SURGERY Synopsis







CHAIR'S MESSAGE



Douglas E. Wood, MD, FACS, FRCSEd The Henry N. Harkins Professor and Chair

/ elcome to the next edition of Surgery Synopsis. We are highlighting the area of Transplant Surgery in this issue. The early part of my career was focused on transplantation; I was recruited to UW to develop general thoracic surgery, but importantly, also to start and lead a new program in lung transplantation. My very first surgery at UW was also the beginning of the lung transplant program at UW, performed on Easter Sunday, fitting as Easter is a day that stands for renewal of life in the Christian tradition, and April is National Donate Life Month. You cannot imagine how stressful it was to have my first case as an attending also be an operation with so much at stake. Fortunately, the finishing cardiothoracic surgery fellow, only a few months junior to me in training, was an excellent surgeon, better than me, and so the case went smoothly with me as a "teaching assistant" and starting my career.

While growing the lung transplant program, I benefited from a fast education in transplant policy. Serving on the Board of Directors of the United Network for Organ Sharing (UNOS), as well as the Thoracic Transplant Committee and Membership and Professional Standards Committee.

As the program grew, it became clear that we needed a true lung transplant leader who had more expertise than myself, and who would focus on leading the lung transplant program to its next stage of growth and development. In 1999, we were very fortunate to recruit Dr. Michael Mulligan, who became the director of the lung transplant program and now also serves as the Division Chief of Cardiothoracic Surgery.

Dr. Mulligan did just what we hoped for; he elevated the UW lung transplant program to one of the largest programs in the country, and one with outstanding outcomes. It has been hugely rewarding to see how he accelerated the lung transplant program's development, and it was a very proud moment when we passed our 1,000th lung transplant in July of 2019. Please read Dr. Mulligan's comments on the current state of our lung transplant program on page 10.

Lung transplantation is only one of the transplant specialties within the Department of Surgery at UW. The Department has a solid organ transplant program that includes:

- 1. Heart transplantation (adult and pediatric)
- 2. Kidney transplantation: Living Donor and Cadaveric (adult and pediatric)
- Liver transplantation: Living Donor (LDLT) and Cadaveric (adult and pediatric)
- 4. Pancreas transplantation (adult)
- 5. Transplants that use combinations of these organs (e.g., pancreas and kidney)

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CHAIR'S MESSAGE

There is a lot to say about transplantation surgery; accordingly, we have asked Dr. Jorge Reyes, Chief of the Division of Transplant Surgery, to write an overall summary of our transplant program, including the important research done by the Clinical and Bio-Analytics Transplant Laboratory (CBATL). A timeline of our transplant program milestones as well as other data points of interest are on page 3.

You will also find a summary of each area of transplantation written by our faculty program directors. These summaries provide a more robust and exciting view of our transplantation programs. Please find them starting on page 4.

One transplant activity that is developing as this is written, is the creation of a new UW Medicine Transplant Institute. Transplant is by its very nature multi-disciplinary: the cardiologists and cardiac surgeons must work together; the nephrologists and kidney transplant surgeons work together, and so on. To make transplant programs work together more efficiently and effectively for our patients and providers, the multi-disciplinary team will be organized along the lines of the UW Medicine Heart Institute. This is an exciting development; look for more details in the near future.

I've offered a look at transplantation by program areas and highlights, but above all the transplant program is about the people involved – in particular the donors and recipients: the donor offering the gift of a life-saving organ - perhaps the most altruistic act a person can make; and the recipients, receiving such a gift with grace, humility and gratitude. We are privileged to share three inspiring stories from recipients and donors with you. Please find those beginning on page 5.

Other features in this issue of *Surgery Synopsis* include our faculty recognitions and achievements, new faculty introductions, and #GettingtoKnowDoS.

I hope you enjoy reading this issue of Surgery Synopsis.

Sincerely,

Douglas E. Wood, MD, FACS, FRCSEd

The Henry N. Harkins Professor & Chair

Department of Surgery

University of Washington

TRANSPLANT SURGERY OVERVIEW & HISTORY

OVERVIEW & HISTORY

DR. JORGE REYES, PROFESSOR & CHIEF DIVISION OF TRANSPLANT SURGERY



Dr. Jorge Reyes

n 1967, Dr. Tom Marchioro joined the University of Washington's medical school where he would soon establish and lead the center that performed the first kidney transplants in the Pacific Northwest (PNW). Not only did the former professor and chief of the Division of Transplant Surgery create the first kidney transplant center in the PNW, he was also a pioneer in developing an organ donation network for Washington,

Alaska, Montana, and Idaho, and founded the Washington lung transplantation program. This template for creation and development has been repeated multiple times at the UW Medicine for the various organ transplant programs in place today, providing outstanding clinical care, research, education, and innovation to our community. Many transplantation milestones followed with other UW surgeons including Drs. Ed Verrier, Professor Emeritus, Cardiothoracic Surgery, James Perkins, Professor, Transplant Surgery and Michael Mulligan, Professor & Chief, Cardiothoracic Surgery, and is uniquely demonstrated in the timeline.

OUR RESEARCH



Dr. James Perkin

Transplant surgeons, fellows, residents, medical students, and other healthcare professionals use the services of the Clinical and Bio-Analytics Transplant Laboratory (CBATL) to research ideas to improve patient care. The services of CBATL include a "think tank" of individuals to provide analytical and interpretative expertise to researchers. The multiple technical modalities of CBATL include microsimulation using Markov

models, mathematical optimization to optimize resources, genomic evaluation, data mining of large clinical repositories, text analytics with natural language processing, and many machine learning algorithms for classification and survival analysis.

CBATL was organized in 2010 by Dr. James Perkins to help extremely busy clinical transplant surgeons, fellows, and residents conduct research to improve transplant patient care. CBATL has now expanded to help many others with a need in their research efforts. Since 2017, CBATL has provided support for 30 published articles, over 20 national and regional oral abstract presentations, and three international invited presentations.



If you are interested in learning how you can support the **transplant program**, please click here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.

Transplant Surgery Milestones at UW

1968	First kidney transplant in the Pacific Northwest (PNW).
1985	Region's first heart transplant.
1989	First abdominal transplant program, comprising liver, kidney, and pancreas transplantation.
1990	First pancreas transplant (with kidney).
1990	First pediatric liver transplant performed at Children's Hospital and Medical Center (CHMC - now Seattle Children's Hospital - SCH
1990	Region's first liver transplant.
1991	First pancreas-only transplant.
1992	First lung transplant in Western Washington.
1994	First kidney transplant with living donor unrelated to recipient.
1994	Region's first pediatric heart transplant performed at CHMC (now SCH).
1998	Region's first laparoscopic nephrectomy on a living kidney donor.
1999	First living related liver transplant performed at UWMC-Montlake and CHMC (now SCH); donor for the two-and-a-half-year-old boy was his mother.
2007	First heart-lung transplant at UWMC-Montlake.
2007	Region's first intestinal transplant performed at CHMC (now SCH)
2007	First abdominal multivisceral transplant performed at CHMC (now SCH).
2014	First combined lung and liver transplant.
2015	First adult to adult living donor liver transplant in the PNW.
2018	First adult multivisceral transplantation (liver, small bowel, and pancreas).
1968- 2021	UWMC-Montlake performed 2,485 liver, 3,341 kidney, 1,101 lung and 1,044 heart transplants.

LIVER TRANSPLANT PROGRAM

DR. MARK STURDEVANT, ASSOCIATE PROFESSOR DIVISION OF TRANSPLANT SURGERY



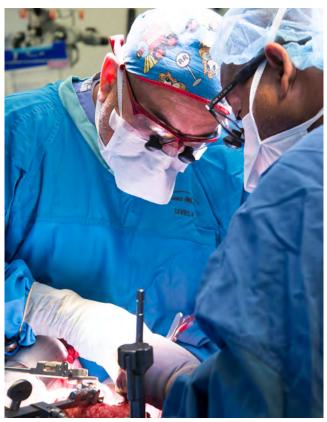
Dr. Mark Sturdevant

The UW Medicine liver transplant service, initiated in 1990 by Dr. James Perkins and led by Dr. Jorge Reyes since 2004, is the largest program of its kind in the Pacific Northwest and has been recognized as having higher than expected patient outcomes by the Surgical Registry of Transplant Recipients. However, the dire need of critically ill patients requiring liver replacement provides a constant stimulus to

this UW Medicine surgical division to develop clinical innovation and accessibility to transplant. Well over 1,000 Americans die annually on the liver transplant waiting list and many regions of the country have a waitlist mortality upwards of 20%. In order to expand its utilization of deceased donors, the UW Medicine liver transplant group has recently been at the forefront of emerging concepts and technologies such as the utilization of advanced hypothermic liver preservation (LIVERguard™) and the use of COVID positive deceased donors. Dr. Reyes collaborated with Ajit Limaye, Director of UW Medicine's Solid Organ Transplant Infectious Disease Program, to write impactful guidance papers which played a prominent role in establishing evidence-based practice internationally. The division's dedication to the establishment of a living donor liver transplant (LDLT) program is also starting to increase transplant accessibility to UW Medicine patients in a significant manner. As program director, Dr. Mark Sturdevant has reinvigorated the LDLT program along with Dr. Ramasamy Bakthavatsalam, Dr. Kiran Bambha, Associate Professor, Department of Medicine, and Winnie Hu, ARNP. Since August 2020, 28 adultto-adult LDLTs have been performed, including the region's first LDLT for metastatic colorectal cancer, and UW Medicine is now one of only six centers nationwide to have performed more than two LDLT procedures monthly in 2022. Close collaborations with Dr. Patrick Healey from Seattle Children's Hospital (SCH) and the UW Medicine hepatobiliary group (Drs. Raymond Yeung, Jim Park, and Jonathan Sham) have optimized care for liver donors, increased the LDLT activity at SCH, and have advanced the role and concept of transplant oncology at UW Medicine.



If you are interested in learning how you can support liver transplant, please click here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.



The first living donor liver transplant between unrelated adults in the Pacific Northwest. The surgical team included Drs. Jorge Reves (left) and André Dick.



Surgeons Mark Sturdevant, left, and Ramasamy Bakthavatsalam prepare the liver for the region's first LDLT for metastatic colorectal cancer. Photo credit: Winnie Hu | UW Medicine

THE ROOTSHTAIN BROTHERS - LIVING DONOR LIVER TRANSPLANT



Gavriel (left) and Uriel (right) in the hospital the day after living donor liver transplant

n April 4th, 2022, Uriel Rootshtain became the 26th person to have an adult-to-adult living donor liver transplant at UW Medicine, a program that was revitalized in 2020 and serves the entire Pacific Northwest. Uriel's medical journey began several years prior, when he was diagnosed with primary sclerosing cholangitis (PSC), a rare disease that causes the bile ducts in the liver to become inflamed and scar, eventually blocking the flow of bile and causing irreversible damage to the liver. In September

2021, Uriel's condition deteriorated so quickly that he was admitted to the hospital and placed on the liver transplant list. That's when he met liver transplant surgeon Dr. Mark Sturdevant and learned about the living donor liver transplant program. "When I went onto the transplant list my MELD score was in the mid-20s, and for someone with a B blood type, a MELD score of 20+ puts you pretty high on the list. The initial thinking was there could be a deceased donor relatively soon, but then my labs stabilized and my MELD score dropped quite a lot although I was still feeling very fatiqued. I ended up much farther down the list as a result, so it looked like it was going to be a much longer haul." Initially, Uriel didn't tell his family about the option for living donor liver transplant as he did not want to put them in harm's way, but when two of his siblings eventually learned of the option, they jumped at the opportunity to be tested to see if they could help their brother. Due to the COVID-19 travel restrictions, both siblings began initial testing at home in Johannesburg. Uriel's brother Gavriel shares, "The tests came back positive for both of us in terms of being good candidates. My sister has four children and I said I would prefer to go if it was between us. From there they did additional testing to make sure I didn't have PSC as well, because it would be no point in giving him a sick liver." Gavriel arrived in Seattle on March 4th and the next day began another round of testing to verify the tests done in South Africa. A month later, it was surgery day. Gavriel shares, "The work, organization and



Uriel, Leonie (mother), Ayelet (sister) and Gavriel, the day after they arrived home post-transplant

effort felt like climbing a rollercoaster. Once operation day came, it felt like we had made it to the very top and now the different rush of the actual operation and recovery was one of relief that we both came out ok and were stable. Very grateful to the entire surgical team and care team for everything they achieved for us." Gavriel's donor operation took seven hours, and Uriel's procedure took ten hours, longer than expected due to the extensive damage the disease had caused on his body. Uriel shares, "We were up and about walking the next day, getting our laps in in the hospital. Physically and from a labs point of view we were making very good progress. We were checked out of the hospital after a week – we were told initially we could be in for as long as two weeks."

Uriel and Gavriel are now more than two months post-transplant and doing well. "General awareness about this option is very low. It comes as a surprise to almost everyone that you can take a portion of someone's liver and transplant it, and that both halves will grow back to full size," says Uriel. Gavriel is quick to add, "Initially, we didn't even know as a family that it was an option to be a living donor... especially for people with PSC, it's a good viable option to be aware of." Uriel notes, "I was fortunate that I had family members that took matters into their own hands and decided to get themselves tested to see if they were eligible. Living donor transplant has helped me tremendously in terms of giving me a path from where I previously wouldn't have had one – at least for a long time."



Top: Gavriel, Uriel and Leonie (mother) at discharge, one week after the living donor transplant surgery.

Bottom: Uriel, Angela (Uriel's wife), and Gavriel at SeaTac airport as Gavriel flies home to South Africa

PEDIATRIC TRANSPLANT PROGRAM

DR. PATRICK HEALEY, PROFESSOR DIVISION OF TRANSPLANT SURGERY



Dr. Patrick Healey

Clinical decisions and practices continue to evolve during the COVID-19 pandemic, presenting new and uncertain challenges to transplant programs across the US. In 2021, the United Network for Organ Sharing (UNOS) introduced new allocation policies that significantly changed the way deceased donor organs are allocated to patients on the waiting list. Despite these external challenges, 2021 was one of our pediatric program's busiest years,

performing 66 organ transplants in children and placing Seattle Children's Hospital (SCH) at #6 nationally in pediatric transplant activity across all programs. With these changes, we have increased our focus on living donor (LD) transplant in our Kidney and Liver Transplant Programs.

In 2021, 45 abdominal organ transplants were performed by our pediatric team. This included 14 liver transplants, one intestine transplant, and a program-high 30 kidney transplants. Nine of the kidney transplants were LD transplants, making SCH #2 in the US.

The LD programs at Children's are a true collaboration with the UW Medicine adult transplant programs. Donor evaluation, surgery, and care is provided by the UW Medicine transplant team, and the donated organ is transported from UW Medicine to SCH after removal. These procedures are performed simultaneously and require meticulous coordination between the two teams. Since inception of the combined LD kidney program in 2003, over 125 children have been able to receive LD transplants with excellent outcomes. Patient and graft survival outcomes reported by the Scientific Registry for Transplant Recipients (SRTR) reveal 100% survival at one-year and three-years post-transplant.

To increase LD kidney transplant possibilities, we participate in Kidney Paired Donor (KPD) Exchange programs with UW Medicine for children who do not have compatible blood types with their intended donor. In KPD exchange, the child is matched with a compatible donor to receive a living donor kidney, and the child's intended donor donates to the recipient paired with that donor. This has resulted in three additional LD kidney transplants that otherwise would not have been possible.

Liver transplant activity has also benefited from the growth of the UW Medicine Living Donor Liver Transplant Program, resulting in three child LD transplants so far in 2022. To date, over 330 children have received liver transplants, with 13 being LD transplants. We have seen 93% overall graft survival in our liver transplant recipients, with 100% survival outcomes in our LD recipients.

These increased volumes and excellent outcomes are the result of highly organized collaborations between the UW Medicine and SCH teams, as well as highly skilled surgery, transplant physician, anesthesia, nursing and social work team members committed to achieving the best outcomes for our children in need of transplant.



If you are interested in learning how you can support **pediatric transplant**, please click here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.

HEART TRANSPLANT PROGRAM

DR. JAY PAL, PROFESSOR DIVISION OF CARDIOTHORACIC SURGERY

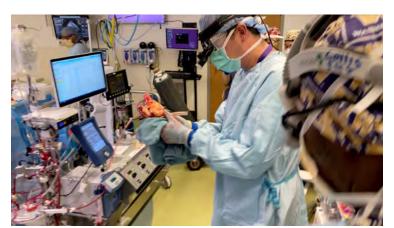


Dr. Jay Pal

The Heart Transplant Program at UW Medicine has a long and storied career. The program has performed over 1,100 transplant procedures, with survival better than the national average. In fact, patients are more likely to be transplanted at UW, with lower waitlist mortality, than the national average, as reported by the Scientific Registry for Transplant Recipients (SRTR). In addition to heart transplantation, UW provides the full spectrum of advanced heart failure

treatments, including extracorporeal membrane oxygenation (ECMO), left ventricular assist device (LVAD), and Total Artificial Heart. Furthermore, the faculty in cardiology and cardiac surgery who specialize in the treatment of advanced heart failure are national leaders in clinical care and translational research.

Three surgeons in the Division of Cardiothoracic Surgery focus on heart transplantation and LVAD implantation: Drs. Jeffrey Keenan, Assistant Professor, Maziar Khorsandi, Assistant Professor, and Jay Pal, Professor. Interestingly, all three obtained their cardiothoracic or transplant training at Duke University. These surgeons work together to ensure all heart failure patients are cared for by surgeons with specialty training in these advanced techniques.



Dr. Jeffrey Keenan carries a donor heart from the Organ Care System to the recipient for a transplant procedure.

Although the basic techniques of heart transplantation are more than 50 years old, several recent developments have led to rapid advancements in the field. In particular, the ability to transplant heart from patients who have died a circulatory death, as well as the use of ex-vivo perfusion systems to transport organs, has allowed more patients to receive heart transplants in 2021 than ever before. With similar advances in LVAD therapy, patients with advanced heart failure are living longer, more normal lives than could have been imagined just a few years ago.



If you are interested in learning how you can support heart transplant, please click here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.

THE HEALING POWER OF TRANSPLANTATION

JUDITH RAPP, ASSISTANT DIRECTOR
ACADEMIC & STAFF HUMAN RESOURCES,
DEPARTMENT COMMUNICATIONS

Why I am writing this: to tell the other side of the transplant story—the donor side from personal experience. To help others understand the healing nature of doing something for others.

G etting a call no parent wants to get – ever – that your child (in this case, grown child) is in the hospital neuro-ICU and has suffered a brain trauma. He is alive, but in serious condition.

I will never forget the long drive to Tacoma General Hospital on January 2, 2020—one day after the start of the new year—not knowing much, fearing the worst; hoping "alive" meant he'll be OK eventually; confused about what happened; nor what we would face when we got there. I kept holding on to the "he's alive" phrase — where there is life, there is hope.

We were met by a small group, the nurse in charge of that unit and the neuro-trauma doctor attending him. We were taken to see Nicholas, our 35-year-old son and only child. He was on a ventilator and his eyes were closed; otherwise, he looked normal and peaceful. We learned he had suffered asphyxia and his brain had been deprived of oxygen for an undetermined amount of time. EMTs had been able to re-establish a heartbeat, but he was on a ventilator. The doctor was kind but gave us the straight facts: Nicholas' brain had been deprived of oxygen for long enough that at this point the outcome was uncertain, but it did not look good.



Judith and Nick at Christmas

Then a most important thing happened. The doctor (I believe he was a neuro-ICU hospitalist) took us to a private space and discussed with us the kinds of brain trauma and how they are determined.

I cannot emphasize how important this conversation was. I am sure medical staff do realize these are sensitive conversations, but I emphasize that handling these well was crucial for our understanding, important decision making, and a vital step in our grief process. The doctor and the other caregivers treated us with respect, honesty, compassion and agency-people, though in shock and grieving, could handle painful information. Another important quality was the doctor and the rest of the team provided us time and space for questions, many repetitious.

We came to understand what brain death was, how it was distinguished from other forms of brain trauma, such as Coma, Vegetative State and Brain Death, which we learned was an irreversible cessation of all functions of the entire brain, including the brain stem. A person who is brain dead is dead, with no chance of revival.

I asked if or how they knew what state Nicholas was in — was he brain dead? I learned that pronouncing someone's brain death is not a simple yes or no. There are criteria that are met or not met over the course of a couple of days that would determine whether he was brain dead. Our doctor explained that tests would be conducted, and he would be meeting with other doctors experienced in evaluation of the data. That was the process to determine Nick's brain status. He did say that tests so far did not reveal any reactivity to pain, and he did not have a gag reflex — both indicators of brain death. At this point, he was not hopeful there would be recovery.

Stunned, I asked a lot more questions. "You hear of people waking up from comas, might that not happen in this case?" I had seen one of the fingers of his right hand move slightly and that gave me hope.

The doctor again told us that he did not think Nick was in either a coma or vegetative state, but more tests — over a period of hours or a couple of days — would need to be done for them to pronounce Nick as brain dead — which is dead. The heart and lungs were now functioning by artificial means and would stop when those were removed.

It was during these conversations that we discussed organ donation. I have always been an advocate of organ donation, as I knew Nick was. But in those moments, you want to make really sure that there is no chance of recovery before you give permission.

(continued on page 8)

THE HEALING POWER OF TRANSPLANTATION

Much as we wanted to hope, it became harder and harder to believe he would recover. We watched them perform some of the tests, which I am grateful they allowed us to witness - tests like the pain and gag reflexes. We gradually accepted our son was brain dead, and on January 4, 2020, he was pronounced brain dead – which is dead.

We gave permission for organ transplantation and the Life Center Northwestⁱ (LCNW) organization took over. It was comforting to me to know that the transplantation team operated independently from the team that pronounced Nick brain dead. Separation of interests is an important concept to me – and allowed and allows me to trust these systems.

The LCNW nurses and organ donation coordinators were extraordinary – they explained every step of the process, provided comfort, and made sure Nick was well taken care of during his final days. The process of determining what organs





Top: Nick and Natalie around her 1st birthday - 2018

Bottom: Nick and Natalie a few months before his death - 2019

could be donated, finding and preparing the recipients, and getting the transplant teams ready to go takes several days. I found these days a grace granted to us. We were able to be with Nick – in a hospital room – but it was peaceful in its own way. LCNW provided a personalized quilt. Nick appeared peacefully asleep. I was grieving as were my husband and our son's fiancée, and we all took extraordinary comfort in our granddaughter, who reminded us of new life.

In the end, though Nick could have donated six organs in total (lungs, heart, liver, pancreas and two kidneys) for various reasons, four organs found new life in recipients that were very sick. His heart, his liver and both kidneys were transplanted.

I was especially thankful his heart was able to be transplanted. Partly because it was a heart, and also because I knew the odds were that one of the surgeons I worked with every day - and had for over 15 years - was likely to perform the transplant. Hearts do not stay viable as long as other organs, and therefore can't travel as far to be transplanted. In the state of Washington there are only a few places it could be transplanted, with UW Medical Center doing the most heart transplants in this region. So, though I don't know for sure since that information is not shared with organ donor families, the odds were one of our surgeons would likely be performing the transplant. This thought was comforting to me. I know our surgeons; I know their skill and compassion. It felt to me like my family was taking care of my son. This is a unique circumstance - knowing and working with cardiac transplant surgeons - but I know that skill and compassion are present in every transplant they do.

I know that his organs went to people who really needed them — a mother with three children received one of his kidneys, another woman got his other kidney; a man got his liver, and his heart went to a 40+ man who has a family that very much needed him. We know that all the recipients are alive and doing well; made it through the worst of COVID. In that I take comfort.

The death of our son was surely the hardest thing we have ever been through. The grief is real and it hits you unexpectedly, and is triggered by the smallest things; but there is grace, too. An important part of walking through the grief toward healing was the knowledge that our son had given the ultimate gift, the gift of life for others.

¹Life Center Northwest is the federally-designated organ procurement organization and AATB-accredited tissue recovery organization serving communities throughout Alaska, Montana, northern Idaho and Washington. https://www.facebook.com/lifecenternorthwest/.

NEW BEGINNINGS FOR HEART FAILURE PATIENTS

DR. CALLISTUS DITAH, FELLOW CARDIOTHORACIC SURGERY



Dr. Callistus Ditah

The capacity to intervene on the human condition is an experience so sating that I wish everyone had the opportunity to examine and judge in their lifetime. Having occasions to do this as a career is something I've neither adjusted nor commanded the comprehension to explain. As I reflect on my life's journey so far, the privilege afforded to me and my colleagues by our patients can only be measured

by the joy of going to bed, mostly tired, but comforted by the notion of rising early with another opportunity to interact with patients burdened by Cardiothoracic derangements—the prospect of exploring ways to heal "a broken heart." This fact alone, is necessary and sufficient.

"Before us is a true hero, one whose parting gift of life will change others forever... she loved everyone around her, was a fan of Justin Bieber and always protected her friends..." I was captivated by this moment for a few extra seconds. "Scalpel please," I murmured... and this marked my first human organ procurement.

This hospital was only a short ride from the airport where our plane was parked, waiting our return. We were there to procure a heart for transplantation. Absorbed by this experience, and for the first time in my career, I felt overwhelmed with privilege. To be part of this transaction, between two humans, on different paths in a fragile life. Parties who knew not of each other and considered no recompense. Howbeit, these two were only moments and a few surgical anastomoses away from being "connected at heart."

As I returned, I agreed—it is okay to allow yourself to be swayed, and by so doing, become emotionally invested in the lives of your patients. It is healthy, and should be free of rub, something I've learned from my mentors at the University of Washington. I try to remind myself of these principles as necessary, yet with understanding that as a cardiac surgeon, perforce, celerity and precision must be accounted.

I was conscious of our patient, waiting for us at home in Seattle, and most vividly, his countenance. Earlier that morning, he shared his background with me, how engaged he had been with his community, his goals, and what it would mean to be able to get a shot at life again, an opportunity to think clearly, love and cry. How then could I employ levity toward this moment? During that conversation, I shared the prospects of a new heart by the end of the day, but as regulations usually stipulate, I couldn't share more.

Now at the procurement theatre, I voided my mind and two juxtaposing futures became apparent. Our team was fighting for these two patients in that moment and no one else mattered. Maybe the interracial nature of this transaction between our donor and recipient approbated more, in my eyes. Fast forward to several days later as our patient was getting ready to go home, he looked full of life. This experience held meaning to our team. It was pure, simple, and worked well for our donor and recipient.







Top: Dr. Ditah performing a heart transplant.

Bottom left: Drs. Chris Burke, Scott DeRoo, and Callistus Ditah (left to right) in the operating room.

Bottom right: Procured heart on the way to being transplanted.

LUNG TRANSPLANT PROGRAM

DR. MICHAEL MULLIGAN, PROFESSOR & CHIEF DIVISION OF CARDIOTHORACIC SURGERY



Dr. Michael Mulligan

t may be surprising to learn that the person who completed his 1,000th lung transplant on July 7, 2019, did not always set out to be a transplant surgeon. In fact, Dr. Michael Mulligan, Professor & Chief, Cardiothoracic Surgery, thought he would be a family care provider in Vermont, where he would spend his days skiing and seeing patients. But life had other plans, and during a medical school anatomy class, Dr. Mulligan's mentors saw a special talent and directed him to

the field of surgery. With a strength in research and an interest in thoracic surgery, transplant became a natural fit. Upon graduation, Dr. Mulligan received several high-profile job offers, but elected to come to the University of Washington (UW) where academic medicine and a promising lung transplant program would give him the opportunity to build a clinical and research program of his own.

And build a program he did. Prior to his arrival, the UW did approximately 12 lung transplants a year. Now, UW Medicine is home to the only lung transplant program in the Northwest. Serving five states – Washington, Alaska, Idaho, Montana and Oregon – it has one of the highest volumes and some of best outcomes in the United States. Of the 60 transplants completed annually, Dr. Mulligan does approximately 57 or 58. He is always on call, and has "spent many a night in a van being retrieved from the snowy northwest, picked up from airstrips when on vacation, airlifted from the base of Mt. Rainier, and was almost shot down by a fighter jet on 9/11" – all to get back in time for a transplant. In fact, for the first 10 years, Dr. Mulligan would be retrieved from anywhere in the continental US if lungs were available for transplant.

Having been immersed in the lung transplant process from donor to recipient operation for over two decades, coupled with his extensive bench research on primary graft disfunction, Dr. Mulligan has witnessed firsthand longitudinal results about what makes a lung transplantation successful. In fact, he has garnered so much knowledge that he wrote the consensus opinion for the International Society of Heart and Lung Transplantation on maximizing the use of donated organs. This document describes "how to evaluate organs in the field using a system of prescribed behaviors and maneuvers to see whether things are safe - essentially an instruction manual on how to do this in the field and what the numbers mean so this is exportable and transferrable knowledge." Says Dr. Mulligan, "I've always been very self-critical, so I've learned to identify organs that can be salvaged or may have been a bit marginal but function very well." These learnings have become even more important in the last two years as COVID-19 ravaged lungs and caused acute respiratory distress syndrome, greatly increasing the demand and urgency for lung transplantation.

Dr. Mulligan's breadth of experience has also led to research and clinical advancements including the newly announced clinical trials in lung transplantation. This project will be "composed of seven multicenter pods with three institutions in each, so 21 transplant programs represented that will be part of the National Lung Transplant Research Consortium that will capture more than half of the lung transplants done in North America, and it will be a think tank with five years of funding that will lead to a clinical trials network that will be without precedence." Dr. Mulligan lobbied for eight years to get project funding, and says of his success, "This will be one of my bigger legacy pieces having fought for so long to get it established and to actually see it happen before I retire has been very gratifying."

Dr. Mulligan's years of hard work have made the UW Medicine lung transplant program what it is today, and he says it is the community that has kept him here for so long. With over 1,100 transplanted patients, it is not uncommon for him to go anywhere without bumping into a former patient or their grateful family members, an experience that was hugely impactful for his two young sons. Dr. Mulligan wants to continue to do as much good as possible and work now aims to "revitalize the ex vivo lung perfusion program so no one dies in our community needing a lung transplant." Says Dr. Mulligan, "I want to do all, but it's important to teach others so the program can live on for the decades to come."



Dr. Mulligan in his research lab.



If you are interested in learning how you can support lung transplant, please click here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.

KIDNEY TRANSPLANT PROGRAM

DR. RAMASAMY BAKTHAVATSALAM, PROFESSOR DIVISION OF TRANSPLANT SURGERY



Dr. Ramasamy Bakthavatsalam

Since the initial kidney transplant procedure in January 1968, 4,000 kidney transplants have been performed at UW Medicine. This is truly a reflection of transplantation being the "Gift of Life," acknowledging families who have lost loved ones donating their organs generously (deceased donors) or from the kindness of individuals donating part of their life (living donors) to end the suffering. This "Gift of Life" has motivated my surgical journey. My urological, vascular and transplant technical skills have guided my expertise to help many patients in need.

UW Medicine is the largest transplant program in the Pacific Northwest, receiving 1,000 patient referrals per year with more than 200 kidney transplants per year. We are one of the few programs in the country to maintain a consistent five star rating (two standard deviations above) for both rate of transplantation and kidney transplant outcomes as reported by the Scientific Registry for Transplant Recipients. The United Network for Organ Sharing selected our program for the COIIN (Collaborative Innovation and Improvement Network) Project as exemplary for other programs to share our best practices. This increase in the number of transplants while maintaining the best outcomes in the country was possible by careful and tireless work of the transplant team with the appropriate matching and usage of the available organs in recipients, thereby increasing the transplantation rate and avoiding dialysis and the associated morbidity and mortality.

The living donor potential is increasing due to education of our recipients and their families regarding the available options to donate:

- 1. Direct donation
- Donor exchange (for positive cross match/incompatible blood type/age mismatch)
- 3. Internal swap/National Kidney Registry (NKR)
- 4. Altruistic donation and perpetuity chains
- 5. Therapeutic donors

Direct donation implies the living donor can directly donate to an intended recipient (relatives/family and friends). If the donor is found to be incompatible with the blood type or positive cross match they are entered into a swap with similar pairs and transplantation is facilitated. NKR is a national program where similar pairs participate and take part in a chain of transplants. We have successfully initiated perpetuity chains starting with altruistic donors and continuing the swaps amongst incompatible pairs. Therapeutic donors are donors who had the unfortunate circumstance of planned removal of their kidney for non-cancerous conditions which are successfully used for transplantation.

Most of our patients participate in research, either sponsored or independent, allowing our patients to experience new medications and technologies. As a result, our program is forefront in experience and expertise with these technologies.



If you are interested in learning how you can support kidney transplant, please click here or email Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.



Dr. Stephen Rayhill, Professor, Division of Transplant Surgery, performs a kidney transplant at UW Medical Center-Montlake.



David Droullard after donating peripheral blood stem cells

DR. DAVID DROULLARD STEM CELL DONATION

n medical school, Dr. David Droullard, General Surgery R4, registered to be a stem cell donor at a "Be The Match" registration drive. "I signed up and promptly forgot about it. Seven years later I received a phone call asking me to start the donation process - saying yes was the easiest decision I have made. Only a minority of registry members will ever be contacted to donate, so I encourage everyone to sign up at "Be The Match." I'm grateful for the chance to donate, and to my co-residents for covering me during the all-day donation process."

DR. DAVID CAMP - ALTRUISTIC KIDNEY DONATION

n February 2020, Dr. David Camp, a chiropractor from Lacey, WA, traveled to Germany to have two lumbar discs replaced, a surgery that he hoped would finally resolve his debilitating back issues caused by a car accident in 2015. Little did he know, this would be the start of a long and very painful medical experience.

While under anesthesia, Dr. Camp's spine surgeon found a rupturing abdominal aneurysm. Without a vascular surgeon on staff, Dr. Camp was rushed to another hospital for an aneurysm repair. Recovery was complicated, and Dr. Camp was in and out of the intensive care unit, his abdomen swollen with fluid. The hospital team thought this was a post-surgical seroma, but the gallon of fluid they drained from his body was never sent for testing. As days passed, Dr. Camp's condition continued to deteriorate, and a week later his abdomen was swollen with fluid again. "They had put a port in my jugular vein, and they were giving me fentanyl and morphine at the highest doses that were safe, and that never lowered my pain below a seven," said Dr. Camp. "I got a cold while I was in the hospital and I coughed one night. I coughed and my ureter exploded ... that was like a 15 out of 10 pain." An MRI revealed a ruptured ureter and the abdominal fluid was drained and sent for testing, which came back as urine. The surgeons laid out five surgical options, but Dr. Camp wasn't interested in another open abdominal procedure and asked about transplant. "They said under German law, they don't allow living kidney donors unless you're donating it to a close family member. They basically said they would take my kidney and study it, which means they would put it in formaldehyde and it would be useless. In my mind losing a healthy kidney and no one getting the benefit of that didn't make any sense." Dr. Camp decided to look into altruistic kidney donation closer to home and emailed Dr. Ramasamy Bakthavatsalam. "I appreciate Dr. Baktha probably more than he knows. Two days after I sent an email, he called me in Germany to ask about the situation. And, you know, that was an important part of my outlook on having this kidney donated."

In March 2020, 46 days after being admitted, Dr. Camp was finally discharged from the hospital with a nephrostomy tube. He was far from good health and couldn't walk 10 feet due to the 56 pounds of muscle mass he had lost while inpatient. Dr. Camp and his wife rented an apartment and spent the next four months recuperating so Dr. Camp would be strong enough to travel.

Finally in July 2020, five months after the initial surgery, Dr. Camp was back in the United States and began testing for kidney donation. In November 2020, it was time to donate. "I've got a lot of adhesions from having my organs bathed in urine for so long, and instead of doing a traditional four-inch scar to remove my kidney, they had to split me almost a full 12 inches because my kidney was encased in scar issue." Dr. Camp doesn't know who received his kidney, but he does know that individual is in excellent health. "I assume that they're doing well because I've always tried to stay healthy. To me, it was just a natural thing that I wouldn't want to just get the kidney out just to be done with it. I've been in chiropractic practice for 29 years and I've served people, and to me it made sense to at least allow somebody the opportunity to utilize the kidney that was healthy."



Dr. Camp on a fishing trip post-donation



André A.S. Dick, MD, MPH

Professor, Transplant Surgery Surgical Director, Pediatric Kidney Transplant, Seattle Children's Hospital Senior Vice President and Surgeon-in-Chief, Seattle Children's Hospital

How did you select transplant surgery as your specialty?

Transplant was not on my list of career choices. In medical school my initial interest was pediatric surgery because of my experiences with Dr. Philip Glick, a pediatric surgeon. I was paired with Dr. Glick after my first year when I received a research scholarship. He created an environment that combined clinical care and research to try and answer challenging clinical scenarios.

When I went to residency my interest continued and I spent time in Dr. Robert Cilley's lab, who was also a pediatric surgeon. After returning to the wards, I met the new transplant surgeon from Stanford, Dr. Ed Alfrey, and that is where my exposure to the field of transplantation first occurred. This was a great experience. We discussed that in transplant I could work with both adults and kids. He created this environment where I was like, "Oh my God, this is exactly what I want to do. I want to sort of be like this person." Through his mentorship and sponsorship, I was able to match in the transplant fellowship at the University of Washington.

When I started applying for fellowships, I looked at places that had strong pediatric transplant programs. It turned out the University of Washington/ Seattle Children's Hospital (SCH) was one of those places. I applied to fellowship here and it's the only place I interviewed, not because I didn't get other interviews, but once I interviewed and they offered me to spot I cancelled everything else.

When I came to SCH, I was walking in the hallways by Department of Surgery and I saw Phillip Glick's picture. I didn't realize he was a fellow here at SCH. It felt like I was destined to be in Seattle - I had Seattle connections even before I even got here.

Tell us about your most memorable patient/surgery.

That's a tough one. They're all memorable to me. I think one of the most memorable surgeries was in a child who presented with acute liver failure and weighed four kilos. I mean, literally he could almost fit in the palm of your hand. It was amazing that we were able to do the liver transplant, and for me, that was a huge highlight to see how far advances in surgical technique have come - that you're able to perform a transplant in a child weighing four kilos. There's not a lot of people in the country, or the world, that can do these operations. I have to say, I've been fortunate and blessed to be able to do that and bring joy back to patients and families that we serve during their most challenging times.

I'm often still amazed that this actually works <laughs>. You can take an organ from someone and put it in someone else and mitigate the immunologic barriers. You put it in, and it works right away. You can see a child that's jaundiced from liver disease, and within 48 hours post liver transplant, they aren't jaundiced anymore. Their skin is clearing up and they're totally different. Or a child who's been on dialysis three times a week or every day, based on their dialysis modality, and they can't do what a normal child does. They can't take part in regular activities most children take for granted. It interrupts their growth and development, education and their family lives. Post kidney transplant and they're totally a new person. They can do whatever they want to, they can eat, drink as much as they want and get a second chance to live a normal life. It's pretty amazing.

What's the best career advice you've ever received?

The best career advice I've ever received is never let anyone define what success looks like for you. You always have to define your own success. Success is an individual thing. Oftentimes, people try to say, "This is the only path. This is the only way to go," and that might be for them. You have to decide, what is your true north. What are you trying to accomplish and what impact are you trying to make? At the end of the day when you are looking in the mirror, there's only one person will be looking back in the mirror that can answer, did this work or not. Never limit yourself to one thing, always keep your eyes open to opportunities. You never know what may come your way.

Switching gears to COVID. How has your practice and life changed since the pandemic started?

From a professional standpoint, transplant never stopped. It may have slowed down, but it never stopped. We kept doing transplants unlike other places in the country like in New York where they were completely overwhelmed and had to divert their resources to care for patients who had COVID-19.



Dr. Dick with his wife, Dr. Anita Tiwari

(continued on page 14)

#GTKDOS - DR. ANDRÉ DICK

On the personal side, things definitely changed. I have two children, a six and an eight-year-old, and I never fully appreciated teachers and nannies. You realize they are a critical part of your life, especially if you don't have any family nearby. You need a village for all this to work. The personal part was very challenging as my wife is also a physician who is very busy. I think one of the other things COVID taught me is to be very intentional in how and with whom I spend my time. Don't waste time on noise but focus on the signal. It's a reminder that life is short and if you don't focus on the things or people that matter the most, once it or they are gone, there's a permanence to it.



Dr. Dick's children, Kiran (8) and Sejal (6)

What is something you've accomplished in the last year that you were most proud of?

I've become the first Black faculty member in the Department of Surgery that's a full professor. That's pretty significant for me, as well as being the first Black surgeon-in-chief at SCH. I think there are four Black surgeon-in-chiefs at major children's hospital in the country right now. The reason why that's a major accomplishment, not just for me personally, but to me, is this serves as an opportunity for people who don't think they can be what they can't see. Someone behind me is going to look and say, "Hey, that's a possibility for me." A person of color who never thought that this is something that they could do, may now aspire to do so and I hope will aspire to do even greater things. This is way bigger than me, and I'm hoping it has a way bigger impact beyond me.

What are you known for professionally or personally?

From a professional standpoint, I hope people would say I'm a person that will always try to do the right thing. I always try to see how I can create opportunities for people behind and around me to succeed. I think that's one measure of my success—how I help someone else be the best person they can be. Surround yourself with accessible brilliance.

On a personal note, I'd say I'm a good friend. I'm always there to support people and I put a lot of emphasis on developing strong bonds and relationships. I think in life, if you want to go far, you've got to go together.

rapid fire

What is the last book vou read?

The Fire Next Time by James Baldwin. If you ever have the opportunity, it's a pretty amazing book.

What TV show are you watching now?

My wife started watching Madam Secretary. It was pretty good to see how the main actor handles her staff and navigates these challenging situations and how she puts a lot of emphasis on loyalty and taking care of her own and sort of leading from the front, not necessarily from behind all the time.

What is your go-to snack?

I grew up in Jamaica and it's called "bun and cheese." It's a cinnamon type of pastry you warm up, slice it, put some cheese in between and you eat it. I get it through Amazon because I can't really get Jamaican stuff here, but every so often I try to order it and try to keep it away from my son, because he loves that too <laughs>.

What's your favorite guilty pleasure?

I think COVID has changed a lot of things for me and I just enjoy hanging out with my family and friends and having people come over. See how people are doing, see how things are going in their lives. That brings a lot of pleasure to me.

When are you the most productive?

I try to get stuff done in the morning so that by the time I get home I can actually spend some time with my wife and kids.

Who's your inspiration and why?

My inspiration is my mom. I grew up in a single-parent home and she made significant sacrifices for me to be where I am today. I say this to my close friends and probably need to say more to my mom - anything that I've achieved her name should also be on it, because if she didn't make those sacrifices there's no way I'd be where I am today.

If a movie was made about your life, who would you want to play you?

<Laugh> I want to say Denzel Washington but I'll say Sidney Poitier. He wrote a book called *The Measure of a Man*, and if you get a chance, read it too. He was able to break through significant barriers and oftentimes as I follow his life, I think about myself and some of the things I've gone through, and I see the difference that he's ultimately made in people's life.
And so he'd be the one - Sidney Poitier.

#GTKDOS - DR. ANDRÉ DICK

What was your last impulse buy?

I don't like shopping <laughs>, so I'm trying to think. I, against my wife's advice and better judgement, bought two iPads for my children. They're always fighting over the iPads and I said, "Hey, you know what? I've got to get you each your own iPad." I think kids are learning a lot differently than how I did growing up. iPads have pencils that they can use to do all this homework—there's all these educational applications. I'd say that's my last impulse buy. I try not to spend money on material things per se, but spend money on experiences that are lifelong and priceless, like travelling. I do like to travel and experience different places and learn about new people and new cultures. I want my children to have the travel bug. See and experience new things that will help shape them to be good citizens of the world.

What is your most memorable vacation?

I would say one of the most memorable vacations was before we had kids. We hiked the trails of Machu Picchu. We booked this trip through this company called Mountain Lodges of Peru. My wife was like, "Oh, it's an easy hike. You don't have to worry about anything. You just show up and enjoy." I did enjoy it, but it wasn't easy hike. I was always in the back and I think they had to deploy a guide just for me. I was totally out of shape and not prepared. It was amazing to hike every day through Peru and see, as you go from one place to the next, the change in the terrain, the change in the food, the change in the local culture. It's like even within the country, there's these different cultures.

And then to end that at Machu Picchu. How did they create this majestic city in the clouds? <a href="laughs"



Dr. Dick and family on another memorable vacation at the National Elk Refuge in Jackson Hole, WY

Welcome New Faculty

CLAIRE BUCHANAN, MD

Professor

DIVISION OF GENERAL SURGERY

In April Dr. Claire Buchanan joined the breast team at UW Medical Center - Northwest and Seattle Care Cancer Alliance. Dr. Buchanan has lived in the Seattle area since 2005, and worked at the True Family



Women's Cancer Center at the Swedish Cancer Institute before joining UW. After completing her undergraduate degree at the University of Chicago, she stayed for her medical degree at the University's Pritzker School of Medicine. Dr. Buchanan completed her general surgery residency at St. Joseph Mercy Hospital in Ann Arbor, Michigan, and during this time she developed an interest in caring for breast cancer patients, and enjoyed the collaborative and multidisciplinary nature of the speciality. Encouraged by her teachers in residency, she spent a year at the University of Southern California doing clinical research with Dr. Melvin Silverstein, an expert in ductal carcinoma in situ. An amazing mentor and surgeon, Dr. Silverstein guided Dr. Buchanan to seek breast surgery fellowship training at Memorial Sloan Kettering Cancer Center.

Dr. Buchanan is excited to return to academics and thrives on relationships with her patients, staff and colleagues. Her clinical interests include nipple sparing mastectomies, oncoplastic approaches, and aesthetic flat closure for women who choose not to have reconstruction after mastectomy. Outside of work, she enjoys West Coast Swing/Lindy Hop dancing, baking pies for friends and family and watching action movies with her sons.

Dr. Lorrie Langdale received the Seattle Surgical Society Lifetime Service Award



Dr. Lorrie Langdale, Professor & Chief, Section of General Surgery, VA Puget Sound Health Care System (VA), received the Seattle Surgical Society Lifetime Service Award to recognize and honor her substantial life-long contributions to the health and well-being of citizens of the Pacific Northwest.

"It was a tremendous honor and surprise to receive the 2022 Lifetime Service Award from the Seattle Surgical

Society," said Dr. Langdale. "The Award was inaugurated in 2021 and presented to Dr. Michael Copass. Given his legacy to Seattle's Emergency Response System and care of the injured patient, to be cast as having had anything close to his impact on our community was humbling. We all aspire to make a difference and there are many paths to achieving that goal. As a kid, I wanted to be either a doctor or a math teacher—as it happened, a fulfilling career at the Seattle VA in the UW Department of Surgery and School of Medicine allowed me to merge those dreams, teaching several generations of residents and students to care for patients both in and out of the operating room and mentoring those who wanted to follow. I have watched with pride the growth of so many friends who are now the go-to surgeons of their institutions. I am most gratified to have played a small role in their continued success."

Dr. Nicholas Vedder Awarded AAPS Distinguished Fellow Award

Dr. Nicholas Vedder, Professor & Chief, Jamie Hunter Endowed Chair in Reconstructive Plastic Surgery, Division of Plastic Surgery, was awarded the American Association of Plastic Surgeons (AAPS) Distinguished Fellow Award. The AAPS, the oldest and most prestigious plastic surgery organization in the world, acknowledged Dr. Vedder for his personal achievements and lifetime contributions to the field of plastic surgery. Dr. Donald Mackay, AAPS Past President (2020-21) and Honors Committee Chair, presented the award to Dr. Vedder, AAPS Past President (2018-19), at the 100th AAPS Annual Meeting in April 2022.

"Over the past two decades I have had the privilege of watching the University of Washington Plastic surgery program grow exponentially under Nick's careful leadership. Stable growth from six residents to 30 residents, and six faculty to 17 could have only happened under a leader with Nick's skill, support and dedication."

— Dr. Richard A. Hopper Chief, Division of Craniofacial and Plastic Surgery Surgical Director, Craniofacial Center Seattle Children's Hospital Professor, Division of Plastic Surgery "This award is a tremendous honor for Dr. Vedder and for our Division of Plastic Surgery. It is confirmation of what those of us here in Seattle, and the entire membership of the AAPS have known for a long time: that Dr. Vedder has made it his life's work to elevate the field of plastic surgery, and to ensure that the American Association of Plastic Surgeons remains at the vanguard of our specialty."

 $$-{\rm Dr.}$ Jeffrey Friedrich Professor, Division of Plastic Surgery

"Dr. Vedder has been awarded the AAPS Distinguished Fellow award in recognition of a lifetime of achievements and contributions to the field of plastic surgery. This is one of the highest awards given from the American Association of Academic Plastic Surgeons, the oldest and one of the most prestigious plastic surgery societies, and is certainly well-deserved given all his accomplishments in a remarkable career."

 $$-{\rm Dr.}$ Otway Louie Section Chief, UW Medicine Center for Reconstructive Surgery Associate Professor, Division of Plastic Surgery



FACULTY

DR. MAZIAR KHORSANDI
RECEIVED THE ISHLT/O.H.
FRAZIER AWARD IN MECHANICAL
CIRCULATORY SUPPORT
TRANSLATIONAL RESEARCH



Dr. Maziar Khorsandi, Assistant Professor, Division of Cardiothoracic Surgery, received the International Society for Heart and Lung Transplantation/O.H. Frazier

Award in Mechanical Circulatory Support (MCS)Translational Research. The purpose of this award is to support rising stars in the field of MCS at a critical time in their career. The award recipient will have already established a track record in the field of mechanical circulatory support and will stive to further develop their career in this area.

"We aim to demonstrate the utility of wireless pulmonary artery pressure monitoring (CardioMEMS HF) in the management of patients supported with durable left ventricular assist devices (LVAD)," said Dr. Khorsandi. "We expect that CardioMEMS HF can obviate the need for invasive hemodynamic studies in the cath lab and echocardiography to determine each patient's optimal LVAD speed. Furthermore, the findings from this study will provide a potential mechanism for the closed-loop modulation of LVAD pump speed in future controller designs."

DR. SARA KIM HONORED
WITH SCRIPPS' COLLEGE 2022
DISTINGUISHED ALUMNAE OF THE
YEAR AWARD



Dr. Sara Kim, Research Professor, Division of General Surgery, was honored with Scripps' College 2022 Distinguished Alumnae of the Year Award.

First presented in 1978, the Scripps College Distinguished Alumna Award was established to celebrate the notable achievements of Scripps alumnae and to focus attention on Scripps' role in the education of women. Dr. Kim has dedicated her career to UW as a medical educator, developing and delivering training in resolving interpersonal conflict in healthcare settings. Dr. Kim credits Scripps and the late Professor Jim Gould, her advisor at Scripps, for instilling the passion for lifelong learning. Dr. Kim states, "Professor Gould showed me that a value like kindness can be and must be a lifelong practice within us. As a leader in the medical school, collaboratively solving organizational challenges or teaching conflict management skills, I'm learning that kindness is the foundation of honoring the dignity of both myself and others. The early experience of kindness at Scripps and the lifelong remembrance of that experience molded me into who I am today."

DR. TERESA KIM RECEIVED NATIONAL CANCER INSTITUTE EARLY-STAGE SURGEON SCIENTIST PROGRAM AWARD



Dr. Teresa Kim, Assistant
Professor, Division of
General Surgery, received
the National Cancer
Institute Early-Stage
Surgeon Scientist Program

(ESSP) Award. ESSP is designed to train surgeon scientists and retain them in cancer research by supporting a program focused on cancer-related disease and basic/translational research. This program aims to bring together surgeon scientists from across the United States and build cohorts that will be trained together for up to three years per cohort.

"This award is so impactful. I am grateful that the NIH recognized and is proactively working to support early-stage surgeon scientists, and I am grateful for the opportunity to learn alongside brilliant peers and continue building my own tumor immunology research program. Most importantly, I am grateful for the sustained support of the Department of Surgery - the investment in my scientific work, the sponsorship of opportunities like this, and the invaluable mentorship shared by senior surgeon scientists, Drs. Raymond Yeung and Venu Pillarisetty. Their passion, wisdom, guidance, and belief in my potential have been critical at many steps along the way. Excited to get to work, tackling immune resistance in colorectal cancer liver metastasis."

DR. REBECCA MAINE RECEIVED THE AMERICAN ASSOCIATION FOR THE SURGERY OF TRAUMA RESEARCH AND EDUCATION FUND SCHOLARSHIP



Dr. Rebecca Maine, Assistant Professor, Division of Trauma, Burn & Critical Care Surgery, received the American Association for the Surgery of Trauma (AAST)

Research and Education Fund Scholarship. The purpose of this scholarship is to encourage young investigators to become a part of the AAST community, network with leading trauma surgeons, and engage in the cutting-edge program at the Annual Meeting.

DR. LARA OYETUNJI RECEIVED THE INAUGURAL DR. PATRICIA L. DAWSON ENDOWED FACULTY FELLOWSHIP



To honor the late Dr. Patricia L. Dawson, MD, FACS, Ph.D, and her 40 year legacy of advocating for healthcare equity, an endowed faculty fellowship in the UW Medicine Office

of Healthcare Equity was created in her name. This fund will "support the work of a faculty leader at UW Medicine to operationalize the goals of the UW Medicine Healthcare Equity Blueprint, an innovative roadmap for improving equity outcomes written by UW Medicine leaders and initiated by Drs. Houston and Dawson." Dr. Shakirat (Lara) Oyetunji, Assistant Professor, Division of Cardiothoracic Surgery, was the inaugural recipient and says of this honor, "Dr. Dawson was a visionary leader and a remarkable surgeon with a passion and career dedicated to eliminating healthcare inequities. It is an immense honor to be selected as the inaugural recipient for this endowed faculty fellowship. I hope that I can rise to the legacy that this endowed fellowship commands and very much look forward

to working with the Office of Health Care Equity, the UW Heart Institute, the Department of Surgery, and local partners on moving the needle pertaining to the cardiac care that UW Medicine provides to our patients and community."

DR. JAMES PARK AWARDED THE WAYNE D. AND JOAN E. KUNI FOUNDATION IMAGINATION GRANT



Dr. James Park, Professor,
Division of General Surgery,
in collaboration with Dr.
Yawen Li in Radiation
Oncology were awarded the
Wayne D. and Joan E. Kuni

Foundation Imagination Grant to support their work in advancing liver cancer imaging. The Imagination Grants serve as catalysts for strengthening or expanding the cancer research capabilities of an institution in service of its mission to fulfill an unmet need and to advance the impactful and innovative work into the next critical phase.

"This generous support from the Kuni Foundation will provide funding to humanize our antibody, a critical next step in bringing our research from bench to bedside. Our innovative platform will detect liver cancer at sizes ten times smaller than current best imaging and treat advanced stage disease when other options are not feasible. This type of imaging will be paradigm shifting, preventing early recurrences after invasive therapies, and will provide a novel treatment to patients with limited options."

DR. VENU PILLARISETTY RECEIVED BROTMAN BATY INSTITUTE FUNDING



Dr. Venu Pillarisetty, Professor, Division of General Surgery, and Evan Newell, Associate Professor, Fred Hutchinson Cancer Center, received

Brotman Baty Institute funding for their research developing personalized T cell therapeutics that target an individual patient's cancer.

Dr. Pillarisetty, who has been studying immunology for over 20 years, noted, "this work is a passion of mine. In some ways, our study represents an interesting pairing. Kidney and pancreatic cancers are very different and respond differently to immunotherapies. Up to this point, pancreatic cancer has not really responded very well to immunotherapy, while kidney cancer has."

DR. JONATHAN SHAM RECEIVED THE DR. CHARLES A. COLTMAN, JR., FELLOWSHIP AWARD FROM THE HOPE FOUNDATION



Dr. Jonathan Sham, Assistant Professor, Division of General Surgery, received the Dr. Charles A. Coltman, Jr., Fellowship Award from The Hope Foundation. The

primary purpose of this award is to engage outstanding early-career investigators from SWOG-affiliated institutions in learning clinical trial methodology within an academic and network group environment that will lead to independent clinical research, while honoring the legacy of long-time SWOG Chair and leader, Dr. Charles A. Coltman, Jr. Dr. Sham's study aims to evaluate the effect of lanreotide on postoperative pancreatic fistula.

"This award presents a unique opportunity to gain career-changing guidance from SWOG leaders about the development and

execution of multi-institutional clinical trials," said Dr. Sham. "I would not have been competitive for this award without the support of my partners in HPB surgery, division mentorship team, and department leadership."

DR. ESTELL WILLIAMS AWARDED THE INAUGURAL ASSOCIATION FOR SURGICAL EDUCATION RESEARCH FELLOWSHIP AWARD

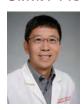


Dr. Estell Williams, Assistant Professor, Division of General Surgery, was awarded the inaugural Association for Surgical Education Research Fellowship award. The

Surgical Education Research Fellowship program (SERF) is a one year, home-site fellowship designed to equip investigators with the skills and knowledge needed to plan, implement and report research studies in the field of surgical education. Following acceptance into the SERF program, each fellow is carefully matched by the program's faculty with a SERF Advisor, a respected and knowledgeable researcher who will serve as the fellow's mentor and consultant on their particular project.

"Ithank Society of Black Academic Surgeons and Association for Surgical Education for this amazing opportunity," said Dr. Williams. "I am so proud to represent my Department of Surgery family and gain the support and skills to continue to advance my academic career."

DR. RAYMOND YEUNG RECEIVED CANCER CENTER SUPPORT GRANT PILOT AWARD



Dr. Raymond Yeung,
Professor, Division of
General Surgery, received
a Pilot Award funded by the
Cancer Center Support Grant,
Fred Hutchinson Cancer

Center, to investigate calcium signaling in fibrolamellar cancer. The goal of this research is to explore a new mechanism that may drive the development and progression of this rare form of childhood liver cancer, which currently has no effective systemic therapy. He will team up with Dr. Yasemin Sancak, Assistant Professor, Department of Pharmacology, to further expand inter-departmental collaboration in basic oncology research. "This work represents an extension of our Translational Team Science Award from the Department of Defense to find new therapeutic targets for fibrolamellar cancer," said Dr. Yeung. "I'm grateful for this support that will continue to promote bench-to-bedside investigation for a deadly disease that afflicts otherwise healthy children and young adults."

RESIDENTS

DRS. CHRISTOPHER MARFO AND DANIELLA REBOLLO-SALAZAR NOMINATED AND TO BE MEMBERS OF THE AΩA HONOR MEDICAL SOCIETY



Drs. Christopher Marfo, General Surgery R4, and Daniella Rebollo-Salazar, General Surgery R2, were nominated and voted by current members of



University of Washington's Alpha Omega Alpha (A Ω A) Chapter to be members of the A Ω A Honor Medical Society for demonstrating their commitment to and

excellence in outstanding leadership, professionalism, service, and professional achievement. A Ω A's purpose is to perpetuate excellence in the medical profession, and election to A Ω A is one of the highest honors that physicians can receive. It recognizes excellence in scholarly activities, humanistic qualities, leadership capacity, and exceptional patient care skills.

"It is an honor to be nominated for the $A\Omega A$ Honor Society. It has been gratifying to teach and learn from our medical students while providing the best possible care to

our patients. I hope my career and future interactions with colleagues and students make me deserving of this honor," said Dr. Marfo.

Dr. Rebollo-Salazar stated, "it's an honor to have been nominated and voted to join UW's AOA chapter. Thank you!"

DR. BLAKE MURPHY SELECTED FOR JACK CRONENWETT MD FELLOWSHIP IN TRAINING



Dr. Blake Murphy, Vascular Surgery R1, was selected by the Society of Vascular Surgery Vascular Quality Initiative (VQI) as the inaugural recipient of the

Jack Cronenwett MD Fellowship in Training (SVS FIT) Program. This 18-month research fellowship is designed to introduce trainees to quality improvement and outcome analysis in vascular surgery by working closely with mentors of center level reporting, regional study group meetings and pursuing research opportunities using regional and national VQI registry data. The VQI works closely in collaboration with the Association of Program Directors in Vascular Surgery (APDVS), American College of Cardiology, and Society for Vascular Medicine. The SVS FIT Program also selected Dr. Sara Zettervall, VQI Associate Medical Director for the Pacific Northwest Regional Group, as faculty leader for this project; she will be mentoring Dr. Murphy during the entirety of the fellowship.

"I sincerely look forward to the mentorship, resources, and learning offered by the SVS/PSO Quality Fellowship in Training (FIT) program over the next 12-18 months," said Dr. Murphy. "Having a dedicated space to explore the Vascular Quality Initiative regional and national registry data, while developing the necessary analytical skillset to do so, is a unique opportunity in surgical training. I am lucky to have the incredible support and mentorship of Dr. Sara Zettervall who brings a wealth of knowledge and experience to this type of learning environment."

Surgery

News

UW Medicine Heart Institute Received AHA Mitral Valve Repair Reference Award



Dr. Gabriel Aldea

n March 17, 2022, the UW Medicine
Heart Institute received the American
Heart Association's Mitral Valve Repair
Reference Center Award. This notable
achievement makes the UW Medical
Center one of 21 such elite centers in the
United States, out of over 1,000 cardiac
surgery centers nationwide, and is the
only center in the Pacific Northwest with
this designation. Under Dr. Gabriel Aldea's

leadership, the UW Mitral Valve Repair Program demonstrated "superior clinical outcomes resulting from evidence-based, quideline-directed degenerative mitral valve repair." Says Dr. Aldea, "Two decades' worth of information shows us that valve repairs, no matter how complex, are way better than valve replacements. When you save someone's original valve, there is a 90% likelihood that they will require no further intervention during their lifetime." In 2021, 61 mitral valve reconstructions were performed at UW Medical Center-Montlake, far surpassing the designation's requirement of 50 per year, and 70% were complex referrals received from community cardiologist and surgeons. This makes the designation even more remarkable, as the success rate must be better than 95% with a mortality rate of less than 1%. Patients who undergo a successful repair often return to normal life expectancy and function. The Mitral Valve Repair Reference Award was created based on the multi-society internationally recognized clinical practice valve guideline (recently updated in 2021 AHA/ACC/ STS), of which Dr. Catherine Otto, UW professor of Cardiology, was the lead author.

The Heart Institute uses a heart valve team approach in which every patient with valve pathology/significant abnormalities is assessed by a multidisciplinary team of cardiologists, cardiac surgeons, and interventional cardiologists to assess and recommend the best treatment option for an individual patient. Mitral valve repair is one of many areas of cardiac surgical expertise at UW. Others include catheter-based valve intervention, treatment of aortic pathology, valve surgery, mechanical assist and transplant. Click to learn more about UW Medicine Heart Institute.

Resident Robotic Training Updates



Dr. James Park Chair, Robotic Steering Committee

The FANTA-SIM robotic simulation tournament came to a successful conclusion. After five grueling games on the gridiron and final "rollercoaster ride" of a sudden death match, Team DaVince Lombardi prevailed and took the trophy! Congratulations to Team DaVince Lombardi, as well as all of the individual competition winners and participants. Below is the breakdown of the standings/scores for the team and individual competitions.

Rank	Team	Score	Members
#1	DaVince Lombardi	2592	Daniel Mohammadi, Malia Brennan, Max Adcox, Lindsay Dickerson, David Droullard, Dara Horn
#2	Pano_Ramas	2193	Patrick Palines, Panayotis Apokremiotis, Elina Serrano, Annie Yang, Denzel Woode, Jamie Robinson
#3	The Marfo's	2181	Stan Moore, Paul Herman, Daniela Rebollo, Irene Zhang, Chris Marfo, Allison Haruta
#4	What's my name	1079	Andrew Liechty, Arthur Lanoux-Nguyen, Cody McHargue, Frank Yang, Jamie Oh
#5	Medium-Large Clip Appliers	996	Kristin Goodsell, Allen Griffen, Alex Hernandez, Nina Clark, Matias Czerwonko, David Miranda
#6	DJ MK2	661	Jamie Schnuck, Divya Ramakrishnan, Marlie Elia, Mike Weykamp, Kate McNevin, Kevin Labadie

Level	Winner	Runner-up
R1	Panayotis Apokremiotis	-
R2	Max Adcox	Marlie, Elia, Elina Serrano
R3	Lindsay Dickerson	-
R4	David Droullard	-
R5	Dara Horn	Allison Haruta, Sara Daniel

With the placement of a dual console at Northwest campus, now there will be more opportunities for simulation training there! Stay tuned for details on this fall's simulation Olympics. Additionally, there will be a 4-hour live training session for the R1s and R2s in July. This opportunity will be geared toward formal R1 hands-on bedside training and console training for the R2s so that they can operate at Northwest campus.

Surgery News

2022 RESEARCH DAY & 27TH ANNUAL HELEN & JOHN SCHILLING LECTURE

Control of the Contro

Dr. Kathie-Ann Joseph

The 2022 Schilling Symposium and Lecture was held March 25th featuring research presentations from trainees and a key note lecture from the visiting professor. The event marked the first in-person iteration since 2019. This year's Schilling Lecturer was Dr. Kathie-Ann Joseph, Professor of Surgery and Population Health, Vice Chair of Diversity and Health Equity, Co-Director of the Beatrice W. Welters Breast Health Outreach and Navigation Program, and

Medical Director KP-3 at NYU Grossman School of Medicine/ NYU Langone Health. Her presentation was titled "Achieving Health Equity in Surgery."

Dr. Joseph is a graduate of Harvard College and received her medical degree and master's in public health degree from Columbia University Vagelos College of Physicians of Surgeons and Columbia University Mailman School of Public Health respectively. She completed her internship and general surgery residency training at NYU Langone Medical Center and her breast surgical oncology fellowship at Columbia University Medical Center. She is dedicated to improving the care of underserved women and eliminating inequity in health care.

The symposium featured 31 research presentations from residents and fellows on a wide variety of basic and clinical research topics. Presentations were scored by the Faculty Research Leadership group on scientific merit and validity, presentation skills, and preparedness for questions and comments from the audience.

CONGRATULATIONS TO TOP PRESENTERS

FIRST PLACE



Dr. Joshua Rosen

Research Resident

"Testing of A Novel Decision Support

Tool for Acute Appendicitis"

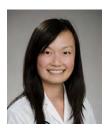
Dr. Yusha (Katie) Liu

Dr. Nina Clark

Dr. Katherine Stern

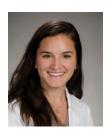
Cancer"

SECOND PLACE



Chief Resident-Plastic Surgery
"Surface EMG-Driven, Smartphone-Integrated
Therapeutic Gaming System for Rehabilitation
of Muscle Weakness"

THIRD PLACE (TIE)



General Surgery R3

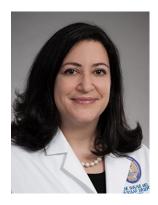
"Guideline Concordant Genetic Testing in Patients with Breast, Ovarian, Pancreatic, And Prostate



T32 Research Fellow, Translational Research in Trauma and Critical Care Fellowship "Artificial Intelligence to Anticipate Sepsis in Critically III Trauma Patients"

Surgery

Publications



Aortic Dissection
Collaborative Publishes
Special Journal Issue
Focused on Patient
Engagement

To date, research in aortic dissection (AD) has focused on management and survival outcomes, but there are many questions that remain to be addressed. Further, patients'

priorities for their own AD healthcare have not been considered in much of AD research. To address these gaps, the Aortic Dissection Collaborative (AD Collaborative) was launched in late 2019, with initial funding from the Patient-Centered Outcomes Research Institute (PCORI). The AD Collaborative, led by Dr. Sherene Shalhub, Associate Professor, Division of Vascular Surgery, is building an infrastructure to involve the AD community of patients, family members, clinicians, researchers, and advocacy organizations in research that is important to people living with or at risk for AD. The March 2022 issue of Seminars in Vascular Surgery shares the AD Collaborative experience of the past two years, in which the AD Collaborative has built an infrastructure involving the AD community in research and worked to understand patient AD healthcare experiences and identify research questions to guide future research. "This is a pivotal work, and it would not be possible without our nearly 100 stakeholder partners," says Dr. Sherene Shalhub, founder and Director of the Aortic Dissection Collaborative. "Not only did our partners contribute to the work itself, but several organizations who are part of the Collaborative provided funds to help us make this an entirely open access issue. We all feel honored to be able to publish this special issue, because it highlights findings relevant to the aortic dissection community and also provides a model that others can use as a template for involving patients and other stakeholders in research of other disease processes." The Aortic Dissection Collaborative Seminars in Vascular Surgery edition can be found online here.

News

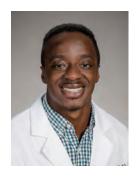


Dr. Alex Lois, former Surgical Outcomes Research Center T32 NIDDK post-doctoral research fellow & current general surgery R4, led a research team conducting a national study of peroral endoscopic myotomy that was published in JAMA Surgery: "Use and Safety of Per-Oral Endoscopic Myotomy for Achalasia in the US."



Dr. Joshua Rosen, Research Resident, published "Unrealistic optimism about treatment risks for acute appendicitis" in the British Journal of Surgery. Dr. Rosen noted, "Unrealistic optimism is a well-known cognitive bias that causes people to believe they are less likely than others to experience negative outcomes. In this study, we found that participants displayed unrealistic optimism towards

potential complications of appendicitis treatment and that this was associated with participants believing that their own risk of a complication was lower than average. Surgeons should be aware of over-optimism in their patients when discussing treatment options."



Dr. Denzel Woode, General Surgery R3, published "Asa G Yancey: The first to describe a modification of the Swenson Technique for Hirschsprung disease" in the Journal of Pediatric Surgery.

"Asa G. Yancey was a Black American general surgeon, who is renowned for his innovation in surgery," said Dr. Woode. "This paper provides a review of the

evidence, focusing on Yancey's innovation in performing and describing the endorectal pull through, a modification of the Swenson technique in treatment of Hirschsprung disease. We reflect on why he had not formally been given credit for his work up to this point, and believe it is time to rename this procedure the Yancey-Soave-Boley. Thank you to the SCH Pediatric Surgery Division for allowing me this opportunity. I only hope that I can inspire the generations that follow me in a semblance of the way Yancey inspired and mentored a generation of black physicians that followed him."

Department of Surgery in the media

read



Dr. Barclay Stewart, Assistant Professor Division of Trauma, Burn & Critical Care Surgery Gender-based disparities in burn injuries, care and outcomes UW HIPRC | February 9, 2022



Dr. Douglas Wood The Henry N. Harkins Professor and Chair Screening key to reducing U.S. cancer deaths, panel finds UW Medicine Newsroom | February 10, 2022

COVID put thousands of procedures in WA on hold, frustrating patients and worrying surgeons The Seattle Times | February 15, 2022



Dr. Jeffrey Friedrich, Professor Division of Plastic Surgery Sharing the Art and Science of Hand Surgery: An Interview with Dr. Jeff Friedrich ReSurge International | February 23, 2022



Dr. Meghan Flanagan, Assistant Professor Division of General Surgery What Are the Types of Biopsy for Breast Cancer? U.S. News | February 28, 2022



Dr. Deepika Nehra, Assistant Professor Division of Trauma, Burn & Critical Care Surgery U.S. Cities' Surge in Shootings Rattles Once-Safe Seattle The Wall Street Journal | March 6, 2022



Dr. Catherine Kling, Assistant Professor Division of Transplant Surgery What Happens in the Brain When an Organ Transplant is Rejected? Discover Magazine | March 14, 2022

listen









Dr. Michael Weykamp, Research Resident

Dr. Nicole White, Clinical Associate Professor

Dr. Andréw Wright, Professor

Dr. Nick Cetrulo, Clinical Assistant Professor

Division of General Surgery

Journal Review in Minimally Invasive Surgery: Surgical Treatment

of Esophageal Reflux - Fundoplication vs. LINX

Behind The Knife Podcast | February 10, 2022

UW Medicine DEPARTMENT OF SURGERY

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If you are interested in learning more about how you can support clinical, education, and research initiatives in the Department of Surgery, please connect with Jeannie Stuyvesant, senior director for philanthropy, at jstuy@uw.edu.

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