



# UW Medicine Rohrmann Endowment for UW Radiology Resident Educational Excellence

WINTER 2018

## A Radiology Resident's Perspectives from the Annual WSRS Meeting by Joshua Rosenbaum, M.D., R5 Radiology Resident, Chief Resident of Research

The WSRS annual meeting this year proved to be an excellent opportunity to promote diversity and career development for trainees within the field of radiology.

This year's meeting combined with the Washington State Medical Association was a good opportunity to



Joshua Rosenbaum, MD  
Chief Resident of Research

network and expand our own perspective on the medical field. Dr. Lucy Kalanithi's speech about her journey through her husband's illness, documented in the book *When Breath Becomes Air*, was an important reminder of why we serve as physicians. As radiologists, we sometimes lose perspective on the humanistic aspect of medical care. Remaining in tune with

challenging healthcare situations can certainly help us all be more compassionate radiologists. Additionally, Dr. Puneet Bhargava's speech on "Giving, Taking and Matching" was an important reminder that there is great diversity in personality types and the knowledge of which can greatly improve how we work with one another.

The Residents and Fellows Section (RFS) was particularly helpful for trainees preparing to search for their first jobs. Larry Muroff's talk about "What They Didn't Teach You, But You Really Need To Know" was extremely valuable information and insight about varying job opportunities. It was helpful to learn about recent survey data of the radiology job market and what kinds of questions to ask at a job interview. The RFS' career panel, staffed by four local radiologists or radiation oncologists, was invaluable in providing a confidential and informative question and answer section along with fruitful opportunities to network. Participating in the medical student panel was also a good opportunity to practice mentorship skills and gain some additional perspective about our own practice of radiology. Lastly, the privilege of presenting my own talk at this year's annual meeting - "Why patients No show for their radiology appointment and what can we do about it" - allowed me to develop and gain comfort with presentation skills at a statewide level. This type of information and experience is often difficult to glean from traditional residency activities and is a perfect example of the added value meeting participation can provide to members in training.

The first WSRS Young and Early Career Professional Section (YPS) event was a success, with our members working together to solve hidden puzzles during an escape room event. Although they were not able to escape, they had a lot of fun trying to accomplish the task as a team.

UW Radiology Resident alumni included the following: Pooja Voria '10 (bottom row, left), Ramesh Iyer '10 (top row, left), Somnath Prabhu '13 (top row, second from left), Leila Bender '12 (top row, third from right), and Jennifer Kohr '10 (top row, second from right).

- Ramesh S. Iyer, M.D.

Associate Professor of Radiology  
Seattle Children's Hospital

University of Washington School of Medicine



## Rohrmann Endowment funds UW Rad Residents at 2017 SNMA Conference

Over 100 under-represented high school, undergraduate and medical students filled classrooms at the University of Washington on Veteran's Day weekend in November, and our radiology residents were there to help welcome them to the Student National Medical Association (SNMA) Regional conference. Students from chapters in California, Oregon, Washington, Nevada, and Arizona anticipated this event for months. The SNMA was founded in 1964 by medical students from Howard University School of Medicine and Meharry Medical College, and is the nation's oldest and largest, independent, student-run organization focused on the needs and concerns of medical students of color. This conference creates an excellent space to introduce students to fields which are historically under-represented, such as radiology.



Residents introduced students to radiology by providing a fun and interactive ultrasound workshop. Students learned about basic anatomy, such as vessels in the wrist and neck and had the opportunity to scan each other with tablet ultrasounds. Students then had the opportunity to ask more questions of our radiology residents during the two-hour long health professional fair. The Rohrmann Endowment was generous enough to sponsor the first ever UW Radiology table at the SNMA conference! Dozens of students took advantage of this resource and eagerly questioned residents. Some questions included: What does a radiologist do? Do you talk to patients? How long is the residency program?

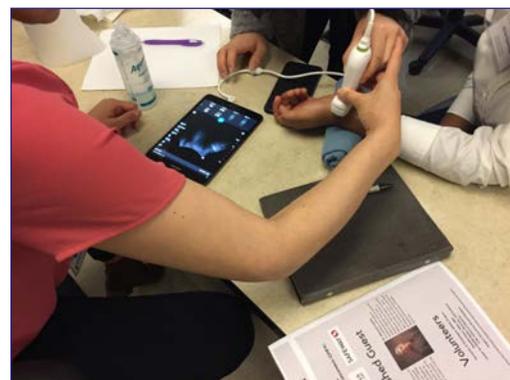


The day ended with radiology residents feeling energized for the next chance to share their love of radiology to a population of students that scarcely get the opportunity to learn about health professionals in general.

Our radiology residents understand the importance of fostering diversity in our historically under-represented specialty and they hope to continue collaborating with SNMA and similar organizations in the future.

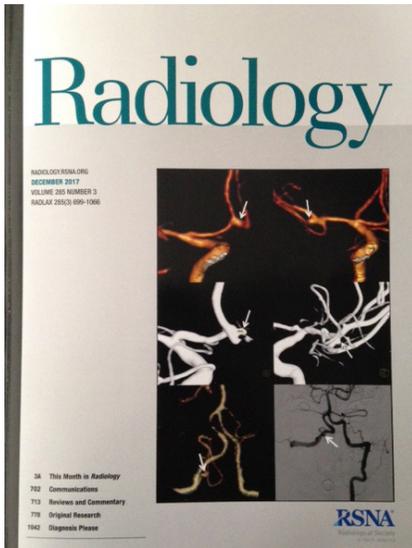


Drs. Ethan Hua, Maria Quezada, and Mahogany Ambrose, R2 Residents



## Rohrmann Endowment supports Rad Residents' Scholarly Achievements

I have been very fortunate to work with my mentors Drs. Habib Rahbar and Savannah Partridge in the breast imaging section on research regarding MRI of pre-invasive breast cancer, known as ductal carcinoma in situ (DCIS). There is considerable debate in the



medical community on whether the current standard of treatment for DCIS, consisting of surgery and radiation, is the right thing to do because many women have

less aggressive forms of DCIS that will never become invasive cancer. However, currently available clinical tools for distinguishing more aggressive forms of DCIS from less aggressive ones are not reliable enough to change how patients are treated. We did a study on breast MRIs performed for DCIS at Seattle Cancer Care Alliance over a 10-year period, and we looked for imaging features that were associated with cancer that recurred after DCIS treatment, signifying more aggressive DCIS. We identified three such MRI features, which are not obvious to the radiologist's eye but instead consist of quantitative measurements related to how DCIS and the normal background fibroglandular tissue enhance with MRI contrast. We recently published these results in the journal *Radiology* in an article titled "Ductal Carcinoma in Situ: Quantitative Preoperative Breast MR Imaging Features Associated with Recurrence after Treatment."

It has been a great learning experience working with my mentors and the breast imaging section. I felt that I was given the right balance of guidance and independence in order to succeed on this project. As a resident, I felt supported and encouraged by our residency program throughout this process. I look forward to working on further research projects and advancing the role of radiology in women's health.

- Jing Luo, M.D.  
UW Radiology R4 Resident

Luo J, Johnston BS, Kitsch AE, Hippe DS, Korde LA, Javid S, Lee JM, Peacock S, Lehman CD, Partridge SC, Rahbar H. Ductal Carcinoma in Situ: Quantitative Preoperative Breast MR Imaging Features Associated with Recurrence after Treatment. *Radiology*. 2017 Sep 14;285(3):788-97.

**Editor's Note: Jing Luo is the first author! Impressive!**

## Medical Illustrations funded by the Rohrmann Endowment

The Rohrmann Endowment has served as an invaluable resource towards the support of scholarly activity for radiology residents at UW. The Rohrmann Endowment provided funding for medical illustrations on two educational exhibits titled "Turf Toe: An Update and Comprehensive Review" and "Posterolateral Corner of the Knee: An Update and Comprehensive Review."

These educational electronic exhibits will be presented at the annual ARRS meeting in Washington, D.C. in April of this year. Without the support of the residency program director, Dr. Paladin, and the

Rohrmann Endowment, these exhibits would not have been a success. I hope that the friends and alumni of UW Radiology continue to support the Rohrmann Endowment so that the residency program can continue to fund such scholarly activities.

As the exhibit will be presented in D.C at the ARRS meeting from April 22-27, no photos are currently available. Be sure to look for these photos in the next edition of the Rohrmann Endowment newsletter!

- Toluwalase Ashimolowo, M.D.  
UW Radiology R3 Resident

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## RSNA 2017 – A time and place for UW Radiology residents to shine!

During the RSNA 2017 Annual Meeting, UW Radiology Residents were on the move:

Allison Tillack (R4) gave an oral presentation entitled “Attitudes toward mobile versus fixed facility preferences for obtaining a mammogram among Latinas” on Wednesday.

Justin Vranic (R4) gave an oral presentation entitled “The Ability of Whole-Body CT to Detect Blunt Cerebrovascular Injury in a Large Trauma Patient Cohort: A Prospective Evaluation” on Thursday.

Giuseppe Toia (R3) had an educational exhibit entitled “How to deal with an alpha - Causes of abnormal maternal serum alpha fetoprotein during pregnancy.” He was also second author on an oral presentation given by Achille Mileto entitled “Feasibility of Dual Energy CT for Zinc Quantification in a Phantom Experiment” on Monday.

Barun Aryal (R3) had an educational exhibit entitled “A Scheme-inductive Algorithmic Approach to First Trimester Ultrasound.”

Aaron Daub (R3) attended academic radiology workshops.

Justin Vranic and Allison Tillack both received RSNA Resident Travel awards!

Jason Hartman (R3) attended as the UW RSNA resident representative. He reflected upon his first-time experience:

I attended RSNA 2017 as the RSNA Resident Representative from the University of Washington. While there I saw many wonderful presentations, both from researchers at UW and around the world. I particularly enjoyed seeing Dr. Mossa-Basha give several excellent talks related to neuroradiology. There were a number of outstanding standing-room only talks on artificial intelligence – the hot topic of the conference. After attending these sessions, I left hopeful that advances in AI will allow us to provide more efficient, effective patient care.

On Monday morning Giuseppe and I attended the Diagnosis Live Resident Competition, where we saw UCLA, Jefferson, University of Cincinnati, and OHSU go head to head answering boards style questions. Eventually University of Cincinnati prevailed, and was awarded the trophy. Hopefully UW will be able to participate in future years – with our top-notch residents we’re certain to win!

On Monday night, I attended the resident reception at the Hyatt Ballroom, where I chatted

with fellow RSNA Resident Representatives from all over the country. Afterwards all of the UW residents gathered with Dr. Paladin at Giordano’s Pizza for some authentic Chicago deep dish!

The next day, hoping to burn off some of those calories, I braved the early morning cold to participate in the RSNA 2017 5K fun run through Grant Park and along the shores of Lake Michigan. It was a beautiful day and it was great to run alongside so many fellow radiologists!

Later that day Justin, Giuseppe, and I attended the Resident and Fellow Symposium, where first-rate speakers gave us tips on finding the right job and how to grow as leaders in the field.

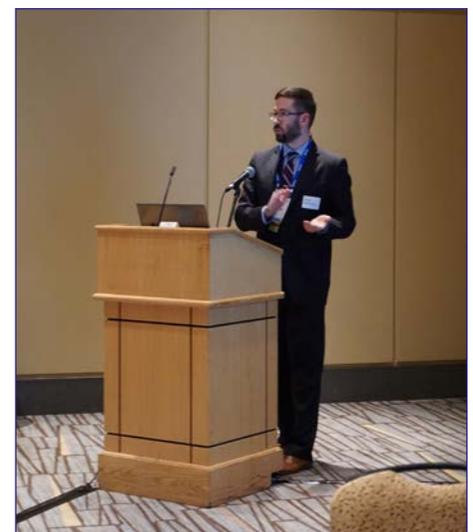
I wrapped up the conference by attending the UW Radiology reception, where I was able to say a few words on behalf of the residency, stressing the importance of teamwork.

Overall, I had a fantastic time, and I headed back to Seattle reinvigorated and excited for the future of Radiology!

- Jason Hartman, M.D.  
UW Radiology R3 Resident



Residents seated (L to R): Drs. Barun Aryal, Justin Vranic, Allison Tillack, Aaron Daub



Editor’s Note: Jason Hartman (pictured above) spoke during the Annual UW Radiology Alumni & Friends Reception on Tuesday evening at RSNA. Be sure to join us next year!



## Rohrmann Endowment supports residents, representing UW Radiology at National meetings

My debut visit to RSNA 2017 provided an exhilarating perspective on the future of radiology. Fueled by networking and outstanding research symposiums in an eerily mild post-Thanksgiving Chicago, RSNA fulfilled its mission of education and innovation. My participation included first author submission of an electronic educational exhibit entitled, “How to Deal with an Alpha: Causes of Abnormal Maternal Serum Alpha Fetoprotein during pregnancy.” With Mariam Moshiri, MD (Body Imaging) as my mentor, we provided an expansive educational



Giuseppe Toia, MD, MS

survey of common and rare prenatal and gynecological conditions linked to abnormal levels of maternal alpha fetoprotein. The project will evolve into a formal review manuscript in the coming months. In addition, I co-authored a scientific oral presentation entitled, “Feasibility of Dual Energy for Zinc Quantification in a Phantom Experiment.” My research mentor Achille Mileto, MD (Body Imaging) presented the talk during a CT Physics scientific session with special focus on Dual Energy CT. The work was well received and has provided pivotal preliminary data for a current project I am leading. The project investigates the nominal concentrations of various trace metals by which dual energy CT can detect and quantify. I am extremely grateful for the UW Medicine Rohrmann Endowment for UW Radiology Resident Educational Excellence, which funded this memorable visit to RSNA 2017.

- Giuseppe Toia, M.D., M.S.  
UW Radiology R3 Resident

Your continued support to the Rohrmann Endowment is what makes these enriching experiences possible for UW Radiology Residents. Funds generated by the Endowment are utilized to provide support for residents’ out-of-pocket educational expenses, such as travel to conferences, books, and also provide support for resident education, research, and community service in the Department of Radiology. Thank you for your generosity!



UW physicians in the photo include: L to R: Sean Rinzler (Pediatric Fellow), Arthie Jeyakumar (R2 Resident), Kevin Koo (attending at SCH), Rush Chewning (former UW IR fellow). Seated in center: Joseph Reis, MD, Attending from University of Rochester, NY

I had the great privilege of attending the annual meeting for the Society of Pediatric Interventional Radiology in Denver, Colorado this past October. Under the mentorship of Dr. Eric Monroe and Dr. Christopher Ingraham, I had the opportunity to present two case studies and a clinical abstract. Working on these projects provided exposure to a niche subspecialty within Interventional Radiology and allowed me to learn the unique challenges of the discipline. It was inspiring to see first-hand the various collaborations and to speak with established leaders in the field and trainees alike. The strong presence of Seattle Children’s research was palpable, and I am grateful for the support I received from the UW faculty. I give my sincere thanks and appreciation to the Rohrmann Endowment for allowing me to partake in this incredible academic experience.

- Arthie Jeyakumar, M.D.  
UW Radiology R2 Resident

# My Experience as a Radiologist in Naivasha, Kenya

by Jacob Smith, M.D., UW R5 Radiology Resident

## Global Outreach Supported by the Rohrmann Endowment

I landed in Nairobi after over 30 hours of travel early on Monday morning with only the name and number of a taxi driver who was supposed to take me from Nairobi to Naivasha, Kenya to where I would be working for the next month. But my cell phone wouldn't work. I had spoken with AT&T prior to leaving the States and they assured me that my phone would work. But now it wasn't working. So I sat in the arrivals terminal for about an hour trying to troubleshoot my cell phone situation when a taxi driver with a sign that said "Jack" walked up to me and asked if I needed a ride to Naivasha. "Jack" seemed close enough to "Jake" and he seemed to be aware of the UW and so off we went. That's how my international rotation in Kenya started this last October.

I spent the month working in a county hospital in Naivasha, an agricultural town of about 200,000 people and 100 km from Nairobi. The hospital has 180

beds including both adult and pediatric wards. The care is heavily subsidized by the government and delivered to the poorest citizens of the county. This past year has been especially difficult for the Kenyan government healthcare force. There was a presidential election and in an effort to get better pay and benefits there was a 6-month physician strike followed by a nursing strike leading up to the elections.

When I arrived, the nursing strike was still in effect and a skeleton crew was running the hospital. The only internal medicine attending and one of two surgery attendings had left without replacement. Interns, a few mid-level practitioners, and mid-level trainees were essentially running the hospital.

As might be expected, limited radiology services are available. Radiology techs are present daily and have a



Radiology Department waiting area

radiography unit and two ultrasound machines. A radiologist from Nairobi comes once a week to review studies, but mainly spends his time reading outpatient radiographs and completes a handful of Doppler ultrasounds. I worked with him each week scanning

patients and reviewing cases. I learned a lot about diseases that we don't see as much of here but are seen on a daily basis in eastern Africa, such as TB, AIDS, and syphilis.

The hospital uses a digital radiography unit. However, since they have no hospital network and care is so fragmented, each study is simply burned to a CD. The CDs were then placed into the patient's chart without

an interpretation. Every

morning before rounds I would collect the CDs of all inpatient examinations completed the last 24 hours and load them onto a computer. Before rounds I would review the imaging of all their patients with the teams and then round with them. After rounds I would usually take one to two patients to the ultrasound unit to do ultrasounds and help the interns with work on the floor. Thursday and Friday mornings they had



Heading to the radiology department

“It was one of the most impactful experiences of my training ...  
It has given me a different view of medicine.” - Jacob Smith, reflecting upon his global health  
experience in Naivasha, Kenya

formal didactics and they gave me 15 minutes at the beginning of each lecture to teach about radiology. I followed the curriculum of *Felson’s Principles of Chest Roentgenology* and borrowed heavily from Dr. Rohrmann’s slide sets. These sessions were very well received, as many of the trainees and mid-levels have minimal education and experience with radiology, yet the majority of the studies they order are never read by a radiologist.

I also had the opportunity to spend a few days in other settings. I spent a day at an outpatient imaging center in Naivasha where the only CT scanner in town is housed. Additionally, I was able to work at Nairobi’s Kenyatta National Hospital, the country’s largest hospital. It also has the only

radiology residency program within the country. I spent time working with their residents scanning ultrasound patients and watching resident read-outs with their attendings. It was a great opportunity to discuss differences in training and learn from them.

I am truly grateful to the Rohrmann Endowment and its donors for allowing me to have such an amazing opportunity. It was one of the most impactful experiences of my training. It has given me a different view of medicine and created lasting friendships. I still receive text message photos asking my opinion about studies. I hope that our program is able to continue to support residents in these kinds of projects because these opportunities not only teach us as residents, but also help other clinicians provide better care.

- Jacob Smith, M.D.



The county hospital in Naivasha



Standard lunch fare at the hospital cafeteria



The ultrasound department at Kenyatta National Hospital



Jacob Smith, MD  
R5 Resident

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Rohrmann Endowment  
UW Medicine, Department of Radiology  
1959 NE Pacific St, Box 357115  
Seattle, WA 98195

Betty L. Lanman  
Phone: 206.598.3303 [blanman@uw.edu](mailto:blanman@uw.edu)

## An Interview with Dr. Bill Warren

*Where are you from originally?*

I was born and raised in Texas. My grandparents on both sides were cotton farmers, so I spent my summers working on a farm. I'm grateful for this experience, because working on the land during my formative years gave me a whole different perspective on life. It was in Texas during medical school where I was fortunate enough to meet my wife Carol.

*What was your path towards becoming a radiologist?*

I received my medical degree from Baylor College of Medicine, and the Army paid for my senior year of medical school. As a result, I owed the Army three years instead of two, so I was stationed in Germany as a General Medical Officer treating soldiers and their families. I was fortunate to do some on-the-job training at Frankfurt Army Hospital in Radiology, which convinced me that this was the medical field for me. I liked the fact that radiologists interacted with all fields of medicine.

I did my residency at Virginia Mason in the mid-1970s. Drs. Bill Bush and Pat Freeny encouraged me to do a fellowship at the University of Oregon after residency, which I did. I focused on ultrasound and interventional radiology and brought these skills to my first job in private practice at the Northwest Hospital in Seattle, where I remained for 23 years! I had a great career there and enjoyed working with a smaller group of physicians, which provided me with the opportunity to work collaboratively with physicians in many fields of medicine.

I was inspired by the international outreach work of Dr. David Christie, so during my time at Northwest Hospital I took a sabbatical leave of 5 months to go to the University of Nairobi in Kenya to teach radiology residents. Having this amazing experience in a third world country developed my philosophy on how important it is for doctors to become empowered, in particular by learning how to advocate for improved healthcare and health equity for their patients. I emphasized advocacy and taking action to the

residents to counteract the complacency we sometimes see in our profession.

As a result of this experience, I later helped establish a program at the University of Washington for radiology residents to spend a block of time working in local hospitals in Tanzania and Kenya as a visiting radiologist interacting with the medical staff in their environment. The ACR agreed to sponsor the first two residents who took advantage of this opportunity. This program is now being funded by the Rohrmann Endowment.

In 2000, I was invited by Dr. Al Moss to join the UW Medicine Radiology Department. Having had the opportunity to work with radiology residents in Kenya was the impetus for my move to UW, where I was privileged to work with outstanding residents and fellows in the last 13 years of my career. I consider this time the highlight of my professional career.



Torres del Paine in Patagonia

*What are some specific memories you have of Dr. Rohrmann?*

My first contact with Dr. Rohrmann was when I was at Virginia Mason as a resident, through the Professor Rounds program at UW. When I was in private practice I would often call on Chuck for his feedback about residents who were applying for a job, because I relied on his judgment and knew he was so well respected. Chuck always gave me straight answers and I was so grateful for his guidance at that time.

*What excites you most about Radiology and what are some of your favorite aspects of the profession?*

I like that Radiology is really at the core of medicine, because all patients need imaging. I also appreciate that I was able to interact with and learn

from such a wide variety of specialists. As the profession expanded to include Ultrasound, CT, MR, etc., it became even more important to provide problem-solving expertise to physicians. Also, imaging opened up many new avenues for diagnosis and treatment, including minimally invasive surgical procedures using imaging guidance.

*What do you think are some of the most important things for Radiology residents to learn?*

I think that as healthcare becomes more and more complex, it's important for young radiologists to learn how to have a voice at the table. In other words, it's vital that they be a part of organized medicine on both a local and national level and help influence how medicine develops in the future. Otherwise, they become subject to whatever is decided politically. Learning to meet and share information with political representatives is an invaluable and important experience for residents to have, an opportunity they can have by attending the ACR Annual Meeting as resident delegates from the WSRS.

*What do you enjoy doing in your spare time?*

I'm an avid photographer and traveler - my wife and I have been lucky to have traveled extensively. I love to ski, especially with family and friends at Whistler. I'm part of a biking group that takes long day-rides and week-long rides, which I really enjoy. I also play the viola da gamba, a bowed, fretted 6 string family of instruments that was used during the Renaissance and Baroque period to play chamber music. I play with an ensemble of viola da gambas weekly, and we perform several times a year.

This brings me to your earlier question. I think it's really important for residents to learn how to embrace work-life balance, especially by making time for their hobbies. This will pay off enormous rewards down the line.



Carol & Bill Warren  
Wine tasting in Napa  
in September