Let’s look back at what people expected from the future of medicine*:
1933: “The future human will be a cyclops.” According to Thomas Hall Shastid, a Chicago ophthalmologist and literary author, as humans evolved from needing to see far into the distance to doing close-range tasks and skills, there would no longer be a need for two eyes.
1956: Francois Ody, a Swiss physician, predicted that a miracle pill would be developed that could cure any ailment: “All the victories which have been the pride of brilliant surgeons will be forgotten.”

What do YOU think will be the future of surgery?
We asked DOS faculty and residents for predictions and projections...

“Most of cardiac surgery will be done robotically. There will be sutureless valves and coronary staplers” - Sarah Nisivasco
“Augmented reality robotic surgeries” - Ryan Jacobs
“Robotic surgery from home” - Steven Papastefan

“People will still fall. Pedestrians will be struck by electric vehicles. Kids will crash hoverboards. People will be shot with lasers. Hopefully the ICU will not be full of COVID 2119.” - Joe Posluszny

“Earlier detection of lung cancers and less lung cancer” - Charles Logan

“Breast cancer surgery will be performed only for tumors at the extremes: either so indolent that surgery alone would be curative, or so deviant that they recur or persist despite molecularly targeted drugs, with or without radiotherapy” - Seema Khan

“Forget incubators—the NICU will be full of artificial wombs. And Kate Ott will cure meningomyelocele.” - Ben Many

“There will be targeted molecular therapies for cancer, decreased need for surgery, and more endoluminal surgery” - Mike McGee

“An automated laparoscopic camera holder” - Norah Zaza

“Most vascular surgeons will be women or from underrepresented minorities. Open aortic surgery will occur rarely, if at all.” - Heron Rodriguez

“Plastic surgery will drive advances that apply to all other surgical fields, since insults that compromise the tissue and wound healing affect all surgical outcomes” - Sonj Aronson

“We will be using stem cells and 3D-printer scaffolds to grow livers that are functional and genetically personalized” - Justin Steggerda

“If I told you, I wouldn’t be able to millions from it!” - Paola Barrios

Dhavan Shah and Bona Ko (senior author: Dave Bentrem) published an editorial on a cohort study examining post-resection liver decompensation and mortality in patients with hepatocellular carcinoma and underlying cirrhosis.

Selcen Yuksel, Ava Chappell, and Brandon Jackson (senior author: Marco Ellis) published a systematic review of interventions for lowering the incidence of persistent neuropathic pain after breast surgery.

Nina Byskosh and Vivek Pamulapati (senior author: Karen Ho) quantified knowledge of peripheral arterial disease among patients and found significant knowledge deficits regardless of severity of symptoms or history of major amputation or surgery for this disease.


Emily Cerier (senior author: Ankit Bharat) has a new JAMA Surgery commentary entitled, “Role of pulmonary vasodilators in ameliorating primary graft dysfunction following lung transplant.” Emily also has 3 abstracts accepted at the 2022 ISHLT meeting!

Chicago Surgical History: DID YOU KNOW?
Open laparoscopy, or the “Hasson Technique,” was developed in Chicago by Dr. Harrith Hasson. He first conceived of the idea in 1969, fresh out of residency. He first performed the technique in 1970 at Grant Hospital of Chicago, but it was not immediately embraced. Reviewers rejected his effort to publish a report of 150 cases, calling the nature of this operation “rather ludicrous.” After a decade of efforts to promote this technique, it became widely accepted and mainstream.

Arielle Thomas (senior author: Anne Stey) has an Invited Commentary in press entitled, “Doing our part to address the opioid epidemic.”

Maggie Reilly is Guest Editor of this edition of SURGE-N. Let’s get to know her!

Where are you from? Toledo, Ohio
What do you love about surgery? I’m pursuing surgery because I like the creative nature and the ability to quickly fix a problem.
Which living person do you admire the most? I most admire Paul Farmer, co-founder of Partners in Health and a powerful advocate for high-quality health care in places with limited resources.
What are your research plans? I’m interested in improving patient knowledge about disease processes and enhancing access to health care among medically underserved patients.
What are you passionate about? I am an ice cream enthusiast!
Where is the best place for ice cream? Jeni’s Thank you, Maggie, for your hard work putting this newsletter together!

First- and second-author publications from DOS residents and fellows from October until end of December 2021. Congratulations to all!
Congratulations to all Northwestern trainees who have presentations at the Academic Surgical Congress! And once again, this year, the Department of Surgery is an Institutional Member.

Calendar of presentations: Tuesday, 2/1/22: Quickshot - Elizabeth Adams, Jehannaz Dastoor, Cassandra Iroz (2), Cherie Lo, Vivek Pamulapati, Audra Reiter, Gwyneth Sullivan. Wednesday, 2/2/22: Oral - Emily Cerrier, Kate Ott; Quickshot - Katherine Lin, Brian Nasca, Casey Silver, Jennifer Slota. Thursday, 2/3/22: Plenary (for top 1% of all abstracts) - Vivek Pamulapati; Oral - Egide Abahuje (2), Debbie Li (2); Quickshot - Kaleem Ahmed (2), Andrew Hu, Rachel Joung

ROUND OF APPLAUSE!

CONGRATULATIONS TO THESE AWARD WINNERS!

Egide Abahuje (mentors: Amy Halverson and Julie Johnson) - Northwestern Memorial Insurance Company Patient Safety Improvement Grant; Almost-FAMEous Certificate of Membership from Feinberg Academy of Medical Educators
Brooke Golisch - Surg Onc R38 (2022-2024 SOQIC Fellow)
Jessie Ho (mentor: Hasan Alam) - “Best Science Presentation” at American College of Surgeons Region V Committee on Trauma Meeting; Society of Asian Academic Surgeons Resident Development Scholarship
Andrew Hu (mentor: Mehul Raval) - NUCATS Fall 2021 Pilot Grant Program
Lauren Janczewski - Surg Onc T32 (2022-2024 SOQIC Fellow)
Charles Logan (mentor: Dave Odell) - 2022 Society of Thoracic Surgeons Looking to the Future Scholarship
Cassie Valukas - Surg Onc T32 (2022-2024 SOQIC Fellow)
Sam Warwar - Surg Onc T32 (2022-2024 SOQIC Fellow); Second Place in “Top 5 Residents/Fellows Best Presentation Competition” held at SAGES 2021 Annual Meeting (mentor: Ezra Teitelbaum)

GOOD LUCK TO THE FOLLOWING TRAINEES ON THEIR GRANT APPLICATIONS!!

Booker T. Davis, IV (mentor: Steve Schuwlst) - “Fecal Microbiome Transfer Reverses Dysbiosis and Functional Deficits After Traumatic Brain Injury” (NIH K99/R00)
Audra Reiter (mentor: Mehul Raval) - “IMplementation of Quality Improvement in Pediatric Surgery (AIM-QIPS)” (NIH R13)
Steven Papastefan (mentor: Aimen Shaaban) - “Reprogramming the endogenous retrovirus-like protein PEG10 for placenta-targeted mRNA delivery for fetal growth restriction” (NIH F32)

Sam Linton (senior author: Fizan Abdullah) performed a study to assess whether wearable data availability during phone calls about postoperative pediatric patients affects clinician decision making and concluded that physiology data from consumer-grade wearables, e.g., Fitbit™, may be useful in triaging postoperative, post-discharge patients.
Brian Brajcich (senior author: Ryan Merkow) summarizes the evidence and makes 4 main recommendations in “Management of colorectal cancer during the COVID-19 pandemic: Recommendations from a statewide multidisciplinary cancer collaborative,” concluding that “such recommendations would be applicable to future outbreaks of COVID-19 or other large-scale disruptions in cancer care.”

Debbie Li was a panelist on a Debakey CV livestream on “Pregnancy Challenges for Female Surgeons: the Data Behind Real World Experience” from Houston Methodist in December 2021. Debbie also participated in this podcast on “Clinical Challenges in Surgical Education: Pregnancy and Parenthood” that was coordinated by Matt Chia.

Taylor Brown (mentors: Bin Jiang and Karen Ho) presented a poster on “Role of Sympathetic Denervation in the Development of Vascular Calcification” at the BMES Annual Meeting in October 2021.

Rachel Joung and Casey Silver (senior author: Ryan Merkow) both have virtual poster presentations at the upcoming SSO meeting.

Andrew Hu (senior author: Mehul Raval) performed semi-structured interviews of participants in the Pediatric Surgery Quality Collaborative to understand why high CT utilization rates for pediatric appendicitis are still observed across many hospitals. “Our findings highlight that future quality improvement efforts should target resource availability, protocol adherence, collaborative culture, and radiation reduction champions.”

Paul Devlin (senior author: Sunjay Kaushal) published an editorial, “Come on maybe lyse my fire? Cell-free DNA: A potential novel therapeutic target for postcardiopulmonary bypass inflammation,” concluding that nuclear and mitochondrial cell-free DNA targeting could improve postoperative outcomes in the field of pediatric cardiac surgery.

Andres Guerra and Calvin Chao (senior author: Mark Eskandari) performed a single-center retrospective study of all patients undergoing EVAR and found that MAC plus local anesthesia is associated with decreased rates of urinary retention after elective EVAR in male patients.

Congratulations to these trainees (mentor: Arun Gosain) who have presentations at AAPS in April 2022! Talks: Emily Chwa, Daniel Sasson, Jenna Stoehr, Josh Weissman. Posters: Sarah Applebaum, Nikhil Shah

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

When are regional and national surgical conferences and abstract deadlines? Bookmark the “Surgical Conferences Calendar”!