

RESEARCH NEWS

HIGHLIGHTS FROM THE ISMMS DEPARTMENT OF ANESTHESIOLOGY,
PERIOPERATIVE AND PAIN MEDICINE



Welcome to our research newsletter!

Happy Spring and welcome to a new feature we are trying out-- a departmental Research Newsletter.

But, why?

As a department, we have been taking amazing steps on a research journey. The quality and quantity of our research have steadily increased (even as we deal with the pandemic). There have been exciting new additions to the team and high impact projects underway. We have also improved access to research. But many challenges remain and there are new hills to climb.

So, the time is right to spotlight the people and research we think you should watch. We hope you enjoy reading about the ways your colleagues are engaged in "practical curiosity". And we hope you appreciate the mission driving this important facet of our practice:

To make scientific advances that improve patient care.

Some of our researchers are an IRB approval or a clinical trial away from accomplishing their larger objectives. Truthfully, most research journeys are never-ending, but one thing is clear: our investigators are taking important steps towards this valuable mission, and they bring honor to the Department by putting us at the cutting edge of investigations in anesthesiology.

Enjoy!

Sam DeMaria

In this issue:

- SPOTLIGHT ON DR. HOFER
- PAPERS YOU SHOULD READ
- TRIALS TO LOOK OUT FOR
- RESEARCH TOOLKIT

Spotlight On Dr. Hofer



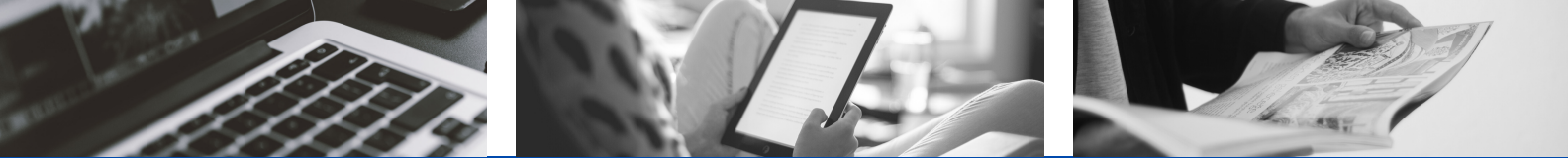
We are excited to welcome back Ira Hofer, MD!

Dr. Ira Hofer was born and raised in New York. As an undergraduate, he earned a Bachelor of Applied Science in Materials Science and a Bachelor of Science in Finance and General

Management from the University of Pennsylvania and the Wharton School.

Dr. Hofer earned his MD and completed his residency in Anesthesiology at the Icahn School of Medicine at Mount Sinai. He began working with electronic medical record (EMR) data during his third year of medical school and has been involved in the field ever since. After residency, he took a position at UCLA, where he established a bioinformatics infrastructure in the Department of Anesthesiology and Perioperative Medicine and designed and implemented the Perioperative Data Warehouse, a comprehensive infrastructure that extracts key clinical information from the EMR and organizes it to facilitate analytics. Dr. Hofer has published multiple manuscripts on techniques for leveraging EMR data in order to better characterize patients. He has also created systems that integrate these phenotypes into clinical practice, allowing clinicians to focus limited resources on the highest risk patients. His work in the field has earned him an NIH K grant, and he hopes to catalyze more external funding for the department.

Dr. Hofer enjoys spending time with his wife Ronit and their three kids. He also enjoys bicycling in the beautiful Southern California weather and doing woodworking. Please welcome him back to Sinai when you see him!



Recent Papers From The Department

Anesth Analg 2021;133(6):1520-1531.

Current Practice Issues in Thoracic Anesthesia. **Edmond Cohen**

Anesthesiol Clin. 2021;39(4):793-809. Decision Making in Obstetric Anesthesia. Rebecca D Minehart, **Daniel Katz**

J Clin Anesth. 2022;77:110636. Delayed extubation in spine surgery is associated with increased postoperative complications and hospital episode-based resource utilization. **Jonathan Gal**, et. al.

J Cardiothorac Vasc Anesth, 2021;35(5):1271-1273. Lessons Learned From COVID-19 Resource Management at a New York Hospital. **Menachem Weiner**, et. al.

Anesth Analg 2021;132(1):38-45. Barrier Devices, Intubation, and Aerosol Mitigation Strategies: Personal Protective Equipment in the Time of Coronavirus Disease 2019. **Eric Fried**, et. al.

Anesthesiology 2022; epub. Self-reported Race/Ethnicity and Intraoperative Occult Hypoxemia: A Retrospective Cohort Study. **Garrett Burnett**, et. al.

Reg Anesth Pain Med 2022; 47(2):106-112. International consensus on anatomical structures to identify on ultrasound for the performance of basic blocks in ultrasound-guided regional anesthesia. **Meg Rosenblatt**, et al.

Pain Med 2022; 23(1):144-151. Genicular Nerve Anatomy and Its Implication for New Procedural Approaches for Knee Joint Denervation: A Cadaveric Study. **Jung Kim**, et al.

J Cardiothorac Vasc Anesth 2021;35(11):3294-3298. Use of Serratus Anterior Plane and Transversus Thoracis Plane Blocks for Subcutaneous Implantable Cardioverter-Defibrillator (S-ICD) Implantation Decreases Intraoperative Opioid Requirements. **Himani Bhatt, Ali Shariat**, et al.

Anesthesiol Clin 2021;39(4):649-665. Updates on Simulation in Obstetrical Anesthesiology Through the COVID-19 Pandemic. **B Mahoney**, et al.

Trials To Watch at MSH

The MOVE Trial

Neuraxial morphine is considered the standard of care for post-operative pain control for patients undergoing a cesarean delivery. Its utility in vaginal delivery, however, has not been examined. We therefore began the MORphine for Vaginal dELivery (MOVE) trial. This study is looking at the potential for utilizing neuraxial preservative free morphine for parturients who underwent a vaginal delivery. We will be looking at post partum opiate consumption, recovery indices, as well as incidence and severity of postpartum depression long term. We are over half-way finished recruiting and aim to complete recruitment by 2023.

The DECORUM Trial

The Delivering Empowering Conversations about Obstetric Regional anesthesia in Underrepresented Minorities (DECORUM) is a new study that has just begun recruitment. We aim to analyze the impact of a face to face conversation with patients about healthcare disparities and pain management on their labor course. We hope to demonstrate that by having frank discussions with patients about the current state of healthcare and how it can relate to their pain management will re-engage them with their healthcare team, restore trust in the system, and lead to better outcomes. This study will take over one year to complete. We look forward to reporting the results by the end of 2023!



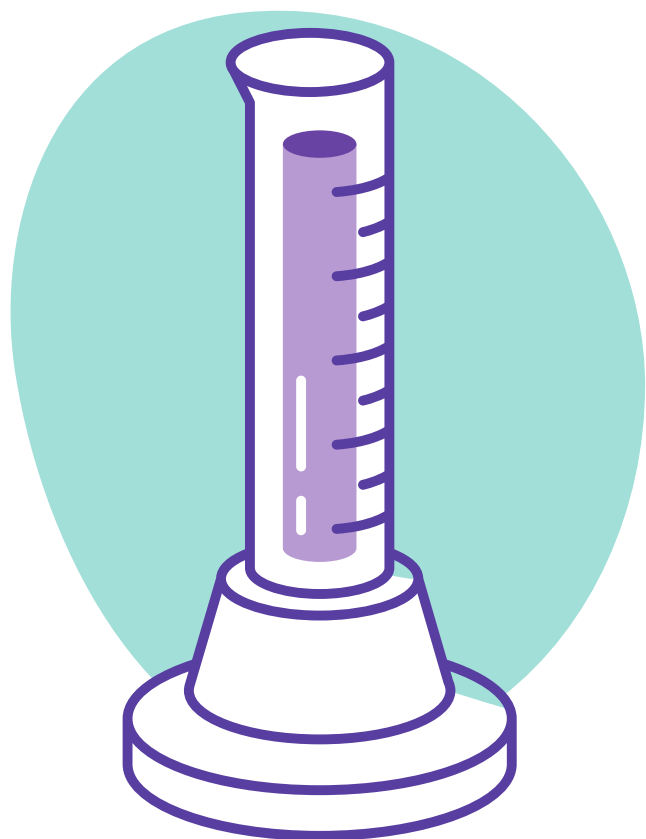
Trials To Watch at MS Morningside/West

THE EFFECT OF COMBINED INTRAVENOUS AND TOPICAL TRANEXAMIC ACID IN MAJOR MULTILEVEL SPINE SURGERY: A PROSPECTIVE RANDOMIZED TRIAL

The purpose of this study is to evaluate the effect of tranexamic acid in patients undergoing multilevel spine surgery. Specifically, we will compare tranexamic acid given only intravenously either as a low dose or high dose or low dose along with the topical form. Our hypothesis is that combined topical and intravenous TXA (combined group) has similar efficacy in terms of overall blood loss postoperatively compared to high or low dose intravenous TXA alone.

COMPARISON OF THE ANALGESIC EFFICACY OF LIPOSOMAL BUPIVACAINE TO BUPIVACAINE WITH DEXAMETHASONE AS AN ADJUVANT IN INTERSCALENE BLOCK FOR SHOULDER SURGERIES

Effective pain management after shoulder surgery has been correlated with early mobilization, rehabilitation, better patient satisfaction and clinical outcomes. To address whether interscalene block with dexamethasone as an adjuvant or liposomal bupivacaine(LB) can provide long acting pain relief after shoulder surgery, we propose 3 comparisons: 1) the analgesic efficacy of LB to single shot interscalene block(SISB) bupivacaine with dexamethasone adjuvant and 2) SISB with LB to continuous interscalene catheter (ISC) with plain bupivacaine and 3) SISB bupivacaine with dexamethasone to ISC with plain bupivacaine. We hypothesize that single injection of LB or dexamethasone as an adjunct for an ISB will provide non-inferior duration and quality of analgesia compared to ISC. We will also compare functional recovery,as well as adverse effects.



Research Toolkit

We plan to bring you some research tools with each newsletter.

See some below!

The Office of Research Services (ORS): serves as a central resource for the Mount Sinai Health System (MSHS) research community. ORS assists the research community with how to navigate the internal research infrastructure and external research agencies; delivers research orientation for new faculty and staff; offers consulting services, ongoing training, education, and communication support; and provides a wide range of research tools. One-stop shopping for various research needs, much of which they will handle for you to save you time.

<http://researchroadmap.mssm.edu/>

And don't forget, within the department you can always reach out to Sam DeMaria (Vice Chair for Research), Matt Levin (Associate Director for Research), or Jim Leader from the department's research office.

The Levy Library: supports the education, research, and clinical information needs of the Mount Sinai Health System. Important resources for researchers include how-to guides, courses (live and pre-recorded), research librarian support (for web searches, systematic reviews, and even simple background research support).

<https://icahn.mssm.edu/about/ait/levy-library>

Guides:

https://libguides.mssm.edu/research?b=g&d=a&group_id=3592

Systematic Review Support:

<https://libguides.mssm.edu/sysrev>

Courses (one live example coming up and some pre-recorded courses on their YouTube channel):

<https://libcal.mssm.edu/event/6948566?hs=a>

<https://www.youtube.com/channel/UCajDQZEzWE8OIDhVzJbu20g>

Anesthesia Global IRB: A blanket IRB approval that covers all retrospective research that doesn't require PHI or individual chart review. Most of the studies we would want to do will be covered by this IRB. To use it, all you have to do is fill out a short REDCap form describing your proposed project. Sam D or I will review and approve. You can then start working right away without having to deal with the IRB. The only requirement is to periodically (at least once a year) update Jim with the status of your project.

<https://is.gd/mssmanesdatarequest>

One Last Thing



As Dr. Leibowitz pointed out in a recent email, we're very proud of the accomplishments of Drs. Pai and Burnett. Please congratulate them when you see them!

Dr. Poonam Pai is April's featured ASRA Spotlight Member

Dr. Pai has established herself as a go-to regionalist and amongst her many accomplishments are her contributions to the establishment of the ACGME accredited Acute Pain Regional Fellowship at MSW, written contributions to ASRA Pain Medicine News, several performance improvement projects to make the administration of regional anesthesia safer, and a number of published and ongoing research projects. Congratulations, Dr. Pai!

Dr. Garrett Burnett was selected as the Mount Sinai Faculty Council's Junior Award Winner

Dr. Burnett will receive his award at the virtual ceremony on May 4th at 5:00 PM. Dr. Burnett is also a regional anesthesiologist and is having quite a year so far. His paper Self-reported Race/Ethnicity and Intraoperative Occult Hypoxemia: A Retrospective Cohort Study will be in May's *Anesthesiology* print version and is also the subject of an accompanying editorial. This publication will also be featured in an interview of Dr. Burnett by Dr. Kevin Tremper. This will be found on the journal's website. Amazing work!