

2nd Annual Drexel Immune Modulation and Engineering Symposium
Nov. 11-13, 2020
Virtual via Zoom

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 Sloan 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-Anchored 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**