

May 2023 Research Newsletter

The Cutting Edge

I can't tell you how many times in the last twenty years I've had some variant of this conversation:

Resident: "Hey Phelan, I've got an idea for a project and I want to get your thoughts."

Me: "Sounds good. What're you thinking of doing?"

Resident: "I'm gonna look at Vitamin C for the common cold."

Me: "Umm...m'kay. How're you planning to do that exactly?"

Resident: "I'm gonna, you know - take patients with the

common cold and, like, give 'em Vitamin C."



Usually, while giving me that answer the resident has a confused look on their face, like when they listen to me talk about my collection of broken Mardi Gras beads. But the reason I pose that question to them is that the specific articulation of the research question is absolutely vital to the conduct of the study. It makes you go from the gray of your imagination to the black and white of the page. Is the process hard? It can be, but don't let that stop you.

And to make it easier, there's a famous mnemonic device to help craft your research question: **PICO**.

<u>Population</u> - What are the characteristics of the population I'm studying?

Intervention - What am I doing to the population?

<u>Comparison</u> - What is the alternative to the intervention I'm instituting?

Outcome - What outcome am I looking to study?

After a brainstorming session, the Resident can now say, "I plan to examine whether giving Vitamin C

May 4, 2023
1st Annual
Research
Symposium
Keynote Speaker:
Timothy Pawlik, MD, PhD

250 mg 2x/day by mouth for 5-days to patients ages 18 - 60 who have all of sore throat, runny nose, coughing, sneezing, headaches, and myalgias and who test positive by nasal swab for rhinovirus or RSV results in complete resolution of symptoms faster than for identical subjects taking placebo." Notice that it's a single sentence. A bit wordy, but a single sentence nonetheless. The PICO method: learn it, know it, live it.

-Herbert Phelan

Do patient care and in your career you'll impact the lives of 2,000 people. Invent a device, and you'll impact the lives of 200,000. Do high quality research, and you'll impact 2,000,000. - James Carrico, MD



RESEARCHER HIGHLIGHT JEFFREY CARTER, MD, FACS



I have been fortunate to have passionate mentors throughout my career. I serve as the lead investigator with over \$100M in research funding from BARDA, DoD, DHA, and NIH. I started at Howard Hughes Medical Institute with a grant followed by an AHA award in medical school where I learned to use a scanning electron microscope, culture stem cells, and perform regenerative cell surgery on various mammalian models. In residency, I took a year as the endowed Bradshaw Research Fellow and secured \$3.5M to build the Center for Applied Learning where they studied crew resource management skills with surgical and emergency teams. During this time, a faculty member placed a bet with me to examine access and outcomes in burn care. The faculty member later lost

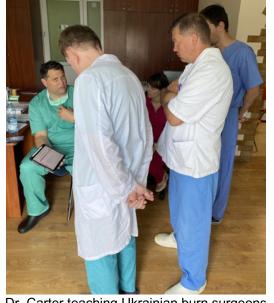
the bet and we won the top burn research award at the ABA. This propelled me to grow in burn research and engage with a relatively new agency called BARDA (Biomedical Advanced Research Development Authority). As a result, BARDA invested over \$700M to advance national burn capability and capacity through innovative products.

This year has been defined with research and presentations that are poised to change the future of burn education and wound assessment, as well as change the lives of people currently working to improve burn care, including:

- The Burn Prehospital Provider Program is a learning software system that incorporates hands-on trainers and scenario-based learning in partnership with Wake Forest, Applied Research Associates, Uniformed Services University, and the Institute for Surgical Research.
- The DeepView Training Study is a multi-spectral imaging algorithm that predicts wound healing more accurately than a surgeon and is partnership with a dozen academic centers.
- · Working with a team of local Ukrainian physicians to translate Advanced Burn Life Support and teach it in Lviv, Ukraine.
- Presenting at the ABA Surgeon Forum about the Business of Burn Care, leading to the development of a new committee to address educational needs on coding and reimbursement.
- Presenting a lecture series to the Louisiana Firefighter Academy to help firefighters diagnose, prevent, and provide early treatment for burn injuries.



Drs. Carter and Phelan celebrating after a challenging case



Dr. Carter teaching Ukrainian burn surgeons

When I came to New Orleans, I wanted to build a research program, and I knew it wouldn't be easy. After we opened the early compassionate use cases required me to donate my own money to start a foundation that could pay the hospital research program to enroll patients with massive burn injuries with spray skin (100%) survival with return to work and school). After a few years, hundreds of enrolled patients, and plenty of hard work by Dr. Phelan, Dr. Schoen, Ariza Sisavath, and Shanna Lennard, the burn research program is truly exceptional and one of only a handful in the country this successful.

CONFERENCES AND EVENTS



Michael Maurer presenting at ACS





#SCVS2023: Amanda Tullos from @lsuvascular delivers data on vascular complications secondary to REBOA placement from her team's center, highlighting the importance of close cooperation between vascular and trauma surgeons. @SCVS1969

Academic Surgical Congress

Stratification of neuroendocrine cancer patients for ecto-5' nucleosidase inhibition. M. Maurer

Society for Clinical Vascular Surgery

Neighborhood Deprivation Index is Not Predictive of Patient's Perceived Barriers to Healthcare in an Urban Setting. A. Tullos, R. Patel, D. Sethi, C. Sheahan, A. Chawla, B. Torrance, A. Brooke, M. Donovan, T. Palit, M. Sheahan

Vascular Complications Secondary to REBOA Placement at a Level 1 Trauma Center. A. Tullos, S. Wunnava, C. Sheahan, A. Chawla, B. Torrance, A. Brooke, M. Donovan, T. Palit, M. Sheahan III

Society for Vascular Surgery Annual Meeting - Presentations from Dr. Sheahan

E. Stanley Crawford Critical Issues Forum: The State and Future of Our Specialty - Extending, Repairing and Maintaining the Vascular Surgery Pipeline

Reported Pain at Work Is a Risk Factor for Vascular Surgery Trainee Burnout

American College of Physicians Internal Medicine Meeting

An Algorithm to Prevent Missed Bowel Injuries in Blunt and Penetrating Abdominal Trauma Patients. L. Gold, A. Clement, J. Schoen, L. Stuke, P. Greiffenstein, A. Marr, JP Hunt, M. St. Romain, J. Duchesne, A. Smith

Chest Wall Injury Summit

Early Implementation of Intrathoracic Plating: A Retrospective Analysis of Rib Surgical Stabilization Approaches. H. Travis, M. Forte, J. Stover, S. Donovan, A. Smith, P. Greiffenstein



IST ANNUAL

RESEARCH SYMPOSIUM 2023

KEYNOTE SPEAKER

TIMOTHY M. PAWLIK, MD, PHD, MPH, MTS, MBA, FACS, FSSO, FRACS (HON.)

PROFESSOR OF SURGERY, ONCOLOGY
CHAIR, DEPARTMENT OF SURGERY
SURGEON-IN-CHIEF
THE OHIO STATE UNIVERSITY WEXNER
MEDICAL CENTER



HUMAN DEVELOPMENT CENTER AUDITORIUM

MAY 4, 2023 7AM – 12PM

IT OFFICE HOURS & IRB LUNCH & LEARN

As noted from Dr. Phelan within the inaugural issue of *The Cutting Edge*, research is a challenging profession. Even the most seasoned scientists are surprised by the shifting landscape in how varying trials are performed or policy changes by IRB's and other governing bodies. The LSUH-NO is exceptional with the tools and services that it offers to our researchers to help make these areas operate as efficiently as possible. Two invaluable resources are monthly presentations called **IT Office Hours** and **IRB Lunch & Learn**. Both meetings can be virtually attended, discuss a variety of topics, and are recorded for viewing after the meeting concludes.



IT Office Hours aims to:

- Increase the exchange of information between the LSU community and IT.
- · Showcase new tools and technologies.
- Get feedback on IT pain points and any other IT-related problems that you may be experiencing.



IRB Lunch & Learn aims to:

- Increase the general knowledge of Faculty/Staff on IRB Procedures.
- Ease the burden of regulative processes with new tools and technologies.
- Provide continuing education on significant updates to IRB Policies.

Look forward to reading more about the helpful services both groups offer in upcoming issues.

ACHIEVEMENTS



Amit Chawla, MD



Amanda Tullos, MD



Malachi Sheahan, III, MD, FACS



Alison Smith, MD, PhD, FACS



Omeed Moaven, MD, FACS



John Paige, MD, FACS

Making History

Amit Chawla performed the first Thoracic Branch Endoprosthesis in Louisiana

Publications

- M. Sheahan, A. Tullos, J. Kim, D. Sethi, K. Owens, K. Kenney, B. Torrance, L. Hollier, C. Sheahan. The role of vascular surgeons in the management of pediatric bone tumors. *J Vasc Surg.* 2023
 Mar.https://doi.org/10.1016/j.jvs.2023.03.022
- M. Sheahan, et al. Defining sources and ramifications of mistreatment among female vascular surgery trainees. *J Vasc Surg.* 2023 Apr 21:S0741-5214(23)01065-0. doi: 10.1016/j.jvs.2023.03.504.
- A. Smith, et al. Outcomes Among Trauma Patients with Duodenal Leak Following Primary vs Complex Repair of Duodenal Injuries: An EAST Multicenter Trial. *J Trauma Acute Care Surg*. 2023 Apr 19. PMID: 37072889.
- A. Smith, et al. The Impact of Prehospital Whole Blood on Hemorrhaging Trauma Patients: A Multi-Center Retrospective Study. J Trauma Acute Care Surg. 2023 Apr 4. PMID: 37012617.
- A. Smith, et al. A Matched Cohort Study of Open Thoracostomies Performed by Ground Medics. *Int J Paramedicine*. 2023. (2), 10-18.
- O. Moaven, et al. Machine Learning Models Create Powerful Tools to Predict Outcomes of Colorectal Liver Metastases Surgical Treatment. J Am Coll Surg. 2023 Apr 1;236(4):884-893
- O. Moaven, et al. Survival Outcomes of Optimally Treated Colorectal Metastases: The Importance of R0 Status in Surgical Treatment of Hepatic and Peritoneal Surface Disease. Ann Surg Oncol. 2023 Feb 8. doi: 10.1245/s10434-023-13174-3
- O. Moaven, et al. Conditional Survival After Hepatectomy for Colorectal Liver Metastasis: Results from the Colorectal Liver Operative Metastasis International Collaborative (COLOMIC). Ann Surg Oncol. 2023 Mar 1. doi: 10.1245/s10434-023-13189-w.

Conference Contributions from John Paige

- Society of American Gastrointestinal and Endoscopic Surgeons
 - Faculty for Train the Trainer Lapco TT Course
 - Co-Moderator for Panel Session "How to optimize your intraoperative teaching."
- · The Association for Surgical Education
 - Vice Chair for Program Committee
 - Panel Moderator for "Ready or Not -EPAs in General Surgery Residency"
 - Workshop Faculty: How to Start and Optimize Team-based Interprofessional Education Simulation

UPCOMING CONFERENCES

Organization	Dates	Location
Society for Surgery of the Alimentary Tract	05/06/23 - 05/09/23	Chicago, IL
American Pediatric Surgical Association	05/10/23 - 05/13/23	Orlando, FL
Society for Vascular Surgery	05/10/23 - 05/10/23	Boston, MA
American Burn Association	05/16/23 - 05/19/23	Grapevine, TX
Scoiety of Academic Emergency Medicine	05/16/23 - 05/19/23	Austin, TX
American Thoracic Society	05/18/23 - 05/24/23	Washington, D.C.
National Medical Association Surgical Section Drew Walker Resident Research Symposium	07/29/23 - 08/02/23	New Orleans, LA

UPCOMING ABSTRACT DEADLINES

Organization	Deadline	
National Medical Association Surgical Section Drew Walker Resident Research Symposium	04/28/23	
Congress of Neurological Surgeons	05/02/23	
Pediatric Trauma Society	05/22/23	
Extracorporeal Life Support Organization	05/10/23	
Society of Asian Academic Surgeons	05/24/23	
Western Surgical Association	06/05/23	
American Pancreatic Association	07/10/23	

FUNDING OPPORTUNITIES

National Institute of Health - National Institute on Alcohol Abuse and Alcoholism

Biomedical Alcohol Research Training Program (NIAAA T32)

Due Date: N/A

Amount: Variable

The goal of the program is to provide mentorship and focused training so that young MD and PhD scientists can become familiar with the biomedical problems related to excessive alcohol consumption and acquire the tools to perform high quality, competitive research. For more information, <u>click here</u>.

American College of Surgeons

Resident Research Scholarship

Due Date: N/A

Amount: \$30k/yr. for 2-years

The applicant must be a Resident Member of the ACS, who has completed at least 2 postdoctoral years in an accredited surgical training program (any specialty) in the United States or Canada at the time the scholarship starts (July of the award year). Scholarships do not support research after completion of the chief residency year. For more information, click here.

FUNDING OPPORTUNITIES

Society of Surgical Oncology

Clinical Investigator Award

Due Date: N/A

Amount: \$50k per year for 2-years (\$100k total)

The Clinical Investigator Award promotes patient-focused research conducted by surgical oncologists in clinical and translational science. Please contact Pam Hayden, Assistant Director, Quality and Research Programs, with any questions at pamhayden@surgonc.org.

Young Investigator Award

Due Date: N/A

Amount: up to \$25k for 1-year

The Young Investigator Award promotes and recognizes clinical and translational research that advances innovative ideas and concepts designed to improve health outcomes through advances in the delivery of cancer-related care. Please contact Pam Hayden, Assistant Director, Quality and Research Programs, with any questions at pamhayden@surgonc.org.

FUNDING OPPORTUNITIES

Eastern Association for the Surgery of Trauma

The EAST Multicenter Trial Junior Investigator Award

Due Date: 05/12/23

Amount: \$10k for 1-year

The EAST Multicenter Trial Junior Investigator Award is to assist a junior primary investigator to successfully conduct and publish a multicenter trial assembling data from five or more centers which seeks to answer an important and novel question in the practice of trauma, acute care surgery or surgical critical care which will change or significantly affect the care of injured or critically ill patients.

John M. Templeton, Jr., MD Injury Prevention Research Scholarship

Due Date: 05/12/23

Amount: \$10k for 1-year

The intent of the John M. Templeton, Jr., MD Injury Prevention Research Scholarship is an interventional trial in the field of injury prevention. Find all rules and regulations <u>here</u>.

Trauma Research Scholarship

Due Date: 05/12/23

Amount: \$40k for 1-year

The intent of the Trauma Research Scholarship is basic or applied trauma related research project of sufficient substance to have potential for further funding sources as initial studies are produced and published (e.g. basic science, clinical, epidemiology, injury prevention, burns). Find all rules and regulations here">here.

Regularly check the (coming soon) <u>DOS Clinical Research Resources</u>
<u>Funding Opportunities List</u> for all the latest Funding Opportunities.

RESEARCH RESOURCES

LSUH-NO Comprehensive Guide to Research within the School of Medicine

There are two great resources listed on Page 5 about how to stay up-to-date on new technologies and IRB procedures that are related to conducting research. But what if you have a question about a foundational principle related to research? Look no further than the <u>Guide to Research at LSUH-NO School of Medicine</u>. This comprehensive guide from 2020 has a plethora of information related to research practices. More importantly, this guide provides insight on how to bring those practices within the walls of LSUH-NO.

As a state university, some of the ways that we are required to conduct research may be different from outside institutions. You'll find concise instructions on how the navigate the red tape efficiently so that you can begin your wildest research dreams instead of enduring a bureaucratic nightmare.

Check out the <u>School of Medicine Research Home Page</u> for many resources available for various research activities.