

NEWS



Department of Surgery

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

OCTOBER 2014

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A WORD FROM THE CHAIR



It is with great pleasure that we present this newsletter to you. It has certainly been an exciting and productive time for me to be part of the University of Colorado School of Medicine Department of Surgery. Several months ago we held our inaugural Research Symposium and had Clifford Ko, MD, Director of the American College of Surgeons National Surgical Quality Improvement Program, as our key speaker. It was a very successful event and we plan to make it an annual occur-

rence. Our 10th Annual Alan R. Hopeman, MD Lectureship brought another honored guest to our campus, Richard She-min, MD Executive Vice Chairman and Chief of Cardiac Surgery at the David Geffen School of Medicine at UCLA.

We have seen much growth within the department. Since July of this year we have added 15 faculty, 5 researchers, and 6 staff. Our pursuit of excellence continues to be a draw to those seeking professional growth and development in the clinics, operating rooms, laboratories, and teaching venues. It is a privilege to work amongst them. Our researchers are making excellent progress in many fields of study thanks to

an additional \$5.5 million in new funding secured this past year through various grants.

On a more recreational (and team-building) note, we recently held our 2nd annual Surgical Mountain Assault Series Hike (SMASH-2). This year's challenge was the 14,060 foot peak of Mt. Bierstadt. Approximately 70 participants from around campus joined the Department Surgery in our ascent. We sincerely hope you enjoy this newsletter.

Richard D. Schulick

Richard D. Schulick, MD, MBA, FACS
The Aragón/Gonzalez-Gústí Chair
Professor & Chair

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A GENEROUS GIFT FROM GREG FOX

CU-Boulder Leeds School of Business graduate **Greg Fox** has a passion for fighting pancreatic cancer. New technologies are accelerating the pace of discoveries in the basic, translational and clinical sciences, and cancer researchers—and ultimately

patients—are reaping the benefit.

A generous \$100k gift from Fox will help to fund referring physicians to create awareness of the University of Colorado Hospital Pancreatic & Biliary Center as a Center of Excellence—broadening awareness of the

center's quality care and outstanding outcomes. "This gift supports the community by providing prospective patients with the awareness and access to a top center—thereby enhancing patient care with leading CU physicians right here in Colorado," Fox says.

SCIENTISTS FIND PROTEIN THAT BLOCKS CANCER GROWTH

A team of researchers has found a new way to block the activity of a protein that is known to drive cancer growth.

University of Colorado Cancer Center researchers stated that a protein called Ral is linked to the growth and spread of pancreatic, prostate, lung, colon and bladder cancers.

“When you want to keep an alligator from biting you, you can tie its mouth shut. We took another approach—we put a stick in its mouth to hold it open,” said Dan Theodorescu, MD, PhD, professor of Urology and Pharmacology, according to a news release.

The researchers set out to find what changes drove inactive Ral protein to become active. They found that

inactive Ral protein has a cavity that disappears when the protein is activated. The team wanted a molecule that could act as a “stick” to keep this mouth open.

The team looked at 500,000 potential compounds that could fit into this cavity. They shortlisted 88 molecules and conducted trials on human cancer cells to find one molecule that could block the protein. The researchers found some molecules that reduced Ral activation in lung cancers. One compound—RBC8—was the most successful in inactivating the protein in metastasis form. The team then refined their research and produced derivatives of RBC8. One such derivative called BQU57 was more effective than the parent compound in blocking the

activity of Ral.

“We still need to optimize these compounds and then characterize these agents for toxicity in several animal species and determine their optimal route of delivery, such as oral or intravenous before moving to the clinic,” Theodorescu said in a news release. “But we see this work as a valuable first step in the development of a novel class of therapeutic agents directed at Ral. The concept of targeting sites on proteins that collapse upon activation, and whose collapse is required for activation, could in principle be used to discover drugs aimed at other proteins driving human disease as well.”

The study is published in the journal *Nature*.

“When you want to keep an alligator from biting you, you can tie its mouth shut. We took another approach - we put a stick in its mouth to hold it open.” Dan T.



Dan Theodorescu, MD, PhD

SMASH 2 HIKE - CONQUERING MT. BIERSTADT



Dr. Schulick and Dr. Meacham
Hike Organizers



DR. TREVOR NYDAM RECEIVES THE 2014 ASTS ASTELLAS FACULTY DEVELOPMENT GRANT - \$100,000

The American Society of Transplant Surgeons (ASTS) continues its commitment to provide qualified ASTS Members with research funding in the field of organ transplantation. It is designed to support a junior faculty member in the development of transplant research so that further funding can be obtained.

This year's recipient is Dr. Trevor Nydam below is his submission.

Defining the role of XIAP in renal cold ischemia and apoptosis

Synopsis: Failure of a kidney post-transplant is referred to as Delayed Graft Function (DGF). DGF occurs in up to 50% of cadaveric transplants and independently predicts reduced 1- and 5-year kidney transplant survival. Before transplanta-

tion, donor kidneys are cooled to 4°C (referred to as cold-ischemia-CI) to delay ex vivo cell death. Kidneys can only sustain limited CI, and DGF significantly increases when CI time exceeds 30 hours. Prolonged CI followed by warm reperfusion (WR) during implantation is a risk factor for DGF. Widespread apoptotic renal tubular epithelial cell (RTEC) death caused by caspase-3 is a feature of kidneys with prolonged CI/WR. CI/WR during hibernation is a unique natural model we have used to understand DGF. Hibernating ground squirrel (GS) kidneys survive CI for several days in torpor followed by WR in Arousal without kidney injury or RTEC apoptosis. Protection from apoptosis in hibernating GS is associated with increased X-linked inhibitor of apoptosis protein (XIAP).

Our preliminary data indicates that CI/WR of non-hibernating mouse RTECS is associated with decreased XIAP, increased caspase-3 and apoptosis. XIAP is inhibited by a protease HTRA2, which can be chemically inhibited by UCF-101. Use of UCF-101 to prevent injury to donor kidneys subjected to prolonged CI/WR is a unique and untried approach derived from studies of hibernators. Specific Aim 1 investigates the protective effect of XIAP up-regulation (by UCF-101) in a mouse kidney transplant model. Specific Aim 2 investigates XIAP expression and RTEC apoptosis in biopsies from human kidney transplants with prompt graft function or DGF.



Trevor Nydam, MD

Don't forget to pick up your hat and mug!

Stop by Academic Office Building One, 6th floor, room 6111 to get yours.



Coming Next Summer—SMASH 3!



2014 ALAN R. HOPEMAN LECTURESHIP IN CARDIOTHORACIC SURGERY

This year marked the 10th Annual Alan R. Hopeman Lectureship in Cardiothoracic Surgery. Dr. Richard J. Shemin of the David Geffen School of Medicine at UCLA was our invited speaker. Since 2008, Richard J. Shemin, MD, one of the nation's top heart surgeons, has held the position of Executive Vice Chairman of the Department of Surgery, Chief of Cardiac Surgery, and Co-director



Dr. Fullerton presenting plaque of appreciation to Dr. Shemin.

of the Cardiovascular Center at the David Geffen School of Medicine at UCLA. His national reputation in performing valvular (mitral and aortic) repair and replacement serves as a platform for his pioneering studies to evaluate new technology for mechanical

prostheses and bioprotheses, as well as surgical therapy for improving the long-term survival of heart-failure patients. He continues to be a leader in the development of minimally invasive cardiac surgery, specializing in robotic-assisted procedures, and collaborates with UCLA's Center for Advanced Surgical and Interventional Technology. Dr. Shemin initiated UCLA's participation in the Society of Thoracic Surgeons National Database to standardize quality improvement and patient safety. His current research aims to induce stem cells to become cardiovascular cells, in order to repair or replace damaged areas of the heart.

Dr. Shemin attended Boston University's six-year medical program and received his medical degree in 1974. He received his bachelor's degree magna cum laude, was elected to Phi Beta Kappa, and was elected to the Alpha Omega Alpha Honor Medical Society in his junior year. After his surgical training at Harvard's Peter Bent Brigham Hospital, Dr. Shemin served as clinical associate in cardiac surgery at the National Heart, Lung and Blood Institute of the National Institutes of Health. He also

trained in cardiothoracic surgery at New York University Medical Center. Dr. Shemin is a certified Diplomate of the American Board of Thoracic Surgery, for which he served as director for six years. He was elected vice chair in 2011 and became chair in 2013 for two years. After pursuing work in heart transplantation at Stanford University, Dr. Shemin helped lead the team

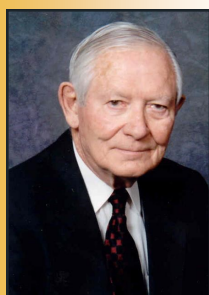
at Brigham and Women's Hospital to perform, in 1984, the first heart transplant in New England. He also served as the director of its Cardiac Surgery Intensive Care Unit. He was recruited back to Boston University School of Medicine, becoming Professor and Chairman of Cardiothoracic Surgery, and later was named Vice Chairman, Division of Surgery. In addition, he co-directed the Cardiovascular Center at Boston Medical Center that participated in the Medicare Participating Heart Bypass Center Demonstration to evaluate clinical, financial, and operational performance.

Dr. Shemin has held many leadership and board positions with prestigious associations, societies, and other organizations. He has been honored with the

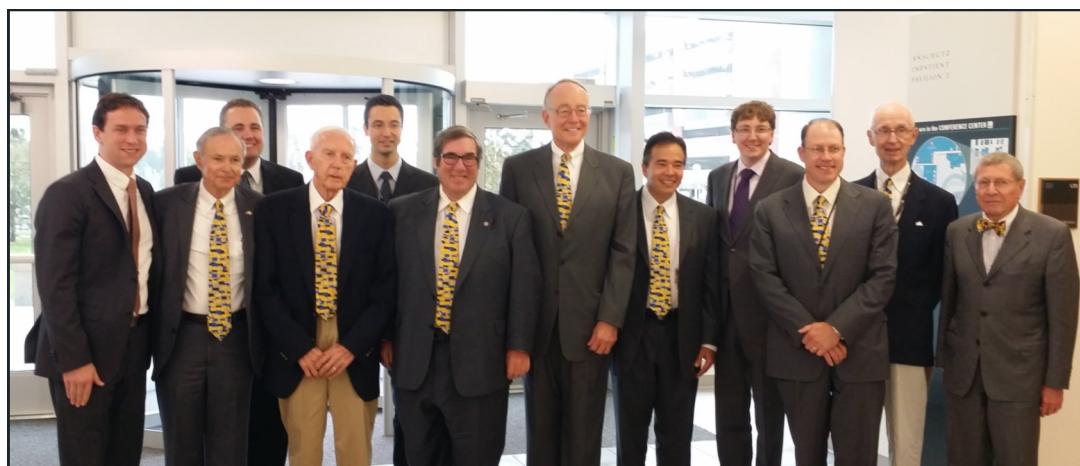


Richard J. Shemin, MD

Distinguished Alumnus Award from both the Boston University School of Medicine and Boston University, and he was recognized for Outstanding Leadership from the Thoracic Surgery Foundation for Research and Education. Dr. Shemin frequently lectures worldwide and has been awarded multiple research grants from peer-review organizations, serving as co-principal investigator for major revascularization trials and new technologies in valvular heart disease. Dr. Shemin currently serves on the editorial board for both the *Journal of Cardiac Surgery* and the *Journal of Thoracic and Cardiovascular Surgery*, was an associate editor for *Circulation* and is a guest reviewer for numerous other leading journals.



Alan R. Hopeman, MD
Professor Emeritus



Front Row: Justin Reeves, MD; Fred Grover, MD; Gerald Rainer, MD; Richard Shemin, MD; David Fullerton, MD; Richard Schulick, MD; Joseph Cleveland, MD; Jim Chandler, MD

Back Row: David Mauchley, MD; Giorgio Zanotti, MD; Ryan Shelstad, MD; Bruce Paton, MD

Congratulations to our 2014 Top Doctors!



THE LIST

University of
Colorado Denver

DEPARTMENT
OF SURGERY
2014



Richard D. Schulick



David N. Campbell



James Jagers



Denis D. Bensard



Jennifer L. Bruny



Frederick M. Karrer



David Partrick



Duncan T. Wilcox



Frederic W.B. Deleyiannis



Robert C. McIntyre, Jr.



Michael J.V. Gordon



Joseph C. Cleveland, Jr.



John D. Mitchell



Paul D. Maroni



Mark Nehler

COMPLEX GENERAL SURGICAL ONCOLOGY

Richard D. Schulick
UNIVERSITY
1665 Aurora Court | Aurora, 80045

CONGENITAL CARDIAC SURGERY

David N. Campbell
CHILDREN'S; UNIVERSITY
13123 E. 16th Ave. | Aurora 80045

James Jagers
CHILDREN'S; UNIVERSITY
13123 E. 16th Ave. | Aurora 80045

PEDIATRIC SURGERY

Denis D. Bensard
CHILDREN'S; DENVER HEALTH, ST. JOSEPH
777 Bannock St. | Denver 80204

Jennifer L. Bruny
CHILDREN'S
13123 E. 16th Ave. | Aurora 80045

Frederick M. Karrer
CHILDREN'S
13123 E. 16th Ave. | Aurora 80045

PEDIATRIC SURGERY

David Partrick
CHILDREN'S;
13123 E. 16th Ave. | Aurora 80045

PEDIATRIC TRANSPLANT HEPATOLOGY

Frederick M. Karrer
CHILDREN'S
13123 E. 16th Ave. | Aurora 80045

PEDIATRIC UROLOGY

Duncan T. Wilcox
CHILDREN'S
13123 E. 16th Ave. | Aurora 80045

PLASTIC SURGERY (WITHIN THE HEAD/NECK)

Frederic W.B. Deleyiannis
CHILDREN'S; UNIVERSITY
13123 E. 16th Ave. | Aurora 80045

SURGERY

Robert C. McIntyre, Jr.
CHILDREN'S; UNIVERSITY
12631 E. 17th Ave. | Aurora 80045

SURGERY OF THE HAND

Michael J.V. Gordon
UNIVERSITY; VETERANS
1635 Aurora Court | Aurora 80045

SURGICAL CRITICAL CARE

Robert C. McIntyre, Jr.
CHILDREN'S; UNIVERSITY
12631 E. 17th Ave. | Aurora 80045

THORACIC AND CARDIAC SURGERY

Joseph C. Cleveland, Jr.
UNIVERSITY; VETERANS
12631 E. 17th Ave., C-310 | Aurora 80045

John D. Mitchell
UNIVERSITY; NATIONAL JEWISH, VETERANS
1635 Aurora Court | Aurora, 80045

UROLOGY

Paul D. Maroni
UNIVERSITY
1635 Aurora Court | Aurora 80045

VASCULAR SURGERY

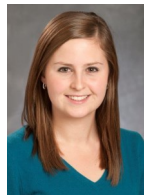
Mark Nehler
UNIVERSITY
12631 E. 17th Ave. | Aurora 80045

WELCOME NEW HIRES!

Cardiothoracic Surgery



Shantel Ho
Patient Affairs
Coordinator I



Courtney Matter, PA
Instructor



Jeanne Wiser, PA
Instructor

CU Development



Liz Muscatello
Director of Development

Finance and Administration



Kathleen O'Keefe
Director of the Office
of Education

GI, Tumor, Endocrine & Burn Surgery



Christian Bartsch, PA-C
Instructor



Nanette LaFrance
Executive Assistant



Melissa Quist, PA-C
Instructor



Arek Wiktor, MD
Assistant Professor



Franklin Wright, MD
Assistant Professor

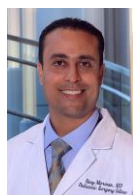
Pediatric Surgery



[Ann Kulungowski, MD](#)
[Assistant Professor](#)



[Jonathan Roach, MD](#)
[Assistant Professor](#)



[Ahmed Marwan, MD](#)
[Assistant Professor](#)



Junwang Xu, PhD
Assistant Professor

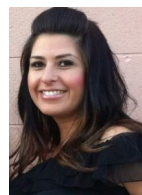


Carlos Zgheib
Post Doc Fellow

Plastic and Reconstructive Surgery



Pamela Herrera, RN
Health Care
Professional



Felicia Martinez
Patient Affairs
Coordinator



Megan Olson
Patient Affairs
Coordinator

Transplant Surgery



Chelsea Ruller
Professional Research
Assistant

Urology



[Kirk Anderson, MD](#)
[Fellow/Instructor](#)



Joseph Hypolite
Professional Research
Assistant



Anna Malykhina, PhD
Associate Professor



Steven Steinberg, MD
Assistant Professor

Vascular Surgery



Darci Dreiling
Division Manager



[Natalia Glebova, MD, PhD](#)
[Assistant Professor](#)



[Ashley Vavra, MD](#)
[Assistant Professor](#)

2014 INAUGURAL RESEARCH SYMPOSIUM



The Department of Surgery held its inaugural Research Symposium on Monday, June 2, 2014.



Out of 40 proposals submitted by residents within the Department of Surgery, 16 were selected for presentation at the symposium.



Eight presentations were in clinical research and eight in basic-science research. Topics covered a wide range of interest too numerous to list.

The featured speaker at the symposium was Dr. Clifford Ko, Director of the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP). Dr. Ko's presentation, Achieving Optimal Care in Surgery: Observations from the American College of Surgeons was well received.

Thanks to the coordination efforts of Dr. Robert Meguid and his team the event was a great suc-

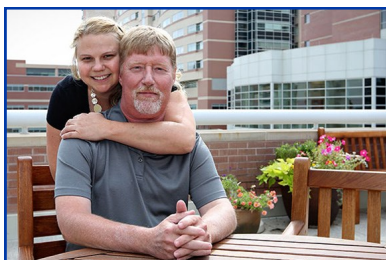
cess and there are plans to make this an annual occurrence.



Clifford Ko, MD, MS, MSHS, FACS
Director, American College of Surgeons
National Surgical Quality Improvement Program

ONE FAMILY, TWO HEARTS

by Vicki Hildner | University Communications



Brian and Holly Sherry

On Dec. 17, 2011, 48-year-old Brian Sherry was folding laundry when he first experienced an unusual electric sensation on the left side of his chest. A veteran elementary school teacher, Brian is an easygoing guy with a wry sense of humor and a passion for producing home-made wine. He walked upstairs, took a shower, sat down at his computer and searched "heart attack" on WebMD.

Then he dialed 911.

That call began a three-year medical odyssey for Brian Sherry. Today, he has a new heart and a new wife, who

has her own story to tell about heart transplants.

For the complete story about Brian and Holly please follow the link:

[OneFamilyTwoHearts](#)

"He was always positive," Brian said. "He had my heart in his hands, but he was just another person. I'm so happy he was my doctor."



Joseph Cleveland, Jr., MD



Upcoming Events

October 13, 2014

Grand Rounds

Contemporary Management of Breast Disease

Colleen Murphy, MD
Assistant Professor, GITES

Current State of Minimally Invasive Liver Surgery

Trevor Nydam, MD
Assistant Professor, Transplant



AMERICAN COLLEGE OF SURGEONS
Inspiring Quality: Highest Standards, Better Outcomes



October 26-30, 2014

October 20, 2014

Grand Rounds - Visiting Professors 2014 ACS International Guest Scholars

Caudate Lobectomy; History and Update



Jiang-Tao Li, MD, Associate Professor of Surgery
Vice-Chief, Hepato-Pancreato-Biliary Surgery Service
Second Affiliated Hospital, Zhejiang University School of Medicine

Molecular Profiling for Predictive & Prognostic Classifiers in Surgical Oncology



Roland S. Croner, MD, MA, FACS, Professor of Surgery
Department of Surgery
University Hospital Erlangen, Germany

Gall Bladder Cancer in India



Mallika Tewari, MBBS, MS, MCh, MRCSEd, USMLE
Associate Professor & Head of Department of Surgical Oncology
Institute of Medical Sciences Banaras Hindu University, India

November 3, 2014

Grand Rounds

Is There a Future for Heart Transplantation?

Ashok Babu, MD
Assistant Professor, Cardiothoracic

Renal Malignancy in Young People

Nicholas Cost, MD
Assistant Professor, Urology

November 10, 2014

Grand Rounds

Cancer Immunotherapy

Yuwen Zhu, PhD
Assistant Professor, GITES Research

Left Lobe Living Donor Liver Transplant

Michael Wachs, MD
Associate Professor, Transplant

November 17, 2014

Grand Rounds John R. Lilly Memorial Lectureship

Allometric Scaling in Clinical Practice

Thane A. Blinman, MD, FAAP
Assistant Professor of Surgery
Perelman School of Medicine
University of Pennsylvania

No Grand Rounds November 24, 2014 due to Thanksgiving Holiday.

December 1, 2014

Grand Rounds

Mechanical Circulatory Support for Children

Max Mitchell, MD
Professor, Cardiothoracic

Population Management and the Value Based Modifier

Christina Finlayson, MD, Med
Professor, GITES

December 8, 2014

Grand Rounds

Blunt Cerebrovascular Injuries

Clay Cothren-Burlew, MD
Director, SICU-Denver Health Medical Center
Associate Professor, GITES

Role of EMR in Research and Quality Improvement

Vijaya Vemulakonda, MD
Assistant Professor, Urology

December 15, 2014

Grand Rounds

Evaluation and Treatment of Bladder Cancer

Shandra Wilson, MD
Associate Professor, Urology

Risk Factors for Major Operations in the Elderly: Chronological Age and Beyond

Csaba Gajdos, MD
Associate Professor, GITES