

# IN THE LOUPE

EDUCATION + SCIENCE + TECHNOLOGY

June 2022

# CHAIR'S MESSAGE

Welcome to our June Department of Surgery newsletter; thanks to Rashad Benton and all of the contributors. Exploding content demonstrates the wealth of activity and achievements of our faculty, staff and learners in spite of the evolving challenges of the pandemic. We celebrate all of you, and especially our graduating chief residents in our general and plastic surgery training programs. Simultaneously, we want to enthusiastically welcome the newest members of our Department: all of our interns who are arriving and preparing to start on **June 21st!** They will have a steep learning curve; please introduce yourselves and pause to get to know them.

Over the summer and in the fall, many new faculty recruits at junior and senior levels and fellows also will be arriving, and we are thankful for the energy and expertise that they will bring. The duress all of us are experiencing from the pandemic seems to only be escalating as more of our colleagues are testing positive with COVID, thinning our ranks and leaving those of us at work even more strained. Please protect yourselves and your families; stay safe. All of us need to work together to care for each other and to continue to care for our patients.

PRIDE IS  
EVERYDAY



JULIE ANN SOSA

To lead these efforts, we will soon be announcing a **Chief Experience Officer** for UCSF Surgery, whose charge will be to focus on finding ways to better support our UCSF community during these challenging times. And finally, **Happy Pride Month!** This is a time to celebrate the growing diversity of our Department and the importance of our UCSF PRIDE values, which are the underpinnings of our culture.

As we continue to focus on critically important diversity, equity and inclusion issues, we will be announcing soon a call for nominations for a new leadership position – **Director for Gender Equity** – to augment our focus on issues and challenges that we face in this area at many levels. Our Department of Surgery is growing and diversifying, and I am thankful for each and every one of you and everything that you do for our patients and for our community.

## DR. WILLIEFORD MOSES

### FACULTY SPOTLIGHT

On **June 7th, 2022** the UCSF Medicine Dean's Office announced that Pediatric Surgeon & Assistant Professor of Surgery, **Dr. Willieford Moses**, from the Department of Surgery was one of eight individuals named a **2022 class of John A. Watson Faculty Scholar** & recipient of **the Dean's Diversity Fund Award!!**

The UCSF School of Medicine Dean's Diversity Fund was established in 2015 to support the recruitment and retention of faculty who share the university's commitment to diversity and our belief that we have the responsibility to care for underserved and vulnerable populations. The awards provide faculty with three-year, **\$75,000** per year support to develop their academic interests, as well as pursue activities that contribute to the community.



## Meet Our New Team Members



**Dr. Alexander Lin**

Dr. Alexander Lin joined us this June as a Professor of Clinical Surgery in the Division of Plastic & Reconstructive Surgery, Director of the Craniofacial Program at UCSF Benioff Oakland & as Co-Director of the UCSF Craniofacial Program at UCSF Benioff San Francisco.



**Dr. April E. Mendoza**

Dr. April E. Mendoza from Massachusetts General Hospital is joining our department as a Trauma Surgeon and Associate Professor of Clinical Surgery at our UCSF East Bay Program at Highland Hospital.



**Dr. Sarah Cairo**

We are excited to announce that Dr. Sarah Cairo will be joining our faculty as a Pediatric Surgeon & Assistant Professor of Surgery at both Benioff Children's Hospital San Francisco and Oakland.



**Dr. Clara Gomez-Sanchez**

Dr. Clara Gomez-Sanchez will be staying in San Francisco & joining our department as a Vascular Surgeon & Assistant Professor of Clinical Surgery at our Parnassus location.



**Dr. Bao-Quynh Julian**

This September, Dr. Bao-Quynh Julian will be joining our faculty at Mission Bay as a Cosmetic, Plastic & Reconstructive Surgeon and Assistant Professor of Surgery in the Department of Surgery.

# EDUCATION

**Dr. Keith Hansen, Dr. Garrett Roll, and Dr. James Gardner** of UCSF Transplant received a **\$100,000 UCSF Catalyst** award for the development of the DIATIRO (more on accomplishment page) Kidney Keeper to improve transplant outcomes!

**Zach Matthay** (General Surgery PGY4) presented his work on post-injury platelet aggregation and venous thromboembolism at the 2022 Western Trauma Association Meeting.

**Yvonne Kelly** (General Surgery PGY5) published a paper "Effects of Multi-stage Procurement on the Viability and Function of Human Donor Parathyroid Glands" in the Journal of Surgical Research.

**Sophia Hernandez** (General Surgery PGY1) & **Alexander Kim** (General Surgery PGY4) co-authored a paper in the Journal of Surgical Education on assessing medical students' surgery clerkship preparedness during COVID-19.

**Alison Baskin** (General Surgery PGY1) published a paper titled "Langer's arch: an anatomic variant complicating axillary node dissection" in the Surgery Journal.

**Dr. Mark Barry** (General Surgery research resident) presented on the regulation of vascular endothelial and intestinal epithelial integrity in hemorrhagic shock by mesenchymal stem cell extracellular vesicles at the **ACS Committee on Trauma** and placed second in the Resident Paper Competition in the basic science category.

**ACS/AEI Fellow and General Surgery Research Resident Dr. Mohammad M. Karimzada & Medical student Anya Greenberg** had the pleasure of presenting at the highly visible Annual ACS Surgical Simulation Meeting.

Dr. Karimzada's presentation was titled "**Which Tasks Are Hard and Who's Faster? Evaluating an Advanced Open Surgical Skills Curriculum**" and Ms. Greenberg's study was titled "**Robotic Training for Medical Students: Feasibility of a Pilot Simulation Curriculum.**"

**UCSF Vascular Surgery Resident Dr. Joel Ramirez** has been selected as a Fellow for this year's Chan Zuckerberg Biohub Physician-Scientist Fellowship Program.

**Dr. Patricia Conroy** (General Surgery research resident) received the Outstanding Resident Teacher Award at Surgical Education Week 2022.

**UCSF Medicine Medical Student Connie Zhou** was appointed the Medical Student Representative to the Association for Surgical Education (ASE) Board of Directors.

**Dr. Alexandra Highet** has received the 2022 Zuckerberg SF General Hospital & Trauma Center Krevans Award for the Division of Surgery. The award recognizes her excellence in patient care, professional conduct, compassion for patients, and outstanding interaction with all levels of staff.

**Vascular Surgery Resident Dr. Colleen Flanagan** was accepted to into the Department of Medicine's Clinical Informatics Fellowship, during which she will receive training in data science, health tech leadership & practical implementation.

**Jane Wang** (General Surgery PGY3) was awarded the UC Pancreatic Cancer Consortium Collaborative Pilot Award.

## 35TH ANNUAL RESIDENT RESEARCH SYMPOSIUM

### MEDICAL STUDENT WINNERS OF THE RESIDENT RESEARCH SYMPOSIUM:

**Alexander Merriman** won **Best Medical Student Quick Shot Presentation** for his project titled "Single Cell Multi-omics Reveal Novel Cardiac Subpopulation Critical to Valve Morphogenesis."

**Research Resident Dr. Caroline Melhado** took home the **Best Presentation in Clinical Research** award for her presentation on "Assessing the Negative Predictive Value of Cervical Spine CT Compared to MRI in Pediatric Trauma Patients: A Multi-Center Retrospective Cohort."

**2nd Year Research Resident Dr. Mark Barry's** presentation on "Regulation of Vascular Endothelial Integrity in Hemorrhagic Shock by Mesenchymal Stem Cell Extracellular Vesicles" was chosen for the **Best Presentation in Basic Science Research** Award.

**Miguel Nunez** took home the award for **Best Medical Student Presentation** for his findings on "Preclinical testing of AAV capsid transduction efficiency and specificity in ex vivo perfused human liver."

**Dr. Sarah Mohamedaly** was recognized with an **Honorable Mention for the Basic Science Research Presentation** award after being chosen for her work on "Nr4a1 as a Regulator of Monocyte Subsets in a Mouse Model of Biliary Atresia."

**Dr. Patricia Conroy** took home an **Honorable Mention for the Clinical Research Presentation** Award after presenting on "Endocrine Surgeons Are Performing More Thyroid Lobectomies for Low-Risk Differentiated Thyroid Cancer Since Publication of the 2015 ATA Guidelines"



On **Wednesday April 13th, 2022**, our hybrid 35th annual Resident Research Symposium took place. 2022 Dunphy Professor **Dr. Jennifer Waljee** from the University of Michigan presented the Keynote Lecture!

**Medical Student Jonathan Li** has been awarded a **12-month Yearlong Research Fellowship** for his proposal entitled, "A Machine Learning Approach to Improving Post-Transplantation Hepatocellular Carcinoma Recurrence Prediction."

**Former General Surgery Chief residents Steven Wisel, Clara Gomez-Sanchez, Lily Cheng, and Anamaria Robles** published a paper in Global Surgery Education – Journal of the Association for Surgical Education on the improved perception of the resident experience following the addition of administrative chief residents.

**Medical Student Megan Casey** has been awarded a **12-month Yearlong Research Fellowship** for her proposal titled "Endoscopic biopsy for suspected pancreatic neuroendocrine tumors in the age of DOTATE PET/CT: understanding current practice and achieving consensus using the Delphi method."

UCSF General Surgery Categorical Interns



CHELSTIE ANDERSON  
UCSF



LUCIA CALTHORPE  
UCSF



PAIGE-ASHLEY CAMPBELL  
UNI. OF CHICAGO



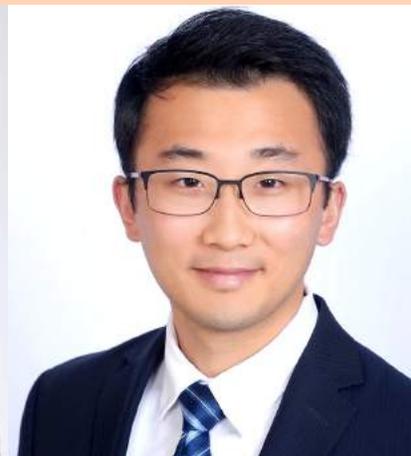
MARIA CASTRO  
UCSF



CAROLINE ERICKSON  
VANDERBILT



PHOEBE MILLER  
UCSF



MICHAEL OU  
JOHNS HOPKINS



SABREEA PARNELL  
BOSTON UNIVERSITY

Vascular Surgery Integrated  
Categorical Intern



SOWMYA MANGIPUDI  
GEORGE WASHINGTON UNI.



NUSAIBA BAKER  
EMORY



WAVERLEY HE  
JOHNS HOPKINS



ALEXANDER MURPHY  
COLUMBIA

Plastic Surgery Categorical Interns

## General Surgery Preliminary Interns



MACKENZIE BOSS  
BROWN



JACQUELINE CHU  
OHIO STATE



ELEANOR LAYFIELD  
UNIV. OF PENNSYLVANIA



YUSUKE NAKAGAWA  
TULANE



CAMILLE ROGINE  
UCSF



RYAN SMITH  
MOUNT SINAI



LUKE WALLACE  
BOSTON UNIVERSITY



ANNIE WONG-ON-WING  
UNI. OF WASHINGTON



NANCY ZHOU  
JOHNS HOPKINS



**"It is absolutely imperative that every human being's freedom and human rights are respected, all over the world."**  
- Jóhanna Sigurðardóttir

## Surgical Education Week 2022 || San Antonio, Texas UCSF Surgery Presentations

On Tuesday, May 3rd, 2022 UCSF Medical Student Leslie Bernal Charondo, BS, gave an insightful presentation titled "Telemedicine Video Utilization in a Major Urban Center Stratified by Zip Code." #SEW2022

UCSF Medicine's Leslie Bernal Charondo presented twice. This time though, she focused on faculty with her work titled "Multidisciplinary Faculty's Perception of Gaps in Current Laparoscopic Simulation Curriculum in a Changing Training Landscape." #SEW2022

UCSF Medicine Student Anya Greenberg delivered a lived experience presentation when she showcased her work titled "Communicating from a Distance: Medical Student Perspectives from a Robotic Bedside Assist Simulation." #SEW2022

Ms. Anya Greenberg presented twice as well. Her second presentation was titled "Faculty Entrustment of Residents in the Operating Room: The Role for Surgical Simulation."

On Wednesday, May 4th, 2022, UCSF Endocrine Surgeon and President of the Association for Surgical Education, Dr. Adnan Alseidi delivered his Presidential Address titled "The Surgical Landscape Lifelong Learning," which was met with great reviews. #SEW2022

Dr. Adnan Alseidi, Dr. Andre Campbell, Dr. Doruk Ozgediz, and incoming General Surgery intern Chelsie Anderson highlighted #DEI when they presented their work titled "Improving Diversity in Surgery: How to Establish a Surgical Pipeline Program." #SEW2022

Breast Surgeon & UCSF Surgery Associate Professor Dr. Rita Mukhtar presented on an interesting topic titled "See One, Do One, Teach One: A Flipped Classroom to Make Quality Improvement Experiential in Surgical Residency." #SEW2022

Dr. Patricia O'Sullivan, Dr. Sarah Jung & Dr. Jeffrey Nahmias combined their brilliant minds to deliver a presentation titled "Once Upon a Time.. Using Storytelling to Capture One's Research in an Abstract or Synopsis." #SEW2022

On May 7th, 2022 the last day of #SEW2022 Drs. Karen Trang, Logan Pierce, Elizabeth Wick & Kenzo Hirose presented a topic titled "Using Electronic Health Record Meta-data to Identify Variation in Trainee Progress Note Writing Patterns: Opportunity to Enhance Systems-Based Care."

Drs. Andre Campbell, Robert Acton, Marc de Moya, Adam Kabaker, Ajit K. Sachdeva, Susan Steinmann, & Ranjan Sudan delivered a presentation titled "One-Stop Shopping: Easy Access to the Co-Branded ACS Curricular Materials for Medical Students and Educators." #SEW2022

#DEI talks showed up more in San Antonio, thanks to Drs. Andre Campbell, Caitlin Collins, Odinakachukwu Ehie, & Doruk Ozgediz and their work titled "Implementing and Evaluating DEI and Health Equity Training in Surgery Residency Programs." #SEW2022

Drs. Keon Min Park, Adnan Alseidi, Melissa Gesbeck, Yoon Soo Park, Ajit Sachdeva, Maura Sullivan, Edgardo Salcedo, Kathy Liscum + Patrice Gabler Blair, MPH submitted a video on a study titled "Delphi Study to Define the Domain of the American College of Surgeons Senior Resident Readiness Assessment." #SEW2022

On Thursday, May 5th, 2022, Dr. Matthew Lin from UCSF + Drs. Brigitte Smith, Cary Aarons, Jeremy Lipman, Sophia McKinley & Barbara Pettitt had a panel discussion on "The Transition from Undergraduate to Graduate Medical Education: Current Issues & Future Directions." #SEW2022

# ACCOMPLISHMENTS

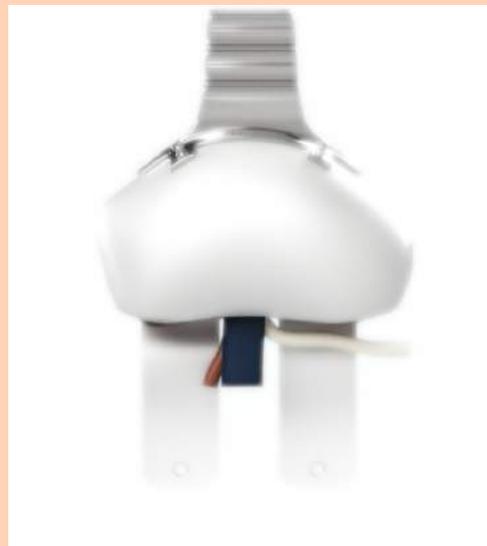
## 1000th Lung Transplant

On Wednesday, April 13th, 2022, **Dr. Jasleen Kukreja** and her team conducted our 1000th lung transplant. This is an enormous milestone and congratulations to Dr. Jasleen Kukreja and her team, the UCSF Lung Transplant program, and the UCSF Division of Adult Cardiothoracic Surgery. Their relentless dedication, selfless contributions and unmatched patient care are only a few reasons that contribute to the achievement of this milestone. The **UCSF Lung Transplant Program** is a true multi-disciplinary collaboration that includes surgeons, pulmonologists, nurses, pharmacists, dietitians, social workers, physical therapists, respiratory therapists, administrative staff and others. "Teamwork is critical to the success of our program," states Jasleen Kukreja, M.D., MPH, Surgical Director of the program. "The success is multifactorial and a multidisciplinary effort that starts with excellent anesthetic management, meticulous surgical technique and perioperative surgical care, and long-term close surveillance."

### FIRST ROBOTAR "ROBOTIC TRANSVERSUS ABDOMINUS RELEASE" IN UCSF'S HISTORY

### DIATIRŌ MEDICAL DEVICE

**Dr. Keith Hansen** and **Dr. James Gardner's** DIATIRŌ medical device that keeps transplant organs cold while they're being sewn into a recipient—preventing the warming injury that leads to their dysfunction and early failure—was granted "**Breakthrough Device Designation**" by the FDA. This sets it up for faster approval for clinical use and distinguishes it in the med-tech landscape as a life-saving device. The duo has been strongly supported by the UCSF Division of Transplant and have moved into the Transplant Lab under the directorship of Dr. Gardner.



They were awarded the **\$100,000 UCSF Catalyst prize** and **\$50,000 Silver Prize** at the **UCSF-Stanford Pediatric Device Consortium Pitch Competition** in March, bringing the total amount of grant money raised to **\$210,000** over the past year. They've also had 8 abstracts accepted to the ASTS, ATC, and CEOT transplant conferences and have been selected as a Transplant Visionary by the American Society of Transplantation's Cutting Edge of Transplant (CEOT) Group.



**DR. JONATHAN CARTER**

Minimally Invasive and Bariatric Surgeon **Dr. Jonathan Carter** performed the **FIRST RoboTAR "robotic transversus abdominus release"** in UCSF's history.

A **RoboTAR stands** for "robotic transversus abdominus release" which is a specialized technique of abdominal wall reconstruction that allows for the minimally-invasive repair of abdominal hernia in a way that closes the hernia, places mesh outside of the peritoneal cavity to avoid mesh-related adhesions and other complications, involves minimal mesh fixation (to avoid postoperative chronic pain), and greatly reduces complications and length of stay compared to open techniques. The technique is more complicated than other approaches to abdominal wall hernia and utilizes the cutting-edge capabilities of modern robotic surgery.

**Dr. Matthew Lin** has been accepted into the Academy of Surgery Clerkship Directors within the ASE and was recognized at the Association For Surgical Education Awards Banquet on **Wednesday, May 4, 2022**, at the ASE Annual Meeting in San Antonio, Texas.

**Dr. Ajay Maker** received the Americas Hepato-Pancreato-Biliary Association (AHPBA) and American College of Surgeons scholarship to attend the Executive Leadership Program in Health Policy and Management program this summer!



**DR. JASLEEN KUKREJA**

### FIRST ROBOTIC SINGLE-PORT COLORECTAL SURGERY IN THE WEST



**DR. ANKIT SARIN**

Colorectal Surgeon **Dr. Ankit Sarin** along with the help of **Dr. Mika Varma** and **Dr. Hueylan Chern** performed the First "**Robotic Single-Port Colorectal Surgery**" in the West at our Mission Bay location. This clinical initiative is part of his funded research program that is adding novel and cutting-edge surgical options for our UCSF Surgical Oncology patients. **Second Highlight:** Robotic volumes continue to expand with a new monthly record every couple of months. In April 2022, the DOS did 78 robotic surgeries which was the most recent monthly record.

**Dr. Ajay V. Maker**, Professor and Chief of Surgical Oncology at UCSF Surgery, calls it "pioneering" and is thankful for Dr. Sarin "speaking thoughtful application of this exciting technology."

**Dr. Tasse Bongiovanni** was presented with the **2021-22 Long-Term Mentor Award** at the 2022 Inquiry Symposium & Dean's Prize Awards. She was nominated by her mentee, **Maria Castro**, which speaks to her leadership, innovation, research & commitment to UCSF.

## UCSF PLASTIC GOES TO SAN DIEGO



TEAM PLASTIC

Several members from our division of Plastic Surgery were at **Torrey Pines** in San Diego for the **72nd California Society for Plastic Surgeons (CSPS) Annual Meeting**. Our team walked away with a number of prizes and new titles.

At the 72nd California Society for Plastic Surgeons (CSPS) Annual Meeting UCSF Plastic Surgery **Resident Research Fellow Dr. Laura Barnes** presented a study titled "The impact of BMI on autologous breast reconstruction outcomes."

**UCSF Medical Student Siyou Song** presented "The sensory assessment after FTM mastectomy (SAFTY) study," "The impact of gender affirming mastectomy on the sexual health & satisfaction of trans patients," and "Delphi consensus to establish Core curricula for gender-affirming surgery trainees in the United States."

In San Diego, **Dr. Nisha Parmeshwar** presented "Investigating the 'Perfect' transfemale breast augmentation: a morphometrics analysis." Dr. Parmeshwar, who is mentored by **Dr. Esther Kim**, also won the **Best Resident Paper** & brought home a huge trophy.

**UCSF PhD Candidate Keit Phong**, who works at the **Zev Gartner lab** with attending plastic surgeon Dr. Kim, presented in San Diego & focused on the "Effects of testosterone therapy on hormone receptor expression in cis and trans breast tissue with immunofluorescence staining."

**Dr. Nicole "Nikki" Conkling** moderated a panel titled "Residents Business Curriculum" at the 72nd California Society for Plastic Surgeons (CSPS) Annual Meeting.



DR. WILLIAM HOFFMAN & DR. SUSAN KAWESKI

Huge Congratulations to our Chief of Plastic Surgery, **Dr. William Hoffman**, for being inducted as the next **President of the California Society for Plastic Surgeons (CSPS)**. Here he's pictured with Outgoing President **Dr. Susan Kaweski**.

Our Chief of Hand and Microvascular Surgery **Dr. Scott Hansen** was elected **Secretary of the California Society for Plastic Surgeons (CSPS)** while in San Diego.



DR. NISHA PARMESHWAR

## DIVISION OF SURGICAL ONCOLOGY, SECTION OF COLORECTAL SURGERY:

Research from Anya L. Greenberg, MBA, Yvonne M. Kelly, MD, Ankit Sarin, MD, MHA, and Madhulika G. Varma, MD, from the Division of Surgical Oncology, Section of Colorectal Surgery was chosen for a **Blue Ribbon Award for High-Value Care at the 6th Annual UCSF Health Improvement Symposium**. Their study, entitled "Proof-of-Concept for Novel Intervention to Prevent Postoperative Ileus in Patients Undergoing Ileostomy Formation", demonstrated the ability to reduce the rate of post-operative ileum by 58% (and decreased post-operative length of stay & direct cost of hospitalization) by implementing an intervention that minimizes fluid overload and allows for adequate bowel rest.

## DR. VALERIE WEAVER'S WORK PUBLISHED IN NATURE SCIENCE

**Significance:** Cancer patient mortality is linked to treatment resistance. Although great strides have been made with regards to targeted therapies and immune checkpoint therapies, many metastatic tumors remain recalcitrant to treatment.

Using patient-derived organoids, Weaver and colleagues identified a novel epigenetic stress-checkpoint regulator NCoR2 whose expression predicts poor patient prognosis. Their studies revealed that NCoR2 forms a complex with HDAC3 to inhibit IRF-1 dependent transcription and reduce INF gamma signaling to render breast tumors highly resistant to chemotherapy and immune checkpoint treatment. This therapy resistance complex appears to reflect a conserved endogenous mechanism that evolved to prevent hyper activation of the inflammatory response that is hijacked by tumor cells. A first in class targeted adenoviral DNA therapy was developed and shown to overcome this epigenetic resistance mechanism in pre clinical models.



DR. VALERIE WEAVER



### Screening of organoids derived from patients with breast cancer implicates the repressor NCoR2 in cytotoxic stress response and antitumor immunity

Kevin K. Tsai<sup>1</sup>, Shang-Shyang Huang<sup>1,2</sup>, Jason J. Northey<sup>1</sup>, Wen-Ying Liao<sup>1</sup>, Chung-Chi Hsu<sup>1</sup>, Li-Hsin Cheng<sup>1</sup>, Michael E. Werner<sup>1</sup>, Chi-Pin Chou<sup>1</sup>, Chandrima Chatterjee<sup>1</sup>, Jonathan N. Lukins<sup>1</sup> and Valerie M. Weaver<sup>1,3,4,5,6,7,8,9,10</sup>

Resistance to anti-tumor treatment contributes to patient mortality. Functional proteomic screening of organoids derived from chemotherapy-treated patients with breast cancer identified nuclear repressor complex 2 (NCoR2) histone deacetylase as an inhibitor of cytokine stress response and anti-tumor immunity. High NCoR2 in the tumors of patients with breast cancer predicted chemotherapy refractivity, tumor recurrence and poor prognosis. Molecular studies revealed that NCoR2 inhibits anti-tumor treatment by regulating histone deacetylase 3 (HDAC3) to repress interferon regulatory factor 1 (IRF-1)-dependent gene expression and interferon (IFN) signaling. Reduced NCoR2 impairs its repressive activity by modifying its interaction with HDAC3 enhanced chemotherapy responsiveness and restored anti-tumor immunity. An auto-associated viral NCoR2-HDAC3 complex attenuated chemotherapy and immune checkpoint therapy in culture and in vivo by permitting transcription of IRF-1-regulated proinflammatory and inflammatory genes to increase IFN-γ signaling. The findings illustrate the ability of patient-derived organoids for drug discovery and suggest that targeting stress and inflammatory-responder complexes such as NCoR2-HDAC3 could overcome treatment resistance and improve the outcome of patients with cancer.

Therapy resistance limits the efficacy of anti-tumor treatment and is the major cause of patient mortality. Despite advances in understanding how apoptosis and autophagy are regulated at the cellular level<sup>1</sup>, experimental findings clarifying the molecular basis of therapy resistance and immune evasion during therapy<sup>2</sup> represent a major challenge in cancer research.

Therapy resistance is a major barrier to the effective treatment of cancer cells with genetic alterations that enhance their growth and survival, or genetically block tumor suppressor genes (e.g., Ras, Raf, MEK, ERK, PI3K, AKT, mTOR, and others).<sup>3</sup> Epigenetic mechanisms, such as DNA methylation, histone acetylation, and histone methylation, are also important in regulating gene expression and cellular fate. In particular, histone deacetylase (HDAC) inhibitors, such as vorinostat, have been shown to enhance the efficacy of chemotherapy and immune checkpoint therapy in preclinical models and in phase I clinical trials.<sup>4</sup> However, the mechanisms underlying therapy resistance are complex and poorly understood. Identifying the molecular mechanisms that regulate therapy resistance is a major challenge in cancer research.

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<sup>1</sup>Department of Surgery and Center for Experimental and Translational Research, University of California, San Francisco, CA, USA; <sup>2</sup>Department of Radiation Oncology, Moffitt Cancer Center, University of California, San Francisco, CA, USA; <sup>3</sup>Department of Biomedical Engineering, University of California, San Francisco, CA, USA; <sup>4</sup>Department of Biomedical Sciences, University of California, San Francisco, CA, USA; <sup>5</sup>Department of Cell and Tissue Biology, University of California, San Francisco, CA, USA; <sup>6</sup>Department of Cell and Tissue Biology, University of California, San Francisco, CA, USA; <sup>7</sup>Department of Cell and Tissue Biology, University of California, San Francisco, CA, USA; <sup>8</sup>Department of Cell and Tissue Biology, University of California, San Francisco, CA, USA; <sup>9</sup>Department of Cell and Tissue Biology, University of California, San Francisco, CA, USA; <sup>10</sup>Department of Cell and Tissue Biology, University of California, San Francisco, CA, USA

## Dr. James Gardner x Science Magazine



**James Gardner, M.D., Ph.D.**, an Assistant Professor in the UCSF Department of Surgery and an abdominal transplant surgeon, is the founder and director of the **UCSF Viable Tissue Acquisition Lab (VITAL) Core**, a resource designed to connect the scientific research community with deceased organ and tissue donors who wish to donate not only for transplantation but also for the advancement of groundbreaking scientific research -- with a goal of better understanding human biology and developing novel therapeutics. Among numerous other projects, this work has resulted in participation in a landmark study just published as the cover story in the journal Science. **The Tabula Sapiens project** (<https://tabula-sapiens-portal.ds.czbiohub.org/>), an initiative organized by the Chan-Zuckerberg Biohub, used single-cell transcriptomics to map nearly 500,000 single cells from 24 tissues and organs across the body, enabling new insights into how the human genome creates distinct cell types. Read it here: <https://www.science.org/doi/10.1126/science.abl4896>.



**DR. JAMES GARDNER**

**Dr. Shareef Syed** has been awarded a **\$40,000** grant by UCSF's Mount Zion Health Fund's (MZHF) to support the project titled, "Surgery Education for the 21st Century – Where Deliberate Practice and Cognitive Load Theory Meet to Build Skills."

**Dr. Emily Finlayson** received an award for "PrehabPal: A digital tool to help frail elders prepare for cancer surgery" from the Emerson Collective and Helen Diller Family Comprehensive Cancer Center worth **\$558,395** that will run through the end of 2024. Dr. Finlayson also received a PrehabPal: AI-powered Surgery Preparation for Vulnerable Older Adults Catalyst Award worth **\$35,000** that will run through the February 2023.

**Dr. Shahram Aarabi** received an **\$220,513** award for "TourniTek: Pre-hospital thermal regulation for the prolonged field care of traumatic injuries" from Tournitek Inc.; DoD Air Force Office of Scientific Research.

**\$40,000** was awarded to **Dr. Elizabeth Wick** by UCSF's Mount Zion Health Fund for her study titled "Implementation of a Patient Navigator to Reduce Inequities in Perioperative Advanced Care Planning."

**Dr. Amar Nijagal** has received an award from UCSF's Clinical & Translational Science Institute (CTSI) worth **\$40,000** for his work titled "Novel immune mechanisms in the developing liver promote pediatric hepatoblastoma."



**DR. ELAINE TSENG**

Chief of Cardiac Surgery at the UCSF VA Hospital **Dr. Elaine Tseng's** project titled: "Developing Biomechanical Predictors of Ascending Thoracic Aortic Aneurysm Growth and Dissection" will receive **\$1.2 million** dollars in funding provided by the VA Merit.

**Dr. Esther Kim** was awarded **\$20,000** in funding by UCSF for her study titled "Plastic Surgery Resident Core Surgical Curriculum Initiative."

Stanford University; National Institute of Health (NIH) has presented **Dr. James Gardner** with award titled "Single-cell Mapping Center for Human Regulatory Elements and Gene Activity" worth **\$72,693** in funding.

**Dr. Lucy Kornblith, Dr. Adam Oskowitz and Dr. James Gardner** have all received the UCSF Chancellor's Faculty Resource Fund Award worth **\$25,000**.

**Dr. Adnan Alseidi** received **\$115,730** for an award titled: "Development and Validation of an Artificial Intelligence Platform to Predict Negative-Margin (R0) Resectability of Pancreatic Ductal Adenocarcinoma Based on Preoperative CT Scans which is sponsored by UC Pancreatic Cancer."

**Drs. Hueylan Chern, David Bayne & Jeannette Lager's** grant proposal for a novel multi-specialty laparoscopic home curriculum titled "Development, Implementation, and Review of a Novel Home Laparoscopic Curriculum", has been approved for funding in the amount of **\$23,179** by UCSF Medicine's Academy of Medical Educators Innovations Funding Program.

**Dr. Hannah Decker & Dr. Elizabeth Wick's** project "Investigating Surgical Outcomes, Experiences, and Care Utilization in Unhoused Adults with Cancer" to better understand the impact of housing instability on cancer surgery has been selected to receive **\$42,000** in funding by the Benioff Homelessness & Housing Initiative.

**Dr. Valerie Weaver** has received **\$100,000** in funding from the Dana-Farber Cancer Institute for an award titled "Glycosylation patterns and therapeutic resistance in breast cancer."

**Dr. Sanziana Roman's** project titled "Near-infrared autofluorescence imaging to differentiate benign and malignant adrenocortical tumors" was awarded **\$50,000** in funding by the Mount Zion Health Fund.

**Dr. Tasce Bongiovanni** has received a K23 career development grant from the National Institute on Aging to better understand and address prolonged use of non-opioid postoperative pain medication in older adults after surgery.



# DIVERSITY, EQUITY & INCLUSION



## DR. CAMARA PHYLLIS JONES X DEI TALK

On May 18th, 2022, from 4-5pm PST, UCSF Presidential Chair Dr. **Camara Phyllis Jones** presented a vital #DEI Workshop in collaboration with the Departments of Anesthesia and Perioperative Care, Obstetrics, Gynecology and Reproductive Sciences, and Surgery.

Dr. Jones engages with UCSF partners to create an equity roadmap at UCSF, guided by three principles: valuing all individuals and populations equally, recognizing and rectifying historical injustices, and providing resources according to need. Attendees were able to hear from Dr. Jones about how we can work together to dismantle racism and create an equity roadmap at UCSF!

**UCSF**  
Department of Surgery

### HAILE T. DEBAS SCHOLARSHIP

*Haile Debas, MD*  
Professor Emeritus of Surgery  
Chancellor Emeritus  
Dean Emeritus, School of Medicine  
Vice Chancellor Emeritus, Medical Affairs  
Senior Global Health Advisor  
Founding Executive Director, Global Health Sciences

Our **Haile T. Debas Diversity Scholarship** application is still **OPEN**. The scholarship was established to build diversity, equity, inclusion and belonging in surgery. It provides a stipend of **\$2,500** towards expenses. Visit >>> <http://ow.ly/2pap50I7ov7> for more information.



## DIANE NGO AWARDED CHANCELLOR AWARD FOR EXCEPTIONAL UNIVERSITY SERVICE

Diane who is a Program Manager for the Department of Surgery and her fellow pictured Vietnamese American recipients **Tina Ly, BSN, RN-NIC (recipient of Distinguished Nurse Award)** and **Hoa Sy, MPH (recipient of Chancellor Award for Public Service)** are all refugees from Vietnam, and with last month being API Heritage month, the significance was recognized by all. They are planning on starting an RCO for the Vietnamese community here at UCSF.



For more information about the **13** individuals including **Diane** who were honored with the **2022 UCSF Founders Day Awards** please visit the following link <http://ow.ly/VB3Q50JsZpz> to learn about them and their remarkable efforts by watching these short videos.



# PROMOTIONS & T.E.A.C.H AWARDS

## Promotions

We spotlighted five faculty members who have been recognized with advancements on social media, and we'd like to continue that acknowledgment for those who may have missed it.



**DR. ESTHER KIM**  
Plastic Surgeon  
Dr. Esther Kim from UCSF  
Plastics has been promoted  
from **Assistant to Associate**  
**Professor** of Surgery.

**DR. HASSAN LEMJABBAR**  
Biomedical Scientist and  
Principal Investigator  
Dr. Hassan Lemjabbar, who  
works in our Thoracic Oncology  
Laboratory, has been promoted  
from **Assistant to Associate**  
**Professor** of Surgery.

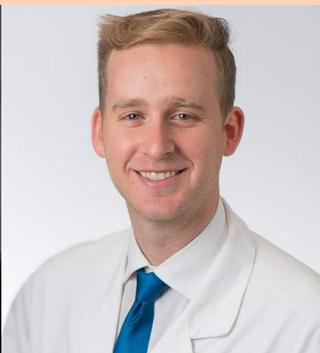
**DR. AMANDA SAMMANN**  
General Surgeon  
Dr. Amanda Sammamm who  
practices trauma surgery, acute  
care surgery, and critical surgical  
care at Zuckerberg San Francisco  
General, has been promoted from  
**Assistant to Associate Professor**  
of Surgery.

**DR. CHAU TAI**  
Plastic and Reconstructive  
Surgeon  
Dr. Chau Tai, who practices at  
UCSF Benioff Children's  
Hospital Oakland, has been  
promoted from **Associate to**  
**Full Professor** of Surgery.

**DR. DORUK OZGEDIZ**  
Pediatric Surgeon  
Benioff Children's Hospitals  
Dr. Doruk Ozgediz who is also  
our Director of the Center for  
Global Surgery and Health  
Equity has been promoted from  
**Associate to Full Professor** of  
Surgery.

## Awardee's

Each year, the graduating medical student class selects residents, fellows, and faculty who have been outstanding teachers, mentors, and role models to medical students during their clinical years at UCSF. Recipients are selected on the basis of their dedication to **UCSF PRIDE** values, teaching excellence, and student experience. **5** members from our department were selected by graduating medical students to receive this year's **UCSF Medicine 2022 T.E.A.C.H. (Teaching Awards for Clinical Faculty) Award.**



**DR. JESSICA GOSNELL**  
Endocrine Surgeon  
Excellence in Teaching for  
Clinical Faculty

**DR. MICHAEL ZOBEL**  
General Surgery Chief Resident  
Teaching Excellence Award for  
Cherished Housestaff  
(T.E.A.C.H.)

**DR. CLARA GOMEZ-SANCHEZ**  
Vascular Surgery Fellow  
Teaching Excellence Award for  
Cherished Housestaff  
(T.E.A.C.H.)

**DR. JASON POMERANTZ**  
Associate Professor & Plastic  
and Reconstructive Surgeon  
Excellence in Teaching for  
Clinical Faculty

**DR. LAURA WONG**  
UCSF Plastics Resident  
Teaching Excellence Award for  
Cherished Housestaff  
(T.E.A.C.H.)

# QUALITY AND SAFETY UPDATES

We continue to work, as part of the Caring Wisely program, to improve advanced care planning for patients undergoing surgery. This year this has taken many different flavors including:

## 01

Partnering with our advanced practice colleagues in the inpatient and outpatient setting to support patients with advanced care planning.

The APeX-embedded messaging just started this spring, and we thank the colorectal, hepatobiliary-GISS, endocrine, and thoracic surgery providers for allowing us to test this approach. Early data is encouraging with over 60% of patients opening the messages, however further study is needed to understand what this results in with regards to advanced care planning prior to surgery.

We are looking forward to introducing a healthcare navigator, part of the UCSF Office of Population Health team, who will reach out and support patients as needed in the pilot with the goal of providing maximal patient assistance while minimizing the burden on the clinical practices. If your group is interested in joining the pilot, please reach out to **Liza**.

## 04

Congratulations to the surgery residents who have meaningful improved advanced care planning documentation on the acute case surgery service and meeting the GME Incentive Program metrics!!! Thank you to **Alexis Colley** for leading the work and we look forward to refining the work for the upcoming year.

We are excited to be able to support the work with APeX reporting as needed and plan to showcase projects in the spring during a dedicated grand round. Hoping groups will engage learners in the work and design their project with eye to scholarship as well as impact!



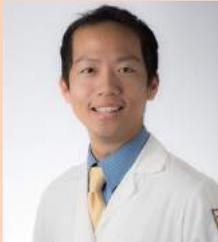
DR. REBECCA PLEVIN



DR. SOPHIA HERNANDEZ



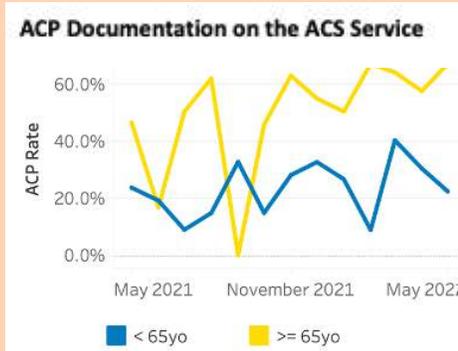
DR. CHEYENNE SONNTAG



DR. JOSEPH LIN



DR. ALEXIS COLLEY



In the new academic year, we look forward to supporting each division to complete a quality improvement project over **12-24 months**. Divisions will be asked to identify their teams and a single project based on area of need with the following recommendations:

- Problems identified in a clinical registry or hospital dashboard
- Opportunities identified to improve compliance with Evidence-Based Guidelines or processes relevant to the service
- Problems identified through annual review of service in CPIC report or divisional or sectional morbidity and mortality conference
- Any patient-centered, quality-related problem determined by the team; consideration should be made to areas of improvement around health equity

## 05

UCSF Health Perioperative Services is launching a **Surgical Quality and Safety Council** in summer 2022. The goal is to provide a forum for cross-surgical and anesthesia department collaboration and learning, partnership with the delivery system to address system-related issues in surgery and improve access to data and analytics and improve “loop closure” to the departments with regards to safety events. More details to be shared soon.

## 06

Welcome to **Ian Soriano**!! Ian, a minimally invasive and GI surgeon, recently joined us from the **University of Pennsylvania**. He served as the **NSQIP surgeon champion** for Pennsylvania Hospital and recently completed his master's in healthcare quality at Penn. In just a few short months, Ian jumped in to help us organize efforts around a complex abdominal wall clinical pathway. Furthermore, he has worked to refine our communication strategies around our **NSQIP data** so be on the look out for more data sharing in the months to come. As always, reach out if you would like to use the data for quality improvement and/or research.



DR. IAN SORIANO

# DEPARTMENT HAPPENINGS



Some of our outstanding faculty and fellows from **Zuckerberg SF General Hospital & Trauma Center & UCSF Surgery** out for drinks. Pictured is **Dr. Tasce Bongiovanni, Dr. Marissa Boeck, Dr. Jennifer Reid, Dr. Joseph Cuschieri, Dr. Kent Garber, Dr. Cassie Sontag, and Dr. Robert Mackerseie.**



In Boston: **Dr. Ryo Hirose** and 4 of our **UCSF Surgery residents/future transplant surgeons!** Though, this was in Boston Dr. Hirose has created a resident restaurant guide to the best places to eat in **#SF #ATCBoston2022**



Our **UCSF General Surgery Residency graduates & their families** together with members from **UCSF Naffziger & UCSF Surgery faculty** and a special member of the **Class of 1972!**

Fun afternoon kickball game between **faculty AKA team #pronate** vs residents from **General & Vascular Surgery AKA team #supinate** on a gorgeous afternoon.



**UCSF Surgery members** during **Surgical Education Week 2022**, which took place in **San Antonio, Texas.**

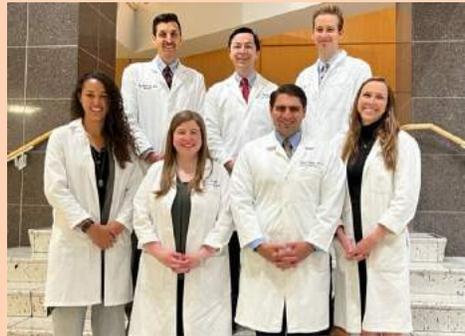


**UCSF Surgery Endocrine Surgeons** at the **American Association of Endocrine Surgeons meeting #AAES2022**

# GRADUATING RESIDENTS



*Class of  
2022*



**Our graduating General Surgery chief residents are below, along with their fellowship plans:**

**Caitlin Collins: Surgical Critical Care Fellowship, UCSF**

**Yvonne Kelly: Transplant Fellowship, Columbia**

**Elizabeth Lancaster: Vascular Surgery Fellowship, UCSF**

**Anthony Squillaro: Colon & Rectal Surgery Fellowship, University of Minnesota**

**Andrew Wisneski: Cardiothoracic Surgery Fellowship, UCSF**

**Arya Zarinsefat: Transplant Fellowship, UCSF**

**Michael Zobel: Pediatric Surgery Fellowship, Children's Hospital Los Angeles**