

SURGERY

Synopsis

UW Medicine
DEPARTMENT OF SURGERY

Chairman's Message



Carlos A. Pellegrini, MD,
FACS, FRCSI (Hon.)
The Henry N. Harkins
Professor & Chair

Friends & Colleagues of the Department of Surgery:

As I write, the Seahawks have just returned from their victory over the Broncos and Seattle is throwing a city-wide party. It has been quite a spectacle, with blue and green and 12th Man flags everywhere. Even if you like football only a little, it is hard not to get caught up in the celebration.

In this issue, *Surgery Synopsis* focuses on our Pediatric mission as carried out through [Seattle Children's Hospital \(SCH\)](#). SCH is often referred to as a "place where miracles happen." When infants and children are helped and healed, it is a miracle. You will read a first-hand account by one of our own surgeons, [Dr. Kris Calhoun](#), whose infant son, August (Gus) received life-saving heart surgery at Seattle Children's Hospital. The story is touching and has a happy ending: one of those miracles.

Seattle Children's was just named by an on-line publication as one of the top five children's hospitals in America. They based this rating on the amazing Craniofacial Center, led by [Dr. Richard Hopper](#). I invite you to read the accolades <http://dailyparent.com/articles/the-nations-top-five-pediatric-hospitals/>.

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Seattle Children's Hospital Surgical Programs: Then and Now

Editor's Note: [Robert Sawin, MD](#), Professor and Chief of the Division of Pediatric Surgery in the Department of Surgery, and Surgeon-in-Chief at Seattle Children's Hospital, provided this brief history of the development of Surgery within SCH and SCH's affiliation with UW School of Medicine:

In 1919, Dr. Herbert Coe began operating at Children's Orthopedic Hospital (COH) in Seattle, Washington. At that time, he was one of just three surgeons in the U.S. to devote his practice to the surgical care of children. A true general surgeon in the broadest terms, Dr. Coe performed all types of surgery for children, and specialized in surgical treatment of cleft lip and palate, foreshadowing the development of one of the world's best and largest Craniofacial Surgery programs decades later. In 1947, Dr. Coe was one of a dozen surgeons who influenced the American Academy of Pediatrics to establish a Surgical Section, thus leading the way to the recognition of Pediatric Surgery as a sub-specialty. Shortly thereafter, Dr. Sandy Bill came to Seattle from Boston and put the Pediatric Surgery program here on the map. He created one of the first Pediatric Surgery fellowship training programs in 1967-68, and it has progressed to be one of America's top training programs.



Robert Sawin, MD

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Chairman's Message — *Continued from page 1*

Seattle Children's is often on the forefront of change – not only in new techniques and treatments, but in how care is delivered. For example, the hospital was an early adopter of process improvement and [LEAN methodology](#). Given the substantial needs of infants, children and their families and the response of the care providers at SCH improvements on delivery of care have occurred at a relatively rapid rate. You will learn about several innovations in care such as “clinical standard work” for the more routine diagnoses and the multi-disciplinary, long-term approach taken to support patients with congenital conditions. SCH surgical services introduced 7-day-a week surgical clinics as well as “attending of the week” rounds in which an attending leads as team of nurses, dietitians, pharmacists and discharge planners on daily rounds to see all patients on that service. Our surgeons are very much a part of these innovations. In this issue you will be introduced to all the surgeons at SCH and learn more about their specialties and academic interests.

[Don Miller, MD](#), Professor Emeritus retired from the Division of Cardiothoracic Surgery. A tribute to his professional life and career is in this issue of *Surgery Synopsis*. I think you will find it interesting learn more about this multi-faceted man and impressive surgeon. We thank Dr. Miller for his years of dedicated service to the Department and to the [VA](#).

[Patch Dellinger, MD](#), Professor has stepped down as Chief of the Division of General Surgery and [Brant Oelschlager, MD](#), Professor has been appointed Chief. This has led to several changes in the leadership of the General Surgery Division. We are appreciative for the 23 years Patch devoted to being Chief and grateful he is remaining in the Department in clinical practice. The changes in General Surgery are outlined in this edition of *Surgery Synopsis*.

On January 30 and 31st, the Department held the [20th Annual Helen & John Schilling Lecture](#). From start to finish, this year's Schilling Day was exceptional. The presentations by residents were excellent and our guest speaker, [Timothy R. Billiar, MD](#), the George Vance Foster Endowed Professor and Chair of the Department of Surgery and Director of the Trauma Research Center at the University of Pittsburgh in Pittsburgh, Pennsylvania delivered a most outstanding talk: “Of Men and Mice: An Iterative Strategy to Dissect the Immune Response to Trauma.”

Finally, as always, our surgeons continue to receive awards and honors. Of particular interest, is the attention generated by “Google Glass” and possible uses in the OR. [Dr. Heather Evans](#), Assistant Professor, is working with Google Glass to see what help it may provide for surgeons as they operate and assessing possible drawbacks. It is an interesting technology with unfolding benefits and challenges.

I hope you enjoy this issue of *Surgery Synopsis*.

Sincerely,

Carlos A. Pellegrini, MD, FACS, FRCSI (Hon.)
The Henry N. Harkins Professor & Chair
Department of Surgery
University of Washington

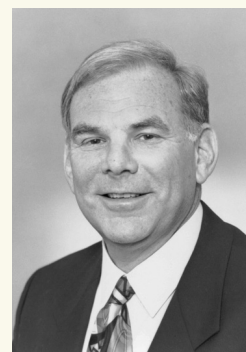
SCH: Then and Now

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In 1974, the Board of Trustees at COH decided that affiliation with the [University of Washington School of Medicine](#) was strategically important. That affiliation was contentious because of the extensive involvement of community physicians and surgeons in the care of children. Yet ultimately, it proved to be a major stimulus to the growth and the prestige of the institution, and enabled recruitment of top-flight academic physicians to practice at COH. Though community pediatricians are very welcome and admit and follow patients at [Seattle Children's Hospital](#), a strong core of pediatric doctors (including pediatric surgeons) is employed by the Seattle Children's physician practice plan (Children's University Medical Group or CUMG – a parallel organization to UWP). These individuals all have appointments in the UW School of Medicine, proceed through the ranks of promotion and enjoy all the rights and privileges of UW faculty. Pediatric surgery is an integral part of the Department of Surgery and the Department is proud that we have such outstanding pediatric surgeon colleagues.

David Tapper, MD

became the first full-time Surgeon-in-Chief in 1983, and over his marvelous tenure until his premature death in 2002, he built a first-rate academic surgical program by expanding from just two pediatric general surgeons and three other surgical specialists to 19 academic surgeons in every discipline.



David Tapper, MD

One of his additional legacies was the development of a pediatric renal transplant program in 1983. This program has now grown into one of the largest children's hospital transplant programs in the country, transplanting nearly 60 organs annually, including kidneys, livers, intestines and hearts.

During Dr. Tapper's time, COH became Children's Hospital and Regional Medical

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Seattle Children's Hospital: Then and Now

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New Seattle Children's Hospital Campus

Photo credit: Erik Stuhaug, Seattle Children's Hospital

Center, (CHRC) and ultimately changed its name to Seattle Children's Hospital (SCH) in its centennial year of 2007.

SCH provides care for children for the entire [WWAMI region \(Washington, Wyoming, Alaska, Montana, and Idaho\)](#) and so it has continued to grow to meet the demands of Seattle and of the greater region. The recent new "Building Hope" expanded bed capacity to 323 licensed beds. Surgical Services have also expanded and we now have more than 40 UW School of Medicine surgical faculty members who practice here in every surgical discipline. The excellence of their clinical care and their teaching has led many of our residents to choose careers in pediatric surgical specialties, enhancing our legacy even further.

Known for early adoption of processes and pathways that benefit children and their families, SCH embraced and, as a whole system, adopted the [LEAN methods](#) (process improvement methods adapted from Toyota Manufacturing to healthcare). This has led to a series of changes that benefit children and families, including 7-days-per week access to General Surgery clinics at the SCH - Seattle campus and a system in which an "attending of the week" leads a team of nurses, dietitians, pharmacists and discharge planners on daily rounds to see all patients on that service. At these rounds the team members talk to the families and patients, answer questions, solve problems and make plans around the needs and concerns of the patient and their family.

Surgeons at SCH believe in following the evidence and changing *how* care is given as enthusiastically as they learn a new technique to change *what* care is given. Consequently,

most of the surgical faculty, in addition to clinical work, lead or participate in important initiatives or teams that further the clinical, educational and research aims of SCH. For example, in addition to his clinical practice, [Dr. George Drugas](#) is head of Quality Improvement for Operative Services.

LEAN principles center on driving out waste and variation that causes mistakes. SCH has developed a number of clinical standard work pathways for patients with "common" (frequent) diagnoses to ensure that appropriate, timely and cost-effective care is given each time, to each patient. Some of these standardized pathways focus on: appendicitis, feeding difficulties requiring gastrostomy tubes, inflammatory bowel disease, pyloric stenosis, chest wall defects, gastroschisis, and central line management. All faculty have participated in the development and implementation of these pathways. [Dr. Daniel Ledbetter](#) and [Dr. Adam Goldin](#) are working both to expand the scope of the appendicitis pathway across the state of Washington and to work with a nationwide collaborative group of children's hospitals to improve care of these patients.

Long-term follow-up and management of complex congenital problems requires a different kind of innovation in care. To provide the continuity and expertise these patients require for an ideal long-term outcome, special multidisciplinary clinics with dedicated pediatric medical and surgical specialists, nurses, dietitians, and therapists have been established. Patients with anorectal malformations are seen in the [Reconstructive Pelvic Medicine \(RPM\)](#) clinic by urologists, gynecologists and general surgeons, including

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Seattle Children's Hospital: Then and Now

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[Dr. Jeffrey Avansino](#). Patients with short bowel syndrome are seen in the Intestinal Rehabilitation Program by gastroenterologists and [Dr. Patrick Javid](#) as the general surgeon. Children who have congenital diaphragmatic hernia, pulmonary hypoplasia and neonatal lung resections are seen in the [Surgery Pulmonary Follow-up \(SPF\)](#) clinic by a pulmonologist and general surgeon (Dr. Ledbetter). These clinics are a "medical home" for these patients as they grow and develop and provide important continuity for the children and their families.

Overview: Pediatric Surgery Faculty, Divisions and Services

Pediatric Surgery at SCH is led by Robert Sawin, MD, Professor and Chief of Surgery at Seattle Children's Hospital. SCH division chiefs for those specialties within the Department of Surgery are: [John Waldhausen](#) (General and Thoracic Surgery); [Richard Hopper](#), (Plastic and Craniofacial Surgery); [Patrick Healey](#), (Transplant Surgery); and [Jonathan Chen](#) (Congenital Cardiac Surgery). The Department of Surgery has 22 pediatric surgeons who provide the most advanced pediatric surgical care. Below is more about each of them:

Pediatric General Surgery

This division is the largest of the pediatric surgical specialties. It provides the full spectrum of general surgery services with all faculty practicing general and thoracic surgery, oncology surgery, and newborn surgery including minimally invasive surgical techniques. In addition, many faculty members have areas of clinical specialization. General surgeons include:



[Jeffrey Avansino, MD](#), Associate Professor, with special interest in anorectal malformations and chest wall anomalies;



[George Drugas, MD](#), Associate Professor, with special interest in Quality Improvement;



[Adam Goldin, MD](#), Associate Professor, with special interest in inflammatory bowel disease and gastrointestinal surgery;



[Kenneth Gow, MD](#), Associate Professor, with special interest in pediatric surgery oncology;



[Patrick Healey, MD](#), Associate Professor, both a fellowship-trained pediatric general surgeon and transplant surgeon. Dr. Healey's general surgery focus is pediatric liver surgery, including correction of biliary atresia and liver resection for tumors;



[Patrick Javid, MD](#), Assistant Professor, with special interest in intestinal failure and chest wall anomalies;



[Daniel Ledbetter, MD](#), Associate Professor with special interest in endocrine surgery, neonatal general surgery, and congenital diaphragmatic hernia;

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[John Meehan, MD](#), Associate Professor, with special interest in chest wall anomalies and robotic surgery techniques;



[Kimberly Riehle, MD](#), Assistant Professor; with special focus on liver research (read her research profile in later pages);



[Robert Sawin, MD](#), Professor and Surgeon-in-Chief, Seattle Children's Hospital, with special interest in thoracic surgery and chest wall anomalies;



[John Waldhausen, MD](#), Professor and Chief of Pediatric General and Thoracic Surgery, with special interest in inflammatory bowel disease, thoracic surgery, and oncology.

Congenital Cardiac Surgery

The congenital cardiac surgery division works closely with pediatric cardiology, pediatric cardiac anesthesiology, critical care medicine, nursing and perfusion to comprise the [Heart Center at Seattle Children's](#). The Heart Center serves the entire Pacific Northwest, with regional offices throughout Alaska, Montana, and Washington. Our regional program performs approximately 500 cases per year, and we offer a comprehensive array of mechanical circulatory assist

devices for children with heart failure. This program ranks among the top five pediatric heart transplant programs in the country, and is one of the nation's leaders in [Extracorporeal Membrane Oxygenation \(ECMO\)](#) therapies. In addition, the Program is one of the first to offer an ACGME-accredited congenital cardiac surgery fellowship training program (one of only 12 in the United States). The larger regional congenital cardiac surgery program includes operations performed at the Mary Bridge/MultiCare site in Tacoma, as well as adult congenital operations performed at the University of Washington.



McMullan



Permut



Chen

We owe a debt of gratitude to our long-term and very committed surgeons, [D. Michael McMullan, MD](#), Associate Professor and [Lester Permut, MD](#), Associate Professor who, over the past 1.5 years, expertly provided all pediatric cardiac surgery care during recruitment for a new Chief and new faculty at Mary Bridge Hospital. We are happy to report that [Dr. Jonathan Chen](#) became the Chief of Pediatric Cardiac Surgery in July 2013 and in 2014, the Division will welcome two new faculty members: [Dr. Muhammad Nuri](#), site chief at the Mary Bridge/Multicare site, and [Dr. Joshua Hermsen](#), the associate surgical director of the adult congenital heart disease program at UW.

Pediatric Craniofacial and Plastic Surgery

[Richard Hopper, MD](#), Associate Professor is Chief of Pediatric Plastic Surgery. Other faculty in pediatric plastic surgery include: [Joseph Gruss, MD](#), Professor (adjunct in Neurosurgery), [Craig Birgfeld, MD](#), Associate Professor, and [Raymond Tse, MD](#), Assistant Professor. Each brings



Hopper



Gruss

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Birgfeld



Tse

their own area of specialization. In addition, other UW Plastic Surgeons come to SCH for specialized cases such as microvascular reconstruction, facial reanimation, and hand surgery.

The Plastic Surgery team provides evaluation and treatment for infants, children and teens with a wide spectrum of congenital and acquired problems. As in many areas of pediatrics, a team approach is used to treat patients. This is especially important when dealing with conditions that affect how children look and how their bodies work. Plastic surgeons are critical team members in the multidisciplinary [Craniofacial Center](#) and [Vascular Anomalies program](#).

Seattle Children's Craniofacial Center

The Craniofacial Center specializes in the treatment of cleft lip and palate, craniosynostosis, craniofacial microsomia and other complex craniofacial conditions.



Cunningham

Under the leadership of surgical director [Dr. Richard Hopper](#) and medical director [Dr. Michael Cunningham](#) the center has become one of the largest programs of its kind in the country. It is a large multidisciplinary effort with over 50 healthcare providers from 19 specialty areas providing diagnosis, medical and surgical treatment, and long-term management for children with craniofacial abnormalities. In 2012 the Craniofacial Center saw 3,207 patients and performed 584 surgical procedures. Surgical techniques developed by SCH craniofacial surgeons are revolutionizing the way craniofacial surgery is done all over the world. These innovative procedures enable doctors to address even the most serious and complex craniofacial abnormalities and provide the benefits of improved health and a more normal appearance for an increasing number of children. The publication, "Daily Parent" recently cited Seattle Children's Hospital as one of the nation's top 5 children's hospitals, and featured the Craniofacial Program as an example of the care provided here: <http://dailyparent.com/articles/the-nations-top-five-pediatric-hospitals/>.

Seattle Children's Transplant Surgery Program

[Seattle Children's Transplant Center](#) offers comprehensive evaluation and care to patients with end-stage diseases of the [heart](#), [liver](#), [kidneys](#) and [intestine](#) who may need an organ transplant. Surgical faculty in the Transplant Surgery program include: [Andre Dick, MD](#), Assistant Professor, [Patrick Healey, MD](#), Associate Professor and Pediatric Division Chief of Transplant Surgery (pictured on page 4); [Jorge D. Reyes, MD](#), Professor and Pediatric Transplant Program Director; as well as heart transplant surgeons, [D. Michael McMullan, MD](#) (pictured on page 5) and [Jonathan Chen, MD](#) (pictured on page 5).



Dick



Reyes

Seattle Children's has been a consistent leader among national pediatric transplant centers. To see outcomes of SCH's transplant program, follow this [outcomes](#) link. SCH's liver, heart and kidney transplant programs are among the best in the nation. The [intestine transplant program](#) is the only one of its kind in the Pacific Northwest. The Transplant Center has recruited top transplant specialists and continues to add innovative programs.



Dr. Andrew Dick

Photo credit: Brian Smale, Seattle Children's Hospital

Seattle Children's is the only provider of pediatric liver transplants in the region. The liver transplant team is led by [Dr. Patrick Healey](#). Dr. Healey is one of the few pediatric transplant surgeons with expertise in both transplant and pediatric

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Dr. Jorge Reyes

Photo credit: Seattle Children's Hospital

surgery. He has performed more than 100 liver transplantations on children. [Dr. Jorge D. Reyes](#), Director of Transplant Services at Seattle Children's, is one of the most experienced pediatric liver transplant surgeons in the United States. He has performed 200 multi-organ transplantations and over 1,000 liver transplantations. Dr. Reyes is also one of the few surgeons in the world who performs living donor liver transplantations.

The heart transplant team is led by surgical director for heart transplant, [Dr. Michael McMullan](#) (pictured on page 5) and [Dr. Yuk Law](#), medical director for cardiac transplant and heart failure. Seattle Children's has performed over 100 pediatric heart transplants.

SCH is one of the top five kidney transplant centers in the United States, with excellent organ survival rates. For children with irreversible intestinal failure, the [Intestinal Care Program](#) is the only program in the Pacific Northwest – and one of only a few in the country – that has specialists who can perform intestine transplants. In fact, SCH's specialists have provided care for more children with intestinal failure than any other doctors in the nation.

Because Seattle Children's provides specialty care across a six-state region – Washington, Oregon, Alaska, Montana, Idaho and Hawaii – it is uniquely positioned to receive viable organs in a wider geographic area than many other children's hospitals. Providers in the Transplant Center are active with local, regional and national transplant groups. Our physicians maintain leadership positions with [United Network for Organ Sharing \(UNOS\)](#) committees and serve on the Organ Procurement Organization.



Dr. Kris Calhoun and Gus Pre-Op

Photo credit: Kris Calhoun, MD

Seattle Children's Hospital: A Saga of Help and Healing

Editor's Note: The following story is the first-hand account of one of the Department's "own," [Kristine Calhoun, MD](#), Associate Professor in the Division of General Surgery, Department of Surgery in the section of Surgical Oncology. Dr. Calhoun's primary area of clinical practice is breast cancer surgery, and she is regarded as a skilled surgeon, great teacher and compassionate physician to her patients. In June, 2013, she had a baby boy. Not only did this event turn her life upside down, in the normal ways a baby changes one's life, but she learned what it is like to be the mother of a critically ill patient. Kris also serves on the Editorial Board of Surgery Synopsis.

When she learned we would feature [Seattle Children's Hospital \(SCH\)](#) in this issue, she wondered if her story would help to illustrate what a great resource SCH is – even when you are a member of the Department. The rest of the Editorial Board quickly took her up on her offer.

\$1,083.51. That is the cost of a critical care ambulance ride from the [UWMC Neonatal Intensive Care Unit \(NICU\)](#) to the [Cardiac Intensive Care Unit \(CICU\)](#) at Seattle Children's Hospital (SCH). I know this because of events that happened following the birth of my son, August Theodore (Gus) on June 10, 2013.

As an "elderly pregnancy" and full-time surgeon, my risk of potential pregnancy complications was high, so I elected to have my OB care within the UW system. I wanted to be close to one of the premiere NICUs in the state. My pregnancy went smoothly, but the wisdom of my decision became very clear about 12 hours after I delivered Gus. An astute postpartum nurse took Gus for a quick "evaluation to check his oxygen saturation and make sure everything was ok." It was not OK. Gus's O₂ saturation was 85%. In hindsight, I should have seen that Gus was tachypenic, lethargic and had some perioral cyanosis, but in my sleep-deprived, new-parent state I didn't see anything wrong. The official diagnosis was that he was in cardiogenic shock secondary to critical aortic stenosis and a very abnormal mitral valve.

After initial resuscitation and a stat ECHO, transfer to the CICU at SCH via that very expensive ambulance was arranged. And so began an amazing saga of help and healing that is characteristic of the UW Medicine system, and in particular, in this case, Seattle Children's Hospital. The first 24 hours at Children's are a blur, but certain aspects definitely stand out: [Dr. Robert Sawin](#), Professor and Chief of Surgery at Seattle Children's Hospital, visited and despite the fact that he is a Pediatric General Surgeon and we were on the Cardiology Service, he gave me his cell phone and pager numbers and

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Gus Calhoun in the SCH CICU Directly Post-Op
Photo credit: Kris Calhoun, MD

told me to call if I needed anything. [Dr. Patrick Javid](#), Assistant Professor of Surgery at SCH and the husband of my colleague [Dr. Sara Javid](#), also stopped by multiple times to visit and offer his assistance. When I had to choose a cardiologist, Patrick was instrumental in helping me make this important choice.

Gus was an inpatient for nearly three weeks, with one return trip to the CICU when he redeveloped cardiogenic shock. At last, he seemed to be ready to go home. He finally came off all supportive medications, was weaned off oxygen, learned how to eat and was discharged to home on June 28, 2013.

The next two months included frequent trips to SCH's Cardiology Clinic for follow up visits and ECHOs. You know you are using a clinic a lot when the greeters stop asking your name and greet you with your identity badge already made. Those little acts of courtesy and kindness mean a lot when your child is sick and you are a frequent visitor to what can be an unhappy place.

It was during an ECHO in August that [Dr. Tim McQuinn](#), the excellent cardiologist who takes care of Gus, observed that he was beginning to develop pulmonary hypertension due to significant mitral regurgitation. A cardiac catheterization and repeat aortic balloon valvuloplasty at the end of August confirmed systemic pulmonary hypertension. This meant it was time for us to meet the Pediatric Cardiac Surgeons ~ a little bit sooner than anticipated or hoped. It

turned out that Gus would need cardiac bypass surgery to replace the mitral and aortic valves.

For three months, I had been hearing about the new chief of Pediatric Cardiac Surgery who had been recruited to SCH from New York. Then I met him: [Jonathan Chen, MD](#), Chief of Pediatric Cardiovascular Surgery, and I understood all the accolades. Dr. McQuinn described him as good and fast, stressing the importance of speed in pediatric cardiac bypass cases. We were actually offered the opportunity to obtain opinions at Stanford or Boston Children's, but I elected to stay in Seattle. It did not make sense to me to leave home for surgery when I had the services of a premier pediatric cardiac surgery service less than 10 miles from my house. This was one of the wisest decisions I have ever made; one I will never regret.

Prior to our initial surgical visit, Dr. Chen, who is a gifted surgeon, but as important, a gifted communicator, was kind enough to call me at the end of a long day and preview his recommendations. He told me that Gus's case was complex due to two valves being abnormal and the presence of subaortic hypertrophy as well. He told me that Gus and treatment options had been discussed extensively at the cardiac multidisciplinary conference. He and I were able to have an honest discussion of the options and he ultimately recommended aortic valve replacement and mitral valve



Dr. Jonathan Chen and Gus—February 2014
Photo credit: Kris Calhoun, MD

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repair or replacement based upon surgical findings. This recommendation was affirmed by Dr. McQuinn.

Following numerous ECHOs and other prognostic procedures, a date was picked to proceed. At that point, even though I was quoted a potential surgical mortality of 10-15%, I was relieved to finally have a concrete plan. Living from study to study, fixating on one aspect for two weeks, and then another for the next two weeks, is a challenging way to live. This experience certainly gave me a much better appreciation for what our patients often go through.

Gus had his surgery on September 17, 2013. He had a Ross-Konnos procedure, with his native pulmonary valve moved to the aortic position, the diseased aortic valve removed, and a new pulmonary valve placed. He then had the subaortic hypertrophy resected and the mitral valve replaced with a 15 mm mechanical St. Jude valve when the native valve was found to be beyond repair. Post-surgically, he was intubated for just over 24 hours, never paced, and out of CICU on postoperative day four. After initiation of anticoagulation, he was home on Coumadin and Lovenox postoperative day seven. The surgery quite honestly could not have gone better, and the ICU postoperative care was fantastic.

Maybe it was because of my surgical background and the fact that I understood pacers, chest tubes and incisions, but this final hospitalization was the easiest to deal with overall. I felt so comfortable with the care that Gus was receiving that I even felt confident sleeping at home; a major change from his earlier stays. I was always included in morning and evening rounds; my opinion of how he was doing was

The great examples of care and professionalism I saw from a different vantage point have made me a better surgeon and caregiver to my patients. I have learned that it is important to call my patients when I promise to call them; surgical skill and excellent decision making are important, certainly, but communication with patients and families is an equally important aspect of good patient care.

—Kristine Calhoun, MD



Gus Calhoun—January 2014

Photo credit: Kris Calhoun, MD

actively sought; and my questions always answered. I saw Dr. Chen and the rest of the surgical team daily and felt that they were attentive to Gus at all times. Finally, even though he was not on service at the time, Dr. McQuinn stopped by daily and had obviously been following Gus's progress. The great examples of care and professionalism I saw from a different vantage point have made me a better surgeon and caregiver to my patients. I have learned that it is important to call my patients when I promise to call them; surgical skill and excellent decision making are important, certainly, but communication with patients and families is an equally important aspect of good patient care.

With the exception of the ongoing Coumadin therapy, which is quite challenging and has allowed us to get to know the lab techs by name, and the fact that Gus will need surgery in the future to replace the mitral valve as he grows, the surgery is an unmitigated success. I am so grateful to everyone we have encountered. The hardest part to deal with was the scar, as it was the first mark on a pristine three month old body, but even that looks good now and is starting to fade nicely.

I would have preferred to have met Dr. Chen at the holiday party instead of in a consult room, but I am so happy with my decision to have Gus treated at Seattle Children's. I have never doubted my decision to remain here for surgery. From the cafeteria workers, to the nurses, the cardiologists, the lab

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workers, the greeters, the intensivists, to the pediatric general and cardiac surgeons, it is quite evident that the purpose and goal of everyone, every day is to help sick children and their families. We are fortunate to have in SCH one of the best children's hospitals in the nation. And I am blessed to have my now healthy and thriving 21 pound, seven month old baby boy. I will never be able to adequately thank everyone who has cared for Gus, but I have tried! Seattle Children's Hospital truly is a place where miracles happen, and one of them is named August Calhoun.

Author's note: This article mainly focuses on the treasure that is Seattle Children's, but I would be remiss if I failed to mention fantastic individuals at UWMC who were there during this whole experience: My OB doctor, [Dr. Vicky Mendiratta](#), nearly missed her own daughter's piano recital to see me through delivery. This was fortunate due to the occurrence of shoulder dystocia. One of my colleagues in surgical oncology, [Dr. Gary Mann](#), was Gus's very first visitor. Once the gravity of his clinical situation became apparent, Dr. Sara Javid, another of my surgical oncology colleagues, engaged her husband Patrick Javid, one of the pediatric surgeons at SCH, to help answer questions. [Dr. David Byrd](#), my Section Chief, came to the UWMC NICU to escort me to my car. And finally, once transfer became imminent, [Dr. Carlos Pellegrini](#) personally contacted Dr. Sawin at Children's to explain the situation and our impending arrival in order to make the transition as smooth as possible. Even though I work in a high-tech, large academic medical center, I also work where I feel like I have a family. The people of the UW Department of Surgery truly make this a remarkable place.

Training Future Pediatric Surgeons at Seattle Children's Hospital

Editor's Note: [Kenneth Gow, MD](#), Associate Professor is the Associate Program Director of the General Surgical Residency Program (pictured on page 4). This is a thumbnail sketch of the work he does to advance training at SCH.

Dr. Gow directs the education of surgery residents and students that rotate on Pediatric General Surgery. This includes 26 UW R1's, 13 UW R3's, 3 Swedish R2's, and 5 VM R3's. Medical students have two elective rotations that he supervises: one inpatient, the other outpatient/clinic experience.

The goal is to optimize the educational experience for all trainees that rotate here. To that end, our work includes evaluating and updating goals and objectives, creating meaningful orientation packages, producing goal oriented self-education units, creating educational "sit-down Professor rounds" with trainees, setting up mentorship for each trainee and creating feedback sessions (including exit interviews). This is a work in progress, but meaningful improvements in the educational mission at SCH have been made.

Editor's Note: [Daniel Ledbetter, MD](#), Associate Professor (pictured on page 4) is a faculty member of the UW School of Medicine's innovative "Colleges" program. He is on the faculty of "Big Sky" College.

The UWSOM Colleges Program combines a clinical skills and professionalism curriculum with a mentoring program to train compassionate, expert physicians to practice outstanding patient-centered care. The Colleges are an academic and administrative structure with three primary goals:

- Oversee a four-year integrated curriculum of clinical skills and professionalism;
- Teach the Introduction to Clinical Medicine II (ICM II) course in the second year; and
- Provide a consistent faculty mentor/advisor to each student over his/her medical school career.

Dr. Ledbetter is one of only a few surgeons that are on the faculty of these colleges. Another of the Department's surgeons, [Dr. Hugh Foy](#), is the Director of the "Wind River" College. For more information about the Colleges Program, visit its website at [UW Medicine MD Program Colleges](#).



Foy

Pediatric Surgical Training Programs – at the Crossroads

Editor's Note: [Dr. John Waldhausen](#), Professor and Chief of Pediatric General/Thoracic Surgery (pictured on page 5), is also the Program Director for SCH's Pediatric Surgery Fellowship Program. Dr. Waldhausen sits on a number of national training committees and boards which provide him a unique perspective regarding the current challenges facing pediatric surgery training programs nationally.



As a program director of SCH's Surgical Training Program, President of the Association of Pediatric Surgery Training Program Directors (APSTPD) and a member of the [Pediatric Surgery Board of the American Board of Surgery \(ABS\)](#), it is a real privilege to work with fellows and faculty dedicated to our specialty who are excited to improve the surgical care of children.

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Seattle Children's Hospital: Then and Now

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Pediatric Surgery remains primarily a clinical specialty with a two-year clinical fellowship. SCH has a highly competitive program. Every year over 75 candidates are evaluated for one SCH Fellowship position. Nationwide less than 50% of candidates match each year.

In the US and Canada there are now over 53 training programs. While this may sound encouraging for the applicant, in reality we are reaching a crossroads for pediatric surgery as a specialty. Depending upon one's point of view, either too many pediatric surgeons are being trained or we are facing a shortage of trainees. The concern is that as more training programs become available, issues of competency and experience become increasingly important. Some of the programs do reach requirements set by the [ACGME](#) Residency Review Committee (RRC) in order to have a program, but may see few of the important index cases. The trainees in these programs may not get adequate experience to competently practice on their own.

Job opportunities for our trainees are changing with positions in high volume centers becoming more scarce, while large parts of rural America may lack a pediatric surgeon altogether. States like Wyoming and Montana lack the pediatric surgeons required to do routine pediatric surgical cases such as hernias, appendectomies and pyloromyotomies. However, a pediatric surgeon in this situation may only see one Wilms tumor or esophageal atresia each year. It would be difficult for pediatric surgeons in this situation to remain competent in all aspects of pediatric surgery.

This leads to questions about how to mitigate these concerns. Should there be increased regionalization of care? Should better ways be found to expose general surgery trainees in rural surgery tracks to pediatric surgery so that they can do common or unexceptional cases? Those are two possible ways to approach this issue.

Discussions posing these questions are currently underway between the RRC, [American Board of Surgery \(ABS\)](#), [American Pediatric Surgical Association \(APSA\)](#) and the Association of Pediatric Surgery Training Program Directors (APSTPD). These bodies have been charged to look at manpower and training issues in order to provide trainees with the training they need to in order for them to provide competent pediatric surgical care for our young patients - regardless of where they may live.

Seattle Children's Hospital Surgical Fellowships Seattle Children's has several highly sought after surgical fellowships. You can learn more about them by following the links. They include:

- Pediatric General Surgery Fellowship - Program Director: [John Waldhausen, MD](#)
<http://www.seattlechildrens.org/healthcare-professionals/education/gme/pediatric-surgery-fellowship/>
- Congenital Cardiac Surgery Fellowship - Program Director: [Lester Permut, MD](#)
<http://www.seattlechildrens.org/healthcare-professionals/education/gme/congenital-cardiac-surgery/>
- Craniofacial Surgery Fellowship - Program Director: [Richard Hopper, MD](#)
<http://www.seattlechildrens.org/healthcare-professionals/education/gme/craniofacial-surgery-fellowship/>

Google Glass: Exploring New Technology for Surgeons and Patients

[Heather Evans, MD, MS, FACS](#) is Assistant Professor of Surgery at the University of Washington. Based at [Harborview Medical Center](#), Dr.

Evans serves as a trauma/general surgeon and surgical intensivist. Her research focuses on leveraging technology to improve early detection and treatment of healthcare

associated infections. In a guest blog for the [Association for Academic Surgery](#), she recalls her recent selection to be one of the first surgeons to use Google Glass, a lightweight, wearable computer with hands-free controls; "I first heard about Google Glass in February [2013], [when Google launched a clever marketing strategy: a contest called #ifihadglass](#). To my astonishment, [my entry in 140 characters](#) was one of about 8,000 selected and I became a Glass Explorer."

Read her entire blog post at <http://www.aasurg.org/blog/ok-glass-take-picture/>. Her experience with Google Glass has also been written about in the *Seattle Times* (http://seattletimes.com/html/localnews/2022282502_googleglassurgeryxml.html), and she will discuss the use of Google Glass in surgery next month in the [final session of UW Mini-Medical School](#).



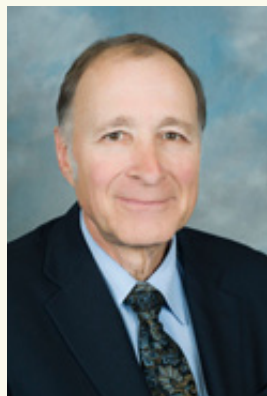
Evans



Dr. Evans is on the forefront of these technologies, as she strongly believes that physicians need to lend their knowledge of current process of care to guide an honest evaluation of novel technologies. "It is our responsibility as surgeons to critically consider the positive impact of Glass through enhanced communication, documentation and decision support, while weighing the potential risks of implementation to security, privacy and clinical outcomes."

Changes in the Division of General Surgery

Patch Dellinger: The Division and Department say “Thanks for an Outstanding 23 Years.”



Dellinger

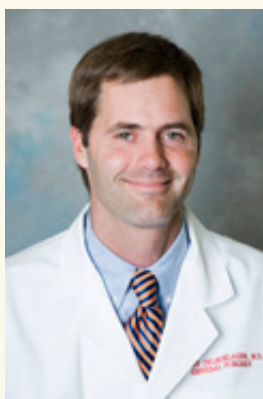
On January 1, 2014, [E. Patchen Dellinger \(Patch\), MD](#), Professor, Department of Surgery, stepped down from his role as Chief of General Surgery. After 23 years as Chief and 37 years with the UW Medicine’s Department of Surgery, Patch wishes to pass the Division Chief baton and focus the remainder of his career on his clinical practice as well as continuing to teach residents and mentor young faculty and participate in other activities within the Department, including

continuing to lead the Department’s A & P Committee. In particular, he will focus his mentoring activities in our newest area of General Surgery practice: the Urgent Care Practice.

During the 23 years as Chief, there has been unprecedented programmatic and faculty growth in General Surgery, currently standing at 23 regular faculty; 3 research faculty and 3 Teaching Associates. Patch has had an extraordinarily distinguished career at the University. He is an excellent teacher and role model for junior faculty, always leading the General Surgery Division with a gentle, steady hand. We are delighted that he will continue in the Division of General Surgery as an attending physician.

Brant Oelschlager, Appointed New Chief of General Surgery

After a recommendation by the Search Committee, headed by [Ron Maier, MD](#), Chief of Trauma Surgery, [Brant Oelschlager, MD](#), Professor, General Surgery, Department of Surgery, has been appointed the Chief of General Surgery, beginning this role on January 1, 2014.



Oelschlager

Brant began his career at UW Medicine as an intern. He completed his residency in general surgery and then a fellowship in foregut minimally invasive surgery. He was asked to join the faculty as an Assistant Professor within the Division of General Surgery at the completion of his training. He rapidly progressed

through the ranks to become a Professor of Surgery. He has developed a very busy clinical practice in endoscopic and laparoscopic treatments for foregut disorders. He has led the Department’s efforts in developing our minimally invasive treatments for foregut disorders and has been the Director of the [Center for Video-Endoscopic Surgery \(CVES\)](#) as well as the CVES Fellowship Director for more than five years. His research has gained national attention and he has mentored many fellows, some who have since become members of our faculty. Dr. Oelschlager has also been active in the administrative aspects of practice, becoming Section Chief of GI surgery when it was clear that the Division of General Surgery needed to be divided into two sections: GI Surgery and Surgical Oncology. In that capacity he learned much of what it takes to be a successful Division Chief: attention to faculty, attention to program growth and attention to the business side of medicine – all the while, keeping a busy clinical practice and remaining academically productive. We are fortunate to have Brant able and willing to step into this position. His imperturbable style and astute mind will make the transition from Patch to Brant seem practically seamless.

David Byrd, Appointed Associate Chief of General Surgery and Section Chief of Surgery Oncology

[David Byrd, MD](#), Professor, Department of Surgery, and one of the perennial “Best Doctors In Seattle” has been appointed Associate Chief of General Surgery and will continue his role as Section Chief of Surgical Oncology. David has a big role within a big Division. The Division has become large enough that a single leader cannot functionally keep up with workload and maintain a clinical and academic practice. The Associate Chief role was developed in order to provide the Chief with a seasoned second in command with whom he can share the load. Another aspect of the Associate Chief role is the ability to assist with strategic and programmatic planning, particularly in the areas where the Chief has less specialty knowledge. In this way, Dr. Byrd enhances and expands Dr. Oelschlager’s abilities to develop and run the Division of General Surgery.



Byrd

Surgical oncology continues to grow programmatically and in importance to the patients in our areas. Dr. Byrd has his finger on the pulse of Surgical Oncology. He has a major role at the [Seattle Cancer Care Alliance \(SCCA\)](#), developing and managing the surgical oncology program at that location. He mentors and advises junior surgical oncology

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Changes in General Surgery

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faculty and is important in assisting and advocating for the more senior faculty within the Section in their endeavors; several of whom are involved in groundbreaking research and policy development. Given the importance of Surgical Oncology as well as the depth and breadth of knowledge necessary to provide effective leadership, Dr. Byrd is also maintaining the Surgical Oncology Section Chief role for the day-to-day operational leadership of Surgical Oncology. We are fortunate to have David for these roles.

Alessandro Fichera Appointed Section Chief of GI Surgery



Fichera

[Alessandro Fichera, MD](#), Professor, Department of Surgery has been appointed to fill the Section Chief role in GI Surgery left vacant by Dr. Brant Oelschlager's appointment to the Chief role. Dr. Fichera is a nationally-renowned, board-certified colorectal surgeon specializing in the latest surgical techniques. Dr. Fichera's research interests focus on inflammatory bowel disease, minimally invasive and robotic surgery, prevention and treatment of colorectal cancers, and the

management of a wide variety of digestive disease. He is leading the UW Medicine initiative to further develop and expand the Colorectal Surgery Program.

Dr. Fichera received his Doctorate with academic honors from the Catholic University of Rome, Italy and completed his internship and residency in general surgery at the 2nd University of Rome and at the University of Chicago, followed by fellowship training in colorectal surgery at Mt. Sinai in New York.

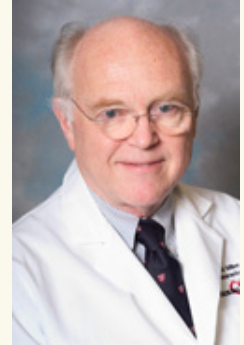
Before moving to the University of Washington's Department of Surgery in 2012, Dr. Fichera spent the last 10 years at University of Chicago Medical Center.

His enthusiasm, his energy, his willingness to listen and his ability to bring fresh perspectives will serve the Division well as he undertakes the role of Section Chief of all of GI Surgery.

These changes in General Surgery will provide stable and excellent leadership for a long time to come. Our congratulations and thanks to all of these individuals.

Donald Miller, MD Retirement

We wish to salute [Donald Miller, MD](#), Professor Emeritus, on the occasion of his retirement in October 2013 and thank him for his years of service in the Division of Cardiothoracic Surgery, Department of Surgery and as the Director of Cardio-thoracic Surgery at the [Veteran's Affairs Puget Sound Health Care System \(VAPHCS\)](#). Dr. Miller has done a superb job leading this program, with a long and interesting career in medicine and enhanced by his many other interests and passions.



Miller

Dr. Miller was born in Hawaii, where his father was a Navy Surgeon. He attended Dartmouth College and received his M.D. degree from Harvard Medical School in 1965. In 1970, after completing a five-year general surgery residency in New York, he joined the Navy on active duty as a Lt. Cmdr. USNR for two years at Camp Lejeune, North Carolina. He then did a two-year fellowship in cardiothoracic surgery at Columbia-Presbyterian Medical Center and Harlem Hospital. He moved to Seattle in 1974.

He started practice at Swedish Medical Center but soon joined the faculty at the University of Washington School of Medicine as an Assistant Professor (1975-1978), and then Associate Professor and Chief of the Division of Cardiothoracic Surgery (1978-1980). He returned to Swedish in 1980 and practiced adult cardiac surgery there for 23 years, serving as Medical Director of the Swedish Heart Institute from 1994 to 1997. In 2003 he was asked to rejoin the full-time faculty at the UW School of Medicine, as a Professor of Surgery, and to direct the cardiothoracic surgery program at the VAPHCS, performing and teaching cardiac surgery there and at the University of Washington Medical Center.

He has pursued many interests in his life beyond medicine. In college, he studied philosophy of religion and played the alto and baritone saxophone in a jazz quintet named "The Modern Men." Inspired by Jack Kerouac's *On the Road*, in 1961, he spent the summer before medical school hitchhiking around Europe with his alto saxophone. He played with jazz groups in clubs on the Left Bank of Paris and Schwabingm, the bohemian quarter of Munich, Germany. In 1965-1970, during his general surgery residency at the Roosevelt Hospital in Manhattan, he served as the Lincoln Center "house doctor," a position that allowed him to attend performances at the New York State Theater (New York City Opera and Ballet), Avery Fisher Hall (New York

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Donald Miller, MD Retirement

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Philharmonic), and the Metropolitan Opera. His passion for music has continued in Seattle where he has served on the Board of Directors of the Seattle Symphony Orchestra (1983-1987) and on the Board of Trustees of Seattle Opera (1984 to 2007). Along with a love of music, Don loves books. He has written two books on heart surgery: *The Practice of Coronary Artery Bypass Surgery* (1978) and *Atlas of Cardiac Surgery* (1983). A third one, *Heart in Hand* (1999), delves into the philosophy of Arthur Schopenhauer, film, science, religion, music, and life as a heart surgeon.

Since retirement, Don and his wife Linda reside in Leavenworth with their Bichon Frisé dog, George. Don spends his time hiking, skiing, reading, listening to music, and writing articles on a variety of subjects. He and Linda have four children: one at Microsoft; one, a physician in Boston; one in the boat business, currently living on a sailboat moored at Shilshole Marina; and one who has formed a new Seattle opera company, the Vespertine Opera Theater. In addition, he and Linda have four grandchildren.

Researcher Profile: Kimberly Riehle, MD

Improving Liver Regeneration in Liver Fibrosis



Kimberly Riehle, MD

The normal human liver is unique among mammalian organs in its ability to regenerate after injury. Most of the time cells in the liver are not dividing, but if the liver is injured, for instance if a toxin such as alcohol kills off some of the cells, the remaining liver cells will somehow get a signal to start dividing to replace the damaged cells. Likewise, if part of the liver is surgically removed, the liver will grow back to its original size in just a

few months, and then stop growing. Unfortunately, many patients who undergo liver resection to cure primary or secondary liver tumors have underlying liver disease, such as liver fibrosis or steatohepatitis, which hinders normal regeneration processes.

Fibrotic livers in particular do not regenerate well, leading to a significant increase in post-resection complications, including a high risk of post-operative liver failure, which is the major cause of death after resection. The cellular mechanisms behind the defective regeneration seen in this setting remain unknown. Specifically, it is not yet known whether the underlying mechanism is related to structural inhibition of regeneration by fibrotic scar, abnormal function of non-parenchymal cells in the liver; or whether fibrosis causes liver cells to fundamentally change at a genetic or epigenetic level and thus stop responding to normal signals.

[Kimberly Riehle, MD](#), Assistant Professor of Surgery in the Division of Pediatric Surgery, has spent the past two years collaborating with Jean Campbell, PhD, Assistant Research Professor of Pathology, to develop a mouse model in which progressive fibrosis develops, leading to worsening regeneration and outcome after hepatectomy. Her current work focuses on ways to improve regeneration in liver fibrosis, such as by pre-treatment with the tyrosine kinase inhibitor Imatinib. The next step will be to translate these studies into therapies that will ameliorate liver fibrosis in patients such that a patient with liver cancer can tolerate a potentially curative resection and regenerate normally afterward.

Dr. Riehle's work has been supported by the 2012-2013 American College of Surgeons Louis C. Argenta Faculty Research Fellowship and the American Surgical Association Foundation Fellowship (2013-2015). In 2012, Dr. Riehle also received a competitive award from the Department of Surgery Research Reinvestment Fund to study a specific subtype of liver cancer that occurs primarily in children, fibrolamellar carcinoma. In collaboration with Raymond Yeung, MD, Professor of Surgery in the Division of General Surgery, she is working to identify critical signaling pathways that drive the formation of these tumors in otherwise healthy children.

While Dr. Riehle is making significant progress in these areas, there remains an increasing need to provide more treatment options to the 500 patients that pass through the University of Washington Liver Tumor Clinic annually. To address this need, Drs. Riehle and Yeung recently joined with fellow Department of Surgery faculty members, Venu Pillarisetty, MD, Assistant Professor in the Division of General Surgery, and James Park, MD, Associate Professor in the Division of General Surgery, along with several

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Researcher Profile: Riehle

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members of the Department of Pathology, to form the Northwest Liver Research Program (NLRP). The program's major goals are to foster a culture of interdisciplinary collaboration between clinicians and scientists in order to develop state-of-the-art techniques to study liver diseases, and maximize bench-to-bedside translation of basic knowledge into clinical care. Key focus areas for NLRP include cancer, regeneration, injury and inflammation, metabolism, and immunology. Some of the questions the group hopes to answer include how to enable earlier detection of liver tumors; how to improve liver regeneration after resection in humans with disease; and how to identify the roles of the immune cells in the liver so as to better harness the body's own immune system to fight cancer.

In addition to monthly meetings to review individual research progress and strategize on collaborative grant proposals, members of the NLRP have begun work to establish a core facility for the isolation, purification, and culture of primary liver cells from resection specimens and unused portions of donated livers. The cell isolation core facility will support the basic research of NLRP investigators and will be expanded in the future to include other gastrointestinal tumors. Once established, the NLRP intends to make the cell isolation core available to faculty in the School of Medicine, as well as other investigators in the region, so as to further enhance collaborative efforts in finding treatment options benefiting each and every patient.

20th Annual Helen & John Schilling Lecture & 2014 Research Day



Timothy R. Billiar, MD

Photo credit: Patricia L. McGiffert
UW Photographer

On Friday, January 31, 2014, the Department of Surgery proudly hosted [Timothy R. Billiar, MD](#) as the 20th Annual Helen & John Schilling Lecturer. Dr. Billiar is the George Vance Foster Endowed Professor and Chair of the Department of Surgery, and Director of the Trauma Research Center at the University of Pittsburgh in Pittsburgh, PA. His laboratory studies the mechanisms leading to the initiation of the inflammatory response and organ injury after trauma. In his talk, "Of Men and Mice: An Iterative Strategy to Dissect the Immune Response to Trauma,"

Dr. Billiar discussed recent findings in humans and experimental models on the mechanisms regulating immune dysfunction following trauma. His talk also provided a framework around which to pursue a complex human disease through an iterative strategy between clinical data and mouse models.

Dr. Billiar graduated *summa cum laude* 1979 from Doane College in Crete, Nebraska with a BA in Natural Sciences. He then received his medical degree from the University of Chicago in 1983 followed by general surgery training and four years of surgical research training at the University of Minnesota and the University of Pittsburgh. In 1992, Dr. Billiar joined the University of Pittsburgh faculty as the Samuel P. Harbison Assistant Professor in the Department of Surgery and in 1999 was named Department Chair.



From left to right: John T. Slattery, PhD, Vice Dean of Research and Graduate Education in the School of Medicine, David R. Flum, MD, MPH, Carlos A. Pellegrini, MD, FACS, FRCSI (Hon.) and Timothy R. Billiar, MD

Photo credit: Patricia L. McGiffert, UW Photographer

Dr. Billiar has a long standing interest in shock and sepsis and as a result of his research he has gained an international reputation for his contributions

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Schilling Lecture and Research Day

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to discoveries on the role of nitric oxide in shock and liver disease. Additionally, his laboratory is credited with initially cloning the human inducible nitric oxide synthase gene. Dr. Billiar holds seven US patents associated with his research. He is currently the Principal Investigator (PI) on a National Institutes of Health (NIH) trauma training grant, Director of a P50 Trauma Center Grant also from the NIH, and PI on an NIH RO1 grant.

Dr. Billiar is widely published, having edited 8 medical texts and authored over 600 peer-reviewed articles. He also sits on eight Editorial Boards, including the Journal of the American College of Surgeons, Molecular Medicine, and the Journal of Perioperative Medicine. Dr. Billiar is active in numerous professional societies and is past president of the Society of University Surgeons, the Nitric Oxide Society, and the Surgical Infection Society. He has previously served on the Surgery, Anesthesia, and Trauma Study Section at NIH and is currently a member of the Residency Review Committee of the Accreditation Council for Graduate Medical Education (ACGME). In 2006 Dr. Billiar was inducted into the Institute of Medicine of the National Academy Sciences, and in 2008 he received the Flance Karl Award for Scientific Achievement from the American Surgical Association. In 2011 he was named University of Pittsburgh Distinguished Professor.

Dr. Billiar's Schilling Lecture was preceded by the annual **Department of Surgery Research Symposium** which included 33 oral presentations and posters by Department of Surgery residents and fellows on a wide variety of basic and clinical research topics. The day also included presentations by three faculty members highlighting their own research as well as related research by colleagues in their divisions:

- [Leah Backhus, MD](#), Assistant Professor in the Division of Cardiothoracic Surgery: "Cardiothoracic Surgery Health Services Research"
- [Thomas Hatsukami, MD](#), Professor in the Division of Vascular Surgery: "p27kip1 and Carotid Plaque Progression"
- [Jason Ko, MD](#), Assistant Professor in the Division of Plastic Surgery: "Targeted Muscle Reinnervation (TMR) As a Treatment for Neuromas: From bedside to bench and... back to bedside"

Both the plenary and poster sessions were adjudicated by Dr. Billiar and Department of Surgery research leadership. Participants were ranked on scientific merit and validity, presentation skills, and preparedness for questions and comments. Congratulations are in order to the top three individuals in each session:

Oral presentations:

1st place – [Jonathan Sham, MD](#) "Novel Antibody-Targeted Zirconium-89 PET Imaging of Hepatocellular Carcinoma"

2nd place – [Ravi Sood, MD](#) "Dermal Fibroblasts from Duroc and Yorkshire Pigs Demonstrate Differences in Response to Injury"

3rd place – [Meera Kotagal, MD](#) "Use and Accuracy of Diagnostic Imaging in the Evaluation of Pediatric Appendicitis: A Report from the SCOAP-CERTAIN Collaborative"

The [Helen and John Schilling Endowed Lectureship](#) was established by the late Helen Schilling to bring distinguished scholars to the Department of Surgery at the University of Washington, and to enhance the Department's commitment to the highest standards of patient care, teaching, research and scholarship. It was Mrs. Schilling's wish that the lectureship be in honor of her husband, John.

Please follow this link to read more about all of the research presentations:


[20th Annual Helen & John Schilling Lecture and 2014 Research Day >>](#)

Honors, Awards and Publications

Faculty



[Dr. Jonathan M. Chen](#), Professor, Division of Cardiothoracic Surgery, and Chief of Pediatric Cardiovascular Surgery is the third individual to hold the Samuel and Althea Stroum Endowed Chair in Pediatric Cardiovascular Surgery at [Seattle Children's Hospital](#).

[Dr. Heather L. Evans](#), Assistant Professor, Division of Trauma, Critical Care and Burn Surgery, was awarded a [Commercialization Gap Fund \(CGF\)](#) grant from the [University of Washington Center for Commercialization \(C4C\)](#) in support of her project entitled "Mobile Post-Operative Wound Evaluator (mPOWER)." 

The UW C4C CGF grants are made possible by funding support from the [University of Washington Royalty Research Fund](#) and the [Washington Research Foundation](#).

Dr. Evans also received an [Institute of Translational Health Sciences \(ITHS\)](#) pilot grant. The pilot grants are intended to provide the funding to develop preliminary findings and test

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Honors, Awards and Publications

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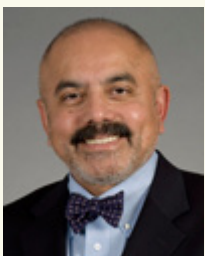
“proof of concept” to support future full-scale, competitive grant applications. Dr. Evans will evaluate the role patients can play in the early identification and treatment of surgical site infections after hospital discharge, including their willingness to use mobile health technology to help self-manage their wounds.



Dr. Brant Oelschlager, Professor and Chief, Division of General Surgery, has been chosen by the [Society of American Gastrointestinal and Endoscopic Surgeons \(SAGES\)](#) Awards Committee and confirmed by the Board of Governors to be the recipient of the Clinical Excellence and Humanism in Medicine Award

for 2014. This award is sponsored by the Arnold P. Gold Foundation and given to a clinician who is recognized by the surgical/GI community for excellence in patient care and surgical practice. It is awarded to surgeons with significant surgical/endoscopic skills, patient care, contributions to community and volunteerism.

Dr. Carlos A. Pellegrini, Professor and Chair, Department of Surgery, was elected as an Honorary Fellow of [The Royal College of Surgeons of England](#). This is one of the College’s highest awards and recognizes individuals who have made outstanding contributions to the field of surgery.



Dr. Jorge D. Reyes, Professor and Chief, Division of Transplant Surgery, was named the Roger K. Giesecke Distinguished Chair in Transplant Surgery. An event to honor Dr. Reyes’ accomplishment, as well as to recognize the contributions of the Piggott family, was held on February 1st. The transplant surgery faculty, fellows and

liver care team were on hand to celebrate and speak to the program benefits the endowed Chair will provide.

Dr. Douglas E. Wood, Professor and Chief, Division of Cardiothoracic Surgery, was the President of the [Society of Thoracic Surgeons \(STS\)](#) in 2013. The Society is 50 years old and their annual meeting held from January 25-29, 2014 in Orlando, Florida, concluded his presidential year. His Presidential Address was interesting and thought-provoking. We



are thankful to STS, who has given us the rights to share the link to that speech so that members and friends of the Department of Surgery can watch it. [Follow this link to hear Dr. Wood’s Presidential Address.](#)

Residents



Dr. Timo Hakkarainen, General Surgery Resident, published an article entitled “Comparative Effectiveness of Skin Antiseptic Agents in Reducing Surgical Site Infections: A Report from the Washington State Surgical Care and Outcomes Assessment Program” in the [Journal of the American College of Surgeons \(abstract\)](#).

Collaborating with [E Patchen Dellinger, MD, FACS](#), [Heather L. Evans, MD, MS, FACS](#), [Farhood Farjah, MD, MPH](#), Ellen Farrokhi, MD, FACS, Scott R. Steele, MD, FACS, Richard Thirlby, MD, FACS, David R. Flum, MD, MPH, FACS, Dr. Hakkarainen performed a prospective cohort analysis to evaluate the relationship of commonly used skin antiseptic agents and SSI for patients undergoing mostly clean-contaminated surgery from January 2011 through June 2012. Multivariate regression modeling predicted expected rates of SSI. Risk adjusted event rates (RAERs) of SSI were compared across groups using proportionality testing.

Dr. Steve Kwon, Chief Resident of General Surgery, has been accepted to the Society of Surgical Oncology Fellowship at [Memorial Sloan-Kettering Cancer Center in New York](#). During his residency, Steve completed a two-year research fellowship at [SORCE](#), working with [Dr. David Flum](#) on evaluating the impacts of health policy on surgical outcomes, analyzing models for optimal delivery of surgical care using Washington State’s quality improvement program called [SCOAP](#), and published 13 manuscripts. Steve also obtained a Master of Public Health in Epidemiology during his research years.



Department of Surgery Grant Activity Report

Congratulations to Department of Surgery Principal Investigators, who received 26 awards in the 1st and 2nd quarters of AY2014 worth \$5.7 million! Of these awards, 14 were new awards or competing renewals:

Name	Sponsor Name	Title
Gabriel Aldea, MD	Sorin Group USA	Clinical Investigation of the Perceval S Sutureless Heart Valve
Saman Arbabi, MD	Oregon Health and Science University (OHSU)	Thrombelastography Based Dosing of Enoxaparin for Thromboprophylaxis: A Prospective Randomized Trial
Eileen Bulger, MD	National Highway Traffic Safety Administration (NHTSA)	Crash Injury Research and Engineering Network (CIREN)
Farhood Farjah, MD	Kaiser Foundation Research Institute	CRN4: Cancer Research Resources & Collaboration in Integrated Health Care Systems
David Flum, MD	Agency for Healthcare Research and Quality (AHRQ)	The CERTAIN Hub: A Platform for Improved Patient Data Collection and Stakeholder Engagement
Nicole Gibran, MD	US Department of Education (DOEd)	Northwest Regional Burn Model System Center
Sara Kim, PhD	Arnold P. Gold Foundation	Conflict Negotiation in Healthcare: A New Paradigm of Theory and Practice
Jason Ko, MD	Axogen Inc.	A Multicenter Retrospective Study of Avance® Nerve Graft Utilization, Evaluations and Outcomes in Peripheral Nerve Injury Repair. (RANGER®)
Ronald Maier, MD	University of Florida	Validation of a Genomics Based Prognostic in Severe Trauma
Michael Mulligan, MD	XVIVO Perfusion, Inc	Normothermic Ex Vivo Lung Perfusion (EVLP) as an assessment of extended/marginal donor lungs
Tam Pham, MD	American Burn Association	Evaluation of a Trial of Propranolol on the Development of PTSD and Return to Work After a Burn Injury (DOD ABA Propranolol)
Kimberly Riehle, MD	American Surgical Association Foundation	Improving Regeneration in the Fibrotic Liver
Benjamin Starnes, MD	Abbott Laboratories	UW Vascular Surgery Fellowship Program
Douglas Wood, MD	SPIRATION, Inc.	A Prospective, Randomized, Controlled Multicenter Clinical Trial to Evaluate the Safety and Effectiveness of the IBV® Valve System for the Single-Lobe Treatment of Severe Emphysema

Six Department of Surgery Co-Investigators collaborated with Principal Investigators from other departments, resulting in 9 awards totaling \$20 million! Three of these awards were new awards, and one a competing revision:

Name	Sponsor Name	Title
Eileen Bulger, MD (PI: Susanne May, MS, PhD, Dept of Biostatistics)	National Institutes of Health (NIH)/US DOD	Resuscitation Outcomes Consortium (ROC) Data Coordinating Center
Eileen Bulger, MD (PI: Susanne May, MS, PhD, Dept of Biostatistics)	US Department of Defense (DOD)	Prehospital Tranexamic Acid Use for Traumatic Brain injury

Department of Surgery Grant Activity Report

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<p>Danielle Lavalley, PharmD, PhD <i>(PI: Janna Friedly, MD, Dept of Rehabilitation Medicine)</i></p>	<p>Patient-Centered Outcomes Research Institute (PCORI)</p>	<p>Long Term Outcomes of Lumbar Epidural Steroid Injections for Spinal Stenosis</p>
<p>Erik Van Eaton, MD <i>(PI: Douglas Zatzick, MD, Dept of Psychiatry & Behavioral Sciences)</i></p>	<p>Patient-Centered Outcomes Research Institute (PCORI)</p>	<p>Developing & Implementing Patient Centered Outcome Assessments in Clinical Trials</p>

Save the Dates

65TH ANNUAL
STRAUSS LECTURE
Friday, November 21, 2014

Dr. Marco Patti
Professor of Surgery and
Director of the Center
for Esophageal Diseases
University of Chicago
Pritzker School of Medicine

More Details to Come

Please see the
Department of Surgery's
monthly Grand Rounds
schedule under
[Special Events](#) on our website:
www.uwsurgery.org

ATTENTION ALUMNI!

**Let us know what
you are up to now!**

If you would like to share news about your
career and family or reflect upon your
residency experience in UW Department of
Surgery, we want to hear about it to publish
in *Surgery Synopsis*.

Please send your updates and photos to
surgeditors@uw.edu.

UW Medicine

DEPARTMENT OF SURGERY

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Surgery Synopsis is an in-house newsletter published on a quarterly basis to highlight the academic and research activities of the University of Washington School of Medicine Department of Surgery. This publication is distributed to the Department's faculty, residents, staff, and friends.

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