

PRELIMINARY PROGRAM

2021 Tumor Section Satellite Symposium



Neurosurgical Oncology **2021:**
A Vision for the Future

October 15–16, 2021 | Austin, Texas

JOIN US!

Register now at cns.org/tumor

Advance Registration Deadline:
September 15, 2021



Jointly provided by the Congress of Neurological Surgeons
and the Joint Section on Tumors



American
Association of
Neurological
Surgeons

Dear colleague,

We're excited to invite you to Austin, **October 15–16, 2021**, for the Tumor Section's 15th Symposium, which immediately precedes the 2021 CNS Annual Meeting. Our meeting theme this year is **Neurosurgical Oncology 2021: A Vision for the Future**.

Join us at this two-day symposium for engaging scientific sessions that explore technological advances in neurosurgical neuro-oncology, including tumor microenvironment and spinal oncology. We will also focus on neurosurgeons as clinical scientists and managing recurrence in neuro-oncology.

Breakout sessions for residents, fellows, and young attendings address topics such as tips for the first three to five years of practice, endoscopic skull base surgery, and incorporating technology in neuro-oncology. Be sure to catch the best original science with four select oral abstract presentations and discussions. We're also pleased to offer industry-sponsored breakfast and lunch symposia.

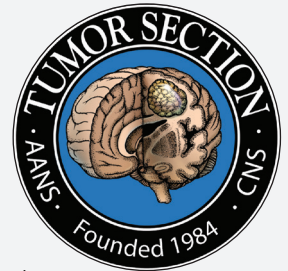
We are thrilled to welcome our 2021 Keynote Speaker, **Dr. José del R. Millán**, presenting on "Brain-Machine Interfaces for Fostering Brain Plasticity and Recovery." He is a professor and holds the Carol Cockrell Curran Endowed Chair in the Dept. of Electrical and Computer Engineering at The University of Texas at Austin. He is also a professor in the Dept. of Neurology of the Dell Medical School. Previously, Millán held the Defitech Foundation Chair in Brain-Machine Interface at the École Polytechnique Fédérale de Lausanne in Switzerland, where he helped establish the Center for Neuroprosthetics. He has made many seminal contributions to the field of brain-machine interfaces, especially based on electroencephalogram signals.

Don't miss the 37th Anniversary Gala, which takes place on Friday evening at the JW Marriott Austin. It is the perfect setting to mingle with colleagues and friends. The Tumor Section's Career Awards will be presented for: distinguished service (The Mark Rosenblum Distinguished Service Award), career accomplishments (The Charles B. Wilson Award), and mentoring (The Andrew T. Parsa Mentorship Award), along with certificates for best oral and poster presentations from the open abstract sessions during the day. On Saturday afternoon, the program will transition into the honored guest symposium highlighting the career of Edward R. Laws Jr.

The Tumor Section Satellite Symposium will take place at the JW Marriott Austin in the heart of downtown Austin, on the iconic Congress Avenue. It is nestled conveniently between the Texas State Capitol building and the Ann and Roy Butler Hike and Bike Trail. Whether it's shopping on South Congress Avenue, visiting the Bullock Texas State History Museum, or enjoying live music and a bite to eat on Sixth Street, Austin has something for everyone!

We encourage you to stay for the 2021 CNS Annual Meeting, **October 16–20**, for more CME, incredible speakers, and networking with colleagues.

We look forward to seeing you in Austin!



SECTION CHAIR



Jason Sheehan

Jason P. Sheehan
University of Virginia
Charlottesville, VA

MEETING CHAIR



M. Vogelbaum

Michael A. Vogelbaum
Moffitt Cancer Center
Tampa, FL

MEETING CHAIR



I. Dunn

Ian F. Dunn
University of Oklahoma
Health Sciences Center
Oklahoma City, OK

WHY YOU SHOULD ATTEND

WHO SHOULD ATTEND

Tumor neurological surgeons, residents, fellows, medical students, nurse clinicians, and physician assistants are welcome and encouraged to attend the Tumor Section Satellite Symposium. Educational sessions are directed toward these audiences and directly apply to their practices.

SYMPOSIUM DESCRIPTION

This symposium will explore technological advances in neurosurgical neuro-oncology, including tumor microenvironment and spinal oncology. It will also focus on neurosurgeons as clinical scientists and managing recurrence in neuro-oncology.

LEARNING OBJECTIVES

Upon completion of this symposium, participants will be able to:

- Discuss advancements in technology and brain tumor science and relevance to treatment approaches and outcome.
- Develop innovative treatment strategies for patients with brain and spine tumors at diagnosis and recurrence.
- Discuss advances in the evaluation and management of pituitary disease.
- Recognize opportunities to develop as clinician-scientists.

ACCREDITATION STATEMENT

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 Congress of Neurological Surgeons and the Tumor Section. The Congress of Neurological Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

CME DESIGNATION STATEMENT

The Congress of Neurological Surgeons designates this Live Activity for a maximum of 13 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.



EXHIBIT HALL HOURS

FRI

OCTOBER 15
9:00 am–6:00 pm

SAT

OCTOBER 16
8:00 am–3:45 pm

Admittance to the Exhibit Hall is by Tumor Section Symposium name badge only. Children under the age of 18 are not allowed in the Exhibit Hall.

SPEAKER READY ROOM

All speakers and abstract presenters should visit the Speaker Ready Room at the JW Marriott Austin prior to their presentations.

FRI

OCTOBER 15
7:00 am–6:30 pm

SAT

OCTOBER 16
6:00 am–5:00 pm

ONSITE REGISTRATION HOURS

FRI

OCTOBER 15
8:00 am–6:00 pm

SAT

OCTOBER 16
6:30 am–5:00 pm

PROGRAM SCHEDULE*

ALL PROGRAMMING WILL BE HELD AT THE JW MARRIOTT AUSTIN

FRI

OCTOBER 15

9:00–11:30 am

General Session 1: Spinal Oncology
Sponsored by NX Development Corp.
Speakers: Mark H. Bilsky, John H. Chi, Ziya L. Gokaslan, George I. Jallo, Nam D. Tran

9:00–9:04 am

Introduction to the Tumor Section Satellite Symposium
Jason Sheehan

9:05–9:14 am

Opening Remarks
Ian F. Dunn, Michael E. Ivan, Michael A. Vogelbaum

9:15–9:26 am

Spinal Oncology: Overview, Primary, Mets, SC Tumors
John H. Chi

9:27–9:38 am

Metastatic Spinal Tumors: Classification, Stabilization Scoring, Prognosis
Ziya L. Gokaslan

9:39–9:50 am

Metastatic Spine Treatment: Surgery, Radiation
Mark H. Bilsky

9:51–10:02 am

Novel Treatment Strategies for Spine Mets
Nam D. Tran

10:03–10:15 am

Intramedullary Spinal Cord Tumors
George I. Jallo

10:15–11:00 am

Break with Exhibitors

KEYNOTE SPEAKER

11:00–11:30 am

Dr. José del R. Millán
The University of Texas at Austin

Dr. José del R. Millán will be presenting on “Brain-Machine Interfaces for Fostering Brain Plasticity and Recovery.” He is a professor and holds the Carol Cockrell Curran Endowed Chair in the Department of Electrical and Computer Engineering at The University of Texas at Austin. He is also a professor in the Department of Neurology of the Dell Medical School. Previously, Millán held the Defitech Foundation Chair in Brain-Machine Interface at the École Polytechnique Fédérale de Lausanne in Switzerland, where he helped establish the Center for Neuroprosthetics. He has made several seminal contributions to the field of brain-machine interfaces, especially based on electroencephalogram signals.



11:30 am–12:10 pm

Abstract Session 1: Selected Oral Abstract Presentations
Moderators: Jennifer Moliterno Gunel, Pablo F. Recinos, Nam Duy Tran

12:10–1:10 pm

Non-CME Sponsored Lunch Sessions
Sponsored by NX Development Corp.

1:15–2:15 pm

General Session 2: Tumor Microenvironment
Speakers: Nduka M. Amankulor, Wenya Linda Bi, Gavin P. Dunn, Michael Lim

1:15–1:26 pm

Cellular Heterogeneity and Tumor Microenvironment
Michael Lim

1:27–1:38 pm

Low-Grade Glioma: Immune Escape
Nduka M. Amankulor

1:39–1:50 pm

High-Grade Glioma: Immunogenomics
Gavin P. Dunn

1:51–2:02 pm

Metastases: Seed vs. Soil
Melanie Hayden Gephart

2:03–2:15 pm

Meningioma: Immune Landscape
Wenya Linda Bi

2:15–3:00 pm

Break with Exhibitors

3:00–5:00 pm

Abstract Session 2: Selected Oral Abstract Presentations
Moderators: John H. Chi, Michael A. Vogelbaum, Isaac Yang

Breakout Sessions for Residents, Fellows, Medical Students, and Young Attendings

5:00–6:00 pm

Breakout Session 1
Tips for the First 3-5 Years of Practice
Speakers: Frederick G. Barker, Jennifer A. Moliterno Gunel, Ricardo J. Komotar, Russell R. Lonser

5:00–5:11 pm

What I Wish I Had Known When I Started My Practice
Jennifer A. Moliterno Gunel

5:12–5:23 pm

Building a Relationship with Community Physicians
Ricardo J. Komotar

5:24–5:35 pm

Finding Your Niche
Frederick G. Barker

5:36–5:47 pm

Submitting Cases/Preparing for Oral Boards
Russell R. Lonser

5:48–6:00 pm

Discussion

5:00–6:00 pm

Breakout Session 2
Endoscopic Skull Base Surgery
Speakers: Chad A. Glenn, Tyler J. Kenning, Pablo F. Recinos, Nathan T. Zwagerman

5:00–5:11 pm

What to Look for in Training
Chad A. Glenn

5:12–5:23 pm

Building the Practice from the Ground Up
Nathan T. Zwagerman

5:24–5:35 pm

Becoming a Hybrid Surgeon: Lessons in Reconstruction
Tyler J. Kenning

5:36–5:47 pm

Responsible Resident and Fellow Training in Endoscopic Skull Base Surgery
Pablo F. Recinos

5:48–6:00 pm

Discussion

5:00–6:00 pm

Breakout Session 3
Incorporating Technology in Neuro-Oncology
Speakers: Gene H. Barnett, Edjah K. Nduom, Daniel A. Orringer, Victor X. Yang

5:00–5:11 pm

Incorporating Social Media into Practice
Edjah K. Nduom

5:12–5:23 pm

Neurosurgeon-Innovator: Taking an Idea into Practice
Victor X. Yang

5:24–5:35 pm

Justifying Investment in a New Technology
Daniel A. Orringer

5:36–5:47 pm

Investing in Technology: The Learning Curve
Gene H. Barnett

5:48–6:00 pm

Discussion



SAT

37th Anniversary Gala
Saturday, October 16 | 6:00–10:00 pm
Reception and Dinner
Four Seasons Hotel Austin (all attendees welcome)

SAT

OCTOBER 16

7:00–8:00am
Sponsored Breakfast Symposium

8:00–9:15 am
General Session 3: Neurosurgeons as Clinical Scientists

Speakers: James B. Elder, Frederick F. Lang, Linda M. Liau, John H. Sampson, Nader Sanai, Andrew E. Sloan

8:00–8:12 am
Overview of how Field has Evolved/ Current Role of Surgeon Scientist
Frederick F. Lang

8:13–8:25 am
Regulatory: Drug Development
John H. Sampson

8:26–8:38 am
First in Human Trials: Device Development
Andrew E. Sloan

8:39–8:51 am
Surgical Trialist–Phase 0 Trials
Nader Sanai

8:52–9:04 am
Role of Surgeons in Late-Phase Trials— Transition from Single-Center to Multi-Center Trials
Linda M. Liau

9:05–9:15 am
Cooperative Clinical Trial Groups— NCTN: NRG, ABTC
James B. Elder

9:15–10:15 am
General Session 4: Managing Recurrence in Neuro Oncology

Speakers: Ashok R. Asthagiri, Veronica Chiang, Ian F. Dunn, Ian F. Parney, Michael A. Vogelbaum

9:15–9:26 am
Recurrent GBM: When to Operate?
Michael A. Vogelbaum

9:27–9:39 am
Recurrent HGG: Trials in Development (What to do After Rapid Growth s/p Surgery, RT, Temodar, Avastin)
Ian F. Parney

9:40–9:50 am
Recurrent Brain Metastases in the Era of Immunotherapy: Considerations and Changing Indications; Radiation Necrosis and Dex in Era of Immunotherapy
Veronica Chiang

9:51–10:02 am
High-Grade Meningioma/Recurrent Skull Base Tumors
Ian F. Dunn

10:03–10:15 am
Familial Brain Tumors (NF1, NF2, Li Fraumeni): What to Do?
Ashok R. Asthagiri

10:15–10:45 am
Break with Exhibitors

10:45 am–12:15 pm
Abstract Session 3: Selected Oral Abstract Presentations and Discussion
Moderators: Nduka M. Amankulor, W. Linda Bi, Michael E. Ivan

12:15–1:15 pm
Sponsored Lunch Symposium

1:15–3:00 pm
Laws Symposium
Speakers: Garni Barkhoudarian, Ian F. Dunn, John A. Jane, Daniel F. Kelly, Edward R. Laws, Le Min, Steven Newman, Daniel M. Prevedello, Jason P. Sheehan, Gabriel Zada

1:15–1:17 pm
Introduction
Edward R. Laws

1:18–1:28 pm
Anatomy and Physiology of the Pituitary Region
Garni Barkhoudarian

1:29–1:39 pm
Imaging of Pituitary Tumors
Gabriel Zada

1:40–1:50 pm
Medical Therapy for Pituitary Adenomas
Le Min

1:51–2:01 pm
Neuro-Ophthalmologic Considerations for Pituitary Adenoma Patients
Steven Newman

2:02–2:12 pm
Extracapsular Removal of Macroadenomas
Brian J. Williams

2:13–2:23 pm
Extended Transsphenoidal Surgery
Daniel M. Prevedello

2:24–2:34 pm
Complications of Pituitary Surgery
Daniel F. Kelly

2:35–2:45 pm
Stereotactic Radiosurgery for Pituitary Adenomas
Jason P. Sheehan

2:46–2:56 pm
Future Developments of Pituitary Care
Ian F. Dunn

2:57–3:00 pm
Closing Remarks

3:00–3:45 pm
Break with Exhibitors

3:45–5:00 pm
Abstract Session 4: Selected Oral Abstract Presentations
Moderators: Chad A. Glenn, Seunggu Jude Han, Gautam U. Mehta

** All speakers and topics are subject to change*

GENERAL INFORMATION

Airport/Ground Transportation

The Tumor Section Satellite Symposium takes place at the JW Marriott Austin, which is located about 7 miles from Austin-Bergstrom International Airport (AUS). Taxis are readily available outside Baggage Claim/Arrivals Level.

Americans with Disabilities Act

The Tumor Section ensures that no individual with a disability is excluded, denied services, segregated, or otherwise treated differently than other individuals because of the absence of auxiliary aids or services. If you require any of the auxiliary aids or services identified in the Americans with Disabilities Act in order to attend any program, please send your requirements directly to the CNS Meetings Department at meetings@cns.org, or by calling 847-240-2500.

Attire

Professional attire is appropriate for the meeting and in the Exhibit Hall. Professional/dressy attire is appropriate for the Anniversary Gala on Friday, October 15.

Climate/Time Zone

Austin's climate is classified as humid subtropical. In October, expect an average high of 82 degrees Fahrenheit and the low average of 60 degrees Fahrenheit. It is recommended that you check the weather forecast two days before your flight for the latest weather and temperature information. Please use this information to pack appropriately.

 **Austin is located in the Central Time (CT) Zone**

WiFi Service

For your convenience, complimentary WiFi is provided throughout the meeting rooms and guest rooms at the JW Marriott Austin.

Austin Attractions

For information, please visit austintexas.org. The city offers a variety of fun activities and outstanding dining opportunities for the business traveler as well as families.

Disclaimer

The material presented at the 2021 Tumor Section Satellite Symposium has been made available by the Tumor Section for educational purposes only. The material is not intended to represent the only, nor necessarily the best, method or procedure appropriate for the medical situations discussed, but rather is intended to present an approach, view, statement, or opinion of the faculty which may be helpful to others who face similar situations.

Neither the content (whether written or oral) of any course, seminar, or other presentation in the program, nor the use of a specific product in conjunction therewith, nor the exhibition of any materials by any parties coincident with the program, should be construed as indicating endorsement or approval of the views presented, the products used, or the materials exhibited by the Tumor Section or by its Committees or Affiliates. The Tumor Section disclaims any and all liability for injury or other damages resulting to any individual attending the meeting, and for all claims which may arise out of the use of the techniques demonstrated therein by such individuals, whether these claims shall be asserted by physicians or any other person. No reproductions of any kind, including audiotape and videotape, may be made of the presentations at the Tumor Section Meeting. The Tumor Section reserves all of its rights to such material, and commercial reproduction is specifically prohibited.

Health/Safety

We are working closely with the JW Marriott Austin to provide a healthy, safe environment for attendees. We will comply with guidelines and social distancing requirements.

Smoking

The JW Marriott Austin is a non-smoking facility.

Exhibitors at Previous Tumor Section Symposium

Arbor Pharmaceuticals

ZEISS

Codman Specialty Surgical

Elekta

Invenio Imaging

Medtronic

Misonix

Monteris Medical

NICO Corporation

NX Development Corporation

Stryker

Synaptive Medical

The Radiosurgery Society

TRAVEL, REGISTRATION, AND HOUSING INFORMATION

Online Registration

Go to cns.org/sections/tumor to register online. Visa, MasterCard, or American Express are accepted for payment. Online advance registration is the most immediate and secure method of registration.

Headquarter Hotel

The meeting will be held at the JW Marriott Austin, 110 East 2nd Street, Austin, TX 78701; Phone: 512-474-4777. Additional hotels and discounted room rates are also available upon registration.

Registration Rates

Registration Type	Through September 15	After September 15
Member	\$375	\$475
Non-Member	\$575	\$675
Resident/Fellow	\$100	\$200
Nurse/NP/PA	\$250	\$350
Medical Student	\$50	\$100

Save \$100 on your registration if you also register for the CNS Annual Meeting on October 16–20, which is free for CNS members. Non-members save \$200 when they register for both meetings (\$100 off the registration for each meeting). Offer expires September 15.

Cancellations/Refunds

Requests for registration cancellation must be made in writing to:

**Tumor Section Satellite Symposium
CNS Registration and Housing Center**
6100 Plano Pkwy., Suite 3500, Plano, TX 75093
Email: cns@mcievents.com
Fax: 972-349-7715

All qualifying refunds will be processed following the 2021 Tumor Section meeting. Please allow four to six weeks for processing.

Refunds will be made in accordance with the following schedule:

- Full registration refunds, less a \$100 processing fee, will be granted if written requests for cancellation are received by 5:00 pm CST on September 15, 2021.
- No refunds will be made for cancellations received after September 15, 2021, or for no-shows.

Deposit

A deposit of one night's room and tax is due at the time your hotel reservation is made. This payment must be submitted with your registration fee and will be charged to the credit card provided. Please make checks payable to: CNS Registration and Housing Center, 6100 W. Plano Parkway, Suite 3500, Plano, TX 75093. All rooms are subject to applicable state and local taxes. A small portion of your room rate will be used to help defray the cost of registration and housing services. Hotel reservations requested without deposit will not be processed.

Ways to Secure Housing

Hotel reservations for the 2021 Tumor Section Satellite Symposium can be reserved in conjunction with the 2021 CNS Annual Meeting. The CNS headquarter hotel is the JW Marriott Austin, and additional hotels and discounted room rates are available upon registration. Visit cns.org/sections/tumor to review housing availability and book your hotel through MCI, the CNS official housing bureau.

Hotel Change/Cancellation Policy

The deadline date for new reservations is September 15, 2021, based on availability. Please make any changes or cancellations through the CNS official housing bureau, MCI, through September 15.



Beginning September 15, 2021

- All changes, cancellations, or questions regarding your reservation must be made directly with the hotel.
- If cancellation notice is not received according to the hotel policy, the deposit will be forfeited. Your individual hotel's cancellation policy can be found in your emailed confirmation.

Airline Discounts

The Tumor Section is pleased to offer discounts with the following airlines. Discounts are available for flight dates between Monday, October 11 and Monday, October 25, 2021, to and from Austin-Bergstrom International Airport (AUS).

American Airlines - www.aa.com
Valid dates: October 13–23, 2021

After selecting your flights, on the "Passenger Detail" page, enter code **56H1DK** in the **promotion codes and accounts** section box at the bottom of the screen.

You will see your discount displayed in the "Cost Summary" section of the "Review and Pay" screen.

United Airlines - www.united.com
Valid dates: October 13–23, 2021

After entering your travel information on the home page, click the **Advanced Search** link. Verify flight information on the next screen and scroll to the bottom of this page, click the arrow next to Upgrades, certificates, and promotion codes and enter discount code **ZJU4675187** into the "Promotions and certificates" box. Select find flights, all prices displayed on the next screen will now reflect the discounted prices.

Delta Airlines - www.delta.com
Valid dates: October 11–25, 2021

After entering your travel information on the home page, select the downward arrow next to the **Advanced Search** link. Enter discount code **NMUMJ** in the Meeting Code (Optional) field. All prices displayed for your flight search will now reflect the discounted prices.

2021 Tumor Section Satellite Symposium



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Advance Registration Deadline: September 15, 2021

October 15–16, 2021 | Austin, Texas



10 N. Martingale Road, Suite 190, Schaumburg, IL 60173-2294



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