

A photograph of a surgical team in an operating room. In the foreground, a surgeon's hands are visible, performing a procedure on a patient. In the background, two other surgeons are looking down at the patient. The room is dimly lit, with bright surgical lights illuminating the operating table. A monitor is visible in the top right corner.

2019  
ANNUAL REPORT  
DEPARTMENT OF  
SURGERY



**On the cover:**

Sepideh Gholami, M.D., F.A.C.S.

Division of Surgical Oncology,

Section of Hepatobiliary Surgery

# CONTENTS

To our colleagues in medicine .....	5
Overall statistics .....	7
Research .....	9
Education .....	11
Division of Burn Surgery and Reconstruction .....	13
Division of Cardiothoracic Surgery .....	17
Division of Colorectal Surgery .....	21
Division of Foregut, Metabolic and General Surgery .....	23
Division of Pediatric General, Thoracic and Fetal Surgery .....	25
Division of Plastic and Reconstructive Surgery .....	29
Division of Surgical Oncology and Sections of Endocrine Surgery and Hepatobiliary Surgery .....	31
Division of Transplant Surgery .....	35
Division of Trauma, Acute Care Surgery and Surgical Critical Care .....	39
Division of Vascular and Endovascular Surgery .....	43

# TO OUR COLLEAGUES IN MEDICINE

## Letter from the Chair

### 50<sup>th</sup> Anniversary Celebration

In November we gathered at a celebratory gala to honor the UC Davis Department of Surgery's five decades of accomplishments. To help mark the occasion Dr. Troppmann has also presented a grand rounds with interviews of all five surgery chairs as well as emeriti faculty.

Having just celebrated the 50<sup>th</sup> anniversary of the UC Davis Health Department of Surgery, I'm pleased to provide this inaugural annual report to share some of the outstanding work our team is doing to provide high-quality patient care, conduct groundbreaking research, and train the next generation of surgical leaders. We are proud of our legacy as one of the largest Trauma and Acute Care surgery programs in the country, and the only level I trauma program in Northern California, and we have expanded on that foundation to include subspecialty care in every discipline. Some highlights follow:

We created the Complex Aorta Program, a new collaboration between our Cardiac and Vascular divisions, to detect and treat the full range of complex aortic diseases and recruited Dr. Victor Rodriguez from Oregon Health Sciences University to lead the program;

We became California's first health system, and second on the West Coast, to welcome the da Vinci SP robotic surgery system. More than 20 UC Davis Health teams can use robotic systems for a variety of conditions, including hepatobiliary, abdominal and gastrointestinal issues;

Dr. Shinjiro Hirose, Chief of the Division of Pediatric General, Thoracic, and Fetal Surgery launched the Fetal Care and Treatment Center, the first comprehensive multidisciplinary fetal diagnosis and therapy center in inland Northern California;



**Diana Farmer, M.D., FACS, FRCS**

Distinguished Professor and  
Pearl Stamps Stewart Chair

Chair, Department of Surgery,  
UC Davis School of Medicine

Surgeon-in-Chief,  
UC Davis Children's Hospital



We opened our new and expanded Children's Surgery Center facility, complementing our status as the West Coast's first American College of Surgeons level I-designated center;

We recruited Dr. Bob Kiaii as our Chief of the Division of Cardiothoracic Surgery. Dr. Kiaii is responsible for several firsts, including North America's first combined surgical and percutaneous procedure for multi-vessel coronary artery disease on the beating heart. He also performed the world's first robotic-assisted surgeries for aortic valve bypass, right atrial perforation repair and left atrial appendage ligation for atrial fibrillation;

We recruited Dr. Matt Mell from Stanford as our Chief of the Division of Vascular Surgery to lead the division in offering new treatment modalities for vascular surgery in the region, such as transcarotid artery revascularization (TCAR);

Our Division of Colorectal Surgery's rectal cancer surgery program was accredited by the American College of Surgeons National Accreditation Program for Rectal Cancer;

We held leadership positions in national professional societies serving colleagues in trauma, burns, plastics, and more.

I hope you enjoy reading this report and learning about our dedication to quality patient care, impactful research, and excellent surgical training. We are grateful for your support and value the contributions you make in support of our mission to serve our Northern California region and beyond.

A handwritten signature in blue ink that reads "Diana Farmer".

Diana Farmer, M.D., FACS, FRCS

**UC Davis Partnerships**

We also leverage unique UC Davis partnerships to improve care, including collaborations with the UC Davis Department of Biomedical Engineering, UC Davis School of Veterinary Medicine, VA Healthcare System of Northern California, Shriners Hospitals for Children – Northern California, and David Grant Medical Center.

# OVERALL STATISTICS

**59** active grants and contracts

(including Shriners Hospitals for Children – Northern California, and clinical trials)

NIH ranking for surgery, per Blue Ridge Institute for Medical Research

**11th**



**\$12.4**  
million annual funding

**4,000<sup>th</sup>**

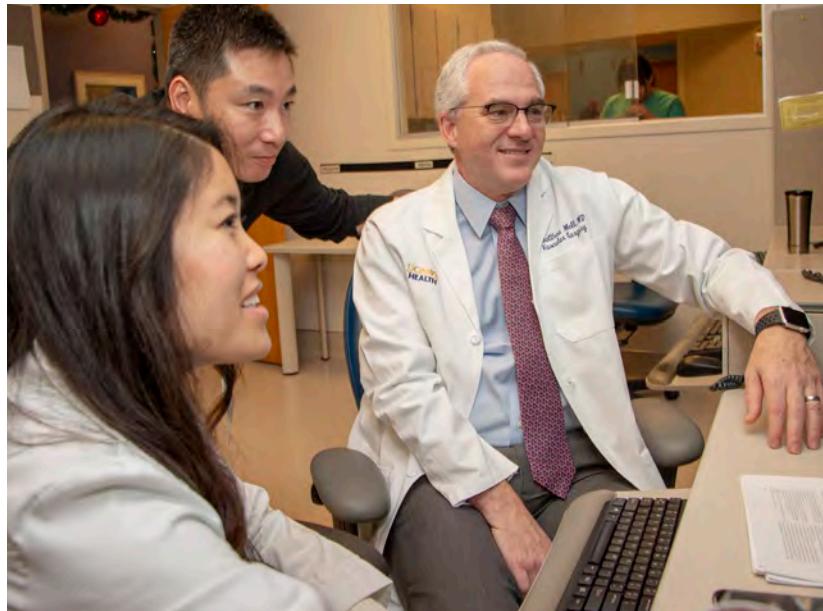
kidney transplant performed by our Transplant Center

Contributions to *U.S. News & World Report* top-50 adult and pediatric rankings, such as adult cancer, cardiology and heart surgery, pulmonology and lung surgery.

High-performing in gastroenterology and GI surgery, and in abdominal aortic aneurysm repair, COPD, colon cancer surgery, heart bypass surgery, heart failure and lung cancer surgery.

The vascular team became **one of first in the Pacific Northwest** to perform petticoat stent grafts for complicated type B aortic dissections.

Burn surgery chief Dr. David Greenhalgh received a \$3 million grant from the U.S. Department of Defense to continue his study on how to **improve outcomes in burn patients**. The continuation of his multi-center Acute Burn Resuscitation Observational Trial (ABRupt) grant will compare albumin to crystalloid in burn patients.



**73**  
current  
faculty  
members

**1,755**  
residency  
applications  
for 2019:

General surgery **1,408**

Vascular surgery **52**

Cardiothoracic surgery **98**

Plastic surgery **197**

**93** current  
residents



# RESEARCH

## 11<sup>th</sup> in the nation for NIH research funding

Our Department of Surgery proudly ranked 11<sup>th</sup> in the nation for research funding from the National Institutes of Health in 2019, according to February rankings compiled by Blue Ridge Institute for Medical Research. The nonprofit organization uses the NIH's Research Portfolio Online Reporting Tool for its annual reports.

Tina Palmieri of our burn division serves as our department's vice chair of research, overseeing a portfolio of investigations that includes precision medicine, regenerative therapies, advanced imaging, molecular and cell biology, donor organ preservation, outcomes and comparative effectiveness, prevention and decision-support guidelines, and other areas. Highlights appear below and in the following pages for each division.



An English bulldog undergoes surgery for spina bifida at the UC Davis Veterinary Medical Teaching Hospital. The dog is part of a pair of puppies being treated for spina bifida through a combination of stem cell therapy and surgery, research made possible through collaboration between the UC Davis School of Veterinary Medicine and UC Davis Health.

### Burn treatment

Fueled by a number of large, recent grants, burn division faculty continue their research on strategies to help victims from the military and civilian worlds alike. Dr. Palmieri is the principal investigator of a \$4.5 million, multi-center Department of Defense (DOD) grant awarded in 2018 to examine the combination of burns and traumatic brain injury, and develop a precision medicine approach. Dr. Greenhalgh has received DOD grants of \$3.2 and \$1.9 million to examine burn resuscitation strategies, and Dr. Sen \$4.5 million to examine the role of exercise in improved burn patient outcomes.

## We continually seek to optimize patient care and outcomes through clinical and laboratory research across all of our divisions.

### **Bioengineering and spina bifida**

A large grant to our Surgical Bioengineering Laboratory has also helped Dr. Farmer and colleagues to continue historic progress toward human trials for a novel spina bifida therapy, which combines in utero surgery with stem cell therapy and bioscaffolding to improve motor function and help patients walk independently. After demonstrating the approach improves hind limb control in lab animals, a team led by Farmer and Aijun Wang, associate professor of surgery and biomedical engineering, earned \$5.6 million from the California Institute for Regenerative Medicine (CIRM) to perform final preparations for human trial approval.

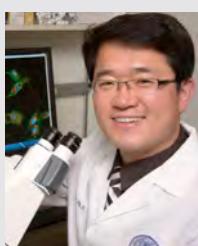
### **Gene therapy for hemophilia**

Farmer, Wang and UC Davis Institute for Regenerative Cures Director Jan Nolta are also among collaborators on research that aims to develop a novel cell-based gene therapy for the treatment of hemophilia A — while also

exploring how to boost longevity of stem cell transplants in general. In a study published last year, they demonstrated that neonatal co-transplantation of endothelial colony-forming cells and placenta-derived mesenchymal stromal cells is a potential strategy to achieve stable, long-term engraftment. Increasing the transplant lives of stem cells has been a longstanding research challenge.

### **Mouse biology**

Veterinary scientist Kent Lloyd directs the UC Davis Mouse Biology Program (MBP), recognized internationally as a world-class center of excellence in mouse embryo manipulation, genome-wide mutagenesis, and whole animal phenotyping and analysis. Lloyd and a team of 100 scientists and staff provide scientific expertise and consultation, technological assistance, infrastructure, and educational support around genetically-altered mice for biomedical disease research, and have contributed several innovations in mouse mutagenesis, biorepository operations, and shared-resource best practices. Associated NIH-funded projects include the Mutant Mouse Resource and Research Center (MMRRC), the Knockout Mouse Production and Phenotyping (KOMP2) projects, and the Mouse Metabolic Phenotyping Center.



**Anjun Wang, Ph.D., has been selected to receive the Dean's Fellowship in Entrepreneurship Award, a program that involves collaborating with distinguished**

**business and science leaders to study how entrepreneurship fits within the academic enterprise. The fellowship will allow Wang to conduct a best-practice analysis of leading institutions for entrepreneurship and continue to enhance innovation at UC Davis' surgical bioengineering lab.**



## Awards

### Master Surgeon Educator

Dr. Galante was inducted into the ACS Academy of Master Surgeon Educators in October.

### ACS Comprehensive Education Institute

The UC Davis Center for Virtual Care was reaccredited as an ACS Comprehensive Education Institute

## The F. William Blaisdell Surgical Education Programs

Our department is dedicated to training surgical leaders across all disciplines. The groundwork for our educational programs solidified in the late 1970s under the leadership and guidance of Dr. F. William Blaisdell, whose commitment to training “thinking doctors” versus “cookbook doctors” permeates all of our programs. We named our programs in honor of his leadership and vision.

Like Dr. Blaisdell, we recognize that surgical training begins early and is carried on through one’s career. The F. William Blaisdell Surgical Education Programs were designed to provide the highest caliber of surgical education, from the pre-med level through continuing education of practicing surgeons, including international colleagues.

The Department has expanded into four separate residencies: General Surgery, Cardiothoracic, Plastic, and Vascular Surgery. Within General Surgery, we offer four pathways: Surgeon-Scientist; Rural/Global Surgeon; Outcomes and Palliative Care; and the Surgeon-Educator.

Through his commitment to the Veterans Affairs Healthcare System in Northern California, Dr. Blaisdell affected the lives of thousands in military service. In keeping with this tradition, we have developed a Program for Military Surgical Education to provide robust training unique to military surgeons and trainees at a national and international level.

Dr. Blaisdell has been at the forefront of surgical innovation and training throughout his distinguished career. It is with his vision that we move forward to advance the education of future generations of surgeons.

#### **Dr. Joseph Galante**

Department Vice Chair of Education

#### **Dr. David Tom Cooke**

Program Director  
Cardiothoracic Surgery Residency

#### **Dr. Edgardo Salcedo**

Program Director  
General Surgery Residency

#### **Dr. Michael Wong**

Program Director  
Plastic Surgery Residency

#### **Dr. Misty Humphries**

Program Director  
Vascular Surgery Residency

## Surgery Residents Roster 2018–2019

### PG-I

	<b>Medical School</b>
Nataliya Bahatyrevich~	Sidney Kimmel Med College
Courtney Beaver	USUHS
Nathan Butler^	West Virginia COM
Michael Davis	Emory University
Joseph Firriolo^	U of New South Wales
Sean Frampton	Midwestern COM
Abdul Hassan*	UC San Diego
Elise Hill^	University of Iowa
Austin Holmes^	UC Davis
Jonathan Hu^	Oakland University
Daniel Khokhorin	Pacific Northwest COM
Nasim Khosravi	Tehran University
Philip Kim^	Wake Forest University
Kara Kleber^	Boston University
Rafael Lozano^	U of Missouri-Kansas
Siobhan Luce^	U of Nevada, Reno
Taylor Martin	Alabama COM
Nicole Moore^	UNC, Chapel Hill
Scott Myers	Oakland University
Son Nguyen^	UCLA
Julianne Pilla	U Central Del Caribe
Cara Pozolo^	Michigan State University
Samy Ramadan	University of Vermont
Alexandra Johns^	Ohio State University
Derek Stewart	Lake Erie COM
Isaac Talbert	University of Kansas
David Tindle	Michigan State University
Matthew Van Uitert	USUHS
Jacquelyn Yu^	UC Davis

### PG-II

	<b>Medical School</b>
Jacob Burns	University of Florida
Jennifer Geiger	University of Michigan
Joel Harding^	Edward Via COM
Gillian Hoshal	Michigan State University
Dania Malik	U of Texas, Southwestern
Sriniwasan Mani^	Georgetown University
Ifeanyi Onyeji^	Columbia University
Trevor Plescia	UC Irvine
Ashly Ruf	University of Missouri
Elan Sherazee	USUHS
Michaela Simoncini	Drexel University
Isabelle Struve	UC Davis
Anna Xue^	University of Washington
Yunfeng Xue^	University of Texas, Houston

### PG-III

	<b>Medical School</b>
Lindsay Bach	West Virginia University
Jeremy Bolin^	USUHS
Lauren Coleman	University of New Mexico
Melissa Grigsby	The Commonwealth Medical College of Nebraska
Timothy Guenther	University of Nebraska
Nikia McFadden	University of Pennsylvania
Lauren Perry	Emory University
Amir Sarkeshik^	Touro University
Sarah Stokes	SUNY Downstate
Christina Theodorou	Northwestern University
Matthew Zeiderman^	University of Louisville

### PG-IV

	<b>Medical School</b>
Jamie Anderson	UC San Diego
Sarah Bateni	UC Davis
Melissa Blaker^	Lake Erie COM
Connor Caples^	USUHS
Katherine Iverson	Oregon Health and Science
Harris Kashtan	USUHS
Cole Nishikawa^	University of Hawaii
Ping Song^	Virginia Commonwealth
Melissa Vanover	University of Texas
Andrew Wishy^	Kansas City University
Mio Yanagisawa	U of Texas, Southwestern

### PG-V

	<b>Medical School</b>
Anders Davidson	Creighton University
Erik DeSoucy	Western University COM
Robert Doiron	SUNY Buffalo
Luis Godoy^	UC Davis
Laura Goodman	University of Pittsburgh
Katherine Iverson	Oregon Health Sciences University
Guy Jensen	University of Washington
Sandra Kabagambe	University of Louisville
Mimmie Kwong^	John Hopkins University
Michael Mirmanesh^	Drexel University
Brie Nardy	University of Iowa
Andrew Perry	University of Florida
Meryl Simon^	Drexel University
Samantha Stradleigh^	Albert Einstein
Emily Tibbits	Wright State University

### PG-VI

	<b>Medical School</b>
Sabrina Evans^	University of Washington

### Research

	<b>Medical School</b>
Carl Beyer	Temple University
James Clark	Rush University
Laura Galganski	University of Louisville
Alicia Gingrich	University of Kansas
Sean Judge	Creighton University
Jonathan Lin	Medical College of Wisconsin
Jennifer Olson	Rush University
Amanda Phares	UC Davis
Linda Schutzman	University of Kentucky
Marguerite Spruce	University of Missouri – Columbia
Debi Thomas	USC
Kyle Thompson	University of Texas, Houston
Kaeli Yamashiro	AT Still COM

\* Categorical General Surgery Resident

\*\* Urology Resident

^ Cardiothoracic Integrated Surgery Program

^ Vascular Integrated Surgery Program

# Plastics Integrated Surgery Program/Combined Program



# DIVISION OF BURN SURGERY AND RECONSTRUCTION

The Burn Center of Excellence consists of two linked programs: the Firefighters Burn Institute Regional Burn Center, for adults, and Shriners Hospitals for Children – Northern California, which provides care to children and adolescents. Together we continue to serve burn patients from the **Oregon border to the Central Valley, and the Bay Area to Nevada.**

**President-elect** — Dr. Greenhalgh was recently named president-elect of the International Society for Burn Injuries, which includes 1,200 members from more than 95 countries. He is also editor of the association's open-access peer reviewed journal *Burns Open*.

Drs. Greenhalgh (2006–2007) and Palmieri (2012–2013) are also past presidents of the American Burn Association (ABA). Dr. Sen is a member of the program committee of the ABA and our newest faculty member, Dr. Romanowski, is currently serving the Association of Academic Surgeons as a program committee member.

**NorCal's largest** — The burn treatment center at UC Davis Health is the largest in Northern California. Formerly called the UC Davis Regional Burn Center, it was renamed after the Firefighters Burn Institute raised \$2 million to help support expansion. The 13,000-square-foot center has 12 private ICU beds, with care enhancers such as infrared overhead heating, sterile ventilation and hydrotherapy.

**Wildfire response** — The enlarged burn center was an important part of the community response to the 2017 Tubbs Fire and 2018 Camp Fire. Burn specialists at UC Davis Health treated more than a dozen patients injured during the fires.

Drs. Greenhalgh and Palmieri are past presidents of the American Burn Association.

## Burns and Multi-Center Trials

Dr. Palmieri is the principal investigator of a \$4.5 million, multi-center Department of Defense (DOD) grant awarded last year to examine the combination of burns and traumatic brain injury, and develop a precision medicine approach. Dr. Greenhalgh has received DOD grants of \$3.2 and \$1.9 million to examine burn resuscitation strategies, and Dr. Sen \$4.5 million to examine the role of exercise in improved burn patient outcomes.



Firefighter and burn survivor  
Jim Adams, pictured at the  
Firefighters Burn Institute  
Regional Burn Center at  
UC Davis Medical Center.



# FACULTY



**David G. Greenhalgh, M.D.**  
Chief of Burn Surgery

**Burn Surgeons**  
Tina L. Palmieri, M.D.  
Soman Sen, M.D.  
Kathleen Romanowski, M.D.

**Burn Research**  
Kiho Cho, D.V.M., Ph.D.

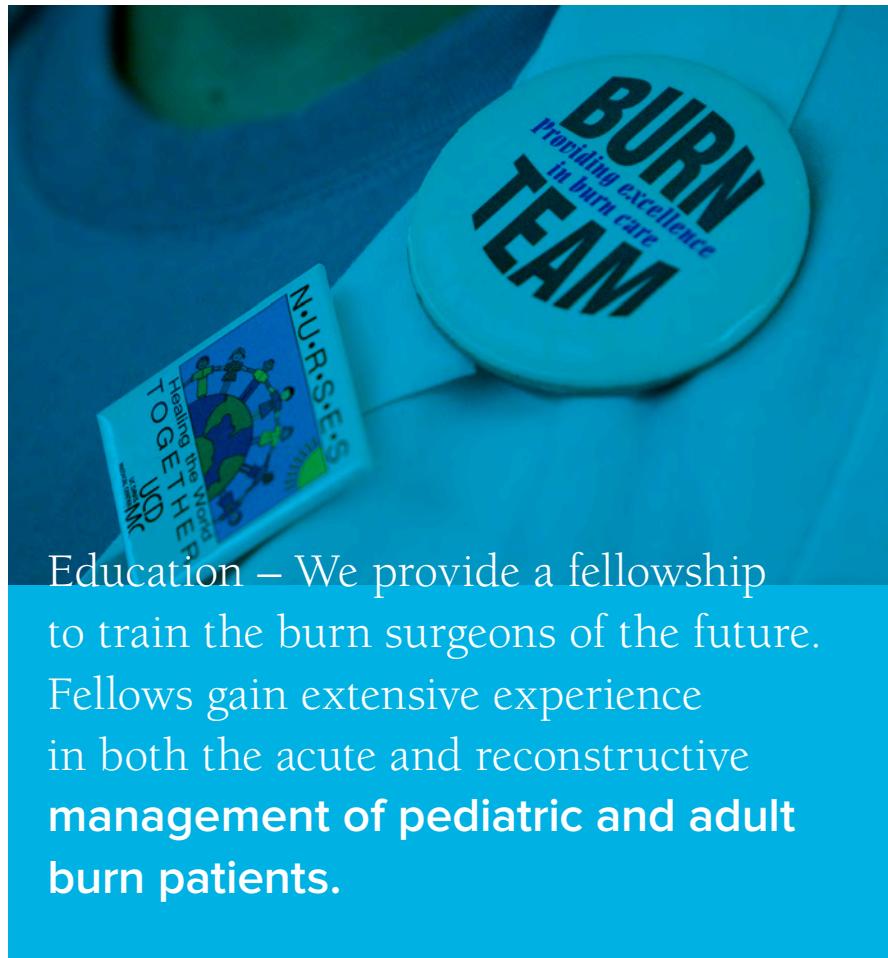
## Research and Publications

The Burn Program is involved in aspects of research, from molecular biology to cell biology and from clinical research to prevention.

**NEJM review** — Dr. Greenhalgh's review article "Management of Burns" was published by the *New England Journal of Medicine* in June, covering clinical aspects. The piece also noted the need for an autologous, rapidly produced engineered skin to replace current split-thickness grafts; for greater understanding of signals that induce hypertrophic scarring; and for control of profound hypermetabolic response.

**ABA Conference** — The burn team presented 10 papers at the American Burn Association's annual meeting.

**Department of Defense funding** — The burn division has garnered more than \$15 million from the DOD in the last 10 years for burn clinical trials, and additional \$2 million for the UC Davis Burn Data Center to support other ABA projects.



Education — We provide a fellowship to train the burn surgeons of the future. Fellows gain extensive experience in both the acute and reconstructive **management of pediatric and adult burn patients.**

## Referral Information

Detailed Burn Center referral criteria are listed on our website at [health.ucdavis.edu/burncenter](http://health.ucdavis.edu/burncenter). Burn survivor support and aftercare resources are also posted.

For new patient referrals, call 916-734-3636 any hour, night or day. For out-patient referrals, please call during business hours. Appointments may be scheduled 8 a.m. to 5 p.m., Monday through Friday.

To help accommodate increased referrals, we have recently implemented a new "bridge" call system that includes the call fellow, charge nurse and referring physician.

# DIVISION OF CARDIOTHORACIC SURGERY

The division is a leading referral center for high-risk adult and pediatric cardiothoracic patients, and provides complete surgical care for complex diseases of the heart, chest, lungs and esophagus. Specialists combine extensive experience and skill with the most advanced technologies and procedures, and are **recognized for research-based, multidisciplinary approaches to surgery.**

## We have the third highest academic thoracic robotic surgical volume west of the Mississippi River.

The division continues to enjoy national recognition, excel in incremental growth and volume, and expand its scope of practice. We are performing more complex operations, with thoracic surgeons in particular taking advantage of advanced technology in robotics. Our new chief will continue these trends.

### General thoracic surgery:

- Drs. Cooke and Brown had the third highest academic thoracic robotic surgical volume west of the Mississippi River.
- Their Comprehensive Lung Cancer Screening Program received American College of Radiation's Designated Lung Cancer Screening Center recognition, and the Lung Cancer Alliance Screening Center of Excellence award.

### Adult cardiovascular surgery:

- We created a new Complex Aorta Program run by Dr. Victor Rodriguez, faculty in both our vascular and cardiothoracic divisions. The team detects and treats the full range of arterial diseases and provides access to new surgical techniques and clinical trials.

### Congenital heart surgery

- Dr. Gary Raff, co-director of the Pediatric Heart Center, serves the region as a full-time specialist in treatments for complex congenital heart disease and chest wall anomalies in infants.
- Last year a team including Dr. Rahm treated America's youngest Impella patient, deploying the technology to boost a 10-year-old's long-term recovery.

---

### Cardiothoracic help in Mexico

A medical team led by Drs. Raff and Rodriguez traveled to the state of Coahuila, Mexico last winter to treat children with congenital heart defects, in cooperation with local cardiologists. Their ultimate goal is to develop the first children's heart program in northern Mexico. The trip was arranged by Heart to Heart Global Cardiac Care and its medical director, Dr. Young.





# FACULTY



**Chief, Cardiothoracic Surgery**  
Bob Kiaii, M.D., F.R.C.S.C.,  
F.A.C.S.

**Adult Cardiovascular Surgery**  
Sabrina Evans, M.D.  
Victor M. Rodriguez, M.D.  
J. Niles Young, M.D., F.A.C.S.

**General Thoracic Surgery**  
David Tom Cooke, M.D., F.A.C.S.  
Section Head  
Lisa M. Brown, M.D., F.A.C.S.

**Pediatric Cardiothoracic Surgery**  
Gary Raff, M.D., F.A.C.S.,  
Section Head  
Amy Rahm, M.D.

**Bob Kiaii joins as chief** — Our new chief is internationally acclaimed heart surgeon Bob Kiaii, who joins us from Western University in Ontario, Canada. Kiaii is known for advancing minimally invasive cardiac surgery techniques and responsible for several firsts, including North America's first combined surgical and percutaneous procedure for multi-vessel coronary artery disease on the beating heart. He also performed the world's first robotic-assisted surgeries for aortic valve bypass, right atrial perforation repair and left atrial appendage ligation for atrial fibrillation.



**National attention for unique story** — Cardiothoracic surgery resident Luis Godoy was the subject of another round of high-profile news stories about his unusual journey into medicine, this time in Spanish-language news media outlets in the U.S. and Latin America.

#### Research and Publications

**Surgeon practices prior to lung resection** — In two *Annals of Thoracic Surgery* articles, Drs. Cooke and Brown found very few thoracic surgeons refer to a cessation program or prescribe nicotine replacement or medical therapy. They also found variation in preoperative cardiopulmonary assessments, and marked discordance with American College of Chest Physicians (ACCP) decision-support guidelines.

#### Presentations at ACS, STS, AATS —

In the last year, thoracic researchers published 12 peer-reviewed studies and presented at scientific meetings such as the American College of Surgeons, Society of Thoracic Surgeons, and American Association for Thoracic Surgery.

#### Awards

The division helped UC Davis Medical Center earn *U.S. News & World Report* top-50 rankings for cardiology and heart surgery and pulmonology & lung surgery, and *U.S. News* high-performing status for COPD, heart bypass surgery, heart failure, and lung cancer surgery.



The UC Davis Comprehensive Lung Cancer Screening Program led by Drs. Brown and Cooke received the American College of Radiation's Designated Lung Cancer Screening Center recognition, and **Lung Cancer Alliance Screening Center of Excellence award**.

#### Referral Information

**Cardiothoracic Surgery appointments and referrals:**  
**916-734-3861**

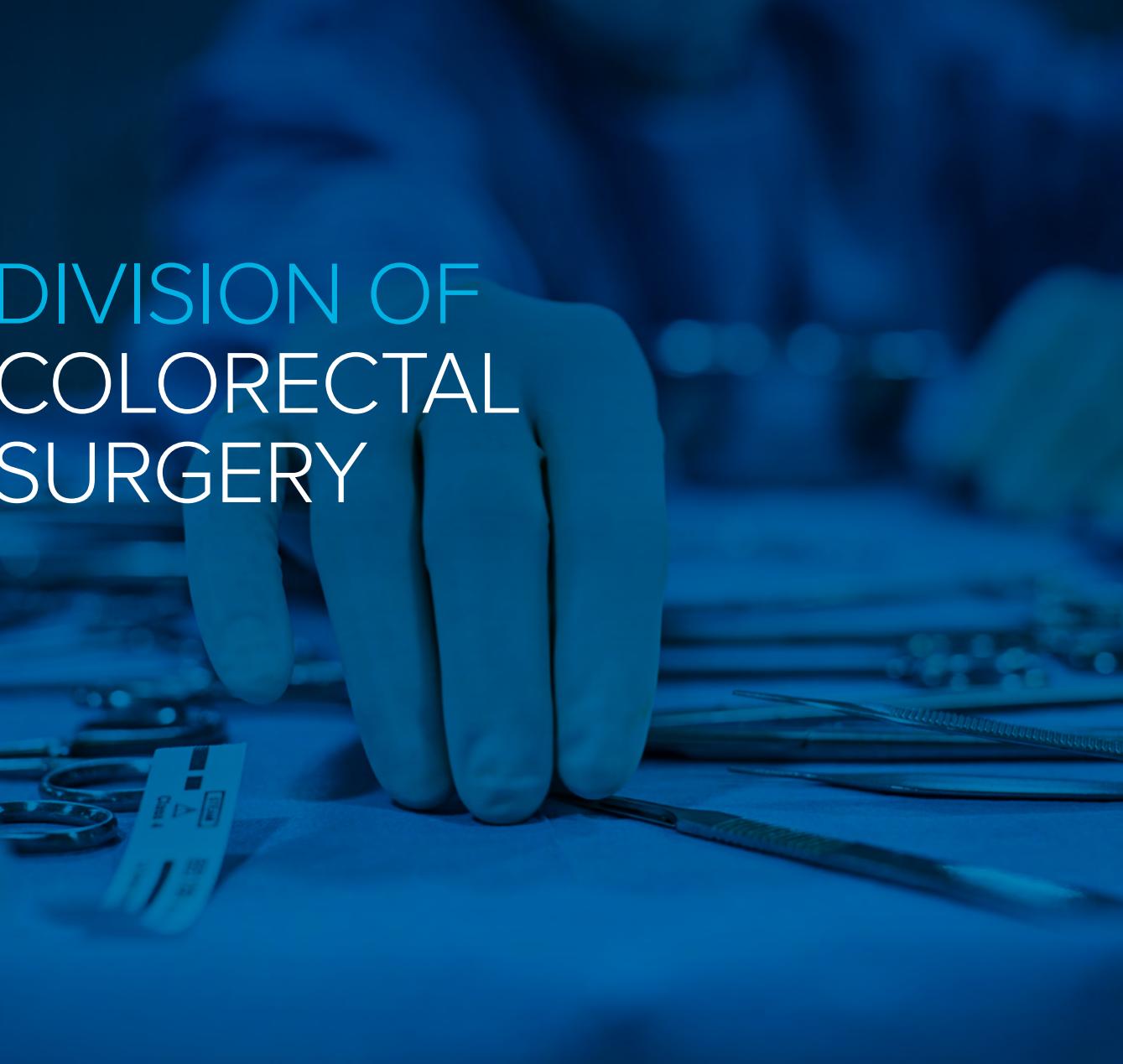
**General Thoracic Surgery appointments and referrals:**  
**916-734-5959**

**General information:**  
**916-734-5994, thoracic@ucdavis.edu**

**Pediatric Cardiothoracic Surgery appointments and referrals:**  
**916-734-3456**

**Hours for all, Monday–Friday:**  
**8 a.m. to 5 p.m.**

# DIVISION OF COLORECTAL SURGERY

A close-up, low-angle shot of a surgeon's hands wearing blue surgical gloves. The hands are positioned over a table covered with a blue cloth, holding and maneuvering several metallic surgical instruments, including forceps and a scalpel. The background is blurred, showing more of the operating room environment.

Our program provides advanced diagnosis, treatment and follow-up care under one roof for all types of colorectal disorders, across all levels of complexity. We offer the full spectrum of non-surgical and surgical treatments – such as minimally invasive and sphincter-sparing surgery – and aim to use **less-invasive treatments whenever possible.**

## Highlights from our past year continued to revolve around excellence in both volume and quality

# FACULTY



**Interim Chief,  
Colorectal Surgery**  
Elizabeth Raskin, M.D.  
**Colorectal Surgeons**  
Wissam J. Halabi, M.D.

**Advanced credentials** — We are currently the region's only program with surgeons double board-certified and fellowship-trained in general surgery colorectal disease care.

**High volume** — In 2018, our team treated more than 400 operating room cases.

### Research and Publications

Dr. Farkas was a principal investigator on two prestigious studies comparing the effectiveness of minimally invasive colorectal surgery techniques for rectal cancer, including Robotic Versus Laparoscopic Resection for Rectal Cancer (ROLARR). Findings are helping our team, and surgeons around the world, to choose the most effective technique for each patient.

Dr. Farkas remains a recognized expert in Lynch syndrome. Farkas helped launch the Lynch Syndrome Surveillance Network for increased awareness, screening and early detection of Lynch-related cancers.

### Referral Information

To learn more about our program or make an appointment with Drs. Raskin or Halabi, please call the consult line at 916-734-2680.

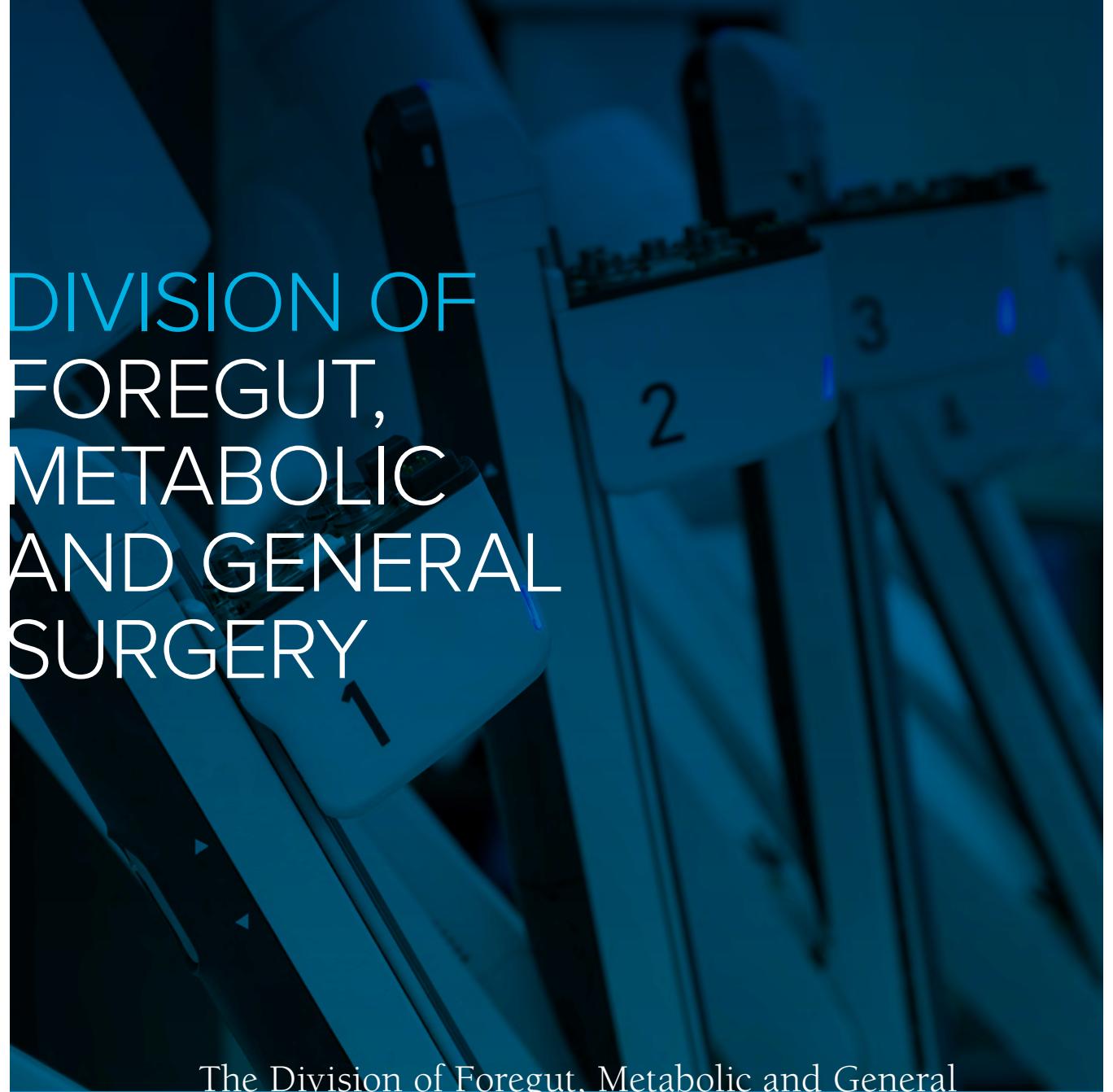
Our open-door philosophy means you can refer a patient to us at any point in their care journey. Our goal is always to transition patients back to referring physicians and local community providers for ongoing medical care.

---

### One of nine accredited U.S. programs

The rectal cancer surgery program was recently accredited by the National Accreditation Program for Rectal Cancer of the American College of Surgeons (ACS), making it one of just nine in the nation to achieve the recognition. The three-year accreditation was developed in collaboration with the ACS Commission on Cancer and is based on 19 standards.





# DIVISION OF FOREGUT, METABOLIC AND GENERAL SURGERY

The Division of Foregut, Metabolic and General Surgery offers comprehensive capabilities to diagnose and treat diseases of the foregut, such as gastroesophageal reflux disease and achalasia. Realizing the strong relationship between obesity and endocrine abnormalities, we have also developed the integrated “endometabolic” approach **to provide treatment solutions for both conditions.**

# FACULTY



**Chief, Bariatric Surgery**  
**Director, Minimally Invasive**  
**Surgery**  
Mohamed R. Ali, M.D., F.A.C.S.

**Surgeons**  
Hazem Shamseddeen, M.D.,  
F.A.C.S., F.A.S.M.B.S.  
Victoria Lyo, M.D., M.T.M.  
Hung Sy Ho., M.D.  
Jonathan L. Pierce, M.D.

**Robotic hernia repair** — Our robotic hernia program benefits from the recruitment of Dr. Shamseddeen, whose skills include robotic-assisted hiatal hernia repair and robotic complex abdominal wall reconstruction, in addition to advanced laparoscopic skills for inguinal/ventral hernia. Dr. Ho, who was recently named the Earl F. Wolfman Endowed Professor in Surgery, is also very active in the program.

**Comprehensive bariatric program** — The UC Davis Bariatric Surgery Program offers a comprehensive solution for surgical weight loss focused on long-term success. The program has been accredited as a comprehensive center by the ASMBS/ACS Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP).

In addition to our minimally invasive laparoscopic and robotic-assisted laparoscopic myotomy capabilities, we continue to grow our endoluminal surgery program to leverage the benefits of incisionless procedures such as Peroral Endoscopic Myotomy (POEM) for achalasia.

## Referral Information

Appointments may be scheduled Monday–Friday 8 a.m. to 5 p.m. A referral letter and copies of appropriate studies will be requested to expedite care. Please contact our Surgery Clinic at 916-734-2680 for referral information and appointments.

## One-stop acid reflux clinic

Dr. Shamseddeen co-directs a regionally unique Reflux Clinic, whose interdisciplinary team approach enables reflux patients to be seen in one clinic, secure a diagnosis, and leave with a treatment plan. The team offers the entire range of treatments for GERD and related complications, such as Barrett's esophagus, and also addresses achalasia and laryngopharyngeal reflux.



A photograph of two surgeons in blue scrubs and caps performing surgery in an operating room. One surgeon is in the foreground, focused on the procedure, while the other is visible in the background. Medical equipment and monitors are visible in the background.

# DIVISION OF PEDIATRIC GENERAL, THORACIC AND FETAL SURGERY

Developing a coordinated program with the region's health care systems has been a longtime goal for the division, which provides comprehensive general and thoracic surgical care for infants, children and adolescents, as well as rare and renowned expertise in fetal interventions. Faculty members have long and broad experience in both basic and complex problems, and in **conventional and minimally invasive techniques**.

#### **Unique Fetal Care and Treatment Center —**

A move to dedicated new space in 2020 will complement and enhance the capabilities of the UC Davis Fetal Care and Treatment Center, our region's only center for on-site fetal surgery. The center, led by Dr. Shinjiro Hirose, is inland Northern California's first comprehensive multidisciplinary fetal diagnosis and therapy center. It offers advancements in surgery and maternal-fetal medicine that allow for multiple avenues of intervention, including in utero or in real time during the birthing process.

**Interdisciplinary AVM care —** An interdisciplinary pediatric arterial venous management (AVM) board and multidisciplinary conference includes faculty in pediatric dermatology, pediatric surgery and pediatric radiology to enhance care for these specialized patients.

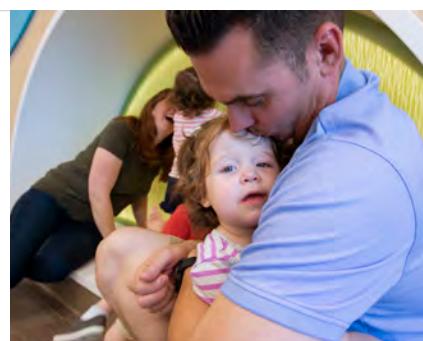
#### **Research and Publications**

**Regenerative spina bifida therapy nearing human trials —** Our program is also home to an extensive fetal care research program, including stem cell and tissue engineering for several diseases. Dr. Farmer and colleagues are making historic progress on a novel spina bifida therapy that combines in utero surgery with stem cell therapy, and earned a \$5.6 million grant to perform final preparations for human trial approval after demonstrating limb control improvements in lab animals.

---

#### **New home for level I-rated Children's Surgery Center**

UC Davis Children's Hospital was the first hospital on the West Coast and only the fourth in the nation to earn verification as a level I children's surgery center from the American College of Surgeons — and is still California's only level I center after a reverification last fall. Our new 20,000-square-foot Children's Surgery Center facilities complement and expand access to this expertise, with advanced OR technology and 24 pre- and post-op bays.



Breen Hardin, her husband Gatlin and their daughter Evie, 15 months, who had fetal surgery to successfully repair her spina bifida.



# FACULTY



## Chief, Pediatric Surgery

Shinjiro Hirose, M.D., F.A.C.S.

## Surgeon-in-Chief, UC Davis

Children's Hospital

Diana L. Farmer, M.D., F.A.C.S.

## Pediatric Surgery Specialists

Lisa Abramson, M.D., F.A.C.S.

Alana Beres, M.D.

Erin Brown, M.D.

Payam Saadai, M.D., F.A.C.S.

Jacob T. Stephenson, M.D., F.A.C.S.

Farmer helped pioneer in utero surgical treatment for spina bifida, and to prove it can improve brain development which reduces the need for a shunt and improves motor outcomes, doubling the rate of independent ambulation at 30 months. She teams with UC Davis Surgical Bioengineering Laboratory co-director Aijun Wang, Ph.D., on the current project, which involves human placenta-derived mesenchymal stromal cells and a biomaterial scaffold.

Another study published by Wang, Farmer and colleagues this spring identified exomes in stem cell secretions as keys to protecting neurons and reducing lower-limb paralysis. Wang and Farmer will use the results to optimize neuroprotective qualities of their treatment; Wang said the findings could also help produce a cell-free treatment.

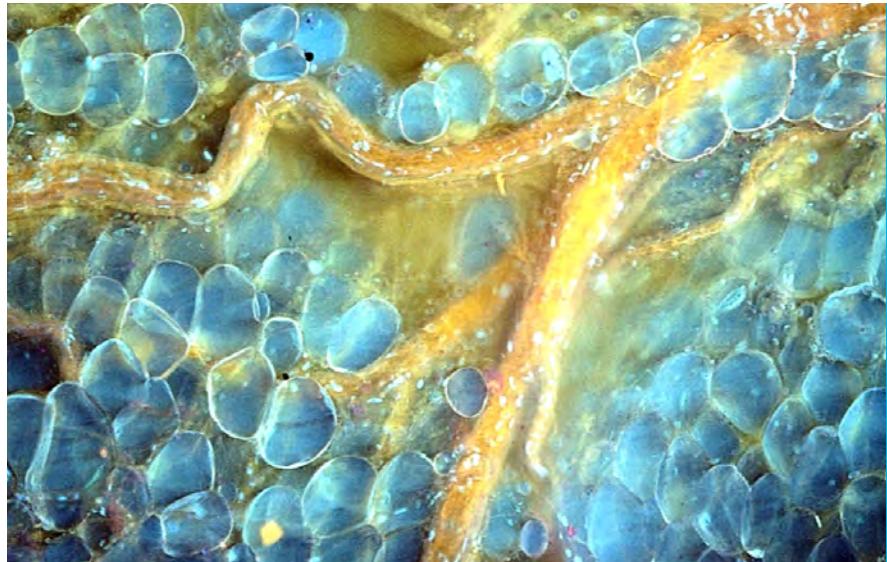
**Largest population-based study —**

Drs. Hirose, Saadai and division researchers published the largest population-based study summarizing current epidemiology of gastroschisis in California.

**Pediatric Colorectal Center —** Dr.

Saadai and collaborators participated in several articles, case studies and presentations about pediatric GI and colorectal conditions at the American College of Surgeons Clinical Congress and other national meetings. Saadai also organized the REACH (Research Education and Awareness for Children with Hirschsprung Disease) annual meeting.

**Pathology innovation —** Saadai and pathology vice chair Richard Levenson presented on Microscopy with Ultraviolet Surface Excitation (MUSE) at the Pediatric Scientific Colorectal Meeting. The UC Davis-developed technology uses UV LED light to generate diagnostic-quality images of tissue samples in minutes.



Dr. Farmer and colleagues are making **historic progress toward human trials for a novel spina bifida therapy**, which combines in utero surgery with stem cell therapy to improve motor function and help patients walk independently.

## Referral Information

**Pediatric Surgery appointments and referrals:**

**Monday–Friday: 8 a.m. to 5 p.m., 916-734-4148**

**Fetal Care and Treatment Center appointments and referrals:**

**call 916-794-BABY-2229 (916-794-2229)**

**email [fctc@ucdavis.edu](mailto:fctc@ucdavis.edu)**

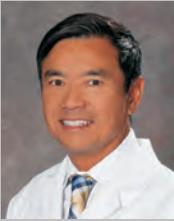
**Information and referral form available at [fetalcare.ucdavis.edu](http://fetalcare.ucdavis.edu)**



# DIVISION OF PLASTIC AND RECONSTRUCTIVE SURGERY

Our service includes a large faculty, with members nationally and internationally recognized in their subspecialties. Together they **provide the full spectrum of reconstructive care** for patients with breast deformities, congenital anomalies, hand injuries and facial trauma, and manage cosmetic issues such as concerns about body contour, facial aging and breast appearance.

# FACULTY



## Interim Chief, Division of Plastic & Reconstructive Surgery

Granger B. Wong, D.M.D., M.D.

## Plastic and Reconstructive Surgeons

Lee L.Q. Pu, M.D., Ph.D.

Michael S. Wong, M.D.

## Hand & Upper Extremity Surgeons

Chetan S. Irwin, M.D.

Andrew Li, M.D.

Clifford T. Pereira, M.D.

**Leadership roles** — Dr. Michael Wong is immediate past president of the California Society of Plastic Surgeons (CSPS), the nation's largest state plastic surgery society, and is a current CSPS visiting professor. Dr. Pu has been newly appointed as associate editor of the journal *Anesthetic Plastic Surgery*, a publication of the International Society of Aesthetic Plastic Surgery.

## Complex and comprehensive hand surgery services

Our services have expanded to include transfers of nerve, tendon and functional free muscle for nerve/spinal injuries and cerebral palsy. Amputee services include targeted muscle reinnervation (TMR) for stump pain/neuromas, and toe-to-thumb/finger transfers.

## Awards

UC Davis was chosen a host institute for the American Society for Surgery of the Hand Visiting Professor Lectures in 2019, and Dr. Pereira participated in an ASSH 2018–2019 International Travel Fellowship to China. Dr. Pu participated in visiting professorships in China, Switzerland, South Korea and Taiwan.

## Research and Publications

Works authored by Drs. Pereira, Pu, M. Wong, and G. Wong were published in major journals.

## Referral Information

**Cosmetic & breast reconstructive surgery (Cannery Business Park): 916-734-7844**

**Reconstructive surgery (Medical Center campus): 916-734-2858, Fax: 916-734-0803**

**Email: [plasticsurgery@ucdavis.edu](mailto:plasticsurgery@ucdavis.edu)**

## Panniculectomy in preparation for kidney transplant

UC Davis is the pioneer in this concept of removing high-risk tissue to help non-qualifying patients become good candidates for transplant. We published our six-year experience — the largest to date — in *Annals of Plastic Surgery* in 2015, and are evaluating use of negative pressure wound therapy on complications in a prospective randomized trial. This collaboration between transplant and plastics has improved access to a life-extending procedure and decreased wound complications after transplant.





# DIVISION OF SURGICAL ONCOLOGY AND SECTIONS OF ENDOCRINE AND HEPATOBILIARY SURGERY

Richard Bold, M.D.  
Surgical Oncology

**Complex cancers** such as gastrointestinal, liver, stomach and colorectal are a specialty, and breast cancers the focus of a special program. The **endocrine section** offers unique services for parathyroid, adrenal and pancreas disorders, and the **hepatobiliary section** for liver, gallbladder, bile duct and pancreatic diseases.



**New sarcoma services** — Dr. Canter, in conjunction with Chair R. Lor Randall and Dr. Steve Thorpe of the Department of Orthopaedic Surgery, developed a comprehensive Sarcoma Service. This combined surgical oncology-orthopaedic oncology program addresses the surgical needs of patients with bone or soft-tissue tumors.

The cancer center also launched the Sacramento region's only multidisciplinary clinic specializing in pediatric, adolescent and young adult sarcoma, which includes Dr. Randall. Dr. Canter is the surgical oncology liaison.

**Melanoma program** — Dr. Kirane started a melanoma program and local immunotherapy treatments for patients.

**Unique hepatobiliary expertise** — The section is currently the region's only program with surgeons board-certified and fellowship-trained in surgery oncology and hepatopancreatobiliary surgery. Our approach includes minimally invasive and robotic techniques, and seamless multidisciplinary integration with the Comprehensive Cancer Center.

### Radioactive seed localization for better cosmetic outcomes

Dr. Sauder is possibly the only doctor in Sacramento performing these surgeries for breast cancer, in which a smaller incision and lighter tissue removal may lead to a smaller scar. Sauder, a breast cancer-dedicated surgeon, also performs reconstruction and skin- and nipple-sparing mastectomies, and coaches med students to help prepare for internship.





# FACULTY



## Chief, Surgical Oncology

Richard J. Bold, M.D., F.A.C.S.

## Surgical Oncologists

Robert J. Canter, M.D., F.A.C.S.

Amanda R. Kirane, M.D.

Candice A. M. Sauder, M.D., M.Ed.

## Section of Endocrine Surgery

Michael Campbell, M.D.

## Hepatobiliary Surgery

Steven D. Colquhoun, M.D., F.A.C.S.

Sepideh Gholami, M.D., F.A.C.S.

**New endocrine services** — Include molecular profiling of indeterminate thyroid nodules, and multiphase 4D-CT for localization of hard-to-find parathyroid disease. We also started a new multi-disciplinary adrenal conference to improve tumor management. Dr. Campbell was asked to present at the American Association of Endocrine Surgeons annual meeting about successful practice-building.

**Physician-in-chief** — Dr. Bold has been appointed this title for the UC Davis Comprehensive Cancer Center, with clinical oversight of outpatient and inpatient services and the UC Davis Cancer Care Network sites throughout Northern California.

## Education

The hepatobiliary section plans to host a CME event focused on new trends and developments in hepatobiliary surgery, liver tumors, technology and management.

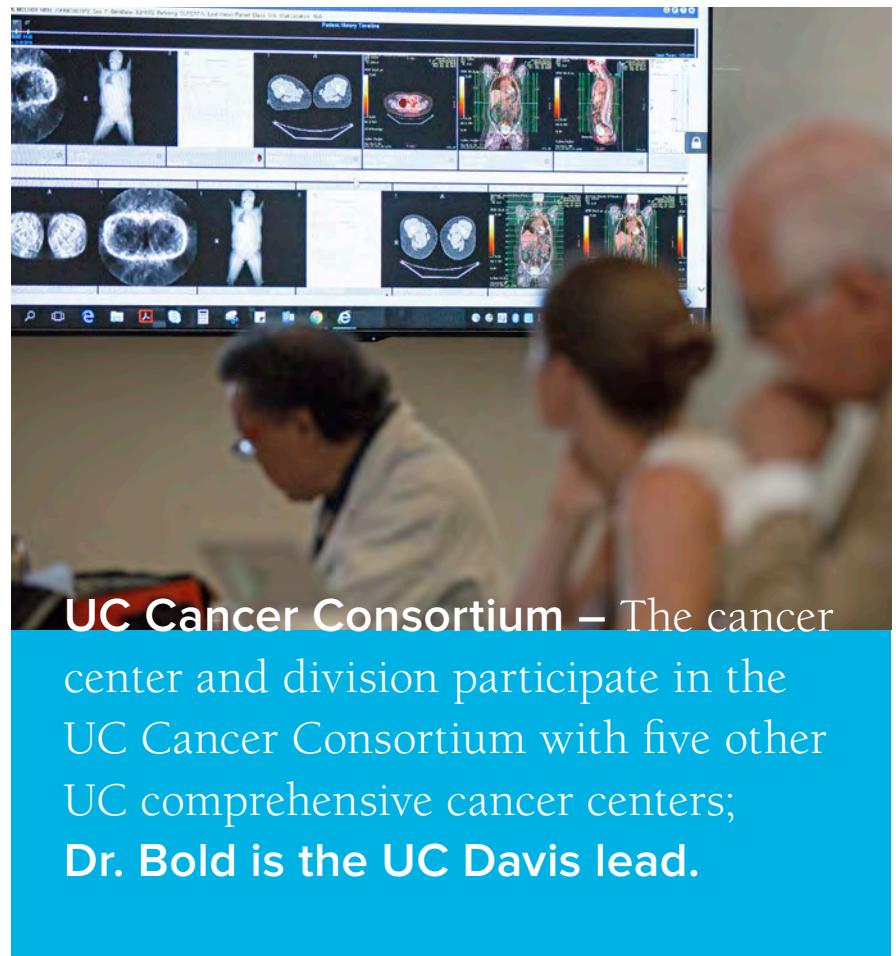
## Research and Publications

**Pinpoint radiotherapy for pancreatic cancer** — Dr. Bold and colleagues have been awarded a \$1 million SU2C grant from the Pancreatic Cancer Collective. Previous UC Davis work developed advanced imaging techniques to pinpoint pancreatic cancer, using positron emission tomography with a specially synthesized peptide that binds to tumor cell receptors. Bold's team will now develop radiotherapy that can be delivered through a radioactive isotope, using the same peptide.

## Comparative oncology

**immunotherapy** — Dr. Canter finished a UO1 grant “Enhancing Natural Killer Immunotherapy with First-in-Dog Trials of Inhaled Recombinant IL-15 and Superagonist IL-15 in Naturally Occurring Canine Cancers,” and was named co-director of comparative oncology.

**High-risk melanoma** — Dr. Kirane's K12 program work will support development of investigator-initiated trials in novel neoadjuvant therapies for high-risk melanoma – a first-in-kind approach for these patients – as well as corresponding identification of biomarkers of response to therapy.



**UC Cancer Consortium** — The cancer center and division participate in the UC Cancer Consortium with five other UC comprehensive cancer centers; **Dr. Bold is the UC Davis lead.**

**Raman spectroscopy** — Dr. Campbell was co-PI on a grant to evaluate the utility of Raman spectroscopy for patients with indeterminate thyroid nodules.

**Tumor-on-a-chip** — Dr. Gholami has received a grant for her research on immune modeling of colorectal liver metastases on a chip, in conjunction with the Comprehensive Cancer Center. Tumor-on-a-chip technology allows the creation of microtumors from patient samples, for pre-treatment drug efficacy testing.

## Referral Information

Information or referral:

**916-703-5210**

Endocrine:

**916-703-5233**

Cancer Center Advice Nurse Line:  
**916-734-3700**

24-hour emergency referral:  
**916-734-2011**  
Fax: **916-703-5266**

Physician Referral Center:  
**800-4-UCDAVIS**  
**(800-482-3284)**



# DIVISION OF TRANSPLANT SURGERY

UC Davis' kidney transplant program launched in 1985, and completed a handful of transplants that first year. Today it's one of the higher-volume programs in the nation, performing between 268 and **402 total adult and pediatric transplants each year since 2011.**



**One of the nation's highest-volume centers** — We remain one of America's busiest transplant departments. In 2018 we performed roughly 300 kidney transplants, placing our transplant center in the nation's top ten. We also placed in nation's top five programs for transplants from deceased donors.

**Making transplants more accessible —**

We continue to acquire many difficult-to-transplant kidneys that other centers lack the expertise to use, and utilize them to save and extend lives. Dr. Troppmann is currently looking to increase our deceased donor program, which now also includes one of the largest pediatric donor programs nationally.

**Nationally ranked —** *U.S. News & World Report* ranked UC Davis Medical Center 26<sup>th</sup> in the nation for adult nephrology 2019–20 and UC Davis Children's Hospital 33<sup>rd</sup> for pediatric nephrology. UC Davis was also high-performing in adult diabetes and endocrinology. We are proud to continue our close work with UC Davis Health's Department of Internal Medicine.

Outcomes for our kidney transplant patients have consistently **exceeded the national average.**

### Milestones in transplantation

Our transplant center performed its 4,000<sup>th</sup> kidney transplant in September 2018. In 2016 we led the nation in volume of kidney transplants performed (402), and remain one of America's busiest transplant departments.

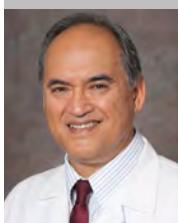


# 4,000<sup>th</sup>

kidney transplant performed by our Transplant Center



## FACULTY



**Chief, Transplant Surgery**  
Richard V. Perez, M.D.

**Kidney Transplant Surgeons**  
John P. McVicar, M.D.  
Junichiro Sageshima, M.D.  
Christoph Troppmann, M.D.

**Transplant Nephrologists**  
Muna Alnimri, M.B.B.S.  
Ling-xin Chen, M.D., M.S.  
Mehul Gandhi, M.B.B.S.  
Yihung (Eric) Huang, M.D.

## Research and Publications

### Ex vivo normothermic perfusion (EVNP)

— We were successful early adopters of cold pulsatile perfusion to assess and restore kidneys for transplantation, and we continue to test ex vivo normothermic perfusion (EVNP) as a possible means to further assess suitability of high-risk kidneys.

In February we published the results of our EVNP work with seven kidneys in the journal *Transplantation*.

We found that favorable perfusion characteristics and immediate function after a 3-hour course of EVNP suggest that high-risk kidneys subjected to long CIT may have been considered for transplantation.

We suggest that combined use of ex vivo hypothermic and normothermic perfusion may be a useful strategy to more adequately assess and preserve high-risk kidneys. A clinical trial will be necessary to validate usefulness.

### Other activities — Research

continues in the area of transplant immunology and pancreatic islet cell transplantation, and a clinical trial of pancreas islet cell transplantation is planned for the near future.



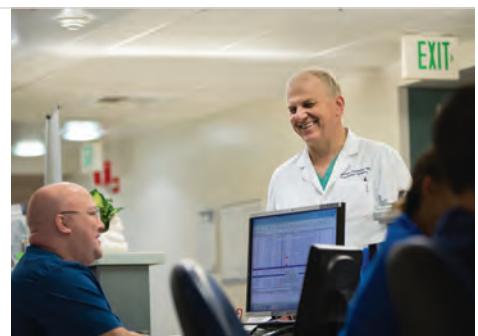
We continue to acquire many difficult-to-transplant kidneys that other centers lack the expertise to use, **and utilize them to save and extend lives.**

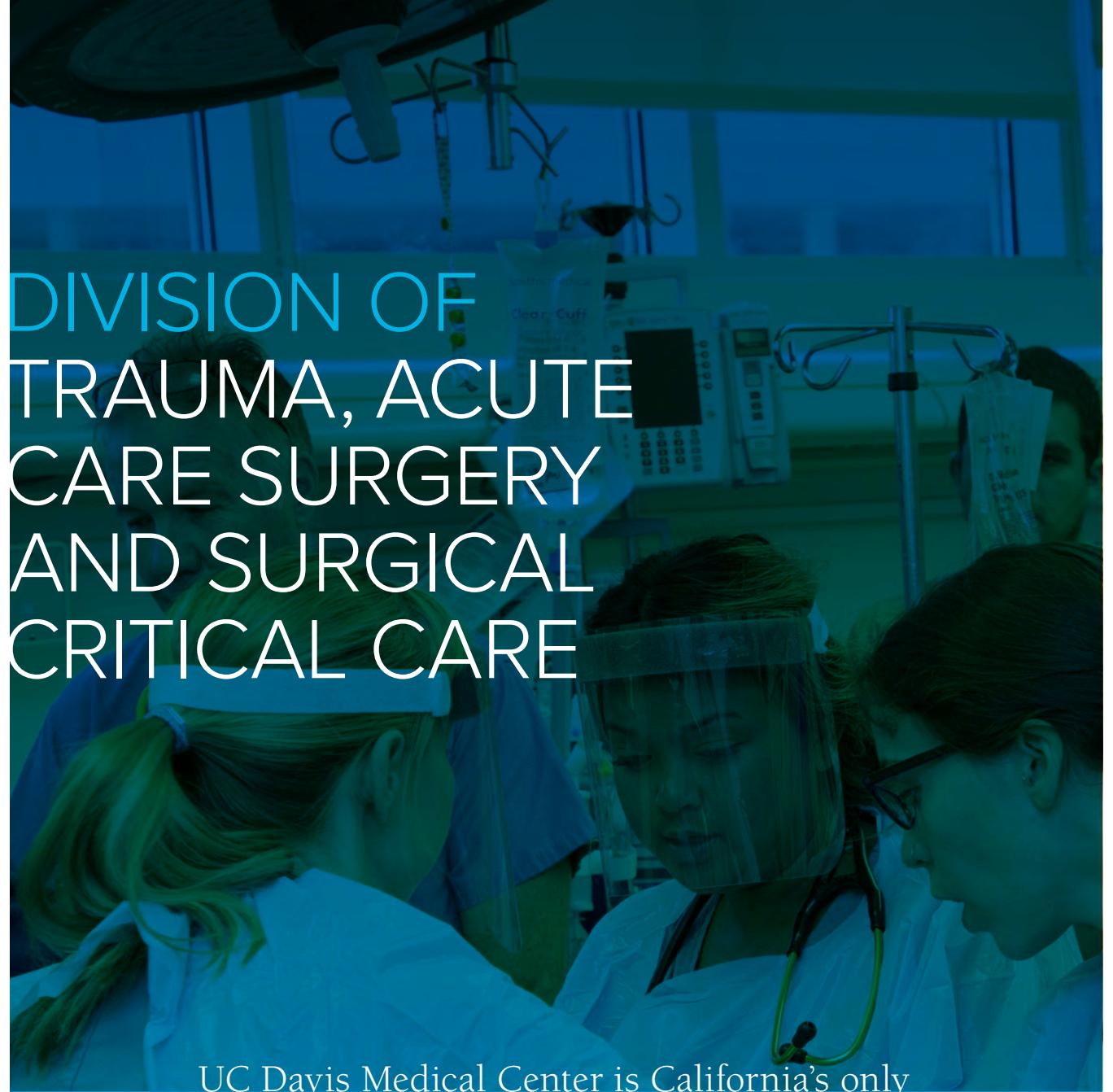
## Referral information

Our team evaluates new patients twice a week in our Sacramento clinic, and we have outreach clinics in Modesto, Merced, Reno, Walnut Creek, Redding and Red Bluff.

Referral forms, instructions and more information on outreach clinics are available at [transplant.ucdavis.edu](http://transplant.ucdavis.edu).

If you have any questions, please don't hesitate to contact our staff at 800-821-9912 or [transplant@ucdavis.edu](mailto:transplant@ucdavis.edu).





# DIVISION OF TRAUMA, ACUTE CARE SURGERY AND SURGICAL CRITICAL CARE

UC Davis Medical Center is California's only level I trauma center north of San Francisco; one of only three in the state with level I verification for both adult and pediatric trauma; and **one of the nation's highest-volume level I trauma centers.**

**National leadership roles** — We have a presence in several national and international organizations:

- Dr. Shatz is incoming president of the Western Trauma Association, and Drs. Cocanour and Jurkovich are past presidents.
- Dr. Jurkovich is president of the NTI (National Trauma Institute) and co-president of the Coalition for National Trauma Research (CNTR), and was selected to give the 2020 Scudder Oration on Trauma by the ACS. He is also past president of the American Association for Surgery of Trauma (AAST), where Dr. Galante led the military liaison committee.
- Drs. Cocanour, Palmieri and Shatz serve on the ACS Committee on Trauma (COT), and Dr. Galante vice-chairs the state COT.

**First BEST site** — This past year we became the first BEST (Basic Endovascular Skills in Trauma) site on the West Coast, and one of the nation's first three. The American College of Surgeons course teaches Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA).

#### Education

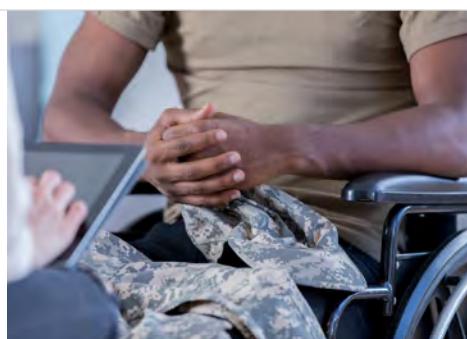
**Master Surgeon Educator** — Dr. Galante was inducted into the ACS Academy of Master Surgeon Educators in October.

**ACS Comprehensive Education Institute** — The UC Davis Center for Virtual Care was reaccredited as an ACS Comprehensive Education

---

#### Military trauma readiness

We are one of a handful of sites who have partnered with the military (U.S. Air Force) to integrate their surgeons, physicians, and medical teams into our trauma center, helping to improve military readiness to care for the injured warrior. Our relationship with the Air Force goes back 25 years.





# FACULTY



## Chief, Trauma, Acute Care Surgery & Surgical Critical Care

**Joseph M. Galante, M.D.**

### Surgeons

John T. Anderson, M.D.

Ian E. Brown, M.D.

Christine Cocanour, M.D.

Eleanor Curtis, M.D.

Rachel A. Hight, M.D.

Gregory Jurkovich, M.D.

David Leshikar, M.D.

Hilary Loge, M.D.

Ho Phan, M.D.

Edgardo Salcedo, M.D.

David V. Shatz, M.D.

Garth Utter, M.D.

David Wisner, M.D.

Scott A. Zakaluzny, M.D.

### Trauma Division Research Manager

Chancey Sweeney, M.P.A., M.H.A.

Institute — an honor bestowed on only about 90 centers worldwide — and recognized as an “outstanding” institute for excellent performance assessments in code blue sessions. The center includes simulators for laparoscopic, endoscopic, endovascular and robotic procedures. Dr. Salcedo is surgical director, and Dr. Ian Julie medical director.

**Best resident papers** — Residents mentored by division faculty won the AAST best resident paper competition, the ACS state Committee on Trauma (COT) resident paper competition, and two regional COT resident competitions.

**Civilian-military partnership** — Dr. Bowyer, creator of the well-respected Advanced Surgical Skills for Exposure

in Trauma (ASSET) course, and his team at Uniformed Services University have built upon the course to make it more valuable for military pre-deployment training. ASSET+ includes additional elements on external fixation, craniotomy, lateral canthotomy, and c-section/obstetrics emergency bleeding. ASSET+ will now be taken on the road, including to Davis/Travis Air Force Base, and David Grant Medical Center experts will help teach “plus” portions.

#### **Research and Publications**

**AAST research award** — Ian Brown is the 2019 recipient of the American Association for the Surgery of Trauma Research and Education Fund Scholarship Award, for his project entitled “P-Selectin-Dependent Pulmonary Arterial Thrombosis in Blunt Thoracic Trauma.” Dr. Brown and his lab have shed new light on the natural history of vascular thrombus formation in trauma, and potential acute and chronic implications on patient outcomes.

**PTSD** — We completed an NIH study examining post-traumatic stress disorder in trauma patients with the University of Washington, and served as study co-PI and site PI.

**Vascular** — We also completed a National Trauma Institute/Department of Defense study prospectively studying traumatic vascular injuries.



Our community youth violence intervention program, led by Ian Brown, M.D., and Christy Adams, R.N., M.P.H., Ph.D., works with community leaders to **prevent violence among young people in high-risk communities.**

#### **Referral Information**

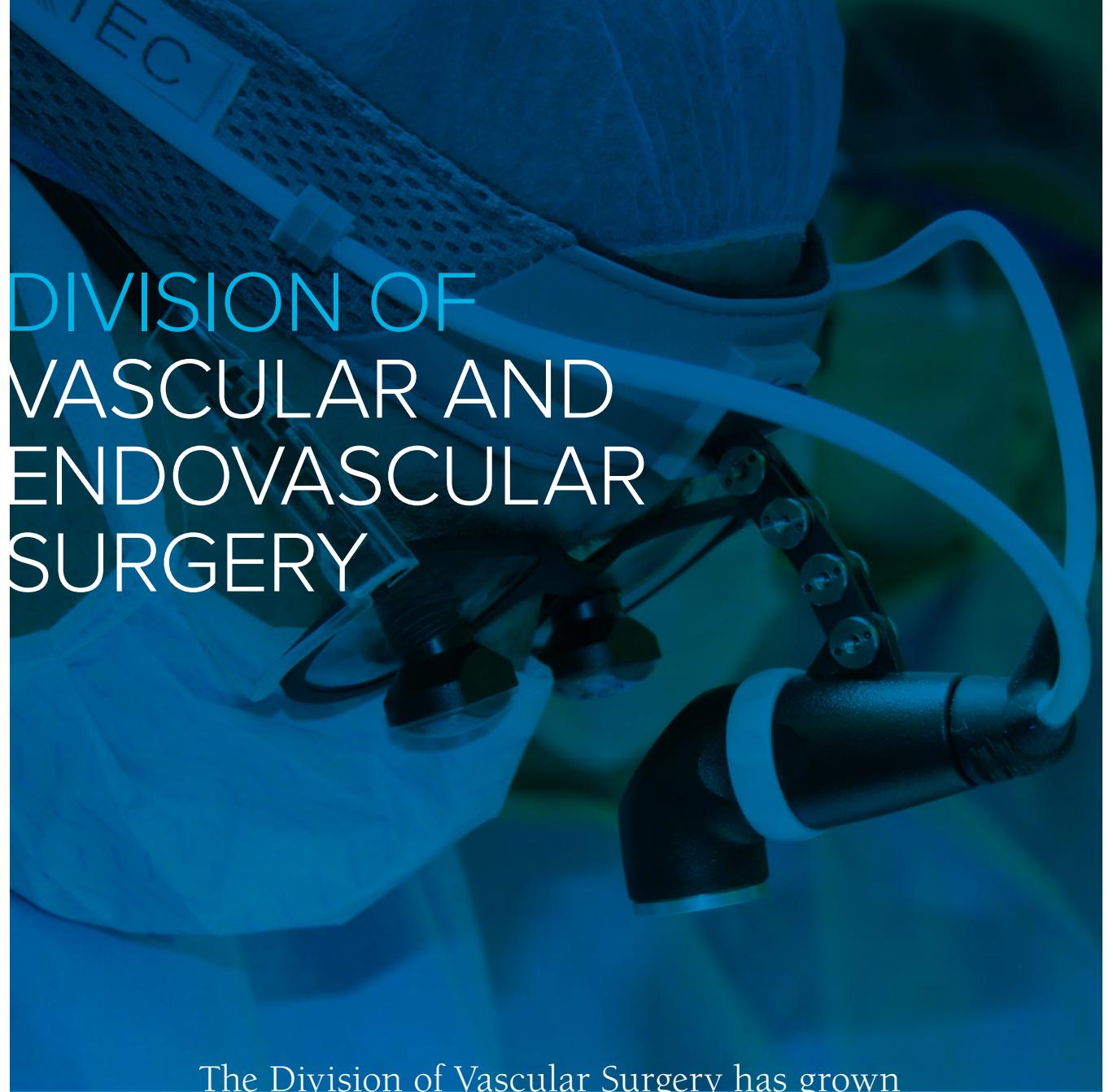
**Information or referral:**

**916-734-2678**

**Fax: 916-734-7755**

**24-hour emergency referral:**

**916-734-8200**



# DIVISION OF VASCULAR AND ENDOVASCULAR SURGERY

The Division of Vascular Surgery has grown to become **the region's largest vascular specialty group**, with unparalleled diagnostic and treatment infrastructure. Faculty members are fellowship-trained at world-renowned centers, and provide the full range of diagnosis and care for blood vessel diseases of all types and acuties.

**National leader joins as chief —**

Dr. Mell joined us from Stanford University, where he was medical director of the Vascular Clinic and Stanford Healthcare Ambulatory Specialty Care, and vice chair of clinical affairs for the surgery department. He is an expert in promoting early recognition of vascular disease and a national leader in defining health policy for managing and treating aortic disease.

**Early adopters —** We were one of the first units in the Pacific Northwest to perform petticoat stent grafts for complicated type B aortic dissections.

**New Complex Aorta Program —** We created a new Complex Aorta Program run by Dr. Victor Rodriguez, whom we recruited to serve as faculty in both our vascular and cardiothoracic divisions. The program's interdisciplinary team detects and treats the full range of arterial diseases, and provides access to new surgical techniques and clinical trials.

**Tailored treatment plans —** Our aortic center is uniquely multidisciplinary and our vein center uniquely comprehensive, allowing for optimal individualized treatment planning. We can provide complete aorta care in different modalities, from open replacement to endovascular surgery, and tailor plans for venous disorders to address aesthetic and medical concerns. Our noninvasive vascular lab is California's busiest.

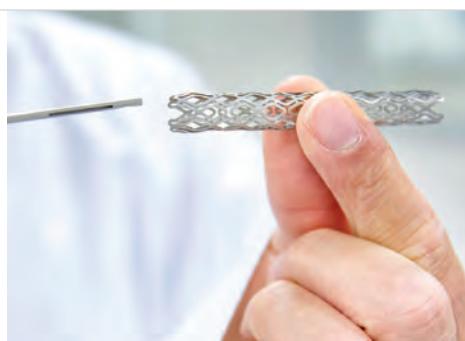
The UC Davis Vascular Center coordinates efforts with **specialists in related fields.**

---

**Transcarotid artery revascularization (TCAR)**

Our Vascular Center was one of the region's first providers and has the most experience to offer the TCAR procedure for patients with complex carotid artery disease, to help reduce treatment-related stroke risk.

TCAR stents travel less distance; loosened material travels away from the brain to larger, lower extremity vessels; and treatment time is reduced by up to half.





# FACULTY



**Chief, Vascular Surgery**  
Matthew Mell, M.D., M.S.

**Vascular Surgeons**  
Nasim Hedayati, M.D.  
Misty Humphries, M.D.  
Mimmie Kwong, M.D.  
Steven Maximus, M.D.  
Victor M. Rodriguez, M.D.  
William Yoon, M.D.

### **Vascular Quality Initiative (VQI) —**

We are now participating in a full complement of arterial modules to assure high-quality outcomes.

### **Education**

We have expanded our program to educate and mentor undergraduate research assistants in our new program RESURG (Research Experience in Surgery).

### **Research and Publications**

#### **New observational studies —**

For Varithena injectable foam for varicose veins, and the MERIT study for PAH.

### **Awards**

#### **Endowed professor —**

Dr. Mell has been recognized as the Pearl Stamps Stewart Endowed Professor in Vascular Biology.

#### **Award for telemedicine research —**

Dr. Humphries received an award from the NIH's Mentored Patient-Oriented Research Career Development Award program for her project titled "Evaluating Implication of Comprehensive Assessment and Telemedicine Consultation to Prevent Amputations for Patients with Lower Extremity Ulcers in Rural Health Clinic."



## **Clinical Trials – Our clinical research program includes two new stem cell trials** the Hemostemix and PACE study.

We are continuing our participation in the BEST CLI study that compares open versus endovascular revascularization procedures for PAD.

### **Referral Information**

#### **Physician Referrals**

#### **Vascular Center Clinic**

**916-734-3800**

#### **Clinical Trials/Research**

**916-734-4156**

#### **UC Davis Health**

#### **Physician Referral Center**

**800-4-UCDAVIS**

**(800-482-3284)**

[referrals.ucdavis.edu](http://referrals.ucdavis.edu)



## Socially Responsible Surgery

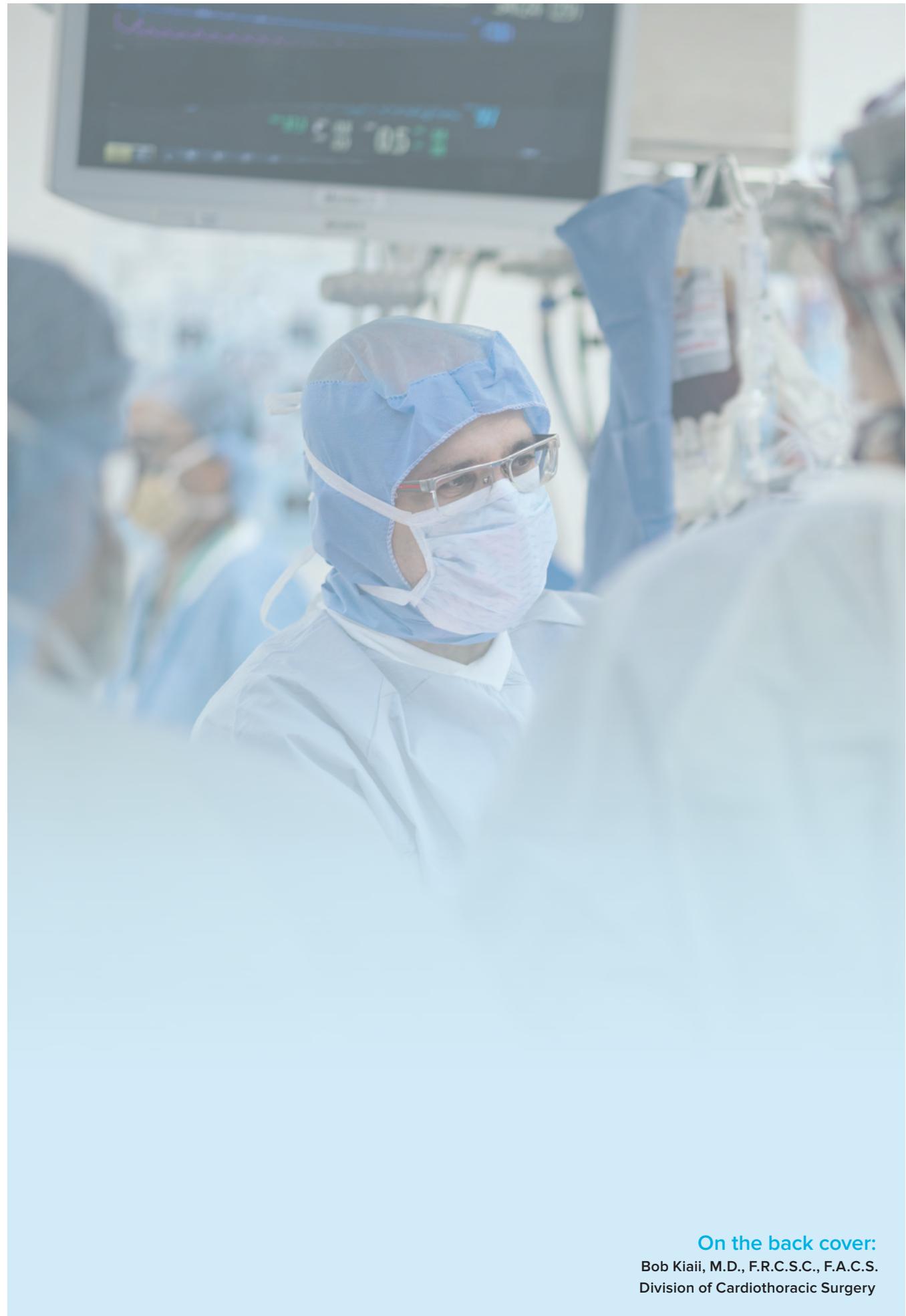
In 2014 Boston University Medical Center founded Socially Responsible Surgery (SRS) to help establish social responsibility as a core value of surgical practice.

In 2018, general surgery resident Dr. Kara Kleber founded the UC Davis Department of Surgery Chapter of Socially Responsible Surgery.

The SRS mission recognizes social responsibility as an essential component of global health, and aims to identify opportunities for leadership, research and collaboration in the training of globally minded surgeons committed to surgical equity. This includes equal access to surgical care; eliminating health care disparities; increasing patient advocacy; and educating and serving our local and global community.

As the only ACS level I trauma center and quaternary referral center north of San Francisco, UC Davis Health is ideally placed to positively influence discussions on surgical inequity in Northern California and beyond.





**On the back cover:**

Bob Kiaii, M.D., F.R.C.S.C., F.A.C.S.  
Division of Cardiothoracic Surgery



**UCDAVIS  
HEALTH**

**Department of Surgery**

2335 Stockton Blvd.  
Sacramento, CA 95817  
916-734-3528

Referrals: [health.ucdavis.edu/referrals](http://health.ucdavis.edu/referrals)  
**800-4-UCDAVIS (800-428-3284)**