Radiotheranostics at The University of Iowa

Theranostics refers to the use of a material that combines therapy and diagnostic imaging. Although theranostics is a relatively new term, the theranostic use of radioactive iodine for thyroid disease has been in practice for more than seven decades. With the recent advances in identification of specific targets in tumors and development of targeted radioligands, the use of radiotheranostic approaches has expanded to treatment of many cancers.

The University of Iowa has a long track record in theranostics of neuroendocrine tumors (NETs). The target receptor in NETs is the somatostatin receptor, which can be imaged with PET/CT using Ga-68 labeled somatostatin analogues. Patients who have surgically unresectable NETs that express somatostatin receptors demonstrated with PET/CT imaging are candidates for peptide receptor radionuclide therapy (PRRT) with Lu-177 or Y-90 labeled somatostatin analogues. We have been using these compounds as investigational therapeutics since 1999 at The University of Iowa. Lu-177 DOTATATE peptide receptor radionuclide therapy (PRRT) was approved by the FDA last year for neuroendocrine tumors and we have built a large PRRT clinic over the last year. The University of Iowa has the only NIH SPORE (Specialized Programs of Research Excellence) grant on NETs (PI: Sue O’Dorisio) with a very strong theranostics component. Our approach, using personalized dosimetry-based treatment with Y-90 DOTATOC (investigational drug), was published last year and Dr. Mark Madsen was awarded with the Henry Wagner award for the best abstract by the Society of Nuclear Medicine for his work in dosimetry of Y-90 DOTATOC in 2016. We have also been leading the efforts on the use of PRRT in the pediatric population and on combining radionuclide therapies to increase treatment efficacy using I-131 MIBG and Y-90 DOTATOC. Additionally, we opened a new clinical trial for intraarterial PRRT with Y-90 DOTATOC in patients with liver-centric metastases. We recently filed a New Drug Application (NDA) with the FDA for Ga-68 DOTATOC based on our experience. The theranostic approach has been successfully applied in patients with castrate resistant prostate cancer with prostate-specific membrane antigen (PSMA). We currently have several imaging trials underway with Ga-68 PSMA ( investigational drug) PET/CT diagnostic imaging in initial staging and evaluation of recurrence of prostate cancer, and we will be participating in a multicenter Phase 2/3 study of Lu-177 PSMA (investigational drug) in the treatment of castrate resistant metastatic prostate cancer.

Radiotheranostic approaches for personalized therapy of cancer have the potential to change the treatment paradigms in many malignancies. At The University of Iowa, we are establishing a Theranostics Center through the joint efforts of the Departments of Radiology, Department of Radiation Oncology and the Holden Comprehensive Cancer Center. The mission of this Center is to develop and conduct clinical trials utilizing targeted radionuclide diagnostics and treatment of various malignancies, and to provide patients with access to the most recent clinical advances in radiotheranostics. Towards that goal, we are exploring the space and personnel needs to establish a center that will have the imaging and treatment capabilities for our expanding program.

These are very exciting times in Nuclear Medicine and Theranostics!
It has been another year of change, growth and progress. We have a lot of success to share in this annual newsletter. First, on a personal note, I did my first RAGBRAI this year and it was spectacular! It is a great showcase for the State of Iowa. I rode with Janet Roe, our technologist supervisor, and The University of Iowa team. It was a really special experience and I gained a much deeper appreciation of the state and some of the many small communities from which so many of our patients (and faculty, staff and students) come from.

We launched our strategic planning effort last fall and are now entering our implementation phase. We had great engagement of faculty and staff throughout the department throughout the process. One common theme that was recognized as a strength of the department was the quality and the commitment of our people – to each other, to the patients we serve, and to our three missions of clinical care, research and education. We also identified many areas to work on and have launched several projects already. These include the creation of a 3-D processing laboratory for post processing on complex CT and MR datasets, helping to support our growing cardiac imaging program. We are developing a set of patient education videos for the clinical work areas. We are working on better ways to communicate across the department.

We have had an influx of outstanding new people, some of whom are introduced in this newsletter. We are expecting more in the coming year. We have to replace two irreplaceable people – Drs. Mark Madsen and Georges El-Khoury. The department also continues to grow and evolve physically. Construction is complete for new offices on the 3rd floor of the John Pappajohn Pavilion. We will be converting the Franken Auditorium to a waiting area for CT and IR and building the new Franken in the JPP Atrium area. We will be breaking ground soon for the PET/MR that will be sited between the PET center and the MR Facility.

We have seen major changes in leadership at the College of Medicine and the University of Iowa Hospitals and Clinics. Starting from the top, Brooks Jackson, MD, replaced Jean Robillard, MD, as the Dean and Vice President for Medical Affairs last winter. Dr. Jackson is a pathologist and was previously the VPMA and Dean at the University of Minnesota. A primary reason for why we were able to get Dr. Jackson to leave a job with the same title is the fact that we are a truly integrated institution. The hospital leadership reports to our dean. We don’t have, like many institutions, a separate hospital, faculty practice plan and college of medicine. Structures like these make it very difficult to get everyone in the boat rowing in the same direction. That is not to say we don’t have challenges, but we are really aligned here and that is a major advantage in an era of rapid change and financial pressures. In addition to alignment, this structure also allows us to create clean and transparent ways to reinvest money generated from the hospital into our clinical (including salary support), research and educational missions.

Our new Chief Financial Officer, Brad Haws, spent 15 years at the University of Virginia as the CFO of their Faculty Practice Plan. The appeal of an integrated system with responsibility for both college of medicine and hospital was a major factor for his recruitment too. Finally, Suresh Gunasekaran became our new Chief Executive Officer (CEO), replacing Ken Kates. Suresh has an IT and practice-building background and was the Chief Operating Officer for University of Texas Southwestern, in Dallas.

We will start to see some rapid changes now that the new leadership is in place. We have many strengths to build on.
A Reflection on
Monzer M. Abu-Yousef, MD, FACP, FAIUM, FSRU

How can you define a nearly 50 year career in medicine and the influence a person had on an institution and a specialty? In this case, I would quote Dr. Abu-Yousef’s own mantra “Ultrasound is the ultimate!”

I don’t know the story of how Dr. Abu-Yousef became involved with ultrasound. Did he choose ultrasound or did ultrasound choose him, but I do know that their paths are closely linked. In 1973, while still a radiology resident in Beirut, the year before he started his residency at Iowa, ultrasound was first recognized as an occupation by the US Office of Education. In 1979, the year he went to UCSD for a brief fellowship in ultrasound, the Joint Review Committee on Education in Medical Sonography was founded. In 1983 ultrasound program certification began nationally and the following year he became medical director and advisor to the program at Iowa. Since then, 292 sonographers have graduated from this program.

At Iowa, he pioneered the use of ultrasound for many things that are now routine: obstetric and gynecologic imaging; the use of Doppler for renal artery stenosis, DVT, carotid artery disease, transplant, and portal hypertension; the use of ultrasound for the diagnosis of appendicitis and initial ER trauma screening; and, the use of ultrasound as the primary modality for percutaneous guided biopsies. He is the reason that our biopsy rule is – Only use CT when we can’t get it with ultrasound. Most recently, he had been working to introduce contrast ultrasound into clinical use, even using it to assist with biopsy localization.

Dr. Abu-Yousef was a very productive academician. He was first or second author on more than 65 scientific presentations, more than 70 publications, and more than 75 scientific exhibits. While publications are an accomplishment in themselves, the presentations and exhibits also resulted in more than 20 national recognition awards. His Radiographics article on liver Doppler was declared a Landmark Reference Article by the ABR and remains a standard reference in the reading room 7 years after its publication. This productivity provided him a platform to guide his trainees. As a mentor, Dr. Abu-Yousef supervised the research projects of 70 medical students, residents, and fellows. It should be noted that of these mentored residents, 6 have careers in academics, 4 here at Iowa.

Nationally, Dr. Abu-Yousef was very active in the American Institute of Ultrasound in Medicine and became a fellow in the AIUM, the American College or Radiology, and the Society of Radiologists in Ultrasound. He was a board examiner for the American Board of Radiology for 14 years.

Dr. Abu-Yousef was a dedicated teacher in the department, maintaining an active curriculum for both medical students and residents. He personally taught every medical student who passed through the ultrasound reading room no matter how busy it got; served as the primary source of teaching the radiology residents OB-gyn and vascular ultrasound; and provided the most consistent curriculum and testing in the Body Section. His teaching evaluations were consistently near the top of the department. Six times he received teacher of the year from the medical students and twice he received the department’s Krabbenhoft Award for Excellence in Education.

Though I started learning from Dr. Abu-Yousef more than 25 years ago, he never stopped teaching me. The week that he was out sick, I was still holding aside 2 exams that I needed his counsel on. I will miss him greatly as a reference and colleague.

What did I learn from Dr. Abu-Yousef? I learned you can get anything with a needle and a transducer. I learned that baklava is an incredible treat. I learned that sometimes you have to go look for yourself. I learned that laughing out loud at a dumb joke in a quiet reading room can be very therapeutic. I learned that the most beautiful place in the world that I will never get to visit is Sharm El Sheikh, Egypt. And finally, I learned that ultrasound is the ultimate.

Thank you to Farida, Dina, Ramy, Maya, Mira, and Taleen for giving up your time with Monzer for us. He made our world a better place.

--David M. Kuehn, MD, FACR

A Note From the Editors

Dr. Monzer Abu-Yousef, Professor of Radiology, passed away on Dec. 14, 2018, surrounded by his loved ones. As one of his many contributions to the Department of Radiology, Dr. Abu-Yousef served as Editor-in-Chief of the department newsletter since 1992. In this capacity, he oversaw the curation and editing of content, and in a pinch when we had unexpected space to fill, could whip up an article in no time at all.

He was also funny and generous; a gentle and kind man who was passionate about his work and helping those around him, be they patients, colleagues or students.

Little did we know last year when planning for this issue that it would be his last. So it is with sadness and gratitude that we dedicate this issue to him. We will miss you, Monzer.

--Nancy Jenkins, EMS Clarke
The MR Research Facility is playing a central role in a recently funded NIH grant to study Bipolar Disorder. This disorder is characterized by extreme fluctuations in mood ranging from mania to depression. This disease can cause significant impairments in family relationships, ability to hold a job, as well as result in legal troubles. An interdisciplinary team of investigators from Radiology (Vincent Magnotta), Psychiatry (John Wemmie and Jess Fiedorowicz), and Electrical and Computer Engineering (Gary Christensen) have been working to study this disorder for the past four years and were recently awarded a five-year R01 grant to continue this effort. This study is focused on studying brain metabolism using novel imaging approaches including T1rho imaging and MR spectroscopy. Prior work by our group has identified metabolic changes in the cerebellum vermis a region known to be involved in mood (Fig 1). Furthermore, we have observed changes in cerebellar and striatal metabolism associated with mood changes (Fig 2). The NIH funded study is focused on the cerebellum, which is a region that has largely been ignored in Bipolar Disorder to date. We will study cerebellar metabolism as well as connectivity (functional and anatomical) of the cerebellum with the emotional control network. We believe that the cerebellum may help to compensate for abnormal function of the emotional control network, and when the cerebellum can longer provide sufficient support, extreme moods (depression or mania) arise. To gain a better understanding of the role that the cerebellum plays in mood regulation, we will collect data across a variety of mood states and assess mood ratings, cognition, and suicidality in a large cohort of subjects (120 bipolar disorder and 90 controls).

**Fig 1.** Significant differences in brain metabolism as assessed by T1rho imaging between subjects with bipolar disorder in the euthymic state and matched control subjects. Regions involved in the cerebral white matter and both the white and grey matter in the cerebellum including the cerebellar vermis.

**Fig 2.** Significant differences in brain metabolism as assessed by T1rho imaging between subjects with bipolar disorder in the depressed and euthymic mood states. Significant differences in mood are reflected in the cerebellar vermis and the striatum.
The NeuroEndovascular (Interventional Neuroradiology) fellowship program at The University of Iowa is back online after a short dormancy of a few years. We have a long tradition of excellence in the endovascular treatment of cerebrovascular disease – including brain aneurysms, stroke, arteriovenous malformations and atherosclerotic stenosis – as well as a long tradition of fellowship training here at Iowa. The University of Iowa remains one of the highest volume centers for aneurysm and stroke care in the nation. We are the only Comprehensive Stroke Center in the state, and we continue to see patients with these diseases transferred in from all over the state and beyond our borders.

We resurrected the program two years ago and graduated our first fellow, Waldo Guerrero, MD, last June. The multidisciplinary faculty for this program consists of Drs. Derdeyn and Minako Hayakawa from Radiology, Drs. Santiago Ortega Gutierrez and Edgar Samaniego from Neurology, Dr. David Hasan from Neurosurgery and Dr. James Rossen from Cardiology. Drs. Derdeyn and Ortega are the Program Director and Associate Program Directors, respectively. Ms. Courtney Bork is the Educational Coordinator. The program is open to radiologists (after completion of a diagnostic neuroradiology fellowship), neurologists (after completion of a vascular neurology fellowship) and neurosurgeons (after completion of a pre-requisite year of training in catheter angiography). It has been accredited by the Committee for Advanced Surgical Training (CAST) for the Society of Neurological Surgeons, and this accreditation is now being tracked by the ACGME. The fellowship consists of a first year, which is tailored to the pre-requisite training needs of the fellow, and a second year which is dedicated to therapeutic endovascular procedures.

Faculty Publications: >100
Over 50 new staff, and 9 new faculty joined the department
Faculty Presentations: >100
New grants totaling over $5M
Adventures Abroad
Tanzania

Bruno A. Policeni, MD, MBA, Clinical Professor

It was a privilege to have been selected for the RSNA International Visiting Professor Program. I had the opportunity to give lectures but also experience the day-to-day workflow.

During my two weeks in Moshi, Tanzania, I lectured at the Kilimanjaro Christian Medical Center’s Radiology Department. It is the only tertiary care center in northern Tanzania. The radiology department has a 64-slice CT machine and two US systems. They have weekly rounds with orthopedics and pediatrics. There are plans to acquire an MRI machine. Currently, there is only one MRI machine in northern Tanzania, located in privately owned clinic in Arusha, which is an hour’s drive from Moshi. The access to MRI is very limited due to financial barriers.

The day would start with a 10-minute walk from the hospital doctor’s compound, to the hospital. It was a pretty stroll since Mount Kilimanjaro was on the horizon; however, most days, it was raining. We would start the day with a clinical conference; on one occasion I had the opportunity to attend a neurology round. After the conference, I would either start my lecture to the residents, or on the days I was not scheduled to lecture, I would spend time in the CT console, protoceling and reviewing the cases with the technologist and radiologist. Most days we would work until 4 pm.

The case mix in the hospital is outstanding. Most cases are positives, and the pathology is very interesting, including trauma,
neoplasia and infectious disease.

During the two weeks, I also had the opportunity to lecture at the Kilimanjaro National Radiology Meeting. The meeting included the hospital CEO and Tanzania minister of health secretary who discussed national strategies to expand radiology services in the country.

There was an unexpected event where we assisted a USA medical student who fell coming down Kilimanjaro from a hike to the summit and needed intensive medical care. We assisted with the initial assessment and helped to guide the care. The patient was later transferred to Kenya for further treatment after the arrangement of air evacuation. It was an amazing opportunity and demonstrated how radiology has a significant impact on patient care. The patient was initially scheduled to go to the OR for exploratory laparotomy; however, after review of the contrast-enhanced CT, it was decided to monitor the lab values since there was no evidence of acute bleeding in the abdomen.

Overall, engaging in outreach programs is rewarding and provides a tremendous contribution to the host country. I continue to communicate with my colleagues in Tanzania and review interesting cases and provide consultations. These very interesting cases give opportunities for trainees at my institution to review pathology not commonly seen in our community.
New Faces Welcomed in 2018

**Faculty**

**Mohammad Amarneh, MD**, joined both the Pediatric Radiology and Vascular Interventional Radiology sections as a Clinical Assistant Professor. Dr. Amarneh completed a fellowship in Pediatric Interventional Radiology at Boston Children's Hospital in Boston, MA. He completed his Diagnostic Radiology Residency and Pediatric Radiology Fellowship at the University of Iowa Hospitals and Clinics. His clinical interests include pediatric minimally invasive interventions and complex vascular anomalies. Dr. Amarneh is excited to return to UIHC and lead the efforts to build a state-of-the-art Pediatric Interventional Radiology Program.

**Girish Bathla, MBBS, MMeD, FRCR**, joined the Neuroradiology section as a Clinical Assistant Professor and Director of Clinical Neuroradiology Research. Dr. Bathla completed his medical education from the Maulana Azad Medical College in New Delhi, followed by radiology training. Subsequently, he joined the National University Hospital in Singapore where he completed his Fellowship of the Royal College of Radiologists and Master of Medicine in diagnostic radiology. He later joined The University of Iowa and completed his residency and Neuroradiology Fellowship training in 2018. His primary research interests include neurosarcoïdosis, stroke and vessel wall imaging. He looks forward to contributing to the growing Neuroradiology section in his new role.

**Nobuhiro Fujita, MD, PhD**, joined the Body Imaging section as a Visiting Associate Professor. Dr. Fujita most recently served as a Clinical Assistant Professor of Abdominal Imaging for 6 years at the Department of Radiology, Kyushu University, Fukuoka, Japan. In addition, he has been a hepatopathologist in the Department of Anatomic Pathology, Kyushu University, for four years (2007-2011) and where he took his PhD. He is keenly interested in radiological-pathological correlation of GI diseases, especially liver tumor and diffuse liver disease.

**Stanley Kruger, PhD**, Research Assistant Professor, joined the Neuroradiology Division. His primary research interest is in using MRI as a tool for thoracic imaging in two primary areas. The first is investigating lung structure and function in order to better assess regional ventilation and perfusion, especially as it relates to disease and therapy. In pursuit of this aim, he is interested in the use of hyperpolarized gas contrast agents (He-3 or Xe-129), Fluorine Imaging, and Oxygen-Enhanced Proton MRI. His second area of interest is to collaborate on development of an MR-only radiation oncology suite for tumor treatment in the chest. Ultimately, his interest is in overcoming the challenges of respiratory motion, and to remove the need for multi-modal acquisitions in treatment planning.

**Chang Hyun Lee, MD, PhD, FSCBT-MR**, joined Cardiovascular and Thoracic Imaging Section as a Clinical Professor. He most recently served as Vice-Chair of Radiology at the Seoul National University Hospital. He completed a fellowship in Thoracic Imaging at Seoul National University Hospital, Seoul, South Korea, and a Diagnostic Radiology Residency in Kyungpook National University Hospital. He served as a visiting professor in Radiology at UIHC in 2011–2012. His research interests include functional and physiologic CT and MR pulmonary imaging and radiation dose monitoring and contrast agents usage in CT. He was recently awarded a grant $5.2 million as a PI from the Ministry of Environment, South Korea for Environmental Lung Disease CT application. He is also a consultant for Dose M (INFINITT Healthcare, Seoul).

**Claudia Mello-Thoms, MS, PhD**, joined the Medical Image Perception Laboratory as a Research Associate Professor of Radiology. She comes from the University of Sydney, in Australia, where she is still an Honorary Associate Professor of Medical Imaging and Radiation Sciences. Prior to that she was with the Departments of Radiology and Biomedical Informatics at the University of Pittsburgh. Dr Mello-Thoms’ research interests are in medical image perception, image understanding and human cognition. Her research focuses on understanding and modeling diagnostic error and disagreement in Radiology and Pathology, as well as analyzing the visual search patterns of experts and novices in their quest to diagnose a medical image.
Prashant Nagpal, MD, joined the Cardiovascular and Thoracic Imaging section as Clinical Assistant Professor. Dr. Nagpal completed Radiology Residency at University of Iowa Hospitals and Clinics and did his Cardiovascular Imaging Fellowship at Brigham and Women’s Hospital, Harvard Medical School. He will be building a multimodality cardiac imaging program between Radiology and Cardiology at UIHC. His research interests include cardiovascular manifestations of pulmonary diseases, appropriate use of multimodality cardiovascular imaging, and advances of MRI techniques to enable imaging of patients who cannot hold their breath. Dr. Nagpal’s teaching interests include an understanding of the pathophysiologic basis of pulmonary and cardiovascular diseases and curriculum-based learning for residents at different levels of training. He serves as an expert faculty for the Society of Cardiovascular CT to develop guidelines on training requirements for cardiac CT readers and utilization of cardiac imaging techniques for risk-assessment of people with high-risk occupations.

Brandi Nicholson, MD, Clinical Professor, joined the Breast Imaging section. A native Iowan, Dr. Nicholson completed her medical education here at the University of Iowa College of Medicine. She later went on to complete her Radiology Residency training, followed by a fellowship in Breast Imaging, at the University of Virginia (UVA) in Charlottesville, VA. Upon completion of her fellowship, Dr. Nicholson served as faculty at UVA. While at UVA, she served as Medical Director for UVA’s Breast Care Program at Culpeper Medical Center. She was also recently appointed Director of the Breast Imaging Fellowship Program at UIHC. Her research interests include teaching of residents/fellows/medical students, and methods to improve utilization and health costs related to breast imaging.

Jinha Park, MD, PhD, Clinical Associate Professor, joined the Body Imaging section. Dr. Park has expertise in the interpretation of complex radiologic studies of abdominal and pelvic cancers. He was previously an Assistant Professor of Radiology at City of Hope Medical Center where he served as Director of MRI and Radiology Research. He obtained his BA, graduating Phi Beta Kappa from the University of California, Berkeley. He then completed both his MD and PhD degrees at the University of Southern California studying a specific tumor associated protein called HER-2 in breast, ovarian, and stomach cancer and developing an antibody against this cancer protein for future diagnostic and therapeutic purposes. After completing an Internship at Kaiser Permanente Los Angeles Medical Center, he then trained as a Resident in Diagnostic Radiology at UCLA Medical Center and as an NIH-sponsored Fellow in Abdominal Cancer Imaging at Stanford University Medical Center.

Residents & Interns

Diagnostic Radiology Residents: Talmage Barth, MD, University of Utah ~ Mothana Saad Eldine, MD, American University of Beirut ~ Bradley Kvamme, MD, University of North Dakota School of Medicine and Health Sciences ~ Christopher Welander, MD, University of Iowa Carver College of Medicine ~ Matthew Hustrulid, MD, University of South Dakota ~ Jakub Siembida, MD, Boston University ~ J. Austin Campbell, MD (DR/IR), University of Kansas ~ Timothy Hurst, MD, University of Iowa Carver College of Medicine

Nuclear Medicine Residents: Ravishankar Pillenahalli Maheshwarappa, MBBS, Mysore Medical College and Research Institute ~ Sarv Priya, MBBS, Post Graduate Institute of Medical Education and Research, Dr. Ram Manohar Lohia Hospital

Diagnostic Radiology Interns: Andrew Hill, MD, St. Louis University ~ Sabarish Narayanasamy, MD, Madurai Medical College ~ Kimberly Ferris, MD, Texas Tech University ~ Daniela Cunha, MD, Universidade Federal de Pernambuco ~ Tyler McDermott, MD, University of Iowa Carver College of Medicine
Dance Marathon Funds New MRI Scanner

On May 10, 2018, the Stead Family Children’s Hospital welcomed the installation of a new Siemens 3T Vida MRI scanner. A $650,000 donation from the University of Iowa Dance Marathon helped make this purchase possible. UI Dance Marathon is a student organization that holds a yearly 24-hour dance after year-long fundraising. In 2018, UI Dance Marathon raised over $3 million dollars.

On the day of installation, cranes carefully lifted a concrete slab next to the Children’s hospital, exposing a utility room where the MRI scanner could be dropped in by crane and positioned into the scanning room. It was a very impressive engineering feat to observe.

This scanner accompanies our current 1.5T scanner, which was being utilized at approximately 140% appointment capacity since the opening of the Children’s hospital. This new scanner will allow for faster patient access, as well as will be very beneficial for epilepsy and brain tumor patients, which can benefit greatly from 3T scanning.
Renovations Bring New Look & Efficiencies to Department

The Department of Radiology faculty support space has been undergoing major renovations that were (mostly!) completed in January of 2019. The construction of Stead Family Children’s Hospital resulted in the creation of a new corridor for access to the main hospital and also created a shell space along the west side of the Department. In addition, the Breast Imaging Center was moved to 4th floor Pomerantz Family Pavilion. These changes resulted in an increase in square footage and an opportunity to completely redesign the support space. Some of the highlights are listed below:

- Franken Conference Room and the Radiology Library move into a new location to the south, where the Breast Imaging Center used to be located
- 14 new offices and 2 new conference rooms
- New, larger staff lounge
- Administrative offices moved into the same area as faculty and support staff
- Esthetically pleasing design that takes advantage of natural light using glass and office alignment
- New medical education suite for residency and fellowship programs
- New reception area for the Department of Radiology

The new design creates a suite of offices that allows more opportunity for collaboration between radiologists and administration.
Retirements

On June 30, 2018, Georges Y. El-Khoury, MD, FACR, tendered his retirement from the University of Iowa Radiology Department. Georges served as the Director of the Musculoskeletal Radiology section from 1975 to 1994 and again from 2001 to 2017. Some may not be aware that Georges also served the Department as the Vice Chair for Imaging and Diagnosis from 1994 to 2001. He was instrumental in shepherding the Department during his tenure as Vice Chair in that he was the glue that held the department together during some tumultuous times. I will never forget the words of a resident on weekend call during that time period, who stated, “Mid-afternoon, I encountered him (Georges) by surprise in the deserted department. He seemed bedraggled and distracted, so I lightheartedly asked if he also had the misfortune to be on call on such a beautiful weekend day. He replied in the negative, explaining that he was taking care of department administrative work that was temporarily his responsibility to manage. Trying to be cheery, I inquired into whether he was enjoying his fancy new administrative role, but his answer was so serious and heartfelt that I remember it to this day. He said, “No. I don’t enjoy it. I have many things I would rather be doing. But for now, the department needs a leader, and everyone here needs someone who will hear them, and those things take time. Someone must do this work, and it deserves to be done well. And so, I am here.” The integrity of Dr. El-Khoury’s response struck me for its wisdom, its emotional intelligence, and its call to service.”

This story epitomizes who Georges is. He is an individual full of integrity, passion for serving others, and a relentless desire to do things well. Whenever he teaches, his passion for getting across his teaching points is palpable.

You can hear the passion and excitement in his voice. He so wants to help others be better radiologists and be better people. He is always striving to help others. As one coworker put it, Georges most commonly used words are, “I will be with you”. Whether it is a fellow needing assistance with a procedure, a surgeon calling for guidance on workup of a spinal tumor, a bone pathologist calling for correlation with imaging, or a colleague needing assistance with a research manuscript, “I will be with you” is the forthcoming response. No matter how busy Georges is, he always finds time to help those needing his assistance. He is approachable. When you talk with him, he never seems hurried or worried about the next meeting or clinical assignment. He always has time to stop what he is doing, look you in the face, and listen to what you have to say.

In tribute to Georges’ career, one could go on about his hundreds of publications, his thousands of presentations/talks, his hundreds of book chapters, or his innumerable awards (including one of the highest honors for orthopedic physicians, the Gold Medal of the International Skeletal Society). However, what is really honorable about Georges is the multitude of people he has helped live better lives through his mentorship. There are many people who have chosen the path of serving others; the path of helping others become better people; and the path of being an encouragement to others because of Georges’ integrity and example to them when they were in need.

The most encouraging thing about Georges retirement is that he will continue to teach and work in the department as an Emeritus Professor. He will still be here to be the glue that helps hold things together. Thank you, Georges, for all you have done for the many people you have helped in Iowa and around the world.

-- D. Lee Bennett, MD, MA, MBA, FACR

Mark T. Madsen, PhD, served for 29 years in the Department of Radiology. As a Professor and Nuclear Medicine Medical Physicist, Mark contributed in numerous ways, including:

- Supporting technical aspects of the nuclear medicine clinic
- Supervising and preforming quality control of nuclear medicine imaging systems
- Teaching radiation physics and instrumentation to nuclear medicine residents and technology students
- Participating in many imaging and nuclear medicine radionuclide therapy research projects, CT protocol and dose review
- Chairing the Medical Radiation Protection Committee for the IRB / Chairing the Hospital Radiation Review Group / Chairing the Radioactive Drug Research Committee, and
- Participating at the national level with the American Board of Radiology, the American College of Radiology and the American Association of Physicists in Medicine

Some of his most notable achievements include:

- Designing the Nuclear Medicine Clinic along with John Bricker and Dr. Jim Ponto
- Receiving the Wagner Award for best presentation at the 2015 SNMMI Annual Meeting
- Receiving recognition for the best abstract submitted from the United States at the 2016 SNMMI Annual Meeting

Michael Briggs, Secretary to the Chair, retired after serving nearly 20 years at UBHC and 9 years in the Department of Radiology. Whether sharing books he read, stories about his travels or his kitties, Michael’s sense of humor made him a joy to work with. We miss him, but in the words of his oft-quoted Great Aunt Lydia: “The damage is already done.”
New Leadership

David Kuehn, MD, FACR, was appointed Vice Chair for Informatics for the department and Assistant Chief Medical Information Officer for Imaging (a UIHC position to help manage imaging across the enterprise). We will all benefit from Dr. Kuehn’s experience, commitment to the department and institution, and his expertise in the flow of digital information and imaging.

Sandeep Laroia, MD, agreed to serve as the Division Director for IR, after serving as interim. Dr. Laroia is a respected clinician, a skilled, thoughtful and dedicated interventional radiologist, and a leader in the emerging field of Y-90 embolization for liver tumors. We are very excited about the future of our outstanding IR program under his leadership.

Catherine Metz, MD, agreed to join the Diagnostic Radiology Residency Program leadership group as an Associate Program Director. The ACGME increased its requirements for residency oversight, and we are excited to have Dr. Metz join Dr. Janet Pollard in the role of associate director to help make our already outstanding program even better.

Brandi Nicholson, MD, was appointed to be the new Director of the Breast Imaging Fellowship Program. Dr. Nicholson is herself a fellowship trained specialist in breast imaging and has served in leadership positions at the University of Virginia. She brings with her a wealth of experience and scholarship, and we look forward to her leadership.

Jinha Park, MD, PhD, assumed the role of Director of the Body Imaging Division. Dr. Park is an accomplished scientist and clinician, with great experience in developing clinical services, such as Body MR, and researching tumor receptors for therapy and diagnostic imaging. He will be a great asset in leading the further development of the Body Imaging Division.

Faculty Promotions

David Dick, PhD, was promoted to the rank of Clinical Associate Professor of Radiology. Dr. Dick’s areas of research interest include the design and implementation radiosynthetic methods for PET radiotracers; equipment design for novel synthesis of radiotracers; production of nonstandard PET radioisotopes; and, using single-mode microwave cavities for radiochemical syntheses.

Resident Chiefs

Nour Aly, MD, and Simmi Deo, MD, were elected Diagnostic Radiology Chief and Assistant Chief Residents, respectively. They joined Michael Lucin, MD, who continues to function as chief resident until June 2019.
2018 Fellow Graduates

Richard Beutler, MD, Radiologist, Eastern Radiological Associates, Billings, MT
Eve Clark, MD, Radiologist, Mercy Hospital, Iowa City, IA
Stephane Desouches, MD, Faculty, Medical College of Wisconsin, Milwaukee, WI
Michaelangelo Fuortes, MD, PhD, Radiologist, Radiology Consultants of Iowa (RCI), Cedar Rapids, IA
Joseph Gastala, MD, Fellow, Northwestern University, Evanston, IL
Waldo Guerrero, MD, Adjunct Assistant Professor, St. Luke’s Hospital/Aurora Healthcare, Milwaukee, WI
Adam Liudahl, MD, Radiologist, Iowa Radiology, West Des Moines, IA
Joel Pereira, MD, Faculty, Richmond VA Medical Center, Richmond, VA
Ravishankar Pillenahalli Maheshwarappa, MBBS, Resident, University of Iowa Hospitals & Clinics
Sarv Priya, MBBS, Resident, University of Iowa Hospitals & Clinics
Neetu Soni, MBBS, Fellow, University of Iowa Hospitals & Clinics,
Peter Taylor, OD, Radiologist, Largo Medical Center, Largo, FL
Douglas Watt, MD, Radiologist, Gillette Medical Imaging, Gillette, WY

2018 Resident Graduates

Girish Bathla, MBBS, MMeD, FRCR, Faculty, University of Iowa Hospitals & Clinics
Adam Bryant, MD, Fellow, University of Iowa Hospitals & Clinics
Joel Dennhardt, MD, Fellowship, University of Iowa Hospitals & Clinics
Antony Hayes, MD, Fellow, Duke University, Durham, NC
Michael Kwofie, MD, Fellow, University of Iowa Hospitals & Clinics
Shihong Li, MD, Fellow, Emory University, Atlanta, GA
Prashant Naggal, MD, Faculty, University of Iowa Hospitals & Clinics
Ehab Saad Aldin, MD, Fellow, University of Nebraska, Omaha, NE
Shafik Wassf, MBBCch, Fellow, Magee-Women’s Hospital of UPMC, Pittsburgh, PA
Pankaj Watal, MBBS, Fellow, University of Iowa Hospitals & Clinics
Beenish Zaidi, MBBS, Fellow, University of Iowa Hospitals & Clinics
Honors & Awards

Eric A. Hoffman, PhD, Receives 2018 Alton Ochsner Award Relating Smoking and Disease

Eric Hoffman, PhD, along with Geoffrey Fong, PhD (University of Waterloo in Canada), received the 2018 Alton Ochsner Award Relating Tobacco Smoking and Diseases. Both were recognized for independently making major contributions that significantly impact their areas of research on the effects of prolonged consumption of tobacco smoke on the development of malignant disease in patients. Each awardee received a $7,500.00 honorarium, an award medallion, and a plaque with the identifying statement attributing their research findings.

Notable Resident Awards

Islam Shehata Elhelf, MBBCh
• Received a Certificate of Outstanding Contribution in Reviewing from the Journal of Vascular and Interventional Radiology (JVIR) in recognition of the contributions he’s made to the quality of the journal.
• Selected for the prestigious 2018 Ziv Haskal JVIR Editor Fellowship. This was the first time the fellowship has been awarded to a resident in training. Dr. Elhelf was able to shadow the editor for JVIR, as well as confer with the publisher and other consultants.

Justin Guan, MD
• Received the award for “Top Oral Presentation” at the Workshops in Interventional Radiology Education Singapore (WIRES) for his presentation entitled, “Does Presence of Arterial Feeder on Cross-Sectional Imaging Predict Treatment Response and Survival After TACE for HCC? Multilevel Analysis of 139 Patients.”
• Selected to participate in the 2018 RSNA/AUR/ARRS Introduction to Academic Radiology Program held at the ARRS meeting in Washington, DC.

Prashant Nagpal, MD
• Invited as a junior investigator to the 15th iMaging And Electric Technologies (MALT) Annual Meeting in Stockholm, Sweden. His presentation entitled, “MR Imaging of Mechanical Activity in Ultra-Thin Layers of Cardiac Tissue” was awarded a Bronze Medal (Young Investigator Award).
• Received a 2018 RSNA Seed Grant Award (RSD-1814) for “Comparison of free-breathing self-gated 3D cardiac MRI with manifold reconstruction algorithms and standard breath-hold sequence in patients with and without COPD.”
• Winner of 2018 CT Jeopardy at the Society of Cardiovascular Computed Tomography’s Annual Meeting.

Janet Pollard, MD,
• Received First Place for her poster entitled, "Quantitative test-retest measurement of [68Ga] PSMA-HBED-CC in tumor and normal tissue" at the 2018 Society of Nuclear Medicine and Molecular Imaging Annual Meeting.

Eunkyung Park, MD, PhD
• Appointed to the Society of Nuclear Medicine and Molecular Imaging Internship Program. The 2-year internship aims to identify and train future SNMMI leaders in the structure, governance, and operations of the organization. In this role, she will work closely with the Clinical Trials Network on various projects that promote their mission.

Eric A. Hoffman, PhD, Receives 2018 Alton Ochsner Award Relating Smoking and Disease

Eric Hoffman, PhD, along with Geoffrey Fong, PhD (University of Waterloo in Canada), received the 2018 Alton Ochsner Award Relating Tobacco Smoking and Diseases. Both were recognized for independently making major contributions that significantly impact their areas of research on the effects of prolonged consumption of tobacco smoke on the development of malignant disease in patients. Each awardee received a $7,500.00 honorarium, an award medallion, and a plaque with the identifying statement attributing their research findings.

Notable Resident Awards

Islam Shehata Elhelf, MBBCh
• Received a Certificate of Outstanding Contribution in Reviewing from the Journal of Vascular and Interventional Radiology (JVIR) in recognition of the contributions he’s made to the quality of the journal.
• Selected for the prestigious 2018 Ziv Haskal JVIR Editor Fellowship. This was the first time the fellowship has been awarded to a resident in training. Dr. Elhelf was able to shadow the editor for JVIR, as well as confer with the publisher and other consultants.

Justin Guan, MD
• Received the award for “Top Oral Presentation” at the Workshops in Interventional Radiology Education Singapore (WIRES) for his presentation entitled, “Does Presence of Arterial Feeder on Cross-Sectional Imaging Predict Treatment Response and Survival After TACE for HCC? Multilevel Analysis of 139 Patients.”
• Selected to participate in the 2018 RSNA/AUR/ARRS Introduction to Academic Radiology Program held at the ARRS meeting in Washington, DC.

Prashant Nagpal, MD
• Invited as a junior investigator to the 15th iMaging And Electric Technologies (MALT) Annual Meeting in Stockholm, Sweden. His presentation entitled, “MR Imaging of Mechanical Activity in Ultra-Thin Layers of Cardiac Tissue” was awarded a Bronze Medal (Young Investigator Award).
• Received a 2018 RSNA Seed Grant Award (RSD-1814) for “Comparison of free-breathing self-gated 3D cardiac MRI with manifold reconstruction algorithms and standard breath-hold sequence in patients with and without COPD.”
• Winner of 2018 CT Jeopardy at the Society of Cardiovascular Computed Tomography’s Annual Meeting.

Janet Pollard, MD,
• Received First Place for her poster entitled, "Quantitative test-retest measurement of [68Ga] PSMA-HBED-CC in tumor and normal tissue" at the 2018 Society of Nuclear Medicine and Molecular Imaging Annual Meeting.

Eunkyung Park, MD, PhD
• Appointed to the Society of Nuclear Medicine and Molecular Imaging Internship Program. The 2-year internship aims to identify and train future SNMMI leaders in the structure, governance, and operations of the organization. In this role, she will work closely with the Clinical Trials Network on various projects that promote their mission.

Innovations in Clinical Care Award

Catie Metz, MD, and Maheen Rajput, MD, were part of a team (that also included Chad Tracey, MD, and Paul Gelhaus, MD, from the Department of Urology) that received the 2018 Innovations in Clinical Care Award from the University of Iowa Physicians group. They were recognized for acquiring the first fusion biopsy machine for prostate biopsy in Iowa and local regions.

2018 Recipient Jack O. Haller Award

Yutaka Sato, MD, PhD, was awarded the 2018 Jack O. Haller Award for Excellence in Teaching by The Society for Pediatric Radiology’s Research and Education Foundation. He was one of two 2018 recipients to receive the award. Awardees received a $1,000 case prize.

First Place

Janet Pollard, MD, received First Place for her poster entitled, “Quantitative test-retest measurement of [68Ga] PSMA-HBED-CC in tumor and normal tissue” at the 2018 Society of Nuclear Medicine and Molecular Imaging Annual Meeting.
2018 Teaching Awards

2018 Krabbenhoft Award for Excellence in Teaching
Catherine Metz, MD
Clinical Assistant Professor

2018 Distinguished Investigator Award
Eric Hoffman, PhD, and Vincent Magnotta, PhD, were both given the Distinguished Investigator Award from The Academy for Radiology & Biomedical Imaging Research. This prestigious honor recognizes individuals for their accomplishments in the field of medical imaging. Recipients of this award have attained a level of accomplishment that ranks within the top 10% of all academic radiology faculty.

Red Apple Awards
Noteworthy Excellence and Effort in Teaching as indicated by the 2017-2018 medical students in the Carver College of Medicine

Faculty
Monzer Abu-Yousef, MBBSCh
Simon Kao, MD
Catie Metz, MD
Maheen Rajput, MD
David Kuehn, MD
Michael D’Alessandro, MD

Residents
Joel Dennhardt, MD
Alex Essenmacher, MD
Nour Aly, MD
Trevin Hayman, MD
Harrison March, MD
Robert Becker, MD
Abel Belay, MD

2018 KRABENHOFT AWARD
Roentgen Resident Research Award
Girish Bathla, MBBS

Resident Teachers of the Year
Joel Dennhardt, MD
Prashant Nagpal, MD

Faculty Teacher of the Year
T. Shawn Sato, MD

IHERF Scholarship Recipient
Ryan Hageman, student in the Radiologic Technology and CT Program, received the Iowa Hospital Education and Research Foundation Scholarship last summer. The goal of the program is to fill health care positions that currently have a significant number of openings in the State of Iowa.

Medical Student Teaching

Gillies Award for Outstanding Senior Medical Student
Tyler McDermott, MD

Resident Teacher of the Year
Sami Faruqui, MD

Resident Educator of the Year
Jaclyn Keller, MD

Fellow Teacher of the Year
Adam Liudahl, MD

Senior Faculty Teacher of the Year
Brian Mullan, MD, MME, MS

Junior Faculty Teacher of the Year
T. Shawn Sato, MD

2018 Employee of the Year
Janese Joecken, RTR, was named the 2018 Employee of the Year. Janese was recognized for being the backbone of the Radiology service at the Stead Family Children's Hospital. She makes everything go smoothly in the exam room. She's a leader as well as a team player, and her dedication to service is second-to-none. She's fantastic with patients and family, keeping everyone in the loop about how/why a procedure is going. Her attitude and behavior are exemplary and she serves as an excellent role model for her co-workers.

Laroia A, Kwofie M, March H, Laroia S. IV Contrast Agent Administration in Pregnant and Lactating Patients - What Do You Need to Know. CERTIFICATE OF MERIT AWARD


Handa A, Becker R, Priya S, Sato T, Sato Y. Neurocristopathies: The Many Enigmatic Faces of Neural Crest Cell Derived Abnormalities. CERTIFICATE OF MERIT AWARD; IDENTIFIED FOR RADIOGRAPHICS

Handa A, Hammarsjo A, Grigelionene G, Nishimura G. Skeletal Ciliopathies: A Pattern Recognition Approach and Latest Updates in Genetics that Radiologists Need to Know. CERTIFICATE OF MERIT AWARD
Resident Research Day 2018
Two Diagnostic Radiology residents were awarded Best Research Presentation in 2018. They are:

Muhammad Abdul-Wahab, MD: Usefulness of Apparent Diffusion Coefficient in Differentiation of Fibrous Dysplasia from Malignant Tumor in Head and Neck (faculty mentor: Toshio Moritani, MD, PhD)

Shihong Li, MD: Safety and Efficacy in Embolotherapy of Cecum Hemorrhage in Comparison to Non-cecum Lower Gastrointestinal Bleeding: Is Bowel Ischemia a Coming Nightmare? (faculty mentor: Shiliang Sun, MD)

Our Diagnostic Radiology Residency Program offers ample opportunities and mentor support for cutting-edge research within the Department of Radiology, and our other senior presenters represent the best of that research. They were:

• Adam Bryant, MD: Retrospective Analysis of Perfusion and Diffusion Imaging in Post-Treatment High-Grade Gliomas (faculty mentor: Toshio Moritani, MD, PhD)
• Ehab Saad Aldin, MD: Usual and Unusual Imaging Presentations of Progressive Multifocal Leukoencephalopathy – Imaging Pitfalls, Differential Diagnoses, and Pathological Correlations (faculty mentor: Toshio Moritani, MD, PhD)
• Joel Dennhardt, MD: Meningiomas – Radiology and Histopathology Beyond the Prototypical Benign T2 Bright, Avidly Enhancing, Extra Axial Mass (faculty mentor: Toshio Moritani, MD, PhD)
• Girish Bathla, MD: Cerebrovascular Manifestations in Neurosarcoidosis: How Common are they and Does Perivascular Enhancement Matter? (faculty mentors: Toshio Moritani, MD, PhD & Andres Capizzano, MD)
• Shaﬁk Wassef, MB, ChB: T1p Imaging in Premanifest Huntington Disease Reveals Changes Associated with Disease Progression (faculty mentor: Vincent Magnotta, PhD)
• Antony J. Hayes, MD: Perisplenic Abscess Formation after Splenic Artery Embolization with Gelfoam versus Coil or PVA Embolization (faculty mentor: Sandeep T. Laroia, MD)
• Michael Kwofie, MD: Imaging of Solitary Fibrous Tumor/Hemangiopericytoma Spectrum in Brain, Head & Neck, and Spine—Pathological Correlations (faculty mentor: Toshio Moritani, MD, PhD)
• Prashant Nagpal, MD: Manifold Learning Based Self-Gated Free-Breathing Cine Cardiac MRI (faculty mentor: Mathews Jacob, PhD)

2018 Making a Difference Awards
This award recognizes individuals who have “performed in an exemplary manner, consistent with the goals of service excellence, and with a commitment to quality care” at UIHC.

Tracy Pettinger
Mothana Saad Eldine, MD
Hailey Jennings
Brendan O’Shea, MD

Luciana Hulse
Stephanie Koeppen
Russell Johnson
Katlin Fuhs

Scot Heery Scholarship Recipients
The recipients of the Scot Heery Scholarships for the 2018-19 academic year are three applicants whose work ethic and daily commitment to quality patient care most closely aligned with the values and character that Scot Heery portrayed in his distinguished career:

• Margaret Cruise – Radiation Therapy
• Ryan Hageman – Radiologic Technology/CT
• Alexis Henry – Nuclear Medicine Technology

The funding of these $5000 awards comes from a very generous gift presented to the UI Foundation in Scot’s name by an anonymous donor. The Scholarship’s Selection Committee, comprised of 7 individuals who knew Scot well, received and reviewed applications from many extremely qualified and deserving students, making the selection process difficult.

Scot Heery Radiologic Technologist of the Year
Adam Kruse, RTR, was awarded the 2018 Scot Heery Radiologic Technologist of the Year Award. Adam has been an imaging technologist since 1999 and is currently a senior imaging technologist on 3rd shift. Adam is a great resource for technologists, residents and the entire hospital. Adam has an incredible work ethic and has encountered just about every situation imaginable on 3rd shift. Everyone knows to just ask Adam. We are so lucky to have him on our team.

Colin P. Derdeyn, MD, 2018 Alfred Luessenhop Lecturer, American Association of Neurological Surgery & Congress of Neurological Surgery

Archan T. Laroia, MD, 2018 Radiology Atis K. Freimanis Visiting Professor, Department of Radiology, Michigan State University
New Grants

PI: Girish Bathla, MD
Title: Vessel Wall Imaging in Neurosarcoidosis: Underrecognized, Underdiagnosed, and Undertreated
Sponsor: Foundation for Sarcoidosis Research
Amount: $25,000
Duration: 10/01/2018-09/30/2021

PI: Girish Bathla, MD
Title: Neuro CT Software Evaluation
Sponsor: Siemens Medical Solutions USA, Inc
Amount: $30,000
Duration: 11/01/2018-10/31/2019

PI: Colin Derdeyn, MD
Title: Multi-Arm Optimization of Stroke Thrombolysis (MOST) Stroke Trial
Sponsor: University of Cincinnati; US Department of Health & Human Services, National Institutes of Health
Amount: $26,045
Duration: 06/01/2018-04/30/2023

PI: Colin Derdeyn, MD
Title: Penumbra DSMB Consulting Services Agreement
Sponsor: Penumbra, Inc
Amount: $13,500
Duration: 02/01/2018-02/01/2021

PI: Colin Derdeyn, MD; Santiago Ortega, MD
Title: C-arm Cone Beam Study
Sponsor: Siemens Medical Solutions USA, Inc
Amount: $50,000
Duration: 06/06/2018-06/30/2019

PI: Colin Derdeyn, MD
Title: NIH StrokeNet National Clinical Coordinating Center – NeuroEndovascular Advisory Committee Chair
Sponsor: University of Cincinnati; US Department of Health & Human Services, National Institutes of Health
Amount: $88,660
Duration: 08/01/2018-07/31/2023

PI: David Dick, PhD
Title: Support for Students, Postdoctoral Fellows and Trainees to Attend the 17th International Workshop on Targetry and Target Chemistry
Sponsor: US Department of Energy
Amount: $11,000
Duration: 06/01/2018-05/31/2019

PI: Stephen Hillis, PhD
Title: Generalized Obuchowski-Rockette Methodology for Analysis of Radiologic Diagnostic Imaging Studies
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $1,977,478
Duration: 09/01/2018-05/31/2022

PI: Sue Gardner, PhD
Co-Investigator: Stephen Hillis, PhD
Title: Severe Pain During Wound Care Procedures: Model and Mechanisms Administrative Supplement
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $218,499
Duration: 09/20/2018-03/31/2019

PI: David Stoltz, MD, PhD
Co-Investigator: Eric Hoffman, PhD
Title: Origins of Cystic Fibrosis Airway Disease PPG
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $11,538,691
Duration: 09/05/2018-06/30/2023

PI: Eric Hoffman, PhD
Title: SPIROMICS II: Biological Underpinnings of COPD Heterogeneity and Progression
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $1,777,511
Duration: 09/15/2017-05/31/2022

PI: Eric Hoffman, PhD
Title: Iowa Lung Imaging T32 Training Program
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $1,553,354
Duration: 08/01/2019-07/30/2024

PI: Eric Hoffman, PhD
Title: Device for Multi-Frequency Oscillatory Ventilation in Adult Patients with Acute Respiratory Distress Syndrome
Sponsor: OscillaVent, Inc; US Department of Health & Human Services, National Institutes of Health
Amount: $116,189
Duration: 09/20/2018-08/31/2019

PI: Sandeep Laroia, MD
Title: Prototype Development Award
Sponsor: University of Iowa Holden Comprehensive Cancer Center Melanoma Symposium
Amount: $10,000
Duration: 08/01/2018-07/31/2019
PI: Vince Magnotta, PhD
Title: Next Generation Functional Neuroimaging (NFGN) Feasibility
Sponsor: Champaign Imaging LLC; US Department of Health & Human Services, National Institutes of Health
Amount: $11,531
Duration: 07/24/2017-02/23/2019

PI: Vince Magnotta, PhD
Title: University of Iowa Research 3T MRI Connectome Upgrade
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $1,915,271
Duration: 04/01/2018-03/31/2019

PI: Robert Block, PhD
Co-Investigator: Vince Magnotta, PhD
Title: General Anesthesia During Early Childhood and Brain Development
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $2,983,766
Duration: 07/01/2018-03/31/2023

PI: Krystal Parker, PhD
Co-Investigator: Vince Magnotta, PhD
Title: Cerebellar Circuits, Timing, and Cognition
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $2,082,082
Duration: 12/01/2018-11/30/2023

PI: Peggy Nopoulos, MD
Co-Investigator: Vince Magnotta, PhD
Title: Immunologic and Neurodevelopmental Consequences of Neonatal Anemia and Thrombocytopenia and Treatment
Sponsor: Boston Children’s Hospital; US Department of Health & Human Services, National Institutes of Health
Amount: $1,869,210
Duration: 09/01/2018-06/30/2023

PI: Prashant Nagpal, MD
Title: Comparison of Free-Breathing Self-Gated 3D Cardiac MRI with Manifold Reconstruction Algorithms and Standard Breath-Hold Sequence in Patients with and without COPD
Sponsor: Radiological Society of North America
Amount: $39,997
Duration: 07/01/2018-06/30/2019

PI: Bruce Gantz, MD
Co-Investigator: Laurie Ponto, PhD
Title: Iowa Cochlear Implant Clinical Research Center
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $12,321,085
Duration: 12/01/2017-11/30/2022

PI: Laurie Ponto, PhD
Co-Investigators: Vince Magnotta, PhD; Yusuf Menda, MD
Title: Comparison of Cerebral Blood Flow (CBF) Measure by Arterial Spin Labeling (ASL) MRI and Quantitative [15O] Water PET
Sponsor: Iowa Neuroscience Institute
Amount: $75,000
Duration: 11/01/2017-10/31/2019

PI: Punam Saha, PhD
Title: Cerebellar Circuits, Timing, and Cognition
Sponsor: US Department of Health & Human Services, National Institutes of Health
Amount: $2,082,082
Duration: 12/01/2018-11/30/2023

PI: Laurie Ponto, PhD
Title: Exemplar Genetics Project
Sponsor: Exemplar Genetics
Amount: $14,470
Duration: 05/01/2018-05/01/2019

PI: John Sunderland, PhD
Title: Subtle Medical Data Use Agreement
Sponsor: Subtle Medical, Inc.
Amount: $5,448
Duration: 04/27/2018-04/27/2021
New Grants continued

PI: Michael Shy, MD  
Co-Investigator: Dan Thedens, PhD  
Title: *Muscle MRI in Charcot Marie Tooth Disease*  
Sponsor: University College London; Muscular Dystrophy Association  
Amount: $369,370  
Duration: 12/01/2017-12/01/2020

PI: Johanna Uthoff, BS  
Title: *Lung Cancer Risk Assessment Using Quantitative Imaging Features From Nodule, Lung Parenchyma, and Whole Lung*  
Sponsor: American Lung Association  
Amount: $21,000  
Duration: 07/01/2018-06/30/2019

PI: Len Watkins, PhD  
Title: *177Lu-OPS201 Radiolabeling Project*  
Sponsor: Ipsen Group  
Amount: $10,000  
Duration: 06/21/2018-09/30/2018