Monday, February 12, 2018

6:30 p.m.-8:15 p.m. WELCOME AND KEYNOTE LECTURES

Legends I-IV

6:30 p.m.-6:45 p.m. **Welcome**

Conference Cochairs

6:45 p.m.-7:30 p.m. Differential regulation of inflammation in the brain and spinal cord

Joan M. Goverman, University of Washington, Seattle, WA

7:30 p.m.-8:15 p.m. Systemic immune therapies for treating brain metastasis and their effects on the

tumor microenvironment in the brain

Harriet M. Kluger, Yale University, New Haven, CT

8:30 p.m.-10:00 p.m. OPENING RECEPTION

Legends V-VI

Tuesday, February 13, 2018

Basic Insights into Immune Mechanisms of CNS that Could Be Relevant to Unique CNS Tumor Environment

7:00 a.m.-8:00 a.m. CONTINENTAL BREAKFAST

Encore

8:00 a.m.-10:00 a.m. PLENARY SESSION 1: PRINCIPLES THAT GOVERN UNIQUE ASPECTS OF THE HOST

IMMUNE RESPONSE WITHIN THE BRAIN

Legends I-IV

Session Chair: Glenn F. Rall, Fox Chase Cancer Center, Philadelphia, PA

8:00 a.m.-8:30 a.m. CNS-draining lymphatics in regulation of meningeal immunity

Antoine Louveau, University of Virginia School of Medicine, Charlottesville, VA

8:30 a.m.-9:00 a.m. Single-cell profiling of human gliomas reveals macrophage ontogeny as a basis for

regional differences in macrophage activation in the tumor microenvironment

Aaron Diaz, University of California San Francisco, San Francisco, CA

9:00 a.m.-9:30 a.m. Modeling cerebral edema in immunotherapy recipients

Glenn F. Rall

9:30 a.m.-9:45 a.m. Integrated omics analysis of temporal changes of neoantigen and tumor

microenvironment in primary and recurrent gliomas*

Takahide Nejo, Department of Neurosurgery, The University of Tokyo, Tokyo, Japan

9:45 a.m.-10:00 a.m. Contraction of T-cell richness in brain metastases of non-small cell lung cancers*

Aaron Mansfield, Mayo Clinic, Rochester, MN

^{*}Short talk from proffered abstract

CONFERENCE PROGRAM

10:00 a.m.-10:30 a.m. BREAK

Abbey Road

10:30 a.m.-12:30 p.m. PLENARY SESSION 2: CNS IMMUNOLOGY: EFFECTOR MECHANISM

(THE EFFERENT ARM OF CNS IMMUNITY)

Legends I-IV

Session Chair: Robyn S. Klein, Washington University School of Medicine,

St. Louis, MO

10:30 a.m.-11:00 a.m. Innate immune regulation of blood-brain barrier function

Robyn S. Klein

11:00 a.m.-11:30 a.m. Regulatory programs mediated by lectins and glycans in CNS immunopathology

Gabriel A. Rabinovich, Instituto de Biología y Medicina Experimental, CONICET,

Buenos Aires, Argentina

11:30 a.m.-12:00 p.m. Microglial responses at the blood-brain barrier

Dimitrios Davalos, Cleveland Clinic Lerner Research Institute, Cleveland, OH

12:00 p.m.-12:15 p.m. Intravital imaging of CAR-T cells directed against GD2 in a preclinical

immunocompetent glioblastoma model* Surya Murty, Stanford University, Stanford, CA

12:15 p.m.-12:30 p.m. Adoptive cell therapy for high-grade gliomas using simultaneous temozolomide and

intracranial MGMT-modified $\gamma\delta$ T cells following standard post-resection chemo and

radiotherapy*

Lawrence Lamb, University of Alabama at Birmingham, Birmingham, AL

12:30 p.m.-3:15 p.m. POSTER SESSION A / LUNCH

Legends V-VI / Encore

3:15 p.m.-5:45 p.m. PLENARY SESSION 3: THE CNS TUMOR MICROENVIRONMENT

Legends I-IV

Session Chair: Hideho Okada, UCSF Helen Diller Family Comprehensive Cancer

Center, San Francisco, CA

3:15 p.m.-3:45 p.m. Gliomas: Big data visualization and mouse modeling

Eric C. Holland, Fred Hutchinson Cancer Research Center, Seattle, WA

3:45 p.m.-4:15 p.m. Sex-specific modifiers of brain tumor risk

Joshua B. Rubin, Washington University School of Medicine, McDonnell Genome

Institute, St. Louis, MO

4:15 p.m.-4:45 p.m. Immunopathology of brain tumors: Relevance of immune infiltrates

Christel Herold-Mende, University of Heidelberg, Heidelberg, Germany

4:45 p.m.-5:15 p.m. **Neoantigens and mutation-induced immunoregulatory mechanisms in gliomas**

Hideho Okada

5:15 p.m.-5:30 p.m. Discrimination of response to CAR T-cell therapy using a novel response metric

incorporating tumor growth kinetics in recurrent GBM patients*

Gustavo De Leon, Mayo Clinic, Phoenix, AZ

^{*}Short talk from proffered abstract

5:30 p.m.-5:45 p.m. Vascular niche regulates alternative macrophage activation in glioblastoma

immunity*

Yi Fan, University of Pennsylvania, Philadelphia, PA

DINNER ON OWN / EVENING OFF

Wednesday, February 14, 2018

Brain Metastasis and Enhancing Immune Responses to CNS Malignancies

7:00 a.m.-8:00 a.m. CONTINENTAL BREAKFAST

Encore

8:00 a.m.-10:00 a.m. PLENARY SESSION 4: CNS METASTASIS

Legends I-IV

Session Chair: Patricia S. Steeg, National Cancer Institute, Bethesda, MD

8:00 a.m.-8:30 a.m. What is the status of blood-tumor barrier and immune cells in brain met models?

Patricia S. Steeg

8:30 a.m.-9:00 a.m. Innate immunity in parenchymal and leptomeningeal metastasis: Mechanism and

therapeutic opportunities

Adrienne A. Boire, Memorial Sloan Kettering Cancer Center, New York, NY

9:00 a.m.-9:30 a.m. The inflammatory microenvironment in brain metastases as a therapeutic target

Anna Sophie Berghoff, Medical University of Vienna, Vienna, Austria

9:30 a.m.-9:45 a.m. Syndecan 1/IL-8 axis facilitates breast cancer brain metastasis through modulation

of blood-brain barrier permeability*

Sierra Mosticone Wangensteen, Virginia Commonwealth University, Richmond, VA

9:45 a.m.-10:00 a.m. Ligand-independent EphA2 signaling drives an amoeboid melanoma phenotype

that metastasizes to the brain*

Inna Smalley, The Moffitt Cancer Center & Research Institute, Tampa, FL

10:00 a.m.-10:30 a.m. BREAK

Abbey Road

^{*}Short talk from proffered abstract

CONFERENCE PROGRAM

10:30 a.m12:30 p.m.	PLENARY SESSION 5: CHECKPOINT PATHWAYS RELEVANT TO CNS Legends I-IV Session Chair: Robert M. Prins, David Geffen School of Medicine at UCLA, Los Angeles, CA
10:30 a.m11:00 a.m.	Challenges in testing immunotherapies in clinical trials Mark R. Gilbert, NCI-CCR, Bethesda, MD
11:00 a.m11:30 a.m.	Immune checkpoint biomarkers in CNS gliomas and metastasis Amy B. Heimberger, The University of Texas MD Anderson Cancer Center, Houston, TX
11:30 a.m12:00 p.m.	Immune checkpoint blockade in patients with melanoma metastatic to the brain Kim A. Margolin, City of Hope, Duarte, CA
12:00 p.m12:15 p.m.	Influence of PD-1 antibody blockade on the tumor microenvironment in patients with recurrent glioblastoma* Aaron Mochizuki, University of California Los Angeles, Los Angeles, CA
12:15 p.m12:30 p.m.	The immune landscape of PD-1 expression in human glioblastoma* Alexander Lee, University of California Los Angeles, Los Angeles, CA
12:30 p.m3:15 p.m.	POSTER SESSION B / LUNCH Legends V-VI / Encore
3:15 p.m5:30 p.m.	PLENARY SESSION 6: ADOPTIVE T-CELL THERAPY FOR CNS MALIGNANCIES Legends I-IV Session Chair: Christine Brown, City of Hope, Duarte, CA
3:15 p.m3:45 p.m.	Adoptively transferred T cells for primary and secondary CNS malignancies Richard M. Sherry, National Cancer Institute, Bethesda, MD
3:45 p.m4:15 p.m.	CAR T cell immunotherapy of brain tumors and associated neurotoxicities Michael C. Jensen, Seattle Children's Research Institute, Seattle, WA
4:15 p.m4:45 p.m.	Neurotoxicity observed in CD19 CAR therapy Hyam I. Levitsky, Juno Therapeutics, Seattle, WA (not eligible for CME credit)
4:45 p.m5:00 p.m.	New therapeutic approach for central nervous system lymphoma by CD19 CAR T cells* Xiuli Wang, City of Hope National Medical Center, Duarte, CA
5:00 p.m5:15 p.m.	Cloning and characterization of T-cell receptors reactive to the mutant isocitrate dehydrogenase-1-derived neoepitope in low-grade gliomas* Payal Watchmaker, Department of Neurological Surgery, University of California San Francisco, San Francisco, CA
5:15 p.m5:30 p.m.	Co-stimulatory domain 41BB (CD137) improves specificity and proliferative potential of IL13Ra2-specific CAR T cells for the treatment of glioblastoma* Renate Starr, Beckman Research Institute, City of Hope National Medical Center, Duarte, CA

DINNER ON OWN / EVENING OFF

^{*}Short talk from proffered abstract

Thursday, February 15, 2018

Multimodality Approaches

7:00 a.m.-8:00 a.m. CONTINENTAL BREAKFAST

Encore

8:00 a.m.-10:00 a.m. PLENARY SESSION 7: VIRAL THERAPY

Legends I-IV

Session Chair: Noriyuki Kasahara, University of Miami Health System, Miami, FL

8:00 a.m.-8:30 a.m. Oncolytic poliovirus immunotherapy

Matthias Gromeier, Duke University Medical Center, Durham, NC

8:30 a.m.-9:00 a.m. Oncolytic adenovirus: The immune angle

Juan Fueyo, The University of Texas MD Anderson Cancer Center, Houston, TX

9:00 a.m.-9:15 a.m. An oncolytic measles virus-sensitive group 3 medulloblastoma model in immune-

competent mice*

Sangeet Lal, University of California San Francisco, San Francisco, CA

9:15 a.m.-9:45 a.m. Retroviral replicating vectors for tumor-targeted gene therapy and immunotherapy

of glioma

Noriyuki Kasahara

9:45 a.m.-10:00 a.m. Immunologic activation in recurrent high-grade glioma patients with durable

complete response following treatment with Toca 511 and Toca FC*

Clark Chen, University of Minnesota, Minneapolis, MN

10:00 a.m.-10:15 a.m. BREAK

Abbey Road

10:15 a.m.-12:15 p.m. PLENARY SESSION 8: MULTIMODALITY IMMUNOTHERAPY APPROACHES

TARGETING CNS TUMOR MICROENVIRONMENT

Legends I-IV

Session Chair: Ignacio Melero, University of Navarra, Pamplona, Spain

10:15 a.m.-10:45 a.m. Radiation therapy and PD-1 blockade in brain metastasis from breast cancer

Silvia C. Formenti, Weill Cornell Medical College, New York, NY

10:45 a.m.-11:15 a.m. Targeted and immunotherapeutic approaches in brain metastases

Frank A. Winkler, German Cancer Research Center, Heidelberg, Germany

11:15 a.m.-11:45 a.m. Novel combinations: Neoadjuvant presurgery and dendritic cell vaccine for

glioblastoma Ignacio Melero

*Short talk from proffered abstract

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11:45 a.m.-12:00 p.m. IDO1 inhibition synergizes with radiation and PD-1 blockade to durably increase

survival against advanced glioblastoma*

Derek Wainwright, Northwestern University Feinberg School of Medicine, Chicago, IL

12:00 p.m.-12:15 p.m. Noninvasive monitoring of in situ immunotherapeutic responses in glioblastoma

using novel PET and MRI techniques*

Joseph Antonios, University of California Los Angeles, Los Angeles, CA

12:15 p.m.-12:30 p.m. CLOSING REMARKS

Legends I-IV

Hideho Okada, UCSF Helen Diller Family Comprehensive Cancer Center,

San Francisco, CA

12:30 p.m. DEPARTURE

^{*}Short talk from proffered abstract