

	Wednesday, July 13	Thursday, July 14	Friday, July 15
7:30	Registration/Breakfast	Breakfast	Breakfast
8:30	Opening Remarks/Announcements	Announcements	Announcements
8:40	Biomedical Applications I KEYNOTE 1: Molecular dam and stretcher using nanoscale constrictions and slits (Chia-Fu Chou) T1: Unravelling intercellular communication and intracellular signaling dynamics by dielectrophoresis (Nathan Swami) T2: Nanoelectrode based devices for rapid pathogen detection and identification (Foram Madiyar)	Cell Characterization KEYNOTE 3: Pushing the limits of dielectrophoresis towards detecting differences in molecular expression on cells (Adrienne Minerick) T9: Determination of the electrophysiological properties of infected erythrocytes using pin-type electrode micro well (Ezekiel Adekanmbi) T10: Isolating, sorting, and characterizing microbial consortia using dielectrophoresis field-flow fractionation (Lorenzo D'Amico)	Electrokinetic Assembly & Separation KEYNOTE 5: Electrical manipulation of cells (Joel Voldman) T22: A wireless biased-ACEO lab-on-a-film platform for particle and fluid manipulation based on AM modulation and inductive coupling for drug delivery in dentistry (Chris Ivanoff) T23: A next generation Dielectrophoresis-based cell separation device: low cost, low cell-loss, label-free, high throughput (Shabnam Faraghat)
10:00	COFFEE BREAK	COFFEE BREAK	COFFEE BREAK
10:30	Insulator Based Dielectrophoresis T3: Exploring new schemes in insulator based dielectrophoresis (Blanca H. Lapizco-Encinas) T4: Drug Response Characterization of Breast Cancer Cells Using An Insulator Based Dielectrophoresis Microfluidic Device (Sepeedah Soltanian-Zadeh) T5: Strong Correlation between Bacterial Extracellular Electron Transport and Cell Envelope Polarizability (Qianru Wang) T6: Hyperresolved Separations with Dielectrophoresis (Mark Hayes)	Particle Manipulation: Theory and Applications I T11: Isomotive dielectrophoresis (isoDEP) for particle subpopulation analysis (Stuart Williams) T12: Distributed dielectrophoretic cytometry: measuring dielectric signature distribution in cell populations (Pavel Fikar) T13: Dielectrophoretic Spectra of CD133+/EpCAM+ HUH7 Cancer Stem Cells and HUH7 Cancer Cells (Zeynep Caglayan) T14: 3D electrodes for simultaneous DEP trapping and particle rotation (Samuel Kilchenmann)	Particle Manipulation: Theory and Applications III T24: Electrokinetic particle-based concentrator for selective cargo transport (Gilad Yossifon) T25: AC electrokinetics of semiconducting nanowires (Pablo Garcia-Sanchez) T26: A multipole re-expansion model for 1D and 2D assembly of dielectric particles in external electric field (Gaurav Goel) T27: Determination of general multipolar terms in calculation of the dielectrophoretic force (Nicolas Green)
11:50	LUNCH/Posters	LUNCH/Posters	
1:20	Biomedical Applications II KEYNOTE 2: Uncovering stem cell fate potential with dielectrophoresis (Lisa Flanagan) T7: Label-free biosensing at polarizable liquid interfaces using fluidic dielectrophoresis T8: DEP Isolation and Detection of Cell Free DNA, RNA and Exosome Biomarkers for Sample to Answer Molecular Diagnostics	Electrokinetic Patterning & Manipulation KEYNOTE 4: A Historical Perspective on Dielectrophoretic Cell Separations (Peter Gascoyne) T15: Recent developments in Rapid Electrokinetic Patterning (Avanish Mishra) T16: Development of a dielectrophoretic-based technique for rapid droplet mixing in digital microfluidics (Ehsan Samiei)	
2:40	COFFEE BREAK	COFFEE BREAK	
3:10	POSTER SESSION	Particle Manipulation: Theory and Applications II T17: Concentration-dependent AC Conductivity of Metallodielectric Colloidal Suspensions (Shalini Gupta) T18: Tailoring of electric field structured composite, model and experiment (Guillaume Belijar) T19: Modeling the electric field-guided carbon nanotube manipulation in organic solvents by a classical dielectrophoretic approach (Andrés I Oliva-Avilés) T20: Green's function-based control-oriented modeling for dielectrophoresis (Martin Gurtner) T21: Real-time optimization-based control of phase shifts for planar dielectrophoretic micromanipulation (Tomas Michalek)	
4:50			

CONFERENCE BANQUET (ticket req'd)
 6:30PM - 9:00PM
 EVOO Restaurant
 350 3rd Street
 Cambridge, MA 02142