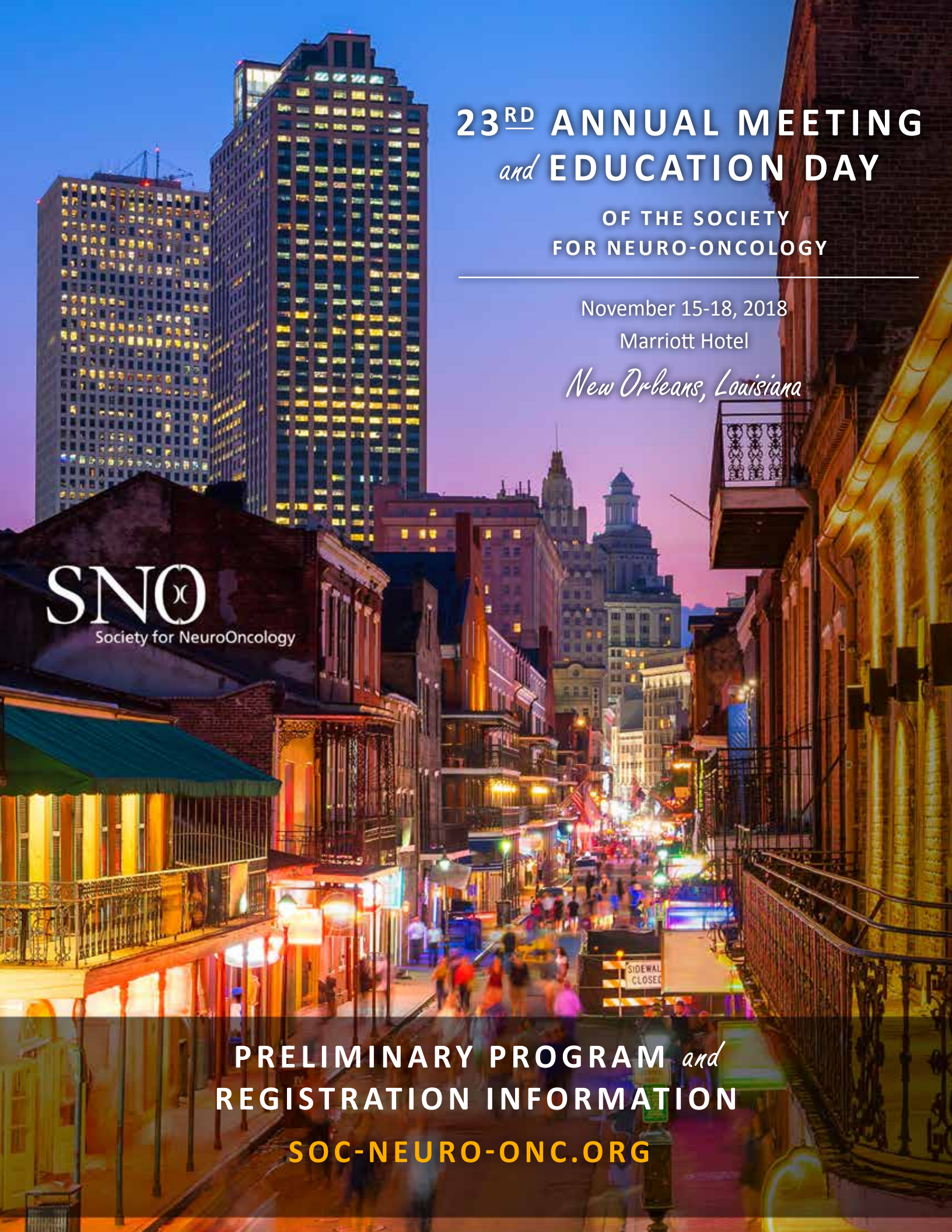


23RD ANNUAL MEETING *and* EDUCATION DAY

OF THE SOCIETY FOR NEURO-ONCOLOGY

November 15-18, 2018

Marriott Hotel

New Orleans, Louisiana

SNO
Society for NeuroOncology

PRELIMINARY PROGRAM *and* REGISTRATION INFORMATION

SOC-NEURO-ONC.ORG

SNO
Society for NeuroOncology

NEW THIS YEAR!

The SNO meeting will provide some exciting new features this year including:

- VIEW POSTERS ON YOUR MOBILE DEVICE
- EXPANDED OPPORTUNITIES FOR Q&A
- MORE SUNRISE SESSION TOPICS
- ENHANCED FEATURES AND NEW NAVIGATION ON APP
- PRESENTATION UPLOAD PRIOR TO THE MEETING
- CAPTURE OF ALL CONTENT FOR POST-MEETING EDUCATION SITE

SPECIAL PRE-CONFERENCE SESSIONS START ON NOVEMBER 14!

Attendees have the option of registering for the following special pre-conference sessions prior to the SNO Annual Meeting:

NEURO-ONCOLOGY REVIEW COURSE

Chair: Maciej Mrugala

Back for the 5th consecutive year, SNO is pleased to announce a full-day Neuro-Oncology Review Course as part of its educational programs for 2018. The course will take place on Wednesday, November 14.

CNS ANTICANCER DRUG DISCOVERY AND DEVELOPMENT CONFERENCE

Chair: Victor Levin

The 3rd CNS Anticancer Drug Discovery and Development Conference will be held Wednesday and Thursday, November 14-15.

Program details are included further in this brochure.

TO REGISTER FOR EITHER OF THESE PRE-CONFERENCE SESSIONS, VISIT THE SNO WEBSITE

SOC-NEURO-ONC.ORG

AN INVITATION TO NEW ORLEANS!

Dear Colleagues,

We are delighted to invite you to attend the 23rd Annual Meeting of the Society for Neuro-Oncology which is scheduled to take place November 15-18, 2018. Held this year in the vibrant and eclectic city of New Orleans, the SNO Annual Meeting plays a vital role in bridging the gap between neuro-oncology research and clinical practice.

Following a pre-conference program on the critically important topic of drug discovery, and the ever-popular Neuro-Oncology Review Course, the 2018 SNO Education Day will focus on "Transforming Clinical Trials in the Modern-Day Era" with keynote lectures from Ronald DePinho and Gideon Blumenthal.

Continuing with the theme of clinical trials, the main scientific program will offer keynote and plenary addresses from Timothy Cloughesy, William Kaelin Jr., Maryam Fouladi and John Sampson. In addition, the Guha Award & Lecture will be delivered by Linda Liau, and the Victor Levin Award & Lecture will be delivered by Antonio Chiocca.

As is typical of the SNO meeting, conference participants will have the opportunity to attend early morning and lunchtime didactic sessions on a broad and varied range of neuro-oncology topics. Outstanding science will be presented in over 200 oral talks selected from the submitted abstracts. The two evening poster sessions are not to be missed, featuring 45 rapid-fire e-talks and over 300 traditional paper posters each night.

Nicknamed the "Big Easy", New Orleans is known for its nightlife, exciting live-music scene and Cajun cuisine reflecting its history as a melting-pot of French, Caribbean and American cultures. The city's wide array of attractions, activities, and personality-infused neighborhoods appeal to visitors of all ages. Against this backdrop, the SNO annual meeting will be an outstanding forum for networking and building lasting relationships with like-minded colleagues from around the world.

We hope to see you in New Orleans!

Sincerely,
Frank Furnari, Daphne Haas-Kogan, Vinay Puduvalli

Frank Furnari
Scientific Program Chair

Daphne Haas-Kogan
Scientific Program Chair

Vinay Puduvalli
Scientific Program Chair

MEETING OVERVIEW

The 23rd Annual Meeting and Education Day of the Society for Neuro-Oncology will take place at the Marriott Hotel in New Orleans, Louisiana. With a prime location in the heart of the world-famous French Quarter, this impressive hotel lets you experience everything New Orleans is renowned for! Bourbon Street, the Audubon Aquarium, Cafe du Monde, the WWII Museum, and other local attractions are all within easy walking distance.

Building on the success of past SNO meetings, sunrise sessions, plenary and concurrent sessions will be featured with oral abstract presentations, enhanced oral eTalk presentations, and poster presentations. Special lunch tutorials and industry-sponsored symposia will provide in-depth information on evolving technologies and therapeutics. Circulated for viewing throughout the meeting will be webcasts with "Meet the Expert" recordings of esteemed scientists and clinicians. The SNO Daily Highlights will again be recorded for viewing, with invited discussants reviewing the most cutting-edge science from that day's basic science and clinical research presentations. Interactive ePoster touch screens will be available in a specially designated area of the meeting space.

EDUCATIONAL OBJECTIVES

After attending this conference, participants should be able to:

- Discuss new CNS cancer technologies in the areas of cell biology, cell signaling, genetics, epigenetics, immune-based therapies including CAR T therapy, stem cells, metabolomics, tumor microenvironment, lower grade gliomas, radiobiology and radiomics, synthetic lethal strategies, and viral therapy,
- Implement higher quality clinical trials based on an understanding of strategies for choosing which therapies to evaluate in specific patient populations,
- Apply novel trial designs beyond the traditional phase I, II and III studies for more efficient evaluation of target drugs
- Identify obstacles to clinical trial enrollment and discuss technologies to increase accessibility and data capture,
- Incorporate new endpoints in clinical trials that measures what is of most importance to patients,
- Describe new advances in the treatment of CNS metastases,
- Utilize patient reported outcomes to evaluate net clinical benefits for patients undergoing treatment, and
- Apply information on sexual differences in brain tumors and reproductive and women's issues to efficiently address therapeutic implications.

TARGET AUDIENCE

The SNO annual meeting will be of value to neuro-oncologists, medical oncologists, adult and pediatric neurosurgeons, pediatric neuro-oncologists, neuroradiologists, neuropathologists, radiation oncologists, neuro-psychologists, epidemiologists, basic and translational scientists and allied health professionals.

EDUCATIONAL METHODS

Lectures, Question-and-Answer Sessions, Panel Discussions, Posters, etc.

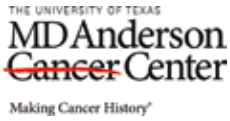
EVALUATION

A course evaluation form will provide participants with the opportunity to comment on the value of the program content to their practice decisions, performance improvement activities, or possible impact on patient health status. Participants will also have the opportunity to comment on any perceived commercial bias in the presentations as well as to identify future educational topics.

ACCREDITATION/CREDIT DESIGNATION

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of The University of Texas MD Anderson Cancer Center and the Society for Neuro-Oncology. The University of Texas MD Anderson Cancer Center is accredited by the ACCME to provide continuing medical education for physicians.

The University of Texas MD Anderson Cancer Center designates this live activity for a maximum of *25.5 AMA PRA Category 1 Credits™*. Physicians should claim only credit commensurate with the extent of their participation in the activity.



CME CERTIFICATES AND ATTENDANCE VERIFICATION CERTIFICATES

Certificates awarding *AMA PRA Category 1 Credit™* will only be available online via the SNO app and/or website. These will be available from the start of the meeting through 4 weeks following the end of the meeting. Physicians will be directed to the evaluation questionnaire and a CME Verification Form which must be completed prior to the CME certificate being displayed. Once displayed the certificate may be printed or downloaded. An email address may also be entered to send the certificate. A record of the CME certificate will be saved for future access.

Certificates of attendance will also be available online via the app and/or website for other health care professionals and international faculty upon completion of the evaluation form. This certificate may be used in verifying attendance or for requesting credits with state nursing boards, specialty societies or other professional associations. A record of this certificate will be saved for future access.

The University of Texas MD Anderson Cancer Center has implemented a process whereby everyone who is in a position to control the content of an educational activity must disclose all relevant financial relationships with any commercial interest that could potentially influence the information presented. MD Anderson also requires that all faculty disclose any unlabeled use or investigational use (not yet approved for any purpose) of pharmaceutical and medical device products. Specific disclosure will be made to the participants prior to the educational activity. Agendas are subject to change because we are always striving to improve the quality of your educational experience. MD Anderson may substitute faculty with comparable expertise on rare occasions necessitated by illness, scheduling conflicts, and so forth.

GALA DINNER

Laissez les bons temps rouler! Join your colleagues from around the world for a special evening to experience a taste—literally and figuratively—of the fascinating culture and delicious cuisine of New Orleans. The evening begins as we gather for libations in front of the Marriott Hotel, and then proceed to parade through the streets of New Orleans, escorted by police, stilt walkers, costumed performers and a raucous brass band. The parade route will take us down Canal Street and through the Warehouse District, dancing and throwing beads to passers-by along the way! Our parade will terminate at the New Orleans Contemporary Arts Center, where we will be treated to delicious Cajun cuisine and lively music for the remainder of the evening! Tickets to the SNO Gala sell quickly and typically are on wait-list basis on-site, so those interested in attending are encouraged to reserve their tickets early!

REGISTRATION INFORMATION

Register Online: www.soc-neuro-onc.org. Online registration is the preferred method of registering for the meeting. Registrants can pay with a major credit card or, alternatively, can choose to pay by check, bank transfer, or money order. If you require a paper registration form, or have questions about registration, please contact Linda Greer, Tel. (346) 980-6935. Email: linda@soc-neuro-onc.org.

We prefer payment prior to arrival in San Francisco. Please note that a surcharge will be assessed for all on-site registrations and/or registration payments.

The online registration deadline is November 5, 2018. For registrations after this date, attendees must register on-site and on-site surcharges will apply.

REFUNDS/CANCELLATIONS

Cancellations must be received in writing no later than November 5, 2018; registration fees will be refunded less a $50 handling fee. Cancellations received after November 8th cannot be refunded, but the meeting registration can be transferred to another person with written authorization. E-mail all cancellation and transfer requests to Program Registrar Linda Greer, linda@soc-neuro-onc.

ACCOMMODATIONS

The New Orleans Marriott is the conference venue for this year's meeting. The excitement and energy of the Crescent City is at your doorstep. Situated in the heart of the French Quarter, directly on Canal Street, this impressive hotel lets you experience everything New Orleans is renowned for. Walk to local attractions including Bourbon Street, the Audubon Aquarium of the Americas, coffee at Cafe du Monde, and the Garden District. The Sheraton Hotel is located directly across the street from the conference venue and will host both of the evening poster receptions. Its convenient location makes it an excellent choice for our attendees and provides easy access to the host hotel.

Special Assistance: Contact SNO at (346) 980-6935 if you have any special dietary or ADA accommodation needs.

NEURO-ONCOLOGY REVIEW COURSE

Neuro-Oncology Review Course Chair: *Maciej Mrugala*

6:00 - 7:15am	REGISTRATION AND LIGHT CONTINENTAL BREAKFAST
7:15 - 7:20am	Welcome and Introduction *Maciej Mrugala*
7:20 - 8:00am	Primary brain tumors - pathology, grading and prognosis - new WHO classification *Peter Canoll*
8:00 - 8:50am	Management of primary CNS tumors - PART I - gliomas *Erin Dunbar*
8:50 - 9:25am	Nonmetastatic cancer-related neurologic disorders *Lisa Rogers*
9:25 - 10:05am	Chemotherapy in neuro-oncology: principles and practice *David Peereboom*
10:05 - 10:25am	BREAK
10:25 - 11:05am	Neurosurgical management of brain tumors *Michael Lim*
11:05 - 11:45am	Principles of radiotherapy in neuro-oncology and its side effects *Helen Shih*
11:45 - 12:45pm	LUNCH
12:45 - 1:25pm	Palliative care for a neuro-oncology provider *Lynne Taylor*
1:25 - 2:05pm	Metastatic disease in the nervous system – brain/spine metastases *Manmeet Ahluwalia*
2:05 - 2:50pm	Pediatric neuro-oncology highlights *Sonia Partap*
2:50 - 3:30pm	Medical complications in neuro-oncology patients *Katherine Peters*
3:30 - 3:45pm	BREAK
3:45 - 4:30pm	Management of primary brain tumors - PART II - non-glial tumors *Rimas Lukas*
4:30 - 5:10pm	Neuro-radiology for a practicing neuro-oncology provider *James Fink*
5:10 - 5:45pm	Neurofibromatoses deciphered *Scott Plotkin*
5:45 - 6:15pm	Metastatic disease in the nervous system – neoplastic meningitis *Maciej Mrugala*
6:15pm	ADJOURN
6:30 - 8:30pm	**Allied Health Professionals Networking Reception:** Balancing Research with Clinical Care *Stacey D. Green, Lauren Kloeppinger*

CNS ANTICANCER DRUG DISCOVERY AND DEVELOPMENT

CNS Anticancer Drug Discovery and Development Conference Chair: *Victor Levin*

7:30 - 8:30am	REGISTRATION AND LIGHT CONTINENTAL BREAKFAST
8:30 - 8:35am	Welcome and Opening Remarks *Victor Levin*
	Session 1: Drug Delivery, The Blood-brain Barrier, and Other Pharmacokinetic Considerations
8:35 - 8:55am	The blood-brain barrier and its effect on drug delivery to brain and tumor *Quentin Smith, Texas Tech University*
8:55 - 9:15am	Factors influencing the distribution of free drug to tumors in the CNS *William Elmquist, University of Minnesota*
9:15 - 9:30am	Understanding brain penetrance of anticancer agents for infiltrative gliomas *Victor Levin, Levin Consulting*
9:30 - 9:45am	Development of a translational PK model for characterizing and predicting protein therapeutics in the brain *Dhaval K. Shah, University of Buffalo*
9:45 - 10:00am	Interplay of OATP1A2 and ABCB1 in drug penetration across human blood-brain barrier: Insights from in vitro, in silico, and patients *Jing Li, Wayne State University*
10:00 - 10:20am	BREAK
10:20 - 10:30am	Mechanisms of enhanced drug delivery in brain tumors with focused ultrasound-induced transient blood-tumor barrier disruption *Costas Arvanitis, Georgia Institute of Technology*
10:30 - 10:40am	A versatile and modular targeted nanoparticle platform for delivery of combination therapies to adult and pediatric CNS tumors *Fred Lam, Massachusetts Institute of Technology*
10:40 - 10:50am	PD-L1 checkpoint blockade using a single-chain variable fragment targeting PD-L1 delivered by retroviral replicating vector (Toca 521) enhances anti-tumor effect in cancer models *Amy Lin, Tocagen, Inc.*
10:50 - 11:00am	A treatment simulator for brain chemotherapy *William Broaddus, Virginia Commonwealth University*
11:00 - 11:10am	Low intensity pulsed ultrasound using an implantable device to temporarily disrupt the blood-brain barrier: A new tool for enhancing delivery of drugs to the brain *Michael Canney, CarThera, Inc.*
11:10 - 11:40am	Session 1 Discussion *James Gallo, moderator*
11:40 - 12:40pm	LUNCH
	Session 2: Approaches to Solve the Regulatory and Pharmaceutical / Biotech Drug Discovery / Development Conundrum
12:40 - 1:00pm	Platform trials for glioblastoma - what they have to offer and what we can learn from them *Brian Alexander, Dana-Farber Cancer Institute*

CNS ANTICANCER DRUG DISCOVERY AND DEVELOPMENT

CNS Anticancer Drug Discovery and Development Conference Chair: *Victor Levin*

1:00 - 1:15pm	TBD *Melissa Paoloni, Berry Consultants*
1:15 - 1:35pm	Attracting industry to the platform approach in the setting of low patient numbers *Gary Gordon*
1:35 - 1:50pm	The challenge of repurposing drugs for CNS neoplasms *Jeffrey Bacha, DelMar Pharmaceuticals*
1:50 - 2:20pm	Session 2 Discussion *Victor Levin, Moderator*
2:20 - 2:45pm	BREAK
	Session 3: Biophysical Modeling to Guide Drug Discovery and Development
2:45 - 3:05pm	Nonequilibrium statistical mechanisms and protein actions *Ken A. Dill, Stony Brook University*
3:05 - 3:25pm	Simulating cancer cell migration *David Odde, University of Minnesota*
3:25 - 3:45pm	Cell mechanical targets for brain tumors *Steven Rosenfeld, Mayo Clinic*
3:45 - 4:00pm	Extracting predictive biomarkers of cancer immunotherapy from tumor spatial heterogeneity using a multi-scale systems biology model *Chang Gong, Johns Hopkins University*
4:00 - 4:10pm	Reaching the subarachnoid space: a role for intrathecal delivery of drug loaded nanoparticles *Rachael Sirianni, University of Texas Health Science Center*
4:10 - 4:45pm	Session 3 Discussion *Peter Tonge, Moderator*
5:00 - 8:00pm	POSTER AND NETWORKING RECEPTION

7:00 - 8:00am	LIGHT CONTINENTAL BREAKFAST

Session 4: Novel Targets, Approaches and Discovery Paradigms

8:00 - 8:20am	Correlating time-dependent target engagement and drug activity *Peter Tonge, Stony Brook University*
8:20 - 8:30am	Nanoparticle delivery of miRNAs to inhibit GBM stem cells *Hernando Lopez, Kennedy Krieger Institute*
8:30 - 8:40am	CD97 perturbation by novel fusion protein DAF-Fc inhibits GBM invasion and induces antibody dependent cellular cytotoxicity *Michael Safaee, University of California, San Francisco*
8:40 - 9:00am	Therapeutic targets in primary and metastatic brain tumors: genomics as a tool *Priscilla K. Brastianos, Massachusetts General Hospital*
9:00 - 9:10am	Translational discovery of therapeutic targets for glioblastoma *Maria-Magdalena Georgescu, Louisiana State University*
9:10 - 9:25am	Protein target identification and target interaction from linear modeling of protein targets from rodent tumors *Forest White, Massachusetts Institute of Technology*
9:25 - 9:35am	Targeting the CD200 checkpoint for the fight against central nervous system tumors *Michael Olin, University of Minnesota*
9:35 - 9:50am	The PROTAC drug approach *Chris Nasveschuk, C4 Therapeutics*
9:50 - 10:05am	Session 4A Discussion *Peter Tonge, Moderator*
10:05 - 10:20am	BREAK
10:20 - 10:40am	Nativis Voyager(r): A disruptive approach to cancer treatment *Mike Butters, Nativis, Inc.*
10:40 - 10:50am	Personalized pharmacogenomics using glioma patient-derived orthotopic xenografts (PDOXs) *Ann-Christin Hau, Luxembourg Institute of Health*
10:50 - 11:10am	A key to tumor cell immortality: How it might inform new drug targets *Joseph F. Costello, University of California, San Francisco*
11:10 - 11:20am	Developing Zika virus as a potential cancer stem cell therapy *Milan Chheda, Washington University*
11:20 - 11:30am	Multi-modality analysis of heterogeneous EGFR inhibitor delivery and efficacy in GBM *Jann Sarkaria, Mayo Clinic*
11:30 - 11:50am	Selective dependency and conceptual approaches to target identification *Jeremy Rich, Sanford Consortium for Regenerative Medicine*
11:50 - 12:00pm	The development of personalized CAM Avatar model to predict chemotherapeutic drug sensitivity/resistance of gliomas *Martine Charbonneau, University of Sherbrooke*

CNS ANTICANCER DRUG DISCOVERY AND DEVELOPMENT

CNS Anticancer Drug Discovery and Development Conference Chair: *Victor Levin*

12:00 - 12:15pm	Principles of epigenetics and chromatin in development and human disease *Ali Shilatifard, Northwestern University*
12:15 - 12:30pm	Session 4B Discussion *Jann Sarkaria, Moderator*
12:30 - 1:30pm	LUNCH
	Session 5: Drug Discovery Efforts and Preclinical and Clinical Accomplishments
1:30 - 1:50pm	Building on the success of osimertinib: Achieving CNS exposure in oncology drug discovery *Nicola Colclough, AstraZeneca*
1:50 - 2:10pm	Discovery of AZD1390, a potent, selective and brain penetrant inhibitor of ATM kinase *Kurt G. Pike, AstraZeneca*
2:10 - 2:30pm	BMI-1 modulation by PTC596 as a new approach to the treatment of GBM *Young-Choon Moon, PTC Therapeutics*
2:30 - 2:50pm	Therapeutic challenges and opportunities for pediatric high-grade glioma *Suzanne Baker, St. Jude Children's Research Hospital*
2:50 - 3:00pm	2-hydroxyoleic acid, a novel membrane lipid regulator, demonstrates clinical activity in high-grade glioma *Derek Hanson, Hackensack University Medical Center*
3:00 - 3:10pm	Small molecule epigenetic targeting of methyl-CpG binding protein 2 (MBD2) for medulloblastoma therapy *Erwin Van Meir, Emory University*
3:10 - 3:20pm	CT-179: an inhibitor of the OLIG2 transcription factor with potent anti-tumour activity in brain cancer *Terrance Johns, Telethon Kids Institute*
3:20 - 3:30pm	Re-programing chromatin with a bifunctional LSD1/HDAC inhibitor induces therapeutic differentiation in DIPG *Jamie Anastas, Boston Children's Hospital*
3:30 - 3:40pm	Identification and validation of azoles as HK2 inhibitors in glioblastoma in vitro and in vivo *Alireza Mansouri, University of Toronto*
3:40 - 3:50pm	The efficacy of therapy with ABT-414, an EGFR-targeting ADC, is potentially altered by heterozygous deletion of the endocytic trafficking regulator RBSN *Gaelle Muller-Greven, Cleveland Clinic*
3:50 - 4:00pm	PAM-OBG: A MAOB-specific prodrug inhibitor of O6-methylguanine DNA methyltransferase (MGMT) that sensitizes GMB to BCNU/CCNU *Martyn Sharpe, Houston Methodist Hospital*
4:00 - 4:30pm	Session 5 Discussion *Zoran Rankovic, Moderator*
4:30 - 4:35pm	Closing Remarks *Victor Levin*
4:35pm	ADJOURN


Rue Bourbon
Bourbon
ONE WAY
DEDICATED TO THE
RESERVATION
JAZZ

TRANSFORMING CLINICAL TRIALS IN THE MODERN-DAY ERA

Education Day Chairs: *Brian Alexander, Ingo Mellinghoff, Joohee Sul, Martin Taphoorn*

6:00 - 7:00am	MORNING YOGA
8:00 - 8:10am	Welcome and Introduction
8:10 - 8:40am	**Keynote Presentation:** Global view of cancer *Ronald DePinho*
8:40 - 10:15am	**Session 1 – Cancer Biology and Genomics** *Session Chair: Ingo Mellinghoff*
8:40 - 9:00am	Aberrant signaling in brain tumors *Ingo Mellinghoff*
9:00 - 9:20am	Molecular trajectories of glioma *Roel Verhaak*
9:20 - 9:40 am	Modeling brain tumor development *Suzanne Baker*
9:40 - 10:00am	Harnessing large-scale genomic data for cancer gene discovery and therapy *Nikolaus Schultz*
10:00 - 10:15am	Panel Discussion *All of Above*
10:15 - 10:30am	BREAK
10:30 - 12:05pm	**Session 2 – Clinical Trials Basics** *Session Chair: Joohee Sul*
10:30 - 10:50am	Clinical trials 101 *Jennifer Clarke*
10:50 - 11:10am	Designs for small patient populations *Karla Ballman*
11:10 - 11:30am	Endpoints for clinical trials *Joohee Sul*
11:30 - 11:50am	Pitfalls in oncology drug development *Patrick Wen*
11:50 - 12:05pm	Panel Discussion *All of Above*
12:05 - 1:05pm	LUNCH Women in Neuro-Oncology (WiN) Kick-off Lunch
1:05 - 1:35pm	**Keynote Presentation:** Novel precision medicine trial designs - Oncology Center of Excellence perspectives *Gideon Blumenthal*
1:35 - 3:45pm	**Session 3 – Next-generation Trials and Biomarkers** *Session Chair: Brian Alexander*
1:35 - 1:55pm	Methylation signatures *Stefan Pfister*

1:55 - 2:15pm	Standardization and implementation of imaging biomarkers in glioma multicenter clinical trials *Ben Ellingson*
2:15 - 2:35pm	Digital technology: Digital biomarkers, outcomes, and performance measures *Andy Coravos*
2:35 - 2:50pm	BREAK
2:50 - 3:10pm	Novel clinical trial designs *Brian Alexander*
3:10 - 3:30pm	Perspectives from pharma *Lauren Abrey*
3:30 - 3:45pm	Panel Discussion *All of Above*
3:45 - 5:00pm	**Session 4 – Improving Patient Participation in Clinical Trials** *Session Chair: Martin Taphoorn*
3:45 - 4:05pm	Practitioners views on clinical trials - survey results *Terri Armstrong*
4:05 - 4:25pm	Access to trials - the BTN experience *Frederick B. Sontag, Kay Verble*
4:25 - 4:45pm	Clinical outcomes assessments / RANO COA *Martin Taphoorn*
4:45 - 5:00pm	Panel Discussion *All of above plus Liz Salmi, David Jenkinson and David Arons*
5:00pm	ADJOURN

5:45 - 7:30pm	**TOWN HALL MEETING:** Hot topics in neuro-oncology - *Light refreshments at 5:45pm* • Drug repurposing • Low grade glioma treatment • Right to try
7:30 - 10:00pm	**WELCOME RECEPTION**
7:30 - 8:30pm	Young Investigator's Career Development and Networking Session *(Pre-registration required. See SNO website for further details.)*

ABSTRACT CODES

ACTR	Adult Clinical Trials – Non-immunologic
ANGI	Angiogenesis and Invasion
ATIM	Adult Clinical Trials – Immunologic
CBMT	Cell Biology and Metabolism
CMET	CNS Metastasis
COMP	Computational Omics
CSIG	Cell Signaling and Signaling Pathways
DDIS	Drug Discovery
DRES	Drug Resistance
EPID	Epidemiology
EXTH	Experimental Therapeutics
GENE	Genetics and Epigenetics
HOUT	Health Outcome Measures
IMMU	Immunology
INNV	Innovations in Patient Care
LTBK	Late-Breaking
MNGI	Meningioma
NCMP	Neurological Complications of Cancer and Cancer Therapy
NCOG	Neuro-Cognitive Outcomes
NIMG	Neuro-Imaging
PATH	Molecular Pathology and Classification – Adult and Pediatric
PDCT	Pediatric Clinical Trials
PDTM	Pediatric Tumors
QOLP	Quality of Life and Palliative Care
RARE	Rare Tumors
RBTT	Randomized Brain Tumor Trials in Development
RDNA	Radiation Biology and DNA Repair
RTHP	Radiation Therapy
STEM	Stem Cells
SURG	Surgical Therapy
TMIC	Tumor Microenvironment
TMOD	Tumor Models

6:00 - 7:00am MORNING YOGA

SUNRISE SESSIONS 7:00 - 8:30am

ASNO/SNO Joint Session: WHO 2016 Classification of CNS Tumours: Impact on Management with Reference to Asian/ASNO Context

Akitake Mukasa (Chair)

- WHO 2016 in Korea, *Sung-Hye Park*
- Implementation of molecular integrated diagnosis of adult gliomas in a resource-limited country, *Takashi Komori*
- Practical guidelines of implementing 2016 update in gliomas in the Asian context, *Vani Santosh*
- Integrated WHO 2016 diagnoses using immunohistochemistry, *Arie Perry*

Complexity of the Brain Tumor Microenvironment

Daniela Quail (Chair)

- Resistance to macrophage targeted therapies in glioblastoma, *Daniela Quail*
- Effect of cytotoxic therapies on the glioma microenvironment, *Leila Akkari*
- Central nervous system lymphatic vessels: Implications for CNS tumors and therapy, *Priscilla Brastianos*
- Lymphocytes in the glioma microenvironment, *Amy Heimberger*

Immune Based Therapies

Hideho Okada (Chair)

- Challenges for brain tumor immunotherapy, *Hideho Okada*
- Effects of systemic PD1 blockade therapy on the GBM tumor microenvironment, *Robert Prins*
- CAR therapy for GBM, *Behnam Badie*
- Bone marrow T cell sequestration in GBM patients, *Peter Fecci*

Synthetic Lethal Strategies in Glioma: The Quest for Targetable Vulnerabilities

Frank Furnari (Chair)

- Targeting cancer-specific vulnerabilities, *Ronald DePinho*
- Targeting a therapeutic vulnerability in PTEN-deficient brain tumor, *Frank Furnari*
- PARP inhibition: lessons learned from synthetic lethality, *Clark Chen*
- Targeting apoptotic pathway vulnerabilities in malignant glioma, *David Nathanson*

Update on Lower Grade Gliomas

David Schiff (Chair)

- Classification and utility of biomarkers in lower-grade gliomas, *David Capper*
- Imaging advances in lower-grade gliomas, *Raymond Huang*
- Lessons from recent clinica trials of lower-grade gliomas, *David Schiff*
- Update on IDH-targeting strategies, *Patrick Wen*

Sex Differences in Brain Tumors: Biology and Therapeutic Implications

Joshua Rubin (Chair)

- Sex specific differences in incidence, survival and risk factors for brain tumors, *Jill Barnholtz-Sloan*
- Sex differences in MR imaging of glioma, *Kristin Swanson*
- Sex differences in microglia and the glioma microenvironment, *Justin Lathia*
- Sex differences in glioma biology and therapeutic responses, *Joshua Rubin*

Brain Cancer Metabolism

Zhimin Lu (Chair)

- Co-dependency pathways in GBM: Identifying and targeting oncogene-induced metabolic vulnerabilities, *Paul Mischel*
- Monitoring metabolism in glioblastoma using hyperpolarized C-13 imaging and H-1 MRSI, *Susan Chang*
- Lipid metabolism alteration in GBM, from de novo synthesis to storage, *Deliang Guo*
- Metabolic and non-metabolic functions of metabolic enzymes in brain tumor development, *Zhimin Lu*

Clonal Evolution of Adult and Pediatric Glioma

Mario Suva (Chair)

- Single-cell regulatory programs of malignant and immune cells in adult and pediatric gliomas, *Mario Suva*
- Title TBD, *Raul Rabadan*
- DNA Amplification in cancer: It's all about location, *Kristen Turner*
- Harnessing exquisite vulnerabilities in H3K27M mutagenesis, *Nada Jabado*

MAIN MEETING PROGRAM

9:00 - 9:05am Welcome and Introduction of Scientific Program
Frank Furnari, Daphne Haas-Kogan, Vinay Puduvalli

9:05 - 9:35am **Keynote Presentation:** Metabolic and oxygen regulation in malignancies
William G. Kaelin Jr.

9:35 - 10:05am **Keynote Presentation:** Pediatric clinical trials and translational research
Maryam Fouladi

10:05 - 10:20am BREAK

10:20 - 10:55am **Victor Levin Award Introduction:** *Victor Levin*

Victor Levin Award Lecture Recipient: *E. Antonio Chiocca*

10:55 - 11:20am **Presidential Address:** *Patrick Wen*

11:20 - 11:25am **SNO Membership Survey:** *Gelareh Zadeh*

11:25 - 11:30am **SNO Convention Center Transition:** *J. Charles Haynes*

11:30 - 11:40am
NCOG-01
Preservation of neurocognitive function (NCF) with hippocampal avoidance during whole-brain radiotherapy (WBRT) for brain metastases: preliminary results of phase III trial NRG Oncology CC001
Gondi V, Pugh S, Brown PD, Wefel J, Gilbert MR, Bovi J, Robinson C, Benzinger T, Tome W, Armstrong TS, Bruner D, Khuntia D, Grosshans D, Konski A, Robidoux A, Kundapur V, Devisetty K, Shah S, Usuki K, Anderson B, Stea B, Yoon H, Li J, Laack NN, Kruser T, Chmura S, Shi W, Mehta M, Kachnic L
APPLIED NEURO-ONCOLOGY AWARD

11:40 - 11:50am
ACTR-39
Two-year results of the INTELLANCE 2/EORTC trial 1410 randomized phase II study on Depatux–M alone, Depatux-M combined with temozolomide (TMZ) and either TMZ or lomustine in recurrent EGFR amplified glioblastoma (NCT02343406)
van den Bent M, French PJ, Eoli M, Sepulveda J, Walenkamp A, Frenel J-S, Franceschi E, Clement P, Weller M, de Heer I, Looman J, Dey J, Krause S, Xiong H, Ansell P, Nuyens S, Brilhante J, Spruyt M, Gorlia T, Golfinopoulos V
ADULT CLINICAL RESEARCH AWARD

11:50 - 12:00pm The oncometabolite R-2-Hydroxyglutarate suppresses the innate immune micro-environment of IDH-1-mutated gliomas via aryl hydrocarbon receptor signaling
Friedrich M, Bunse L, Green E, Kessler T, Pusch S, Sanghvi K, Carretero R, Gutcher I, von Deimling A, Wick W, Platten M
EANO TRAVEL GRANT AWARD

12:15 - 1:15pm LUNCH

LUNCHTIME TUTORIALS AND EDUCATIONAL SESSIONS

Not sponsored by The University of Texas MD Anderson Cancer Center

Palliative Care-Health Outcome Measures and Communication Strategies in Neuro-Oncology
Zarnie Lwin (Chair)

- Advance care planning and palliative care in neuro-oncology, *Tobias Walbert*
- Prognostic understanding and communication challenges in patients with brain tumors, *Deborah Forst*
- Negotiating palliative care in the context of cultural and linguistic diversity – the role of the interpreter, *Zarnie Lwin*

Emerging Functional and Genomic Single Cell Technologies
Paul Northcott (Chair)

- Application of single-cell sequencing to define the developmental origins of childhood brain tumors, *Paul Northcott*
- Developmental programs in H3K27M gliomas dissected by single cell RNAseq, *Mariella Filbin*
- Single-cell analysis of adult brain tumors, *Aaron Diaz*

12:15 - 1:15pm LUNCH, continued

Young Investigator Luncheon
- Demystifying the grant process

Epigenetics of CNS Malignancies
Anna Lasorella (Chair)

- Epigenetics in tumors of the central nervous system: an overview, *Anna Lasorella*
- DNA methylation-based classification of CNS tumors, *Stefan Pfister*
- Epigenetic changes in IDH1 mutant tumors, *Houtan Noushmeher*

Emerging Model Systems in Neuro-Oncology
David Raleigh (Chair)

- Mouse genetic models of hedgehog-associated medulloblastoma, *David Raleigh*
- Canine models of brain cancer, *Amy LeBlanc*
- Mouse genetic models of medulloblastoma, *Robert Wechsler-Reya*

Basic Science in Neuro-Oncology for the Clinician
Vinay Puduvalli (Chair)

- Basic mechanisms involved in tumor heterogeneity and treatment resistance, *Vinay Puduvalli*
- Translational strategies in neuro-oncology - from bench to bedside, *Jann Sarkaria*
- Immunological approaches against brain tumors, *Duane Mitchell*

Industry Supported Symposia
Not sponsored by The University of Texas MD Anderson Cancer Center

- Implementing best practices to improve fragmented glioblastoma care across community and academic settings

CONCURRENT SESSIONS 1:30 - 5:00 pm

1:30 - 3:00pm **CONCURRENT SESSION 2A**

Adult Clinical Trials I/Trials in Development

1:30 - 1:40pm
ACTR-31
Phase 1 study of AG-881, an inhibitor of mutant IDH1 and IDH2: results from the recurrent/progressive glioma population
Mellinghoff I, Penas-Prado M, Peters KB, Cloughesy TF, Burris HA, Maher EA, Janku F, Cote GM, De LaFuente MI, Clarke J, Steelman L, Le K, Xu H, Sonderfan A, Hummel D, Schoenfeld S, Yen K, Pandya SS, Wen PY
ADULT CLINICAL RESEARCH AWARD

1:40 - 1:50pm
ACTR-45
Phase 0/2 study of ribociclib in patients with recurrent glioblastoma
Tien A-C, Bao X, Derogatis A, Kim S, Mehta S, Li J, Sanai N

1:50 - 1:55pm
ACTR-13
A bayesian adaptive randomized phase II trial of bevacizumab versus bevacizumab plus vorinostat in adults with recurrent glioblastoma – final results
Puduvalli V, Wu J, Yuan Y, Armstrong TS, Wu J, Giglio P, Xu J, Colman H, Walbert T, Raizer J, Groves M, Iwamoto F, Tran D, Avgeropoulos N, Paleologos N, Fink K, Peereboom D, Chamberlain M, Merrell RT, Penas-Prado M, Yung WK, Gilbert MR

1:55 - 2:00pm
RARE-24
Objective response and clinical benefit in recurrent ependymoma in adults: final report of CERN 08-02: A phase II study of dose-dense temozolomide and lapatinib
Armstrong T, Yuan Y, Wu J, Mendoza T, Elizabeth Vera E, Omuro A, Lieberman F, Robins H, Gerstner E, Wu J, Wen P, Mikkelsen T, Aldape K, Gilbert M

2:00 - 2:05pm **DISCUSSION**
All Presenters

2:05 - 2:10pm **Q & A**

2:10 - 2:15pm
ACTR-02
NRG Oncology/RTOG 0424: Long-term results of a phase II study of temozolomide-based chemoradiotherapy regimen for high-risk low-grade gliomas
Fisher B, Zhang P, Macdonald D, Chakravarti A, Lesser G, Fox S, Coons S, Rogers L, Werner-Wasik M, Doyle T, Bahary J-P, Fiveash J, Bovi J, Howard S, Yu M, Dsouza D, Laack N, Roach M, Kwok Y, Wahl D, Stasser J, Won M, Mehta MP

2:15 - 2:20pm
ACTR-61
Long-term analyses of the NOA-08 randomized phase III trial
Kessler T, Wick A, Platten M, Meisner C, Bamberg M, Herrlinger U, Felsberg J, Weyerbrock A, Seidel C, Steinbach J, Sabe M, Vesper J, Debus J, Sahm F, Meixensberger J, Ketter R, Mayer-Steinacker R, von Deimling A, Reifenberger G, Weller M, Wick W

2:20 - 2:25pm
ACTR-38
A phase I trial of afatinib and radiotherapy (RT) with or without temozolomide (TMZ) in patients with newly diagnosed glioblastoma (GBM)
Saran F, James A, McBain C, Jefferies S, Harris F, Cseh A, Pemberton K, Schaible J, Bender S, Brada M

2:25 - 2:30pm
ACTR-30
Phase 1b/2 study to assess the clinical effects of pamiparib (BGB-290) in combination with radiation therapy (RT) and/or temozolomide (TMZ) in patients with newly diagnosed or recurrent/refractory glioblastoma (GBM)
Shih K, Schiff D, Kim L, Battiste J, Campian J, Puduvalli V, Wen P, Cloughesy T, van den Bent M, Pirzkall A, Wood K, Wei R, Du B, Mu S, Ramakrishnan V, Walbert T

2:30 - 2:35pm **Q & A**

2:35-2:40pm
ACTR-67
A phase I study of convection-enhanced delivery of liposomal-irinotecan (Onivyde) using real-time imaging with gadolinium in patients with recurrent high grade gliomas: results thus far
Kumar K, Chang S, Oberheim-Bush NA, Clarke J, Taylor J, Page M, Chang K, Guth-rie L, Lawrence A, Lindahl C, Miyamoto C, Vogrinec U, Butowski N

2:40 - 2:45pm
ACTR-33
Tumor tissue penetration and pharmacodynamics of ONC201 in adult recurrent glioblastoma patients
Arrillaga-Romany I, Odia Y, Allen J, Prabhu VV, Tarapore R, Vendramini Costa D, Shah N, Cukierman E, Oster W, Mehta M, Wen P, Batchelor T

2:45 - 2:50pm
ACTR-16
Peripheral blood CD4+ mononuclear cell fractions are associated with overall survival at first recurrence of IDH-wildtype glioblastoma after standard chemoradiotherapy: secondary analyses of the phase II DIRECTOR trial
Wirsching H-G, Terksikh E, Silginer M, Krieg C, Tabatabai G, Wick W, Reifenberger G, Roth P, Becher B, Weller M

2:50 - 2:55pm
ACTR-29
Ketogenic diets as an adjuvant therapy in glioblastoma (KEATING): A mixed method approach to assessing trial feasibility
Martin-McGill K, Cherry G, Marson A, Tudur Smith C, Jenkinson M

2:55 - 3:00pm **Q & A**

3:00 - 3:15pm BREAK

1:30 - 3:00pm **CONCURRENT SESSION 2B**

Practical and Applied Neuro-Oncology I

1:30 - 1:40pm
QOLP-30
Survival, local control, and health related quality of life in oligometastatic and polymetastatic spinal tumors: A multicenter, international study
Barzilai O, Versteeg A, Sahgal A, Rhines L, Bilsky M, Sciubba D, Schuster J, Web-ber M, Varga P, Boriani S, Bettegowda C, Fehlings M, Yamada Y, Clarke M, Arnold P, Gokaslan Z, Fisher C, Laufer I

1:40 - 1:50pm
QOLP-20
Quality of life in the phase III CeTeG/NOA-09 trial randomizing CCNU/temozolomide (TMZ) combination therapy vs. standard TMZ therapy for newly diagnosed MGMT-methylated glioblastoma
Weller J, Tzaridis T, Steinbach J, Schlegel U, Hau P, Krex D, Grauer O, Goldbrun-ner R, Bähr O, Uhl M, Seidel C, Tabatabai G, Bullinger L, Galldiks N, Schaub C, Stummer W, Simon M, Fimmers R, Schmid M, Coch C, Glas M, Herrlinger U, Schäfer N

1:50 - 2:00pm
HOUT-19
Treatment patterns, outcomes, and prognostic indicators in elderly patients with glioblastoma: a retrospective single institution analysis
Johnson M, Kirkpatrick J, Weant M, Vaslow Z, Lipp E, Herndon J, McSherry F, Desjardins A, Randazzo D, Friedman H, Ashley D, Peters K

2:00 - 2:05pm **DISCUSSION**
All Presenters

2:05 - 2:10pm **Q & A**

2:10 - 2:15pm
QOLP-12
A novel multidisciplinary care clinic model for frail patients with central nervous system malignancies
Nevel K, Davis ME, Skakodub A, Ali J, Sullivan-Henry A, Gilman J, Harrison M, Huang M, Bailey L, Mack K, Rawlins-Peters G, Jean-Charles D, Kilkenny D, Martin A, Kelly B, Cohen L, Saliu A, Trapani M, Zavolas S, Guzman JP, Diamond E, Carver A, DeAngelis L, Barnett K, Ruppert L, Pentsova E

2:15 - 2:20pm
QOLP-03
End of life phase in glioblastoma: prospective assessment of symptom burden and symptom interference in the end of life phase - final analysis
Walbert T, Schultz L

2:20 - 2:25pm
QOLP-29
Symptom clusters in newly diagnosed glioma patients: which clusters are associated with functioning and global health status?
Coomans M, Dirven L, Aaronson N, Baumert B, van den Bent M, Bottomley A, Brandes A, Chinot O, Coens C, Gorlia T, Herrlinger U, Keime-Guibert F, Malm-ström A, Martinelli F, Stupp R, Talacchi A, Weller M, Wick W, Reijneveld J, Taphoorn MJB

2:25 - 2:30pm
QOLP-21
The relationship between caregiving burden and anxiety symptoms in caregivers of patients with malignant gliomas
Quain K, Nipp R, Greer J, El-Jawahri A, Batchelor T, Temel J, Forst D

2:30 - 2:35pm
Q & A

2:35 - 2:40pm
QOLP-19
Effect of intensive nutrition intervention on pediatric patients with central nervous system tumors with concurrent radiochemotherapy
Cai LB, Zhang Y

2:40 - 2:45pm
QOLP-09
Association between body image investment and alteration in patients with primary brain tumors
Mathen P, Armstrong T, Vera E, Acquaye A, Crandon S, Fletcher Ruiz M, Aboud O, Boris L, Brown M, Garren N, Ji M, Levine J, Mackey M, Romo C, Reyes J, Siegel C, Smart D, Wu J, Gilbert M, Camphausen K, Mendoza T, Rowe L

2:45 - 2:50pm
NCMP-09
Isocitrate dehydrogenase mutations and increased tissue 2-hydroxyglutarate concentration might be related with seizure onset in patients with gliomas
Ohno M, Hayashi M, Matsushita Y, Miyakita Y4, Takahashi M, Yamazawa E, Tsushita N, Ichimura K, Hamada A, Narita Y

2:50 - 2:55pm
NCOG-04
Effects of proton radiation on brain structure and function in low grade glioma
Parsons M, Hoebel K, Chang K, Pongpitakmetha T, Beers A, Brown J, Kalpathy-Cramer J, Sherman J, Shih H, Dietrich J

2:55 - 3:00pm
Q & A

3:00 - 3:15pm
BREAK

1:30 - 3:00pm
CONCURRENT SESSION 2C

Experimental Therapeutics

1:30 - 1:40pm
EXTH-36
Bifunctional RNA nanoparticles induce antitumor immune responses and allow MRI-based detection of dendritic cell migration as a biomarker of antitumor immune response
Grippin A, Wummer B, Sayour E, Monsalve A, Fillingim M, Dyson K, Wildes T, Dobson J, Mitchell D

1:40 - 1:50pm
EXTH-27
Inflammatory reprogramming of gliomas using Delta-24-RGDOX and immunometabolic adjuvants
Nguyen T, Rivera-Molina Y, Puerta Martinez F, Fan X, Henry V, Jiang H, Lang F, Fueyo J, Gomez-Manzano C

1:50 - 2:00pm
EXTH-25
Dianhydrogalactitol (VAL-083) reduces glioblastoma tumor growth in vivo, upon bevacizumab-induced hypoxia
Golebiewska A, Oudin A, Steino A, Niclou S, Brown D, Bacha J

2:00 - 2:10pm
EXTH-03
Local oncolytic adenovirus treatment affects both the innate and adaptive arms of the immune system and provides an avenue for enhancing immunotherapies for GBM
Lamfers M, Belcaid Z, van den Bossche W, Kleijn A, Berrevoets C, Lamers C, Teunissen C, Noske D, Lim M, Sleijfer S, Debets R, van Dongen J, Dirven C

2:10 - 2:15pm
DISCUSSION

2:15 - 2:20pm
Q & A

2:20 - 2:25pm
EXTH-70
Efficient delivery of siRNAs to glioma via functionalized extracellular vesicles primed by radiation
Tannous B, Tian T, Obeid P

2:25 - 2:30pm
EXTH-43
Effective treatment of canine spontaneous gliomas with a cytotoxic cocktail targeting IL-13RA2 and EphA2 receptors
Rossmeisl J, Herpai D, Robertson J, Dickinson P, Tatter S, Debinski W

2:30 - 2:35pm
EXTH-32
Transgenic expression of IL15 improves the efficacy of CAR T cells in an immune competent glioblastoma model
Pituch K, Zannikou M, Ilut L, Chen C, Lesniak M, Gottschalk S, Krenciute G, Balyasnikova I

2:35 - 2:40pm **Q & A**

2:40 - 2:45pm
EXTH-34
G-quadruplex DNA drives genomic instability and represents a targetable molecular abnormality in ATRX-deficient malignant glioma
Wang Y, Yang J, Danussi C, Riggins G, Sulman E, Chan T, Huse JT

2:45 - 2:50pm
EXTH-23
A novel nanotechnology-based platform improves laser interstitial thermal therapy for intracranial tumors
Chongsathidkiet P, Liu Y, Kemeny H, Dechant C, Odion R, Cui X, Rhodin K, Vo-Dinh T, Fecci, P

2:50 - 2:55pm
EXTH-04
Targeting CD97 by novel fusion protein DAF-Fc inhibits GBM invasion and induces antibody dependent cellular cytotoxicity
Nguyen A, Safaee M, Chandra A, Wycoff K, Aghi M

2:55 - 3:00pm **Q & A**

3:00 - 3:15pm BREAK

3:15 - 5:00pm **CONCURRENT SESSION 3A**

Immunology – Preclinical and Clinical I

3:15 - 3:25pm
IMMU-44
Optical barcoding to investigate clonal dynamics of GBM highlights the intrinsic capacity of GBM to re-activate developmental genes and escape immune surveil-lance
Maire C, Mohme M, Riecken K, Failla A-V, Boernigen D, Fita K, Kolbe K, Fehse B, Westphal M, Lamszus K

3:25 - 3:35pm
ATIM-12
Neoadjuvant anti-PD-1 immunotherapy promotes intratumoral and systemic immune responses in recurrent glioblastoma: An Ivy Consortium trial
Prins R, Mochizuki A, Orpilla J, Lee A, Davidson T, Gaffey S, Sanders C, Rytlewski J, Ellingson B, Li G, Yong W, Clarke J, Arrillaga-Romany I, Colman H, Reardon D, Kaley T, de Groot J, Liau L, Wen P, Cloughesy T

3:35 - 3:45pm
ATIM-19
Results of the GLOBE study: a phase 3, randomized, controlled, double-arm, open-label, multi-center study of VB-111 combined with bevacizumab vs. bevacizumab monotherapy in patients with recurrent glioblastoma
Cloughesy T, Brenner AJ, Butowski N, Cohen YC, Lowenton-Spier N, Wen P

3:45 - 3:55pm
ATIM-41
Phase II trial of a survivin vaccine (SurVaxM) for newly diagnosed glioblastoma
Ahluwalia M, Reardon D, Abad A, Curry W, Wong E, Peereboom D, Belal A, Qiu J, Mogensen K, Schilero C, Casucci D, Mechtler L, Uhlmann E, Ciesielski M, Fenstermaker R

3:55 - 4:00pm **DISCUSSION**

4:00 - 4:05pm **Q & A**

4:05 - 4:10pm
IMMU-45
Dose modulation of temozolomide have distinct effects on host response to PD-1 blockade
Karachi A, Dastmalchi F, Yang C, Huang J, Sayour E, Mitchell D, Rahman M

4:10 - 4:15pm
IMMU-32
Retargeting immunoedited glioma escape variants with adoptive cellular therapy
Wildes T, Dyson K, Grippin A, DiVita B, Flores C, Mitchell D

4:15 - 4:20pm
IMMU-06
Absence of the amino acid stress-sensor GCN2 reduces suppressive effects of MDSCs in glioma
Rashidi A, Miska J, Lee-Chang C, Kanojia D, Panek W, Lopez-Rosas A, Han Y, Kim J, Pituch K, Lesniak M

4:20 - 4:25pm
ATIM-25
Neoadjuvant PD-1 antibody blockade is associated with focal upregulation of PD-L1 and CD8 T cell infiltrate in recurrent glioblastoma
Orpilla J, Mochizuki A, Reynoso J, Akkad N, Lee A, Davidson T, Liau L, Cloughesy T, Prins R

4:25 - 4:30pm
ATIM-06
Phase 2 trial of SL-701 + bevacizumab in patients with previously treated glioblastoma (GBM) meets primary endpoint of OS-12, with preliminary correlation between long-term survival and target-specific CD8+ T cell immune response
Peereboom D, Nabors LB, Kumthekar P, Badruddoja M, Fink K, Lieberman F, Phuphanich S, Dunbar E, Walbert T, Schiff D, Tran D, Ashby L, Butowski, Iwamoto F, Lindsay R, Bullington J, Schulder M, J Sherman J, Brooks C, Reardon D

4:30 - 4:35pm **Q & A**

4:35 - 4:40pm
ATIM-17
Pembrolizumab blocks PD-1 on CAR T cells administered intraventricularly to glioblastoma patients
Portnow J, Synold T, Tran V, Chiu V, Alizadeh D, Wang D, Brito A, Kilpatrick J, Mcnamara P, Forman S, Badie B, Brown C

4:40 - 4:45pm
IMMU-55
Immunomodulatory IL-7 and IL-12-expressing MSCs induce long-term survival and immunity in syngeneic intracerebral glioblastoma models
Mohme M, Maire C, Geumann U, Dührsen L, Schliffke S, Fita K, Binder M, Lamszus K, Guenther C, Westphal M, Hermann F, Ole Schmidt N

4:45 - 4:50pm
IMMU-58
Reduced neoantigen expression as a possible immune evasion mechanism during glioma progression
Nejo T, Matushita H, Karasaki T, Nomura M, Nagae G, Takayanagi S, Tanaka S, Takahashi S, Kitagawa Y, Hana T, Koike T, Narita Y, Nagane M, Nishikawa R, Ueki K, Aburatani H, Mukasa A, Kakimi K, Saito N

4:50 - 4:55pm
IMMU-28
High-dimensional single cell characterization of the systemic influence of neoadjuvant PD-1 blockade in patients with recurrent glioblastoma
Mochizuki A, Orpilla J, Lee A, Garcia A, Liau L, Cloughesy T, Prins R

4:55 - 5:00pm **Q & A**

3:15 - 5:00pm CONCURRENT SESSION 3B

Genetics/Epigenetics/Computational Omics

3:15 - 3:25pm
GENE-42
The genomic landscape of triple-negative glioblastoma
Diplas B, Waitkus M, He X, Brosnan-Cashman J, Liu H, Chen L, Wang Z, Moure C, Killela P, Lipp E, Rodriguez F, Jiao Y, McLendon R, Bigner D, Meeker A, Yan H

3:25 - 3:35pm
COMP-07
Comparative molecular life history of spontaneous canine and human glioma
Amin S, Boudreau B, Martinez-Ledesma JE, Anderson K, Kim H, Johnson K, Dickinson P, Packer R, Taylor A, Rossmeisl J, Heimberger A, Levine J, Verhaak R

3:35 - 3:45pm
GENE-18
Divergent clonal evolution of melanoma brain metastases during treatment with immunotherapy
Alvarez-Breckenridge C, Izar B, Stocking J, Lastrapes M, Nayyar N, Gill C, Bertalan M, Kaplan A, McCabe D, Johnson D, Horbinski C, Zakaria R, Nassiri F, Zadeh G, Fisher D, Martinez-Lage M, Suva M, Sullivan R, Cahill D, Carter S, Brastianos P

3:45 - 3:50pm **DISCUSSION**

3:50 - 3:55pm **Q & A**

3:55 - 4:00pm
GENE-35
IDH1-R132H induces an epigenetic reprogramming in glioma impacting median survival, DNA-damage response and radio-sensitivity
Nunez F, Mendez F, Kadiyala P, Alghamri M, Carney S, Ljungman M, Qin T, Sartor M, Venneti S, Lyssiotis C, Costello J, Herting C, Hambardzumyan D, Figueroa M, Lowenstein P, Castro M

4:00 - 4:05pm
GENE-22
Re-programing chromatin with a bifunctional LSD1/HDAC inhibitor induces therapeutic differentiation in DIPG
Anastas J, Filbin M, Kim M, Kalin J, Zee B, Blanco A, Das J, Golub T, Cole P, Shi Y

4:05 - 4:10pm
COMP-20
The non-invasive detection of glioblastoma-derived cell-free DNA in plasma using next-generation sequencing and an untargeted variant search
Underhill H, Hellwig S, Nix D, Bhetariya P, Fuertes C, Marth G, Colman H, Bronner M, Jensen R

4:10 - 4:15pm
COMP-06
Glioblastoma development mirrors the developing brain
Couturier C, Ayyadhuri S, Le P, Monlong J, Allache R, Baig S, Riva G, Bourgey M, Misic B, Guiot M-C, Antel J, Bourque G, Ragoussis J, Petrecca K

4:15 - 4:20pm **Q & A**

4:20-4:25pm
GENE-06
The oncohistone H3.3K27M drives diffuse intrinsic pontine glioma independent of functional EZH2
Dhar S, Becher O

4:25 - 4:30pm
GENE-34
Mouse model of diffuse intrinsic pontine glioma harboring Acvr1 G328V
Mendez F, Nunez F, Koschmann C, Ravindran R, Dzaman M, Lowenstein P, Castro M

4:30 - 4:35pm
GENE-26
Molecular characterization of benign and malignant peripheral nerve sheath tumors that occur in sporadic and syndromic settings
Suppiah S, Karimi S, Mansouri S, Mamatjan Y, Liu J, Aldape K, Zadeh G

4:35 - 4:40pm **Q & A**

4:40 - 4:45pm
GENE-09
Functional genomic elements defined by DNA methylation can distinguish meningioma subgroups
Malta T, Snyder J, deCarvalho A, Poisson L, Souza C, Zadeh G, Aldape K, Tirapelli D, Carlotti C, Lee I, Kalkanis S, Walbert T, Noushmehr H

4:45 - 4:50pm
COMP-14
Tumor evolution directed graphs imply therapies against moving targets in pan-gliomas
Wang J

4:50 - 4:55pm
GENE-38
Intron 1-mediated regulation of EGFR expression In EGFR-dependent malignancies
Jameson N, Tang J, Parisian A, Benitez J, Furnari F

4:55 - 5:00pm **Q & A**

3:15 - 5:00pm CONCURRENT SESSION 3C

Microenvironment/Angiogenesis and Invasion

3:15 - 3:25pm
TMIC-05
Abscopal immune response in glioblastoma elicited by miR124-attenuated oncolytic herpes simplex virus 1 armed with UL16 binding protein 3
Wirsching H-G, Zhang H, Grandi P, Arora S, Cimino PJ, Campbell JS, Szulzewsky F, Pattwell SS, Ene C, Kumasaka D, Pierce RH, Finer M, Queva C, McGarry Houghton A, Holland E

3:25 -3 :35pm
TMIC-16
Core-like tumor cells promote malignance of glioblastoma via intercellular cross-talk with edge-like tumor cells in a HDAC1-CD109 dependent manner
Yu H, Pavlyukov MS, Minata M, Zhang S, Bastola S, Markert J, Bhat K, Wang M, Nakano I

3:35 - 3:45pm
TMIC-29
Reprogramming bone marrow of tumor-bearing hosts for glioma immunotherapy
Wildes T, DiVita B, Grippin A, Dyson K, Flores C, Mitchell D

3:45 - 3:55pm
ANGI-14
Epigenetic reactivation of BAI1 suppresses tumor invasion by preventing TGFβ1-induced mesenchymal switch in glioblastoma
Osuka S, Yang L, Zhu D, Devi N, Van Meir E

3:55 - 4:00pm **DISCUSSION**

4:00 - 4:05pm **Q & A**

4:05 - 4:10pm
ANGI-07
5ALA fluorescence based sorting identifies SERPINE1 as a novel therapeutic target on invasive GBM cells
Rowlinson J, de los Angeles Estevez Cebrero M, Lourdusamy A, Rahman R, Smith S

4:10 - 4:15pm
TMIC-46
Fibroblast-produced EDA fibronectin in the subventricular zone drives glioblastoma pathogenesis
Rick J, Nguyen A, Chandra A, Yagnik G, Lau D, Chuntova P, Ordaz A, Dayani F, Gar-cia J, Sagar S, Arfaie S, Dalle Ore C, Aghi M

4:15 - 4:20pm
TMIC-28
Glioblastoma exploits cell surface glycosylation-mediated immune regulatory circuits for immune escape
Dusoswa S, Verhoeff J, Abels E, Breakefield X, Noske D, Würdinger T, Broekman M, Van Kooyk Y, Garcia-Vallejo J

4:20 - 4:25pm
ANGI-15
PDGF-mediated mesenchymal transformation renders endothelial resistance to anti-VEGF treatment in glioblastoma
Ma W, Gong Y, Brem S, Fan Y

4:25 - 4:30pm
TMIC-49
Activation of the Wnt/β-Catenin signaling pathway in glioma stem cells impacts endothelial cell-cell interaction
Vézina A, Gilbert M, Jackson S

4:30 - 4:35pm **Q & A**

4:35 - 4:40pm
TMIC-40
Interleukin-6 in Cerebrospinal Fluid as a Prognostic Marker for Glioblastoma Patients
Sasayama T, Tanaka K, Hori T, Nishihara M, Maeyama M, Nakamizo S, Tanaka H, Kohmura E

4:40 - 4:45pm
TMIC-34
Na/H exchanger isoform 1 (NHE1) in immunosuppressive tumor microenvironment in mouse syngeneic glioma model
Hasan N, Guan X, Kohanbash G, Sun D

4:45 - 4:50pm
TMIC-30
Computational characterization of suppressive immune microenvironments in glioblastoma
Luoto S, Hermelo I, Vuorinen E, Hannus P, Kesseli J, Nykter M, Granberg K

4:50 - 4:55pm
TMIC-31
Genetic driver-mutations define composition and properties of tumor-associated myeloid cells in glioblastoma
Chen Z, Murukuti J, Hambardzumyan D

4:55 - 5:00pm
Q & A

5:00 - 7:00pm
Factors Impacting Clinical Trial Accrual
Chairs: Patrick Wen, Eudocia Quant lee, Terri Armstrong, David Arons, J. Charles Haynes

5:00 - 5:30pm
Refreshments

5:30 - 5:35pm
Introduction
Patrick Wen

5:35 - 5:43pm
National Brain Tumor Society survey results
David Arons

5:43 - 5:51pm
SNO clinical trials survey
Terri Armstrong

5:51 - 6:01pm
Patient and community factors
John DeGroot, David Arons

6:01 - 6:11pm
Physician and provider factors
Susan Chang

6:11 - 6:21pm
Clinical trials factors
David Reardon

6:21 - 6:31pm
Site and organizational factors
Michael Weller

6:31 - 6:41pm
Disparities
Ugonma Chukwueke, Shawn Hervey-Jumper

6:41 - 6:51pm
Future directions
Eudocia Quant Lee, Patrick Wen

6:51 - 7:00pm
Discussion and wrap-up

5:30 - 7:30pm
Industry Supported Symposia
Not sponsored by The University of Texas MD Anderson Cancer Center

- The role of the neuro-oncologist in EGFR-Mutant NSCLC: Treating leptomeningeal carcinomatosis with the multidisciplinary team

7:30 - 8:30pm
E-TALKS *Interactive Electronic 4 Minute Presentations Followed By Group Discussions*
Group 1: Cell Signaling/Cell Biology/Metabolism/Genetics/Epigenetics
Group 2: Drug Resistance/Drug Discovery/Experimental Therapeutics/Tumor Microenvironment
Group 3: Imaging/Pediatric Tumor Models/Pediatric Clinical Trials/Molecular Pathology/Health Outcomes

7:30 - 9:30pm
POSTER SESSION Traditional Poster Viewing

E-TALKS 7:30 - 8:30pm

GROUP 1: Cell Signaling/Cell Biology/Metabolism/Genetics/Epigenetics

7:30 - 7:34pm
GENE-04
Characteristics of patients with a primary brain tumor undergoing hereditary cancer multi-gene panel testing
Azam S, Qualmann K, Hashmi S, Ramdaney A, Rodriguez-Buritica D, Dunnington L, Jackson M

7:34 - 7:38pm
GENE-13
Genomic functional enhancers define potential tumorigenesis of G-CIMP-low (IDH-mutant Astrocytoma) tumors independent of promoter methylation
Sabedot T, deCarvalho A, Poisson L, Snyder J, Walbert T, Lee I, Kalkanis S, Berman B, Noushmehr H

7:38 - 7:42pm
GENE-28
Methylomes and transcriptomes vary across IDH1 mutant cancers
Scholtens D, Zewde M, Buss A, James D, Unruh D, Horbinski C

7:42 - 7:46pm
COMP-24
Utilizing machine learning methods for segmentation and classification of brain tumors based on conventional MRI
Artzi M, Bressler I, Bashat DB

7:46 - 7:50pm
CSIG-42
High throughput kinome and transcriptome analyses reveal novel therapeutic targets in NF2-deficient meningioma
Beauchamp R, Erdin S, Angus S, Stuhlmiller T, Oblinger J, Jordan J, Haggarty S, Plotkin S, Chang L-S, Johnson G, Gusella JF, Ramesh V

7:50 - 7:54pm
CSIG-25
Epidermal Growth Factor Receptor extracellular domain missense mutation A289V as a driver of glioblastoma invasion and proliferation
Binder Z, ThorneA, Bakas S, Wileyto EP, Akbari H, Rathore S, Min Ha S, Zhang L, Idbaih A, Bagley S, Morrissette J, Nasrallah M, Ma J, Zanca C, Scott A, Davatzikos C, Furnari F, O'Rourke D

7:54 - 7:58pm
CSIG-47
TRIM24 is an oncogenic transcriptional co-activator of STAT3 in glioblastoma
Feng H

7:58 - 8:02pm
CSIG-06
The molecular subtype of Primary Glioblastoma cells correlates with response to therapeutic agents that induce apoptosis or senescence.
Kumar R, Lorimer I

8:02 - 8:06pm
CSIG-43
The tyrosine phosphatase PTPN12/PTP-PEST regulates phosphorylation-dependent ubiquitination and stability of focal adhesion substrates in Invasive glioblastoma cells
McCarty J, Morales J, Guerrero P , Chen Z

8:06 - 8:10pm
CBMT-35
MicroRNA analysis of the invasive margin of glioblastoma reveals druggable therapeutic targets in lipid metabolism pathways
Alfardus H, de los Angeles M, Cebrero E, Rawlinson J, Lourdusamy A, Grundy R, McIntyre A , Smith S

8:10 - 8:14pm
CBMT-40
A Sox2-expressing pericyte precursor constitutes a new and efficient target for anti-angiogenesis in gliomas
Kälin R, Li Y, Linzhi C, Synowitz M, Tonn J-C, Enard W, Montanez E , Glass R

8:14 - 8:18pm
CBMT-10
Glutamine deprivation alters one-carbon metabolism to maintain glioma cell survival
Tanaka K, Sasayama T, Uno T, Maeyama M, Fujita Y, Irino Y, Kohmura E

8:18 - 8:22pm
CBMT-41
Glioblastoma clones derived from tumor core and edge display spatial metabolic heterogeneity
Yamashita D, Zhang S, Yu H, Sadahiro H, Yamaguchi S, Komarova S, Bastola S, Ghosh S, Ganguly A, Nabors B, Markert J, Yang Z, Zamboni N , Nakano I

8:22 -8:26pm
CBMT-39
Metabolic profiling of human gliomas assessed with NMR
Yang S-H, Eun Lee J

8:26 - 8:30pm
CBMT-23
Modulation of hypersynaptic microenvironment differentially promotes gliomagenesis across PIK3CA variants
Yu K, Hatcher A, Woo J, John Lin C-C, Kong K, Mohila C, Lozzi B, Creighton C, Noebels J, Deneen B

GROUP 2: Drug Resistance/Drug Discovery/Experimental Therapeutics/Tumor Microenvironment

7:30 - 7:34pm
DRES-03
EGFR-targeted therapy-induced resistance mechanism in malignant gliomas
Hwang I, Wu L, CaoD, Hu B, Yao J, Yu Y, Wang Q, Zheng H, Paik J

7:34 - 7:38pm
DDIS-24
Proteasome inhibition is a targeted therapy for PTEN-deficient glioblastomas
Benitez J, Finlay D, Ma J, Koga T, Vuori K , Furnari F

7:38 - 7:42pm
DDIS-19
CT-179: an inhibitor of the OLIG2 transcription factor with potent anti-tumour activity in brain cancer
Johns T, Greenall S, Chen S, Stewart R, Alton G, Kesari S

7:42 - 7:46pm
DDIS-04
Compounds identified by structure based virtual screening decrease GBM BTIC growth and glucose uptake
Libby C, Zhang S, Gc S, Benavides G, Scott S, Pathak V, Moukha-Chafiq O, Li Y, Redmann M, Tran A, Otamias A, Darley-Usmar V, Napierala M, Zhang J, Augelli-Szafran C, Zhang W, Hjelmeland A

7:46 - 7:50pm
DDIS-25
Targeting glioblastoma heterogeneity with miR-34a
Khan M, Ruggieri R, Tran N, Sarkaria J, MacDiarmid J, Brahmbhatt H, Boockvar J, Symons M

7:50 - 7:54pm
EXTH-52
Use of a phospholipid binding MARCKS mimetic for targeted killing of glioblastoma cells
Eustace N, Warram J, Widden H, Anderson J, Hicks P, Troelsgaard R, Placzek W, Hjelmeland A, Gillespie Y, Willey C

7:54 - 7:58pm
EXTH-80
Impaired PARP1 DNA repair defines chemo-sensitivity in IDH1-mutated cell
Lu Y, Liu Y, Gilbert M, Wu J, Yang C

7:58 - 8:02pm
EXTH-53
In vivo quantitative analysis of oncolytic virus-tumor kinetics
Ito H, Nakashima H, McLaughlin E, Chiocca EA

8:02 - 8:06pm
EXTH-17
Selective, non-competitive DRD2/3 antagonism by imipridone ONC206 is effective in tumors with dopamine receptor dysregulation
Prabhu VV, Madhukar N, Tarapore R, Garnett M, McDermott U, Benes C, Anantharaman L, Charter N, Deacon S, VanEngelenburg A, Rucker J, Doranz B, Rusert J, Wechsler-Reya R, Elemento O, Stogniew M, Oster W, DeMorrow S, Free RB, Sibley D, Allen J

8:06 - 8:10pm
EXTH-64
Imipridones cause metabolic reprogramming and elicit unique vulnerabilities in preclinical model systems of glioblastoma
Ishida C, Zhang Y, Westhoff M-A, Karpel-Massler G, Prabhu VV, Allen J, Siegelin M

8:10 - 8:14pm
TMIC-14
Auto-/paracrine signaling of PI3K/AKT/YKL-40 in mesenchymal glioblastoma progression
Chen A, Sharma V, Wang Q, Agnihotri S, Kohan-bash G, Wang YA, Pollack I, DePinho R, Hu B

8:14 - 8:18pm
TMIC-24
Tumor-suppressive and anti-inflammatory microRNA-93 is decreased in glioblastoma patients
Hübner M, Effinger D, Hinske C, Möllhoff N, Kreth F-W, Kreth S

8:18 - 8:22pm
TMIC-15
OMX is a tumor microenvironment modifier that restores anti-tumor immunity and improves anti-tumor efficacy by reducing tumor hypoxia in intracranial glioblastoma mouse model
Le Moan N, Davis T, Leung P, Ng S, Winger J, Cary S, Butowski N, Krtolica A

8:22 - 8:26pm
TMIC-25
Dissecting the role of host genetics in glioma evolution using genetically-engineered mouse models and the Collaborative Cross
Skinner K, Ferris M, Bash R, Shelton A, Smithberger E, Angus S, Golitz B, Sciacky N, Simon J, Stein J, Matsushima G, Ostrom Q, Stetson L, Barnholtz-Sloan J, Dhruv H, Berens M, Pardo Manuel de Villena F, Miller R

8:26 - 8:30pm
TMIC-04
Nonfunctional pituitary adenomas demonstrate two subtypes based on macro-phage polarization status
Yagnik G, Rutkowski M, Aghi M

GROUP 3: Imaging/Pediatric Tumor Models/Pediatric Clinical Trials/Molecular Pathology/Health Outcomes

7:30 - 7:34pm
NIMG-22
High-grade glioma outcomes in the Phase 1 BXQ-350 trial of cancer-selective SapC-DOPS nanovesicles
Puduvalli V, Villano J, Wise-Draper T, Morris J, Rixe O, Johnson A, Giglio P, Otero J

7:34 - 7:38pm
NIMG-06
Kinetics-based response metric discriminate improved outcomes for patients receiving bevacizumab-based therapies
Singleton K, Kirby D, Johnston S, Rickertsen C, De Leon G, Whitmire S, Clark-SwansonK, Morris Y, Bendok B, Mrugala M, Porter A, Swanson K

7:38 - 7:42pm
PDTM-24
Pilot study of circulating tumor cells in pediatric high grade brain tumors
Batth I, Zaky W, Chen S-H, Huang W, Albert A, Daw N, Gill J, Khatua S, Li S

7:42 - 7:46pm
PDTM-37
The role of exosome miRNA during the progression of medulloblastoma
Chang Q, Zhu L-Y, Wu X-U, Zhang J

7:46 - 7:50pm
PDTM-05
Radiation DNA damage repair inhibition by GSK-J4 induced chromatin compaction in DIPG
Louis N, Zou L, Unruh D, Ozark PA, Piunti A, Gorbunova V, He X, Katagi H, Gryzlo D, Zhang A, Saratsis AM, Laurie K, Lulla R, Fangusaro J, Horbinski C, Goldman S, James CD, Shilatifard A, Hashizume R

7:50 - 7:54pm
PDTM-29
CSF H3F3A K27M circulating tumor DNA copy number quantifies tumor growth and treatment response
Stallard S, Savelieff MG, Mullan B, Miklja Z, Bruzek A, Garcia T, Wierzbicki K, Singer B, Hashizume R, Montero Carcaboso A, McMurray KQ, Heth J, Muraszko K, Robertson PL, Mody R, Venneti S, Garton H, Koschmann C

7:54 - 7:58pm
PDTM-46
Poliovirus receptor (CD155) expression in pediatric brain tumors mediates oncolysis of medulloblastoma and pleomorphic xanthoastrocytoma
Thompson E, Brown M, Dobrikova E, Ramaswamy V, Taylor M, McLendon R, Chandramohan V, Bigner D, Gromeier M

7:58 - 8:02pm
PDTM-47
Real time in vivo monitoring of 18F-labeled panobinostat pharmacokinetics for treatment of diffuse intrinsic pontine glioma (DIPG) via convection enhanced delivery (CED).
Tosi U, Kommidi H, Bhanu Maachani U, Marnell C, Guo H, Schweitzer M, Ting R, Souweidane M

8:02 - 8:06pm
PATH-42
EGFR-amplified IDH-wildtype glioblastomas seldom transform into a hypermutated phenotype
Draaisma K, Chatzipli A, Taphoorn M, Kerkhof M, Weyerbrock A, Sanson M, Hoeben A, Lukacova S, Lombardi G, Hanse M, Fleisscheuer R, Leenstra S, Watts C, Gorlia T, Golfinopoulos V, Kros J, McDermott U, van den Bent M, Robe P, French P

8:06 - 8:10am
PATH-25
Survival stratification of IDH mutant glioma using methylation and mRNA analysis of Hox genes
Mamatjan Y, Bunda S, Moraes F, Suppiah S, Heir P, Maimaitiming A, Zadeh G, Aldape K

8:10 - 8:14pm
PATH-31
Giant cell glioblastomas: analysis of mismatch-repair (MMR) proteins expression, Polymerase ε (POLE) mutations and their role in tumor immunoresponse
Pollo B, Patanè M, Calatozzolo C, Paterra R, Farinotti M, Spinello S, DiMeco F, Silvani A, Finocchiaro G

8:14 - 8:18pm
PATH-16
Molecular pathology and clinical characteristics of MMR deficiency (MMRd) in diffuse gliomas
Touat M, Santagata S, Guillerm E, Bi W, Beuvon F, Mokhtari K, Giry M, Guegan J, Block S, Carpentier A, Delattre J-V, Sanson M, Duval A, Beroukhim R, Bandopadhayay P, Reardon D, Wen P, Idbaih A, Coulet F, Ligon K, Bielle F

8:18 - 8:22pm
NCOG-09
The level of reporting of neurocognitive outcomes in randomized controlled trials of brain tumor patients: a systematic review
Habets E, Taphoorn M, Klein M, Vissers T, Dirven L

8:22 - 8:26pm
PDCT-06
Phase 1 study of ONC201 in pediatric patients with H3 K27M-mutant high grade glioma or newly diagnosed DIPG
Gardner S, Suarez F, Stafford JM, Tarapore RS, Merdinger K, Oster W, Allen J, Chi AS, Fuller-Becker H, Yaffe A, Allen JC

8:26 - 8:30pm
PDCT-08
Tracking the T cell repertoire after adoptive cell therapy in pediatric patients with recurrent medulloblastoma
Yegorov O, Yegorova Y, Dechkovskaia A, Cleaver B, Clement N, Slayton W, Gururangan S, Mitchell D

8:30 - 9:30pm
E-talk presenters move to their designated posters in the general poster session for further discussion

6:00 - 7:00am MORNING YOGA

SUNRISE SESSIONS 7:00 - 8:30am

EANO/SNO: Status Update: What failed, what remains, what is new?
Martin van den Bent, Patrick Wen (Chairs)

- WHO classification interpreted by cIMPACT NOW, *Kenneth Aldape*
- IDH biology, *Sevin Turcan*
- Tackling heterogeneity, *Monika Hegi*
- Immunotherapy 2018, *Amy Heimberger*
- Precision concepts for daily practice and trials, *Wolfgang Wick*

Diffuse Intrinsic Pontine Glioma - New Insights and Emerging Therapeutic Strategies
Michelle Monje-Deisseroth (Chair)

- Targeting microenvironmental dependencies of DIPG, *Michelle Monje-Deisseroth*
- Harnessing exquisite vulnerabilities in H3K27M mutagenesis, *Nada Jabado*
- Developmental programs in H3K27M gliomas dissected by single cell RNAseq, *Mariella Filbin*
- Targeting histone-3 variant H3.3K27M mutation for immunotherapy of diffuse midline glioma, *Hideho Okada*

Brain Metastases Biology
Frank Winkler (Chair)

- Brain metastases biology: from seed to soil, *Frank Winkler*
- Genetic evolution in brain metastases, *Priscilla Brastianos*
- Microenvironmental dynamics in leptomeningeal metastasis, *Adrienne Boire*
- Immunotherapy for brain metastases, *Mihaela Lorger*

Neurotoxicity of CAR T Therapy (AAN/SNO)
Jorg Dietrich (Chair)

- Clinical patterns of neurotoxicity associated with immunotherapies, *Jorg Dietrich*
- Mechanisms of CAR-T cell mediated toxicities, *Verena Staedtke*
- EEG findings after CAR-T cell therapy, *Aline Herlopian*
- Clinical spectrum of CAR-T cell associated neurotoxicity, *Bianca D. Santomasso*

Targeted Therapies in Neurofibromatosis
Scott Plotkin (Chair)

- Clinical trials of MEK inhibitors for pediatric and adult NF1 patients with progressive plexiform neurofibroma, *Jaishri Blakeley*
- Activity and safety of cabozantinib for treatment of progressive plexiform neurofibroma in NF1 patients, *Chie-Schin Shih*
- Recent data from trials of targeted therapies to treat NF1-related low grade gliomas, *Nathan Robison*
- Activity and safety of bevacizumab for treatment of progressive vestibular in NF2 patients, *Scott Plotkin*

Molecular Life History of Glioma
Roel Verhaak (Chair)

- Molecular evolution of diffuse gliomas and the Glioma Longitudinal Analysis consortium, *Roel Verhaak*
- Single-cell strategies for defining clonal hierarchies in pediatric and adult brain tumors, *Peter Dirks*
- The nursery of childhood gliomas, *Stefan Pfister*
- Title TBD, *Jinghui Zhang*

Patient Centered Outcomes and Net Clinical Benefit in Brain Tumor Clinical Trials
Jeffrey Wefel (Chair)

- ESMO magnitude of Clinical Benefit Scale - is it applicable for glioma clinical trials? *Leor Zach*
- How does the 21st Century Cures Act influence the use of patient centered outcomes in the drug approval process? *Joohee Sul*
- Has adding PROs to clinical trials in patients with brain tumor had an impact on patient care? *Terri Armstrong*
- Has adding tests of NCF to clinical trials in patients with brain tumor had an impact on patient care? *Jeffrey Wefel*

Radiation Therapy of GBM in the Era of Personalized Medicine
Daphne Haas-Kogan (Chair)

- Title TBD, *Ranjit Bindra*
- Radiation therapy of GBM in the era of personalized medicine, *Fen Xia*
- Exploiting nuclear envelope fragility as a radiosensitizing strategy in gliomas, *Alexander Spektor*
- Overcoming radiation resistance in patients with glioblastoma: is more better? *Erik Sulman*

MAIN MEETING PROGRAM

9:00 - 9:05am Welcome/In Memoriam
Daphne Haas-Kogan

9:05 - 9:35am **Keynote Presentation:** Considerations for clinical development in glioma
Timothy Cloughesy

9:35 - 10:05am **Keynote Presentation:** Challenges for immunotherapy against brain tumors
John H Sampson

10:05 - 10:20am BREAK

10:20 - 10:50am **Abhijit Guha Award Introduction**

Abhijit Guha Lecture Award Recipient: *Linda Liau*

10:50 - 11:00am **Lifetime Achievement Award Introduction**

Lifetime Achievement Award Recipient: *Gregory Cairncross*

11:00 - 11:10am **Neuro-Oncology Community Service Award Introduction:** *Patrick Wen*

Neuro-Oncology Community Service Award Recipient: *David Arons*

11:10-11:20am **Jan Esenwein Public Service Award Introduction:** *Susan Chang*

Jan Esenwein Public Service Award Recipient: *J. Charles Haynes*

11:20 - 11:30am
IMMU-40
Single-cell level comparison of histopathology and single-cell RNA-seq databases between IDH-MUT and –WT glioblastomas reveals distinct innate immune microenvironments that can be exploited for therapeutic gain
Poon CC, Liu K, Gordon P, Yang R, Sarkar S, Mirzaei R, Sheikh T, Huges M, Yong W, Kelly J
ADULT BASIC RESEARCH AWARD

11:30 - 11:40am
PDTM-41
Super elongation complex-mediated transcriptional dependency in H3K27M-mutant diffuse midline gliomas
Dahl N, Venkataraman S, Balakrishnan I, Madhavan K, Fosmire S, Wang D, Vibhakar R
PEDIATRIC BASIC RESEARCH AWARD

11:40 - 11:50am
ATIM-27
Intratumoral administration of an Oncolytic Polio/Rhinovirus Recombinant (PVSRIPO) in malignant glioma patients: Assessment of mutational response correlates
Ashley DM, Desjardins A, Gromeier M, Muscat A, Herndon II JE, Friedman A, Friedman HS, McSherry F, Randazzo DM, Miller ES, Boulton S, Lipp ES, Bigner DD, Sampson JH

11:50 - 12:00pm
MNGI-05
Development and validation of a DNA methylome-based predictor of meningioma recurrence and meningioma recurrence score
Nassiri F, Mamatjan Y, Suppiah S, Badhiwala J, Mansouri S, Karimi S, Harter P, Baumgarten P, Weller M, Preusser M, Herold-Mende C, Sahm F, von Deimling A, Zadeh G, Aldape K

12:15 - 1:15pm LUNCH

LUNCHTIME TUTORIALS AND EDUCATIONAL SESSIONS

Not sponsored by The University of Texas MD Anderson Cancer Center

Computational Neuro-Oncology
Spyridon Bakas (Chair)

- The role of computational biology in the current WHO classification of CNS tumors, *Roel Verhaak*
- Computational diagnostics of CNS tumors in the era of radiomics and radiogenomics, *Christos Davatzikos*
- Computational modeling of tumor growth, invasion and proliferation, *Kristin Swanson*

International Outreach Luncheon
Jason Huse, Mustafa Khasraw (Chairs)

12:15 - 1:15pm LUNCH, continued

Surgical Trials: From Design to Regulatory Approval
Linda Liau (Chair)

- Cellular immunotherapy approaches for brain tumors, *Linda Liau*
- Oncolytic virotherapy for brain tumors, *James Markert*
- Drug delivery approaches for brain tumors, *Russell Lonser*

Current State of Glioma Epidemiology and Moving the Science into the Future
Melissa Bondy (Chair)

- Overview of the current state of epidemiology research, *Jill Barnholtz-Sloan*
- Future directions of epidemiology - where is the field moving, *Melissa Bondy*
- Novel approaches to patient recruitment and clinical intervention using social media and smart phone technology, *Elizabeth Claus*

Novel Statistical Designs and Methods for Neuro-Oncology Clinical Trials
Ying Yuan (Chair)

- Designs for small patient populations, *Karla Ballman*
- Biomarker-based and basket trials in neuro-oncology, *Annette Molinaro*
- Novel designs for phase I neuro-oncology trials, *Ying Yuan*

Meet the Editors
Patrick Wen (Chair)

- Introduction, *Patrick Wen*
- *Neuro-Oncology Practice* update, *Susan Chang*
- *Neuro-Oncology* update, *Kenneth Aldape*

Neuro-Oncology Trainee Forum

- From fellowship to leadership – navigating the early years in neuro-oncology

Industry Supported Symposia
Not sponsored by The University of Texas MD Anderson Cancer Center

- Transforming glioblastoma management - evaluating newer options & emerging strategies in the precision medicine & person-centered care era

1:30 - 3:00pm CONCURRENT SESSION 5A

Metabolomics/Cell Biology/Cell Signaling

1:30 - 1:40pm
CBMT-37
FDA-approved HDAC inhibitors antagonize the Warburg effect and cause unique metabolic vulnerabilities
Zhang Y, Ishida C, Karpel-Massler G, Siegelin M

1:40 - 1:50pm
CBMT-15
Metabolic and transcriptional profiles of GBM invasion: Comparison of patients and paired patient derived xenografts using ^{1}H Magnetic Resonance Spectroscopy and Imaging (7T and 14T) and RNA-sequencing
Hegi M, Cudalbu C, Bady P, Lai M, Xin L, Gusyatiner O, Hamou M-F, Lepore M, Daniel R, Gruetter R, Hottinger A

1:50 - 2:00pm
CBMT-22
The PI3K/mTOR pathway contributes to sex differences in glioblastoma
Sponagel J, Yu K, Deneen B, Ippolito J, Rubin J

2:00 - 2:10pm
CBMT-04
Inducing mitochondrial oxidative stress and targeting cellular stress response by inhibition of NAMPT, the rate limiting enzyme in the NAD+ salvage pathway in glioma
Sharma P, Senepides W, Baloglu E, Puduvalli V

2:10 - 2:15pm **DISCUSSION**

2:15 - 2:20pm **Q & A**

2:20 - 2:25pm
CSIG-40
Heterozygous IDH1$^{R132H/WT}$ created by "single base editing" inhibits human astroglial cell growth and promotes cell migration
Wei S, Wang J, Oyinade O, Ma D, Wang S, Qian, J, Xia S

2:25 - 2:30pm
CSIG-37
FOXR2 stabilizes MYC and activates FAK/SRC signaling in a dual mechanism to promote transformation in neural progenitor cells
Beckmann P, Larson J, Larsson A, Ostergaard J, Largaespada D

2:30 - 2:35pm
CBMT-32
Imaging a hallmark of cancer: TERT expression leads to MRS-detectable metabolic reprogramming
Viswanath P, Pieper R, Ronen S

2:35 - 2:40pm **Q & A**

2:40 - 2:45pm
CBMT-18
Integrative cross platform analyses identify enhanced heterotrophy as a metabolic hallmark in glioblastoma
Prabhu A, Kant S, Kesarwani P, Ahmed K, Forsyth P, Nakano I, Chinnaiyan P

2:45 - 2:50pm
CBMT-06
Lower grade isocitrate dehydrogenase (IDH) mutant gliomas metabolically mimicking glioblastoma (GBM) express higher R:S 2-hydroxyglutarate ratios relative to non-GBM-mimicking IDH mutant gliomas
Nejad R, Nassiri F, Mamatjan Y, Sim H-W, Chen E, Agnihotri S, Aldape K, Zadeh G

2:50 - 2:55pm
CSIG-34
PI3 kinase pathway activation promotes malignant progression in oligodendroglial tumors
Tateishi K, Nakamura T, Fink A, Lelic N, Matsushita Y, Koerner M, Murata H Ichimura K, Batchelor T, Yamamoto T, Chi A, Iafrate J, Wakimoto H, Cahill D

2:55 - 3:00pm **Q & A**

3:00 - 3:15pm BREAK

1:30 - 3:00pm **CONCURRENT SESSION 5B**

Surgery/Radiation/Radiobiology and DNA Repair

1:30 - 1:40pm
SURG-02
A novel risk model to define the relative benefit of maximal extent of resection within prognostic groups in newly diagnosed glioblastoma
Molinaro A, Hervey-Jumper S, Han SJ, Morshed R, Lafontaine M, Ebrahimi N, Young J, Phillips JJ, Shai A, Warrier G, Rice T, Lin Y, Crane J, Nelson S, Wrensch M, Wiencke J, Perry A, Oberheim Bush NA, Taylor J, Butowski N, Prados M, Clarke J, Chang S, Chang E, Aghi M, Theodosopoulos P, McDermott M, Berger M

1:40 - 1:50pm
RTHP-06
Randomized prospective trial of stereotactic radiosurgery versus chemotherapy for recurrent malignant glioma after second-line chemotherapy
Modh A, Bergman D, Schultz L, Snyder J, Mikkelsen T, Ryu S, M. Siddiqui S, Walbert T

1:50 - 2:00pm
RDNA-18
TP5, a peptide inhibitor of aberrant and hyperactive CDK5/p25: a novel therapeutic approach against glioblastoma
Tabouret E, Wang H, Amin N, Redon C, Jung J, Cui J, Song Q, Liu L, Appay R, Vyas A, Park D, Gilbert M, Pant H, Zhuang Z

2:00 - 2:10pm
RDNA-05
Synthetic sensitization of MGMT-deficient tumor cells to temozolomide using ATR inhibitors
Jackson C, Noorbakhsh S, Sundaram R, Kalathil A, Bindra R

2:10 - 2:15pm **DISCUSSION**

2:15 - 2:20pm **Q & A**

2:20 - 2:25pm
RTHP-08
Re-evaluating the sequencing of radiotherapy and chemotherapy in pediatric medulloblastoma
Hess C, Yeap B, Sahasakmontri J, Lawell M, Weyman E, Gallotto S, Bajaj B, Sieger K, MacDonald S, Marcus K, Kieran M, Huang M, Tarbell N, Ebb D, Yock T

2:25 - 2:30pm
RTHP-02
Impact of 18F-DOPA PET on radiotherapy target volumes for newly diagnosed MGMT unmethylated glioblastoma patients; preliminary results of a phase II dose-escalation trial
Brinkmann D, Pafundi D, Hunt C, Lowe V, Yan E, Brown PD, Zakhary M, Zhang Y, Seaberg M, Wan Chan Tseung H, Sarkaria J, Laack N

2:30 - 2:35pm
RTHP-05
Non-operative treatment of non-germinomatous germ cell tumors of the pineal region
Lee J, Cai LB, Lai M

2:35 - 2:40pm **Q & A**

2:40 - 2:45pm
RTHP-32
Reconsidering the prognostic impact of age, grade, and extent of resection on clinical outcomes of 1p/19q codeleted oligodendrogliomas after radiation therapy: a multi-institutional report
Lin A, Kane L, Molitoris J, Smith D, Badiyan S, Wang T, Kruser T, Huang J

2:45 - 2:50pm
SURG-13
Third harmonic generation (THG) imaging: A novel tool for intra-operative histologic analysis of fresh human glioma tissue
Wesseling P, Zhang A, de Munck J, Verburg N, de Witt Hamer P, Groot M

2:50 - 2:55pm
RTHP-04
Tumor recurrence or radiation necrosis following chemoradiation in patients with glioblastoma: Does pathology predict outcomes?
Patrizz A, Choi P, Yan Y, Zorofchian S, Ballister L, Esquenazi Y

2:55 - 3:00pm
LTBK-04
Phase 1 trial of Wee1 kinase inhibitor Adavosertib (AZD1775) combined with radiation therapy for children with newly diagnosed diffuse intrinsic pontine glioma: A report from the Children's Oncology Group Phase 1 Pilot Consortium (ADVL1217)
Mueller S, Yang X, Pal S, Ermoian R, Gajjar A, Liu X, Prem K, Minard CG, Mugundu G, Reid JM, Haas-Kogan D, Fox E, Weigel BJ

3:00 - 3:05pm **Q & A**

3:05 - 3:15pm BREAK

1:30 - 3:00pm **CONCURRENT SESSION 5C**

Neuro-Imaging

1:30 - 1:40pm
NIMG-33
Multicenter, prospective validation of automated intraoperative neuropathology using stimulated Raman histology and convolutional neural networks
Hollon T, Pandian B, Heth J, Sagher O, Maher C, Sullivan S, Garton H, Thompson G, Save A, Marie T, Boyett D, Petridis P, McKhann G, Muraszko K, Bruce J, Camelo-Piragua S, Canoll P, Orringer D

1:40 - 1:50pm
NIMG-75
WHO 2016 grade II glioma molecular subtypes have a distinct spatial distribution pattern
Wijnenga M, van der Voort S, French P, Klein S, Dubbink H, Dinjens W, Atmodimedjo P, Schouten J, Kro J, Dirven C, Vincent A, Smits M, van den Bent M

1:50 - 2:00pm
NIMG-40
Non-invasive in vivo signature of IDH1 mutational status in high grade glioma, from clinically-acquired multi-parametric magnetic resonance imaging, using multivariate machine learning
Bakas S, Rathore S, Nasrallah M, Akbari H, Binder Z, Min Ha S, Mamourian E, Morrissette J, O'Rourke D, Davatzikos C

2:00 - 2:05pm **DISCUSSION**

2:05 - 2:10pm **Q & A**

2:10 - 2:15pm
NIMG-79
Early treatment response assessment using O-(2-18F-fluoroethyl)-L-tyrosine (FET) PET compared to MRI in malignant gliomas treated with adjuvant temozolomide chemotherapy
Ceccon G, Lohmann P, Tscherpel C, Dunkl V, Rapp M, Stoffels G, Herrlinger U, Rosen J, Wollring M, Shah NJ, Fink GR, Langen K-J, Galldiks N

2:15 - 2:20pm
NIMG-73
Radiomics of glioblastoma for predicting MGMT promotor methylation status and prognosis
Sasaki T, Kinoshita M, Fujita K, Arita H, Uda T, Tsuyuguchi H, Hayashi N, Fukai J Uematsu Y, Mori K, Okita Y, Nonaka M, Moriuchi S, Hashizume R, Nakao N, Kanemura Y

2:20 - 2:25pm
NIMG-45
Multivariate pattern analysis of de novo glioblastoma patients offers in vivo evaluation of O^6-methylguanine-DNA-methyltransferase (MGMT) promoter methylation status, compensating for insufficient specimen and assay failures
Rathore S, Bakas S, Nasrallah M, Akbari H, Bagley S, Ha SM, Mamourian E, Watt C, Binder Z, O'Rourke D, Davatzikos C

2:25 - 2:30pm
NIMG-26
Radiomic features of Glioblastoma on pre-treatment Gd-T1w MRI are predictive of response to chemo-radiation therapy and associated with AKT and apoptosis pathways
Beig N, Prasanna P, Verma R, Hill V, Varadan V, Madabhushi A, Tiwari P

2:30 - 2:35pm **Q & A**

2:35 - 2:40pm
NIMG-23
Deep learning for accurate, rapid, fully automatic measurement of brain tumor-associated abnormality seen on MRI
Mitchell J, Kamnitsas K, Singleton K, Whitmire S, Clark-Swanson K, Rickertsen C, Glocker B, Hu L, Swanson K

2:40 - 2:45pm
NIMG-68
MRI changes in newly diagnosed glioblastoma patients treated as part of a Phase II trial with bavituximab, radiation, and temozolomide
Ly I, Cardona J, Beers A, Chang K, Brown J, Reardon D, Arrillaga-Romany I, Dietrich J, Forst D, Lee E, Jordan J, Nayak L, Wen P, Batchelor T, Kalpathy-Cramer J, Gerstner E

2:45 - 2:50pm
NIMG-27
Radiogenomic analysis of Glioblastoma reveals textural features from MRI that correlate with genomic immune score and are also predictive of chemo-radiation treatment response
Beig N, Braman N, Prasanna P, Varadan V, Madabhushi A, Tiwari P

2:50 - 2:55pm
NIMG-30
Preoperative predictors of malignancy in non-enhancing glioma in the era of molecular classification
Dao Trong P, Jesser J, von Deimling A, Kilian S, Herold-Mende C, Unterberg A, Jungk C

2:55-3:00pm **Q & A**

3:00-3:15pm BREAK

3:15-5:00pm **CONCURRENT SESSION 6A**

Pediatrics: Clinical and Basic Science

3:15 - 3:25pm
PDCT-09
Phase 1/2 study of DSP-7888 in pediatric patients with malignant glioma
Fujisaki H, Hashii Y, Terashima K, Goto H, Horibe K, Sugiyama K, Watanabe A, Sugimoto S, Yanagisawa T, Kikuta A, Kawamoto H, Hashimoto N, Hara J

3:25 - 3:35pm
PDTM-27
Epigenetic loss of BAI1 expression in cerebellar granule neuron precursors inactivates the p53 tumor suppressor and facilitates medulloblastoma formation in the cerebellum.
Zhu D, Osuka S, Zhang Z, Reichert Z, Kanemura Y, Nishikawa R, Nelson WG, Olson JJ, Van Meir EG

3:35 - 3:45pm
PDTM-33
ATRX loss confers enhanced sensitivity to combined PARP inhibition and radiotherapy in paediatric glioblastoma models
Fazal Salom J, Bjerke L, Carvalho D, Boult J, Mackay A, Pemberton H, Molinari V, Clarke M, Vinci M, Carceller F, Marshall L, Moore A, Montero Carcaboso A, Lord C, Robinson S, Hargrave D, Jones C

3:45 - 3:55pm
PDTM-34
Targeting H3.3G34R/V re-wiring of the epigenome in pediatric glioblastoma of children and young adults
Bjerke L, Mackay A, Carvalho D, Pemberton H, Molinari V, Vinci M, Carceller F, Marshall L, Moore A, Montero Carcaboso A, Lord C, Hargrave D, Jones C

3:55 - 4:00pm **DISCUSSION**

4:00 - 4:05pm **Q & A**

4:05 - 4:10pm
PDTM-26
Dual therapy with PI3K inhibitor ZSTK-474 and MEK inhibitor trametinib via convection-enhanced delivery in a genetically-engineered mouse model of diffuse intrinsic pontine glioma
Chang R, Tosi U, Bhanu Maachani U, Voronina I, Schweitzer M, Wu L, Souweidane M

4:10 - 4:15pm
PDTM-21
Matching of single cell transcriptomics from cerebellar development identifies putative subgroup specific cells of origin for medulloblastoma.
El-Hamamy I, Vladoiu M, Donovan L, Cavalli F, Ramaswamy V, Farooq H, Lopez B, Kleinman C, Chan J, Singh S, Jabado N, Stein L, Taylor M

4:15 - 4:20pm
PDTM-13
Overexpression of MYC alone is sufficient to initiate group 3 medulloblastoma
Tao R, Murad N, Xu Z, Zhang P, Okonechnikov K, Kool M, Rivero-Hinojosa S, Laz-arski C, Zheng P, Eberhart C, Rood B, Packer R, Pei Y

4:20 - 4:25pm
PDTM-31
Drug screening linked to molecular profiling identifies novel dependencies in patient-derived primary cultures of pediatric high grade glioma and DIPG
Mackay A, Carvalho D, Molinari V, Pemberton H, Temelso S, Burford A, Clarke M, Fofana M, Boult J, Izquierdo E, Taylor K, Bjerke L, Fazal Salom J, Kessler K, Rogers R, Marshall L, Carceller F, Pears J, Moore A, Miele E, Carai A, Mastronuzzi A, Robinson S, Lord C, Olaciregui N, Mora J, Montero Carcaboso A, Hargrave D, Vinci M, Jones C

4:25 - 4:30pm
PDTM-12
DLX2 transcriptional regulation of central nervous system cell fate relevance to pediatric diffuse midline gliomas with Histone 3 mutations
Nevin M, Song X, Becher O, Underhill DA, Godbout R, Eisenstat D

4:30 - 4:35pm **Q & A**

4:35 - 4:40pm
PDTM-06
ALK amplification and rearrangements are recurrent targetable events in glioblastoma
Blandin A-F, Graham M, Ramkissoon S, Ramkissoon L,Pelton K, Pages M, Jones R, Becker S, Watkinson F, Schoolcraft K, Haemels V, Goumnerova L, Chi S, Wright K, Kieran M, Tauziede-espariat A, Varlet P, Alexandrescu S, Reardon D, Carcamo B, Charest A, De Smet F, Beroukhim R, Dubuc A, Kittler R, Wen P, Alexander B, Bandopadhayay P, Bachoo R, Ligon K

4:40 - 4:45pm
PDTM-28
The contribution of PAX genes as novel tumor suppressors in group 3 medulloblastoma
Zagozewski J, Morrison L, Stromecki M, Palidwor G, Ramaswamy V, Werbowetski-Ogilvie T

4:45 - 4:50pm
PDTM-18
Activation of tumor-reactive T cells against brain stem glioma using hematopoietic stem cells
Flores C, Woodworth D, Moorley C, Moore G, Mitchell D

4:50 - 4:55pm
PDTM-11
A novel ex vivo model for human medulloblastoma: a new personalized medicine tool
Felker JT, Dey A, Malhotra A, Liu J, Schniederjan M, Kenney A, MacDonald TJ

4:55 - 5:00pm **Q & A**

3:15 - 5:00pm CONCURRENT SESSION 6B

Meningioma

3:20 - 3:30pm
Invited Speaker: *Patrick Wen*
Opportunities in Clinical Trials for Meningiomas

3:30 - 3:40pm
Invited Speaker: *Kenneth Aldape*
Precision Diagnostics Guiding Meningioma Care

3:40 - 3:50pm
PDTM-38
Pediatric meningiomas are characterized by distinct methylation profiles different from adult meningiomas
Mawrin C, Kirches E, Sahm F, Bluecher C, Boekhoff S, Schüller U, Schittenhelm J, Snuderl M, Karajannis M, Perry A, Pietsch T, Mueller H, Capper Beck K, Schlesner M, Kropf S, Brastianos P, Korshunov A, Pfister S

3:50 - 3:55pm
MNGI-36
Brain invasion in meningiomas previously classified as WHO grade I has limited impact on outcome
Biczok A, Suchorska B, Egensperger R, Tonn J-C, Schichor C

3:55 - 4:00pm
MNGI-28
Correlation of methylation class and genetic alterations with progression free survival in meningioma
Berghoff A, Ricken G, Rajky U, Marosi C, Hainfellner J, von Deimling A, Sahm F, Preusser M

4:00 - 4:05pm
MNGI-12
Expression of Programmed cell death ligand-1 (PD-L1) in meningioma: Clinical utility for prediction of tumor recurrence and association with hypoxic response and NFKB2 activation
Karimi S, Suppiah S, Mansouri S, Nassiri F, Mamatjan Y, Liu J, Aldape K, Zadeh G

4:05 - 4:10pm **Q & A**

4:10 - 4:15pm
MNGI-17
The ROAM / EORTC 1308 information study results: how qualitative research methods can optimize patient recruitment for meningioma trials
Jenkinson M, Sherratt F, Haylock B, Weber D, Young B

4:15 - 4:20pm
MNGI-18
Risk factors for pre- and postoperative seizures in meningioma patients identified by logistic regression analysis
Goertz L, Hamisch C, Erdner N, Muders H, von Spreckelsen N, Stavrinou P, Gold-brunner R, Krischek B

4:20 - 4:25pm
MNGI-10
Predictors of early progression of surgically treated atypical meningiomas
Budohoski K, Clerkin J, Millward C, O'Halloran P, Waqar M, Looby S, Young A, Guilfoyle M, Fitzroll D, Devadass A, Allinson K, Farrell M, Javadpour M, Jenkinson M, Santarius T, Kirollos R

4:25 - 4:30pm
MNGI-14
Loss of histone H3K27me3 identifies a subset of meningiomas with increased risk of recurrence
Katz LM, Hielscher T, Liechty B, Silverman J, Zagzag D, Sen R, Wu P, Golfinos J, Reuss D, Neidert M, Wirsching H-G, Baumgarten P, Herold-Mende C, Wick W, Harter P, Weller M, von Deimling A, Snuderl M, Sen C, Sahm F

4:30 - 4:35pm **Q & A**

4:35 - 4:40pm
EXTH-63
Efficient ADCC-mediated killing of malignant meningioma cells using avelumab and an engineered high avidity natural killer cell line, haNK
Giles A, Hao S, Fuji R, Padget M, Song H, Zhang W, Cao X, Jung J, Liu Y, Jensen R, Lee J, Soon Shiong P, Gillespie D, Schlom J, Gilbert M, Yang C, Hodge J, Park D

4:40 - 4:45pm
MNGI-37
DMD genomic deletions characterize a subset of progressive/higher-grade meningiomas with poor outcome
Juratli T, McCabe D, Nayyar N, Williams E, Silverman I, Martinez-Lage M, Shankar G, Tummala S, Fink A, Miller J, Ely H, Christiansen J, Schackert G, Wakimoto H, Rivera M, Iafrate J, Carter S, Brastianos P, Cahill D

4:45 - 4:50pm
MNGI-22
A prognostic index to predict the risk of active monitoring failure for incidentally-found asymptomatic meningiomas
Islim A, Mohan M, Moon R, Rathi N, Kolamunnage-Dona R, Brodbelt A, Mills S, Jenkinson M

4:50 - 4:55pm
MNGI-27
The long-term disease burden of meningioma patients: results on health-related quality of life, cognitive function, anxiety and depression.
Zamanipoor Najafabadi A, van der Meer P, Boele F, Nabuurs R, Koekkoek J, Lagerwaard F, Reijneveld J, Peul W, Taphoorn M, Klein M, van Furth W, Dirven L, Peerdeman S

4:55 - 5:00pm
MNGI-07
The Anaplastic Meningioma International Consortium (AMICo) retrospective study of treatment and outcome of patients with anaplastic meningiomas
di Bonaventura R, Young A, Zakaria R, Champeaux C, Foo A, Tonn J-C, McMurran C, Tai Yeo T, Kirsch M, Afshari F, Florian S, Rossi M, Biczok A, Dedeciusová M, Benes V, Pollock J, Magill S, Allinson K, Hanemann O, McDermott M, Bhatt K, Bel-lo L, Jenkinson M, Kirollos R, Guilfoyle M, Santarius T

5:00 - 5:05pm **Q & A**

3:15 - 5:00pm **CONCURRENT SESSION 6C**

RANO Update

Program forthcoming

5:00 - 6:30pm **Industry Supported Symposia**
Not sponsored by The University of Texas MD Anderson Cancer Center

- Next Generation Approaches for the Molecular Characterization of Tumors

5:00 - 7:00pm **E-TALKS** *Interactive Electronic 4 Minute Presentations Followed By Group Discussions*
Group 1: Adult Therapeutics/Immunology
Group 2: Angiogenesis and Invasion/Radiation Biology and DNA Repair/Tumor Models/ Stem Cells/Epidemiology
Group 3: Health Outcomes/ Neurological Complications of Cancer and Cancer Therapy/Quality of Life/ Radiotherapy/Surgical Therapy/CNS Metastases

5:00 - 7:00pm **POSTER SESSION** Traditional Poster Viewing

7:00 - 11:00pm **SNO GALA** Held at Contemporary Arts Center *(Separate Ticket Required)*

E-TALKS 5:00 - 7:00pm

GROUP 1: Adult Therapeutics/Immunology

5:00 - 5:04pm
ATIM-07
Window-of-opportunity clinical trial of pembrolizumab in recurrent glioblastoma patients
de Groot J, Penas-Prado M, Mandel J, O'Brien B, Weathers S-P, Loghin M, Kamiya-Matsuoka C, Zhou S, Colen R, Hunter K, Fuller G, Huse JT, Rao G, Weinberg J, Prabhu S, Ferguson S, Yuan Y, Vence L, Allison J, Sharma P, Heimberger A

5:04 - 5:08pm
ATIM-23
Anti-CD27 agonist antibody varlilumab in combination with nivolumab for recurrent glioblastoma (rGBM): Phase 2 clinical trial results
Reardon D, Kaley T, Iwamoto F, Baehring J, Subramaniam D, Rawls T, He Y, Keler T, Yellin M

5:08 - 5:12pm
ATIM-32
Personalized neoantigen-targeting vaccine generates robust systemic and intratumoral T cell responses in glioblastoma (GBM) patients
Reardon D, Keskin D, Tirosh I, Anandappa A, Mathewson N, Sun J, Shukla S, Gjini E, Li S, Giobbie-Hurder A, McCluskey C, Chiocca EA, Neuberg D, Wucherpfennig K, Suva M, Fritsch E, Rodig S, Ligon K, Wen P, Livak K, Regev A, Hacohen N, Wu C, Ott P

5:12 - 5:16pm
ATIM-16
Phase 1 study results of M7824 (MSB0011359C), a bifunctional fusion protein targeting TGF- and PD-L1, among patients with recurrent glioblastoma (rGBM)
Khasraw M, Weller M, Lorente Estelles D, Kolibab K4, Lee C, Gedye C, De La Fuente M, Vicente D, Reardon D, Ojalvo L, Helwig C, Gourmelon C, Groves M

5:16 - 5:20pm
ATIM-37
Safety run-in results of a phase I/II study to evaluate the safety and clinical efficacy of atezolizumab (atezo; aPDL1) in combination with temozolomide (TMZ) and radiation in patients with newly diagnosed glioblastoma (GBM)
Weathers S-P, Kamiya-Matsuoka C, Dervin S, Yun C, Loghin M, O'Brien B, Harrison R, Yung WKA, Penas-Prado M, de Groot J

5:20 - 5:24pm
ACTR-14
Phase I study of AZD1775 with radiation therapy (RT) and temozolomide (TMZ) in patients with newly diagnosed glioblastoma (GBM) and evaluation of intratumoral drug distribution (IDD) in patients with recurrent GBM
Alexander B, Supko J, Agar N, Ahluwalia M, Desai A, Dietrich J, Kaley T, Peereboom D, Takebe N, Desideri S, Fisher J, Sims M, Ye X, Ligon K, Nabors L, Grossman S, Wen P

5:24 - 5:28pm
ACTR-17
Evophophamide (TH-302) for recurrent GBM following bevacizumab failure, final results of a multicenter phase II study
Brenner AJ, Reardon D, Wen P, Huang S, Fox P, Muzi M, Lee E

5:28 - 5:32pm
ACTR-64
Objective responses to chemotherapy in recurrent glioma do not predict better survival: A prospective analysis from the German Glioma Network.
Baehr O, Hentschel B, Hattingen E, Reusche M, Tatagiba M, Tonn J-C, Schnell O, Schackert G, Westphal M, Herrlinger U, Pietsch T, Reifenberger G, Weller M, Löffler M, Steinbach J

5:32 - 5:36pm
ACTR-46
Higher doses of TTFields in the tumor are associated with improved patient outcome.
Ballo M, Bomzon Z, Urman N, Lavy-Shahaf G, Toms S

5:36 - 5:40pm
ACTR-15
Safety and preliminary activity of PT2385, a first-in-class HIF2-alpha inhibitor, planned interim analysis of an open label, single-arm phase II study in patients with recurrent glioblastoma
Strowd R, Ellingson B, Wen P, Ahluwalia M, Piotrowski A, Desai A, Clarke J, Lieberman F, Desideri S, Nabors L, Grossman S

5:40 - 5:44pm
IMMU-70
Global immune fingerprinting in glioblastoma reveals immune-suppression signatures associated with prognosis
Alban T, Alvarado A, Sorensen M, Bayik D, Volovetz J, Serbinowski E, Mulkearns-Hubert E, Sinyuk M, Hale J, Onzi G, McGraw M, Huang P, Grabowski M, Wathen C, Radivoyevitch T, Kornblum H, Kristensen BW, Vogelbaum M, Lathia J

5:44 - 5:48pm
IMMU-38
Targeting hypoxia downstream signaling protein, CAIX for CAR-T cell therapy against glioblastoma (GBM)
Cui J, Zhang Q, Song Q, Wang H, Cao X, Westlake T, Yang K, Rosenblum J, Yao Y, Gilbert M, Zhuang Z

5:48 - 5:52pm
IMMU-16
Guadecitabine (SGI-110) enhances MHC class I and tumor antigen expression on murine C57BL/6-syngeneic glioma and DIPG models
Kohanbash G, McCarl L, Shoger K, Broniscer A, Warren KE, Pollack I

5:52 - 5:56pm
IMMU-34
A Balanced Tryptophan Diet Leads to Maximal Immunotherapeutic Efficacy in Glioblastoma Models
Ladomersky E, Zhai L, Lenzen A, Lauing K, Otto-Meyer S, Savoor R, Lukas R, Wainwright D

5:56 - 6:00pm
IMMU-25
Programmed cell death-ligand 1 (PD-L1) is not expressed in diffuse intrinsic pontine glioma (DIPG) tumor cells
Walia P, D'Arcy C, Hawkins C, Warren, KE

GROUP 2: Angiogenesis and Invasion/Radiation Biology and DNA Repair/Tumor Models/ Stem Cells/Epidemiology

5:00 - 5:04pm
ANGI-08
Targeting the RhoGEF Beta-Pix to enhance the activity of bevacizumab in glioblastoma: A nanoparticle mediated gene silencing approach
Connor K, Murray D, Lou B, Sweeney K, Jarzabek M, Miller I, O'Farrell A, Ruiz-Hernandez E, Duffy G, Wolfe A, Mastrobattista E, Schiffelers R, Hennink W, Symons M, Byrne A

5:04 - 5:08pm
ANGI-06
The matrix protein Thrombospondin-1 is a downstream target of TGF-β induced microtube formation in glioblastoma
Joseph JV, Magaut C, Trones A, Grosch J, Zhou W, Hossain J,Latif A, Ninzima S, Kruyt FAE, Bjerkvig R, Winkler F, Daubon T, Miletic H

5:08 - 5:12pm
RDNA-01
microRNA degradation mediated genetic heterogeneity as a novel mechanism for temozolomide resistance in glioblastoma
Ramakrishnan V, Akers J, Nguyen T, Mao Y, Nitta M, Tao J, Carter B, Chen C

5:12 - 5:16pm
TMOD-27
Humanized microbiome mouse models to enhance immunotherapy in glioblastoma
McFarland B, Dees K, Little R, Van Der Pol W, Benveniste E, Morrow C, Nabors LB

5:16 - 5:20pm
TMOD-33
Establishment and preliminary evaluation of bevacizumab-resistant glioma xenograft models
Keir S, Waitkus M, Roskoski M, Friedman H, Bigner D, Yan H, Ashley D

5:20 - 5:24pm
TMOD-09
Targeting the PI3K-mTOR pathway and elucidating mechanisms of resistance in a novel and relevant animal model of Glioblastoma.
Dey B, Wassell M, Perez J, Stanton A-C, Mack S, Pollack I, Agnihotri S

5:24 - 5:28pm
TMOD-03
GliomaPDOX: A molecularly diverse library of direct-from-patient orthotopic glioma xenografts recapitulates intratumor heterogeneity
Bayley N, Baufeld L, Gosa L, Morrow D, Tse C, Balanis N, Yan W, Cloughesy T, Liau L, Graeber T, Nathanson D

5:28 - 5:32pm
TMOD-23
Dynamic patterns of glioblastoma clonal evolution in response to chemoradiotherapy
Qazi M, Venugopal C, Vora P, Nixon A, Desmond K, Singh M, Neil S, Subapanditha M, Tong A, Bakhshinyan D, Mak A, Yelle N, Murty N, Brown K, Bock N, Moffat J, Singh S

5:32 - 5:36pm
TMOD-31
Novel heterogeneous glioblastoma models to optimize human tumoricidal neural stem cell therapy
Satterlee A, Dunn D, Hagler S, Lo D, Hingtgen S

5:36 - 5:40pm
STEM-07
Non-canonical regulation of SOX2 by the TRIM26 E3 ubiquitin ligase in glioblastoma stem-like cells
Mahlokozera T, Taiwo R, Mao D, Salehi A, Gujar A. Kim A

5:40 - 5:44pm
STEM-24
Identification of Serpin B3 as a junctional adhesion molecule a binding partner in glioblastoma cancer stem cells
Volovetz J, Turaga S, Naik U, Lathia J

5:44 - 5:48pm
STEM-01
Prospective analysis of cancer stem cell drug response assay for glioblastoma patients
Ranjan T, Howard CM, Valluri J, Yu A, Aziz K, Jho D, Julien T, Leonardo J, Alberico A, Cortese A, Denning K, Claudio PP

5:48 - 5:52pm
STEM-13
Hypoxic induction of vasorin mediates glioma stem cell-endothelial cell interactions in the perivascular niche
Yu J, Yu X, Burrows, A, Bao S

5:52 - 5:56pm
STEM-12
Downregulation of H-Ferritin expression using multivalent cationic liposomes results in increased radiation sensitivity in patient derived glioma initiating cells
Ravi V, Madhankumar A, Slagle-Webb B, Connor J

5:56 - 6:00pm
EPID-01
Associations of timing of adjuvant therapies, radiation fractions and radiation doses with glioblastoma survival: A retrospective cohort analysis using the National Cancer Database and SEER-Medicare database.
Zhu P, Du X, Esquenazi Y, Zhu J-J

GROUP 3: Health Outcomes/ Neurological Complications of Cancer and Cancer Therapy/Quality of Life/ Radiotherapy/Surgical Therapy/CNS Metastases

5:00 - 5:04pm
HOUT-16
The cost effectiveness of Tumor Treating Fields treatment for patients with newly diagnosed glioblastoma based on the EF-14 trial
Guzauskas G, Wang BCM, Pollom E, Stieber VW, Garrison L

5:04 - 5:08pm
HOUT-35
Retrospective analysis of outcomes in hospitalized malignant brain neoplasm patients with status epilepticus
Lobbous M, Gupta S, Warren P

5:08 - 5:12pm
NCMP-03
Risk factors for surgical site infections after craniotomy for primary brain tumors
Krafft PR, Agoris C, Tran Q, Sahebjam S, Tran N

5:12 - 5:16pm
NCMP-22
Treatment-related adverse effects in patients with malignant glioma: establishment of key features for pseudoprogression and treatment-induced necrosis.
Winter S, Vaios E, Muzikansky A, Bussière MR, Shih H, Martinez-Lage M, Loebel F, Vajkoczy P, Dietrich J

5:16 - 5:20pm
QOLP-02
Insurance status impacts the economic burden and survival of glioblastoma patients with health insurance
Chandra A, Young J, Dalle Ore C, Lau D, Rick J, Dayani F, Nguyen A, Garcia J, Michael McDermott M, Berger M, Aghi M

5:20 - 5:24pm
QOLP-25
Quality of life following re-irradiation for recurrent high grade glioma
Amidei C, Dixit K, Kumthekar P, Kruser T, Sachdev S, Kalapurakal J, Gondi V, Grimm S, Nicholas M, Lukas R, Chmura S, Mehta M, Raizer J

5:24 - 5:28pm
RTHP-21
Characterization of radiation therapy effects on cerebral vasculature in pediatric brain tumor survivors
Avadiappan S, Morrison M, Jakary A, Felton E, Mueller S, Lupo J

5:28 - 5:32pm
RTHP-07
Transcription factor networks of oligodendrogliomas (IDH-mutant and 1p/19q codeleted) treated with adjuvant radiotherapy or observation informs prognosis
So J, Moraes F, Mamatjan Y, Aldape K, Zadeh G

5:32 - 5:36pm
RTHP-10
Less is more or bigger is better? Radiation treatment volume for glioblastoma patients does not impact survival
Song A, Gowda S, Werner-Wasik M, Bar-Ad V, Kim L, Glass J, Judy K, Farrell C, Andrews D, Shi W

5:36 - 5:40pm
SURG-06
Laser ablation for brain metastases: Safety and preliminary outcomes from the Laser Ablation of Abnormal Neurological Tissue using Robotic NeuroBlate System (LAANTERN) registry
Kamath A, Tatter S, Fecci P, Chen C, Chiang V, Rao G, Mohammadi A, Judy K, Field M, Neimat J, Leuthardt E, Kim A

5:40 - 5:44pm
SURG-07
Between-hospital variation in mortality and survival after glioblastoma surgery
De Witt Hamer P, Ho V, Zwinderman K, Ackermans L, Ardon H, Boomstra S, Bouwknegt W, van den Brink W, Dirven C, van der Gaag N, van der Veer O, Idema B, Kloet F, Koopmans J, ter Laan M, Verstegen M, Wagemakers M, Robe P

5:44 - 5:48pm
SURG-05
Navigated intra-operative 2-D ultrasound vs standard neuronavigation in high grade glioma surgery
Moiraghi A, Prada F, Delaidelli A, Goga C, Guatta R, May A, Bartoli A, Saini M, Waelchli T, Bijlenga P, Schaller K, DiMeco F

5:48 - 5:52pm
IMMU-26
Visualizing tumor cell - lymphocyte interactions in the brain metastatic cascade using in vivo two photon microscopy
Piechutta M, Berghoff A, Karreman M, Gunkel K, Wick W, Winkler F

5:52 - 5:56pm
CMET-28
Impact of disease site, size and surgical resection on survival from metastatic CNS neuroblastoma
Kramer K, Haque S, Wolden S, Greenfield J, Kushner B, Modak S, Cheung N-K, Donzelli M, Eljalby M, Souweidane M

5:56 - 6:00pm
CMET-19
Clinical risk assessment score to estimate the likelihood of pseudoprogression versus tumor growth following stereotactic radiosurgery for brain metastases.
Skeie B, Øyvind Enger P, Pedersen P-H, Olve Skeie G

6:00 - 7:00pm
E-Talk presenters move to their designated posters in the general poster session for further discussion


St. Peter

SUNRISE SESSIONS 7:00-8:30am

Brain Tumor Stem Cells as Drivers of Therapeutic Resistance
Petra Hamerlik (Chair)

- Genomic instability and replication stress in glioblastoma-derived cancer stem cells, *Petra Hamerlik*
- Glioma stem cell-derived pericytes and therapeutic resistance, *Shideng Bao*
- Title TBD, *Ichiro Nakano*
- How the genetic make-up of brain tumor stem cells mediates the response to therapeutics, *Maria Castro*

Viral Therapies in Brain Tumors
Juan Fueyo (Chair)

- Delta-24-RGD in combination with positive regulators of the immune synapsis for gliomas in adults and children, *Juan Fueyo*
- Oncolytic measles virus in GBM treatment: harnessing permissiveness and proinflammatory responses, *Eva Galanis*
- Treatment of pontine gliomas with oncolytic adenoviruses, *Marta Alonso*
- Oncolytic rhabdovirus vaccine therapy for GBM, *David Stodjl*

The Use of Machine Learning Methods in Neuro-Oncology
Dafna Ben Bashat (Chair)

- Application of radiomics & deep-learning in brain tumor imaging, *Philipp Kickingereder*
- Radiomics for immune assessment, *Arvind Rao*
- Decoding tumour genotype and phenotype of brain tumours by noninvasive imaging using a quantitative radiomics approach, *Philippe Lambin*
- Improving therapy response assessment of high grade gliomas using machine learning classifications, *Dafna Ben Bashat*

Reproductive and Women's Neuro-Oncology
NaTosha Gatson (Chair)

- Introduction and program overview of reproductive & women's issues, *NaTosha Gatson*
- Epidemiological and biological basis of primary and metastatic brain tumors as they pertain to Women's Neuro-Oncology, *Priscilla Brastianos*
- Clinical best practices, cancer ethics and preservation of fertility in women's neuro-Oncology, *Mitchell Rosen*
- Genetically disparate cells that persist long-term and reach the brain: risks and benefits, *J. Lee Nelson*

Targeting Gliomas, Perspective from China
Shi-Yuan Cheng (Chair)

- Autophagy in glioblastoma: critical for tumorigenesis and viable target for combination therapy, *Shi-Yuan Cheng*
- Developing anti-vascular therapy for GBM through dissecting microcirculation pattern, *Zhong-Ping Chen*
- Mutational landscape reveals MET alteration as a drug target in secondary glioblastoma, *Tao Jiang*
- Are IDH wt diffuse astrocytomas just glioblastoma in disguise? *Ho-Keung Ng*

Circulating Biomarkers
Chetan Bettegowda (Chair)

- Liquid biopsy for GBM - the holy grail or a bridge too far, *Amit Ray*
- Blood based assays for diagnosis and stratification of glioma patients, *Leonora Balaj*
- Blood test for brain tumors, *Brian Nahed*
- CSF based liquid biopsies for brain tumors, *Chetan Bettegowda*

Meningiomas: Molecular Advances and Targeted Therapy
Gelareh Zadeh (Chair)

- Molecular landscape of meningiomas
- Imaging and diagnostics advances in meningiomas
- Meningioma as a chronic disease: a quality of life viewpoint
- Translational models in meningioma
- Advances in multidisciplinary therapies for meningioma

MAIN MEETING PROGRAM

8:30 - 10:00am **CONCURRENT SESSION 7A**

Adult Clinical Trials II

8:30 - 8:40am
ACTR-22
A phase I study of cytosine deaminase-expressing neural stem cells (CD-NSCs) administered intracranially and in combination with oral 5-fluorocytosine (5-FC) and leucovorin in patients with recurrent high grade glioma
Portnow J, Synold T, Badie B, Blanchard S, Kilpatrick J, Tirughana R, Metz M, Tran V, Aboody K

8:40 - 8:50am
RARE-09
Efficacy and safety of dabrafenib + trametinib in patients with recur-rent/refractory BRAF V600E–mutated high-grade glioma (HGG)
Wen P, Alexander S, Yung-Jue B, van den Bent M, Gazzah A, Dietrich S, de Vos F, van Linde M, Lai A, Chi A, Prager G, Campone M, von Bubnoff N, Fasolo A, Lopez-Martin J, Mookerjee B, Boran A, Burgess P, Rangwala F, Subbiah V

8:50 - 9:00am
ACTR-34
Integrated clinical experience with ONC201 in previously-treated H3 K27M-mutant glioma patients
Chi A, Arrillaga-Romany I, Gardner S, Wen P, Batchelor T, Hall M, Odia Y, Khatua S, Zaky W, McGovern S, Harrison R, de Groot J, Sumrall A, Shonka N, Khatib Z, Karajannis M, Mueller S, Tarapore R, Merdinger K, Schalop L, Allen J, Oster W, Mehta MP

9:00 - 9:05am **DISCUSSION**

9:05 - 9:10am **Q & A**

9:10 - 9:15am
ACTR-08
A phase II study of apatinib plus temozolomide in adults with refractory recurrent high-grade gliomas
Zhang J, Ge J, Li C

9:15 - 9:20am
ACTR-09
Targeting myeloid derived suppressor cells: Phase 0/1 trial of low dose capecitabine + bevacizumab in patients with recurrent glioblastoma
Peereboom D, Lathia J, Alban T, Mohammadi A, Ahluwalia M, Brewer C, Vogelbaum M

9:20 - 9:25am
ACTR-47
Patients with EGFR amplification but without EGFRvIII expression have improved benefit compared to those with EGFRvIII expression in samples of the INTEL-LANCE 2/EORTC 1410 randomized phase II trial
French P, Kros J, de Heer I, Eoli M, Sepulveda J, Walenkamp A, Frenel J-S, Enrico Franceschi8, Clement P, Weller M, Ansell P, Looman J, Bain E, Morfouace M, Gor-lia T, Golfinopoulos V, van den Bent M

9:25 - 9:30am
ACTR-18
Phase II trial of temozolomide and TRC 102, base excision repair inhibitor, in bevacizumab naïve glioblastoma at first recurrence
Ahluwalia M, Drappatz J, Ye X, Walbert T, Holdhoff M, Lesser G, Cloughesy T, Peereboom D, L Nabors, Wen P, Grossman S, Rogers L

9:30 - 9:35am **Q & A**

9:35 - 9:40am
ACTR-40
A phase 1, multicenter, open-label study of marizomib (MRZ) with temozolomide (TMZ) and radiotherapy (RT) in newly diagnosed WHO grade IV malignant glioma (glioblastoma, ndGBM): Full enrollment results
Bota DA, Kesari S, Piccioni D, Aregawi D, Roth P, Stupp R, Desjardins A, Reich SD, Elias I, Li M, Levin N, Winograd B, Mason W

9:40 - 9:45am
ACTR-43
Open-label phase 1 clinical trial testing personalized and targeted skull remodeling surgery to maximize TTFields intensity for recurrent glioblastoma – Interim analysis and safety assessment (OptimalTTF-1)
Korshoej A, Lukacova S, Sørensen JC, Lundgaard Hansen F , Mikic N, Thielscher A, Ole Stigaard Cortnum S, Lignell Guldberg T, Ramshad-Lassen Y, Rahbek C, Eg Severinsen K, von Oettingen G

9:45 - 9:50am
ACTR-36
A single arm phase 2 study of the dual mTORC1/mTORC2 inhibitor vistusertib provided on an intermittent schedule for neurofibromatosis 2 patients with progressive or symptomatic meningiomas
Plotkin S, Jordan J, Beauchamp R, Muzikansky A, Stemmer-Rachamimov A, Ramesh V

9:50 - 9:55am
ACTR-37
Short-term bevacizumab for recurrent glioblastomas
Matsutani T, Hirono S, Iwadate Y

9:55 - 10:00am **Q & A**

10:00 - 10:15am BREAK

8:30 - 10:00am CONCURRENT SESSION 7B

Molecular Pathology/Stem Cells

8:30 - 8:40am
PATH-49
Genomic attributes of tumor evolution and treatment response in diffuse glioma
Lin AL, Jonsson P, Ogilvie S, Chavan S, Nolan C, Gavrilovic I, Kaley T, Grommes C, Pentsova E, Diamond E, Davas M, Stone J, De Angelis L, Tabar V, Brennan C, Young RJ. Rosenblum MK, Taylor BS, Mellinghoff I

8:40-8:50am
STEM-06
A draft single-cell atlas of human glioblastoma reveals spatial and differentiation gradients of stem-like cells
Mueller S, Bhaduri A, DiLullo E, Yagnik G, Lim D, Aghi M, Kriegstein A, Diaz A

8:50 - 9:00am
STEM-29
Unsaturated fatty acid (UFA) metabolism regulates membrane-endolysosome-nuclear inter-organelle communication in glioma stem cells
Hu J

9:00 - 9:05am **DISCUSSION**

9:05 - 9:10am **Q & A**

9:10 - 9:15am
PATH-29
Clinical significance of temozolomide-induced somatic hypermutation in initially low-grade IDH-mutant diffuse gliomas
Yu Y, Hilz S, Grimmer M, Solomon D, Choi S, Wahl M, Mazor T, Hong C, Shai A, Phillips JJ, Villanueva-Meyer J, McDermott M, Haas-Kogan D, Taylor J, Butowski N, Clarke J, Berger M, Molinaro A, Chang S, Costello J, Oberheim Bush NA

9:15 - 9:20am
PATH-32
Brain tumor classification updates from cIMPACT-NOW, the Consortium to Inform Molecular and Practical Approaches to CNS Tumor Classification
Louis D, Brat D, Ellison D

9:20 - 9:25am
PATH-13
The origin of human glioblastoma (IDH wildtype) is not the location of the tumor but the subventricular zone
Kang S-G, Lee JH, Yoon SJ, Lee J-H, Kim SH, Kim EH, Chang JH, Lee JH

9:25 - 9:30am
PATH-37
Liquid biopsy for identification of newly diagnosed glioma
Lee I, Scarpace L, Nelson K, Patil D, Datta V, Akolkar D, Apurva S, Fulmali P, Pu-ranik S, Snyder J, Noushmehr H, Devhare P, deCarvalho A, Datar R, Walbert T, Kalkanis S

9:30 - 9:35am **Q & A**

9:35 - 9:40am
STEM-25
Single-cell signatures uncover glial progenitor heterogeneity and molecular determinants for glioma growth
Lu R, Wang J, Wang J

9:40 - 9:45am
STEM-11
Directed neuronal differentiation as a therapeutic strategy for malignant gliomas
Audia A, Ravikumar V, Deng Z, Murali V, Balasubramaniyan V, de Groot J, Rao A, Bhat K

9:45 - 9:50am
STEM-28
Tissue factor promotes the glioma stem cell phenotype, and is suppressed by mutant IDH1
Horbinski C, Unruh D, Mirkov S, Wray B, Lamano J, Scholtens D, Sarkaria J, James D

9:50 - 9:55am
STEM-23
miR-486-5p regulates tumor suppressor networks and its inhibition reduces tumor volume and sensitizes to radiation treatment in a PDX mouse model of GBM
Kotchetkov I, Lopez-Berotni H, Michelson N, Rui Y, Lal B, Li Y, Green J, Laterra J

9:55 - 10:00am **Q & A**

8:30 - 10:00am CONCURRENT SESSION 7C

CNS Metastases

8:30 - 8:40am
CMET-20
Evidence of CNS response of pembrolizumab for leptomeningeal carcinomatosis at a single cell resolution
Alvarez-Breckenridge C, Prakadan S, Lee E, Tolaney S, Nayak L, Lin N, Bihun I, Chukwueke U, Oh K, White M, Gerstner E, Lawrence D, Cohen J, Giobbie-Hurder A, Cahill D, Carter S, Shalek A, Sullivan R, Brastianos P

8:40 - 8:50am
CMET-45
Checkpoint blockade immunotherapies for melanoma brain metastases: improved survival outcomes in a national cohort.
Iorgulescu J, Harary M, Zogg C, Ligon K, Hodi S, Aizer A, Reardon D, Smith T

8:50 - 9:00am
CMET-39
Intra-CSF liposomal cytarabine plus systemic therapy as initial treatment of breast cancer leptomeningeal metastasis: a randomized, open-label trial
Le Rhun E, Mailliez A, Wallet J, Rodrigues I, Boulanger T, Desmoulins I, Barrière J, Fabbro M, Taillibert S, Andre C, Le Deley MC, Weller M, Bonneterre J

9:00 - 9:10am
CMET-30
Brain metastases from EGFR-mutated NSCLC which had acquired resistance to EGFR-TKI. ~Less-frequent T790M and preserved response to other TKIs~
Iuchi T, Sakaida T, Hasegawa Y, Yoshida Y, Ashinuma H, Mizuno S, Setoguchi T, Shingoji M

9:10 - 9:15am **DISCUSSION**

9:15 - 9:20am **Q & A**

9:20 - 9:25am
CMET-18
Risk factors for cerebral edema after stereotactic radiosurgery for brain metastases
Alattar A, Hirshman B, Joshi R, Chen C

9:25 - 9:30am
CMET-46
Initial clinical and advanced imaging outcomes from a multi-institutional phase I dose-escalation trial of RRx-001 plus whole brain radiation for patients with brain metastases
Kim M, Parmar H, Aryal M, Schipper M, Devasia T, Kesari S, Morikawa A, Spratt D, Junck L, Hayman J, TLawrence T, Tsien C, Aiken R, Goyal S, Knox S, Caroen S, Carter C, Oronsky B, Cao Y, Lao C

9:30 - 9:35am
CMET-27
Outcomes of Lung cancer patients with leptomeningeal metastases in the targeted therapy era
Nevel K, Cowan A, Reiner A, Ogilvie S, Skakodub A, Distefano N, Pentsova E, Boire A

9:35 - 9:40pm **Q & A**

9:40 - 9:45pm
STEM-03
Novel metastatic brain tumor targets isolated through phage display biopanning against brain metastasis-initiating cells
Kim J, Bao S, Rich JN, Liu J

9:45 - 9:50pm
CMET-21
The role of brain metastasis free interval in patients with brain metastases of breast carcinoma
Hulsbergen A, Lamba N, Claes A, Kavouridis V, Smith T, Verhoeff J, Broekman M

9:50 - 9:55pm
CMET-22
Intrathecal (IT) Traztuzumab (T) for the treatment of leptomeningeal metastases (LM) in patients (pts) with human epidermal growth factor receptor 2-positive (HER2+) cancer : A multicenter Phase 1/2 study
Kumthekar P, Gradishar W, Lin N, Pentsova E, Groves M, Jeyapalan S, Melisko M, Grimm S, Lassman AB, Raizer J

9:55 - 10:00am **Q & A**

10:15 - 12:00pm CONCURRENT SESSION 8A

Drug Discovery/Drug Resistance/Tumor Models

10:15 - 10:25am
TMOD-36
Precise investigation of cancer stem cells in a mouse glioblastoma model
Xie X, Laks D, Sun D, Poran A, Laughney A, Belenguer G, Massague J, Zhou X, Farinas I, Elemento O, Parada L

10:25 - 10:35am
DRES-17
Activation of FGF signaling pathway confers resistance to EGFR inhibition in GBM
Guo G, Gong K, Sarkaria J, Habib A

10:35 - 10:45am
DRES-02
Ciliary protein ARL13B promotes chemoresistance by modulate glioblastoma purine biosynthesis
Shireman J, Atashi F, Park C, Warnke L, Miska J, Ahmed A

10:45 - 10:55am
TMOD-35
Can rare SOX9-positive cells incite MYC-driven medulloblastoma recurrence?
Bolin S, Savov V, Borgenvik A, Garancher A, Rosén G, Rahmanto A, Hutter S, Rusert J, Garzia L, Fotaki G, Hill RM, Dubuc AM, Remke M, Aner M, Ramaswamy V, Clifford S, Sangfelt O, Schüller U, Taylor M, Wechsler-Reya R, Weishaupt H, Swartling F

10:55 - 11:00am **DISCUSSION**

11:00 - 11:05am **Q & A**

11:05 - 11:10am
DRES-06
Preventing the emergence of temozolomide resistance in glioblastoma by PARP-1 inhibition
Yuan A, Bering E, Cairncross J, Blough M

11:10 - 11:15am
DDIS-02
Novel bispecific activator of macrophages for the treatment of glioblastoma
Salgado M, Schaller T, Gedeon P, Snyder D, Archer G, Sanchez-Perez L, Sampson J

11:15 - 11:20am
DRES-05
Molecular evolution of diffuse gliomas and the Glioma Longitudinal Analysis Consortium
Verhaak R, Aldape K, Amin S, Ashley D, Barnholtz-Sloan J, Bates A, Beroukhim R, Bock C, Brat D, Claus E, Costello J, de Groot J, Finocchiaro G, French P, Gan H, Griffith B, Herold-Mende C, Horbinski C, Iavarone A, Kalkanis S, Karabatsou K, Kim H, Kouwenhoven M, McDonald K, Miletic H, Nam D-H, Ng HK, Niclou S, Noush-mehr H, Ormond D, Poisson L, Reifenberger G, Roncaroli F, Sa JK, Sillevis Smitt P, Smits M, Souza CF, Tabatabai G, Van Meir E, Watts C, Wesseling P, Woehrer A, W.K. Yung WKA, Jungk C, van Dyck E, Westerman BA, Abiola O, Zeps N, Grimmond S

11:20 - 11:25am
TMOD-24
Patient-derived brain tumour iPSCs: models for investigating glioma stemness and drug discovery
Mathew R, da Silva B, Polson E, Williams J, Tams D, O'Shea O, Taylor C, Shaw G, Ballereau S, Short S, Smith C, Rutka J, Chumas P, Markowetz F, Wurdak H

11:25 - 11:30am
DRES-10
DRD5 is a modulator of glioma susceptibility to DRD2 antagonism by ONC201
Prabhu VV, Madhukar N, Gilvary C, Kline CLB, Tarapore R, El-Deiry W, Doherty F, VanEngelenburg A, Durrant J, Benes C, Oster W, Elemento O, Allen J

11:30 - 11:35am **Q & A**

11:35 - 11:40am
DRES-08
Dynamic kinome profiling of genetically-defined, EGFRvIII-driven murine astrocyte models of glioblastoma reveals targets for dual kinase inhibitor therapy
Smithberger E, Shelton A, Butler M, Flores A, Bash R, Angus S, Sciaky N, Dhruv H, Johnson G, Berens M, Furnari F, Miller R

11:40 - 11:45am
DRES-09
In Vivo Functional Genomics Identifies Drivers of Chemoresistance in Medulloblastoma
Guerreiro Stücklin A, Garzia L, Skowron P, De Antonellis P, Nör C, Wu X, Taylor M

11:45 - 11:50am
DRES-01
ZEB1-mediated invasive mesenchymal transition at the single cell level promotes anti-angiogenic therapy resistance in glioblastoma
Chandra A, Jahangiri A, Chen W, Yagnik G, Garcia J, Nguyen A, Weiss J, Wolf K, Lin J-M, Mueller S, Rick J, Diaz A, Gilbert L, Kumar S, Aghi M

11:50 - 11:55am
TMOD-19
Mutant IDH1 promotes glioma formation in vivo
Yu D, Boekholder R, VanBrocklin M, Sonnen J, Colman H, Holmen S

11:55 - 12:00pm **Q & A**

10:15 - 12:00pm CONCURRENT SESSION 8B

Practical & Applied Neuro-Oncology II

10:15 - 10:25am
HOUT-18
Cost effectiveness of treating glioblastoma patients age 65 years or older with Tumor Treating Fields plus temozolomide versus temozolomide alone
Guzauskas G, Wang BCM, Pollom E, Stieber VW, Garrison L

10:25 - 10:35am
EPID-12
Using germline variants to predict glioma risk and identify glioma subtype pre-operatively
Eckel-Passow J, Decker P, Kosel M, Kollmeyer T, Molinaro A, Rice T, Caron A, Drucker K, Praska C, Pekmezci M, Hansen H, McCoy L, Bracci P, Erickson B, Wiemels J, Wiencke J, Bondy M, Melin B, Burns T, Giannini C, Lachance D, Wrensch M, Jenkins R

10:35 - 10:45am
EPID-08
Effect of health disparities on overall survival of patients with glioblastoma
Mandel J, Youssef M, Nam J, Patel A, Liu D, Wu J, Armstrong G, Bondy M, de Groot J

10:45 - 10:50am **DISCUSSION**

10:50 - 10:55am **Q & A**

10:55 - 11:00am
EPID-15
Incidence patterns of primary brain and other central nervous system tumors in Appalachia
Ostrom Q, Gittleman H, Kruchko C, Barnholtz-Sloan J

11:00 - 11:05am
EPID-04
Leveraging genomic data to identify risk factors for childhood ependymoma
Zhang C, Hansen H, Gonzalez-Maya J, Smirnov I, Wiemels J, Walsh K

11:05 - 11:10am
HOUT-23
Association between treatment facility volume and mortality In patients with glioblastoma (GBM): A large national analysis
Aulakh S, DeDeo M, Free J, Berdeguez K, Rosenfeld S, Quinones-Hinojosa A, Chanan-Khan A, Ailawadhi S

11:10 - 11:15am
HOUT-21
Real-word evaluation of the impact of radiotherapy and chemotherapy in elderly patients with glioblastoma based on age and performance status: A National Cancer Database analysis
Al Feghali K, Buszek SM, ElHalawani H, Chevli N, Allen PK, Chung C

11:15 - 11:20am **Q & A**

11:20 - 11:25am
HOUT-03
Screening for mood disturbance in long-term Central Nervous System (CNS) tumor survivors using Patient Reported Outcomes Measurement Information Sys-tem (PROMIS): A Neuro-Oncology Branch Natural History Study (NOB-NHS) report
Fletcher Ruiz M, Vera E, Acquaye A, Boris L, Brown M, Crandon S, Garren N, Ji M, Levine J, Reyes J, Siegel C, Wu J, Gilbert M, Armstrong T

11:25 - 11:30am
HOUT-12
Characterization of symptom burden in minority patients with CNS tumors: a report from the neuro-oncology branch (NOB) natural history study (NHS)
Crandon S, Vera E, Acquaye A, Siegel C, Aboud O, Boris L, Brown M, Garren N, Ji M, Levine J, Romo C, Reyes J, Wu J, Gilbert M, Armstrong T

11:30 - 11:35am
EPID-11
Progression of IDH mutant glioma after first recurrence: development of a feasible clinical trial endpoint in the recurrent setting
Miller J, Loebel F, Arrillaga-Romany I, Mordes D, Lelic N, Batchelor T, Iafrate AJ, Chi A, Cahill D

11:35 - 11:40am **Q & A**

11:40 - 11:45am
EPID-02
Effects of treatment and social demographics on adult medulloblastoma survival
Pradhan N, Piccioni D

11:45 - 11:50am
QOLP-26
Patient Reported Outcomes Measurement Information System (PROMIS) screening for anxiety & depression in central nervous system (CNS) cancer: large cohort report from the Neuro-Oncology Branch Natural History Study (NOB-NHS).
Garren N, Vera E, Aboud O, Acquaye A, Boris L, Brown M, Crandon S, Ji M, Levine J, Reyes J, Romo C, Siegel C, Wu J, Gilbert M, Armstrong T

11:50 - 11:55am
QOLP-08
A neuro-oncology caregiver support group, an effective way to provide emotional support for caregivers.
Page M, Rossi R, Woodall M, Chang S

10:15 - 12:00pm CONCURRENT SESSION 8C

Immunology – Preclinical and Clinical II

10:15 - 10:25am
IMMU-21
Multidimensional characterization of immune cell populations in the glioma tumor microenvironment reveals a dominant proportion of cells derived from the myelo-monocytic lineage
Lee A, Mochizuki A, Ishihara M, Garcia A, Nathanson D, Wang A, Everson R, Liau L, Prins R

10:25 - 10:35am
ATIM-33
NOA-16: A first-in-man multicenter phase I clinical trial of the German Neurooncology Working Group evaluating a mutation-specific peptide vaccine targeting IDH1R132H in patients with newly diagnosed malignant astrocytomas
Platten M, Schilling D, Bunse L, Wick A, Bunse T, Riehl D, Green E, Sanghvi K, Karapanagiotou-Schenkel I, Harting I, Sahm F, Steinbach J, Weyerbrock A, Hense J, Misch M, Krex D, Stevanovic S, Tabatabai G, von Deimling A, Schmitt M, Wick W

10:35 - 10:45am
ATIM-40
High rate of objective anti-tumor response in 9 patients with glioblastoma after viro-immunotherapy with oncolytic parvovirus H-1 in combination with bevacicumab and PD-1 checkpoint blockade
Geletneky K, Bartsch A, Weiss C, Bernhard H, Marchini A, Rommelaere J

10:45 - 10:50am **DISCUSSION**

10:50 - 10:55am **Q & A**

10:55 - 11:00am
IMMU-56
CXCR1/2 modified CARs co-opt radiation-induced IL-8 for enhanced chemotaxis of the CAR T cells and maximal anti-tumor efficacy
Jin L, Tao H, Zhang W, Long Y, Dyson K, Karachi A, Deleyrolle L, Sayour E, Rahman M, Mitchell D, Rajon D, Yang C, Kubilis P, Bova F, Lin Z, Huang J

11:00 - 11:05am
IMMU-20
Single cell cytomics of peripheral blood mononuclear cells reveals new avenues for glioma immunotherapy
Dusoswa S, Verhoeff J, Crommentuijn M, Würdinger T, Noske D, Van Kooyk Y, Garcia-Vallejo J

11:05 - 11:10am
IMMU-02
Oncolytic HSV therapy enhances glioblastoma control via the expansion of functional tumor-specific T cells and modulation of myeloid cell population
Alayo Q, Ito H, Passaro C, Zdioruk M, Mahmoud A, Nakashima H, Chiocca EA

11:10 - 11:15am
ATIM-10
A phase I/II clinical trial of autologous CMV-specific cytotoxic T cells (CMV-TC) for glioblastoma: dose escalation and correlative results
Penas-Prado M, Weathers S-P, Zhou S, Kamiya-Matsuoka C, O'Brien B, Loghin M, Harrison R, Pei BL, Ictech S, Hunter K, Yung WKA, de Groot J, Shpall EJ, Heimberger A, Rezvani K

11:15 - 11:20am
Q & A

11:20 - 11:25am
IMMU-50
The immune landscape of blood dendritic cells in glioblastoma multiforme: implications for DC vaccination combined with checkpoint inhibition
Kong B, Kim J, Fromm P, Bui KT, Linton A, Kaufman K, Beale P, Buckland M, Clark G

11:25 - 11:30am
IMMU-46
Glioblastoma patient diagnoses and immunosuppression are maximal during old age: a random coincidence, or cause and effect?
Ladomersky E, Otto-Meyer S, Zhai L, Savoor R, Lauing K, Lenzen A, Lukas R, Wainwright D

11:30 - 11:35am
IMMU-27
Preventing T-cell S1P1 internalization obviates bone marrow T cell sequestration and improves immunotherapeutic efficacy in GBM
Chongsathidkiet P, Woroniecka K, Dechant C, Kemeny H, Cui X, Wilkinson D, Fecci P

11:35 - 11:40am
Q & A

11:40 - 11:45am
ATIM-39
Improved survival noted in glioblastoma patients treated with adjuvant TLR-3 agonist in setting of autologous lysate-pulsed DC vaccination
Antonios J, Everson R, Soto H, Khattab S, Bethel J, Sun M, Mochizuki A, Lee A, Odesa S, Billingslea-Yoon E, Moughon D, Wang A, Cloughesy T, Prins R, Liau

11:45 - 11:50am
ATIM-28
Phase 2 study of ERC1671 plus bevacizumab vs bevacizumab plus placebo in recurrent GBM interim results and correlations with CD4+ T lymphocyte counts
Bota DA, Chung J, Dandekar M, Carrillo JA, Kong X, Fu DB, Hsu FPK, Schönthal AH, Hofman FM, Chen TC, Zidovetzki R, Pretto C, Strik A, Schijns VEJC, Stathopoulos A

11:50 - 11:55am
IMMU-71
Evaluating the compatibility of tumor treating electric fields with key anti-tumoral T cell functions
Diamant GI, Simchony H, Shiloach T, Globerson-Levin A, Eshhar Z, Grossman R, Ram Z, Volovitz I

11:55 - 12:00pm
Q & A

12:00 - 12:30pm
Highlights of SNO 2018
Frank Furnari, Daphne Haas-Kogan, Vinay Puduvalli

12:30pm
ADJOURN


REGISTER ONLINE AT
SOC-NEURO-ONC.ORG

Society for Neuro-Oncology
PO Box 273296 Houston, TX 77277-3296
Tel: 713-526-0269 E-Fax: 801-421-0269
www.soc-neuro-onc.org