### MONDAY, November 9

**Electrokinetics for Protein Separation and Analysis**  
*Location: Salt Palace CC, Ballroom E*  
*Chair: Frank Jahnke*

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>Characterization of an Internal Standard for Phosphotyrosine Western Blotting (N. Kendrick)</td>
</tr>
<tr>
<td>9:15</td>
<td>New Strategies for Preconcentration, CE Injection, &amp; Ionization for Mass Spectrometry (R. Kelly)</td>
</tr>
<tr>
<td>9:30</td>
<td>Analysis of Amyloid Oligomers Using Microchannel Electrophoresis (C. N. Hestekin)</td>
</tr>
<tr>
<td>9:45</td>
<td>Surface Isoelectric Focusing (sIEF) for Qualitative Protein Separation (A. Minerick)</td>
</tr>
</tbody>
</table>

### TUESDAY, November 10

**Electrokinetics in Non Polar Media**  
*Location: Salt Palace CC, Ballroom E*  
*Chairs: Sven Behrens and Hitomi Mukaiho*

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Conductivity Theory Fitting Measured Data for Various Alcohol-Toluene Mixtures (A. Dukhin)</td>
</tr>
<tr>
<td>9:15</td>
<td>Electrochemical Impedance Spectroscopy of Doped Nonpolar Liquids (B. Yezer)</td>
</tr>
<tr>
<td>9:30</td>
<td>Transition from Steric to Electrostatically Stabilized Carbon Black Suspensions (L. M. Walker)</td>
</tr>
<tr>
<td>9:45</td>
<td>The Acid-Base Mechanism for the Charging of Colloidal Particles in Apolar Media (J. C. Berg)</td>
</tr>
</tbody>
</table>

### WEDNESDAY, November 11

**Electrokinetics: Advancing the Fundamentals**  
*Location: Salt Palace CC, Ballroom E*  
*Chairs: Aditya S. Khair and Alireza Salmanzadeh*

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<tbody>
<tr>
<td>9:00</td>
<td>Single-Molecule Translocation through Asymmetric Conic Nanopores: Effects of Van Der Waal Absorption &amp; Electro-Osmotic Flow (H. C. Chang)</td>
</tr>
<tr>
<td>9:15</td>
<td>Adapting Current Monitoring Measurements to Low Conductivity Systems (M. Saeucdo-Espinosa)</td>
</tr>
<tr>
<td>9:30</td>
<td>Field Effect Control of Ion Transport in a pH-Regulated Nanochannel with Overlapped Double Layers (L. H. Yeh)</td>
</tr>
<tr>
<td>9:45</td>
<td>Taylor Dispersion in Electrofocusing at Steady-State (C. F. Ivory)</td>
</tr>
</tbody>
</table>

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### LUNCH WITH LEADERS $15 (payable at door)
Salt Palace CC, Ballroom E

**Electrokinetics for Cellular Separation & Analysis**  
*Location: Salt Palace CC, Ballroom E*  
*Chairs: Fatima Labeed and Lisa Flanagan*

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<tr>
<td>1:00</td>
<td>On the Influence of Outer Membrane Cytochromes on Cell Polarizability (C. Buie)</td>
</tr>
<tr>
<td>1:15</td>
<td>Monitoring of Microbial Hunger Games: Dielectrophoretic Analysis of Intersp. C.Difícile Antagonisms (N. Swami)</td>
</tr>
<tr>
<td>1:30</td>
<td>Dielectrophoretic Separation of Babesia-Infected Erythrocytes (E. Adenamnbi)</td>
</tr>
<tr>
<td>1:45</td>
<td>Optimizing Neural Stem Cell Sorting with Dielectrophoresis (L. Flanagan)</td>
</tr>
<tr>
<td>2:00</td>
<td>Identification of Stages of Apoptosis in Non-Small Cell Lung Carcinoma Using Dielectrophoresis (R. T. K. Kumar)</td>
</tr>
<tr>
<td>2:15</td>
<td>Robust Dielectrophoretic Cell Aggregation in Biocompatible Hydrogels (E. A. Henslee)</td>
</tr>
<tr>
<td>2:30</td>
<td>Measuring Electrical Properties of Cancer Cells Via Electrotranslocation (J. Lannin)</td>
</tr>
<tr>
<td>2:45</td>
<td>One Step Microfluidic Immunomagnetic Separation of Tumor Initiating Cells Based on Multiple Markers (C. Sun)</td>
</tr>
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**Electrokinetics and Microfluidics for Biomolecular Analysis**  
*Location: Salt Palace CC, Ballroom E*  
*Chairs: Zachary Gagnon and Sagnik Basuray*

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<td>1:15</td>
<td>Enabling Ultrafast Immunoassays By Dielectrophoretic Biomarker Enrichment on a Nanoslit (N. Swami)</td>
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<td>1:30</td>
<td>Diffusion-Based Microfluidic Bisulfite Conversion for DNA Methylation Detection (S. Ma)</td>
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<td>Salt Gradient Regulation of Ion and Nanoparticle Transport in Nanopores with Bipolar Charges (C. Y. Lin)</td>
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<td>Performing Gene Mapping on DNA Unraveled on Patterned Lipid Bilayers (H. J. Guo)</td>
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<tr>
<td>2:15</td>
<td>An Integrated Diagnostic Platform for Biomolecule Detection (S. Senapat)</td>
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<td>2:30</td>
<td>Selective Biomolecular Detection Using Interfacial Electrokinetic Transduction (Z. R. Gagnon)</td>
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<td>2:45</td>
<td>Sensitive, Multiplexed Dielectrophoretic miRNA Detection Using Peptide Nucleic Acids (J. W. Schneider)</td>
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**Business Meeting @ Location: Ballroom E**

**GET INVOLVED! Organizers of 2016 meeting:**
- Lisa Flanagan
- Fatima Labeed

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**Lunch on your own**

**Soft Matter Electrokinetics: Particles, Drops and Bubbles**  
*Location: Salt Palace CC, Ballroom E*  
*Chairs: Stuart Williams and Christopher Wirth*

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<td>Trapping and Sorting of Bacteria in an Optoelectric Trap (A. Mishra)</td>
</tr>
<tr>
<td>1:15</td>
<td>Dielectrophoresis in Porous Media: Electrically Switchable Filtration (G. R. Pesch)</td>
</tr>
<tr>
<td>1:30</td>
<td>Comprehensive Micro RNA Profiling By Nanoparticle Electrophoresis in a Gel-Membrane Medium (S. Marczak)</td>
</tr>
<tr>
<td>1:45</td>
<td>The Effect of the Structure of Ion-Exchange Membranes on Ion Concentration Polarization and Associated Electrokinetics (Z. Slouka)</td>
</tr>
<tr>
<td>2:00</td>
<td>Microfluidic Free Flow Electrophoresis Using Conductive PDMS Polymer Membranes (K. Fu)</td>
</tr>
<tr>
<td>2:15</td>
<td>Discussion of Nontraditional Methods of Addressing of Liquid Droplets By DC Electric Field (M. Pribyl)</td>
</tr>
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<td>2:30</td>
<td>The Response of an Anisotropic Colloid to a Nearby DC Electrode (C. Wirth)</td>
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<td>2:45</td>
<td>Liquid Crystals Enabled Electrokinetics (O. Lavrentovich)</td>
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<td>3:15</td>
<td>Deterministic Absolute Negative Mobility for Sub-Micrometer Bioparticle Separation (A. Ros)</td>
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<td>3:30</td>
<td>A Bias-Free Method for Concentrating Proteins (F. Jahnke)</td>
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<td>3:45</td>
<td>Enrichment of Small Cell Populations from Large Sample Volumes Using 3D Carbon-Electro Dielectrophoresis (M. Islam)</td>
</tr>
<tr>
<td>4:00</td>
<td>Dielectrophoretic Behavior of Pegylated Ribonuclease A in a Microdevice with Diamond-Shaped Insulating Posts (M. A. Mata-Gómez)</td>
</tr>
<tr>
<td>4:15</td>
<td>Design of Insulator-Based Dielectrophoretic Devices: Effect of Insulator Posts Characteristics (M. Saucedo-Espinosa)</td>
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<td>4:30</td>
<td>DEP Isolation and Detection of CF-DNA and CF-RNA Biomarkers from Hematological Cancer, Solid Tumor and TBI Patient Blood and Plasma Samples (M. J. Heller)</td>
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**Poster Session**

**Banquet. $55 (payable at door)**

@ Buca di Beppo

202 West 300 South

**Networking Event**

@ Copper Canyon Grill House & Tavern

215 South Temple

AWARDS GIVEN TO BEST STUDENT POSTER!