First of all, we hope that all of you and your families are safe and healthy in this difficult time. All of our lives have been deeply affected by the COVID-19 crisis. It has altered care pathways for our patients, put our practices on hold, and challenged aspects of our lives that until recently we never felt would be of concern. The MSTS unfortunately has been greatly affected as well. As you well know, the MSTS Specialty Day at the 2020 AAOS meeting was cancelled. A wonderful meeting with a distinct international flavor was planned. The Executive Committee (EC) has decided that we should allow the educational schedule to be presented at the 2021 Specialty Day in San Diego. We know that you will truly enjoy this unique experience and look forward to sharing it with you next year. The EC met on April 20 to discuss the future of the planned 2020 MSTS Annual Meeting. A very difficult but unanimous decision was made to cancel the 2020 MSTS Annual Meeting and have it in Columbus, Ohio in 2021. We felt compelled to make this decision early to save tens of thousands of dollars that the MSTS would contractually owe the hotel as well as the fact that nearly all of us felt that we did not want to risk any of our members personal safety by trying to travel before a vaccine arrives to make it appropriately safe. The EC also decided to continue to send out our request for abstract submissions. Although we will not have a full virtual meeting this

President’s Report – Joel Mayerson, MD, FAOA, FAAOS

Hoping everyone is remaining healthy and adjusting to our new normal in 2020. As we look to the year ahead, we want to recognize our many committee participants and our engaged members of the Musculoskeletal Tumor Society (MSTS). You are the lifeblood of our organization. We are very grateful for all your efforts to not only improve the care of our patients but also to continue to work toward a sarcoma and cancer free world! This past year has seen great progress and so we are so grateful for the leadership of our outgoing president Lor Randall. A heartfelt thanks to Lor for his long term leadership in our society!

The 2019 Annual Meeting in Portland was co-chaired by Dr. James Hayden and Yee-Chen Doung. They worked extremely hard to present an innovative and unique meeting experience with a Northwest flavor. Their work as well as the committees, leaders, and presenters who participated in creating an outstanding meeting that will be talked about for years to come. The meeting included excellent sessions on our own AAOS/MSTS registry pilot, advances in soft tissue and bone sarcomas, adolescents and young adults specific challenges, updates about basic science research, metastatic bone disease and an excellent guest speaker – Theresa Guise, MD who presented, Cancer, Bone, Muscle and Metabolism: What’s the Connection? Her talk will be certainly be remembered for not only the information she presented but also for the personal touches that led to her efforts.

The MSTS Executive Committee welcomes Dr. Michelle Ghert as our new Treasurer, Dr. Michael Mott moves on to Secretary and Dr. Carol Morris becomes President.

Continued on page 2
Special Updates, cont’d from pg. 1

fall, we do plan to create a large collection of posters from the abstract submissions. The authors will be eligible for submission to the MSTS-CORR Annual Meeting Symposia that is created through the best submissions to our Annual Meeting. More to come soon on this topic. In addition, we are planning to have a short educational session and conduct a virtual business meeting this fall so we can move with society business. We are also planning to collaborate with the Karen Zupko educational coding team to have the same virtual coding course that was planned this fall at the Annual Meeting. Look for more details and a date in the coming weeks.

We would also like to update you about some changes that will be occurring in the management of the MSTS. A detailed discussion was planned for our business meeting in Orlando so we could discuss in person. Since that opportunity was lost due to COVID-19, I will try to briefly summarize the proposed changes. Last fall AAOS leadership notified us that academy was no longer going to provide management service for the remaining specialty societies that they currently work with. Since that notice, our EC has been hard at work developing a plan to provide a new management pathway. We requested proposals from multiple professional management companies and reviewed their proposals as well as the financial costs. In parallel with this, the EC tried to find a pathway where we could potentially collaborate with another orthopaedic specialty society and hire our current management staff to provide a smooth transition to a new method of management. I would like to announce that we have reached a tentative agreement in principle to collaborate with the Ruth Jackson Orthopaedic Society to share our staff (as we had been doing while the AAOS managed the MSTS) and move forward with an independent management team controlled by the MSTS and RJOS. We are hopeful this agreement will be completed soon. The EC unanimously decided to work to hire Kerri and Deborah (who have been doing an excellent job managing the society) to manage us in the future. Through our planned relationship with RJOS, we will be able to be good stewards of our financial resources, maintain our current high performing management team, and allow them to focus on continued improvements rather than the whims of a for profit management company. We will be finalizing plans for our new management team and will update the membership as more details become available.

OREF/SICOT Travel Award Proposals Are Due Next Month!

OREF and the International Society of Orthopaedic Surgery & Traumatology (SICOT), invite proposals for the OREF/SICOT Travel Awards. The Award Recipient will be given the opportunity to attend the SICOT 41st World Congress in Budapest, Hungary September 30-October 3, 2020.

For more information about this opportunity or to apply, please visit the OREF website.

The submission deadline is May 7, 2020.

Columbus, Ohio, site of the MSTS Annual Meeting in 2021

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Columbus, Ohio, site of the MSTS Annual Meeting in 2021

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Elect. Dr. Lor Randall now Immediate Past-President and Dr. Joseph Benevenia will serve as Past-President. We also welcome our new Executive Committee (EC) members: Dr. Lukas Nystrom as Member-at-Large; and several new MSTS committee members and volunteers:

- Kurt Weiss, MD – Annual Meeting Planning Committee
- Tessa Balach, MD – Education Committee
- Richard McGough, MD – Education Committee
- Kelly Homlar, MD – Membership Committee
- Bob Esther, MD – Membership Committee
- Raffi S. Avedian, MD – Nominating Committee
- Kevin MacDonald, MD – Fellowship Committee
- Robert Steffner, MD – Fellowship Committee
- Ian Dickey, MD – Research Committee
- Brock Lindsey, MD – Research Committee
- Matthew T. Wallace, MD – Evidence Based Medicine Committee
- John A. Abraham, MD – ACS Representative
- H. Thomas Temple MD – CORR Liaison

A special thank you is extended to Anna Greene (Finance Director) and our executive management team, Kerri Mink (Society Director) and Deborah Meyer (Society Coordinator), for their guidance and help. We would also like to express our many thanks to all the EC members and outgoing EC committee members: EC Member-at-Large, Nicholas Bernthal, MD and second past president, Robert H. Quinn, Jr., MD. We value the impact that you have had to better the society.

The 2019 Annual Meeting in Portland was a very successful meeting for us financially as was Specialty Day. The society has worked diligently to develop relationships with our sponsors and secure support for the MSTS on an annual basis. This strategy has been successful in helping our society remain healthy financially. Investment accounts with Morgan Stanley followed the general market rise in 2019 and provided funding to offset the increased costs we incurred this year from our management agreement with the AAOS. We continue to receive modest contributions for research efforts through designated giving via the Orthopaedic Research and Education Foundation (OREF).

Once again this year, we want to give a heartfelt thank you to Dr. Matthew DiCaprio for his continued contributions to the Sarcoma Research Fund as well individual members of the Society who made designated contributions to our research efforts. These funds previously supported research grants over the years and in addition are now supporting mentored research for promising young scientists in the MSTs that are felt to have the opportunity to develop a lab and compete for funding from agencies such as the NCI. Both of these types of research support are currently funded largely through the SarcomaStrong program helping our research mission while simultaneously helping to maintain the fiscal health of our Society. Our current Treasurer Michelle Ghert will present you with the details of our budget on behalf of the finance committee to you during our next business meeting which we are working on scheduling.

The 2021 Annual Meeting will be held in Columbus, Ohio at the Hyatt Regency Columbus and Drs. Thomas Scharschmidt and Kurt Weiss will serve as our Program Co-Chairs. The meeting dates are to be determined – we are hopeful to stay in our Fall time frame. While in Columbus, you will have the option to visit the Arthur James Cancer Hospital and Solove Research Institute at The Ohio State University Medical Center, with over 1.1 million square feet of clinical space, that is the third largest free-standing cancer hospital in the United States. We hope you take time to see this magnificent architectural and patient care facility. In addition to the Annual Meeting, we will be offering our Allied Health Course. The Annual Meeting will highlight emerging multidisciplinary sarcoma care advances as well highlight the MSTS vision of creating a more comprehensive and collaborative treatment platform for metastatic bone disease. Columbus is home to The Ohio State University, the capital of Ohio and home to the world famous Columbus Zoo and its director emeritus, Jack Hanna. There are campus sites to recognize great Americans that are Ohio State alumni including Jack Nicklaus and Jesse Owens.

We have many wonderful initiatives currently in process in our society. I would like to update you on just a few of them. As I discussed in my presidential address in Portland, the goal of the MSTS is to provide member value. We strive to do this via the four pillars of our strategic plan: research, education, membership and advocacy. Our website revitalization was completed and updates are continually being made based upon your feedback. The AAOS/MSTS sarcoma registry pilot project is nearing completion. Soon we will be adding more institutions with the goal to make this effort open to all those who wish to participate. I want to personally thank Ben Miller and his entire team as well as the AAOS registry staff for their leadership. This project was an enormous task to undertake and extremely well done. Once you get a chance to see it in action, I believe you will see how it will enable us to significantly improve sarcoma patient care. An MSTS Taskforce on Metastatic Bone Disease is also being created. This project will be co-chaired by president-elect Carol Morris and past president Lor Randall. We hope to have the Taskforce recommendations for next steps available this fall in Columbus.

Beginning next year, it has been requested that we take over the orthopedic oncology fellowship match oversight process. The Executive Committee is reviewing the entire fellowship oversight process in light of this development. We will report to membership our recommendations once finalized. Please reach out to me or any other Presidential Line members with any questions.

In closing, I am honored to serve as your President this year. Please reach out to me or the executive committee with your ideas and concerns. Let us know how we can further improve our operations to benefit the Society’s vision and mission. Hope to see everyone in person once we can gather as a society again.

Joel
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MUSCULOSKELETAL TUMOR REGISTRY UPDATE

The Musculoskeletal Tumor Registry (MSTR) has officially transitioned from a pilot project to a full registry. This milestone would not have been possible without the diligent work of the surgeons and IT support at our six pilot centers (Iowa, Dartmouth, Ohio State, Stanford, Cleveland Clinic, and Johns Hopkins) to create an EHR-based data collection “smartform” and identify potential barriers and pathways for institutional participation. The AAOS continues to be supportive of this effort, and we have already begun to identify and prepare for incorporation of the next round of interested institutions. There was a substantial amount of interest expressed at the MSTS meeting in Portland, much to the delight of our team, which further emphasizes our society’s ability to work together cohesively around a common goal. The AAOS Registry Program’s mission is to improve orthopaedic care through the collection, analysis, and reporting of actionable data. MSTR, a diagnosis-based registry, joins AAOS’ three procedural registries—the American Joint Replacement Registry (AJRR), Shoulder & Elbow Registry (SER), and the American Spine Registry (ASR), which is a collaboration with the American Association of Neurological Surgeons.

To learn more about the Musculoskeletal Tumor Registry, visit www.aaos.org/registries.

MSTS MEMBERSHIP UPDATE

MSTS is pleased to welcome the following new members who were approved for membership by the Executive Committee in March 2020.

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<tr>
<th>CANDIDATE Members</th>
<th>RESIDENT Member</th>
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<tr>
<td>Shachar Kenan, MD</td>
<td>Timothy John Evans, MD</td>
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<td>Jorge Manrique-Succar, MD</td>
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<td>Ryan Todd Voskuil, MD</td>
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MSTS 2019 ANNUAL MEETING ABSTRACT AWARD RECIPIENTS

MSTS, and the 2019 Annual Meeting Committee, are pleased to congratulate the abstracts from the 2019 MSTS Annual Meeting who were selected as best in their categories.

YOUNG INVESTIGATOR

1st place: The Downstream Revenue Impact of a Dedicated Orthopaedic Oncologist
Submitted by Zeke Walton, MD

2nd place: Improved Survivorship Following Surgical Resection of the Primary Tumor in Patients with Metastatic Soft Tissue Sarcoma
Submitted by Sophia A. Traven, MD

3rd place: Intraoperative Angiography for Predicting Wound Complications in Soft Tissue Sarcoma of the Extremities: A Pilot Study
Submitted by Alexander Leandros Lazarides, MD

BEST PAPER

1st place: Affordable Care Act and Insurance Coverage in Orthopaedic Oncology: An Analysis of the Seer Database
Submitted and presented by Azeem Tariq Malik, MBBS

2nd place: Comparison of Reconstructive Techniques Following Oncologic Intraarticular Resection of Proximal Humerus
Submitted and presented by Matthew T. Houdek, MD

3rd place: Leiomyosarcomas: Recurrence Rates Based on Tumor Depth
Submitted by Matthew T. Houdek, MD,
Presented by Elizabeth Wellings, MD

BEST POSTER

1st place: Tranexamic Acid in Cancer Patients Undergoing Resection and Endoprosthetic Reconstruction - A Cost Analysis
Submitted by Douglas Reed Haase, MD

2nd place: Cd44 and Aldh1 Predict Oncologic Outcomes in Osteosarcoma
Submitted by Augustine Mark Saiz Jr, MD

3rd place: What Are the 10-Year Survivorship Outcomes of Compressive Endoprosthetic Osseointegration Fixation of the Femur?
Submitted by John Groundland, MD
Research Committee
– Francis Young Lee, MD, PhD, Chair

2019 was an exciting year for the MSTS Research Committee owing to collaborative research fund raising efforts by MSTS members and Sarcoma Strong Foundation led by Matthew DiCaprio, M.D. As a result, more than $100,000 of Sarcoma Research Funding will be available for the 2020-2021 grant cycle. It is envisioned that MSTS young members acquire rigorous research data and skills to obtain major research funding from NCI, VA, DOD, ACS, AACR, ASCO, and other cancer-related organization. It is time to own musculoskeletal tumors encompassing primary and metastatic tumors in bone and connective tissues.

Here are some highlights.

2019-2020 MSTS Sarcoma Research Mentored Award
($25,000; Deadline. December 15, 2019)
Peer Review in Progress. Announcement of Award in April, 2020.

2020-2021 MSTS Sarcoma Research Mentored Award
($25,000/Award; 2 Awards)
Research Funding Announcement (RFA) will be released in May, 2020.

2020-2021 MSTS Sarcoma Research Grant
($50,000/Award; 1 Award)
Research Funding Announcement will be released in May, 2020.

2020-2021 MTF/MSTS Research Award
($50,000/Award; 1 Award)
RFA draft in progress. RFA will be released in Oct, 2020.

2018-2019 Mentored Sarcoma Research Award
Rosanna Wustrack, MD, UCSF
Title: Identifying and Enhancing Host Immune Response in Adult Soft Tissue Sarcoma

2019-2020 Sarcoma Strong Research Award
Brock Lindsey, MD, University of West Virginia
Title: Delineating Mechanisms of Checkpoint Blockade Failure While Manipulating MDSCs as a Treatment to this Conundrum

Evidence Based Medicine Committee
– Felasfa Wodajo, MD, Chair

The Evidence Based Medicine Committee (EBM) continues to work on internal projects as well as collaborate with other medical and surgical societies. This multidisciplinary approach allows us to share ideas and increase the visibility of our society.

The MSTS Clinical Practice Guideline (CPG) for Medical, Radiation and Surgical Treatment of Metastatic Carcinoma and Myeloma of the Femur is completed and now entering its peer and public review phase. In addition to peer review by other specialty organizations, MSTS members will be invited to submit comments before the document is finalized. The guideline project was led by MSTS in a three-way collaboration with the American Society of Therapeutic Radiation (ASTRO) and American Society of Clinical Oncology (ASCO), each of whom contributed members to the workgroup. The Principal Investigators are Felasfa Wodajo and Patrick Getty.

ASTRO has also invited MSTS to collaborate on a guideline for Radiation Therapy in the Treatment of Soft Tissue Sarcoma. Steve Thorpe is representing MSTS on the ASTRO led
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multidisciplinary workgroup, which was seated in September 2019. Steve is also a member of the Evidence Based Medicine Committee.

We have ongoing collaborations with the American College of Radiology to develop structured reporting for musculoskeletal imaging. You may already have seen structured reporting for lung, prostate and breast imaging (“lung RADS”, “PI RADS” and “BI RADS”, RADS stands for Reporting and Data Systems). These tools promote more detailed reporting and appropriate risk stratification of imaging findings. Eric Henderson, now rotated off EBM Committee, proposed to the ACR a format for structured reporting of bone radiology. The ACR workgroup, which included MSTS members, has now completed its second draft of the document and is working on publishing. In addition to this project, an initiative for structured reporting of soft tissue lesions has recently been submitted to the ACR by EBM committee member Matt Wallace. Our goal is that future musculoskeletal imaging reports will provide referring physicians with more appropriate differential diagnoses and recommendations for next steps, which in turn should lead to decreased patient anxiety and more timely referrals.

Other collaborations are in various stages. These include potential projects with ASCO, Society of Surgical Oncology (SSO) and US Oncology on: chemotherapy for soft tissue sarcoma, inappropriate excisions of soft tissue sarcoma and workup of suspicious bone lesions, respectively. We hope to provide updates on these and other projects in future newsletters.

The EBM committee serves the MSTS membership. If you have any ideas for guidelines or other quality improvement projects, please do not hesitate to reach out to myself (wodaig@sarcoma.md) or any EBM committee members.

Practice Management Committee
- Adam S. Levin, MD, Chair

It has been a busy year so far from a Practice Management standpoint. Together with the AAOS and AAHKS, we have helped develop new codes for non-bioabsorbable antibiotic delivery implants, including antibiotic cement spacers. These have been surveyed and valued, and will likely become active in January 2020. In addition, we have also been supporting the AAOS’s efforts regarding valuation of Evaluation and Management services, as well as the valuation of arthroplasty procedures. As many of our members may be aware, CMS has been adjusting the plans for documentation requirements for Evaluation and Management (E&M) Level of Service (LOS). Some of these changes have already gone into effect -- mostly related to easing the need to re-document information that is already in the medical record. That is a small, but recognizable victory for clinicians. The major changes will roll out in January 2021, and will likely have profound impact on documentation requirements for E&M services, the means of determining LOS, and the valuation of E&M services. We will work to prepare our members for these changes as we get closer to implementation of these changes. We are also developing content to be included on the MSTS website to assist members regarding coding and practice management considerations, as well as providing a forum for questions or concerns.

Please let us know if there are any additional practice management or coding questions or concerns that we can either answer or address, in order to better suit the needs of our membership.

Thank You!
The Musculoskeletal Tumor Society would like to thank the following exhibitors for generously supporting the MSTS 2019 Annual Meeting

- **Diamond Exhibitors**
  - ONKOS SURGICAL
  - STRYKER
  - ZIMMER BIOMET

- **Platinum Exhibitor**
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- **Bronze Exhibitor**
  - LINKBIO CORP

- **Exhibitors**
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  - LinkBio Corp
  - MTF Biologics
  - Med Learning Group
  - Merete Technologies, Inc.
  - Northwest Sarcoma Fdtn
  - NuVasive Specialized Orthopedics
  - Onkos Surgical
  - Stryker
  - Vector Surgical
  - Wright Medical Group, N.V.
  - Integrum, Inc.
  - Zimmer Biomet

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**OUR MISSION**
The Musculoskeletal Tumor Society will advance the science of orthopaedic oncology and promote high standards of patient care through excellence in education and research.

**OUR VISION**
The Musculoskeletal Tumor Society will be a recognized authority on all aspects of orthopaedic oncology, an influential participant in policy-making for orthopaedic oncology services, and responsive to the needs of orthopaedic oncologists and their patients.
In 2020, Sarcoma Strong welcomes a new-updated website (www.sarcomastrong.com) to align with our mission and goals. Online registration is open (www.zippyreg.com/register/sarcomastrong) for our 7th Annual Sarcoma Strong 5k Run/Walk in Albany, NY on August 15, 2020 and the link can be found on our site. A donation page for those unable to participate in an event but wish to support the mission can also be found on the website. The MSTS Development of Research Funding Project Team is also working on other avenues to support research. We are exploring: merchandise for Sarcoma Strong/MSTS, getting Sarcoma Strong/MSTS listed as a charitable organization that participants in the major marathons (Boston, New York, Chicago, etc...) can raise funds for, and working on advocacy for grant funding through Congressional relationships.

Our goal in 2020 is to surpass $125,000 and move the needle closer to a long term sustainable mission. We welcome and encourage more sarcoma centers and their team leaders to get involved and work with us to Unite the Sarcoma Fight! If you are considering starting an event at your institution please visit www.sarcomastrong.com/startup for helpful documents and tips to take your ideas and putting them into action.