



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."



Image source: <https://app.hedgeye.com/>

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**

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**

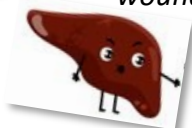


"An automated laparoscopic camera holder" - **Norah Zaza**

"Most vascular surgeons will be women or from under-represented minorities. Open aortic surgery will occur rarely, if at all." - **Heron Rodriguez**



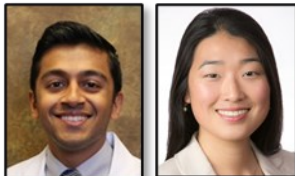
"Plastic surgery will drive advances that apply to all other surgical fields, since insults that compromise the tissue and wound healing affect all surgical outcomes" - **Sonj Aronson**



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

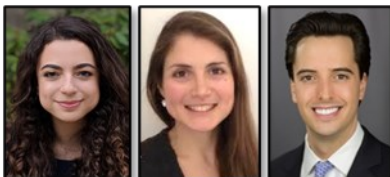
"If I told you, I wouldn't be able to millions from it!" - **Paola Barrios**

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



Annals of
**SURGICAL
ONCOLOGY**

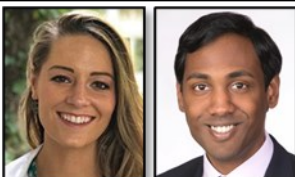
Selcen Yuksel, Ava Chappell, and Brandon Jackson (senior author: **Marco Ellis**) published a [systematic review](#) of interventions for lowering the incidence of persistent neuropathic pain after breast surgery.



**JPRAS
OPEN**

26 First- and second-author publications from DOS residents and fellows from October until end of December 2021. **Congratulations to all!**

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.



JVS Journal of
Vascular Surgery

Megan Fracol (senior author: **John Kim**) published a [book review](#) on a new reference book for modern and promising techniques in breast reconstruction.



Plastic and
Reconstructive
Surgery*

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!



MEET THE GUEST EDITOR



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!

Chicago Surgical History: DID YOU KNOW?

Open laparoscopy, or the "Hasson Technique," was developed in Chicago by Dr. Harrih 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.



Source: Hasson, H.M. JSL. 2007.11:399-402

Arielle Thomas (senior author: **Anne Stey**) has an [Invited Commentary](#) in press entitled, "Doing our part to address the opioid epidemic."

The
American
Journal of
Surgery*



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.

17th Annual Academic Surgical Congress

February 1-3, 2022 | Orlando, FL



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 Cerier, 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 Schwulst) - "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.

Journal of
Pediatric
Surgery



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



AAPS 2022
Centennial
MEETING

Rachel Joung
and **Casey Silver**
(senior author:
Ryan Merkow)

both have virtual
poster presenta-
tions at the upcom-
ing SSO meeting.



**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”!](#)

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



Debbie Li was a panelist on a Debakey
CV [livestream](#) on “Pregnancy Challenges
for Female Sur-
geons: the Data Be-
hind Real World Ex-
perience” from Houston Method-
ist in December 2021. Debbie also
participated in this [podcast](#) on “Clinical
Challenges in Surgical Education: Preg-
nancy and Parenthood” that was coordi-
nated by **Matt Chia**.



Andrew Hu (senior author: **Mehul Rav-
al**) performed semi-structured inter-
views of participants in the Pediatric Sur-
gery 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 adher-
ence, collaborative culture, and radiation reduction
champions.”



Brian Brajcich (senior author: **Ryan
Merkow**) summarizes the evidence and
makes 4 main recommendations in
“[Management of colorectal cancer during
the COVID-19 pandemic: Recommenda-
tions from a statewide multidisciplinary cancer collab-
orative,](#)” concluding that “such recommendations
would be applicable to future outbreaks of COVID-19
or other large-scale dis-
ruptions in cancer care.”



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 inflam-
mation,” 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 retro-
spective [study](#) of all patients
undergoing EVAR and found
that MAC plus local anesthe-
sia is associated with de-
creased rates of urinary re-
tention after elective EVAR
in male patients.

