### Day 1: December 7, 2022

**5:00-7:00 PM Opening Reception**

**Lola Eniola-Adefeso, PhD** | University of Michigan  
"Diverse Perspectives in Immune Engineering"

### Day 2: December 8, 2022

**8:00 AM Breakfast**

**9:00 AM Opening Remarks - Kara Spiller, PhD**

**9:05 AM Session 1: Regenerative medicine I - Moderator: Peter Gaskill**

- **Kam Leong, PhD** | Columbia University  
  "Cell-free DNA scavengers to modulate immune cell behavior"

- **Katherine Gallagher, MD** | University of Michigan  
  "Epigenetics in Inflammation and Vascular Disease"

- **Megan Ballinger, PhD** | The Ohio State University  
  "Macrophage-fibroblast interactions in pulmonary fibrosis"

**10:35 AM Break**

**10:55 AM Session 2: Regenerative medicine II - Moderator: Yinghui Zhong**

- **Andres Garcia, PhD** | Georgia Tech  
  "Synthetic Hydrogels for Islet Immune Acceptance to Treat Type 1 Diabetes"

- **Kara Spiller, PhD** | Drexel University  
  "Immunomodulatory Biomaterials for Regenerative Medicine"

- **Erika Moore, PhD** | University of Florida  
  "Biomaterials to direct the B cell response"

**12:25 PM Lunch Break**

**2:00 PM Session 3: Infectious diseases and vaccines - Moderator: Michele Kutzler**

- **Rafick-Pierre Sekaly, PhD** | Emory University  
  "Convergent mechanisms for the development of immune based interventions for HIV and Cancer"

- **Ana Jaklenec, PhD** | Massachusetts Institute of Technology  
  "Vaccine design for global health"

- **Michael Nonnemacher, PhD** | Drexel University  
  "Immunopathogenesis and neuropathogenesis of HIV"
### Day 3 December 9, 2022

#### 3:30 PM Coffee Break

#### 3:50 PM Session 4: Nanomedicine - Moderator: Mohamad-Gabriel Alameh

- **Lola Eniola-Adefeso, PhD** | University of Michigan
  “Polymeric microparticle decoys targeting vascular inflammation”

- **Yizhou Dong, PhD** | Icahn School of Medicine at Mount Sinai
  “Lipid nanoparticles for mRNA therapeutics, cancer immunotherapy, and cell therapy”

- **Evan Scott, PhD** | Northwestern University
  “Engineering the Bio/Nano interface for cell-Selective nanotherapy”

#### 5:15-7:30 PM Poster Session and cocktail reception

#### 8:00 AM Breakfast

#### 9:00 AM Opening Remarks

#### 9:05 AM Session 5: Cancer immunotherapy - Moderator: Jennifer Hope Gracias

- **John Maris, MD** | Children’s Hospital of Philadelphia
  “Engineering immunotherapies for childhood cancers”

- **Pierluigi Porcu, MD** | Thomas Jefferson University
  “Allogeneic transplantation for the treatment of lymphoid malignancies”

- **Gabriele Romano, PhD** | Drexel University
  “Chemokine-based approaches to treat immunologically “cold” tumors”

#### 10:35 AM Coffee Break


- **Xiao Huang, PhD** | Drexel University
  “Control and enhance therapeutic T cells with precision bioengineering”

- **Klaudia Kuranda, PhD** | Spark Therapeutics
  “Combating the immune response to gene therapy vectors.”

- **Eric Kmiec, PhD** | Gene Editing Institute
  “Clinical development of CRISPR-directed gene editing for cancer therapeutics”

#### 12:25 PM Lunch Break
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<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>2:00 PM</td>
<td><strong>Session 7: Tolerogenic therapies for autoimmune disease - Moderator: Hao Cheng</strong></td>
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<tr>
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<td>Jessica Weaver, PhD</td>
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<td>“Placenta-inspired approaches to engineering immune tolerance”</td>
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<td>Taku Kambayashi, MD, PhD</td>
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<td>“The role of T cells in skin barrier function and obesity”</td>
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<td>Peter Deak, PhD</td>
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<td>“Engineering Robust Tolerogenic Dendritic Cells using Combinations of Chemical Signals”</td>
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<td>3:30 PM</td>
<td><strong>Coffee Break</strong></td>
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<tr>
<td>3:50 PM</td>
<td><strong>Session 8: Talks by Trainee Awardees - Moderator: Chris Rodell</strong></td>
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<tr>
<td>5:00 PM</td>
<td><strong>Concluding Remarks</strong></td>
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