# Image-Based Profiling: A Powerful and Challenging New Data Type

**Monday January 3, 2022**  
Plaza Ballroom  
1:30 - 4:30 PM

**Organizers:**  
Gregory P. Way, Hannah Spitzer, Philip Burnham, Arjun Raj, Fabian Theis, Shantanu Singh, Anne E. Carpenter

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Description</th>
<th>Speaker Name</th>
<th>Affiliation</th>
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<tr>
<td>1:30 - 1:40</td>
<td>Welcome</td>
<td>Gregory P. Way</td>
<td>University of Colorado Anschutz</td>
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<tr>
<td>1:40 - 2:00</td>
<td>Introduction to image-based profiling</td>
<td>Niran Chandrasekaran</td>
<td>Broad Institute of Harvard and MIT</td>
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<td>2:00 - 2:20</td>
<td>Image-based cell phenotyping with deep learning</td>
<td>Juan C. Caicedo</td>
<td>Broad Institute of Harvard and MIT</td>
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<td>2:20 - 2:40</td>
<td>Challenges and opportunities in the analysis of image-based profiling data</td>
<td>Paula Andrea Marin Zapata</td>
<td>Bayer</td>
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<td>2:40 - 2:55</td>
<td>Break</td>
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<td>2:55 - 3:15</td>
<td>Mapping biology with a unified representation space for genomic and chemical perturbations to enable accelerated drug discovery</td>
<td>Imran Haque</td>
<td>Recursion</td>
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<td>3:15 - 3:35</td>
<td>Integrated intracellular organization and reorganization of the human stem cell</td>
<td>Susanne Rafelski</td>
<td>Allen Institute for Cell Science</td>
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<td>3:35 - 4:05</td>
<td>Lightning talks</td>
<td>5 selected speakers, 6 minutes each</td>
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<td>4:05 - 4:30</td>
<td>Panel discussion</td>
<td>All invited speakers</td>
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