

Day	Time (EST)	Seminar program	
Day 1: Wednesday, March 17, 2021	8:45-9:00	Welcome Plenary session 1 Chair: Eva Sevcsik	
	9:00-9:35	P. Mendes: Tuning and switching the binding properties of bio-interface materials	
	9:35-10:10	K. Salaita: Repurposing nucleic acids as high-resolution force sensors to study mechanotransduction in living cells	
	10:10-10:25	A. Cavalcanti-Adam: Nanopatterned materials for receptor crosstalk in cell adhesion	
	10:25-10:40	B. Baird: Micropatterned surfaces to investigate assembly of cellular signaling machinery	
	10:40-11:10	Break, Coffee Tables, Speakers' Tables	
		Single molecule architectures via DNA origami nanotechnology Chair: G. Leggett	3D Nanostructures Chair: J. Piehler
	11:10-11:45	M. Palma: DNA origami nanoarrays for multi-valent cellular investigations with single-molecule control	B. Cui: The role of membrane curvature at the nano-bio interface
	11:45-12:00	C. Niemeyer: Multiscale DNA systems to investigate living cells	J. Moran Mirabal: Shrink and Wrinkle: Structuring of thin films on thermo-responsive substrates for the study of cell-surface receptors
	12:00-12:15	J. Hellmeier: DNA origami demonstrate the unique stimulatory power of single pMHCs as T-cell antigens	K. Martinez: Stable cytosolic access of high-aspect-ratio nanostructures for novel biological applications
	12:15-15:00 (open end)	Poster Session 1, Coffee Tables, Speakers' Tables	
		Plenary session 2 Chair: Sebastian Springer	
Day 2: Thursday, March 18, 2021	9:00-9:35	C. Prinz: Nanostructures for probing and transfecting living cells	
	9:35-10:10	M. Sheetz: Mechanical stresses kill tumor cells	
	10:10-10:25	H. Cai: Nanoengineered biomimetic interfaces for mechanobiology study	
	10:25-10:40	E. Lemma: Selective cell adhesion on 3D scaffolds via photo-induced DNA functionalization	
	10:40-11:10	Break, Coffee Tables, Speakers' Tables	
		Spatial, mechanical and chemical cues Chair: G. Schütz	Tunable biomaterials Chair: E. Martinez Fraiz
	11:10-11:45	M. Schwartzman: Nanoscale spatio-mechanical regulation of the immune signaling in cytotoxic lymphocytes.	F. Simmel: Programming cells and biomaterials with nucleic acid strand displacement processes
	11:45-12:00	K. Sengupta: AI based detection of hidden features in T cell architecture	A. Diaz Alvarez: Developing a novel and tunable biomaterials platform to mimic the intercellular interface
	12:00-12:15	J. Rädler: Adhesion-velocity relation of motile cells in confined geometry	C. You: Nanoscopic anatomy of dynamic multi-protein complexes at membranes resolved by graphene induced energy transfer
	12:15-12:50	J.T. Groves: Visualizing the LAT protein condensation phase transition in T cell signaling	
	12:50-12:55	S. Jorda: Introduction of the WE-Heraeus Foundation	
	12:55-15:00 (open end)	Poster Session 2, Coffee Tables, Speakers' Tables	