Iowa State University, Jack Lutz - Iowa State University, Matthew Patitz - Iowa State University, Scott Summers - Iowa State University, and Damien Woods - University of Seville, Spain	pexatus@gmail.com

23-Apr	7:30-8:00 am	Coffee (outside Ballroom 1)					
23-Apr		Track on Viral Self-Assembly (Ballroom 1); Track Chair Adam Zlotnick, Department of Biology, Indiana University, Bloomington, IN, azlotnic@indiana.edu					
	8:00-8:35 am	Bogdan Dragnea	Chemistry Department and Indiana Nanoscience Institute, Bloomington, IN	Viral Self-Assembly	<u>Keynote: Physics of Virus-inspired Self-Assembly</u>	Bogdan Dragnea - Chemistry Department and Indiana Nanoscience Institute	need
	8:35-8:40 am	Break					
	8:40-9:05 am	Anette Schneemann	The Scripps Research Institute, La Jolla, CA	Viral Self-Assembly	<u>Invited talk: Assembly of multi-layered viral nanoparticles: a new approach for vaccine design</u>	Anette Schneemann - The Scripps Research Institute	need
	9:05-9:35 am	Brian Bothner		Viral Self-Assembly	<u>Keynote: Stability and Dynamics of Protein Cages</u>	Brian Bothner	need
23-Apr	9:30-10:30 am	Breakfast and Morning Poster Session (outside Ballroom 1)					
		C. R. Bourne	Biochemistry and Molecular Biology, OUHSC, Oklahoma City, OK	Viral Self-Assembly Thursday Poster	<u>Poster session C: Evaluating Self-assembly-directed antiviral molecules</u>	C. R. Bourne - OUHSC, S. Lee - The Scripps Research Institute, B. Venkataiah - The Scripps Research Institute, A. Lee - OUHSC, B. Korba - Georgetown University Medical Center, M. G. Finn - The Scripps Research Institute, and A. Zlotnick - OUHSC and Indiana University-Bloomington	need
		K. Burns	Biochemistry and Molecular Biology, OUHSC, Oklahoma City, OK	Viral Self-Assembly Thursday Poster	<u>Poster: pH-Dependent Quaternary Transitions in Viral Nanotubes</u>	K Burns - OUHSC, S. Mukherjee - OUHSC, J. M. Johnson - OUHSC, T Keef - University of York-Heslington, and A. Zlotnick - OUHSC and Indiana University-Bloomington	need
		Michael Norton	Department of Chemistry, Marshall University, Huntington, WV	Self-Assembly Across Scales Thursday poster	<u>Poster session C: NTA Directed Protein Nano-Patterning on DNA Origami Nanoconstructs</u>	Wanqiu Shen, Hong Zhong, David Neff, and Michael L. Norton - Marshall University	Norton@marshall.edu
		Sang-Gook Kim	Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA	Self-Assembly Across Scales Thursday poster	<u>Poster session C: Assembly of Individual Nanostructures to Microdevices</u>	Soohyung Kim, Hyung Woo Lee and Sang-Gook Kim - MIT	sangkim@mit.edu
		Gregory Rorrer	Department of Chemical Engineering, Oregon State University, Corvallis, OR	Self-Assembly Across Scales Thursday poster	<u>Poster session C: Biological Incorporation of Nanostructured TiO2 into Nano and Micro-Patterned Biosilica</u>	Clayton Jeffryes - Oregon State University, Timothy Gutu - Portland State University, Haiyan Li - Portland State University, Jun Jiao - Portland State University, and Gregory Rorrer - Oregon State University	rorrergr@enr.orst.edu

	Shaghayegh Abbasi	University of Washington	Self-Assembly Across Scales Thursday poster	<u>Poster session C: Capillary-Based Self-Assembly: Positioning Accuracy and Scaling</u>	Shaghayegh Abbasi - UW, Rajashree Baskaran - Intel Corporation and UW, and Karl F. Böhringer - UW	abbasi@u.washington.edu
	Rémi Dreyfus	Center for Soft Matter Research, New York University, New York, NY	Self-Assembly Across Scales Thursday poster	Poster session C: Aggregation-disaggregation transition of DNA coated colloids: experiments and theory	Rémi Dreyfus - NYU, Mirjam E. Leunissen - NYU, Roujie Sha - NYU, Alexei V. Tkachenko - University of Michigan, Nadrian C. Seeman - NYU, David J. Pine - NYU, Paul M. Chaikin - NYU	dreyfus@nyu.edu
23-Apr	Track on Self-Assembly Across Scales; Track Chair Karl Böhringer, Department of Electrical Engineering, UW, Seattle WA, karl@ee.washington.edu					
10:30-11:05 am	Gary Bernstein	Center for Nano Science and Technology, Department of Electrical Engineering, University of Notre Dame, Notre Dame, IN	Self-Assembly Across Scales Session 1	<u>Keynote: Quilt Packaging – a Quasi-Monolithic Way to Merge Size Scales</u>	Gary H. Bernstein, Joseph Bonath, Jay Brockman, Wayne Buckhanan, Siyuan Dai, Patrick Fay, Mohammad Khan, David Kopp, Jason Kulick, Alfred Kriman, Yenchun Lee, Cai Liang, Daniel Myers, Michael Niemier, Michael Padberg, Ryan Savino, and Gregory Snider - University of Notre Dame	bernstein.1@nd.edu
11:05-11:25 am	Gunjan Agarwal	Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA	Self-Assembly Across Scales Session 2	<u>Contributed talk: Shape-Selective Assembly in Deformable Systems using Templated Assembly by Selective Removal</u>	Gunjan Agarwal, Amelia Servi, Feras Eid, and Carol Livermore - Massachusetts Institute of Technology	agarwalg@mit.edu
11:25-11:30 am	Break					
11:30-11:50 am	Mirjam Leunissen	Center for Soft Matter Research, New York University, New York, NY	Self-Assembly Across Scales Session 2	<u>Contributed talk: Towards Self-Replicating Materials of DNA-Functionalized Colloidal Particles</u>	Mirjam Leunissen, Remi Dreyfus, Roujie Sha, Tong Wang, Nadrian Seeman, and Paul Chaikin - NYU	ml154@nyu.edu
11:50-12:10	Sheetal Shetye	Interdisciplinary Microsystems Group, Dept. Electrical and Computer Eng., University of Florida, Gainesville, FL	Self-Assembly Across Scales Session 2	<u>Contributed talk: Magnetic Self-Assembly of Multiple Component Types: Simultaneous and Sequential Sorting of a Heterogeneous Mixture</u>	Sheetal B. Shetye, Ilan Eskinazi, and David P. Arnold - University of Florida	sheetals@ufl.edu
12:10-12:30	Mehmet R. Dokmeci	Department of Electrical and Computer Engineering, Northeastern University, Boston, MA	Self-Assembly Across Scales Session 2	<u>Contributed talk: Three Dimensional Nanostructures using Dielectrophoretic Assembly</u>	Mehmet R. Dokmeci - Northeastern University	mehmetd@ece.neu.edu
12:30-1:30	Lunch (location TBA)					

23-Apr	Track on Self-Assembled Surface Chemistry Session 1 (Ballroom 1); Track Chair Lloyd Smith, Department of Chemistry, University of Wisconsin-Madison, smith@chem.wisc.edu					
1:30-2:05	Stephen W. Turner	Pacific Biosciences, Menlo Park, CA	Self-Assembled Surface Chemistry Session 1	<u>Keynote: Harnessing Nature's Powerful DNA Sequencing Engine: Single Molecule Real Time Sequencing-by-Synthesis</u>	Stephen W. Turner - Pacific Biosciences	trard@pacificbiosciences.com
2:05-2:25	Mustafa Gungormus	Department of Materials Science & Engineering, University of Washington	Self-Assembled Surface Chemistry Session 1	<u>Contributed talk: Surface Bio-Engineering Using Peptides for Enhanced Cell Adhesion and Proliferation</u>	Mustafa Gungormus - UW, Sibel Cetinel - Istanbul Technical University, Ersin E. Oren - UW, Brandon R. Wilson - UW, Christopher So - UW, Martha J. Somerman - UW, Candan T. Behar - UW and Istanbul Technical University, and Mehmet Sarikaya UW and Istanbul Technical University	musgun@u.washington.edu
23-Apr	2:40-3:40 Refreshments and Afternoon Poster Session (includes all Friday am posters) outside Ballroom 1					
	Annette Raigoza	Department of Chemistry & Biochemistry, University of Notre Dame, Notre Dame, IN	Self-Assembled Surface Chemistry Thursday Poster	<u>Poster session C: Scanning Tunneling Microscopy Studies of Multi-Component Self-Assembled Monolayers</u>	Annette Raigoza, D. Andres Villalba, and S. Alex Kandel - University of Notre Dame	araigoza@nd.edu
	Ibrahim H. Ibrahim	Physics Department, Alexandria University, Alexandria, Egypt	Self-Assembled Surface Chemistry Thursday Poster	<u>Poster session C: Effect of SnO₂-nano addition on the mechanical properties of (Cu_{0.5}Ti_{0.5})-1223</u>	Ibrahim H. Ibrahim, Nayera H. Mohammed, Aly I. Abou-Aly, Ramadan Awad, and Mona Rekaby - Alexandria University	ibrahimh47@hotmail.com
	Nikolai Lebedev	Center for BioMolecular Sciences and Engineering, U.S. Naval Research Laboratory, Washington, DC	Self-Assembled Surface Chemistry Thursday Poster	<u>Poster session C: Construction of a novel high functional density photo-electronic material by encapsulation of photosynthetic reaction center proteins in carbon nanotube arrayed electrode</u>	Nikolai Lebedev - U.S. Naval Research Laboratory, Scott Trammell - U.S. Naval Research Laboratory, Stanislav Tsoi - U.S. Naval Research Laboratory, Anthony Spano - University of Virginia, Jimmy Xu - Brown University, and Joel Schnur - George Mason University	nikolai.lebedev@nrl.navy.mil
	Greg McColm	Department of Mathematics, University of South Florida, Tampa, FL	Computational Tools for Self-assembly Thursday poster	<u>Poster: Using a Net Generator to Survey Crystal Nets</u>	Mohamed Eddaoudi, Greg McColm, and Michael Zaworotko - University of South Florida	mccolm@cas.usf.edu
	Prateek Jain	Dhirubhai Ambani Institute of Information and Communication Technology, Gujarat, India	Computational Tools for Self-assembly Thursday poster	<u>Poster: An Error-Correction Package for DNA Self-Assembly</u>	Anshul Chaurasia, Sudhanshu Dwivedi, Prateek Jain, and Manish K. Gupta - Dhirubhai Ambani Institute of Information and Communication Technology	mankg@computer.org
	Hiram J. Conley	Brigham Young University, Provo, UT	Fullerene Nanostructures Thursday Poster	<u>Poster session C: Massively Parallel Indirect Dielectrophoresis</u>	Hiram J. Conley, David Jones, and Robert Davis - Brigham Young University	hiramconley@gmail.com
	Alexey Koyfman	Biochemistry and Molecular Biology, Baylor College of Medicine, Houston, TX	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Attachment of Self-Assembled DNA Multilayer Stacks to cells</u>	Alexey Koyfman - Baylor College of Medicine, Gary Braun - UC -Santa Barbara, Norbert Reich - UC - Santa Barbara	koyfman@bcm.edu

	Kirill Afonin	Department of Chemistry and Biochemistry, University of California-Santa Barbara	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Construction of Artificial RNA Nano-Switches Based on Attenuation of Loop-Receptor Interactions through the Formation of Intramolecular Pseudoknots</u>	Kirill Afonin - UC -Santa Barbara, Eckart Bindewald, SAIC-Frederic, Inc., NCI-Frederick, Alan Yaghoubian - UC -Santa Barbara, Bruce Shapiro - NCI-Frederick, and Luc Jaeger - UC -Santa Barbara	kafonin@chem.ucsb.edu
	Abdul Rehman	Institute of analytical and food chemistry, University of Vienna, Austria	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Resolution of Complex Mixtures by Nanostructured Molecularly Imprinted Polymer Coated QCM Sensor Arrays</u>	Abdul Rehman and Naseer Iqbal - University of Vienna-Austria	abdul.rehman@univie.ac.at
	Carston R. Wagner	University of Minnesota, Minneapolis, MN	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Self-Assembling T-cell Specific Single-Chain Antibody Nanorings</u>	Carston R. Wagner, Qing Li, and Daniel A. Vallera - University of Minnesota	need
23-Apr	Track on Self-Assembled Surface Chemistry Session 2 (Ballroom 1); Track Chair Lloyd Smith, Department of Chemistry, University of Wisconsin-Madison, smith@chem.wisc.edu					
3:40-4:05	Franco Cerrina	Electrical and Computer Engineering, Boston University, Boston, MA	Self-Assembled Surface Chemistry Session 2	<u>Invited talk: Lithography and DNA Synthesis: Integration at the Nanoscale</u>	Franco Cerrina - Boston University	fcerrina@bu.edu
4:05-4:30	Brian Fox	University of Wisconsin-Madison	Self-Assembled Surface Chemistry Session 2	<u>Invited talk: Cell-free Protein Translation</u>	Brian Fox--University of Wisconsin-Madison	bgfox@biochem.wisc.edu
4:30-4:35	Break					
23-Apr	Track on Computational Tools for Self-assembly (Ballroom 1): Track Chair Mark Sims, President, NanoRex, mark@nanorex.com					
4:35-5:00	Shawn Douglas	Dana-Farber Cancer Institute and Harvard Medical School, Cambridge, MA	Computational Tools for Self-assembly	<u>Keynote: Rapid prototyping of three-dimensional DNA-origami shapes with caDNAno</u>	Shawn Douglas - Dana-Farber Cancer Institute and Harvard Medical School, Adam Marblestone - Dana-Farber Cancer Institute and Harvard Medical School, Surat Teerapittayanon - Harvard Medical School, Alejandro Vazquez - Harvard Medical School, George Church - Harvard Medical School, and William Shih - Dana-Farber Cancer Institute and Harvard Medical School	William_Shih@dfci.harvard.edu
5:00-5:35	Matthew J. Patitz	Department of Computer Science, Iowa State University, Ames, IA	Computational Tools for Self-assembly	<u>Invited talk: Simulation of Self-Assembly in the Abstract Tile Assembly Model with ISU TAS</u>	Matthew J. Patitz - Iowa State University	mpatitz@cs.iastate.edu
5:35-6:00	Adrien Treuille	Robotics Institute, Carnegie Mellon University, Pittsburgh, PA	Computational Tools for Self-assembly	<u>Invited talk: Foldit: Scientific Discovery through Computer Games</u>	Adrien Treuille - Carnegie Mellon University	treuille@cs.cmu.edu

23-Apr	6-7:00 pm	Reception and Combined Poster Session C (Eagle Cliff Room)			
C. R. Bourne	Biochemistry and Molecular Biology, OUHSC, Oklahoma City, OK	Viral Self-Assembly Thursday Poster	<u>Poster session C: Evaluating Self-assembly-directed antiviral molecules</u>	C. R. Bourne - OUHSC, S. Lee - The Scripps Research Institute, B. Venkataiah - The Scripps Research Institute, A. Lee - OUHSC, B. Korba - Georgetown University Medical Center, M. G. Finn - The Scripps Research Institute, and A. Zlotnick - OUHSC and Indiana University-Bloomington	need
K. Burns	Biochemistry and Molecular Biology, OUHSC, Oklahoma City, OK	Viral Self-Assembly Thursday Poster	<u>Poster session C: pH-Dependent Quaternary Transitions in Viral Nanotubes</u>	K Burns - OUHSC, S. Mukherjee - OUHSC, J. M. Johnson - OUHSC, T Keef - University of York-Heslington, and A. Zlotnick - OUHSC and Indiana University-Bloomington	need
Michael Norton	Department of Chemistry, Marshall University, Huntington, WV	Self-Assembly Across Scales Thursday poster	<u>Poster session C: NTA Directed Protein Nano-Patterning on DNA Origami Nanoconstructs</u>	Wanqiu Shen, Hong Zhong, David Neff, and Michael L. Norton - Marshall University	Norton@marshall.edu
Sang-Gook Kim	Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA	Self-Assembly Across Scales Thursday poster	<u>Poster session C: Assembly of Individual Nanostructures to Microdevices</u>	Soohyung Kim, Hyung Woo Lee and Sang-Gook Kim - MIT	sangkim@mit.edu
Gregory Rorrer	Department of Chemical Engineering, Oregon State University, Corvallis, OR	Self-Assembly Across Scales Thursday poster	<u>Poster session C: Biological Incorporation of Nanostructured TiO₂ into Nano and Micro-Patterned Biosilica</u>	Gregory Rorrer - Oregon State University, Clayton Jeffryes - Oregon State University, Timothy Gutu - Portland State University, Haiyan Li - Portland State University, and Jun Jiao - Portland State University	rorrergrl@enr.orst.edu
Shaghayegh Abbasi	University of Washington	Self-Assembly Across Scales Thursday poster	<u>Poster session C: Capillary-Based Self-Assembly: Positioning Accuracy and Scaling</u>	Shaghayegh Abbasi - UW, Rajashree Baskaran - Intel Corporation and UW, and Karl F. Böhringer - UW	abbasi@u.washington.edu
Annette Raigoza	Department of Chemistry & Biochemistry, University of Notre Dame, Notre Dame, IN	Self-Assembled Surface Chemistry Thursday Poster	<u>Poster session C: Scanning Tunneling Microscopy Studies of Multi-Component Self-Assembled Monolayers</u>	Annette Raigoza, D. Andres Villalba, and S. Alex Kandel - University of Notre Dame	araigoza@nd.edu
Ibrahim H. Ibrahim	Physics Department, Alexandria University, Alexandria, Egypt	Self-Assembled Surface Chemistry Thursday Poster	<u>Poster session C: Effect of SnO₂-nano addition on the mechanical properties of (Cu_{0.5}Ti_{0.5})-1223</u>	Ibrahim H. Ibrahim, Nayera H. Mohammed, Aly I. Abou-Aly, Ramadan Awad, and Mona Rekaby - Alexandria University	ibrahimh47@hotmail.com
Nikolai Lebedev	Center for BioMolecular Sciences and Engineering, U.S. Naval Research Laboratory, Washington, DC	Self-Assembled Surface Chemistry Thursday Poster	<u>Poster session C: Construction of a novel high functional density photo-electronic material by encapsulation of photosynthetic reaction center proteins in carbon nanotube arrayed electrode</u>	Nikolai Lebedev - U.S. Naval Research Laboratory, Scott Trammell - U.S. Naval Research Laboratory, Stanislav Tsoi - U.S. Naval Research Laboratory, Anthony Spano - University of Virginia, Jimmy Xu - Brown University, and Joel Schnur - George Mason University	nikolai.lebedev@nrl.navy.mil

	Greg McColm	Department of Mathematics, University of South Florida, Tampa, FL	Computational Tools for Self-assembly:	<u>Poster Session C: Using a Net Generator to Survey Crystal Nets</u>	Mohamed Eddaoudi, Greg McColm, and Michael Zaworotko - University of South Florida	mccolm@cas.usf.edu
	Hiram J. Conley	Brigham Young University, Provo, UT	Fullerene Nanostructures Thursday Poster	<u>Poster session C: Massively Parallel Indirect Dielectrophoresis</u>	Hiram J. Conley, David Jones, and Robert Davis - Brigham Young University	hiramconley@gmail.com
	Alexey Koifman	Biochemistry and Molecular Biology, Baylor College of Medicine, Houston, TX	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Attachment of Self-Assembled DNA Multilayer Stacks to cells</u>	Alexey Koifman - Baylor College of Medicine, Gary Braun - UC -Santa Barbara, Norbert Reich - UC - Santa Barbara	koifman@bcm.edu
	Kirill Afonin	Department of Chemistry and Biochemistry, University of California-Santa Barbara	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Construction of Artificial RNA Nano-Switches Based on Attenuation of Loop-Receptor Interactions through the Formation of Intramolecular Pseudoknots</u>	Kirill Afonin - UC -Santa Barbara, Eckart Bindewald, SAIC-Frederic, Inc., NCI-Frederick, Alan Yaghoubian - UC -Santa Barbara, Bruce Shapiro - NCI-Frederick, and Luc Jaeger - UC -Santa Barbara	kafonin@chem.ucsb.edu
	Abdul Rehman	Institute of analytical and food chemistry, University of Vienna, Austria	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Resolution of Complex Mixtures by Nanostructured Molecularly Imprinted Polymer Coated QCM Sensor Arrays</u>	Abdul Rehman and Naseer Iqbal - University of Vienna-Austria	abdul.rehman@univie.ac.at
	Carston R. Wagner	University of Minnesota, Minneapolis, MN	Biomedical Nanotechnology Thursday Poster	<u>Poster session C: Self-Assembling T-cell Specific Single-Chain Antibody Nanorings</u>	Carston R. Wagner, Qing Li, and Daniel A. Vallera - University of Minnesota	
24-Apr	7-7:30 am	Coffee (outside Ballroom 1)				
24-Apr	Track on Fullerene Nanostructures (Ballroom 1); Track Chair Jie Liu, Department of Chemistry, Duke University, Durham, NC, j.liu@duke.edu					
	7:30-8:05 am	John A. Rogers	University of Illinois	Fullerene Nanostructures Session 1	<u>Keynote: Ultrathin Films of Single Walled Carbon Nanotubes for Analog RF and</u>	John Rogers - University of Illinois jrogers@illinois.edu
	8:05-8:30 am	Stefano Curtarolo	Department of Mechanical Engineering and Materials Science, Duke University, Durham, NC	Fullerene Nanostructures Session 1	<u>Invited talk: Order-disorder transitions in nano-clusters and implications in their catalytic activity</u>	Stefano Curtarolo - Duke University stefano@duke.edu
	8:30-8:40 am	Break				
	8:40-9:00 am	Jing Kong	Massachusetts Institute of Technology, Cambridge, MA	Fullerene Nanostructures Session 2	<u>Invited talk: Large area, Few Layer Graphene Films on Insulating Substrates</u>	Alfonso Reina, Xiaoting Jia, Stefan Thiele, Daniel Nezich, Mildred S. Dresselhaus, and Jing Kong - Massachusetts Institute of Technology jingkong@mit.edu
	9:00-9:25 am	Ming-Hsuan Kang	Math Department, Pennsylvania State University, State College, PA	Fullerene Nanostructures Session 2	<u>Contributed talk: Toroidal Fullerenes with the Cayley Graphs Structures</u>	Ming-Hsuan Kang - Pennsylvania State University kang_m@math.psu.edu

9:25-9:45 am	Jie Liu	Department of Chemistry, Duke University, Durham, NC	Fullerene Nanostructures Session 2	<u>Contributed talk: Selective growth of well aligned semiconducting single-walled carbon nanotubes</u>	Lei Ding, Alexander Tselev, Dongning Yuan, Thomas P. McNicholas, and Jie Liu - Duke University	j.liu@duke.edu
9:45-9:50 am	Break					
24-Apr	Track on Biomedical Nanotechnology (Ballroom 1), Track Chair Carston R. Wagner, Department of Medicinal Chemistry, University of Minnesota, wagne003@umn.edu					
9:50-10:25 am	James Williamson	The Scripps Research Institute, La Jolla, CA	Biomedical Nanotechnology Session 1	<u>Keynote: Self Assembly of the Ribosome Protein Synthesis Machine</u>	James Williamson - The Scripps Research Institute	jrwill@scripps.edu
10:25-10:45	Nicole F. Steinmetz	The Scripps Research Institute, La Jolla, CA	Biomedical Nanotechnology Session 1	<u>Contributed talk: Viral Nanoparticles (VNPs) as platforms for biomedicine: Targeting VNPs to sites of disease in vivo</u>	Nicole F. Steinmetz and Marianne Manchester - The Scripps Research Institute	nicoles@scripps.edu
10:45-11:10	Refreshments (outside Ballroom 1)					
11:10-11:35	Maaïke Everts	University of Alabama-Birmingham	Biomedical Nanotechnology Session 2	<u>Invited talk: Targeting Nanoparticles to Tumors Using Adenoviral Vectors</u>	Maaïke Everts - University of Alabama-Birmingham	maaïke@uab.edu
11:35-12:00	Dean Ho	Robert H. Lurie Comprehensive Cancer Center, Northwestern University, Chicago, IL	Biomedical Nanotechnology Session 2	<u>Invited talk: Nanodiamond-Based Therapeutic Delivery Agents for Cancer, Inflammation, and Wound</u>	Rafael Shimkunas - Northwestern University, Erik Robinson - Northwestern University, Eiji Osawa - Shinshu University, and Dean Ho - Northwestern University	need
12:00-12:20	Mehmet Sarikaya	University of Washington, Seattle, WA	Biomedical Nanotechnology Session 2	<u>Contributed talk: Molecular Biomimetics – Coupling Peptides and Nanoparticles for Nanotechnology and Medicine</u>	Candan Tamerler - UW and Istanbul Technical University, Ram Smaudrala - UW, Emre Oren - UW, John Evans - NYU, Beth Traxler - UW, and Mehmet Sarikaya - UW	sarikaya@u.washington.edu
12:20-12:25	Break					
24-Apr	Track on Molecular Motors Session 2 (Ballroom 1); Track chair Andrew Turberfield, Department of Physics, University of Oxford, Oxford, UK, a.turberfield1@physics.ox.ac.uk					
12:25-12:50	F. C. MacKintosh	Department of Physics and Astronomy, Faculty of Exact Sciences, Vrije Universiteit, Amsterdam, The Netherlands	Molecular Motors Session 2	<u>Invited talk: Molecular Motors: Contractile fluctuations and stiffening of motor-activated gels</u>	F. C. MacKintosh - Vrije Universiteit	fcm@nat.vu.nl