

# **Seventeenth Annual Symposium**

## **Center for Protein Therapeutics**

### **Agenda**

- 8:50** Introduction to the Annual CPT Symposium (J. Balthasar)
- 9:00** Integration of scRNA-seq data and bivalent binding kinetic PBPK models to predict the disposition of bispecific antibodies (Balthasar Lab)
- 9:30** Investigating the effect of FcRn blockade on subcutaneous (SC) absorption of antibodies (Shah Lab)
- 10:00** Quantitative investigation of the biodistribution and dynamics of ADC, free toxin, antigen and associated markers in cell surface, endosome/lysosome, and interstitial space (Qu Lab)
- 10:30** Break
- 11:00** Evaluation of Determinants for Tissue PK and Efficacy of siRNA Therapeutics (Woo Lab)
- 11:20** Sequence and Structure Analysis of Antibody-Based Drugs to Predict Pharmacokinetics Across Species using Hybrid mPBPK-NN Modeling (Mager Lab)
- 11:40** Development of a query able immunogenicity database to aid prediction, biologics discovery and development (Balu-Iyer Lab)
- 12:00** Break
- 1:00** Evaluating Strategies to Enhance Endolysosomal Escape of Antibody-siRNA Conjugates (Woo Lab)
- 1:20** PK/PD of Fragment-Drug Conjugates (FDCs) (Shah Lab)
- 1:40** Tumor Organoid on Chip to Optimize T Cell Therapy (Lao Lab)
- 2:00** Development of Dose-Exposure Relationship for Lipid Nanoparticle (LNP) Mediated Delivery of mRNA-Encoded Monoclonal Antibodies (Shah Lab)
- 2:20** Pharmacokinetics of MMAE-Based ADC in Peripheral Nerves (Shah Lab)
- 2:40** Break
- 3:10** Tissue Disposition of Antibodies with Enhanced Effector Function (Shah Lab)
- 3:30** An in-depth, comprehensive investigation of the temporal characteristics of >10,000 proteins in isolated immune cells and plasma following CAR T-cell treatment in a large clinical sample cohort (Qu Lab)
- 3:50** PBPK Model to Characterize Maternal to Fetal Transfer of Antibody-Based Therapeutics (Shah Lab)
- 4:10** Prediction of Immunogenicity (ImmPred) of Biologic constructs containing unnatural amino acid (Balu-Iyer Lab)
- 4:30** Investigation of Alzheimer's disease across space and time: studying the temporal impact of disease progression and mAb treatment on intra-brain distributions of markers and phosphorylation states (Qu Lab)
- 4:50** Cellular and spatial proteomic assessment of antigen-specific immunotherapy (Lovell Lab)
- 5:10** Concluding Remarks (J. Balthasar)

There is no fee for the Symposium for members of CPT Consortium Sponsors or for students, fellows, or faculty of the University at Buffalo. [Please register by July 21, 2025.](#)

Registration link: [https://sppsbuffalo.formstack.com/forms/cpt\\_symposium](https://sppsbuffalo.formstack.com/forms/cpt_symposium)

