



Mayo Clinic School of Continuous Professional Development

Mayo Clinic

# NEUROSCIENCE & ONCOLOGY INNOVATION SUMMIT 2017

17.0

*AMA PRA Category*

*1 Credits™.*

**FOUR SEASONS RESORT ORLANDO  
AT WALT DISNEY WORLD® RESORT  
ORLANDO, FLORIDA  
DECEMBER 14–16, 2017**

## Course Description

The course is designed to provide cutting edge medical knowledge and will focus on both basic and advanced topics and will cover scientific principles including DNA editing, (CRISPr Cas9) brain tumor biology and growth, vascular neogenesis, nanotechnology for tumor suppression, viral vectors for tumor destruction, and other new agents to target and destroy brain tumors. The faculty will discuss new therapies that are available and interpret the impact of recent clinical trial data on clinical practice as well as emerging precision medicine practices.

## Course Learning Objectives

Upon conclusion of this program, participants should be able to:

- Recognize the signs and symptoms of cancer and primary and metastatic brain tumors
- Define tumor biology of primary and metastatic brain tumors as well as new scientific methods to destroy and neutralize tumor growth
- Provide cutting-edge updates in neuroscience, neuro-oncology and oncologic biology research
- Outline U.S. health challenges in patient care for the future of those with brain and other tumors and cancer

## Intended Audience

This course is designed for neurologists, neurosurgeons, medical oncologists, neuropathologists, neurointerventional surgeons, radiation oncologists, pathologists, ARNPs/PAs, nurses and other health care personnel who are interested in this field.

## Credit



JOINTLY ACCREDITED PROVIDER™  
INTERPROFESSIONAL CONTINUING EDUCATION

### ACCREDITATION STATEMENT

In support of improving patient care, Mayo Clinic College of Medicine and Science is accredited by the Accreditation Council

for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

## CREDIT STATEMENT

**AMA** Mayo Clinic College of Medicine and Science designates this live activity for a maximum of 17.0 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**ANCC** Mayo Clinic College of Medicine and Science designates this live activity for a maximum of 17.0 ANCC nursing contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

**AOA** This program has been accredited by the American Osteopathic Association for 18.0 credits of AOA Category 2-A.

## Other Health Care Professionals

A certificate of attendance will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

## Registration

To register online, visit [ce.mayo.edu/neuroonc2017](http://ce.mayo.edu/neuroonc2017). The registration fee includes tuition, comprehensive electronic course syllabus, continental breakfasts, break refreshments, reception, and lunch. Although it is not Mayo Clinic School of Continuous Professional Development (CPD) policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised. A letter of confirmation will be sent upon receipt of payment and completed registration form.

Registration Fees		
	On or Before November 14, 2017	After November 14, 2017
Physicians and Scientists	\$750	\$850
ARNPs & PAs, Residents, Fellows, RNs, Allied Health and Retirees	\$400	\$500
<b>Public/Student (No CEUs or CMEs Awarded)*</b>	\$50 per day	\$50 per day
<i>*If you are not claiming continuing education credits, please contact the CME Department at 1-800-462-9633 to register by phone.</i>		

## Travel and Lodging Accommodations

Four Seasons Resort Orlando  
at Walt Disney World® Resort

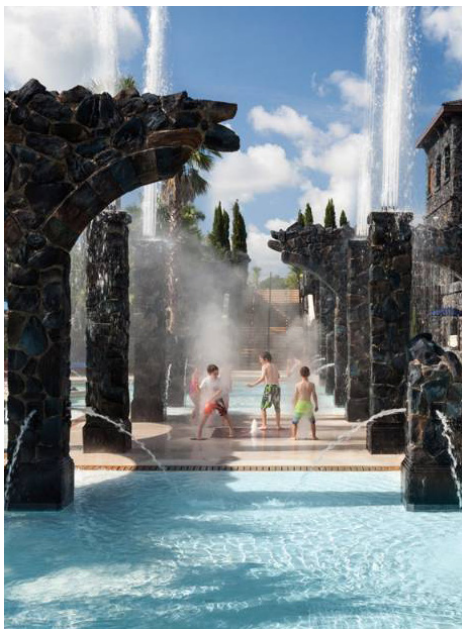
10100 Dream Tree Boulevard

Buena Vista, FL 32836

407-313-7777

Four Seasons is offering rooms starting at \$249 per night, plus tax for attendees and their guests. When calling to make a reservation, identify yourself as a participant of the Mayo Clinic Neurosurgical Symposium. Special room rates are available until the block is sold out or November 14, 2017, whichever comes first.

Mayo Clinic School of CPD is not responsible for expenses incurred by an individual who is not confirmed and for whom space is not available at the meeting. Costs incurred by the registrant such as airline or hotel fees or penalties are the responsibility of the registrant.



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## Faculty

### Guest Faculty Listing

Albert Manero II, Ph.D.  
*Director of Limbless Solutions*

Robert McIver, PT, DPT, NCS  
*Brooks Rehabilitation*

Kenneth Ngo, M.D.  
*Brooks Rehabilitation*

Amanda Gammisch  
*Patient*

Andres Hinojosa  
*Patient*

### Mayo Clinic Faculty Listing

*Thomas G. Brott, M.D.*

*Paul D. Brown, M.D.*

*Guojun Bu, Ph.D.*

*Jan C. Buckner, M.D.*

*Robert B. Diasio, M.D.*

*Stephen C. Ekker, Ph.D.*

*W. David Freeman, M.D.*

*Neill Graff-Radford, M.D.*

*Robert B. Jenkins, M.D., Ph.D.*

*Richard Joseph, M.D.*

*Betty Kim, M.D., Ph.D.*

*Keith L. Knutson, Ph.D.*

*Ian Parney, M.D, Ph.D.*

*Ronald C. Petersen, M.D., Ph.D.*

*Alfredo Quiñones-Hinojosa, M.D.*

*Ronald Reimer, M.D.*

*Steven Rosenfeld, M.D., Ph.D.*

*Owen A. Ross, Ph.D.*

*Jann N. Sarkaria, M.D.*

*Kristin R. Swanson, Ph.D.*

*Oliver Tobin, M.B., B.Ch., BAO, Ph.D.*

*Joon H. Uhm, M.D.*



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# PROGRAM

## Thursday, December 14, 2017

### Neuroscience Discoveries

7:00 - 7:45 a.m.	<b>Continental Breakfast &amp; Exhibits</b>	2:15 - 2:30	Q&A <i>Ronald C. Petersen, M.D., Ph.D., Guojun Bu, Ph.D. and Neill Graff-Radford, M.D.</i>
7:45 - 8:00	Welcome & Announcements <i>Joon H. Uhm, M.D.</i>	2:30 - 2:45	Refreshment Break & Exhibits
8:00- 8:30	The Neuro-Oncology Program at Mayo Clinic Cancer Center; A Vision for the Future <i>Robert B. Diasio, M.D.</i>	2:45 - 3:15	Genetics of Cerebrovascular Disease <i>Owen A. Ross, Ph.D.</i>
8:30 - 9:00	Tailoring Radiation for Tumors <i>Paul D. Brown, M.D.</i>	3:15 – 3:45	Molecular Medicine and the Free-fall in Cerebrovascular Mortality <i>Thomas Brott, M.D.</i>
9:00 - 9:30	Targeting Go and Grow in Glioblastoma <i>Steven Rosenfeld, M.D., Ph.D.</i>	3:45 – 4:15	How to Join the Genome Writers Guild <i>Stephen Ekker, Ph.D.</i>
9:30 - 9:45	Q&A <i>Robert B. Diasio, M.D., Paul D. Brown, M.D. and Steven Rosenfeld, M.D., Ph.D.</i>	4:15 – 4:30	Q&A <i>Owen A. Ross, Ph.D., Thomas Brott, M.D. and Stephen Ekker, Ph.D.</i>
9:45 - 10:00	Refreshment Break & Exhibits	4:30	Adjourn
10:00 - 10:30	Understanding the Germline and Somatic Pathogenesis of Gliomas <i>Robert B. Jenkins, M.D., Ph.D.</i>	4:30 - 5:30	E-Poster and Abstract Presentations
10:30- 11:00	Minimally Invasive Neurosurgery for Epilepsy Patients <i>Robert E. Wharen, Jr., M.D.</i>	5:30– 6:30 p.m.	Welcome Reception (Sponsored by NW Bio)
11:00 - 11:30	Advances in Chemotherapy for High Grade Gliomas <i>Joon H. Uhm, M.D.</i>	<b>Friday, December 15, 2017</b> <b>Neurosurgical/Oncology Breakthroughs</b>	
11:30 - 11:45	Q&A <i>Robert B. Jenkins, M.D., Ph.D., Robert E. Wharen, Jr., M.D., Ph.D. and Joon H. Uhm, M.D.</i>	<b>7:00 - 7:45 a.m.</b>	<b>Continental Breakfast &amp; Exhibits</b>
<b>11:45 - 12:45 p.m.</b>	<b>Buffet Lunch, Networking, &amp; Exhibits</b>	7:45 - 8:00	Welcome & Announcements <i>W. David Freeman, M.D.</i>
12:45 - 1:15	Biomarkers for Alzheimer's Disease <i>Ronald C. Petersen, M.D., Ph.D.</i>	8:00- 8:30	Advances in Chemoradiation for Patients with Low Grade Gliomas <i>Jan C. Buckner, M.D.</i>
1:15 – 1:45	Vascular Risk Factors for Alzheimer's Disease <i>Guojun Bu, Ph.D.</i>	8:30 - 9:00	The Influence of Blood Brain Barrier Heterogeneity on Treatment Efficacy in Brain Tumors <i>Jann N. Sarkaria, M.D.</i>
1:45 - 2:15	Present and Future Rx of Alzheimer's Disease <i>Neill Graff-Radford, M.D.</i>	9:00 - 9:30	State of the Art—Future Therapies for Glioblastoma Multiforme <i>Alfredo Quiñones-Hinojosa, M.D.</i>
		9:30 - 9:45	Q&A <i>Jan C. Buckner, M.D., Jann N. Sarkaria, M.D. and Alfredo Quiñones-Hinojosa, M.D.</i>
		9:45 - 10:00	Refreshment Break & Exhibits

## Saturday, December 16, 2017

10:00 - 10:30	Every Patient Deserves Their Own Equation <i>Kristin R. Swanson, Ph.D.</i>	7:15 - 8:00 a.m.	Continental Breakfast & Exhibits
10:30- 11:00	Surgery and Immunology for Brain Tumors <i>Ian Parney, M.D., Ph.D.</i>	8:00 - 8:15	Welcome & Announcements <i>W. David Freeman, M.D.</i>
11:00 - 11:30	System Therapy for Brain Metastases in Melanoma Patients <i>Richard W. Joseph, M.D.</i>	8:15 - 9:00	Exoskeleton <i>Robert McIver, PT, DPT, NCS</i>
11:30 - 11:45	Q&A <i>Kristin R. Swanson, Ph.D., Ian Parney, M.D., Ph.D. and Richard W. Joseph, M.D.</i>	9:00 – 9:30	Q&A and Demonstration <i>Robert McIver, PT, DPT, NCS</i>
<b>11:45 - 12:45 p.m.</b>	<b>Buffet Lunch, Networking, &amp; Exhibits</b>	9:30 – 9:45	Refreshment Break & Exhibits
12:45 - 1:15	Cancer Immunity <i>Keith L. Knutson, Ph.D.</i>	9:45 - 10:15	UCF Next Generation Bionics Laboratory--- Bringing Bionic Arms to Life for Girls and Boys <i>Albert Manero II, Ph.D.</i> Director of Limbitless Solutions
1:15 – 1:45	Tumefactive Multiple Sclerosis Variants <i>W. Oliver Tobin, M.B., B.Ch., BAO, Ph.D.</i>	10:15 - 10:30	Q&A <i>Albert Manero and Guests: Alex Pring</i>
1:45 - 2:15	Q&A <i>Keith L. Knutson, Ph.D. and W. Oliver Tobin, M.B., B.Ch., BAO, Ph.D.</i>	10:30 a.m.	Closing Announcements and Adjourn <i>Alfredo Quiñones-Hinojosa, M.D.</i>
2:15 - 2:30	Refreshment Break & Exhibits		
2:30 – 3:00	Innovative Technologies in NeuroRehabilitation <i>Kenneth Ngo, M.D.</i>		
3:00 - 3:30	Neuroanatomic Acupuncture in the 21st Century: Getting The Point <i>Ronald Reimer, M.D.</i>		
3:30 – 3:45	Q&A <i>Kenneth Ngo, M.D. and Ronald Reimer, M.D.</i>		
3:45 – 4:45	My Journey- The Patient Centered Q&A with <i>Alfredo Quiñones-Hinojosa, M.D., Amanda Gammisch and Andres Hinojosa</i>		
4:45	Adjourn		
4:45- 5:45	E-Poster and Abstract Presentations		

**MAYO CLINIC**  
4500 San Pablo Road  
Jacksonville, FL 32224

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**[CE.MAYO.EDU/NEUR00NC2017](http://CE.MAYO.EDU/NEUR00NC2017)**

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