

Center for Protein Therapeutics

Management Committee Meeting – July 29, 2025; In-person (PB276) and via Zoom

0830: Welcome; brief update on CPT activities and brief discussion of scoring for CPT project proposals

0845: Review/discussion of project proposals for 2025-2026

1040, 1210 & 1410: Breaks

~1700: Collection & tabulation of scores, Announcement of projects selected for funding in 2025-26

Tentative Schedule of Project Review

Rev #	Time	PI	Title
1	0840	Lao 1	Tumor Evolution on Chip and in silico
2	0850	Lao 2	Virus-like Nanoparticles for Gene Therapy
3	0900	Balthasar 1	Comparative evaluation of anti-idiotypic distribution enhancers and priming doses of naked mAb for enhancing ADC efficacy in small and large tumors
4	0910	Balthasar 2	Informing PBPK models for bispecific constructs through investigation of relationships between single-cell RNA sequence data and cell-surface protein expression
5	0920	Sprowl 1	Assessment of factors that mediate TROP2-targeting antibody drug conjugate intracellular localization and changes associated with drug resistance
6	0930	Balu 1	Prediction of immunogenicity and its consequence: Integration of Preclinical Data, PK/PD Information, and a Large Language Model to inform on biologics drug design and modelling
7	0940	Balu 2	Understanding gene signature and immune signaling pathway involved in immunogenicity of Biological modalities
8	0950	Mager 1	Systems Pharmacology Modeling of Chimeric Antigen Receptor (CAR) T-cell Induced Neurotoxicity
9	1000	Mager 2	Systematic Analysis of RNA-seq and Proteomic Data
10	1010	Mager 3	Translational PBPK Modeling of Small Format, Non-Antibody Biologics
11	1020	Mager 4	Quantitative structure pharmacology and population modeling of anti-drug antibody (ADA) dynamics and impact on antibody pharmacokinetics
12	1030	Mager 5	Quantitative Investigation of Target-Mediated Drug Disposition via Fluorescence-Based Internalization and QSPKR Modeling
***	1040	Break	
13	1100	Straubinger 1	System pharmacology analysis of next-generation KRAS inhibitor-mediated tumor priming combined with immunotherapy in pancreatic cancer.
14	1110	Straubinger 2	Inhibition of C-X-C motif receptor type-4 to enhance the intratumor T-cell response to recombinant cytokine immunotherapy in pancreatic cancer
15	1120	Straubinger 3	Role of next-generation KRAS inhibitors in altering tumor uptake and intra-tumor distribution of mAb
16	1130	Qu 1	Longitudinal Deep Protein Profiling of Plasma, Immune Cells and Extracellular Vesicles in CAR-T Treated Patients to Discover ICANS Biomarkers and Therapeutic Targets
17	1140	Qu 2	Integrated Temporal-Spatial Profiling of Brain RNAs, Proteins, and Phosphorylation to Understand Early Alzheimer's Disease Onset/progression and Uncover Potential Therapeutic Targets
18	1150	Qu 3	Spatial Dynamics Investigation of the Effects of Co-administration of Naked mAb on ADC Penetration in Solid Tumors
19	1200	Qu 4	Biodistribution and kinetics of membrane permeable ADC payloads and ADC in extra-cellular space, cell membrane, cytosol and microtubule compartments
****	1210	Break	-----
20	1240	Wang 1	Antibody Targeting Inflammatory Lungs via Anti-ICAM-1

21	1250	Wang 2	Design of Lung Targeted ADCs to Improve Therapy of ALI/ARDS
22	1300	Wang 3	Radiation Enhances Tumor Targeting of Anti-ICAM-1
23	1310	Neelamegham1	Evaluating potential pharmaceutical value of new Glycan Binding Proteins (GBP)
24	1320	Neelamegham2	RNA-seq vs proteomics data: single-cell and bulk
25	1330	Talkington 1	Continuous time tracking of immune activation, exhaustion, and therapeutic perturbation in the tumor microenvironment
26	1340	Woo 1	Development and Validation of IVIVC and PBPK/PD of siRNA Therapeutics
27	1350	Woo 2	Evaluation of Determinants for Tissue PK and Efficacy of siRNA Therapeutics – Part II
28	1400	Lovell 1	Comparing RNAseq to proteomics profiling in an immunotherapy-resistance murine tumor model
****	1410	Break	
29	1430	Shah 1	Acute Liver Failure from High Dose AAV Therapy: Causes and Remedies
30	1440	Shah 2	Critical Investigation of the Differential Pharmacology of Dual-Payload ADC
31	1450	Shah 3	Evaluation of Generative AI Models for De Novo Antibody Discovery
32	1500	Shah 4	In Vitro Evaluation of the Improved Therapeutic Index of Bi-specific ADC
33	1510	Shah 5	Development of a Translational QSP Model for Targeted LNP Mediated In Vivo CAR-T Therapy
34	1520	Shah 6	Lipid Nanoparticle (LNP) Mediated mRNA Delivery for Sustained Exposure of Proteins with Short Half-life
35	1530	Shah 7	Investigation of the Determinants for Therapeutic Antibody Biodistribution to the Placenta and Embryo at Different Stages of Development
36	1540	Shah 8	Development of Translational PBPK Model to Characterize Brain Disposition of Antibody-Conjugated and Non-Conjugated Oligonucleotides
37	1550	Shah 9	Translational PBPK Model for Protein Therapeutics with Different Size and FcRn Affinity
38	1600	Shah 10	Evaluation of Small-Format Drug Conjugates as an Alternative to ADCs
39	1610	Shah 11	Evaluation of Strategies to Overcome the Binding-Site Barrier for ADCs
****	1620	Scoring	
****	1700		Announcement of proposals selected for funding