

# NEXUS

FALL 2021



Department of  
**Anesthesiology &  
Perioperative Medicine**



University of  
Pittsburgh

**UPMC**  
LIFE CHANGING MEDICINE

# Contents

2	Chair's Message
3	A Closer Look at the Labs of Drs. Gregg Homanics and Sean Farris
6	Clinical Spotlight: OB/Women's Anesthesiology and Dr. Grace Lim
9	New Programs
10	Team Arrivals and Changes
11	New Leadership Appointments
12	Accolades
13	In the Press
13	New Grants
14	Research Support Announcements
15	Publications
17	Education Announcements
18	Innovation Pathway
19	Graduating SRNAs
21	Meeting Highlights
23	Saying "Thanks"
24	Celebrating Halloween
29	Career Opportunities
30	Giving

## Feature Articles

Page 3



Drs. Sean Farris and Gregg Homanics share a common research theme - the neurobiology of addiction.

Page 6



Under the direction of Dr. Grace Lim, our Division of OB/Women's Anesthesiology provides comprehensive anesthetic and perioperative services for the region's highest- and lowest-risk pregnancies.

# Chair's Message



**Aman Mahajan, MD, PhD, MBA**

I'm very pleased to introduce the second issue of our e-magazine, *Nexus*. This Fall 2021 issue covers news and activities from our department occurring between July 1 - October 31, 2021, as well as some important announcements and information about upcoming events and deadlines. Our feature research article in this issue focuses on the labs of Dr. Gregg Homanics and Dr. Sean Farris, who are both working on some exciting projects in the area of addiction research and epigenetics. Compelling work in our system-wide Division of Obstetric and Women's Anesthesiology, led by Dr. Grace Lim, is the topic of our clinical spotlight article.

I'm also excited to get the word out in this issue about some new programs that we recently started. Dr. Kim Cantees is heading up our new Equity, Diversity, and Inclusion Committee to integrate these critical values into our department's work environment and practices. We launched our Innovation Pathway, a new educational program that offers various support services to residents, fellows, and faculty for physician innovation projects. We also introduced a new Quality Improvement Project Incentive Program for our clinical staff with ideas to improve patient care.

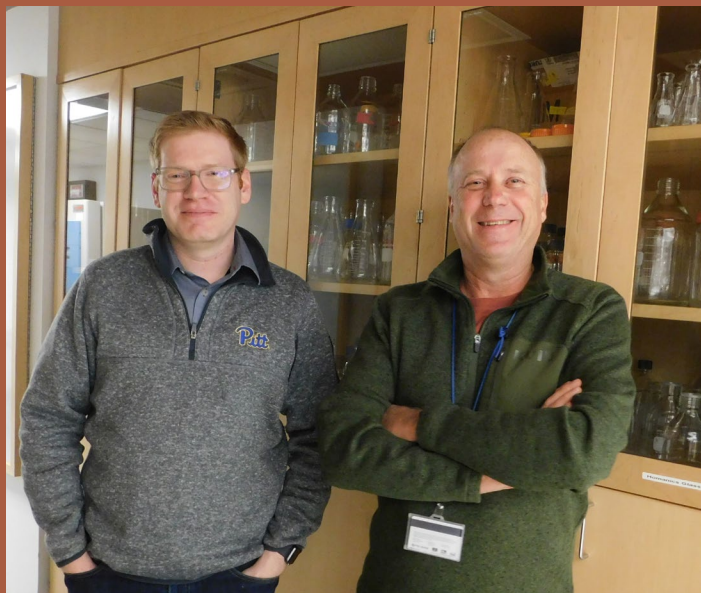
Last but not least, many members of our team were very "spirited" to contribute fun images for the entertaining spread of Halloween photos in this issue. Thank you to everyone who enthusiastically responded to our call for pictures. I'm sure that our readers will enjoy them as much as I did!

Please remember that we welcome content suggestions from all current and former members of the department. If you are interested in submitting material to be considered for inclusion in *Nexus*, please e-mail our Managing Editor, Christine Burr ([heiner@upmc.edu](mailto:heiner@upmc.edu)).

Thank you to all our readers for your continued support and interest in our work. On behalf of the department, I wish you and your families a very happy holiday season.

AM

# A Closer Look at the Laboratories of **Drs. Sean Farris and Gregg Homanics**



Dr. Sean Farris (L) and Dr. Gregg Homanics (R)

**How do alcohol and other drugs of abuse affect the brain? Can these substances and related behavior change the way our genes work to cause diseases? Could some of our genes that don't encode proteins play a key role in some of these mechanisms? Drs. Homanics and Farris investigate mysteries such as these in neighboring lab space on the 6th floor of Biomedical Science Tower 3.**

Excessive alcohol consumption remains a serious societal problem, with significant economic costs and detrimental consequences to human health. Binge and heavy drinking lead to short- and long-term health risks, including accidents, violence, risky behaviors, mental health issues, cancers, cardiovascular diseases, and gastrointestinal problems. Excessive drinking also increases one's chances of developing alcohol use disorder (AUD), which encompasses alcohol abuse, dependence, and addiction. Department researchers Dr. Gregg Homanics and Dr. Sean Farris study AUD from various angles.

Dr. Homanics' long-term goal is to understand the molecular effects of alcohol on the body so that safe, effective treatments for AUD can be developed. "We want to understand how alcohol affects the brain – that's the bottom line," he explains. "Because once we can understand that, then we may be able to develop treatments for AUD. Remarkably, we don't know how alcohol brings about its effects in the brain." Dr. Homanics is currently Director of the Genetically Engineered Rodent Core and Scientific Co-Director for the Integrative Neuroscience Initiative on Alcoholism (INIA)-Neuroimmune Consortium, a multi-institutional, international group of National Institutes of Health-funded alcohol researchers.

The Homanics lab also studies the intergenerational effects of alcoholism, a genetic disease known to run in families. Two heredity models explain how traits are passed from parents to offspring. "Hard inheritance" explains that traits are passed from parent to offspring through unaltered DNA. The Homanics lab challenges this model by also focusing on "soft inheritance" – the opposing explanation that traits parents acquire during their lifetime can change how genes function, which subsequently allows those traits to be passed to offspring. The lab is currently testing the hypothesis that alcohol exposure produces long-lasting "soft" effects that can be passed down through generations and ultimately impact alcohol drinking and behavioral responses to alcohol. They recently found that paternal preconception alcohol exposure impacts male offspring's behavioral sensitivity to alcohol, alcohol drinking behavior, and response to stress.

Dr. Farris, who is also a member of the INIA Neuroimmune Consortium, joined our faculty in 2020 as an independent, tenure track investigator after completing a postdoctoral research fellowship at the Waggoner Center for Alcohol and Addiction, the Institute for Neuroscience, and the Institute for Cell & Molecular Biology at the University of Texas at Austin. The overarching goal of his research is to identify new mechanisms that contribute to disease, whether it be AUD, addiction to other abused drugs, pain, or other neuropsychiatric disorders. "My research, more broadly, is aimed at epigenetic mechanisms that contribute to disease," Dr. Farris explains. "What are the underlying mechanisms? And what distinguishes the mechanisms of something like pain from the mechanisms behind opiates or schizophrenia?"



The Homanics lab team (L to R): Gregg Homanics, Amit Seth, Carolyn Ferguson, Anna Baratta, and Sonja Plasil



The Farris lab team: (L to R) Adam Bradner, Sean Farris, and Rachel Rice

As part of the INIA consortium, Dr. Farris continues to collaborate on the study "Alcohol-Related Changes in Gene Expression and Structure Using Next Generation Sequencing" with principal investigator (PI) Dayne Mayfield, PhD, from the University of Texas at Austin that started as part of his postdoctoral fellowship work. Drs. Mayfield and Farris propose that alcohol-induced changes in brain function are caused by changes in gene expression and explore these expression changes in humans and different animal species. They also use data from those investigations to predict which medications from existing FDA-approved drugs would work best against AUD. The most promising drugs will then be tested in humans with AUD. So far, they have seen changes in genes related to the drug gabapentin, a medication used primarily to treat neuropathic pain that has been shown in some human lab studies to reduce alcohol consumption. Dr. Farris is also starting a new project in collaboration with the lab of fellow department researcher Bradley K. Taylor, PhD, looking at how chronic alcohol use causes co-morbid pain.

An exciting research focus for both Drs. Farris and Homanics is how alcohol changes genetic factors in the brain, including non-coding RNA (ncRNA) and long ncRNA (lncRNA), and how those changes are related to AUD. Dr. Homanics explains: "DNA is the blueprint of life. Some of our genes make proteins. And that's what everybody has focused on for the past couple decades. It turns out, only a very small part of the genome makes proteins. The vast majority of the genome makes these ncRNAs, and everybody's ignored them for years. But they are there for a reason. I think they're really important." Dr. Farris elaborates: "To date, their functions are largely unknown, but we're finding out that they are very cell type- and tissue-specific and they play key roles in regulating gene expression, particularly in disease states."

Dr. Homanics studies lncRNAs as PI on the project "Role of Noncoding RNA in Alcohol Action" for the INIA consortium. He hypothesizes that individual lncRNAs are key regulators of ethanol drinking. The Homanics lab produces and analyzes genetically-engineered animals with altered lncRNA expression, first screening these mutant animals for changes in ethanol drinking and then observing animals with altered drinking behavior for insights into the mechanisms behind the behavior, including molecular, transcriptomic, cellular, and additional behavioral investigations.



First-year graduate students Rachel Rice (L, Homanics lab/Farris lab) and Adam Bradner (R, Farris lab) preparing samples using gel electrophoresis to analyze genetic mutations.



Carolyn Ferguson (Homanics lab manager for the past ~25 years) prepares single cell embryos to create novel, genetically-engineered mice.



Sonja Plasil (L, Homanics lab) and Richa Rathod (R, Farris lab) gathering and preparing different cell-types and brain samples for analysis.

Dr. Farris studies lncRNAs as well, as PI on the National Institute on Alcohol Abuse and Alcoholism-funded study "Long Non-Coding RNA Regulation of Alcohol Drinking Behavior." In this project, Dr. Farris uses computational biology, state-of-the-art sequencing, and focused gene-targeting approaches to study the neurobiology of chronic alcohol abuse, which may lead to improved gene-based diagnostics and treatment options for AUD. Identifying and testing the biological role of lncRNAs in the context of the brain and alcohol drinking behavior could potentially lead to an improved understanding of disease and new pharmacotherapies.

Both Dr. Homanics' and Dr. Farris' work extends beyond AUD to other diseases. The Homanics lab genetically engineers rodents and non-human primates used not only in their own studies, but also in studies by collaborators all over the world on human diseases like Angelman syndrome, maple syrup urine disease, and Alzheimer's disease. Dr. Farris is working on a new project looking at general ncRNA mechanisms and investigating enigmas such as the fundamental functions of lncRNAs in the brain, rather than their role in a specific disease like AUD. "Since most of them have never been studied before, we're trying to be trailblazers, in a sense, to figure out what these unannotated genes do. Nobody knows what they are. We're just trying to understand them on a very fundamental, basic science, basic biology level," says Dr. Farris.

Both Drs. Homanics and Farris agree that the study of non-coding genes is a very critical area of focus for future projects, such as trying to find medications that actually work via these genes. All medication development to date has been focused on protein-coding genes, which comprise less than 2% of our genome. The rest of our genetic code is made up of non-coding genes. "Could we, in the long term, design medications that would work through non-coding genes rather than protein-coding genes?" asks Dr. Farris. Investigations by the Homanics lab and the Farris lab could indeed lead to exciting innovations in drug design and pharmacogenomics.

## Homanics Lab Key Publications

Rompala GR, Mounier A, Wolfe CM, Lin Q, Lefterov I, **Homanics GE**. Heavy Chronic Intermittent Ethanol Exposure Alters Small Noncoding RNAs in Mouse Sperm and Epididymosomes. *Front Genet.* 2018 Feb 8;9:32.

Harris RA, Bajo M, Bell RL, Blednov YA, Varodayan FP, Truitt JM, de Guglielmo G, Lasek AW, Logrip ML, Vendruscolo LF, Roberts AJ, Roberts E, George O, Mayfield J, Billiar TR, Hackam DJ, Mayfield RD, Koob GF, Roberto M, **Homanics GE**. Genetic and Pharmacologic Manipulation of TLR4 Has Minimal Impact on Ethanol Consumption in Rodents. *J Neurosci.* 2017 Feb 1;37(5):1139-1155.

Finegersh A, **Homanics GE**. Paternal alcohol exposure reduces alcohol drinking and increases behavioral sensitivity to alcohol selectively in male offspring. *PLoS One.* 2014 Jun 4;9(6):e99078.

Chandra D, Jia F, Liang J, Peng Z, Suryanarayanan A, Werner DF, Spigelman I, Houser CR, Olsen RW, Harrison NL, **Homanics GE**. GABAA receptor alpha 4 subunits mediate extrasynaptic inhibition in thalamus and dentate gyrus and the action of gaboxadol. *Proc Natl Acad Sci U S A.* 2006 Oct 10;103(41):15230-5.

Mihalek RM, Banerjee PK, Korpi ER, Quinlan JJ, Firestone LL, Mi ZP, Lagenaur C, Tretter V, Sieghart W, Anagnostaras SG, Sage JR, Fanselow MS, Guidotti A, Spigelman I, Li Z, DeLorey TM, Olsen RW, **Homanics GE**. Attenuated sensitivity to neuroactive steroids in gamma-aminobutyrate type A receptor delta subunit knockout mice. *Proc Natl Acad Sci U S A.* 1999 Oct 26;96(22):12905-10.

## Farris Lab Key Publications

**Farris SP**, Mayfield RD. Epigenetic and non-coding regulation of alcohol abuse and addiction. *Int Rev Neurobiol.* 2021;156:63-86. Epub 2020 Oct 14.

Grantham EK, **Farris SP**. Bioinformatic and biological avenues for understanding alcohol use disorder. *Alcohol.* 2019 Feb;74:65-71. Epub 2018 Aug 23.

Augier E, Barbier E, Dulman RS, Licheri V, Augier G, Domi E, Barchiesi R, **Farris S**, Nätt D, Mayfield RD, Adermark L, Heilig M. A molecular mechanism for choosing alcohol over an alternative reward. *Science.* 2018 Jun 22;360(6395):1321-1326.

**Farris SP**, Arasappan D, Hunnicke-Smith S, Harris RA, Mayfield RD. Transcriptome organization for chronic alcohol abuse in human brain. *Mol Psychiatry.* 2015 Nov;20(11):1438-47. Epub 2014 Dec 2.

**Farris SP**, Tiwari GR, Ponomareva O, Lopez MF, Mayfield RD, Becker HC. Transcriptome Analysis of Alcohol Drinking in Non-Dependent and Dependent Mice Following Repeated Cycles of Forced Swim Stress Exposure. *Brain Sci.* 2020 May 2;10(5):275.

# Clinical Spotlight: Dr. Grace Lim and Obstetric & Women's Anesthesiology

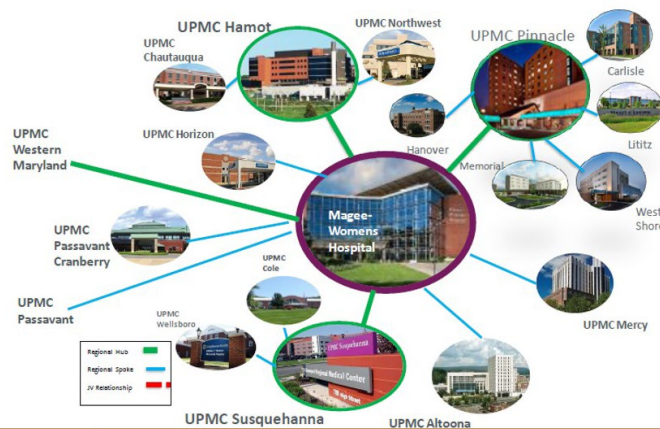


**Under the direction of Grace Lim, MD, MSc, the division provides comprehensive anesthetic and perioperative services for the region's highest- and lowest-risk pregnancies.**

The Division of Obstetric (OB) and Women's Anesthesiology strives to be a world leader in improving maternal and women's health through advancing acute care medicine and science. Its mission is to: 1) provide safe, patient-centered, and evidence-based clinical care by leveraging a multidisciplinary team approach; 2) educate the next generation of clinicians and leaders; and 3) advance cutting-edge knowledge, discoveries, and innovation in OB and women's anesthesiology. Division Chief Dr. Grace Lim proudly leads a passionate team of clinicians and researchers who constantly push the boundaries of knowledge and clinical practice. "Our division is expanding and thriving due to our perfect mix of talent, motivation, and resources," says Dr. Lim. "These assets put us on a growth trajectory that is truly unparalleled by any other OB anesthesia service anywhere."

The foundation of their clinical work is the perioperative and peripartum management of routine and medically complex OB patients. The division also provides services for *in* and *ex utero* fetal surgeries, non-OB surgery during pregnancy, and scheduled and unscheduled cesarean-hysterectomies for placenta accreta spectrum, among other procedures. Fetal surgeries encompass percutaneous umbilical blood sampling, fetoscopic laser photocoagulation, radiofrequency ablation of twin reversed arterial perfusion (TRAP) sequence, fetal shunt procedures with radiographic guidance, and *ex utero* intrapartum procedures (EXIT).

OB/Women's Anesthesiology is a key partner with UPMC Women's Health Service Line, which encompasses 15 urban and rural maternity hospitals in the UPMC network spanning Pennsylvania, New York, Ohio, Western Maryland, and West Virginia. UPMC Magee-Womens Hospital, among the nation's top women's hospitals, functions as the tertiary referral main "hub" for women's clinical care throughout the health system. About 21,000 deliveries occur annually at UPMC hospitals (20% of annual births in Pennsylvania), with nearly half occurring at Magee. The referral relationship between Magee and the other hospitals has built a continuously growing wealth of experience and collaboration. The service line and OB/Women's Anesthesiology collaborate closely to identify priorities and develop care standards that ultimately improve access to high quality maternity care. Dr. Lim explains that this partnership helps to align best practices across UPMC maternity hospitals and establishes footing within our department, where that expertise is housed. "We're able to share and partner with all these institutions, so that all hospitals thrive and translate best practices to the local level, which has been a continuous improvement effort," explains Dr. Lim.



Current hospitals in the UPMC Women's Health Service Line



Left: The busy OB ICU Team Station at UPMC Magee-Womens Hospital

Right: Rachel C. Cellurale, MSN, CRNA and Deanna R. Alko, MSN, CRNA updating the team's task list for the day.



Magee was one of the first 20 hospitals in the world inaugurated as a Society for Obstetric Anesthesia and Perinatology (SOAP) Center of Excellence for Obstetric Anesthesia Care in 2019. This international designation recognizes Magee as an institution demonstrating superior OB anesthesia care through a rigorous and transparent review process. The Center of Excellence designation is reviewed every four years based on data demonstrating continued excellence and ongoing professional development. Three additional UPMC maternity hospitals are in discussions to potentially increase their levels of care to meet the criteria for this prestigious designation and can rely upon Magee as a blueprint to achieve those goals.

The division is also represented in UPMC's multidisciplinary maternal mortality review committees (MMRCs), which review mortality cases at the local and state level. The Pennsylvania Perinatal Quality Collaborative (PA PQC) Alliance for Innovation in Maternal Health (AIM) serves as the "action arm" of the PA MMRCs. Dr. Lim represents UPMC as part of this new state maternal safety effort, which also focuses on severe hypertension, health disparities, and depression screening and follow-up. The PA PQC recently formed a task force and is working towards releasing two maternal patient safety bundles, the AIM Severe Hypertension in Pregnancy Bundle and the AIM Racial/Ethnic Disparities Bundle, which will help guide patient care at hospitals across PA. Andrea Ibarra, MD, MS, is also developing a line of research to tackle the problem of maternal health disparities. To close gaps in rural care disparities, teams are developing specialized training programs to meet the challenges of providing high-quality clinical care in under-resourced local environments such as rural Pennsylvania. Division members Tyler Smith, MD, and Joseph S. DeRenzo, MD, have been working with neonatology educators and leaders to devise creative ways to increase neonatal resuscitation skills in remote areas that may lack in-house pediatricians.

The division's research mission is to optimize maternal-neonatal and women's health with innovative and personalized clinical management. The division actively engages in research on important themes including pain management in special populations, appropriate therapies in pregnancy and lactation, and physiology, monitoring, and technology for decision support/prediction. Division faculty and OB anesthesia fellows regularly present their work at national and international meetings of academic societies like SOAP, the International Anesthesia Research Society, and the Association of University Anesthesiologists.

The department's expertise is brought to the international stage as part of the SOAP/Society for Maternal Fetal Medicine/ASRA Task Force on Peri-delivery Pain Management in Women with Opioid Use Disorder, which have developed consensus guidelines to inform the care of these patients. "What I love about this effort is that it represents key members from not only OB and anesthesiology leadership, but also experts in chronic and acute pain, addiction medicine, and obstetric medicine," says Dr. Lim. She is excited to share that they are finally reaching the finish line, with four publications in the pipeline: three consensus guidelines, and one systematic review that Dr. Lim says couldn't have been completed without the support and resources of our department. She calls this work "incredibly revealing" in terms of the amount of time that's being wasted on efforts that don't matter for this population. "We were able to make some really clear-cut recommendations on what researchers, health service providers, and other experts really need to be doing to make progress," Dr. Lim shares.



Dr. Grace Lim (L) with department residents (L to R) Drs. Matt Yin, Ryan Holden, and Thomas Pham at MWH



These findings are also shaping division research priorities on personalized pain management in special populations. Currently, researchers are designing clinical trials to improve pain management in people with opioid use disorder. Researchers are also focused on the pharmacokinetics and appropriate use of ketamine in pregnancy/lactation and in patients having mastectomies. A trial on genetic markers of opioid metabolism to increase medication safety in cesarean delivery is also underway.

Clinicians in the OB/Women's Anesthesiology division and Magee educate diverse learners. The hospital is the primary OB clinical site for student nurse anesthetists, dental anesthesia residents, anesthesiology residents, and OB anesthesiology fellows. Our department's OB Anesthesiology Fellowship, directed by Patricia Dalby, MD, offers two tracks – a one-year, ACGME-accredited clinical track, and a three-year (one-year clinical, two-year research) clinical investigator track. Dr. Dalby is also at the cutting edge of curricular advancement, developing innovative training pathways for fellows to grow skills in innovation and clinician education (led by Tyler Smith, MD), OB anesthesia - critical care (led by Kate Petty, MD), and cardio-obstetric anesthesiology (led by Alexa Nicholas, MD), among other key areas. Our program was among the first in the country to offer a formalized pathway for point-of-care ultrasound (POCUS) training. As of 2021-2022, all our OB anesthesiology fellows become internally or ASA-certified in POCUS.

In 2020, the division began an OB & Women's Health Grand Rounds Lecture Series presented by our faculty and fellows and OB/women's anesthesiology experts worldwide. Monthly lectures are delivered both virtually and in-person and offer continuing medical education credits. Lectures are recorded for sharing with viewers who could not participate live and regularly attract an impressive turnout of Pitt/UPMC attendees, as well as external viewers from all over the world. The series features annual memorial lectures named in honor of two past OB/women's anesthesiology pioneers from our department and Magee - Dr. Ezzat I. Abouleish, a former Chief of OB Anesthesiology, and Dr. Sivam Ramanathan, a former Chief Anesthesiologist. The division has also hosted a few podcasts and plans to release additional episodes in the future.

The popularity of our OB Grand Rounds series can likely be directly attributed to OB/Women's Anesthesiology's robust presence on social media. Anyone wanting to learn more about the division is encouraged to follow them on Twitter (@**OBAnesUPMC**), where they actively promote their lectures and activities and engage in an ongoing dialogue with OB experts worldwide. They also have a presence on Instagram (**obanesupmc**), where followers can enjoy an inside look into the division's social activities.



Excited residents and fellows training at Magee

## Key Publications

Belfer I, Schreiber KL, Shaffer JR, Shnol H, Blaney K, Morando A, Englert D, Greco C, Brufsky A, Ahrendt G, Kehlet H, Edwards RR, Bovbjerg DH. Persistent postmastectomy pain in breast cancer survivors: analysis of clinical, demographic, and psychosocial factors. *J Pain*. 2013 Oct;14(10):1185-95. Epub 2013 Jul 23. Original Research.

Nguyen E, Lim G, Ding H, Hachisuka J, Ko MC, Ross SE. Morphine acts on spinal dynorphin neurons to cause itch through disinhibition. *Sci Transl Med*. 2021 Feb 3;13(579):eabc3774. Original Research.

Dalby PL, Gosman G. Crisis Teams for Obstetric Patients *Crit Care Clin*. 2018 Apr;34(2):221-238. Epub 2018 Feb 1. Review.

Bollag L, Lim G, Sultan P, Habib AS, Landau R, Zakowski M, Tiouririne M, Bhambhani S, Carvalho B. Society for Obstetric Anesthesia and Perinatology: Consensus Statement and Recommendations for Enhanced Recovery After Cesarean. *Anesth Analg*. 2021 May 1;132(5):1362-1377. Guideline.

Lim G, Facco FL, Nathan N, Waters JH, Wong CA, Eltzschig HK. A Review of the Impact of Obstetric Anesthesia on Maternal and Neonatal Outcomes. *Anesthesiology*. 2018 Jul;129(1):192-215. Review.

Lim G, Farrell LM, Facco FL, Gold MS, Wasan AD. Labor Analgesia as a Predictor for Reduced Postpartum Depression Scores: A Retrospective Observational Study. *Anesth Analg*. 2018 May;126(5):1598-1605. Original Research.

# NEW PROGRAMS

## EQUITY, DIVERSITY, & INCLUSION



Dr. Kimberly Cantees

A strong commitment to equity, diversity, and inclusion (EDI) is a fundamental value of the University, UPMC, and our department and is critical to achieving personal, professional, and organizational success. We have made great progress, but know we must do more. Through our commitment, we have formed a structured EDI Committee to actively lead, support, and advance the equity, diversity, and inclusion of our faculty, staff, and students through innovative and evidence-based methods of recruitment, career development, retention, and advancement.

**Kimberly Cantees, MD, MBA**, has been appointed EDI Committee Chair to lead our mission, vision, and objective in these efforts. We received an impressive response from our faculty and staff interested in committee membership, resulting in 23 members who will join Dr. Cantees in the vital role to advance and embed EDI in our work environment and practices. The first committee gathering was held in December. Dr. Cantees initiated discussion by posing

the question to the committee, "are we an equitable, diverse, and inclusive department?" Responses were very thoughtful, recognizing that our department fosters EDI and suggesting potential opportunities for further action.

Are we an equitable, diverse, and inclusive department? How would you respond to this question? Members of the department are invited to share their valuable thoughts and suggestions for ways the department could advance in this area with Deanne Krugh (krughdd3@upmc.edu).

Watch Nexus for further developments from our EDI Committee!

### Introducing our EDI committee members:

Kimberly Cantees, MD, MBA

Jacques E. Chelly, MD, PhD, MBA

Cara J. Fleischman, MHS, CRNA

Rachel Hicks, MSN, CRNA

Ibtesam A. Hilmi, MB, CHB, FRCA

Andrea Ibarra, MD, MS

Jessica E. Kridler, MSN, CRNA

Deanne Krugh

Kevin Luong, PA-C, MBA

Aman Mahajan, MD, PhD, MBA

Melissa S. McConnell, MSN, CRNA

Michelle Messersmith, MS

David G. Metro, MD, FASA

Malinda Miller, MSN, CRNA

Lilinete Polsunas, MD

Kenny M. Roman, PhD

Senthil Sadhasivam, MD, MPH, MBA, FASA

Tetsuro Sakai, MD, PhD, MHA, FASA

Siamak Salavatian, PhD

Emily C. Skrbins, MSN, CRNA

Doreen Soliman, MD

Kathirvel Subramaniam, MD, MPH, FASE

Erin A. Sullivan, MD, D.ABA, FASA

## QUALITY IMPROVEMENT PROJECT INCENTIVE PROGRAM

Attention, department physicians, CRNAs, and clinical staff! Do you have an idea to improve the quality of our care at UPMC? We have launched a new Quality Improvement (QI) Project Incentive Program to support QI projects in our department developed by clinical teams at our hospital sites. Teams striving to improve the patient experience, clinical outcomes, clinical care coordination, patient and clinical team safety, anesthesia team coordination and teamwork, and clinical education and training focused on improving patient outcomes are invited to apply. Teams can submit a project for consideration by sending a completed Quality Improvement Project Proposal Form to their local site clinical leadership (faculty chief/CRNA director) for review. Site leaders will identify viable projects for further consideration and approval by our executive leadership and QI Project Committee. Deadlines for submission will be determined by each site's leadership and a finite number of projects will be approved for each site. Guidelines for proposals are summarized below. The full guidelines and project proposal form can be found **on our department Sharepoint**\*

\* Sharepoint is an intranet website residing behind the UPMC firewall accessible only by individuals with a department UPMC network account. Please **visit our website** for additional guidance.

### Project Examples

- Clinical competency workshops
- Preceptor training programs for CRNAs and anesthesiologists to work with students, residents, and other trainees
- Protocols to reduce medication errors in the peri-operative setting

Did we miss your name or photo?  
 If so, please email Christine Burr  
 (heiner@c@upmc.edu) and let us  
 know so we can include  
 you in the next issue  
 of Nexus!

# Team Arrivals and Changes

## NEW TEAM MEMBERS



**Leath Abdullah, MD**  
 Clinical Assistant  
 Professor,  
 UPMC East



**Meredith Axe**  
 Division Administrator,  
 Scaife 13th Floor  
 Administration



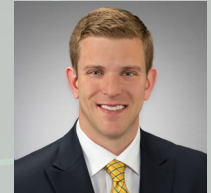
**Heather Blake, MHA**  
 Administrative  
 Liaison, Scaife 13th  
 Floor Administration



**Kristy Bowman,  
 MSN, CRNA**  
 UPMC St. Margaret



**Angela Coroso,  
 MSN, CRNA**  
 UPMC Children's  
 Hospital of  
 Pittsburgh



**Michael Gemma, MD**  
 Clinical Assistant  
 Professor, UPMC  
 Presbyterian



**Erin Haberman,  
 CRNP**  
 Chronic Pain  
 Division, Oakland/  
 UPMC Passavant



**Abigail Hellman, PhD**  
 T32 Postdoctoral  
 Research Scholar



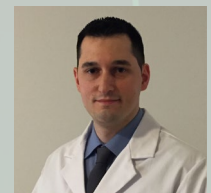
**Callie Hlavin, MD**  
 T32 Postdoctoral  
 Research Scholar



**Paul Hoffman, DO**  
 Clinical Assistant  
 Professor, UPMC  
 Presbyterian



**Jessica Kieta, PsyD**  
 Psychologist,  
 Chronic Pain  
 Division



**Luca La Colla, MD**  
 Assistant Professor,  
 UPMC Presbyterian



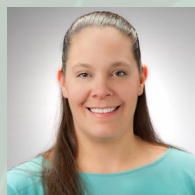
**Eric Long, MD**  
 Clinical Assistant  
 Professor, UPMC  
 Altoona



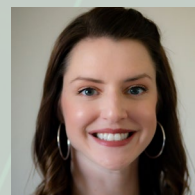
**Jayun Lu, MD**  
 Psychiatrist,  
 Chronic Pain  
 Division



**Mutasim Makeen,  
 MBBS**  
 T32 Postdoctoral  
 Research Scholar



**Alisha Maslanka**  
 Cardiac/Perioperative  
 Research Manager



**Leann McDonald,  
 DNAP, CRNA**  
 UPMC Passavant



**Kevin Pardo, MD**  
 Clinical Assistant  
 Professor, UPMC  
 Presbyterian and  
 Mercy



**Kate Petty,  
 MD, USAFR**  
 Clinical Assistant  
 Professor, UPMC  
 Magee-Womens  
 Hospital



**Daniel  
 Paulus, PhD**  
 Psychologist,  
 Chronic Pain  
 Division



**Kristin  
 Pivovarnik, PA-C**  
 Chronic Pain,  
 UPMC Children's  
 Hospital of  
 Pittsburgh



**Aisha Ullah, MD**  
 Clinical Assistant  
 Professor, UPMC  
 Presbyterian



**Jessica Warnock**  
 GME Academic  
 Manager,  
 Residency  
 Program,  
 Education Office



**Stephanie  
 Waters,  
 MSN, CRNA**  
 UPMC Mercy



**Danielle Zheng,  
 MD, PhD**  
 Assistant  
 Professor,  
 Chronic Pain  
 Division

## New Team Members, Not Pictured

**Monica Ceraso**  
Academic Support Coordinator,  
Scaife 13th Floor Administration

**Connie Chaudhary, MD**  
Clinical Assistant Professor,  
UPMC Presbyterian

**Caitlin Loudon, DO**  
Clinical Assistant Professor,  
UPMC Presbyterian

**Michelle Higgins, MSN, CRNA**  
UPMC Horizon

**Natalie Kerr, MSN, CRNA**  
UPMC Horizon/Jameson

**Helena Knapp, CRNA**  
UPMC St. Margaret

**Evelyn Lucanish**  
Research Administrator

**Senthil Sadhasivam,  
MD, MPH, MBA, FASA\***  
Executive Vice Chair for Clinical Quality,  
Patient Safety, and Clinical Research;  
Director, Perioperative Research; Director,  
Perioperative Genomics Program

**Melissa Servello, MSN, CRNA**  
UPMC St. Margaret

**Morgan Swanson, MD**  
Clinical Assistant Professor,  
UPMC Altoona

**David Wood, MHS, CRNA**  
UPMC East

**Tyler Smith, MD\***  
Director of OB Anesthesia  
Education, UPMC  
Magee-Womens Hospital

**Mary Young, DNAP, CRNA**  
UPMC Magee-Womens Hospital

*\*see photo in below section, "New Leadership Appointments"*

## NEW LEADERSHIP APPOINTMENTS



**Phillip S. Adams, DO, FASA**  
Director, Anesthesiology  
Residency Program



**Rachel Cellurale, MSN, CRNA**  
Assistant CRNA Clinical  
Director, UPMC Magee-  
Womens Hospital



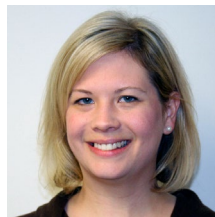
**Franklyn P. Cladis, MD**  
Assistant Chief, UPMC  
Children's Hospital of  
Pittsburgh



**Jennifer M. Holder-Murray,  
MD, FACS, FASCRC**  
Surgical Director, UPMC  
Center for Perioperative Care



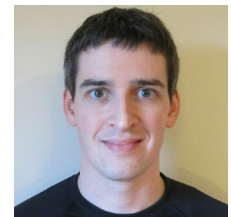
**Joshua Knight, MD, FASE**  
Interim Medical Director  
of Quality, UPMC/  
Pitt Department of  
Anesthesiology and  
Perioperative Medicine



**Tara Knizner, MD**  
Assistant Chief  
Anesthesiologist, UPP  
East Anesthesiology  
Division



**William McIvor, MD, FASA,**  
Director, Medical  
Student Programs



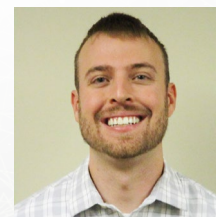
**Gregory L. McHugh, MD**  
Clinical Director,  
Operating Room, UPMC  
Children's Hospital of  
Pittsburgh



**David G. Metro, MD, FASA**  
Senior Vice Chair for  
Education; Senior Vice  
Chair for Faculty Affairs,  
UPMC/Pitt Department  
of Anesthesiology and  
Perioperative Medicine



**Senthil Sadhasivam,  
MD, MPH, MBA, FASA**  
Executive Vice Chair for Clinical  
Quality, Patient Safety, and Clinical  
Research; Director, Perioperative  
Research & Perioperative  
Genomics Program; Professor,  
Scaife 13th Floor Administration



**Tyler Smith, MD**  
Assistant Professor,  
Director of OB  
Anesthesia Education,  
UPMC Magee-  
Womens Hospital

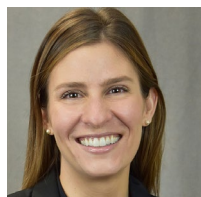
# Accolades



UPMC Presbyterian Anesthesiology received the "Good Catch" Award for the first quarter of this year on behalf of **Arielle E. Brice, MSN, CRNA**, and **David Modranski, Jr., MSN, CRNA**. Arielle and David were recognized for their dedication to patient safety by preventing potential patient harm.



**Allison Lewis, MBA, MSN, CRNA**, won the Outstanding APP (advanced practice provider) Award, and **Wende A. Goncz, DO, MMM**, received the Outstanding Physician APP Supporter Award as part of Passavant's APP Week 2021.



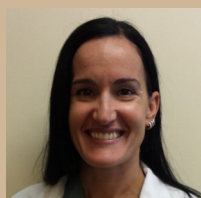
**Eve Pourzan, MD**, won the vote to become President-Elect of the Pennsylvania Society of Anesthesiologists (PSA) Resident Component for the 2021-2022 year. Dr. Pourzan will follow current PSA Resident Component President **Paige Pribonic, MD**, marking the first time that two UPMC residents have held PSA President and President-Elect positions.



**Gaurav Chauhan, MD**, was nominated for a UPMC Physician Excellence New Physician Award.



**James W. Ibinson, MD, PhD**, received the VA Pittsburgh Healthcare System's Clinical Excellence Award.



**Melissa A. Dupilka, MSN, CRNA**, received "The Extra Mile" Honorable Mention for second quarter of this year.



**Michael Jordan, MSN, CRNA**, received the 2021 Preceptor of the Year Award from the UPMC Advanced Practice Providers Preceptor Academy.



**Trent D. Emerick, MD, MBA**, was a winner of the UPMC Physician Excellence Award - Early - to Mid - Career Physician Excellence in Clinical Care.



WISER was re-endorsed as an approved program in the ASA Simulation Education Network. **William R. McIvor, MD, FASA**, WISER's Associate Director, led the re-endorsement process.



**Brian Gierl, MD**, received the Tony Demos Award from Surgicorps International.



**Tetsuro Sakai, MD, PhD, MHA, FASA**, became President of the Society for the Advancement of Transplant Anesthesiologists (SATA) on August 1, 2021. Dr. Sakai will serve as SATA's President for two years.

## FACULTY PROMOTIONS

**Drs. Mihaela Visoiu, Franklyn Cladis, and Kathirvel Subramaniam** all recently achieved faculty promotions. Each of these individuals have led meritorious careers and have distinguished themselves as superb clinicians, educators, and leaders while maintaining a deep commitment to academic activities, including clinical research, as well as to our department.



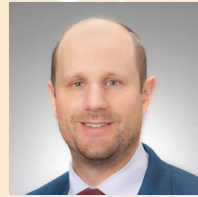
**Mihaela Visoiu, MD**  
promoted to  
Associate Professor



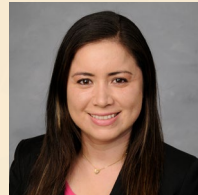
**Franklyn P. Cladis, MD**  
promoted to  
Professor



**Kathirvel Subramaniam, MD, MPH**  
promoted to  
Professor



**Trent D. Emerick, MD, MBA**, Tracy Cui, PhD (Pitt Bioengineering), and Raj Kubendran, PhD (Pitt Electrical and Computer Engineering), University of Pittsburgh's Chancellor's Gap Fund, "Vanish Therapeutics, Inc. — Biodegradable Nerve Stimulator"



**Andrea J. Ibarra, MD, MS**, Bristol Myers Squibb Foundation Diversity in Clinical Trials Career Development Program funding for her participation in the study "Randomized Evaluation of Bromocriptine in Myocardial Recovery Therapy for Peripartum Cardiomyopathy (REBIRTH)."

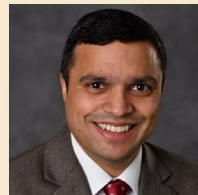
## IN THE PRESS

"Steffi's Story," the first segment of episode 49 of *UPMC NOW*, is an incredible story of outstanding patient care by **our anesthesiology team at UPMC Altoona** that saved a little girl's life. **Watch the video on Microsoft Stream** (please note, this link only works for individuals with a UPMC network account).

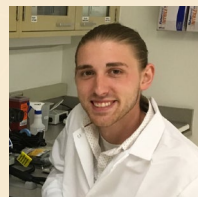


The NIH Heal Initiative website featured the project "Proof of Concept Study to Treat Negative Affect in Chronic Low Back Pain" led by **Ajay D. Wasan, MD, MSc** as part of the Back Pain Consortium (BACPAC) Research Program: "**Can**

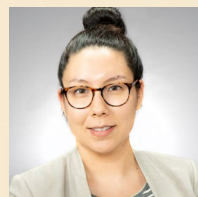
**Treating Pain and Mood Together Improve Outcomes for People With Chronic Low Back Pain?**"



**Ramakrishna Mukkamala, PhD**, NIH/National Institute of Biomedical Imaging and Bioengineering award, "Towards a Convenient, Point-of-Care Device for Screening and Surveillance of Aortic Aneurysms"

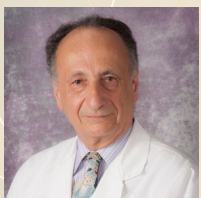


**Tyler Nelson** (Dr. Brad Taylor lab), NIH/ National Institute of Neurological Disorders and Stroke (NINDS) F99/K00 predoctoral-to-postdoctoral transition award, "Targeting Spinal Neuropeptide Y1 Receptor-expressing Neurons for the Control of Neuropathic Pain"



**Kayla Nguyen, PhD** (Dr. Brad Taylor's Lab), NIH/NINDS F32 award, "Peripheral Mechanisms of Central Neuropathic Pain in Multiple Sclerosis"

## NEW GRANTS



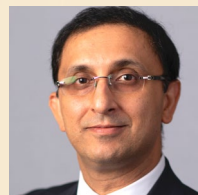
**Jacques E. Chelly, MD, PhD, MBA**, Heron Therapeutics, "Heron Center of Excellence - Pennsylvania Center for Opioid Prescribing Stewardship"; Masimo, "Feasibility and Efficacy of Bridge for Post-Operative Pain Management in Hip Arthroplasty"



**Shiv K. Goel, MD**, Shadyside foundation, "Music Therapy for the Treatment of Perioperative Anxiety and Pain"



**Michael Schnetz, MD, PhD; Aman Mahajan, MD, PhD, MBA**, University of Pittsburgh's Chancellor's Gap Fund, "TVI — A Software Application System for Clinicians to Manage Blood Pressure More Safely During Surgery"



# Research Support Announcements

## CLINICAL AND TRANSLATIONAL RESEARCH CENTER

We place a high value on research and innovation in each of our clinical divisions. Providing faculty and trainees with the tools and support to achieve success in their research endeavors is a top priority. To aid our faculty and trainees, our Clinical and Translational Research Center (CTRC) provides many departmental resources to assist with various aspects of research, including statistical support, IT and data analytics, and a pool of dedicated clinical research staff to help with Institutional Review Board submissions, subject enrollment, data collection, and data entry. We recently added **a new CTRC page** to our website to help assist researchers in achieving their academic goals. The page provides specific guidance for faculty and trainees in our department on how to start a research project and illustrates the process for industry-sponsored, grant-funded, and non-funded investigator-initiated clinical trials. Formal requests for CTRC support can be submitted through **our Sharepoint site\*** (click "submit research proposal").

### Statistical Consult

Statistical support is available to investigators as part of the CTRC. Department investigators whose projects have been reviewed and approved by the CTRC and/or faculty mentors are eligible for this support, where statisticians from the university's Epidemiology Data Center assist with study design/analytical plans; sample size and power calculations; and statistical analyses of data. The statisticians hold weekly walk-in office hours every Tuesday 10am-12pm via Microsoft Teams for department investigators with CTRC-approved projects who submit a request through **our Sharepoint site\*** (click "submit statistical consult").

When planning projects, please consider the anticipated times for completing statistical service requests:

**Sample size calculation:** *One week.* Please provide primary hypothesis and relevant references to estimate effect size and distribution around effect size.

**Simple analysis:** *Three to four weeks.* Research question and hypothesis are clearly defined; dataset is complete, and minimal data management is required; sample tables/shells are provided clearly indicating type of results that are requested. The completion time range is based on how many results tables and/or figures are requested.

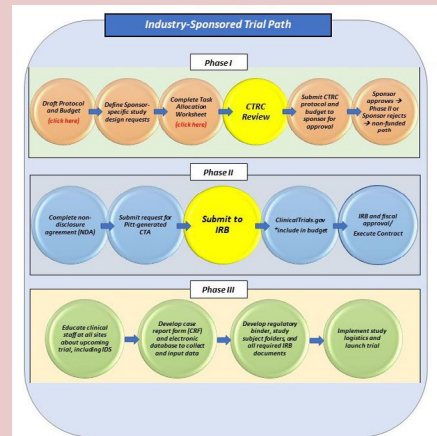
**Complex analysis:** *Eight weeks.* Research question and hypothesis are clearly defined; dataset is complete, but data must be managed and/or extensive coding is required before statistical analysis can begin (examples: propensity score matching; dataset variables are recorded as text rather than in numeric categories; dataset variables must be extensively redefined to match hypothesis and relevant study population).

*\*Sharepoint is an intranet website residing behind the UPMC firewall accessible only by individuals with a department UPMC network account. Please visit **our website** for additional guidance.*

## SEAd GRANT APPLICATIONS DUE JANUARY 3, 2022

SEA is excited to continue providing a \$10,000 education research starter grant, open to faculty members of the society. The purpose of the grant is to inspire and assist aspiring faculty who have no previous funding to start an educational research project. The grant requires that the recipient be given non-clinical time by their department to complete the project.

The deadline to apply is January 3, 2022. Please visit the **SEAd grant webpage** for detailed information.



Our new CTRC webpage includes interactive pathways such as this to help researchers navigate the CTRC support processes



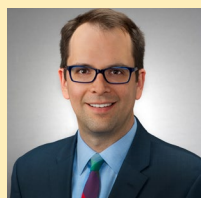
# Publications

Authors from our department produced **76 publications** from July 1, 2021–October 31, 2021. Below are some highlights. All department publications can be viewed **on our website**.

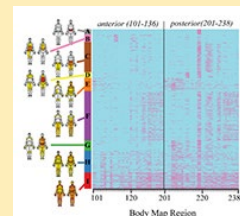
## HIGHLIGHTS



The article "**Spinal Anesthesia or General Anesthesia for Hip Surgery in Older Adults**" by investigators of the REGAIN trial ("Regional Versus General Anesthesia for Promoting Independence After Hip Fracture"), including **Charles B. Luke, MD, MBA, FASAM**, was presented at ANESTHESIOLOGY 2021 and published in *The New England Journal of Medicine*, one of the world's leading medical journals. The study, which found no significant difference in patient outcomes with respect to survival, recovery of ambulation at 60 days, and incidence of postoperative delirium between those who received spinal anesthesia and those who got general anesthesia, was also featured on several websites, including **Penn Medicine, Medpage Today, Medical Dialogues, and Health Day**.



"**Hierarchical Clustering by Patient-Reported Pain Distribution Alone Identifies Distinct Chronic Pain Subgroups Differing by Pain Intensity, Quality, and Clinical Outcomes**" by department authors **Benedict Alter, MD, PhD**, and **Ajay D. Wasan, MD, MSc**, and colleagues from the University of Pittsburgh Departments of Biostatistics and Psychiatry was published in *PLoS One*. Using an algorithmic approach, the authors found that how patients report the bodily distribution of their chronic pain affects nearly all aspects of the pain experience, including what happens three months later. These findings emphasize that chronic pain is a disease process and suggests that this facet of the chronic pain phenotype will be important for future developments in diagnosis and personalized pain management.



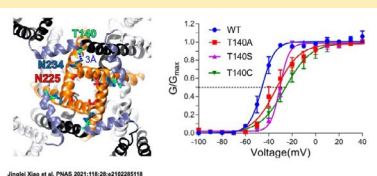
Heatmap with body map region on horizontal axis and each row on the vertical axis representing an individual patient out of the entire cohort (N = 21,658 unique patients) organized by cluster membership. Image credit: Alter et al, 2021, PLOS ONE (CC-BY 4.0, <https://creativecommons.org/licenses/by/4.0/>)



The article was featured in several news publications, including **Science Daily, Medical News, Florida Times News, and Science Alert.com**; Pain Research Forum selected it as one of their **Papers of the Week** for June 31 – August 6, 2021; and Dr. Alter was interviewed about his work for **PainRelief.com**.



"**Regulation and drug modulation of a voltage-gated sodium channel: Pivotal role of the S4–S5 linker in activation and slow inactivation**" from the labs of **Yan Xu, PhD**, and **Pei Tang, PhD**, in partnership with collaborators at Temple University, University of Pennsylvania, and Shanghai Jiaotong University, was published in the journal *Proceedings of the National Academy of Sciences*. The authors reported critical structural insights into the activation and propofol effects on slow inactivation of voltage-gated sodium channels. Elucidating this new mechanism of general anesthetic action points to a possible direction for conformation-specific drug development to target the gating machinery of voltage-gated ion channels.



Jingfei Xiao et al. PNAS 2021;118:26–31



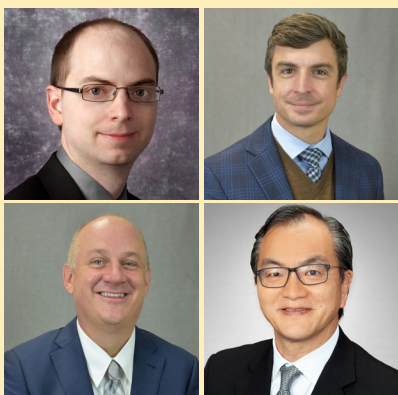
## HIGHLIGHTS



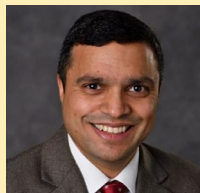
Two *Journal of Cardiothoracic and Vascular Anesthesia* articles on perioperative echocardiography by **Kathirvel Subramaniam, MD, MPH, FASE**, et al. were the topic of editorials.

The article "**An Approach to Standard Perioperative Transthoracic Echocardiography Practice for Anesthesiologists-Perioperative Transthoracic Echocardiography Protocols**" proposes a foundation for building a standardized transthoracic echocardiography exam for perioperative physicians. An accompanying editorial on the article, "**Perioperative Transthoracic Echocardiography – Thoughtful Design and Delivery of Standardized Imaging Protocols for Anesthesiology Teams**," called their proposal "an important step forward to address the required standards for this diagnostic modality in the perioperative period" and stated that "Subramaniam and colleagues should be congratulated for highlighting a comprehensive framework for standardizing transthoracic echocardiography across the perioperative spectrum to improve uptake, quality and ultimately, patient care."

A second article, "**Basic Transesophageal Echocardiography Education for Senior Anesthesiology Residents-Institutional Experience**" presents the outcomes of the transesophageal echocardiography (TEE) didactic curriculum in our department as measured by the rate at which participating residents obtained basic TEE certification and the percentage of graduates who continued to use TEE in their regular practice. This work was discussed in the accompanying editorial "**An Unsentimental Education: How Should We Be Teaching Perioperative Echocardiography?**"



The publication "**Early Immersion in a Dedicated One-Month Anesthesiology Professional Practice Rotation for Post-Graduate Year-1 Interns is Associated With an Increase in Scholarly Activity During Residency**" by **Keith M. Vogt, MD, PhD**; Ally T. Citro, BS; **Philip S. Adams, DO, FASA**; **David G. Metro, MD, FASA**; and **Tetsuro Sakai, MD, PhD, MHA, FASA**, was published in *Journal of Clinical Anesthesia (JCA)*. The authors showed that resident participation in our APP rotation was significantly associated with more scholarly activity during residency. The number of publications prior to entering residency and other resident characteristics did not contribute to this observed increase. *JCA* tweeted about the paper, sparking a conversation about the work on Twitter.



Congratulations to the authors of the review paper "**Evaluation of the Accuracy of Cuffless Blood Pressure Measurement Devices: Challenges and Proposals**," who include our faculty member **Ramakrishna Mukkamala, PhD**. Their work, which was published in the high-impact journal *Hypertension*, gives an overview of the capabilities and limitations of these cuffless blood pressure monitors and describes the unique challenges of evaluating the accuracy of these devices. The authors also propose better ways to evaluate the devices.

# Education Announcements

## PAIN FELLOWSHIP MATCH RESULTS

Our Pain Medicine Fellowship is proud to announce its class of 2022-2023. Congratulations to our incoming fellows and thank you to all those who participated in the interview process. To view the names and photos of the matching fellows, please visit [our website](#).

## NEW VIDEO ON RESIDENCY PROGRAM

In September, we released a new video, "Message from the Chair", in which Dr. Aman Mahajan explains why UPMC is the best place in the world for anesthesiology residents to complete their training.

**Watch the video** on our YouTube channel!



## LECTURE SERIES

### Grand Rounds/Journal Club

Our Journal Clubs and Grand Rounds lectures are held Thursdays at 5pm. Journal Club sessions are held both virtually via Microsoft Teams as well as in person in the LHAS Auditorium in UPMC Montefiore, 7th Floor. Visiting professor/keynote speaker Grand Rounds are held virtually only. Sessions are recorded for future viewing as format and speaker permit. Upcoming lectures are **publicized online**, as well as e-mailed weekly with Teams calendar invitation/links and CME text attendance codes to all anesthesiology faculty, fellows, residents, and others (Grand Rounds distribution list). **We tweet** Grand Rounds information in advance of lectures weekly. Anyone outside the department who would like to be added to our Grand Rounds distribution list should contact Cynthia Kral (kralc@upmc.edu).

### OB & Women's Health Grand Rounds

Our OB & Women's Health Grand Rounds are held monthly on Tuesdays from 6:45-7:45 AM using a hybrid platform - virtually via Microsoft Teams and in person at UPMC Magee-Womens Hospital, Education Room 3415. Sessions are recorded for future viewing and shared on our internal Sharepoint site. Upcoming lectures are **publicized online**, as well as e-mailed weekly with Teams links and CME text attendance codes to all anesthesiology faculty, fellows, residents, and others (OB Grand Rounds distribution list). Lecture information is **tweeted** in advance of lectures monthly. Anyone outside the department who would like to be added to our OB Grand Rounds distribution list should e-mail [aneswebmaster@upmc.edu](mailto:aneswebmaster@upmc.edu).

### Research Rounds

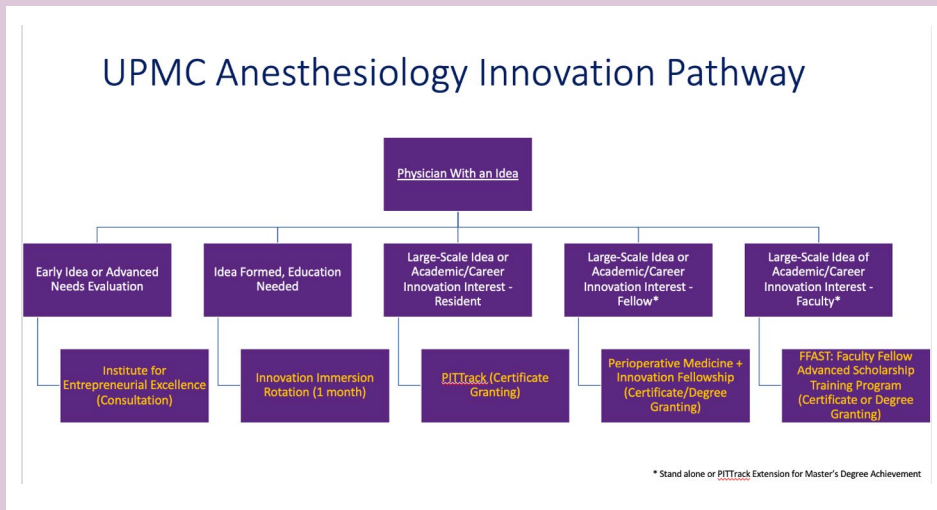
This lecture series promotes the sharing of recent results and ongoing projects in basic and clinical research both from within and outside our department. Meetings are held select Tuesdays in a hybrid format - virtually via Zoom and in person (locations announced prior to lectures). Upcoming lectures are **publicized online**, as well as e-mailed with Teams links and CME text attendance codes to all anesthesiology faculty, fellows, residents, and others interested participants. **We tweet** lecture information weekly. Faculty and trainees who are interested in participating or who have suggestions for speakers should email Carol Hunn ([hunncl@upmc.edu](mailto:hunncl@upmc.edu)).



Our Regional Anesthesiology Fellows celebrating at an "after boards" gathering this summer

# INNOVATION PATHWAY

*A new educational program offering robust support for physician innovation projects*



We recently launched the UPMC Anesthesiology Innovation Pathway, a program offering a robust foundation for innovation projects in conjunction with a well-established network of support both at the University of Pittsburgh and within the City of Pittsburgh's innovation ecosystem. The pathway connects busy department physicians who have ideas with teams of innovation experts. Pathway offerings include consultation with the Pitt Institute for Entrepreneurial Excellence as well as dedicated programs for residents, fellows, and faculty – **PITTrack, our Perioperative Medicine Fellowship Program, and FFAST**, respectively.

**The Pittsburgh Innovation and Technology Track (PITTrack)** connects residents with innovation support and graduate-level credentials without extending training, starting with the incoming 2022 residency cohort. PITTrack combines executive-style, multidisciplinary, team-based coursework with up to six months of dedicated research time - all integrated into our four-year Anesthesiology Residency Program. Successful PITTrack scholars will earn a Graduate Certificate in Medical Device Innovation with the option to extend to a master's degree in Medical Device Engineering from the Center for Medical Innovation at the University of Pittsburgh.

For post-residency trainees, **our Perioperative Medicine Fellowship** is uniquely designed to allow additional training in medical innovation. The one-year fellowship includes three months in our busy outpatient Center for Perioperative Care at UPMC Presbyterian, "prehabilitating" high risk patients for non-emergency surgery while developing the foundational knowledge/experience in perioperative echo and medical management. The fellowship continues with seven months of inpatient experience as a perioperative expert consultant to UPMC's top ranked inpatient medical specialties, including cardiology, pulmonology, hematology, endocrinology, nutrition, cardiopulmonary therapy, social work, addiction medicine, palliative care, psychiatry/dual diagnosis, physical medicine and rehabilitation, and inpatient complex care services. Experiences are specific to the perioperative care of these patients pre- and post-surgery. Perioperative medicine fellows work directly with departmental chiefs and fellowship directors to focus and tailor the consultant role.

For faculty physicians, our **Fellow Advanced Scholarship Training (FFAST)** Career Development Program provides financial support to pursue advanced degrees in health fields outside anesthesiology to launch subspecialty teams. These opportunities have led to innovative research on topics such as OR management, clinical and research predictive modeling, cost savings models, and OR staffing strategies.

Education opportunities are available for faculty to earn graduate-level certificates/degrees in business, public health, clinical research, education, medical product innovation, informatics, healthcare administration, quality improvement/patient safety, and leadership. Our recently published webpage on FFAST (link below) includes a list of past and present program scholars and information about what they are studying and their plans to utilize their newly acquired knowledge and skills in the department.

Please visit the following web pages for more info:

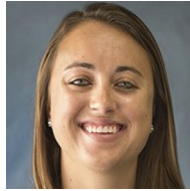
**Innovation Pathway**  
**PITTrack**  
**Perioperative Medicine Fellowship**  
**FFAST**

# Graduation Dec. 2021

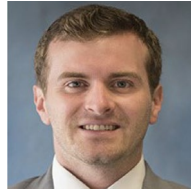
## GRADUATING SRNAs



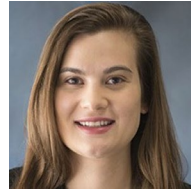
Monica Bentzen



Maddy Betsker



John Boylan



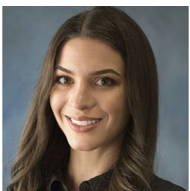
Rachael Broadbent



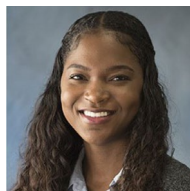
Hannah Coccia



Connor Cole



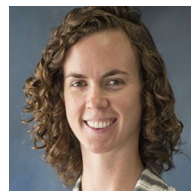
Amber DeSantis



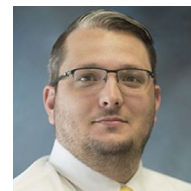
Brittney Deslandes



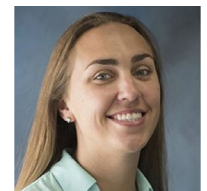
Melissa Dibben



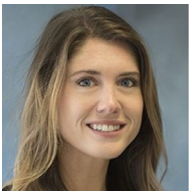
Monica Fetrow



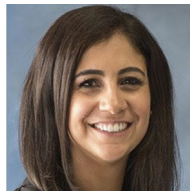
Andy Ford



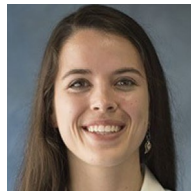
Betsy Gadziala



Lauren Gaffney



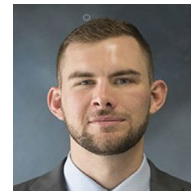
Alexis Gottlieb



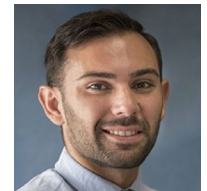
Clarice Hune



Sarah Ignelzi



Michael Jones



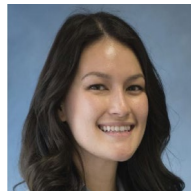
Jeffrey Jurosky



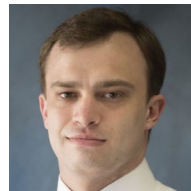
Sarah Kempel



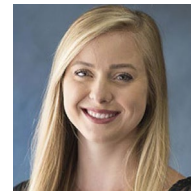
Marcus Knight



Samantha MacLachlan



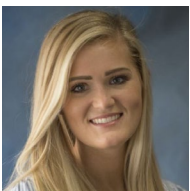
Connor McClellan



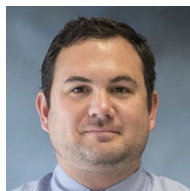
Lauren Mealy



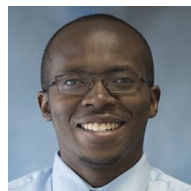
Austin Mills



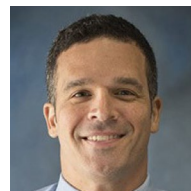
Amanda Mogielski



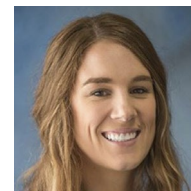
Matthew Newcomer



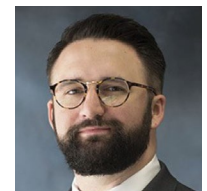
Beau Nkunzingoma



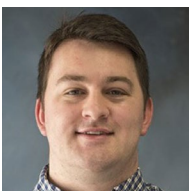
Jussus Sanchez



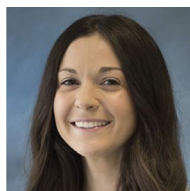
KC Smith



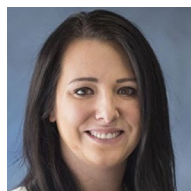
David (Carl) Stuvek



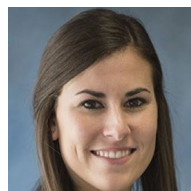
David Tompkins



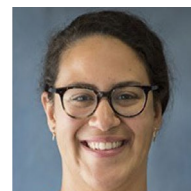
Alexandra Uram



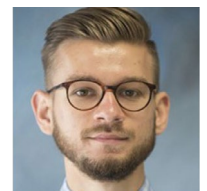
Jennifer Vaccaro



Grace Vaughn



Nyera Youssef



Vadim Zhushma

*Not pictured: Jessica Mancosh, Chris Noorda, Maria Ochoa Carrillo*

# SRNA Graduate DNP Projects

**Monica Bentzen:** Use of In-Situ Simulation to Evaluate Nurses' Response to a Malignant Hyperthermia Crisis in the Recovery Room: A Quality Improvement Project

**Madison Betsker:** Life After Malignant Hyperthermia: A Qualitative Study

**John Boylan:** The Effect of Implementing an Ultrasound Training Course for CRNAs to Improve Knowledge, Competence, and Confidence While Performing Interscalene Peripheral Nerve Blocks

**Rachel Broadbent:** Development and Validation of Guidelines to Improve Patient Safety in Anesthesia Care for Pediatric Patients Undergoing Gamma Knife Treatment and Magnetoencephalography

**Hannah Coccia:** Effects of an Online CRNA Preceptor Training Program on Knowledge, Skills, and Attitudes

**Connor Cole:** Introduction of STOP-Bang Assessment Education at the UPMC Mercy Endoscopy Lab to Increase Recognition of Obstructive Sleep Apnea

**Amber DeSantis:** Implementation of an Ultrasound Training Course for CRNAs to Improve Knowledge, Competence, and Confidence of Supraclavicular Block Administration

**Brittney Deslandes:** Nursing Workforce Characteristics and Effect on Life Expectancy and Under Five Mortality in Southeast Asian Countries

**Melissa Dibben:** Performance of CRNAs in Placing Ultrasound-Guided Adductor Canal Blocks: Efficacy of Simulation-Based Training

**Monica Fetrow:** Methodologies in Developing an Augmented Reality Simulation for Management of an Opioid Overdose by Police Officers to Improve Knowledge, Skills, and Confidence During an Opioid Crisis

**Andrew Ford:** Cost Benefit and Analysis of Low-dose Epinephrine Preparation and Administration

**Elizabeth Gadziala:** Implementation of an Ultrasound Training Program to Improve Ultrasound Knowledge and Use Among Anesthesia Providers

**Lauren Gaffney:** Improving CRNA Readiness and Confidence in Precepting Registered Nurse Anesthetists by Implementing a Preceptor Training Program

**Alexis Gottlieb:** Nurse-driven Protocol to Initiate End Tidal Capnography Monitoring in Patients with Obstructive Sleep Apnea in the Post Anesthesia Care Unit: A Quality Improvement Project

**Clarice Hune:** Implementation of Emergency Manuals for Use in Obstetric Anesthesia Emergencies

**Sarah Igelzi:** Assessment of Knowledge, Confidence, and Skills of Anesthetic Providers Following Use of a Mobile Application for Anesthetic Guidelines of Parturients with Fontan Palliation

**Michael Jones:** Improving Management and Response Time to Treat Malignant Hyperthermia via in situ Simulation in Post Anesthesia Care

**Jeffrey Jurosky:** The Use of an Ultrasound Training Course to Improve Block Success and Nurse Anesthetists' Knowledge, Competence and Confidence in the Placement of a Femoral Nerve Block

**Sarah Kempel:** The Impact of Guidelines for the Use of High Flow Nasal Cannula by Nurse Anesthetists in the Gastrointestinal Laboratory

**Marcus Knight:** Improving the Flow during a Massive Transfusion Protocol, Education of Nurse Anesthetists about Large Bore Intravenous Catheters and Elimination of Flow Restrictors

**Samantha MacLachlan:** Methodologies in Developing an Augmented Reality Simulation Training for Opioid Overdose Response to Improve Caregiver Knowledge, Attitudes, and Skills During an Opioid Overdose Crisis

**Jessica Mancosh:** A Practice Evaluation of Clinical Preceptor Knowledge and Understanding of Perioperative Medication Administration Errors (MAEs) and Student Registered Nurse Anesthetist Requirements for Reporting MAEs to the Educational Institution

**Connor McClellan:** Analysis of the Healthcare Provider's Hand Hygiene Practices and Infection Control Perceptions

**Lauren Mealy:** The Use of Preemptive Acetaminophen to Decrease Post-Operative Pain in Patients Undergoing Elective Cesarean Section at a Tertiary Care Hospital

**Austin Mills:** Effectiveness of Simulation-Based Training Regarding Malignant Hyperthermia Crisis Management for Non-Anesthesia Providers at a Small Outpatient Surgery Center

**Amanda Mogielski:** Evaluation of Bispectral Index Scores During Anesthesia With Ketamine Bolus Administration: A Retrospective Analysis

**Matthew Newcomer:** Development and Validation of a Focused Preoperative Screening Tool for the Civilian Population to Identify those at Risk for Postoperative Emergence Delirium

**Bienvenu Nkuningoma:** Decreasing Perioperative Pain in Patients taking Buprenorphine through the Development and Implementation of a Perioperative Anesthesia Protocol

**Christopher Noorda:** Evaluating ICU Team Member Readiness and Confidence in Managing Patients with Malignant Hyperthermia by Implementing an In-Situ Simulation Protocol

**Maria Ochoa Carrillo:** Education for Treatment of Malignant Hyperthermia in the Electroconvulsive Therapy Lab: A Quality Improvement Project

**Jussus Sanchez:** Implementation of Difficult Airway Management Education for the Dental Anesthesia Provider and Evaluation of Clinical Practice Outcomes

**K.C. Smith:** Methodologies in Developing an Augmented Reality Training for Management of Opioid Use Disorder Critical Events for Anesthesia and ER Providers

**David Stuvek:** Evaluating Cardiac Catheterization Laboratory Team Member Readiness and Confidence in Managing Patients with Malignant Hyperthermia by Implementing an in situ Simulation Protocol

**David Tompkins:** The Impact of a Simulation-Based Educational Course on CRNA Knowledge, Competence, and Confidence Levels Regarding USG Transversus Abdominis Plane Blocks

**Alexandra Uram:** Identifying Difficult Intravenous Access in Presurgical Patients with a Modified Telephone Version of the Enhanced Adult Difficult Intravenous Access Screening Tool

**Jennifer Vaccaro:** Emergence Delirium Screening in Military Veterans: A Quality Improvement Project

**Grace Vaughn:** Development and Implementation of Guidelines on Ultrasound-Guided Arterial Catheter Insertion for CRNAs to Improve Success Rates in Perioperative Patients

**Nyera Youssef:** Evaluating OR Personnel Adherence to Use of Required Personal Protective Equipment at a Large Academic Medical Center: Identification of Knowledge and Practice Deficits

**Vadim Zhushma:** Improving Response Time and Preparedness in Management of a Malignant Hyperthermia Crisis via in situ Simulation

# Meeting Highlights

## LOCAL EVENTS

### UPMC APP ACADEMY, AUGUST 27-28, 2021, WISER AT UPMC PASSAVANT

Several CRNAs and physicians from our department participated in the advanced practice providers (APP) academy. **Allison Lewis, MBA, MSN, CRNA** (Clinical Director of Nurse Anesthesia at Passavant and Vice Chair of the UPMC Passavant APP Council) and **Megan Tomaino, MPAS, PA-C** (Senior Physician Assistant with UPMC Passavant Anesthesiology) served as two of the course directors. Course faculty included **Stephen A. Esper, MD, MBA** (Assistant Professor and Medical Director, UPMC Centers for Perioperative Care); **Francis X. Feld, DNP, LAT, NRP, CRNA** (nurse anesthetist, UPMC Passavant); and **Ho Kevin Luong, PA-C, MBA** (Physician Assistant, Supervisor with UPMC Mercy Anesthesiology / Chronic Pain).



L to R: Megan Tomaino, Allison Lewis, Alexandra Bartow (Dept. Cardiothoracic Surgery); Amy Haller (UPMC Center for Advanced Practice Education)



Ultrasound station - instructors Cecilia Ratay (Critical Care Medicine, UPMC Presbyterian) and Francis Feld, (Anesthesiology, UPMC Passavant)

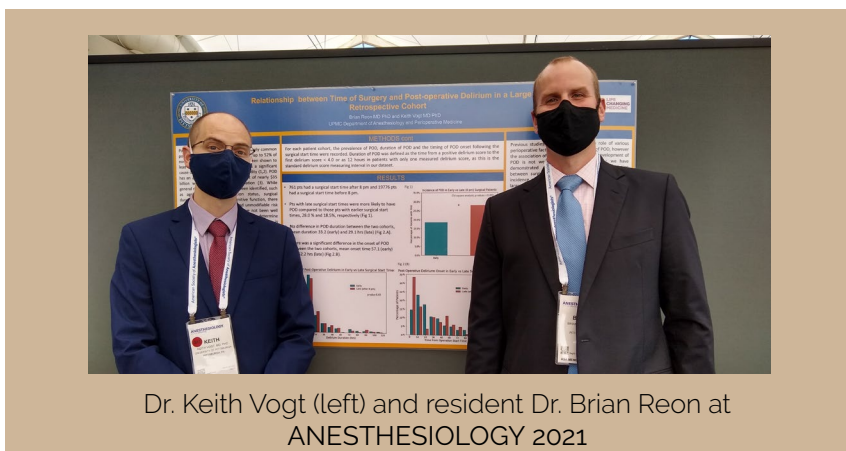


Dr. Stephen Esper (UPMC Anesthesiology/Centers for Perioperative Care)

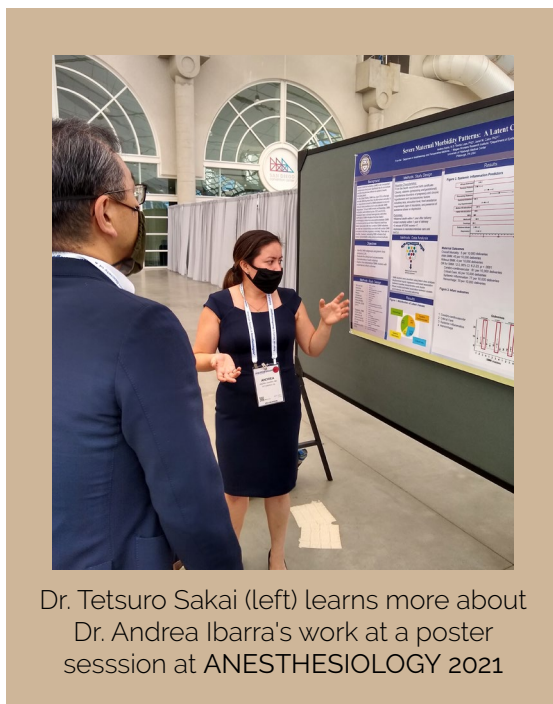
## NATIONAL EVENTS - SELECTED HIGHLIGHTS

### ANESTHESIOLOGY, San Diego, CA/Virtual, October 8-12, 2021

Department members delivered 57 presentations; six faculty members moderated or facilitated sessions or workshops; and 14 faculty members and four residents served on ASA and ASA-related committees. Please see our **2021 ASA Meeting Companion** (PDF) for full details.



Dr. Keith Vogt (left) and resident Dr. Brian Reon at ANESTHESIOLOGY 2021



Dr. Tetsuro Sakai (left) learns more about Dr. Andrea Ibarra's work at a poster session at ANESTHESIOLOGY 2021

## American Society of Regional Anesthesia and Pain Medicine (ASRA) "Hot Topics Club": Incorporating the Multi-Society Buprenorphine Guidelines Into Your Practice



On August 10, 2021, **Trent D. Emerick, MD, MBA**, presented the lecture "Pharmacology of Buprenorphine" as part of the live ASRA webinar.

## THE MIDSTATE SATA MEETING, SEPTEMBER 25TH, 2021, VIRTUAL

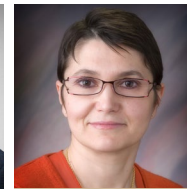
UPMC and the Society for the Advancement of Transplant Anesthesia (SATA) planned this virtual meeting designed to provide a review of the latest updates on a variety of intraoperative and critical care management topics that involve abdominal and thoracic transplant patients. New SATA President **Tetsuro Sakai, MD, PhD, MHA, FASA**, gave an address at the meeting. Other department participants were **Harikesh Subramanian, MBBS**, who moderated the Cardiothoracic Transplantation Session and served on the program committee; **Daniela Damian, MD**, who presented the lecture "Cardiac Risk Stratification in Patients Undergoing Renal Transplantation"; and **Kathirvel Subramanian, MD, MPH, FASE**, who delivered closing remarks.



Dr. Tetsuro Sakai



Dr. Harikesh Subramanian



Dr. Daniela Damian



Dr. Kathirvel Subramanian

## UPCOMING EVENTS

### THE MIDWEST SATA MEETING, JANUARY 22, 2022, VIRTUAL

This meeting will provide updated knowledge on several critical management issues in liver, heart, and thoracic transplant patients. Target audience is anesthesiologists, intensivists, surgeons, fellows, residents, medical students, nurse anesthetists, advanced practice nurses, anesthesiologist assistants, physician assistants, and nursing staff involved in transplant patients' perioperative care. **Dr. Tetsuro Sakai** will give a presidential address at this meeting also. For more information, visit the **UPMC CCE website**.

GETTING WISER  
on  
DIVERSITY,  
EQUITY, AND  
INCLUSION IN  
HEALTHCARE  
EDUCATION  
The Roles of Simulation

WISER  
Education and Simulation  
Improving Healthcare  
wisersimulation.org

APRIL 08, 2022

Virtual Conference 8:00 am EST - 12:00 pm EST  
Onsite Workshop 1:00 pm EST - 5:00 pm EST

Formal invitation and details to follow

UPMC  
LIFE CHANGING MEDICINE

University of Pittsburgh

### 19TH ANNUAL SAFAR SYMPOSIUM MAY 26 -27, 2022

#### MULTI-DEPARTMENTAL TRAINEES' RESEARCH DAY

Departments of Anesthesiology & Perioperative Medicine,  
Critical Care Medicine, Emergency Medicine,  
Neurological Surgery, and Physical Medicine and Rehabilitation

MAY 26, 2022, UNIVERSITY CLUB

#### WISER SIMULATION PROGRAM

MAY 27, 2022, 230 MCKEE PLACE, SUITE 300



41<sup>st</sup> Peter & Eva Safar Annual  
Lectureship In Medical Sciences and  
Humanities

**Geoffrey Ling, MD, PhD**  
CEO of On Demand Pharmaceuticals  
Founding director of DARPA  
Former member of the White House  
Office of Science and Technology Policy  
under President Obama

"Say Yes to a Different Attitude to Help  
Advance Patient Care"

May 26, 2022, 12pm

Please visit  
[www.anesthesiology.pitt.edu](http://www.anesthesiology.pitt.edu)  
for more info

**Save the date for the 2022 Safar Symposium!** Building upon the Peter and Eva Safar Lectureship established in 1980 by Peter M. Winter, MD, this yearly event honors the late Dr. Peter Safar and his wife Eva for their contributions to the scientific community and highlights current research in areas spanning Dr. Safar's scientific career and interests. We will share more info **online** as additional details become available.

# Saying "Thanks"

## CRNAs ORGANIZE SURPRISE "PAY IT FORWARD" LUNCH FOR UPMC PASSAVANT MEDICAL & SURGICAL ICUs

A group of CRNAs from UPMC Passavant, Mercy, Presbyterian, and Shadyside and the VA Pittsburgh Healthcare System, led by **Emily M. Whitco, MSN, CRNA** (UPMC Passavant), united to organize a surprise lunch for the staff caring for COVID patients in Passavant's Medical and Surgical Intensive Care Units (MSICU) and staff in collaborating departments such as respiratory, physical, and occupational therapy. Local businesses Board & Brush Pittsburgh North, Chick-fil-A McKnight Rd., Kiki's Beauty Bar, Philly Pretzel Factory Ross Township, Renee Piatt Jewelry, and The Sol Collective Aspinwall contributed giveaways for gift baskets. An overnight package for the Hilton Garden Market Square with a \$150 gift card to Revel was also donated to the units to raffle off. The surprise lunch included a "Rainbow Encouragement Chain" created by the Surgical Services Staff at Passavant and Healthcare Heroes Cards made by children from the second grade at Scott Primary Elementary School. The MSICU staff members rotated throughout the conference room to enjoy the cards and Rainbow Chain amidst their incredibly busy day.



Emily Whitco and MSICU Staff with gift baskets



Karen Florian (L, CRNA, UPMC Presbyterian) and Emily Whitco (R, CRNA, UPMC Passavant)



Rainbow Chain of Encouragement - notes from all the UPMC Passavant Surgical Services Staff



Cards from second graders at Scott Primary Elementary School

## CHRONIC PAIN STAFF APPRECIATION



**Shannon Morrissey, MSCL**, Division Administrator, coordinated efforts to recognize her chronic pain team. In August, she planned a lunch to promote team-building among the staff, welcome new advanced practice providers, and show appreciation for one another. Then, for Pain Awareness Month in September, she had cookies delivered to each chronic pain clinic as a "thank you" to the staff and providers for their dedication and hard work.





# Celebrating Halloween

Thank you to all faculty and staff who provided photos!



Submitted by Rory Airhart (Scaife, 13th floor): L: Pumpkins carved by Rory and her kids; R: Pumpkin Rory carved for her daughter and son-in-law



Submitted by Brianna Rompala (CRNA, UPMC Presbyterian) L: The Incredibles and Pokémon R: Cutest pumpkin in the patch turned one year old



Submitted by Mary Jo Seifert (Chronic Pain, UPMC Mercy): Mary and her coworkers in the Halloween spirit.



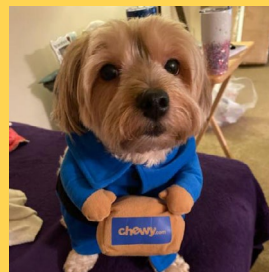
Submitted by Dr. Kristin Ondecko Lidga (UPMC Mercy): London Lidga as a stick figure



Submitted by Carly Bellora (CRNA, UPMC Presbyterian): Daughter Emma (age 4) as Elsa from Frozen



Submitted by Tammy Nuzzo (CRNA, UPMC Shadyside): New puppy George on his first Halloween



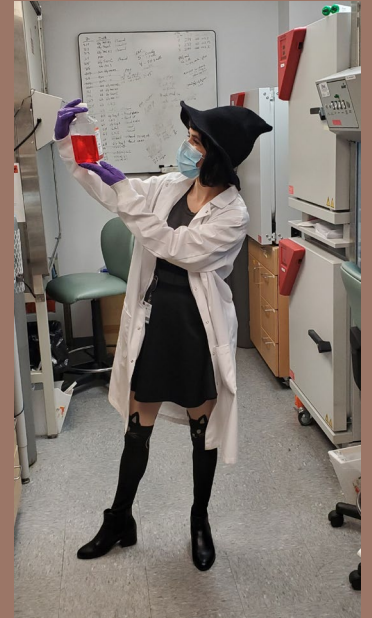
Submitted by Stacey Weleski (Chronic Pain, Monroeville): Her dog Herbert Willis Weleski dressed as a lobster and a Chewy delivery worker



Submitted by Jamie Artman (Scaife 13th floor): "Dr." Little Chad Artman



Submitted by Barb Chismar (Education Office): Barb celebrating Halloween at camp with her mom, sister, and son. Guess who's T Rex?



Submitted by Rachel Rice, (Farris & Homanics labs, BST3)



Submitted by Meredith Axe (Scaife 13th Floor): Her dog Theodore in his costume



Submitted by Dr. Zach Frabitore (resident): Sons Riley, 3 and Rowan, 5, as Ghostbusters



Submitted by Sandy Hirsch (Xu and Tang labs, BST3): Her son's puppy Indie as a Beanie Baby



Submitted by Jenn Fleegle-Vitsas (CRNA, UPMC Presbyterian): Daughters, Kenzie and Kaylee, ages 12 and 8, as cotton candy and a bubble gum machine



Submitted by Britni Kress (Scaife, 13th floor): Spooky pumpkins carved by Britni and her husband Dayne



Submitted by Dr. Gregg Homanics (research, BST3): Members of the Homanics and Farris labs at a Homanics farm Halloween party featuring a haunted hayride and a killer donkey



Submitted by Allison Courtney (CRNA, UPMC Passavant): her family in Star Wars costumes. Allison's six children range from 13 years to 8 months old



Submitted by Jennifer Branik (Scaife, 13th Floor): L: Daughter Abby Branik; R: Branik dogs Izzie and Maggie waiting for trick or treaters



Submitted by Marjorie Palmer (UPMC Montefiore): Graveyard decorations at her daughter's house in West Mifflin.

Sent by Rhiannon Yednak (UPMC Children's): Bat Dog & Super Teddy to the rescue



Submitted by Cynthia Kral (Education Office): Cynthia dressed as the Plague Doctor with her kids Audrey D., 9 and Rhea D., 8 in Harry Potter and Minecraft costumes



Submitted by Dr. Krupa Patel (resident): Krupella de Vil



Submitted by Dr. Thomas Gasior (UPMC Presbyterian): The impressive Halloween decoration display outside his house



Submitted by Laura Hollis, UPMC East: Laura's children Michael (9) and Mila (8)



Dr. Zack Denham (resident) and his wife Micaela Rodriguez dressed as an Argentinian Gaucho (cowboy) and an American cowgirl, respectively



Submitted by Amy Stoyer (Chronic Pain, UPMC Horizon): Amy and her husband in costume at a Roarin' 20s Murder Mystery Theater. They solved the murder and won a prize!



Submitted by Christine Burr (Scaife, 13th Floor): Movie-themed pumpkins carved by Christine and husband Jason - Donnie Darko, Venom, Ghostbusters



**Dr. Theresa Gelzini's'  
Annual  
Halloween  
Party**



Drs Beverly Pearce Smith and Theresa Gelzini (UPMC Presbyterian)



Dr. Rebecca Minorini (resident) and her boyfriend David Bonaroti as Wayne and Garth



Dr. Doreen Soliman (UPMC Children's Hospital)



Dr. Nehah Harinarayan (resident) and her husband Suraj Shetty a few days before they welcomed their newborn.



Sister (Dr.) Peter Ritchie (L) praying for our sins with the Bishop (Dr. Pat Forte) and Sister (Dr.) Mike Desciak. They didn't even plan their costumes as a trio.

L: Dr. Maria Cohen (resident) with her daughter Sarah Graham  
R: Dr. Cohen's husband and Pittsburgh orthopedic surgeon Dr. Kraig Graham with her father Dr. Alex Matveevsky, an anesthesiologist in Florida.



Dr. Connie Chaudhary (UPMC Presbyterian) with her husband Rahul and daughter Fay (20 months old) dressed as a frog, fairy, and avocado.

# Career Opportunities

The University of Pittsburgh is an Affirmative Action/Equal Opportunity Employer and values equality of opportunity, human dignity and diversity, EOE, including disability/vets.

## FACULTY

We are seeking highly motivated physicians and researchers with demonstrated track records for excellence and the ability to work with a highly productive team. Clinically, we offer opportunities throughout a 18-hospital system in numerous anesthesiology subspecialties. We offer exceptional career growth opportunities and stability as part of a financially strong and thriving world-class health system. Our highly competitive compensation and benefits package includes occurrence-based malpractice, an employer-funded retirement plan, health insurance, CME allowance, and more.

We are currently recruiting for the following faculty positions. Please visit the [career opportunities page](#) on our website for full information:

- Clinical Leadership Positions
- Physician Investigators
- Medical Director, UPMC West Mifflin Outpatient Center
- Acute Pain Physician, UPMC Mercy
- Physician - UPMC East
- Physicians - UPMC Magee-Womens Hospital
- Physicians - UPMC Shadyside

Interested candidates should send their CV and three letters of recommendation via e-mail to David G. Metro, MD, FASA, or Aman Mahajan, MD, PhD, MBA, at [gallascj@upmc.edu](mailto:gallascj@upmc.edu).

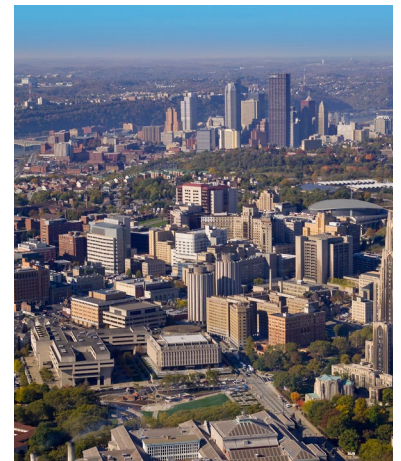
## NIH T<sub>32</sub> POSTDOC FELLOWS

We are actively recruiting physicians who are committed to both excellence in clinical care and research for an NIH-funded research training program. Most trainees are recruited from anesthesiology residency programs, but individuals from other clinical specialties may be considered if their research interest is focused on problems in anesthesiology and pain medicine. Trainees are expected to spend at least two years in the program and devote a minimum of 80% effort toward their research.

More information on the program and eligibility requirements can be found on our website's [Postdoctoral Research Training page](#). Applications will be accepted until positions are filled.

## NURSE ANESTHETISTS

Physician Services Division is seeking full-time CRNAs for the Department of Anesthesiology & Perioperative Medicine at various UPMC facilities/hospitals. For questions regarding CRNA positions, please e-mail Toni Orsino, MBA, CRNA ([orsinoa@upmc.edu](mailto:orsinoa@upmc.edu)). To submit a resume or CV to our recruitment team, please visit the [UPMC Careers website](#).



# Giving

Please help us continue our tradition of excellence by supporting our department with your tax-deductible gift. Whether you choose to contribute toward our research initiatives, educational programs, or other area of need, your generosity is sincerely appreciated at any level. Philanthropic giving to our department plays an important role in helping us improve the lives of patients throughout Western Pennsylvania and all over the world by giving us more opportunities to train the best and brightest clinicians and discover new and better treatment plans.

## How to Give

For information on how to make a contribution to the University of Pittsburgh Department of Anesthesiology and Perioperative Medicine, please contact Laura Latini at Pitt's Division of Philanthropic and Alumni Engagement at 412-398-0786 or [LauraLatini@pitt.edu](mailto:LauraLatini@pitt.edu). Types of gifts accepted include:

- gifts of cash, check, or credit card;
- gifts of stock;
- gifts of other assets;
- memorial gifts;
- unrestricted gifts;
- and bequests and planned gifts.



**To make your gift by check:** Checks should be made payable to University of Pittsburgh Physicians. If you wish to give to a specific department initiative or would like your gift to honor or memorialize an individual, please designate this information on the memo line. Please mail checks to Barb Novak Chismar, Department of Anesthesiology and Perioperative Medicine, 3471 Fifth Avenue, Suite 402 Kaufmann Building, Pittsburgh, PA 15213.

**To make your gift by credit card:** Your gift can be **made online**. If you'd like to make a credit card gift to another area, please contact Laura Latini at 412-398-0786 or [LauraLatini@pitt.edu](mailto:LauraLatini@pitt.edu).

## Honorary or Memorial Gifts

A gift made in honor or memory of an individual is a thoughtful way to recognize the accomplishments of or remember a loved one, friend, or colleague.

## Matching Gifts

Your gift may be increased if you work for a company with a matching gift program. Spouse and retiree gifts may also be matched. Contact your company's human resources department to get more information on the options they offer.

## Tax Concerns

Your contribution may be tax-deductible. Contributions to the University of Pittsburgh and UPMC are tax-deductible as provided by law. Official registration and financial information may be obtained from the Pennsylvania Department of State by calling toll-free at 1-800-732-0999. Please consult with your tax advisor before making any contribution or taking any tax deduction.

We gratefully  
acknowledge the  
generous donations  
from **contributors to  
the Alumni Fund** on our  
website



University of  
Pittsburgh®

Department of Anesthesiology  
and Perioperative Medicine

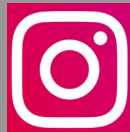
A-1305 Scaife Hall  
3550 Terrace Street  
Pittsburgh, PA, 15261  
(412) 647-2994  
[www.anesthesiology.pitt.edu](http://www.anesthesiology.pitt.edu)



Pitt Anesthesiology  
UPMCAnesRes



@PittAnes  
@UPMCAnesRes  
@OBAnesUPMC  
@PittCTAnes  
@UPMC\_Reg\_Anes



[upmc\\_anesthesia\\_residency](https://www.instagram.com/upmc_anesthesia_residency)



**YouTube** [UPittAnesthesiology1](https://www.youtube.com/UPittAnesthesiology1)

To unsubscribe or update your contact information,  
please e-mail [heiner@upmc.edu](mailto:heiner@upmc.edu)