Eric Chen, MD, PGY-4, attended the ARRS conference in Honolulu through funding provided by the Rohrmann Endowment, for the educational exhibit “Calcifications as Harbingers of Malignancy in Soft Tissue Tumors: A Case-Based Review,” which received a Certificate of Merit award.

“With generous funding from the Rohrmann Endowment, I was able to attend the American Roentgen Ray Society (ARRS) 2023 Conference in Honolulu. Attending the conference was a valuable opportunity for me to meet and learn from enthusiastic radiologists from across the country. I would like to express my gratitude to the Rohrmann Endowment and my mentor Dr. Majid Chalian, as well as co-authors Dr. Elizabeth Horneber, Dr. Christine Rehwald, Dr. Bahar Mansoori, and Dr. Firoozeh Shomal Zadeh.”

– Eric Chen, MD

Cody Schopf, MD, PGY-5, received funding for conference attendance to present an abstract as first author at the AUR Annual Meeting from April 25–28, 2023, in Austin, Texas.

“I would like to express my gratitude to the Rohrmann Endowment for the support to present at the AUR Annual Meeting. This was a great experience that provided many insights into education in radiology and allowed me to meet and network with colleagues from across the country.”

– Cody Schopf, MD

Dylan Constantino, MD, PGY-5, was awarded a travel scholarship to attend the Society of Interventional Radiology (SIR) annual scientific meeting in March in Phoenix, Arizona. He is pictured below left with medical student Maclean Cook, co-author.

“I want to express my deepest gratitude to the Rohrmann Endowment for funding my attendance at the SIR 2023 annual meeting. The conference proved to be an enriching experience, allowing me to share my research findings, expand my knowledge, and establish connections with medical professionals from across the country, including alumni from the University of Washington Interventional Radiology program. This conference came as a much-needed reprieve from my intense board studying, providing me with a renewed sense of inspiration and reminding me of the incredible possibilities and advancements in the field.”

– Dylan G. Constantino, MD

“Once again, I extend my heartfelt appreciation to the Rohrmann Endowment for making this experience possible and for investing in my future. The generous funding not only facilitated my professional development but has also sparked my excitement for the upcoming academic year when I will begin my formal training in Interventional Radiology.”

– Dylan G. Constantino, MD
The Rohrmann Endowment Supports Residents’ Equity, Diversity, and Inclusion Activities

“...the Annual Medical Education Conference (AMEC) gave attendees several days of innovative programming geared at preparing the next generation of physicians for successful careers in medicine. With dozens of educational workshops and programs focused on academic and clinical success, professional development, and personal growth, AMEC is a premier experience that catapults attendees toward becoming clinically excellent, culturally competent, and socially conscious physicians. Attendees enjoyed the unique opportunity to network with colleagues, physicians, medical school and residency program representatives, and partners from all over the country.

I attended this conference to help the Department of Radiology achieve its stated Equity, Diversity, and Inclusion goals, which include a prong called “Build a Pipeline.” An action item within this plan is to promote the recruitment and advancement of underrepresented groups. It is encouraging to see that our department has already publicly acknowledged the need for institutional buy-in toward pursuing these ambitions.

As an exhibitor at the recruitment fair and exhibitor hall, over three days I presented our program and services to medical students and interns interested in pursuing radiology as a career. We discussed the benefits of living in Seattle while being trained in a supportive environment. Many students wanted to make sure that I felt welcome in the reading room and if I found my people. It wasn’t hard to reassure them that UW nourishes identity and wellness just as much as it does education and innovation.

As a participant in the conference, I engaged with a wide range of students and trainees from regions across the country. All of these individuals identified as a part of a group that is underrepresented in medicine. I met with high schoolers on the bus ride between the hotel and the conference that were stunned by hearing about the life of a young Black doctor. I was recruited ad hoc by American College of Radiology representatives to show pre-med and medical students how to biopsy frozen grapes in phantom molds to teach fundamentals of ultrasound. I remember going to local radiology workshops as a medical student and finding out how cool it was to use the tools that radiologists use to help people. I remember being so thrilled talking with residents and other healthcare professionals at these events. I got to talk with residents who were planning on switching into Radiology. Not surprisingly, I ran into other residents who I went to medical school with, giving presentations, facilitating discussions, or acting as representatives of their respective programs.

On top of being an exhibitor and engaging with other trainees, I partook in several discussions with leaders in the field regarding the future of health care policies and how they affect vulnerable populations. Many of the professionals fighting this battle take time outside of work to talk to the county, state and federal representatives to convince them of the value behind some policies. They encouraged young doctors to pay attention to the policies in place, listen to their patients, and stand up for what they believe in. They wanted us to continue to fight for those without a voice. These were some of the goals that stuck with me:

• Making changes at one’s home program to make it more inviting
• Making sure our efforts toward inclusivity are public.
• Ensuring there is a clear office with a mission statement that champions the goal
• Graduating well-rounded, exceptional radiologists with social and emotional intelligence

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Your Endowment Support Makes a Difference!

Of the dozens of students who came to our table, approximately 67 signed onto our general interest list. Eight of those students were interested in Radiology, and two of those eight were interested in Interventional Radiology. I have been in contact with three of these students, giving them tips on applying into Radiology and my thoughts on residency. Separately, I met two students from the University of Washington’s Student National Medical Association chapter. Subsequently, in the past couple of months, we’ve talked about doing some joint resident and medical student events.

Everything that came with this event motivates me to continue to support the Department of Radiology in their pursuit of advancing UW’s diversity, equity, and inclusion as it is a proven benefit to any organization’s progress. I am deeply grateful to the Rohrmann Endowment Fund Education Endowment Advisory Committee for supporting my endeavors. I hope the committee continues to send a representative every year to show our program’s commitment to the cause.

– Adlai Grayson, MD

A virtual celebration for the 2023 graduating class of diagnostic radiology residents was held on Saturday, June 10. We are so proud of these trainees who are entering the next chapter of their careers.

Ali Abadi, MD  
*Fellowship: Abdominal Imaging at the University of Washington*

Anna Anderson, MD  
*Fellowship: Breast Imaging at UW/Fred Hutch Cancer Center*

Anne Chen, MD  
*Fellowship: Breast Imaging at the University of California, San Francisco*

Charles Davis, MD  
*Fellowship: Neuroradiology at the University of California, Los Angeles*

Jennifer Knight, MD  
*Fellowship: Musculoskeletal Radiology at the Mayo Clinic (Rochester, MN)*

Spencer Lewis, MD  
*Fellowship: Abdominal Imaging at Stanford University*

Matthew Stolzberg, MD  
*Fellowship: Abdominal Imaging at the University of Washington*

David Thompson, MD  
*Fellowship: Abdominal Imaging at the University of Washington*

Kiet Vo, MD  
*Fellowship: Breast Imaging at the University of Washington/Fred Hutch Cancer Center*

Alekhya Yechoor, MD  
*Fellowship: Abdominal Imaging at the University of Washington*

Tyler Jackson (IR/DR), Interventional Radiology at the University of Washington

John “JJ” Weaver (IR/DR), Interventional Radiology at the University of Washington

Andrew Woerner (IR/DR), Interventional Radiology at the University of Washington

We congratulate all 2023 resident and fellow graduates! We are extremely proud of their individual and collective accomplishments. This class of Diagnostic, Interventional, and Nuclear Medicine residents demonstrated their ability to quickly adapt to changes throughout their residency experience, despite unprecedented times – clearly proving they will be highly successful radiologists. Our subspecialty trained fellows and four-year pathway trainees provided a steady and collegial experience for our residents and attendings alike – they are all excellent clinicians!

Congratulations to the 2023 UW Radiology Graduates!
The Rohrmann Endowment supports residents’ Global Health experience in Tanzania, partnering with Road2IR

Earlier this year, Blaine Menon, MD, and Kara Fitzgerald, MD, IR Integrated Residents, had the unique opportunity to travel to Tanzania with Road2IR (https://www.road2ir.org/). Blaine participated in the department’s Global Health elective, and Kara joined him for a week as a volunteer. UW Radiology IR attendings Doctors Jeff Chick and Matthew Abad-Santos also joined them. Blaine and Kara shared their experiences at the Sixth Annual Lunch and Learn Event on May 6, 2023. You can hear their presentation via a link on the Rohrmann Endowment website: https://rad.washington.edu/rohrmann-endowment/

Located in sub-Saharan east Africa, with a population of 455 million, Tanzania has a population of about 60 million people within about 130 different tribes. We went to Dar es Salaam, the largest city in Tanzania. It is the finance capital with about five million people.

This is the most densely populated area along the Indian Ocean; almost 50% of their population is 18 and under. Physician density and hospital bed density is far lower than in the US. HIV prevalence is 4.5%. While there has been a lot of progress with improvement in quality of life and access, about one-quarter of the population live on less than the equivalent of 21 US dollars per month. They do not have good access to electricity, water, or sanitation.

We traveled to the hospital network and university area called MUHAS, Tanzania’s main medical academic teaching center. The campus is comprised of four institutions. The hospital is a 10-minute walk, where we had to go to the angio suite. Most of the area was open to the outdoors, an open air campus including the waiting area for the radiology area.

Road2IR is a nonprofit with the goal to build self-sustaining IR training programs in East Africa. When it was first started, a needs assessment in 2017 revealed only one IR physician in Tanzania for 60 million people, no regional training program and a few training programs in Africa but nothing close to what was needed. In 2018, they wrote an RSNA grant and were awarded $70,000 to start the program and worked to create a Masters in Science program, equivalent to a fellowship, started in 2019. Currently they are starting up programs in Rwanda and Uganda.

Radiology at MUHAS is ultrasound heavy, however, they have received a lot of donated equipment and they have an MRI and CT and a robust residency with 25 residents. Neuroradiology curriculum is taught by US faculty who broadcast lectures and come over, and residents do abroad rotations in the US.

The IR department is new. They were able to acquire a room and refit it for their needs. It has a small desk and projector, and patients sit in the room for consultation; it also functions as a place for morning conference for doctors.

IR layout at MUHAS: they have a CT procedure suite. On the right is the angio suite at the hospital we had to walk 10 minutes to. The C-arm and ultrasound suite with beautiful designs make you feel like you are outside.

One of the most exciting things that happened while we were there was that the prior week they were able to build a new angio suite in their hospital. This was much more than giving access to a room. As a department they had to pay to use the other angio suite. With the support of the hospital they were able to open their own angio suite.

IR supplies are difficult to obtain. The supply chain is difficult to navigate. Everything is donated! They have very few workhorse-type items. They use things we would never think about using here, but they are wonderful at working with what they have. For one case, all the transhepatic biopsy devices were failing and they had to try many different ones. To get the devices for your case, everything is donated so there is a huge room where things are hung up on the wall and you don’t know how much of what you have. The fellows collect all the supplies they need the night before, load them up on a box on a wheelchair and push them over to the angio suite.

The IR trainees – two graduating classes, three fellows in each graduating class – get paired with a junior and a senior. The Masters of Science in IR is not a job like here, it is more like a masters program that you pay for to get the training. It is quite a sacrifice to get their career started. Thanks to a recent donation they received a research stipend to help offset the costs.

The curriculum is didactic and case-based and covers the full gambit of IR over two years. They do a lot fewer procedures than we do here, about 200-300 before graduating, but more than enough non-vascular procedures. They are rapidly growing their
vascular service line and are seeing an increase in angioplasties and embolizations.

We worked with an amazing group of attendees who graduated from the program, from the first graduating class. The program is also supported by faculty from around the world. Attendings from Germany arrived a couple of weeks before us and we coordinated our trips. Our faculty members, Doctors Jeff Chick and Matt Abad-Santos represented the UW, with both of them volunteering for their first time with Road2IR. IR attendings are the backbone of the entire program. There are also residents in training and other medical students and pre-med students. There are a lot of educational activities and a very robust research program.

Here is an example of IR ingenuity at MUHAS. A lot of problems come up when you try to do IR in this setting – how do you deal with a sterile field when you don’t have all the disposable supplies you need? There are no sterile ultrasound covers. So, they made a custom reusable sterile cloth and gloves that are not often used (such as those too large or small) to cover the end of the probe and they use betadine instead of sterile ultrasound gel. They are able to get amazing images due to their ingenuity!

We met each morning. The fellows go over cases for the day, and in between cases, clinic happens. Sometimes patients and their families walk through the door with a CD containing images. They project them on the wall and talk to the patients in real time and come up with a plan, one consult at a time.

The rest of the day was spent in cases. The IR group has done an amazing collaboration with the hepatobiliary surgeons, providing biopsies and diagnosing cases, including therapeutic options.

One case we worked on while there (and this is common): a dialysis patient that comes in. A lot of patients do not have access to care and end up with arteriovenous fistulas. They have central lines in for a long time and this ends up scarring their veins. A lot of the work is trying to open up veins.

Another type of patient is young women who have locally invasive cervical cancer. Before IR came about, they would come to the hospital, but would be sent home to pass with their families. They were coming in with renal failure and they were not able to do anything for them. A simple nephrostomy tube helped their renal function improve. Now, the oncology service is able to offer them things they were not able to offer before, such as chemotherapies.

Kara and I also got involved with peer-to-peer teaching, which was an amazing experience. There was so much to learn from them and so much to teach. We had more formal teaching sessions with in-service on devices, and hands-on demonstrations. The group was excited to get to know how to use the devices.

Also important to note – they were amazing hosts and helped us choose the right foods and snacks!

Another main thing we spent our time on outside of patient cases was helping them build a simulation lab. They don’t see the same number of cases we see here and they experience gaps when attendings cannot come and they still want to teach their fellows. In collaboration with faculty at Yale we helped them apply for an RSNA International Education Scholar Grant. We reached out to Simbionix and asked if they would partner with us. They agreed to donate an AngioFlex simulator device to Road2IR. They are building a curriculum for that.

We also got involved in low fidelity simulation, using vascular access phantoms. The junior fellows enjoyed working with us. They do not get a lot of exposure to vascular access early on.

Another project was the Oculus 3D Video library from Yale, a video library of procedure trainings. Fellows can watch these videos using the device, and it feels like you are in the procedure room. It is a great way to prep for the procedure.

Dr. Wayne Monsky helped Blaine with this project – he connected us with Dopli Technologies. We met in a virtual environment and had on the Oculus devices. They handed Blaine the controls to a robot-guided catheter in Seattle and he was able to move it in its virtual environment and it was in real time. Using this as a proof of concept, this simulation can be used over a distance.

We are so excited that folks are interested in continuing some of this work. All three PGY-3 IR residents are interested in going to Tanzania or Rwanda and working on more low fidelity simulation work. As for future projects, we are hoping to be able to get some endovascular models and the fellows will be able to use those for training. We are also hoping to get a handheld ultrasound device for phantoms.

IR Global Health – Why we went over there

Blaine: Today millions lack access to essential and life-saving procedures. There is no doubt the work that was done was essential for those patients. We have the opportunity to create an impact that is much larger than we can see, as the fellows continue to train others. There were many opportunities for personal and professional growth, because of the connections I made with the people I met.

Kara: We got to be there where it was fully immersive, growing ourselves, growing with the residents. It was great to see how many women are having wonderful opportunities as trainees and becoming IR attendings, or as nurses or techs helping. The economic advancement is huge, with more opportunities for folks, and women specifically.

More residents will be traveling, and we always need more support for future trips. Also, volunteering to do lectures can be beneficial to IR residents. You can learn more about Road2IR by following them on Instagram, visiting their website and listening to their stories. Thank you all for your support. We are grateful and excited for the residents who will continue the work.”

– Blaine Menon, MD and Kara Fitzgerald, MD
We were pleased to host the Sixth Annual Lunch and Learn Event on May 6, 2023, with some of our alumni in attendance and others attending remotely. Ramesh Iyer, MD, Vice Chair of Education, welcomed our presenting residents and all who were able to attend and thanked all of the donors and contributors to our Endowments.

Elliot Breshears, MD, PGY-5, presented, “Incorporation of Macropads into Abdominal Imaging to Improve Radiologist Productivity and Efficiency.” Elliot thanked his mentor, Dr. Puneet Bhargava, for all his guidance. A summary of his project presentation follows.

Increasing exam volumes and other demands on radiologists’ time highlight the importance for radiologists to identify ways to optimize productivity and efficiency. Elliot’s focus has been on workstation optimization, specifically on a peripheral device called a macropad. The number of clicks as well as computer navigation correlated with reading a study (see Liver Reporting Data System image below) typically requires eight keystrokes and 50 cm of mouse navigation; with continued use these functions add up. That is where macropads come into play. They are composed of input buttons that can be programmed to perform targeted tasks such as opening a program. One such macropad is called a Stream Deck. However, many of the Stream Deck capabilities are not supported by our software or institutions that have restrictions on software connections, which is becoming increasingly common. After reviewing those available on the market, the duckyPad was selected, the only device identified to provide an acceptable level of functionality. After initial programming on a non-restricted computer, onboard memory in the form of a microSD card allows duckyPad to be used on workstations without further installation of software or drivers. It was programmed to open on frequently accessed online resources.
After graduating in 2022 and not matching into radiology, I was devastated. I had not planned to extend a year, but I needed to figure out how to make myself a stronger candidate for the competitive field of radiology. One aspect of my application that I wanted to continue to work on was research. Through resources provided to medical students from the University of Washington, I was put into contact with Dr. Sahani to help work on a project with him. After several meetings with him and discussing the project, we were able to submit and get the abstract accepted to present at RSNA.

During my undergraduate education, I gave one oral presentation to a classroom of about five people, two of them being my mom and grandma. Public speaking is not exactly my forte, but I also know that you can only get better at things when you actually do them. I was excited, but also very nervous, for this opportunity to speak to a much larger crowd. To get my nerves to calm down, I attended sessions prior to when I had to give my presentation. Seeing other great people share their knowledge and research from around the world was so rich, and taught me so much. It also helped me build relationships and connections with people who ended up coming to listen to my presentation! The setbacks and lessons learned along the way ended up being so beneficial for me and my presentation went smoothly.

RSNA was an amazing educational experience. I learned so much and gained new friends, and connected with old ones. I would like to personally thank the donors and the Department of Radiology Freeny Fund for allowing me to have this opportunity; without it, I wouldn’t have been able to go. Now I am starting my intern year at Medical College of Wisconsin and will continue with my interventional radiology residency afterwards at the same place. I look forward to passing on this type of kindness when I am able to.

– Ty Mattinson, MD

Explore ways to give: https://rad.washington.edu/donate/
Initially 15 resources were mapped; however, multiple commands can be assigned to each key to enable toggling between profiles and switching the functionality of each key. Stickers were created to identify the resource associated with the key.

There are a number of websites that allow the uploading of customized PDF documents to a URL. A PDF document containing all of the flow charts from JACR White Papers on Incidental Findings was compiled into a single PDF and mapped to one of the keys.

Assembly: All parts were included and assembly time was 30 minutes. Custom vinyl stickers were applied and it was ready for programming. These were programmed using the duckyPad software and 15 keys were assigned abbreviated names. Each key was programmed to open one of the online resources. The keys were programmed to open the task bar and input the URL within a new tab of a web browser. Delays were input to help the program catch up to the URL, as it loaded very quickly. The plug and play nature of the device made it ready to use after programming!

For frequently accessed resources, for the amount of time it takes to search for articles and open links, it is efficient for accessing resources.

The duckyPad was replicated and three devices were circulated to abdominal reading rooms at separate sites. Overall feedback from the radiologists was positive. It was reported to be intuitive and pleasing to use and demonstrated the potential for reducing both mental effort and time to perform repetitive tasks.

One additional duckyPad was also customized by Elliot for use on call for a number of shifts at HMC and it was helpful when trying to juggle phone calls, reading studies, and looking up resources quickly. It demonstrated the ability of this device to be modified for any imaging section, not just abdominal imaging.

Despite successful implementation, it does have several limitations that may prevent widespread use. Assembly would be time consuming, and devices are only shipping from the UK. The duckyPad is limited by the design of its switches, which firmly rest within the front plate, but are not secured by metal or glue. Potential loosening of the switches with time could require troubleshooting that would negate the time-saving benefits of the device. The device is also limited by its programming language, duckyScript. We were able to program it to open the websites and perform basic functions, but in order to perform a task that is more complex to be associated with a macro would not be possible with the limitations of the duckyScript. The duckyPad circumvents the obstacles of software requirements for macropad use, but the limitations of the device would curtail its widespread use.

My experience is that the incorporation of macropads into daily practice for radiologists is best achieved with pre-assembled pads that require software support. Going forward our next goal with this project is to collaborate with IT to facilitate the installation of software that is required to support some of these devices such as the Stream Deck. We would then like to create a standardized profile of resources, potentially one for abdominal imaging, residents, and neuroradiology, and store those resources on a server or online on a platform such as OneDrive. We would then be able to pull that profile onto a Stream Deck device and standardize profiles across the entire department. This would be a much more efficient way of implementing macropads across the department.

Special thanks to the Rohrmann Endowment which made funding for this project possible. I was able to have an entire month of half-days in the afternoon when I was able to develop and work on the device.

– Elliot Breshears, MD