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Northwestern Surgery Research Growth and Engagement Newsletter

Issue 6 (Fall 2022)



Guest Editor Maggie Reilly, MD asked DOS faculty:

"WHAT'S YOUR BEST MEMORY FROM YOUR "RESIDENCY RESEARCH YEARS'?"



Ezra Teitelbaum: "I got to teach the lap common bile duct exploration to all my fellow residents!"



KT Weber: "My senior resident offered to make a poster about our QI project and take it to a local meeting. When I got there, there was a whole collection of 8.5x11" papers, lined up with the abstract

contents. I was totally embarrassed!"



Vitaliy Poylin: "I taught my colleagues in Ukraine the principles of clinical trials. They had read about them but not actually conducted any before."



Sam Kim: "I got married during my research years and had to work 20 moonlighting shifts per month to pay for it, but I was still able to publish 6-7 papers."



Leah Tatebe: "I gave a presentation on live TV about a trauma first responder class... when I was 10 days postpartum!"



Cord Sturgeon: "Doing a right hemicolectomy for colon cancer in an elderly monkey and bottle-feeding newborn baboons stand out as the most rewarding memories!"



Satish Nadig: "For the first 6 months, every mouse I operated on died, but my mentors encouraged me to persist. This led to a career-defining paper in *Nature*. I am an expert in embracing failure!"



Anne Stey: "I gave a talk at ACS and the moderator started talking about his completely unrelated NEJM paper. That's when I realized that some people go into research to ask questions and other people just want all eyes on them.

Now I always try to figure out which group people are in before I start working with them."



Kevin Bethke: "I worked in Hans Sollinger's transplant immunology lab at University of Wisconsin and was part of the team that did the first fetal pancreas transplant."





Karen Ho: "I accidentally cut the tip of my thumb on the sharp blade of the cryostat, which is used to cut frozen tissue sections.

It bled profusely. But my labmate **Andy Hoel** saved the day by performing the perfect digital block and sewing my thumb back up!"



Sue Jordan: "Halfway through my lab year, I brought my 2-month old daughter to the lab. I left her napping with another lab resident while I went to do mouse work. Apparently, my daughter

awoke within 5 minutes and her high-pitched screams could be heard throughout the Tarry Building. A messenger was quickly sent to retrieve me."

INTERN CORNER

Welcome to Northwestern! These interns are also first authors on these recent publications.



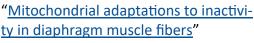
Johanna Borst (senior author Allison Berndtson): "You're never too old for optimal venous thromboembolism prophylaxis: Re-thinking current trauma guidelines"





Alyssa applied Physiology
Applied Physiology Brown

(senior author Gary Sieck):





Adwaiy Manerikar (senior author Ankit Bharat): "Characteristics and Outcomes of Patients with COVID-19-Associated ARDS Who Underwent Lung Transplant-REPLY"



Adaure Nwaba (senior author Marco Ellis): "Microvascular Reconstruction of the An-THE

JOURNAL OF ANIOFACIAL terior Skull Base" Surgery



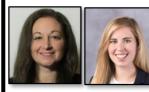
Cheresa Smith (mentor Mehul Raval) received a 2022 AAS Fall



Courses Travel Award! Great job!

Kudos to these winners at Lurie Children's 2022 Trainee Research Day!

First place: Kate Ott (mentor Aimen Shaaban)



Second place: Gwyneth Sullivan (mentor Mehul Raval)

Ann & Robert H. Lurie children's Hospital of Chicago



Cassie Valukas (senior author Akhil Chawla) performed a review of biomarkers for pathologic response and survival following neoadjuvant therapy for pancreatic adenocarcinoma.

CCO CHINESE CLINICAL ONCOLOGY



First- and second-author publications of DOS residents and fellows from June to September 2022. STRONG WORK!

If you are going to the **American** College of Surgeons Clinical Congress, be sure to support these trainees (and their mentors) from DOS:



Monday, 10/17/22:

Emily Cerier (Chitaru Kurihara), Audra Reiter (Jonah Stulberg), Michael Visenio (Ryan Merkow) Tuesday, 10/18/22:

Sarah Applebaum (Arun Gosain), Audra Reiter (Mehul Raval), Kayla Giger (Mehul Raval), Joanna Ledwon (Arun Gosain), Dhavan Shah (Hidayatullah Munshi), Suhail Zeineddin (Seth Goldstein), Michael Visenio (Yue-Yung Hu), Casey Silver (Anne Stey), Ashorne Krithiesh (Dave Odell), Emily Cerier (Chitaru Kurihara)

Wednesday, 10/19/22:

Emily Chwa (Arun Gosain), Charles Logan (Dave Bentrem), Egide Abahuje (Julie Johnson)



Congratulations to Jessie Ho and Casey Silver! Jessie (mentor Hasan Alam) won first place in the 2022 CCOT Resident and Fellow Trauma Basic Science Paper Competition

for the second year in a row. Casey (mentor Anne Stey) won second place in the Clinical Research Competition.









NQUIRES, which stands for Northwestern QUalty Improvement, Research, & Education in Surgery, is the new name for the center previously known as SOQIC!



Strong work! Jennie Chen (mentor: Steven Schwulst) received an appointment on the Mechanisms of Aging and Dementia T32 Training Program that will start in June 2023.



Rachel Joung (senior author: **Jeff Wayne**) published a <u>review</u> of neoadjuvant and adjuvant therapies for the treatment of resec-

table primary ret-



roperitoneal sarcomas.

Rachel also gave oral presentations on "What is a

'Responsive' Residency program?" (mentor Yue-Yung Hu) at the Association of Program Directors





in Surgery Meeting and at the Society of Asian Academic Surgeons Plenary Session.



Taylor Brown (mentor: **Bin Jiang**) gave a talk on "Sympathetic Innervation as a Strategy for Vascular Remodeling" at the CARE Symposium on Regenerative Engineering in May.

Taylor will also present a poster at the American Heart Association Scientific Sessions in November on "Development of Femoral Artery Denervation Models for Vascular Remodeling."

American Heart Association



Andy Lee (senior author Mark Ferguson) reported that between 2008 and 2018, there has been an increase in applicants for thoracic surgery training from general surgery trainees in resi-

dency programs not affiliated with a comprehensive cancer center or a thoracic surgery fellowship. The increased interest in thoracic surgery training was accompanied by overall enhanced scholarship

production among the applicants and matriculants regardless of their residency charac-



teristics. Andy will also give a talk on "The Risk Analysis Index is an Independent Predictor of Outcomes after Lung Cancer Resection" at the Society of Thoracic Surgeons meeting in January.

These were the poster presenters from DOS (and their mentors) at **Feinberg's 16th Annual Lewis Landsberg Research Day** in September:



Anitesh Bajaj (Robert Galiano), Conor Broderick (Anne Stey), Taylor Brown (Bin Jiang), Jennie Chen (Steven Schwulst), Maria Bustamente (Sue Clare), Sahil Doshi (Akhil Chawla), Kacie Ford (Steven Schwulst), Stuti Garg (Robert Galiano), Michelle Guo (Karen Ho), Shuling Han (Jenny Zhang), Atieh Hajirahimkhan (Seema Khan), Alexander Huang (Daniela Ladner), Mecca Islam (Steven Schwulst), Jonathan Jung (Karen Ho), Faraz Longi (Mehul Raval), Skylar Nahi (Joe Posluszny), Nikita Nangia (Cord Sturgeon), Sarbjeet Niraula (Karen Ho), Steven Papastefan (Amir Alhajjat), Praneet Polineni (Daniela Ladner), Audra Reiter (Mehul Raval), Gwyneth Sullivan (Mehul Raval), Katia Valdez (Karen Ho), Max Wilberding (Julie Johnson), Tingging Wu (Kathy Grady), Selcen Yuksel (Arun Gosain), Grant Zhao (Mehul Raval), Xin Zheng (Jenny Zhang)





Charles Logan and Ryan Jacobs (senior author Dave Odell) used the National Cancer Database to identify 250,000 patients with clini-

cal stage I to IIA non–small cell lung cancer surgically treated between 2004 and 2018 and found that of these, 4.4% were treated with segmentectomy. Their study concluded that "As segmentectomy is increasingly established as a valid oncological option for the treatment of non–small cell lung cancer, it is important that quality remains high. This study demonstrates that continued improvement is needed."

Browse through faculty research descriptions <u>here!</u> Learn about research funding opportunities for residents and students here! Find other research resources here!





Emily Cerier and Andrew Hu (senior author Swati Kulkarni) reported that didactic teaching and personalized posture coach-

ing improve ergonomics knowledge and reduce MSK symptom severity. "Surgical residencies should consider implementing similar interventions to improve resident wellbeing."







Jesse Ho and Calvin Chao (senior author Tad Tomita) published a retrospective study on upper and lower extremity venous duplex

studies and found that a modified COVID-19 venous duplex ultrasound protocol reduced sonographers' potential exposure time to

COVID-19 without compromis- IVS-VI ing clinical efficacy.







Andrew Hu and Audra Reiter (senior author Mehul Raval) utilized a multicenter retrospective cohort study at 14 children's

hospitals and found that COVID-19 elective surgery cancellations did not appear to increase the likelihood of incarceration or emergency department encounters despite delays in inguinal hernia repair, suggesting that cancellations are safe in children with inguinal hernias. SURGERY





Aaron Kearney and Jenny Bai (senior author Lucia Petito) studied a prescribing tool for postop pain that was de-The Journal of Hand Surgery signed for hand, orthopedic, plastic, and spine surgeons

and implemented into electronic discharge order sets in a 10-hospital health care system. They found that the prescribing tool had a negligible impact on system-wide compliance with suggested opioid pill quantities and morphine mg equivalents.



Did you know?

Biophysicist William T. Bovie (1982-1958), who invented the electrocautery device that is named after him, was Chairman of the Department of Biophysics at Northwestern University in the later stages of his career. Though he was a brilliant innovator, he was not business-minded. When he patented his apparatus in 1931 (US Patent No 1,813,902, which lists him as the sole inventor; see below), he conveyed his patent rights to the manufacturer for only \$1!

Patented July 14, 1931

1,813,902

UNITED STATES PATENT OFFICE

WILLIAM T. BOVIE, OF EVANSTON, ILLINOIS, ASSIGNOR TO THE LIEBEL-FLARSHEIM COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO

ELECTROSURGICAL APPARATUS

Application filed January 18, 1928. Serial No. 247,719.

This invention relates to electro-surgical the flow of blood from large capillaries or apparatus of the nature disclosed in the application to John G. H. Liebel, Serial No. The current having these desiccating or co-229,937, wherein the discharge of electric agulating characteristics must usually be of current from an electrode is used to dissect different voltage and amperage than the current from the current from an electrode is used to dissect different voltage and amperage than the current form and on electrode is used to dissect different voltage and amperage than the current form and one developed to the current from an electrode is used to dissect different voltage and amperage than the current form and the

Sources: O'Connor, JL and Bloom, DA. Surgery. 1996. Carter, P. Am J Surg. 2013.



Dan Dolan (senior author Abby White) performed a single center retrospective review of NSCLC cases in 2019-2020 and found that surgical wait time, pathologic tumor size, and complications were

not different among patients undergoing surgery before vs. during the pandemic. "The significant decrease in surgical cases is concerning for untreated cancers that may progress without proper treat-ITD JOURNAL OF THORACIC DISEASE ment."

Bookmark the "Surgical Conferences Calendar"!



Find regional and national surgical conference dates and abstract deadlines



Want to hear about what your peers are doing in research? Come to DOS RESEARCH **CONFERENCE!**



SHARE THE BUZZ!

Do you have research news? Email Karen Ho (kho1@nm.org)!