PICI Guide to **#AACR25**

The Parker Institute for Cancer Immunotherapy (PICI) is proud to share this curated resource spotlighting the innovative research, presentations and insights from PICI Network Investigators at the 2025 AACR Annual Meeting. This guide highlights key sessions, posters, symposia and forums featuring PICI Network scientists' contributions to cancer immunotherapy. We encourage you to download this guide and share it with your colleagues attending #AACR25.

Note: All times in this document are listed in CDT.

FRIDAY, APRIL 25

Session: ED27 - Advances in Gene and Cellular Therapy | Room S100 A (Grand Ballroom A)

- McCormick Place South (Level 1)
 - Chairperson: PICI Investigator Nina Bhardwaj, MD, PhD (Icahn School of Medicine at Mount Sinai)
 - 3:00-4:30 PM

SATURDAY, APRIL 26

Session: ED28 - Tumor Immunology and Immunotherapy for Nonimmunologists: New-Generation Technologies for Immune-profiling and Spatial Imaging |

Room S406 (Vista Ballroom) - McCormick Place South (Level 4)

- Genomic and immunoproteomic approaches for cancer antigen discovery
 - PICI Investigator Catherine Wu, MD* (Dana-Farber Cancer Institute)
 - 10:01–10:21 AM
- *Session chair

Session: ED26 - T-Cell Engagers: Engineering, Translation and Comparison with CAR-T Cell Therapy | Room S100 A (Grand Ballroom A) - McCormick Place South (Level 1)

- Protein engineering considerations for bispecific T-cell engagers
 - PICI Investigator Yvonne Chen, PhD (UCLA)*
 - o 12:31–12:54 PM

*Session chair

Session: MW02 - Application of Al and Natural Language Processing to Advance Cancer Research and Treatment | *Room S100 BC (Grand Ballroom BC)* - *McCormick Place South* (Level 1)

- Precision cancer medicine in the era of machine learning and clinical multi-omics
 - PICI Investigator Eliezer Van Allen, MD* (Dana-Farber Cancer Institute)
 - 1:30-1:50 PM
 - *Session chair

Session: ED50 - Ex Vivo Models of the TME | Room S100 BC (Grand Ballroom BC) -McCormick Place South (Level 1)

- High resolution dynamic ex vivo profiling of the immune TME
 - PICI Investigator David Barbie, MD (Dana-Farber Cancer Institute)
 - 3:00-3:20 PM

SUNDAY, APRIL 27

Session: PL02 - Opening Plenary: Unifying Cancer Science and Medicine - A Continuum of Innovation for Impact | Hall B1 - McCormick Place North (Level 3)

- Addressing tumor heterogeneity: Personalized cancer vaccines
 - PICI Investigator Catherine Wu, MD (Dana-Farber Cancer Institute)
 - 11:01–11:28 AM

Session: CTPL01 - Advances in Immunotherapy | Arie Crown Theater - McCormick Lakeside Center (Level 2)

- Co-Chair: PICI Center Director Antoni Ribas, MD, PhD (UCLA)
- 1:00-3:00 PM

Session: SY38 - Anti-Cancer Treatments at the Interface of Surgical and Medical Oncology | *Room S402 - McCormick Place South (Level 4)*

- Harnessing the neoadjuvant window: Immunotherapy in breast cancer
 - PICI Center Co-Director Elizabeth Mittendorf, MD, PhD (Dana-Farber Cancer Institute)
 - 1:05–1:25 PM

Poster Session: LBPO.ET01 - Late-Breaking Research: Experimental and Molecular Therapeutics 1 | Section 50; 2:00–5:00 PM

- LB011 / 11 Combining CBP/p300 and PARP inhibitors to enhance anti-tumor efficacy in lethal prostate cancer
 - PICI CEO Dr. Karen Knudsen

Poster Session: PO.BCS01.04 - Database Resources | Section 46; 2:00-5:00 PM

- 1071 / 11 Online resources from the Allen Institute for Immunology: longitudinal profiling of multiple myeloma treatment and the Human Immune System Explorer platform
 - PICI Investigator Philip Greenberg, MD (Fred Hutchinson Cancer Center) and PICI Investigator Evan Newell, PhD (Fred Hutchinson Cancer Center)

Poster Session: PO.CL01.18 - Spatial Proteomics and Transcriptomics 1 | Section 32; 2:00–5:00 PM

- 770 / 22 ccRCC metastasis rewires tumor microenvironment to increase immunosuppression and fibrosis
 - PICI Investigator Catherine Wu, MD (Dana-Farber Cancer Institute)

Poster Session: PO.CL05.01 - Cancer Care for All: Innovations in Geriatric Oncology and Broadening Research Representation | Section 27; 2:00–5:00 PM

- 630 / 11 Directly engaging participants in rare cancer research is feasible: the osteosarcoma and leiomyosarcoma projects
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute)

Poster Session: PO.CL06.07 - Vaccines and Cell Therapies | Section 35; 2:00-5:00 PM

- 870 / 26 Engineering of a novel Buddy-CAR system: CAR-NK cells expressing IL7/IL7Rα exhibit superior proliferation and anti-tumor responses while promoting trans-activation of the bystander T cells
 - PICI Investigator Rizwan Romee, MD (Dana-Farber Cancer Institute)

Poster Session: PO.MCB06.04 - Comprehensive Multiomic Profiling of Chromatin Dynamics, DNA Methylation and Tumor Microenvironments | Section 9; 2:00–5:00 PM

- 213 / 7 Epigenomic dissection of histology-specific drivers of testicular germ cell tumors
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute)

Session: MS.IM02.01 - Overcoming Tumor Immune Suppression | *Room S404 - McCormick Place South (Level 4)*

- 1172 An estrogen receptor signaling transcriptional program linked to immune
 - evasion in human hormone receptor-positive breast cancer
 - PICI Center Co-Director Elizabeth Mittendorf, MD, PhD (Dana-Farber Cancer Institute) and PICI Investigator Judith Agudo, PhD (Dana-Farber Cancer Institute)
 - 3:05-3:20 PM

Session: MS.MCB07.01 - Gene Regulation and Transcription Factors | Room E352 - McCormick Lakeside Center (Level 3)

- 1180 Epigenetic dysregulation of IGF1 and PPARG2 in dedifferentiated liposarcoma
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute)
 - 3:20-3:35 PM

Session: LBMS01 - Minisymposium: Late-Breaking Research | *Room S403 - McCormick Place South (Level 4)*

- LB091 T cell targeted lentiviral gene delivery using the PACK-IT Platform generates CAR-T cells with superior potency compared to conventional lentivirus and enables in vivo generation of CD19-CAR T cells capable of controlling leukemia in preclinical models
 - PICI Center Director Crystal Mackall, MD (Stanford Medicine); PICI Investigator Louai Labanieh, PhD (Stanford Medicine); former PICI Investigator Howard Chang, MD, PhD (formerly Stanford Medicine) and PICI Investigator Bingfei Yu, PhD (University of Southern California)
 - o 4:05-4:20 PM

Session: CTPL02 - New Frontiers in Precision Oncology | Arie Crown Theater - McCormick Lakeside Center (Level 2)

- CT018 A double-blind placebo-controlled randomized phase 2 clinical trial to assess the efficacy of a topical BRAF inhibitor for acneiform rash toxicities from anti-EGFR therapies
 - PICI Center Director Antoni Ribas, MD, PhD (UCLA)
 - 4:30-4:45 PM

Session: MS.TB10.02 - The Stromal-Immune Interplay in Cancer Progression | *Room* S106 - *McCormick Place South (Level 1)*

- 1213 Immune aging impedes intratumoral T-cell activity to reduce response to therapy in triple negative breast cancer
 - PICI Center Co-Director Elizabeth Mittendorf, MD, PhD (Dana-Farber Cancer Institute)
 - 4:35-4:50 PM

Session: TM02 - Acquired Resistance to Immunotherapies - A Cancer Immunology Working Group Town Hall and Networking Meeting | *Room S105 - McCormick Place South* (Level 1)

- Chairperson: PICI Investigator Catherine Wu, MD (Dana-Farber Cancer Institute)

 7:00-7:10 PM
- Invited Speaker: PICI Investigator Judith Agudo, PhD (Dana-Farber Cancer Institute)
 - 7:10-7:25 PM

MONDAY, APRIL 28

Session: PL03 - Innovative Technologies Driving Advances in Cancer Research | Hall B1 - McCormick Place North (Level 3)

- Driving new CAR T cells
 - PICI Investigator Marcela Maus, MD, PhD (Massachusetts General Hospital)
 - 8:32-8:59 AM

Poster Session: LBPO.TB02 - Late-Breaking Research: Tumor Biology 2 |

Section 54; 9:00 AM-12:00 PM

- LB163 / 3 Novel multiplex immunoassay for simultaneous profiling of human and mouse immunomodulatory proteins in humanized models
 - PICI Center Director Jedd Wolchok, MD, PhD (Weill Cornell Medicine) and
 PICI Center Co-Director Taha Merghoub, PhD (Weill Cornell Medicine)

Session: MG08 - Meet the Editors-in-Chief of Cancer Immunology Research |

AACR Publications Booth 2615 - South Halls A1-2

- PICI Investigator Robert Schreiber, PhD (Washington University School of Medicine)
 - 10:30-11:00 AM
- PICI Investigator Philip Greenberg, MD (Fred Hutchinson Cancer Center)
 - 11:00–11:30 AM

Poster Session: PO.TB03.01 - Novel Therapeutic Targets for Metastasis |

Section 5; 9:00 AM–12:00 PM

- 1319 / 3 Luminal reprogramming, druggable mitogenic pathway activation and rare outgrowth of occult basal cancers define ER loss in HR+/HER2- MBC
 - PICI Center Co-Director Elizabeth Mittendorf, MD, PhD (Dana-Farber Cancer Institute)

Poster Session: PO.TB06.01 - Radiation Sciences 1 | Section 6; 9:00 AM-12:00 PM

- 1336 / 9 Combination of gemcitabine and local tumor ablation WST-11 vasculartargeted photodynamic therapy displays superior efficacy compared to either monotherapy in a urothelial cancer model
 - PICI Center Co-Director Taha Merghoub, PhD (Weill Cornell Medicine)

Poster Session: PO.TB10.15 - Uncovering How Secreted Factors Sculpt the Tumor Microenvironment | Section 7; 9:00 AM-12:00 PM

- 1370 / 25 Antibodies derived from patient tumors augment response to immune checkpoint blockade in cancer
 - PICI Center Director James P. Allison, PhD (MD Anderson Cancer Center) and PICI Center Co-Director Padmanee Sharma, MD, PhD (MD Anderson Cancer Center)

Poster Session: PO.MCB02.01 - Apoptosis and BCL2 Family | Section 9;

9:00 AM-12:00 PM

- 1387 / 9 Superoxide induces phosphorylation-mediated Mcl-1 stability to promote resistance in hematologic malignancies
 - PICI Investigator Catherine Wu, MD (Dana-Farber Cancer Institute)

Poster Session: PO.MCB09.06 - Metabolic Dependencies | Section 14; 9:00 AM-12:00 PM

- 1534 / 16 Targeting oxygen consumption with metformin and phenformin have differential effects on immune cells in the tumor microenvironment
 - PICI Investigator Mehdi Benzaoui, PhD (Weill Cornell Medicine); PICI Center Director Jedd Wolchok, MD, PhD (Weill Cornell Medicine) and PICI Center Co-Director Taha Merghoub, PhD (Weill Cornell Medicine)

Poster Session: PO.CL01.02 - Liquid Biopsy: Circulating Nucleic Acids 5 / Circulating Tumor Cells 2 | Section 28; 9:00 AM-12:00 PM

- 1951 / 19 Inferring immune and tissue cell type contributions to cell-free DNA (cfDNA) with a DNA methylation assay
 - PICI Alliances & Collaborations Director Samantha Liang, PhD and PICI Chief Scientific Officer John Connolly, PhD

Poster Session: PO.CL01.20 - Spatial Proteomics and Transcriptomics 3: Other Topics/Biomarkers | Section 33; 9:00 AM-12:00 PM

- 2107 / 10 Insights into inherited genetic variations and genetic ancestry of patients with high-risk melanoma
 - PICI Center Co-Director F. Stephen Hodi, MD (Dana-Farber Cancer Institute)

Poster Session: PO.IM01.14 - Interplay between Immune System and Radio-, Chemo- and Targeted Therapies 1 | Section 35; 9:00 AM-12:00 PM

- 2152 / 6 NT-I7 increases lymphocytes and enhances chemotherapy and immunotherapy efficacy in HNSCC
 - PICI Investigator Matthew Spitzer, PhD (UCSF)

Poster Session: PO.IM01.08 - Local and Systemic Immunity against Cancer: New Analytic and Prognostic Tools | Section 36; 9:00 AM–12:00 PM

- 2179 / 3 Multiomic co-detection of proteins, mRNA and protein-protein interactions reveal PD1-PDL1 interactions in the tumor microenvironment of bladder cancer patients treated with anti-PD-L1
 - PICI Investigator David Oh MD, PhD (UCSF) and former PICI Center Co-Director Lawrence Fong, MD (formerly UCSF)
- 2198 / 22 Platform for purifying antigen-presenting myeloid cells based on frequency of interactions with T cells
 - PICI Investigator Kenneth Hu, PhD (MD Anderson Cancer Center)

Poster Session: PO.BCS01.05 - Quantitative Methods and Pipelines | Section 47; 9:00 AM-12:00 PM

- 2505 / 26 Semi-automated image registration and cell typing integrates multiplexed imaging data to investigate the tumor microenvironment in clinical biopsies
 - PICI Center Director Antoni Ribas, MD, PhD (UCLA) and PICI Investigator Katie Campbell, PhD (UCLA)

Session: SS08 - AACR Annual Business Meeting of Members | *Room S106 - McCormick Place South (Level 1)*

- PICI Investigator and AACR Past President Philip Greenberg, MD (Fred Hutchinson Cancer Center)
- 12:30–1:45 PM

Session: SY17 - Overcoming the Tumor Suppressive Role of the Innate Immune System within the Tumor Microenvironment | *Room E451 - McCormick Lakeside Center (Level 4)*

- Harnessing neutrophil to overcome resistance to immune based therapies
 - PICI Center Co-Director Taha Merghoub, PhD (Weill Cornell Medicine)
 - o 12:35-12:55 PM

Poster Session: PO.TB10.03 - Aging and Senescence in the Tumor Microenvironment | Section 2; 2:00–5:00 PM

- 2562 / 16 Cell populations in human breast cancers are molecularly and biologically distinct with age
 - PICI Center Co-Director Elizabeth Mittendorf, MD, PhD (Dana-Farber Cancer Institute)

Poster Session: PO.ET02.09 - Therapeutic Approaches to Attack the Tumor Microenvironment | Section 24; 2:00–5:00 PM

- 3129 / 14 Fibroblast activation protein directed CAR T cells engineered in situ using targeted lipid nanoparticles inhibit progression of pancreatic ductal adenocarcinoma
 - PICI Center Director Carl June, MD (The University of Pennsylvania)

Poster Session: PO.CL01.09 - Predictive Biomarkers 4 | Section 31; 2:00-5:00 PM

- 3323 / 26 nELISA high-throughput protein profiling applied to the RADIOHEAD cohort: Insights from the largest plasma proteomics study of patients receiving checkpoint inhibitor therapy
 - PICI Alliances & Collaborations Director Samantha Liang, PhD; PICI Research Director EnJun Yang, PhD and PICI Chief Scientific Officer John Connolly, PhD

Poster Session: PO.CL01.16 - Prognostic Biomarkers 2 | Section 32; 2:00-5:00 PM

- 3358 / 28 Tertiary lymphoid structures (TLS) estimated by AI tools from digital H&E slides significantly enhance survival prediction in high-risk AJCC stages III/IV melanoma
 - PICI Center Co-Director F. Stephen Hodi, MD (Dana-Farber Cancer Institute)

Poster Session: PO.IM01.18 - Vaccines, In Situ Vaccines, and Vaccine Combinations | Section 39; 2:00–5:00 PM

- 3527 / 3 Low-intensity pulsed focused ultrasound, with microbubbles and immune adjuvants, promotes CNS epitope spreading, improving CAR T cell therapy for heterogeneous brain tumors
 - PICI Investigator Marco Gallus, MD, MS (UCSF) and PICI Investigator Hideho Okada, MD, PhD (UCSF)

Session: MS.IM01.03 - Antigens, Antibodies, BiTEs and Vaccines | Room S102 -McCormick Place South (Level 1)

- Chairperson: PICI Investigator Cristina Puig-Saus, PhD (UCLA)
- 2:30-4:30 PM

Session: ESP5E - Transformative Proteomics: Leveraging Affinity Based Assays to Advance Immunotherapy and Precision Prevention in Cancer Research | Spotlight Theater E - South Hall A

- PICI Investigator Divij Mathew, PhD (The University of Pennsylvania)
- 3:00-4:00 PM

Session: MS.MD01.01 - Advancing Cancer Research Through an International Cancer Registry: AACR Project GENIE Use Cases | *Room E350 - McCormick Lakeside Center* (Level 3)

- 3745: Allele-specific HLA LOH frequencies and survival outcomes in cancer: a real-world analysis
 - PICI Investigator Christopher Klebanoff, MD (Memorial Sloan Kettering Cancer Center)
 - 3:05-3:20 PM

Session: MS.CL06.01 - Innovations in Immunotherapy *Arie Crown Theater - McCormick Lakeside Center (Level 2)*

- 3765 Combined silencing of *MED12* and activation of *IL2* by epigenetic editing enhances CAR T antitumor potency
 - PICI Investigator Sean Yamada-Hunter, PhD (Stanford Medicine) and PICI Center Director Crystal Mackall, MD (Stanford Medicine)
 - 3:10-3:25 PM

Session: FO03 - Advances in Tumor-infiltrating Lymphocyte (TIL) and CAR T Therapies | Room E451 - McCormick Lakeside Center (Level 4)

- TCRs and TIME: what's Kras got to do with it?
 - PICI Investigator Robert Vonderheide, MD, DPhil (The University of Pennsylvania)
 - 5:20-5:40 PM

TUESDAY, APRIL 29

Session: PL04: Leveraging tumor immune archetypes in treating cancer | Hall B1 -McCormick Place North (Level 3)

- PICI Investigator Max Krummel, PhD (UCSF)
- 8:32–8:59 AM

Poster Session: PO.BCS01.13 - Single-Cell and Spatial Molecular Analysis | Section 47; 9:00 AM-12:00 PM

- 5084 / 22 Evaluation of single-cell foundation models for cancer outcome predictions
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute)

Poster Session: PO.CL06.03 - Immune Responses to Therapies Including Chemotherapy and Radiotherapy | Section 28; 9:00 AM-12:00 PM

- 4536 / 7 Dissecting tumor-immune microenvironment in response and resistance to immune checkpoint blockade in metastatic melanoma
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute); PICI Investigator Barbara Engelhardt, PhD (MD Anderson & Gladstone Institutes) and PICI Center Co-Director F. Stephen Hodi, MD (Dana-Farber Cancer Institute)
- 4540 / 11 Longitudinal analysis of multiple myeloma: Therapeutic response and immune microenvironment dynamics in the context of tumor heterogeneity
 - PICI Investigator Philip Greenberg, MD (Fred Hutchinson Cancer Center) and PICI Investigator Evan Newell, PhD (Fred Hutchinson Cancer Center)

Poster Session: PO.CTP01.02 - Phase I Clinical Trials in Progress 2 | Section 50; 9:00 AM-12:00 PM

- CT186 / 3 EVEREST-2: A seamless phase 1/2 study of A2B694, a logic-gated Tmod CAR T-cell therapy, in patients with mesothelin-expressing solid tumors with human leukocyte antigen-A*02 loss of heterozygosity
 - PICI Investigator Marcela Maus, MD, PhD (Massachusetts General Hospital)

Poster Session: PO.ET01.05 - Oncogenes, Tumor Suppressor Genes and Gene Products as Targets for Therapy 1 | Section 19; 9:00 AM-12:00 PM

- 4325 / 21 FXYD5 plays diverse roles in immune evasion and tumor progression in prostate cancer
 - PICI Investigator Aram Lyu, PhD (UCSF) and former PICI Center Co-Director Lawrence Fong, MD (formerly UCSF)

Poster Session: PO.ET02.06 - New and Emerging Cancer Drug Targets |

Section 17; 9:00 AM-12:00 PM

- 4250 / 7 Tumor-wide RNA splicing aberrations generate immunogenic public neoantigens across cancers
 - PICI Investigator Inaki Etxeberria, PhD (Memorial Sloan Kettering Cancer Center); PICI Investigator Maggie Colton Cove, PhD Candidate (UCSF); PICI Investigator Marco Gallus, MD, MS (UCSF); PICI Investigator Arun Wiita, MD, PhD (UCSF); PICI Investigator Christopher Klebanoff, MD (Memorial Sloan Kettering Cancer Center) and PICI Investigator Hideho Okada, MD, PhD (UCSF)

Poster Session: PO.IM01.01 - CAR-T Cells | Section 37; 9:00 AM-12:00 PM

- 4806 / 9 CAR binders affect CAR T cell tonic signaling, durability and sensitivity to target
 - PICI Center Director Carl June, MD (The University of Pennsylvania)
- 4820 / 23 Anti-CD72 nanobody-based CAR-T affinity maturation leads to improved in vitro efficacy versus low antigen density lymphoma models, but limited benefit in vivo
 - PICI Investigator Arun Wiita, MD, PhD (UCSF)
- 6395 / 18 Synthetic pathway activators enhance CAR-T functional persistence and prevent T cell exhaustion
 - PICI Center Co-Director E. John Wherry, PhD (The University of Pennsylvania)

Poster Session: PO.IM02.04 - Epigenetic Regulation of Tumor Immunity | *Section 38; 9:00 AM-12:00 PM*

- 4834 / 4 Genomic and metabolic effects of KDM6A loss regulates differential responses to immune checkpoint therapy and chemotherapy in bladder cancer
 - PICI Center Co-Director Padmanee Sharma, MD, PhD (MD Anderson Cancer Center)

Poster Session: PO.MCB09.01 - Metabolic Pathways | Section 13; 9:00 AM-12:00 PM

- 4156 / 6 Differential effects of tumor metabolites on T cell activation and effector function
 - PICI Center Director Jedd Wolchok, MD, PhD (Weill Cornell Medicine) and PICI Center Co-Director Taha Merghoub, PhD (Weill Cornell Medicine)

Poster Session: PO.TB04.01 - Mouse and Other Models | Section 4; 9:00 AM-12:00 PM

- 3935 / 28 Durable inhibition of ERK phosphorylation is required for tumor regression in novel human and mouse models of NF1-inactivated melanoma
 - PICI Center Co-Director Taha Merghoub, PhD (Weill Cornell Medicine)

Poster Session: PO.TB05.02 - Pediatric Cancer Models | Section 5; 9:00 AM-12:00 PM

- 3940 / 1 Development of immunocomplex pediatric tumor organoids for oncoimmunotherapy research
 - PICI Investigator William Weiss, MD, PhD (UCSF) and PICI Center Director Crystal Mackall, MD (Stanford Medicine)
- 3950 / 11 Novel scaffold free method to establish 3D spheroid and 2D adherent primary neuroblastoma cell lines with adrenergic and mesenchymal-like phenotypes
 - PICI Investigator Robbie Majzner, MD (Dana-Farber Cancer Institute)

Poster Session: PO.TB10.12 - The Tumor Immune Interplay as a Driver of Progression | Section 6; 9:00 AM–12:00 PM

- 3976 / 20 Disrupting CD44-SPP1 interaction between tumor cells and tumorassociated macrophages (TAMs) to overcome cisplatin resistance in muscleinvasive bladder cancer (MIBC)
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute)

Session: SY16 - Novel Classes of Human Cancer Rejection Antigens: Beyond Point Mutations | Room E351 - McCormick Lakeside Center (Level 3)

- Therapeutic targeting of public neoantigens resulting from recurrent gene fusions and mRNA mis-splicing events
 - PICI Investigator Christopher Klebanoff, MD* (Memorial Sloan Kettering Cancer Center)
 - o 10:20-10:40 AM
- Tumor-wide RNA splicing aberrations generate therapeutically actionable public neoantigens
 - PICI Investigator Hideho Okada, MD, PhD (UCSF)
 - 10:45–11:05 AM
 - *Session chair

Session: CTPL04 - Biologics and T-cell Engagers | Arie Crown Theater - McCormick Lakeside Center (Level 2)

- Co-Chairs: PICI Center Director Crystal Mackall, MD (Stanford Medicine) and PICI Center Director Jedd Wolchok, MD, PhD (Weill Cornell Medicine)
- 10:15 AM-12:15 PM

Session: ESP7C - High-Throughput Serum Proteomics of 1000+ Checkpoint Inhibitor Patients: Insights From nELISA™ Profiling of RADIOHEAD Cohort | Spotlight Theater C -South Hall A

- PICI Research Director EnJun Yang, PhD
- 12:30–1:30 PM

Poster Session: PO.BCS01.07 - Computational Immunology and Tumor

Microenvironment Characterization | Section 45; 2:00–5:00 PM

- 6256 / 3 Dissecting tumor-intrinsic programs and immune dynamics driving response to immunotherapy in metastatic melanoma through non-negative matrix factorization decomposition
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute); PICI Investigator Barbara Engelhardt, PhD (MD Anderson & Gladstone Institutes) and PICI Center Co-Director F. Stephen Hodi, MD (Dana-Farber Cancer Institute)

Poster Session: PO.CL06.11 - Immunomodulatory Agents and Interventions | *Section 29;* 2:00–5:00 PM

- 5841 / 17 SARS-CoV-2 mRNA vaccines sensitize tumors to immune checkpoint blockade
 - PICI Center Co-Director Padmanee Sharma, MD, PhD (MD Anderson Cancer Center)

Poster Session: LBPO.CL03 - Late-Breaking Research: Clinical Research 3 | Section 53: 2:00–5:00 PM

- LB358 / 2 Single cell RNA sequencing of cerebrospinal fluid lymphocytes in CARv3 TEAM E treated glioblastoma patients
 - PICI Investigator Marcela Maus, MD, PhD (Massachusetts General Hospital)

Poster Session: PO.IM01.04 - CAR Therapies: Emerging Approaches and Combinations | Section 38; 2:00–5:00 PM

- 6099 / 7 STEAP1 targeting CAR-T cells equipped with collagen-binding IL-12 for advanced prostate cancer
 - PICI Investigator John K. Lee, MD, PhD (UCLA)
- 6104 / 12 Comparative evaluation of CAR-expressing T-, NK-, NKT-cells and macrophages in an immunocompetent mouse glioma model
 - PICI Investigator Marco Gallus, MD, MS (UCSF) and PICI Investigator Hideho Okada, MD, PhD (UCSF)
- 6114 / 22 Engineering novel synNotch CAR T cells to precisely and effectively target medulloblastoma
 - PICI Investigator Maggie Colton Cove, PhD Candidate (UCSF) and PICI Investigator Hideho Okada, MD, PhD (UCSF)
- 6115 / 23 MZB1 TCR-like CAR T cell therapy, a new weapon in the war against multiple myeloma and waldenström macroglobulinemia
 - PICI Investigator Rizwan Romee, MD (Dana-Farber Cancer Institute)
- 6116 / 24 Generation of multi-specific CAR T cells using a novel single-marker selection platform to target medulloblastoma heterogeneity
 - PICI Investigator Louai Labanieh, PhD (Stanford Medicine) and PICI Center Director Crystal Mackall, MD (Stanford Medicine)

Session: MS.IM01.01 - Adoptive Cell Therapies | Arie Crown Theater - McCormick Lakeside Center (Level 2)

- 6398 Harnessing the conditional proteolytic activity of ADAM17 to generate autonomous regulatory mechanisms in CAR T cells
 - PICI Investigator Sean Yamada-Hunter, PhD (Stanford Medicine); PICI Investigator Louai Labanieh, PhD (Stanford Medicine) and PICI Center Director Crystal Mackall, MD (Stanford Medicine)
 - 3:05-3:20 PM

Session: MS.IM01.02 - Checkpoints and Modulators of Tumor Microenvironment | Room S100 A (Grand Ballroom A) - McCormick Place South (Level 1)

- 6405 T-cell dependency of tumor regressions and complete responses with RAS(ON) multi-selective inhibition in preclinical models of PDAC
 - PICI Investigator Robert Vonderheide, MD, DPhil (The University of Pennsylvania)
 - 3:20-3:35 PM

WEDNESDAY, APRIL 30

Poster Session: PO.CL01.06 - Liquid Biopsy: Circulating Nucleic Acids 4 / Predictive Biomarkers 1 | Section 32; 9:00 AM-12:00 PM

- 7152 / 16 High-dimensional, single-cell analysis and transcriptional profiling reveal novel correlatives of response to PARP inhibition plus PD-1 blockade in triple-negative breast cancer
 - PICI Center Co-Director Elizabeth Mittendorf, MD, PhD (Dana-Farber Cancer Institute)
- 7153 / 17 Subclonal mutation load predicts survival and response to immunotherapy in cancers with low to moderate TMB
 - PICI Center Co-Director Padmanee Sharma, MD, PhD (MD Anderson Cancer Center)

Poster Session: PO.CL06.09 - Immune Monitoring / Clinical Correlates | *Section 31; 9:00 AM-12:00 PM*

- 7123 / 2 Unravelling temporal dynamics of GD2-CAR T cell therapy in H3K27Mmutant diffuse midline glioma through comprehensive single-cell and multi-omic profiling
 - PICI Investigator Zinaida Good, PhD (Stanford Medicine) and PICI Center Director Crystal Mackall, MD (Stanford Medicine)
- 7125 / 4 Distinct CD8+T cell subsets in advanced melanoma patients with liver metastasis
 - PICI Investigator Adil Daud, MD (UCSF) and PICI Investigator James Lee, MD (UCSF)

Poster Session: PO.MCB08.04 - Genomic Profiling of Tumors 2 | Section 9;

9:00 AM-12:00 PM

- 6600 / 7 Dissecting genomic features of BCG unresponsive non-muscle-invasive bladder cancer identifies drivers of sensitivity to intravesical gemcitabine/docetaxel
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute)
- 6605 / 12 Spatially-resolved single-cell transcriptome landscape of response and resistance to CDK4/6 inhibitors in patients with hormone receptor-positive metastatic breast cancer
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute) and PICI Investigator Barbara Engelhardt, PhD (MD Anderson & Gladstone Institutes)

Poster Session: PO.MCB08.05 - Genomic Profiling of Tumors 3 |

Section 10; 9:00 AM –12:00 PM

- 6627 Clonal architecture analysis of response to PARP inhibition in prostate cancer
 - PICI Investigator Eliezer Van Allen, MD (Dana-Farber Cancer Institute)

Poster Session: PO.TB04.08 - Other Organisms and in Vivo/in Vitro Models | Section 3; 9:00 AM-12:00 PM

- 6511 / 22 Immunocompetent large animal model of mesenchymal glioblastoma achieved through somatic gene editing technology
 - PICI Investigator Christine Brown, PhD (City of Hope)

Awards & Recognition

WEDNESDAY, APRIL 30

Session: LE11 - AACR-Cancer Research Institute Lloyd J. Old Award in Cancer

Immunology | Room S105 - McCormick Place South (Level 1)

- Distinguished award recipient: PICI Center Director Crystal Mackall, MD (Stanford Medicine)
- 3:10–3:45 PM