

**Saturday, March 28, 2020**  
**Orange County Convention Center**  
**Room W311A**  
**8:00 am – 3:45 pm**



## Musculoskeletal Tumor Society

*“Connecting Our World to Push the Field Forward”*

### General Information

#### Description

The focus of the upcoming Specialty Day will be on advances in musculoskeletal oncology around the world. With presenters from 6 continents, attendees will have the opportunity to learn the cutting-edge science, surgical techniques, and innovative technologies moving our field forward. Attendees will see different approaches to the challenges faced in orthopaedic oncology, and with interactive sessions, will contribute to collaborative solutions.

#### Educational Objectives

Upon completion of this session, attendees should be able to:

- Be aware of cutting-edge sarcoma research being performed in North America, Europe and Asia.
- Recognize different approaches to complex surgical cases.
- Identify new medical, non-surgical options for giant cell tumor of bone, tenosynovial giant cell tumor, and sarcoma.
- Understand the FDA approval process for new therapeutics and differences between device approval and drug approval.
- Develop an awareness of the difference organizations representing us (MSTS, EMSOS, ISOLS), the different roles each organization plays, and the potential collaborations in promoting education.
- Understand the important of surgical margins in bone and soft tissue tumors, respectively.

#### Accreditation

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 American Academy of Orthopaedic Surgeons and the Musculoskeletal Tumor Society. The American Academy of Orthopaedic Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

#### Credit Hours

The American Academy of Orthopaedic Surgeons designates this live activity for a maximum of **6.25 AMA PRA Category 1 credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### Disclosure

Each faculty member in this Specialty Day Meeting has been asked to disclose if he or she (of their spouse/partner) has received something of value from a commercial company or institution, which relates directly or indirectly to the subject of their presentation. An indication of the participants disclosure appears after his or her name as well as the commercial company or institution that provides the support.

The AAOS and the MSTS does not view the existence of these disclosed interests or commitments as necessarily implying bias or decreasing the value of the author's participation in the course.

#### Disclaimer

The material presented at this Specialty Day Meeting has been made available by the MSTS for educational purposes only. This material is not intended to represent the only, or necessarily the best, methods or procedures 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.

The Musculoskeletal Tumor Society disclaims any and all liability for injury or other damages resulting to any individual attending a course and for all claims, which may arise out of the use of the techniques demonstrated there in by such individuals, whether these claims shall be asserted by a physician or any other person.

#### Program Committee Leadership

**Pietro Ruggieri, MD, PhD**, Program Chair  
**Nicholas M. Bernthal, MD**, Vice Chair  
**David M. King, MD**, Member-at-Large

<b>8:00 am – 8:05 am</b>	<b>Welcome</b> <i>Joel L. Mayerson, MD, MSTS President</i> <i>Pietro Ruggieri, MD, PhD, Program Chair</i>
<b>8:05 am – 9:00 am</b>	<b>Session I: State of Research</b> <b>Moderators:</b> <i>Pietro Ruggieri, MD, PhD and Wakenda K. Tyler, MD, MPH</i>
8:05 am – 8:20 am	Biomedical Research in the USA <i>Francis J. Hornicek, MD</i>
8:20 am – 8:35 am	Biomedical Research in Europe <i>Panayiotis J. Papagelopoulos, MD</i>
8:35 am – 8:50 am	Biomedical Research in Asia <i>Hiroyuki Tsuchiya, MD, PhD</i>
8:50 am – 9:00 am	Discussion and Questions
<b>9:00 am – 10:00 am</b>	<b>Session II: Challenging Cases: Ask an International Expert</b> <b>Moderators:</b> <i>Yee-Cheen Doung, MD and Valerae O. Lewis, MD</i>
	<b>Panel Participants:</b> <i>Reinhard Windhager, MD, (Austria), Peter S. Rose, MD (USA), Eduardo Botello, Sr., MD (South America), Edward Y. Cheng, MD (USA), Andrea Angelini, MD, PhD (Italy)</i>
10:00 am – 10:30 am	Morning Break
<b>10:30 am – 11:00 am</b>	<b>Session III: MSTS Research Committee Special Session: Critical Issues &amp; Update on Emerging Drugs</b> <b>Moderators:</b> <i>David M. King, MD and Odion T. Binitie, MD</i>
10:30 am – 10:35 am	MSK Drug Targets, MSK Tumors, & FDA Approval Process <i>Rosanna Wustrack, MD</i>
10:35 am – 10:40 am	Bisphosphonates, Denosumab and Beyond <i>David D. Greenberg, MD</i>

10:40 am – 10:45 am	CSF-1 Receptor Blockers: Failures, Success, & Side Effects <i>Brooke M. Crawford, MD</i>	<b>1:30 pm – 2:30 pm</b>	<b>Session IV: Education in Musculoskeletal Oncology – The role of International Societies in Promoting Education</b>
10:45 am – 10:50 am	(5) Immune Checkpoint Regulators: Failures, Successes, & Side Effects <i>Joseph H. Schwab, MD</i>		<b>Moderators:</b> <i>Franklin H. Sim, MD and Pietro Ruggieri, MD, PhD</i>
10:50 am – 11:00 am	Discussion and Questions	1:30 pm – 1:45 pm	The Role of MSTS <i>R. Lor Randall, MD, FACS</i>
<b>11:00 am – 12:00 pm</b>	<b>Achieving Equilibrium</b> <b>Moderators:</b> <i>Patrick P. Lin, MD and Peter S. Rose, MD</i>	1:45 pm – 2:00 pm	The Role of EMSOS in Europe <i>Andreas Leithner, MD</i>
<b>11:00 am – 11:15 am</b>	<b>The Best and Worst Thing About My Job</b> <i>Michelle Ghert, MD, FRCSC</i>	2:00 pm – 2:15 pm	The Intercontinental Role of ISOLS <i>Mark T. Scarborough, MD</i>
<b>11:15 am – 11:30 am</b>	<b>Balancing Research and Clinical Care</b> <i>Parker Gibbs, Jr., MD</i>	2:15 pm – 2:30 pm	Discussion and Questions
11:30 am – 11:45 am	Discussion and Questions	<b>2:30 pm – 3:45 pm</b>	<b>Session V: “Open Problems”</b>
<b>11:45 am – 11:50 am</b>	<b>Announcement of MSTS Annual Meeting Paper and Poster Awards</b>		<b>Moderators:</b> <i>Cara A. Cipriano, MD and Nicholas M. Bernthal, MD</i>
<b>11:50 am – 12:00 pm</b>	<b>Hatcher Fellowship Announcement</b> <i>Michael A. Simon, MD</i>	2:30 pm – 2:45 pm	“Oops” Surgery: Still A Relevant Problem in Musculoskeletal Oncology? <i>Nicola Fabbri, MD</i>
12:00 pm – 1:00 pm	Lunch – MSTS Members Only Meeting	2:45 pm – 3:00 pm	Surgical Margins: Still an Issue! – Bone Tumors <i>Joseph Benevenia, MD</i>
<b>1:00 pm – 1:30 pm</b>	<b>New Technologies – Innovative Techniques</b> <b>Moderators:</b> <i>Peter Ferguson, MD and Emily E. Carmody, MD</i>	3:00 pm – 3:15 pm	Surgical Margins: Still an Issue! - Soft Tissue Tumors <i>Carol D. Morris, MD, MS</i>
1:00 pm – 1:10 pm	Minimally Invasive Endo-Pelvis Reconstruction for Metastatic Cancers <i>Francis Young Lee, MD, PhD</i>	3:15 pm – 3:30 pm	What’s New: Basic Science in Musculoskeletal Oncology <i>John H. Healey, MD, FACS</i>
1:10 pm – 1:20 pm	Navigation in Musculoskeletal Oncology: An Update <i>G. Douglas Letson, MD</i>	3:30 pm – 3:45 pm	Discussion and Questions
1:20 pm – 1:30 pm	Discussion and Questions	3:45 pm	Final Remarks and Adjourn <i>Pietro Ruggieri, MD, PhD and Nicholas M. Bernthal, MD</i>