

| 2025 MSTs Annual Meeting - Final Program                                     |          |                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| December 3-5, 2025 - Hyatt Regency Polanco, Mexico City                      |          |                                                                                                                                                                                                                                                                                                              |
| Gregory Domson, MD and Santiago Lozano Calderon, MD, PhD - Program Co-Chairs |          |                                                                                                                                                                                                                                                                                                              |
| Rajiv Rajani, MD - MSTs President                                            |          |                                                                                                                                                                                                                                                                                                              |
| Wednesday, December 3, 2025                                                  |          |                                                                                                                                                                                                                                                                                                              |
| 8:00 AM                                                                      | 11:00 AM | Percutaneous Pelvis Fixation Workshop - Separate Registration Required                                                                                                                                                                                                                                       |
| 12:00 PM                                                                     | 7:30 PM  | Registration Regency Ballroom A & B Foyer                                                                                                                                                                                                                                                                    |
| 1:00 PM                                                                      | 5:00 PM  | MORI Young Member Session - Separate Registration Required - Regency Ballroom A & B                                                                                                                                                                                                                          |
| 1:00 PM                                                                      | 8:00 PM  | Exhibit Booth Set Up - Regency Ballroom C                                                                                                                                                                                                                                                                    |
| 6:00 PM                                                                      | 8:00 PM  | MSTs Welcome Reception - La Residencia - Hyatt Regency                                                                                                                                                                                                                                                       |
| Thursday, December 4, 2025                                                   |          |                                                                                                                                                                                                                                                                                                              |
| Start                                                                        | End      |                                                                                                                                                                                                                                                                                                              |
| 6:30 AM                                                                      | 4:00 PM  | Registration - Regency Ballroom A & B Foyer                                                                                                                                                                                                                                                                  |
| 7:00 AM                                                                      | 8:30 AM  | Breakfast - Regency Ballroom C                                                                                                                                                                                                                                                                               |
| 8:15 AM                                                                      | 4:00 PM  | Nurse & Allied Health Professionals Symposium - Separate Registration Required - Regency Room F                                                                                                                                                                                                              |
| 7:00 AM                                                                      | 4:15 PM  | E-Posters/Exhibits Open - E-Posters in the Foyer and Exhibits in Regency Ballroom C                                                                                                                                                                                                                          |
| 8:00 AM                                                                      | 8:10 AM  | Introduction and Welcome (Raj Rajani, MD)                                                                                                                                                                                                                                                                    |
|                                                                              |          | <b>Session I: Soft Tissue Sarcoma - Regency Ballroom A &amp; B</b>                                                                                                                                                                                                                                           |
|                                                                              |          | <b>Moderators: Meena Bedi, MD, MS and Alexander Lazarides, MD</b>                                                                                                                                                                                                                                            |
| 8:10 AM                                                                      | 8:15 AM  | Paper 1 Clinical Research - Incisional Negative Pressure Wound Therapy for Preoperatively Irradiated Pelvis and Lower Extremity Soft Tissue Sarcoma Wounds: A Prospective, Randomized, Multicenter Pilot Trial (Lee R. Leddy, MD, MSrCR)                                                                     |
| 8:15 AM                                                                      | 8:20 AM  | Paper 2 Clinical Research - Proteomic Liquid Biopsy and Digital Molecular Barcodes - Providing New Insights into Soft Tissue Sarcoma Treatment with Immunolight Cancer Therapy (William Eward, MD, DVM)                                                                                                      |
| 8:20 AM                                                                      | 8:25 AM  | Paper 3 Clinical Research - Surgical Outcomes Following Tumor Bed Excision in Patients Undergoing Unplanned Excision of Soft Tissue Sarcoma (Juan Pretell, MD)                                                                                                                                               |
| 8:25 AM                                                                      | 8:30 AM  | Paper 4 Clinical Research - Marginal Excision of Extremely Dedifferentiated Liposarcoma Without Radiation May Be Safe in Select Patients (Juan Barriga, MD)                                                                                                                                                  |
| 8:30 AM                                                                      | 8:35 AM  | Paper 5 Clinical Research - Prognostic Relevance of Tumor Location in Myxoid Liposarcoma: Favorable Outcomes with Intramuscular Lesions (Ilkyu Han, MD, PhD)                                                                                                                                                 |
| 8:35 AM                                                                      | 8:45 AM  | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                                               |
|                                                                              |          | <b>Moderators: Adam S. Levin, MD and Alexandra K. Callan, MD</b>                                                                                                                                                                                                                                             |
| 8:45 AM                                                                      | 8:50 AM  | Paper 6 Registry/Database - Lymph Node Metastases in Soft Tissue Sarcoma: A Comparative Analysis of the SEER and NCDB databases (Sarah E. Ballatori, MD)                                                                                                                                                     |
| 8:50 AM                                                                      | 8:55 AM  | Paper 7 Clinical Research - Does Chemotherapy Improve Survival for Patients with Synovial Sarcoma? (Emily Pearis, MD)                                                                                                                                                                                        |
| 8:55 AM                                                                      | 9:00 AM  | Paper 8 Registry/Database - Neoadjuvant Chemotherapy is Associated with Reduced Amputation Risk in Synovial Sarcoma of the Lower Extremity (Lauren Wessel, MD)                                                                                                                                               |
| 9:00 AM                                                                      | 9:05 AM  | Paper 9 Clinical Research - Deep Learning and Dimensionality Reduction for Sarcoma Subtyping (Jay Swayambunathan)                                                                                                                                                                                            |
| 9:05 AM                                                                      | 9:10 AM  | Paper 10 Clinical Experience - Levels of Circulating Tumor DNA (ctDNA) Correlate with Disease Status in Patients with Soft Tissue Sarcomas: A Pilot Study (Tae Won B. Kim, MD)                                                                                                                               |
| 9:10 AM                                                                      | 9:20 AM  | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                                               |
| 9:20 AM                                                                      | 9:25 AM  | Transition Time                                                                                                                                                                                                                                                                                              |
| 9:25 AM                                                                      | 9:45 AM  | <b>Product Theater #1 - Onkos Surgical - No CME Credit - Regency Room G</b>                                                                                                                                                                                                                                  |
| 9:25 AM                                                                      | 9:45 AM  | <b>Break / E-Poster Viewing - Break in Regency Ballroom C and E-Posters in the Foyer</b>                                                                                                                                                                                                                     |
| 9:45 AM                                                                      | 9:50 AM  | Transition Time                                                                                                                                                                                                                                                                                              |
|                                                                              |          | <b>Session II: Trials in Musculoskeletal Oncology - Regency Ballroom A &amp; B</b>                                                                                                                                                                                                                           |
|                                                                              |          | <b>Moderators: Benjamin J. Miller, MD, MS and Alysia Kemp, MD</b>                                                                                                                                                                                                                                            |
| 9:50 AM                                                                      | 9:55 AM  | Paper 11 Clinical Research - Long-Term Efficacy and Safety of Vismetlinib in Patients with Tenosynovial Giant Cell Tumor (TGCT): 2-Year Results from the MOTION Phase 3 Trial (R. Lor Randall, MD, FACS)                                                                                                     |
| 9:55 AM                                                                      | 10:00 AM | Paper 12 Clinical Research - The Surveillance After Extremity Tumor Surgery (SAFETY) International Multi-Center Randomized Controlled Trial (Michelle Gert, MD, FRCSrC)                                                                                                                                      |
| 10:00 AM                                                                     | 10:05 AM | Paper 13 Clinical Research - Enrollment Challenges to a Randomized Controlled Trial Supporting Mental Health in Patients with Sarcoma (Meredith Bartelstein, MD)                                                                                                                                             |
| 10:05 AM                                                                     | 10:10 AM | Paper 14 Clinical Research - Development of Explainable Machine-Learning Models to Identify Patients at Risk for One-Year Mortality and New Distant Metastases Post-Endoprosthetic Reconstruction for Lower Extremity Bone Tumors: A Secondary Analysis of the PARITY Trial (Anthony Bozzo, MD, MSc, FRCSrC) |
| 10:10 AM                                                                     | 10:15 AM | Paper 15 Registry/Database - The Burden of Surgical Site Infections with Pathogens Presumably Resistant to Perioperative Prophylaxis in Orthopedic Tumor Surgery: A Secondary Analysis of the PARITY trial (Hadia Farukh)                                                                                    |
| 10:15 AM                                                                     | 10:25 AM | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                                               |
|                                                                              |          | <b>Session III: Artificial Intelligence - Regency Ballroom A &amp; B</b>                                                                                                                                                                                                                                     |
|                                                                              |          | <b>Moderators: Anthony Bozzo, MD, MSc, FRCSrC and Tessa Balach, MD</b>                                                                                                                                                                                                                                       |
| 10:25 AM                                                                     | 10:30 AM | Paper 16 Clinical Research - Evaluation of Commonly Utilized Large Language Models in Optimizing Readability, Accuracy, and Patient Comprehension of Orthopaedic Oncology Patient Educational Materials (Patrick Nian, BA)                                                                                   |
| 10:30 AM                                                                     | 10:35 AM | Paper 17 Registry/Database - Interpretable Machine Learning for Predicting Recurrence in Pediatric Extremity Sarcomas: A Proof-of-Concept Using National Cancer Registry Data (Kole Joachim, BA)                                                                                                             |
| 10:35 AM                                                                     | 10:40 AM | Paper 18 Other Research - Who can write a better editorial in orthopedic oncology? A human vs. artificial intelligence competition (Jessa D. Fogel, MD)                                                                                                                                                      |
| 10:40 AM                                                                     | 10:45 AM | Paper 19 Other Research - Large Language Model Extraction of Structured Data in Unstructured Sarcoma Pathology Notes: A Pilot Study (Marisa N. Ulrich, MD)                                                                                                                                                   |
| 10:45 AM                                                                     | 10:50 AM | Paper 20 Clinical Research - Development and External Validation of a Machine Learning Algorithm to Predict Overall Survival in Patients with Pelvic or Appendicular Liposarcoma (Andrew Girgis, BS)                                                                                                         |
| 10:50 AM                                                                     | 11:00 AM | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                                               |
| 11:00 AM                                                                     | 11:05 AM | Transition Time                                                                                                                                                                                                                                                                                              |
| 11:05 AM                                                                     | 11:25 AM | <b>Product Theater #2 - EMD Serono - No CME Credit - Regency Room G</b>                                                                                                                                                                                                                                      |
| 11:05 AM                                                                     | 11:25 AM | <b>Break / E-Poster Viewing - Break in Regency Ballroom C and E-Posters in the Foyer</b>                                                                                                                                                                                                                     |
| 11:25 AM                                                                     | 11:30 AM | Transition Time                                                                                                                                                                                                                                                                                              |
|                                                                              |          | <b>Session IV: Osteosarcoma - Regency Ballroom A &amp; B</b>                                                                                                                                                                                                                                                 |
|                                                                              |          | <b>Moderators: Joshua C. Patt, MD, MPH and Rosanna Wustrack, MD</b>                                                                                                                                                                                                                                          |
| 11:30 AM                                                                     | 11:35 AM | Paper 21 Basic and/or Translational Research - Osteosarcoma: The Clot Traps the Cancer (Stephen W. Chenard, MSc)                                                                                                                                                                                             |
| 11:35 AM                                                                     | 11:40 AM | Paper 22 Clinical Research - Bias or Best Fit? A Comparative Analysis of SEER and NCDB Datasets in Single-Model Machine Learning for Predicting Osteosarcoma Survival Outcomes (Andrew Girgis, BS)                                                                                                           |
| 11:40 AM                                                                     | 11:45 AM | Paper 23 Basic and/or Translational Research - The Effect of Disulfiram and Enzalutamide Combination Therapy on the Survival and Migration of In Vitro Metastatic Osteosarcoma (Lawrence Garvin, MD)                                                                                                         |
| 11:45 AM                                                                     | 11:50 AM | Paper 24 Clinical Experience - GLI1 Amplification in Dedifferentiated Osteosarcoma (Carol Morris, MD, MS)                                                                                                                                                                                                    |
| 11:50 AM                                                                     | 11:55 AM | Paper 25 Clinical Research - Is Tumor Percent Necrosis Associated with Surgical Margin Status in Osteosarcoma? (Stephan Chenard, MD)                                                                                                                                                                         |
| 11:55 AM                                                                     | 12:05 PM | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                                               |
| 12:05 PM                                                                     | 1:00 PM  | <b>Lunch/E-Poster Viewing - Lunch in Regency Ballroom C and E-Posters in the Foyer</b>                                                                                                                                                                                                                       |
| 1:00 PM                                                                      | 2:10 PM  | <b>MSTs Business Meeting - No CME Credit - Regency Ballroom A &amp; B</b>                                                                                                                                                                                                                                    |
| 2:10 PM                                                                      | 3:10 PM  | <b>Presidential Guest Speaker - Bobby Mukkamala, MD - Patient Advocacy in Turbulent Times</b>                                                                                                                                                                                                                |
| 3:10 PM                                                                      | 3:15 PM  | Transition Time                                                                                                                                                                                                                                                                                              |
| 3:15 PM                                                                      | 3:35 PM  | <b>Product Theater #3 - Zimmer Biomet - No CME Credit - Regency Room G</b>                                                                                                                                                                                                                                   |
| 3:15 PM                                                                      | 3:35 PM  | <b>Break/Poster Viewing - Break in Regency Ballroom C and E-Posters in Foyer</b>                                                                                                                                                                                                                             |
| 3:35 PM                                                                      | 3:40 PM  | Transition Time                                                                                                                                                                                                                                                                                              |
|                                                                              |          | <b>Session V: Registries and Large Database Studies - Regency Ballroom A &amp; B</b>                                                                                                                                                                                                                         |
|                                                                              |          | <b>Moderators: Michelle Gert, MD, FRCSrC and Max Vaynrub, MD</b>                                                                                                                                                                                                                                             |
| 3:40 PM                                                                      | 3:45 PM  | Paper 26 Registry/Database - The International Sarcoma Registry Minimal Dataset: Updates on a Global Multi-Society Collaboration (Benjamin J Miller, MD, MS)                                                                                                                                                 |
| 3:45 PM                                                                      | 3:50 PM  | Paper 27 Clinical Research - Advancing Sarcoma Research Through the Musculoskeletal Oncology Tumor Registry and Tissue Bank (MOTOR) (Amanda Locker)                                                                                                                                                          |
| 3:50 PM                                                                      | 3:55 PM  | Paper 28 Registry/Database - A Prospective Analysis of Quality of Life Outcomes in Pediatric Patients Undergoing Surgical Intervention for Lower Extremity Bone Sarcoma (Hanna Gratny, BS)                                                                                                                   |
| 3:55 PM                                                                      | 4:00 PM  | Paper 29 Registry/Database - Comparison of Sarcoma Biopsies between Referral Centers and Treating Centers: An Analysis of the Musculoskeletal Tumor Registry (MsTR) (Adam S. Levin, MD)                                                                                                                      |
| 4:00 PM                                                                      | 4:05 PM  | Paper 30 Registry/Database - 2025 Updates and Goals for the Musculoskeletal Tumor Registry (Adam S. Levin, MD)                                                                                                                                                                                               |
| 4:05 PM                                                                      | 4:15 PM  | <b>Q&amp;A</b>                                                                                                                                                                                                                                                                                               |
| 4:15 PM                                                                      |          | Meeting Adjourns                                                                                                                                                                                                                                                                                             |
| 6:00 PM                                                                      | 10:00 PM | <b>Social Event - Casino Espanol - bus transportation provided</b>                                                                                                                                                                                                                                           |

| Friday, December 5, 2025  |          |                                                                                                       |                                                                                                                                                                                                                                   | Friday, December 5, 2025 |          |                                                                                                     |                                                                                                                                                                                                                              |
|---------------------------|----------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6:30 AM - 8:30 AM         |          | Registration - <i>Regency Ballroom A &amp; B Foyer</i>                                                |                                                                                                                                                                                                                                   | 6:30 AM - 8:30 AM        |          | Registration - <i>Regency Ballroom A &amp; B Foyer</i>                                              |                                                                                                                                                                                                                              |
| 7:00 AM - 8:30 AM         |          | Breakfast / E-Poster Viewing - Breakfast in <i>Regency Ballroom C</i> and E-Posters in <i>Foyer</i>   |                                                                                                                                                                                                                                   | 7:00 AM - 8:30 AM        |          | Breakfast / E-Poster Viewing - Breakfast in <i>Regency Ballroom C</i> and E-Posters in <i>Foyer</i> |                                                                                                                                                                                                                              |
| 7:00 AM - 12:00 PM        |          | E-Posters/Exhibits Open - E-Posters in <i>Foyer</i> and Exhibits in <i>Regency Ballroom C</i>         |                                                                                                                                                                                                                                   | 7:00 AM - 12:00 PM       |          | E-Posters/Exhibits Open - E-Posters in <i>Foyer</i> and Exhibits in <i>Regency Ballroom C</i>       |                                                                                                                                                                                                                              |
| 8:00 AM                   | 8:05 AM  | Announcements                                                                                         |                                                                                                                                                                                                                                   | 8:00 AM                  | 8:05 AM  | Announcements                                                                                       |                                                                                                                                                                                                                              |
| Concurrent Paper Sessions |          |                                                                                                       |                                                                                                                                                                                                                                   |                          |          |                                                                                                     |                                                                                                                                                                                                                              |
|                           |          | Session VI-A: Chondrosarcoma - <i>Regency Ballroom A &amp; B</i>                                      |                                                                                                                                                                                                                                   |                          |          | Session VI-B: Genetics and Basic Science - <i>Regency Room E</i>                                    |                                                                                                                                                                                                                              |
|                           |          | Moderators: Julia D. Visgauss, MD and Lukas M. Nystrom, MD                                            |                                                                                                                                                                                                                                   |                          |          | Moderators: Kurt R. Weiss, MD and Francis Lee, MD, PhD                                              |                                                                                                                                                                                                                              |
| 8:05 AM                   | 8:10 AM  | Paper 31                                                                                              | Clinical Research - The Prognostic Value of the Modified Glasgow Prognostic Score in the Management of Patients with Chondrosarcoma: A Multicentre Study (Sanjay Gupta)                                                           | 8:05 AM                  | 8:10 AM  | Paper 65                                                                                            | Basic and/or Translational Research - A Multi-Institutional Archive and Deep Learning Pipeline for Quantifying Chondrosarcoma Composition (Lyla Handoklow)                                                                   |
| 8:10 AM                   | 8:15 AM  | Paper 32                                                                                              | Clinical Research - IDH Mutations in Chondrosarcoma Correlate with Patient Survival in De-Differentiated but not Conventional Subtypes (Jay Swayambunathan)                                                                       | 8:10 AM                  | 8:15 AM  | Paper 66                                                                                            | Basic and/or Translational Research - Single-Cell RNA Sequencing and Proteomic Spatial Profiling Reveal Complex Tumor Microenvironment and Novel Immune Interactions in Chondrosarcoma (Aron Mebrahtu)                       |
| 8:15 AM                   | 8:20 AM  | Paper 33                                                                                              | Clinical Research - Income Impacts Overall but not Cause-Specific Survival in Patients with Chondrosarcoma: a Population Based Study from the SEER Database (Adrian Lin, BS)                                                      | 8:15 AM                  | 8:20 AM  | Paper 67                                                                                            | Basic and/or Translational Research - Carboxylic Acid Functionalized Polycarbonates as Bone Cement Additives for Improved Antibiotic Delivery to Prevent Infections in Endoprosthetic Reconstructions (Zhen Chang Liang, MD) |
| 8:20 AM                   | 8:25 AM  | Paper 34                                                                                              | Clinical Research - Association of Cartilage Cap Thickness with Tumor Grade and Outcomes in Secondary Chondrosarcoma (Takashi Hirase, MD, PhD)                                                                                    | 8:20 AM                  | 8:25 AM  | Paper 68                                                                                            | Basic and/or Translational Research - Investigating Macrophage Populations in Primary and Metastatic Sarcoma Samples (Maia Brown)                                                                                            |
| 8:25 AM                   | 8:30 AM  | Paper 35                                                                                              | Clinical Research - Demographic and Clinical Risk Factors for Lung Metastases in Chondrosarcoma: A Multi-Institutional Analysis Using TriNetX (Ameer Zaman, BS)                                                                   | 8:25 AM                  | 8:30 AM  | Paper 69                                                                                            | Clinical Experience - Mutational Analysis of Primary and Advanced Chordoma Tissue using Next-Generation Sequencing (Josh Chan)                                                                                               |
| 8:30 AM                   | 8:40 AM  | Q&A                                                                                                   |                                                                                                                                                                                                                                   | 8:30 AM                  | 8:40 AM  | Q&A                                                                                                 |                                                                                                                                                                                                                              |
| 8:40 AM                   | 9:00 AM  | MSTS Research Updates and Grant Announcements - Bang H. Hoang, MD - <i>Regency Ballroom A &amp; B</i> |                                                                                                                                                                                                                                   | 8:40 AM                  | 9:00 AM  | MSTS Research Updates and Grant Announcements - <i>Regency Ballroom A &amp; B</i>                   |                                                                                                                                                                                                                              |
| 9:00 AM                   | 9:05 AM  |                                                                                                       | Transition Time                                                                                                                                                                                                                   | 9:00 AM                  | 9:05 AM  |                                                                                                     | Transition Time                                                                                                                                                                                                              |
| 9:05 AM                   | 9:25 AM  | Product Theater #4 - Deciphera Pharmaceuticals - No CME Credit - <i>Regency Room G</i>                |                                                                                                                                                                                                                                   | 9:05 AM                  | 9:25 AM  | Product Theater #4 - Deciphera Pharmaceuticals - No CME Credit - <i>Regency Room G</i>              |                                                                                                                                                                                                                              |
| 9:05 AM                   | 9:25 AM  | Break / E-Poster Viewing - Break in <i>Regency Ballroom C</i> and E-Posters in the <i>Foyer</i>       |                                                                                                                                                                                                                                   | 9:05 AM                  | 9:25 AM  | Break / E-Poster Viewing - Break in <i>Regency Ballroom C</i> and E-Posters in <i>Foyer</i>         |                                                                                                                                                                                                                              |
| 9:25 AM                   | 9:30 AM  |                                                                                                       | Transition Time                                                                                                                                                                                                                   | 9:25 AM                  | 9:30 AM  |                                                                                                     | Transition Time                                                                                                                                                                                                              |
| Concurrent Paper Sessions |          |                                                                                                       |                                                                                                                                                                                                                                   |                          |          |                                                                                                     |                                                                                                                                                                                                                              |
|                           |          | Session VII-A: Metastatic Bone Disease I - <i>Regency Ballroom A &amp; B</i>                          |                                                                                                                                                                                                                                   |                          |          | Session: VII-B Amputation - <i>Regency Room E</i>                                                   |                                                                                                                                                                                                                              |
|                           |          | Moderators: Ian English, MD and Brooke M. Crawford, MD                                                |                                                                                                                                                                                                                                   |                          |          | Moderators: Nicholas Arpey, MD and C. Parker Gibbs, Jr., MD                                         |                                                                                                                                                                                                                              |
| 9:30 AM                   | 9:35 AM  | Paper 36                                                                                              | Clinical Research - The Proximal Femur Reconstruction or Internal Fixation for Metastases (PERFORM) Randomized Controlled Trial: Protocol Development and Study Update (Michelle Gert, MD, FRCSC)                                 | 9:30 AM                  | 9:35 AM  | Paper 70                                                                                            | Clinical Experience - Can We Validate the Musculoskeletal Infection Society Criteria in Patients Suspected of Infection After Transfemoral Osseointegration Surgery? (Sarah E. Rabin, MD)                                    |
| 9:35 AM                   | 9:40 AM  | Paper 37                                                                                              | Clinical Research - Intralesional Treatment is Associated with Similar Post-Operative Outcomes to Wide Resection and Reconstruction for Renal Cell Carcinoma Long Bone Metastases (Jayanth Kashyap)                               | 9:35 AM                  | 9:40 AM  | Paper 71                                                                                            | Clinical Research - Decreased Frequency of Revision Amputation with Primary Targeted Muscle Reinnervation and Regenerative Peripheral Nerve Interface Surgery (Mathangi Sridharan, MD)                                       |
| 9:40 AM                   | 9:45 AM  | Paper 38                                                                                              | Clinical Research - Protrusio Acetabuli Radiographical Risk Model (PARRM) Predicts Progression of Periacetabular Metastases to Protrusio Acetabuli (Francis Lee, MD, PhD)                                                         | 9:40 AM                  | 9:45 AM  | Paper 72                                                                                            | Other Research - Surgical Complications Associated with Oncologic Rotationplasty Procedures (Courtney Lavin, MD)                                                                                                             |
| 9:45 AM                   | 9:50 AM  | Paper 39                                                                                              | Clinical Research - Minimally Invasive Percutaneous Screw Fixation for Metastatic Pelvic Lesions: Clinical Outcomes, Biomechanical Modeling, and AI-Assisted Innovation (Rui Yang, MD)                                            | 9:45 AM                  | 9:50 AM  | Paper 73                                                                                            | Registry/Database - Amputation Following Megaprosthesis Use in Limb Salvage (Emily Peairs, MD)                                                                                                                               |
| 9:50 AM                   | 9:55 AM  | Paper 40                                                                                              | Clinical Research - Tumoral Biomarkers Predict Pathologic Fracture Risk in Skeletal Metastases from Breast and Prostate Cancer (Brooke Crawford, MD)                                                                              | 9:50 AM                  | 9:55 AM  | Paper 74                                                                                            | Basic and/or Translational Research - Biomechanical Effects of Described Variations on the Van Nes Rotationplasty (Michael A. McNamara, MD)                                                                                  |
| 9:55 AM                   | 10:05 AM | Q&A                                                                                                   |                                                                                                                                                                                                                                   | 9:55 AM                  | 10:05 AM | Q&A                                                                                                 |                                                                                                                                                                                                                              |
| Concurrent Paper Sessions |          |                                                                                                       |                                                                                                                                                                                                                                   |                          |          |                                                                                                     |                                                                                                                                                                                                                              |
|                           |          | Session VIII-A: Metastatic Bone Disease II - <i>Regency Ballroom A &amp; B</i>                        |                                                                                                                                                                                                                                   |                          |          | Session VIII-B: Pelvic Reconstruction - <i>Regency Room E</i>                                       |                                                                                                                                                                                                                              |
|                           |          | Moderators: Meredith Bartelstein, MD and Juan A. Pretel, MD                                           |                                                                                                                                                                                                                                   |                          |          | Moderators: Krista Goulding, MD, MPH and Nathan W. Mesko, MD                                        |                                                                                                                                                                                                                              |
| 10:05 AM                  | 10:10 AM | Paper 41                                                                                              | Clinical Research - Long-Term Comparison of Percutaneous Focal Fixation, Intramedullary Nailing, and Hemiarthroplasty for Proximal Femur Metastases: A 10-Year Prospective Study (Francis Lee, MD, PhD)                           | 10:05 AM                 | 10:10 AM | Paper 75                                                                                            | Clinical Research - Nerve Palsy After Type II Internal Hemipelvectomy: Prevalence and Recovery (Samuel E. Broida, MD)                                                                                                        |
| 10:10 AM                  | 10:15 AM | Paper 42                                                                                              | Registry/Database - The "Oncologic Polytrauma": Characteristics, Outcomes, and Treatment Strategies (William Hogan, MD)                                                                                                           | 10:10 AM                 | 10:15 AM | Paper 76                                                                                            | Other Research - Evaluating the Accuracy of Custom 3D-Printed Jigs in Bone Tumour Resections: A Single Centre Study (Lee Bayliss, MD)                                                                                        |
| 10:15 AM                  | 10:20 AM | Paper 43                                                                                              | Clinical Research - Comparison of Reoperation and Local Recurrence Rates Between Metastasectomy, Intralesional Resection, or Stabilization Alone in the Treatment of Bone Metastases from RCC (Santiago Lozano Calderon, MD, PhD) | 10:15 AM                 | 10:20 AM | Paper 77                                                                                            | Other Research - 3D MAP: 3D-Printed Minimally Invasive Augmentation of the Pelvis. A Cadaveric Study of Minimally Invasive Augmentation for Periacetabular Bone Metastasis (Michael D. Leslie, MD, MSc)                      |
| 10:20 AM                  | 10:25 AM | Paper 44                                                                                              | Clinical Research - Are Circulating Immune Signatures Associated with Survival Following Surgical Intervention for Bone Metastases? (Brian Greenstein, BA)                                                                        | 10:20 AM                 | 10:35 AM |                                                                                                     | Invited Speaker: Pelvic Resection and Reconstruction (Lee Jeys, MD)                                                                                                                                                          |
| 10:25 AM                  | 10:30 AM | Paper 45                                                                                              | Clinical Experience - What is the Incidence of Distal Femoral Disease Progression in Isolated Proximal Femur Bone Metastasis? (Ian Kevin Christman, MD)                                                                           |                          |          |                                                                                                     |                                                                                                                                                                                                                              |
| 10:30 AM                  | 10:45 AM | Q&A                                                                                                   |                                                                                                                                                                                                                                   | 10:35 AM                 | 10:45 AM | Q&A                                                                                                 |                                                                                                                                                                                                                              |
| 10:45 AM                  | 10:50 AM |                                                                                                       | Transition Time                                                                                                                                                                                                                   | 10:45 AM                 | 11:50 AM |                                                                                                     | Transition Time                                                                                                                                                                                                              |
| 10:50 AM                  | 11:10 AM | Product Theater #5 - Daiichi Sankyo, Inc (DSI) - No CME Credit - <i>Regency Room G</i>                |                                                                                                                                                                                                                                   | 10:50 AM                 | 11:10 AM | Product Theater #5 Daiichi Sankyo, Inc (DSI) - No CME Credit - <i>Regency Room G</i>                |                                                                                                                                                                                                                              |
| 10:50 AM                  | 11:10 AM | Break / E-Poster Viewing - Break in <i>Regency Ballroom C</i> and E-Posters in the <i>Foyer</i>       |                                                                                                                                                                                                                                   | 10:50 AM                 | 11:10 AM | Break / E-Poster Viewing - Break in <i>Regency Ballroom C</i> and E-Posters in <i>Foyer</i>         |                                                                                                                                                                                                                              |
| 11:10 AM                  | 11:15 AM |                                                                                                       | Transition Time                                                                                                                                                                                                                   | 11:10 AM                 | 11:15 AM |                                                                                                     | Transition Time                                                                                                                                                                                                              |

| Concurrent Paper Sessions |          |                                                                                                           |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
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|                           |          | Session IX-A: Giant Cell Tumor of Bone - <i>Regency Ballroom A &amp; B</i>                                |                                                                                                                                                                                                                                                       |  |  |          |          | Session IX-B: Miscellaneous: ICG in Musculoskeletal Oncology - <i>Regency Room E</i> |                                                                                                                                                                                                                                                                                         |
|                           |          | Moderators: Kevin A. Raskin, MD and David D. Greenberg, MD                                                |                                                                                                                                                                                                                                                       |  |  |          |          | Moderators: Raffi Avedian, MD and Mark T. Scarborough, MD                            |                                                                                                                                                                                                                                                                                         |
| 11:15 AM                  | 11:20 AM | Paper 46                                                                                                  | Basic and/or Translational Research - Distinct Metabolic Signatures Predict the Biologic Behavior of Giant Cell Tumor of Bone (Devin Conway, MD, MPH)                                                                                                 |  |  | 11:15 AM | 11:20 AM | Paper 78                                                                             | Clinical Research - SPY Intraoperative Angiography Decreases Wound Dehiscence but not Overall Wound Complications Following Limb-Sparing Surgery for Pre-Irradiated Lower Extremity Soft Tissue Sarcoma (Benjamin J. Miller, MD, MS)                                                    |
| 11:20 AM                  | 11:25 AM | Paper 47                                                                                                  | Other Research - Impact of Peri-Operative Denosumab on Local Recurrence After Surgical Management of Giant Cell Tumors: A Meta-analysis (William Eward, MD, DVM)                                                                                      |  |  | 11:20 AM | 11:25 AM | Paper 79                                                                             | Clinical Experience - Indocyanine Green-Based Fluorescence Imaging to Guide Posterior Thoracic Keystone Island Perforator Flaps Following Oncologic Resection: A Surgical Technique (Joel M. Post, DO)                                                                                  |
| 11:25 AM                  | 11:30 AM | Paper 48                                                                                                  | Registry/Database - Sex-Based Differences in Recurrence Risk of Giant Cell Tumors: A Retrospective Cohort Study (Christopher D. Hamad, MD)                                                                                                            |  |  | 11:25 AM | 11:30 AM | Paper 80                                                                             | Clinical Experience - Intraoperative Indocyanine Green Angiography May Reduce Reoperation Rates After Oncologic Pelvic Resections: A Contemporary Cohort Compared to Institutional Historical Outcomes (Christa L. LiBizzi, MD)                                                         |
| 11:30 AM                  | 11:35 AM | Paper 49                                                                                                  | Clinical Research - Giant Cell Tumor Patient Outcomes when Treated with Subchondral Bone Grafting After Curettage (Joseph Ippolito, MD)                                                                                                               |  |  | 11:30 AM | 11:35 AM | Paper 81                                                                             | Withdrawn by Submitter                                                                                                                                                                                                                                                                  |
| 11:35 AM                  | 11:45 AM | Q&A                                                                                                       |                                                                                                                                                                                                                                                       |  |  | 11:35 AM | 11:45 AM | Q&A                                                                                  |                                                                                                                                                                                                                                                                                         |
| 11:45 AM                  | 12:35 PM | Lunch /E-Poster Viewing - Lunch in <i>Regency Ballroom C</i> and E-Posters in the Foyer                   |                                                                                                                                                                                                                                                       |  |  | 11:45 AM | 12:35 PM | Lunch /E-Poster Viewing - Lunch in <i>Regency Ballroom C</i> and E-Posters in Foyer  |                                                                                                                                                                                                                                                                                         |
| Concurrent Paper Sessions |          |                                                                                                           |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
|                           |          | Session X-A: Access and Health Disparities - <i>Regency Ballroom A &amp; B</i>                            |                                                                                                                                                                                                                                                       |  |  |          |          | Session X-B: Endoprosthetic Reconstruction - <i>Regency Room E</i>                   |                                                                                                                                                                                                                                                                                         |
|                           |          | Moderators: Rajiv Rajani, MD and Cara A. Cipriano MD, MSc                                                 |                                                                                                                                                                                                                                                       |  |  |          |          | Moderators: Matthew T. Houdek, MD and Nicholas M. Bernthal, MD                       |                                                                                                                                                                                                                                                                                         |
| 12:35 PM                  | 12:40 PM | Paper 50                                                                                                  | Clinical Research - Characterizing Financial Toxicity in Survivors of Sarcoma: A Single-Institution Study (Devika Shenoy)                                                                                                                             |  |  | 12:35 PM | 12:40 PM | Paper 82                                                                             | Clinical Research - A Multicenter Comparison of Reverse Total Shoulder Arthroplasty versus Hemiarthroplasty for Endoprosthetic Reconstruction following Oncologic Resection of the Proximal Humerus (John H. Alexander, MD)                                                             |
| 12:40 PM                  | 12:45 PM | Paper 51                                                                                                  | Clinical Research - Higher Area Deprivation Index (ADI) is Associated with Worse Five-Year Disease-Specific Survival in Localized Soft Tissue Sarcoma (Brian Benyamini)                                                                               |  |  | 12:40 PM | 12:45 PM | Paper 83                                                                             | Clinical Research - Is Tranexamic Acid Safe and Effective for Orthopaedic Oncology Patients Undergoing Endoprosthetic Reconstruction? (Stephen W. Chenard, MSc)                                                                                                                         |
| 12:45 PM                  | 12:50 PM | Paper 52                                                                                                  | Registry/Database - Socioeconomic Disparities in Access to Flap Reconstruction After Oncologic Lower Extremity Resection (Ying Yu, BA)                                                                                                                |  |  | 12:45 PM | 12:50 PM | Paper 84                                                                             | Clinical Research - What are the Implant Revision-Free Survival Outcomes for Patients Undergoing Custom Three-Dimensional (3D) Printed or Machined Hemipelvis Reconstruction for Massive Pelvic Defects? A Multi-Centre, International Study of 207 Patients (Krista Goulding, MD, PhD) |
| 12:50 PM                  | 12:55 PM | Paper 53                                                                                                  | Clinical Research - Patient Encounter Cards Improve Physician and Patient Engagement for New Patient Visits in Orthopaedic Oncology (Mathangi Sridharan, MD)                                                                                          |  |  | 12:50 PM | 12:55 PM | Paper 85                                                                             | Clinical Research - Treatment Success Rate after Surgical Management of Periprosthetic Joint Infections in Oncologic Proximal Tibia Reconstruction (Iris Skomja)                                                                                                                        |
| 12:55 PM                  | 1:00 PM  | Paper 54                                                                                                  | Clinical Research - "Function is More Important than Looks": A Qualitative Analysis of Patient Reported Outcomes on Life After Bone Cancer Surgery (Janet E. Panoch PhD)                                                                              |  |  | 12:55 PM | 1:00 PM  | Paper 86                                                                             | Registry/Database - Reverse Total Shoulder Arthroplasty Demonstrates Improved Functional Outcomes and Equivocal Mid-Term Survival Compared to Hemiarthroplasty Following Oncologic Reconstruction in Proximal Humerus Replacement (Christopher D. Hamad, MD)                            |
| 1:00 PM                   | 1:10 PM  | Q&A                                                                                                       |                                                                                                                                                                                                                                                       |  |  | 1:00 PM  | 1:10 PM  | Q&A                                                                                  |                                                                                                                                                                                                                                                                                         |
|                           |          | Session XI: SLATME I - <i>Regency Ballroom A &amp; B</i>                                                  |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
|                           |          | Moderators: Marcos Galli Serra, MD and Adriana Hernandez, MD                                              |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 1:10 PM                   | 1:15 PM  | Paper 55                                                                                                  | Clinical Research - Association of the Nutritional Prognostic Index in the Failure of Modular Prosthesis in Orthopaedic Oncology (Miguel Angel Clara Altamirano, MD, MSc, PhD)                                                                        |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 1:15 PM                   | 1:20 PM  | Paper 56                                                                                                  | Clinical Research - P99mTc-MIBI Uptake as a Predictor of Fracture Risk in the Appendicular Skeleton in Patients with Multiple Myeloma in the Instituto Nacional de Rehabilitación "Luis Guillermo Ibarra Ibarra" (Reyna Sahahi Banuelos Balderas, MD) |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 1:20 PM                   | 1:25 PM  | Paper 57                                                                                                  | Other Research - The Practice of Musculoskeletal Oncology in Latin America: Current Challenges and New Perspectives (Marcos Galli Serra, MD)                                                                                                          |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 1:25 PM                   | 1:30 PM  | Paper 58                                                                                                  | Clinical Research - Epidemiology and Survival of Primary Bone Tumors in Mexican Patients (Ruben Eduardo Gonzales-Prieto, MD)                                                                                                                          |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 1:30 PM                   | 1:35 PM  | Paper 59                                                                                                  | Registry/Database - Giant Cell Tumor of Bone in Younger than 14 Years Old (Ricardo Becker, MD)                                                                                                                                                        |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 1:35 PM                   | 1:45 PM  | Q&A                                                                                                       |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 1:45 PM                   | 2:05 PM  | Break /E-Poster Viewing - Break in <i>Regency Ballroom C</i> and E-Posters in the Foyer                   |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
|                           |          | Session XII: SLATME II - <i>Regency Ballroom A &amp; B</i>                                                |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
|                           |          | Moderators: Cecilia Belzarena, MD, MPH, MBA and Carlos Cuervo Lozano, MD                                  |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 2:05 PM                   | 2:10 PM  | Paper 60                                                                                                  | Clinical Experience - Reduction of Recurrence of Aneurysmal Bone Cysts by Cryosurgery with Nitrous Oxide (Edgar Angel Poblete, MD)                                                                                                                    |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 2:10 PM                   | 2:15 PM  | Paper 61                                                                                                  | Withdrawn by Submitter                                                                                                                                                                                                                                |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 2:15 PM                   | 2:20 PM  | Paper 62                                                                                                  | Clinical Experience -Two-Stage Protocol for Pelvic Sarcoma Resection and Reconstruction with Custom Pelvic Prosthesis (Roberto Velez, MD)                                                                                                             |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 2:20 PM                   | 2:25 PM  | Paper 63                                                                                                  | Clinical Research - Clinical Outcomes and Treatment Challenges in Spindle Cell Bone Sarcomas: A Retrospective Analysis (Angel Antonio Gonzalez Garcia)                                                                                                |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 2:25 PM                   | 2:30 PM  | Paper 64                                                                                                  | Clinical Research - Outcomes of Metastasectomy in Patients with Solitary Bone Metastases: Experience from a Cancer Center in Bogotá, Colombia (Gabriel Narvaez Rodríguez, MD)                                                                         |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 2:30 PM                   | 2:40 PM  | Q&A                                                                                                       |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
|                           |          | Session XIII: Clinical Cases SLATME, "My Worst Case" Panel Discussion - <i>Regency Ballroom A &amp; B</i> |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
|                           |          | Panelists: Luis Carlos Gomez Mier, MD, Francisco Linares, MD and Eduardo J. Ortiz-Cruz, MD                |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 2:40 PM                   | 3:05 PM  |                                                                                                           |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 3:05 PM                   | 3:15 PM  | Q&A                                                                                                       |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 3:15 PM                   | 3:35 PM  | Award Presentations - No CME Credit                                                                       |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 3:35 PM                   | 3:40 PM  | Closing Remarks                                                                                           |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 3:40 PM                   |          | Meeting Adjourns                                                                                          |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |
| 3:40 PM                   | 4:00 PM  | Bebidas in the Foyer - Thank you for attending the 2025 MSTS Annual Meeting                               |                                                                                                                                                                                                                                                       |  |  |          |          |                                                                                      |                                                                                                                                                                                                                                                                                         |