Day 1: Wednesday, Nov. 11, 2020

9-9:50  Session I: Infectious Diseases and Vaccines
•  Plenary speaker: Ted M. Ross, PhD - *Consensus-based prophylactic approaches to effectively prevent influenza infections* (Director of the Center for Vaccines and Immunology and Georgia Research Alliance Eminent Scholar, Professor of Infectious Diseases, University of Georgia)

9:50-10 Break

10-11 Session II: Infectious Diseases and Vaccines II
•  Drew Weissman, MD, PhD - *mRNA vaccines for Influenza, HSV* (Co-director, Penn Center for AIDS Research, Immunology Core, Univ. of Pennsylvania)
•  Ami Patel, PhD – *Synthetic DNA vaccines against emerging infectious diseases* (Research assistant professor, Wistar Institute)
•  Xun Sun, PhD – *Vaccine delivery for infectious diseases* (Professor of Pharmaceutics, Sichuan University) - tentative

11-11:20 Panel discussion

11:20-1 Break

1-2  Session III: Development of Immunotherapies
•  Paula Oliver, PhD – *Cullin ligases that regulate immune cell function* (Co-chief, Division of Protective Immunity, Children’s Hospital of Philadelphia)
•  Eric Appel, PhD – *Sustained delivery technologies for improving humoral immune responses to vaccines* (Assistant Professor, Materials Science and Engineering, Stanford)
•  Kristy Ainslie, PhD – *Influence of particle degradation rates on optimization of universal influenza vaccines* (Professor, School of Pharmacy, UNC Chapel Hill)

2-2:20 Panel Discussion

2:20-2:40 Break

2:40-3:40 Session IV: Immune-microbiota interactions
•  Edward M. Behrens, MD – *Pathogenesis and treatment of cytokine storm syndromes*. (Chief, Division of Rheumatology, Children’s Hospital of Philadelphia)
•  Alison Carey, MD – *Modulating the developing lung microbiome to improve the infant response to respiratory viruses* (Associate professor of pediatrics, Drexel University College of Medicine, St. Christopher’s Hospital for Children).
•  Chengcheng Jin, PhD - *Immune-microbiota interactions in lung cancer*. (Assistant Professor, Department of Cancer Biology, Univ. of Pennsylvania)

3:40-4 Panel Discussion

4  Day 1 Closing Remarks
Day 2: Thursday, Nov. 12, 2020

9-9:50 Session V: Cancer Immunotherapies I
  • Plenary speaker: Darrell Irvine, PhD – Vaccine boosting natural and synthetic T cells for cancer immunotherapy (Professor of Biological Engineering, MIT)

9:50-10 Break

10-11 Session VI: Cancer Immunotherapies II
  • Zhen Gu, PhD – Platelet-derived immunotherapeutics (Professor of Bioengineering, UCLA)
  • Saar Gill, MD, PhD – Engineering immune cells (Assistant Professor of Medicine, University of Pennsylvania)
  • Zhuang Liu, PhD – Biomaterials to boost cancer immunotherapy (Professor of Biomaterials, FUNSOM) - tentative

11-11:20 Panel Discussion

11:20-1 Break

1-2 Session VII: Cancer Immunotherapies III
  • Melody Smith, MD - Impact of intestinal microbiota on CAR-T patient outcomes (Assistant Member, Memorial Sloane Kettering Cancer Center). https://www.mskcc.org/research/ski/labs/members/melody-smith
  • Michael J. Mitchell, PhD – Lipid nanoparticle-mediated mRNA delivery for CAR-T cell engineering (Assistant professor of Bioengineering, University of Pennsylvania)
  • Elizabeth Wayne, PhD – Biomaterials targeting tumor-associated macrophages (Assistant Professor of biomedical engineering, Carnegie Mellon University)

2-2:20 Panel Discussion

2:20-2:40 Break

2:40-3:40 Session VIII: Immune Tolerance
  • Elias Haddad, PhD – Targeting follicular helper T cells for HIV vaccines (Professor of Medicine, Drexel University)
  • Stefania Gallucci, MD – Immunostimulatory dendritic cells in autoimmunity (Associate Professor of Microbiology and Immunology, Temple University)
  • Ben Keselowsky, PhD – Tissue-Anchorered Enzyme for Suppressive Metabolic Immune Engineering (Professor of Biomedical Engineering, University of Florida)

3:40-4 Panel discussion

4 Day 2 Closing Remarks

Day 3: Friday, November 13, 2020
9:00-9:50  Session IX: Regenerative Medicine I
- Plenary speaker: Jennifer Elisseeff, PhD – Biomaterial-mediated control over immune cell interactions (Professor of Biomedical Engineering, Johns Hopkins University)

9:45-10  Break

10-11  Session X: Regenerative Medicine II
- Jonathan Epstein, PhD – Targeting cardiac fibrosis with engineered T cells (Professor of Cardiovascular Research, Perelman School of Medicine, UPenn)
- Wendy Liu, PhD – Controlling the inflammatory response to biomaterials (Associate Professor of Biomedical Engineering, UC Irvine)
- Anthal IPM Smits, PhD – Development of regenerative scaffolds for heart valve and blood vessel engineering (Assistant Professor of Biomedical Engineering, Eindhoven University of Technology)

11-11:20  Panel discussion

11:20-1  Break

1-2  Session XI: Neuro-Immune Modulation
- Lonnie Shea, PhD – Immune cell reprogramming for neuro-immune modulation (Professor of Biomedical Engineering, Univ. of Michigan)
- Jae Lee, PhD – Immunomodulation of central nervous system fibrosis (Associate Professor of Neurological Surgery, The Miami Project to Cure Paralysis)
- Yinghui Zhong, PhD – Nanoparticles for neuro-immune modulation (Associate Professor of Biomedical Engineering, Drexel University)

2-2:20  Panel discussion

2:20-2:40  Break

2:40-3:40  Session IX: Talks selected from submitted abstracts (4 at 10min + 5min Q&A)

3:40  Closing Remarks