Decompression To Better Serve UNC Health Care’s Mission

Where UNC Health Care System (UNC HCS)’s logo is found over outpatient facility entrances around the state, the network’s core mission – to extend top-tier, academic medical center-affiliated patient care across North Carolina – is at work. Within central North Carolina, however, several UNC HCS entities affixed with UNC Hospitals (UNCH)’s logo serve the added purpose of redistributing the patient volume that increasingly congests the network’s five-hospital flagship in Chapel Hill.

The 2011 openings of two smaller-scale UNCH facilities in the greater Chapel Hill area gave UNCH’s comprehensive imaging care a foothold roughly 30 miles to the west (UNCH Burlington Imaging and Breast Center), as well as just two miles east of the main UNC Hospitals campus (UNCH Imaging and Spine Center). Two years later, the establishment of UNCH’s Hillsborough campus to the north of the flagship further extended UNCH’s outpatient imaging services.

Along with medical oncology, infusion, pharmacy and surgical oncology clinical care, as well as laboratory, infusion and injection services, imaging services were amongst the first outpatient care offered within UNCH Hillsborough’s three-floor, 60,000-square-foot Medical Office Building (MOB). Screening and diagnostic mammography, as well as breast ultrasound, were prioritized as part of the comprehensive cancer care to be offered in Hillsborough when it first opened. Bone density testing (dual energy X-ray absorptiometry) was also extended to Hillsborough as standard imaging care offered at multiple UNC HCS facilities.

The MOB’s accommodation of patients at UNCH’s northern Orange County campus has desirably distributed demand for access to comprehensive Breast Imaging services away from the main campus in Chapel Hill since its mid-2013 opening. As UNC HCS Breast Imaging Division Chief Dr. Cherie Kuzmiak notes:

“When the Burlington and Chapel Hill imaging centers came along in the same year, it was a tremendous boost to have two new facilities in the area where our division could directly provide breast imaging care just as we do at our main North Carolina Cancer Hospital...
The Chapel Hill medical campus is operating at 100% census [maximum patient volume] every day, and the purpose of offering inpatient and outpatient services at Hillsborough’s new hospital is to decompress this long-standing volume in Chapel Hill.”

"Over the past two years, we’ve seen the desired results via demand from area patients for imaging services at Hillsborough’s MOB. Once we begin offering imaging services tied to inpatient and more extensive comprehensive hospital care at the completed complex in July, we’re confident our patients in the area will welcome access to such UNCH care at the new facility as well.”

The Department’s Vascular-Interventional Radiology and Neuro-interventional Radiology divisions will not provide clinical services in Hillsborough. UNCH’s Director of Radiology Todd Smiley has played a key role in planning Phases 1 and 2 roll-out and integration of all other imaging services into patient care being and to be offered at the Hillsborough campus.

As Smiley notes: “The imaging services at the new hospital’s opening in July to immediately support the emergency department. Given the start-up of all modalities except nuclear medicine later fall, most imaging services employees will start in the early weeks of UNCH HBH’s operations, when the demand for outpatient- and emergency department-linked imaging services tied should be immediately felt.”

In recent years, UNC HCS Associate VP for Operations Mike DeGennaro has been heavily involved in the network’s two-phase development and roll-out the Hillsborough campus: Phase 1 (Medical Office Building); and Phase 2 (UNCH HBH). DeGennaro notes:

“The imaging services at the new hospital will consist of CT scan, diagnostic radiology, ultrasound, MRI, nuclear medicine, and breast imaging. In addition to inpatient imaging services, we will continue to support the community’s outpatient imaging needs. Though the July ribbon-cutting at the Hillsborough hospital complex signifies that all imaging services offered at the Chapel Hill campus will now be offered at our northern Orange County facility, start-up of some imaging services will be staged through the end of the year, such as those tied to nuclear medicine.”

“Whereas [UNCH] structurally offers round-the-clock care, in its early months, [UNCH HBH] will operate solely on-call for after-hours patient care. The model will evolve in accordance with patient volume and demand for services, and we’re confident the convenience of the new hospital will catch on with those who have traditionally received their care in Chapel Hill.”}

Two years beyond the MOB’s opening, UNCH’s $200 million+ hospital complex in Hillsborough -- UNC Hospitals Hillsborough Hospital (UNCH HBH) -- will open in July 2015, representing UNC HCS’ most significant extension to date of UNCH’s comprehensive patient care in central North Carolina. Spread over 40 acres, the 83-bed facility is divided into 50 acute care beds and an 18-bed intensive care unit and 15 outpatient beds. The hospital will also have six operating rooms, two procedure rooms and a 10-bed emergency department. A clinical and administrative employee base of close to 500 employees will staff UNCH HBH once opened.

As UNCH HBH’s Associate Vice President Jeff Strickler notes: “Imaging services will be invaluable to the new hospital’s opening in July to immediately support the emergency department. Given the start-up of all modalities except nuclear medicine later fall, most imaging services employees will start in the early weeks of UNCH HBH’s operations, when the demand for outpatient- and emergency department-linked imaging services tied should be immediately felt.”

In recent years, UNC HCS Associate VP for Operations Mike DeGennaro has been heavily involved in the network’s two-phase development and roll-out the Hillsborough campus: Phase 1 (Medical Office Building); and Phase 2 (UNCH HBH). DeGennaro notes:

“Since the early stages of [Phases 1 and 2] planning, Hillsborough’s MOB and hospital complex have been conceptualized as what would become [UNCH]’s ‘facilities down the hall’ to decompress the main campus. The Hillsborough campus is a [UNCH] entity, not a [UNCH HCS] affiliate, as are the network’s eight hospital affiliates statewide, including [UNCH].
Kuzmiak Inducted as American College of Radiology (ACR) Fellow

The Department would like to congratulate Associate Professor and Breast Imaging Division Chief Dr. Cherie M. Kuzmiak for being inducted as an American College of Radiology (ACR) Fellow during the radiological society’s annual meeting mid-May 2015 in Washington, DC. Only 10 percent of ACR’s 36,000+-person base of members achieve this distinction, and for 2015, Kuzmiak was one of 102 diagnostic radiologists, radiation oncologists and medical physicists nationwide to be inducted at a formal convocation ceremony at the meeting. Fellows are chosen based upon demonstration of long-term service to ACR, organized radiology and teaching, as well as upon significant accomplishments in basic science or clinical radiological research.

Kuzmiak noted: “Receiving this honor right as I mark my 10-year service as the Department’s Breast Imaging Division Director is a true career milestone. Four years ago, I felt fortunate to be recognized for my contributions to my radiological subspecialty when I was chosen as a Fellow of the Society of Breast Imaging. Now that I’ve been inducted as an ACR Fellow, I feel grateful for the affirmation that I’ve had some overall impact as well on the field of radiology, especially during recent years in which I’ve become increasingly involved in multidisciplinary research across UNC’s campus.”

Li Awarded School of Medicine Small Instrumentation Grant

The Department would like to recognize Associate Professor of Radiology and Radiochemist Dr. Zibo Li for being awarded a one-year Small Instrumentation Grant ($30K) by the UNC School of Medicine’s Office of Research (OoR) in February 2015. The OoR’s Core Facilities Advocacy Committee (CFAC) is funding Li’s project – “Dedicated radio-HPLC for preclinical tracer synthesis” – jointly with UNC’s Biomedical Research Imaging Center (BRIC).

The major goal of Li’s project is to develop a dedicated radio-HPLC (high-performance liquid chromatography) system for pre-clinical tracer synthesis conducted by his radiochemistry laboratory. If successful, a radio-HPLC system would permit Li’s investigational group to remove unlabeled "cold" peptides/proteins from those that are copper nuclide (Cu-64)-labeled in producing highly specific, tumor-targeting PET probes. Without radio-HPLC-assisted removal of these unlabeled molecules, targeted receptor proteins can be saturated, blocking the effect of molecular imaging probes during pre-clinical tracer synthesis. Obtaining a radio-HPLC system also allows Li’s group to remove loosely bonded Cu-64 and other impure radiopharmaceuticals in order to generate clean images in vivo.

As Li notes: “This radio-HPLC could help UNC investigators develop novel diagnostic and companion diagnostic imaging agents and theranostics for their research. With dedicated radio-HPLC for Cu-64 labeling, our core laboratory is well-positioned to generate suitably radiolabeled, target-specific antibodies, proteins, inhibitors and peptides to assist UNC investigator research. It will also allow researchers develop their own probes and translate them into clinical investigation.”

Isaacson Receives NCTraCS Funding for Tumor Targeting Study

The Department of Radiology would like to recognize Assistant Professor Dr. Ari Isaacson for securing one-year funding ($21.5K) effective March 1, 2015 from the North Carolina Translational and Clinical Sciences (NCTaCS) Institute as Principal Investigator of a study entitled, “Evaluation of TRAIL/Dox Nanocarrier as Theranostic for HCC.” The NCTraCS award is matched by the Department and explores improved precision in liver [Hepatocellular Carcinoma (HCC)] tumor targeting via nanoparticle delivery.

Beyond Isaacson, other UNC School of Medicine co-investigators include Assistant Professor of Biomedical Engineering Dr. Zhen Gu; Assistant Professor of Radiology Dr. Hyeon Yu; and Assistant Professors Drs. Chad Pecot and Hanna Sanoff, both of UNC’s Division of Oncology. Using laboratory-generated nanoparticles at UNC from Gu’s North Carolina State University (NCSU)’s biomedical engineering laboratories, co-investigators will conduct this project with a two-pronged approach: 1) therapeutic-testing nanoparticle delivery targeting HCC in mice; and 2) diagnostic-testing efficacy of safely delivering tumor-selective contrast agents to mice.

Both Isaacson’s and Yu’s assignment to this study involves them in basic science research that is not routinely applied to their subspecialty. As Isaacson noted: “Dr. Gu’s laboratory has tested this type of nanoparticle delivery with breast cancer, but not yet with liver cancer. If we can establish efficacy of safety in mice through this study, the goal is to apply for further funding to study the effect of these particles when delivered through a catheter in the hepatic arteries in a rabbit model. One of our goals as a division is to become more involved in translational research in order to advance the field of Interventional Radiology.”
Wu Receives NIH R21 for Early Brain Structural Change Study

The Department would like to recognize Assistant Professor Dr. Guorong Wu for receiving two-year R21 funding ($418K) in April 2015 from NIH’s National Institute of Child Health and Human Development for his project entitled, “A Joint Segmentation and Registration Framework for Early Brain Development Study.” Over the funded period, Wu’s research team seeks to advance accurate imaging characterization of structural changes in early brain development. Applied successfully, Wu’s study techniques will develop an efficient computational anatomy approach that improves upon current tissue segmentation and registration techniques in infant brain imaging.

Wu’s study seeks to establish a joint segmentation and registration framework that identifies tissue type and deformation pathways drawn from any two infant images at different developmental stages. Creating an effective framework overcomes difficulties such as dynamic appearance changes and spatially-varied development in imaging-based infant brain studies that rely on image segmentation and registration techniques. At study completion, the resulting computational anatomy approach will be software-packaged and distributed freely to the research community as an efficient imaging tool for studying early brain development and early detection of neurodevelopmental disorder.

On UNC Biomedical Research Imaging Center (BRIC)-affiliated faculty since spring 2014, Wu has focused his research on fast and robust analysis of large population data, computer-assisted diagnosis, and image-guided radiation therapy. His expertise in medical image analysis has been applied not only to studying early brain development; as a former BRIC post-doctoral fellow (2009-2014), he also applied this expertise to several NIH-funded studies where he has developed various computational tools for quantitative measurement of anatomical differences. The newly funded R21 grant expand his research to the ongoing infant brain development studies conducted at UNC. In this project, Dr. Wu will collaborate with two UNC imaging experts, Dr. Weili Lin of the Department of Radiology and Dr. John Gilmore of the Department of Psychiatry.

Gao Receives NIH R21 Funding for Early Brain Functional Mechanism Study

The Department would like to recognize Assistant Professor of Radiology Dr. Wei Gao for receiving two-year R21 funding ($418K) from the NIH National Institute of Neurological Disorders and Stroke, for his project entitled, “Creating Normative Functional Brain Atlases During Infancy.” Based on a large-scale data set of normal developing singleton and twin infants with longitudinal rsfMRI scans, Gao’s study seeks to establish a set of normative functional-connectivity-based brain atlases tied to studying the first two years of life.

Successfully conducted, Gao’s project will advance exploration of the functional mechanisms underlying both normal and abnormal early brain development, accounting for genetic and environmental factors. An independent dataset of twin infants is applied to validating parcellation based on the singleton data. By study completion, Gao’s team aims to have produced software that contains infant-specific normative functional brain atlases that are coupled with behavioral correlation, genetic association, and environmental influences. Such output will be made freely available to the research community to further advance the study of functional mechanisms underlying both normal and abnormal early brain development.

Gao noted: “Right now there are several obstacles in the neuroimaging study of functional brain development during infancy; first it is very hard to define functionally meaningful ROIs for infants since they are understandably very different from adult ones; the other relates to the difficulty of infant-specific interpretation of functional imaging findings. The establishment of a set of normative functional brain atlases during infancy will greatly alleviate such difficulties and promote more in-depth study of the functional brain development during this critical period, when both opportunities and risks abound.”

This project expands upon Gao’s base of research at UNC focused on study of early brain development. A member of UNC’s Biomedical Research Imaging Center (BRIC) since 2010, Gao’s research team uses integrated structural and functional brain imaging to systematically study the interplay between early brain development, functional growth and behavioral improvements. On a translational scale, Gao’s study seeks to assist early diagnosis and intervention tied to brain disorders with onset during the developmental years through better understanding the neurophysiological mechanisms underlying these disorders. Along the same line, one new endeavor of Gao’s team is to explore the neuronal mechanisms and behavioral consequences during infancy-related prenatal drug exposure with the similar goal of early identification of risks and intervention.

The UNC Department of Radiology is on Facebook!

Just search for "UNC Department of Radiology" and be sure to "like" us!
The UNC Department of Radiology held its First Annual Alumni Weekend on April 10–12. The brainchild of Dr. Ari Isaacson, the event was created to reunite alumni, connect current trainees with alumni, and revitalize the annual faculty-resident basketball game. Dr. Isaacson worked closely with Laurie Birdsong, who was the driving force in orchestrating the three-day event.

Arun Krishnaraj, MD, MPH, kicked off the weekend with a fantastic noon conference, “The Impact of the Affordable Care Act on Radiology: Beyond Reimbursement.” Dr. Krishnaraj encouraged the audience to take ownership of the future, constantly improve the patient imaging experience and think in terms of population health. After challenging the audience intellectually, Dr. K then joined the faculty team and challenged the residents physically that evening in one of the closest faculty-resident basketball games in recent history. The faculty “tied” the residents and then narrowly won in overtime. However, sources close to the scorekeepers suggest that the money may have changed hands to facilitate the “tie.” Afterwards, the teams gathered at Tobacco Road to for a fun evening of food and beverage.

Saturday brought beautiful weather for the family picnic at Southern Community Park and a delightful evening reception at the Carolina Club. That evening Dr. Mauro and Professor Emeritus Dr. Richard Clark shared with the group the background of the Mathew Brady photography contest, an annual competition that Chairman Emeritus Dr. James Scatliff created and hosted during his chairmanship years.

During the 2014-15 academic year, many medical students rotated through the department on a one-month specialty elective, on a two-week exploratory block, or in RAD401. Thirty-six students took the general radiology elective, RAD 401, which was run from August-October of 2014, and from February to April of 2015. Overall, the course evaluations were excellent, as were individual evaluations of attendings and residents. One student wrote of Dr. Ben Huang: “Excellent attending. I hope other students can take advantage of the awesome opportunity to work with someone so brilliant and kind.” Thanks to everyone, and keep up the high-quality teaching that RAD 401 requires.

At UNC School of Medicine the inaugural Foundation Phase of the Translational Education at Carolina Curriculum (TEC) is halfway done. As many of you know, The Foundation Phase is essentially the first two years of the traditional curriculum compressed into 18 months. Radiology is a “Coil” that runs through all of the blocks, and thus far, we have given lectures and presided over small group sessions in various blocks. The Musculoskeletal, Endocrine and Reproductive blocks are coming up, and a new TEC class will commence in August 2015, so please expect to share your expertise with the students either as a lecturer or small group leader.

Congratulations, Graduates!

On Friday, May 8, the Department of Radiology held its annual year-end banquet to honor graduating residents and fellows.

Fourth-year Diagnostic Radiology residents chose Dr. Leonard A. Parker, Jr. as the 2015 Charles A. Bream Award recipient for excellence in teaching.
At UNC, Diagnostic Radiology alumnus Dr. Peter Strobl (Class of 1996) reached several significant milestones traditionally associated with the transitional adult years. Residency prepared him to enter private practice with his father and twin brother after returning to West Virginia post-training. Training in radiology also facilitated meeting an ultrasonographer with the Department of Radiology who became Strobl’s professed soulmate, wife, and mother of their first child together near the end of his residency.

If UNC had a hand in securing Strobl’s future workplace and family, a handful of departmental mentors stand out amongst the many clinical faculty he considered outstanding teachers:

**Former Vascular-Interventional Section Chief Dr. Paul Jaques:** “I loved the confidence of Dr. Jaques during interventional procedures. When another resident and I were a bit hesitant about a procedure, in his Irish drawl, Jaques would say, ‘Don't worry lads, there's nothing you can do that I can't fix!’”

**Professor Emeritus Dr. Bob McClelland:** “He was a legend in his own right. Mammography is extremely difficult for residents, and he helped me learn its nuances, knowing instantly if a mammogram had an abnormality. McClelland could look at a suspicious density and tell you whether it was a mass or summation shadow … and he was always right!! I loved his quote on follow-up spot views: ‘The mass was more apparent than real.’”

**Executive Vice Chair Dr. Paul Molina:** “I thought the world of him, not only as brilliant, but also as a down-to-earth, very approachable guy. He was always willing to help the residents with whatever they needed. As a world class baseball player and one darn good golfer, Molina was living proof that athletics and academics can go hand in hand. Does he remember the dunk I put down on him and the rest of the faculty during the annual resident/attending basketball game?!?”

**Department of Radiology Chair Dr. Matt Mauro:** “Amongst a few others, I felt closest to Dr. Mauro. I brought a lot of his interventional techniques back to West Virginia with me to start practice. Apart from work, I was also impressed with sporting abilities. Is he still doing his martial arts?!”

**Former Professors Drs. Bernadette Keefe and Carol Mittlestaedt (Abdominal Imaging):** “Both of them were excellent ultrasound imagers. They educated me on the tremendous diagnostic ability of ultrasound. Before I spent time with them, I was still a medical school skeptic who didn’t get how radiologists could get past the gray and black haze using body ultrasound!”

**Immediate Past Chair Dr. Joseph K.T. Lee:** “I remember reading CT films with him. On a panel of four sheets of film with 20 microscopic images per film [before PACS], he could pick out a subtle abnormality on one image from 10 feet away!”

**Professor of Radiology Dr. Jordan Renner:** “As one of the first attendings I worked with at UNC, Dr. Renner was instrumental in alleviating my fears and preparing me for the stress of night call. His approach to successfully interpret the emergency situations we would be subjected to was systematic and emphasized. He also was a tremendous teacher at the viewbox. He quizzed me once about a possible sternal injury in an elderly woman. I erroneously misinterpreted the exam as negative when indeed, it was a sternal fracture. I earned myself the label of ‘sternum’ from Dr. Renner for the next four years!”

**Division of Radiologic Science Director Joy Renner:** “What a wonderful lady!! My wife Beth was fortunate enough to train under Joy in the Radiologic Sciences program and thinks the world of her. An excellent teacher and an even better person. Beth and I are very grateful for the personal attention and knowledge imparted to us by the Renners.”

**Vice Chair of Clinical Research Dr. Keith Smith:** “I remember doing a cerebral angiogram on a child with Dr. Smith when he was a fellow. He let me do the arterial puncture, and when I hit the small artery on the first stick, he paid me a nice compliment. That goes a long way for the psyche of a first-year resident.”

At least once on a return trip to Chapel Hill, Strobl has gotten to take a lap through the Department to trade hellos. Two years removed from training, he visited to give a board prep case review lecture to 4th-year residents. Most recently, however, this father of four returned on a tighter clock to show his oldest son Reid the UNC campus as a college prospect. Off hours are spent close to home, with the Strobl children’s involvements in multiple sports sending Peter and Beth from one practice or game to the next. Beyond raising three sons and a daughter ages 12 to 19, Strobl also encounters family in the workplace. Having practiced alongside his father for eight years, Strobl now joins his two brothers as members of an eight-radiologist private practice group.

Strobl’s sentiments toward the institution that trained him are clear: “I owe a lot to UNC Radiology. Residents are expected to know the material and take an active part in learning, but it's a relaxed, friendly learning environment. I found just the right mixture at UNC – excellent academics and social experience.”
According to a top-tier healthcare consultancy, a high-performing medical group can be identified through five indicators: 1) organizational effectiveness; 2) practice efficiency; 3) financial sustainability; 4) provider alignment; and 5) clinical integration. When UNC Health Care System (UNC HCS) grew to eight hospital locations across North Carolina by early 2014, we could no longer assume that best practices at work in our high-performing, yet less-affiliated network would sustain such quality when applied to serving a vastly increased number of patients. UNC HCS has tasked a group comprised of physician and executive leaders with examining how our eight-hospital system might couple new standards of efficiency with sustained quality.

In August 2014, UNC HCS CEO and UNC School of Medicine (SOM) Dean Dr. Bill Roper appointed me to serve as Chair of SOM Clinical Chairs, Chair Liaison for UNC HCS Affiliates and Executive Committee Chair of UNC Faculty Physicians. In these roles, managing faculty and community physician groups separately preserved operational efficiency amongst the distinctive constituencies served by UNC HCS and the SOM. Working with these self-governing groups, however, allowed me uniquely to facilitate operational linkages between SOM departments, affiliate hospital leadership and community physician practices.

In September 2014, Dr. Roper introduced UNC HCS’ new operational efficiency initiative “Carolina Value” to the UNC HCS community. In launching Carolina Value, UNC HCS announced its partnership with the most qualified entity to lead a five-month organizational assessment of our eight-hospital system - Huron Healthcare, the consulting group that had developed the five key indicators of a high-performing medical group. Between September and January, Huron examined UNC HCS’ system-wide operational practices, identifying gaps in efficiency and quality performance that could be streamlined and simplified to strengthen revenues and decrease expenses over a five-year period.

In early January, a new hospital and physician leadership structure was created. I was named UNC HCS’ new CEO of UNC Faculty Physicians, shifting my focus from roles assigned in 2014 to singularly managing UNC Faculty Physician group practice finances, clinical operations, value of care, clinical integration and supplemental benefits. In the past several months, I’ve closely collaborated with newly named UNC HCS Chief Medical Officer Dr. Tony Lindsey of UNC Hospitals and newly named UNC Physicians Network CEO Dr. Bob Gianforcaro. The three of us are leading implementation efforts linked to Huron’s report that focus on restructuring the UNC HCS and SOM integrated clinical enterprise. We report directly to newly named President of UNC Physicians and Chief Value Officer President Dr. Allen Daugird.

Huron’s report identifies hundreds of collaboration- and efficiency-minded operational opportunities at UNC HCS and UNC’s SOM that can be carried out over a two-year implementation period (January 2015 - January 2017). In these initial months, our Carolina Value team has been developing a prioritized roadmap aimed at implementing practices that will increase revenues and reduce expenses over the coming five years.

Solution teams have been assigned to undertake Huron’s recommendations in 13 identified areas of operational improvement – Shared Services, Clinical Operations, Revenue Cycle, Care Access, Human Resources, Information Technology, Strategy and Advisory, Physician Services, Perioperative Services, Clinical Documentation, Labor, Non-labor and SOM Investment. Throughout the implementation phase, these solution teams will be expected to drive benefit realization in all of these areas, with the goal of realizing up to 12% recurring financial benefit ($328M) of total system revenues. Approximately 40% of these areas of improvement relate to revenue growth, while 60% are tied to expense reduction.

When Dr. Roper announced Carolina Value to the UNC community last fall, he noted, “doing more with less is the new normal in health care.” Indeed, dealing with downward reimbursement pressures in the face of rising expenses occurs not only system-wide, but also at the department level. The vantage point I’ve gained at the macro-level of ensuring UNC HCS remains a high-performing medical group fortunately informs my operational decision-making for UNC’s Department of Radiology as well.
NEW FACULTY AND EMPLOYEES

The Department was pleased to appoint Dr. Sarah Nyante as Assistant Professor of Radiology in December 2014, specific to working under Dr. Louise Henderson’s direction with the Carolina Mammography Registry (CMR), a member of the Breast Cancer Surveillance Consortium. In her new faculty role, Dr. Nyante’s primary responsibilities include supporting CMR efforts to understand the role of breast cancer screening in breast cancer diagnosis, focusing on pathologic outcomes and initiating new research related to the relationship between breast imaging and breast cancer etiology.

Prior to her UNC faculty appointment, Dr. Nyante obtained her BS in Biology from Yale University in 2001. She completed her post-graduate studies in Public Health at UNC thereafter – MSPH (2005) and PhD (2009) -- with an academic concentration in Epidemiology. After obtaining her PhD, Dr. Nyante worked as a post-doctoral fellow at the National Cancer Institute (NCI)’s Division of Cancer Epidemiology and Genetics (DCEG) in Rockville, MD.

Dr. Nyante’s main research interests include cancer heterogeneity, disease natural history and the role of hormonal factors in cancer risk and prognosis. During her post-doctoral years, she focused primarily on research design, analysis, and interpretation tied to examining the linkage between hormonal factors and breast cancer risk and survival. Dr. Nyante’s design and facilitation of a breast cancer case-control study as a post-doctorate fellow of mammographic density and breast cancer-specific death transfers relevantly to her new role developing studies to understand the association between breast tissue features identified by imaging and breast cancer characteristics in the CMR.

“I’m excited to join the Carolina Mammography Registry. Working with this population will allow me to understand how different aspects of screening affect breast cancer etiology. I hope that our findings can bring about opportunities for more collaboration between the Department’s Epidemiology and Clinical Research groups and increase our understanding of the impact of screening on women in North Carolina.”

The Department was pleased to appoint Michelle Fischer as its Graduate Medical Education (GME) coordinator in September 2014. This appointment became a job transition for Fischer after having served as the Vascular-Interventional Radiology division’s faculty assistant, as well as the Assistant GME coordinator, since February 2014.

In her role as coordinator, Fischer oversees all administrative functions linked to the Department’s GME-appointed specialty and subspecialty training programs – Diagnostic Radiology, Neuroradiology, Nuclear Medicine, and Vascular-Interventional Radiology. Fischer’s primary program-related duties include facilitating trainee recruitment, orientation and evaluation; ensuring compliance with ACGME standards; assisting preparation for training program reaccreditation; alumnus credentialing; coordinating Grand Rounds; and assisting program directors with projects such as curriculum development.

Prior to joining the Department, Michelle obtained her BS in Psychology from SUNY-Oneonta. Michelle’s teaching hospital experience began as a Referral Coordinator for the Primary Care Department at Bassett Medical Center in Cooperstown, NY. She worked with review organizations and insurance companies to ensure prior approval requirements were met, as well as presented necessary medical information to overturn insurance denials for patients.

Before relocating to Chapel Hill, Michelle also worked as a Patient Navigator at Boston Medical Center, where she guided patients through the health care system, ensuring that they were able to access culturally and linguistically appropriate services in a timely and cost effective manner. Michelle served as the patient referral “main pipeline” of communication between Boston Medical Center and other community clinics. Outside of work, Michelle’s interests include hiking with her fiancé and chocolate lab puppy, exploring North Carolina, and spending time with family.

The Department welcomed Mikael Anne Greenwood-Hickman to its Carolina Mammography Registry (CMR) staff in October 2014 as a Data Manager. In this new role with Dr. Louise Henderson’s research group, Mikael Anne is responsible for all data management activities, including collecting mammography data from participating practices, performing data quality checks, and assisting in research projects utilizing registry data.

Prior to moving to the Chapel Hill area, Mikael Anne earned dual undergraduate degrees in Biology (BS) and Anthropology (BA) from Indiana University in Bloomington, IN, in 2011. She also obtained her Master in Public Health (MPH) in Epidemiology from the University of Washington in Seattle, WA, in 2014. While obtaining her MPH, Mikael Anne worked for the University of Washington and the Group Health Research Institute in Seattle as a Research Assistant. In this role, Mikael Anne acquired invaluable skills in analytical methods for health-related data through involvement in research projects exploring the health impacts of shift work on risk for ovarian and endometrial cancer, as well as reduction of sedentary behavior among older adults.

“While my duties at the CMR have included a number of new, exciting (and occasionally somewhat daunting!) challenges, I feel that my training in epidemiologic methods has given me a strong analytical framework in which to approach the complex data issues faced in my role as Data Manager and as part of the CMR team. The field of Mammography and Breast Cancer Screening is new to me, but I am enjoying this opportunity to truly acquaint myself with it. I look forward to continuing the adventure I started in October!”
NEW EMPLOYEES

The Department was pleased to appoint **Doreen Steed** as Medical Diagnostic Technologist in August 2014. Steed has worked with Department faculty in the Breast Imaging division since 2007 in clinical research breast imaging. Her new role will be solely dedicated to Department of Radiology clinical research imaging activities that draw upon her mammography research experience, such as assisting Assistant Professor Dr. Yueh Z. Lee’s recently initiated UNC Lineberger Comprehensive Cancer Center-sponsored stationary digital chest tomosynthesis study. Steed will also serve as back-up for the Radiology Research Coordinator as needed.

In 2007, Steed began working at UNC’s Biomedical Research Imaging Center (BRIC) under then-BRIC Director Dr. Etta Pisano. Though she began as a research mammographer, over the years, Steed’s role became more generally applicable to imaging research coordination. Steed’s activities at the BRIC eventually linked to Associate Professor and Director of Breast Imaging Dr. Cherie Kuzmiak’s breast imaging research. Through assuming responsibilities at North Carolina Translational and Clinical Sciences Institute (NC TraCS) as well, Steed’s work also came under the supervision of Vice Chair of Clinical Research Dr. Keith Smith. Prior to joining UNC, Steed worked as a Radiologic Technologist, CT Tech and Mammographer at Franklin Regional Hospital in Louisburg, NC, for five years.

“Over the years, I acquired additional research coordination and consent skills allowing me not only to image, but also to screen, recruit and consent potential subject volunteers, as well as to maintain documents throughout and after study completion. These skills have remained invaluable in assisting a range of clinical research imaging activities in my new role.”

The Department was pleased to appoint **Paul Marini** as its new Contracts and Grants Manager in April 2015. In this departmental role, Marini’s primary duties include developing, submitting and managing budget proposals for a large, diverse portfolio of contracts and grants and clinical trials; negotiating and maintaining subcontracts within prime contracts; monitoring resulting awards received for academic and research projects and programs; and managing contracts- and award-affiliated personnel. Marini works closely with grants and contracts administrators across the University to carry out deadline-driven pre-award and post-award responsibilities. He also assists researchers with interpreting funding regulations and guidelines linked to programs with complex and broad guidelines for spending.

This appointment draws upon Marini’s experience as Research Administrator for a year in the UNC School of Medicine’s Office of Finance and Business Operations, out of Medicine Administration. Marini has been working with the Finance Service Center since he started, and he still works with UNC’s Departments of Urology and Physical Medicine & Rehabilitation in post-award and clinical trial management.

“In starting a new role within Radiology, it was helpful to already have School of Medicine experience in knowing the ins and outs of Infoporte and ConnectCarolina. I already knew how to obtain real-time, actionable data to help myself and others within our daily roles and overall operations.”

Outside of work, Marini’s interests include playing and writing music, as well as studying culinary arts to cook for family and friends.

In April, the Department was pleased to appoint **Samantha Johnston** as its Vascular-Interventional Radiology (VIR) division’s Administrative Support Specialist. In this new role, Johnston oversees all administrative functions supporting the division’s six clinical faculty members, ranging from assisting with their schedules, division planning and peripheral patient support, amongst other duties.

This appointment is a return to the Department of Radiology for Sam; she’d previously served as faculty assistant for the Thoracic and Musculoskeletal Imaging divisions from 2005 to 2010. Going from university to hospital, she held the position of oncology patient coordinator at the front desk of the multidisciplinary clinic at UNC’s NC Cancer Hospital from mid-2011 to 2015. In this role, she worked directly with clinic patients to improve their communication between physicians and staff, as well as to maintain a welcoming, comfortable environment for cancer patients and their caregivers.

In her spare time, Johnston continues her study of art history and is still painting (after all these years). She’s currently working on her first show, which is slated for summer of 2016 and is one of an ongoing series of shows by local artists supported by a large Unitarian church in Raleigh. Johnston, a native of Washington, DC, also loves to travel, is an avid reader and music-lover, professes to thousands of movie-watching hours, and stays involved in the interests of her grown daughter, an actor/director in Seattle who shares her mother’s love of the arts.
Clinical Research Service Center

The Clinical Research Group, under the leadership of Dr. Keith Smith, has established a Clinical Research Services Core. The Core provides professional radiology services to clinical research projects both internal and external to the University.

Services provided by the Core are those that are beyond the normal professional clinical interpretation billed through the UNC Faculty Physicians.

**Services available include:**

1. De-identification and transmittal of clinical research images to research sponsor or central reading facility.
2. Clinical research image processing or analysis beyond standard clinical protocols.
3. Lesion measurements and response assessment for clinical trials where the measurements are beyond the standard clinical interpretation (Any response assessment protocol more complex than RECIST 1.1).

**What are the Benefits of Using Services of the Center?**

**Lesion Tracking Services**

- Saves time for both clinical study Principal Investigator and coordinator
- Eliminates confusion on what target and non-target lesions are to be followed
- Results in consistent and accurate reads for the P.I. and the study sponsor

**De-identification and Clinical Research Image Transmittal to Research Sponsor**

- Saves coordinator time from ordering a de-identified CD from PACS support
- Eliminates need for coordinator to mail or upload and transmit images
- Provides images to the sponsor sooner that can be essential if patient treatment is dependent on the central read

*For more information, please contact one of the following:*

Shanah Kirk, CCRP (shanah_kirk@med.unc.edu)
Paul Marini (paul_marini@med.unc.edu)
Anne Nesbitt (anne_Nesbitt@med.unc.edu)
Faculty investigators facilitate a range of clinical trials that actively recruit at UNC Hospitals via the assistance of the Clinical Research Services Core. Many of these clinical research projects are “first-in-human studies.” If successfully conducted, these studies generate imaging technology applicable to further human investigation for clinical application in seeking a “gold standard” imaging approach for a range of diseases. UNC Department of Radiology faculty-led clinical trials are affiliated with multiple departmental divisions, amongst them:

**Breast Imaging**

**Comparison of Stationary Breast Tomosynthesis and 2-D Digital Mammography in Patients with Breast Augmentation**
Pl: Yueh Z. Lee, MD, PhD / ClinicalTrials.gov NCT02175628
**Purpose:** To compare the 3D s-DBT (stationary digital breast tomosynthesis) and conventional 2-D digital mammography devices with regards to patient comfort and radiologist preference in women with breast implants.

**Comparison of the Sensitivity and Specificity of Acoustic Angiography to the Sensitivity and Specificity of Conventional Ultrasound**
Pl: Yueh Z. Lee, MD, PhD / ClinicalTrials.gov NCT02175628 / Funding: NIH
**Purpose:** To evaluate a new ultrasound imaging technology called acoustic angiography that uses an ultrasound contrast agent (already FDA-approved for use in cardiology) to enhance imaging of blood vessels. Diagnostic information is sought to enable investigators to reduce false positive tests and discriminate lethal cancers from non-lethal disease.

**Comparison of Stationary Breast Tomosynthesis and 2-D Digital Mammography in Patients with Known Breast Lesions**
Pl: Yueh Z. Lee, MD, PhD / ClinicalTrials.gov NCT01773850 / Funding: University Cancer Research Fund
**Purpose:** To compare the radiologist confidence level in evaluating patients with known breast lesions using a carbon nanotube x-ray based stationary breast tomosynthesis imaging device.

**Diffusion Weighted MR Imaging of the Breasts in Women at High Risk of Breast Cancer: A Pilot Study**
Pl: Heidi Hartman, DO / ClinicalTrials.gov NCT01938157 / Funding: UNC-Chapel Hill
**Purpose:** To evaluate whether MRI of the breasts with diffusion-weighted MR imaging can identify features more specific for breast cancer in women at high-risk of developing breast cancer.

**Cardiothoracic Imaging**

**Evaluation of the Lung Nodule Sensitivity of Stationary Chest Tomosynthesis in Patients with Known Lung Nodules**
Pl: Yueh Z. Lee, MD, PhD / ClinicalTrials.gov NCT02075320 / Funding: Lineberger Cancer Center Cancer Research Fund
**Purpose:** To successfully implement and produce a low-dose, low-cost, and highly effective method for screening of lung cancer, leading to reduction of the lung cancer mortality rate.

**Stationary Chest Tomosynthesis for Imaging of Early Cystic Fibrosis Lung Disease**
Pl: Yueh Z. Lee, MD, PhD / Funding: UNC School of Medicine Translational Team Science Award – Phase II
**Purpose:** To successfully adapt the stationary digital chest tomosynthesis imaging system and enable significantly earlier diagnosis of lung pathology in the very young pediatric cystic fibrosis population.

**Brain Imaging**

**FLT PET/MR for Evaluation of Pseudoprogression in Patients with Brain Lesions**
Pl: Yueh Z. Lee, MD, PhD / ClinicalTrials.gov NCT02328300
**Purpose:** To identify imaging biomarkers of metastatic brain tumor treatment response that could allow early modification of treatment by determination of tumor progression vs. treatment-related effects (pseudo-progression vs. radiation necrosis). This study’s goal is to explore FLT-PET imaging combined with dynamic MR imaging techniques for identifying tumor response markers in metastatic brain tumors.

**Vascular-Interventional Radiology**

**Efficacy of Prostatic Artery Embolization (PAE) in Patients with Severe Benign Prostatic Hyperplasia (BPH)**
Pl: Ari Isaacson, MD / ClinicalTrials.gov NCT02167919 / Funding: UNC-Chapel Hill
**Purpose:** To evaluate the efficacy of prostatic artery embolization (PAE) in patients with benign prostatic hyperplasia (BPH) and refractory lower urinary tract symptoms (LUTS) in decreasing the volume of the prostate gland.
UNC Health Care System (UNC HCS) patient Carmen Ward doesn’t take for granted her roots, nor the opportunities her years have afforded her. A vibrant individual in her early 80s, Ward has traveled to over 20 countries worldwide, actively participates in Duke University’s Osher Lifelong Learning Institute (OLLI), and as a trained pianist, plays regularly at church worship services and serves as accompanist to two local choral groups. During her 15+ years working as a college administrator in the International Programs Office at Babson College, Ward obtained her Ed.D. in Education. She was honored in 1996 by Babson, as well as by the Massachusetts Association for Women in Education, for her efforts in the "advancement of women’s causes."

"What an amazing life I’ve had, especially growing up in Kansas on a farm. My parents valued books and education, but because of the Depression and then World War II, I was the only one of five children to complete college. I obtained my doctoral degree for the love of learning, but also during an era in which women's leadership in higher education was gaining a lot more attention."

Ward’s grateful outlook on life was tested when she learned of her Stage 1 breast cancer diagnosis in January 2013. Her primary care provider at Durham’s Highgate Family Medicine first noticed a breast lump during his patient’s annual exam, and he referred her to UNC Hospitals. At UNC’s Multidisciplinary Breast Clinic, Associate Professor of Radiology Dr. Sheryl Jordan biopsied Ward’s breast mass. The initial lab report returned a diagnosis of Stage 1 invasive mucinous carcinoma of the breast. Ward received the news by phone from UNC HCS’ Division of Surgical Oncology, and she saw Jordan again at her follow-up visit.

"Dr. Jordan was the one who seemed to see me as a person, not as just another patient. She is one of the most caring providers who's treated me in the UNC Health Care System. In a hospital, a patient ends up seeing a lot of providers, many of them only once. Even now, nearly two years since my surgery, Dr. Jordan remembers me and greets me warmly each time I see her. That has made a real difference in my experience at UNC's Cancer Hospital."

In turn, Dr. Jordan’s patient-provider exchanges with Ward produced similar sentiments regarding her patient: “From the moment I met Dr. Ward two years ago, and in every interaction since, I have been inspired, strengthened, and even entertained by her. She’s overcome each challenge in the most gracious, graceful, and giving manner. In a physician’s career, there are many special patients who touch and teach. Lovely Carmen is the most special of special!”

Based on the additional pathology report, Ward’s UNC treatment team determined that neither chemotherapy nor radiation were required for her case. A few weeks after Ward's diagnosis, former UNC Professor of Surgery Dr. Nancy DeMore performed her lumpectomy. For her post-operative therapy, Ward was started on a five-year therapeutic regimen of one milligram a day of anastrozole (Arimidex).

Accounting for only 2.4% of invasive breast cancers, Ward’s breast cancer type - mucinous carcinoma - gives her a very promising road ahead in overcoming her diagnosis. Metastasis to the nodes is less likely with mucinous carcinomas, and this cancer type’s characteristic ER+/PR+/HER- status tumors equal a less aggressive cancer in Ward’s case.

UNC Professor of Medicine and Director of Geriatric Oncology Dr. Hy Muss is a leading expert on optimal breast cancer treatments for women aged 65 and older. Dr. Muss’ groundbreaking research has shown the majority of older breast cancer patients present with curable disease, where major survival benefits come from treating hormone receptor-positive tumors with tamoxifen and aromatase inhibitors, rather than adjuvant chemotherapy and radiation therapy.

"I feel very fortunate with my diagnosis and treatment. I’ve always paid attention to what it takes to stay healthy, have had regular check-ups, have done yoga for 30 years and strength-training classes for nearly 15 years. I’m also fortunate to have good genes, and longevity runs in my family. Taking a daily medication which, in my case, has had practically no side effects has become the only real way my health regimen has changed, so there is much for which to be thankful as I look to the future.”
UNC HCS co-hosted its 2nd Annual “Cure HHT” fundraising 5K with beneficiary Cure HHT foundation in March 2015. The event was coordinated by UNC HCS’ Vascular-Interventional Radiology division, and collective efforts raised over $4000 in support of research and awareness efforts aimed at curing genetic vascular disorder Hereditary Hemorrhagic Telangiectasia (HHT). Eight UNC School of Medicine departments and one School of Dentistry division offer comprehensive, multi-disciplinary HHT treatment at UNC’s HHT Center of Excellence.

Breast Imaging Division Advisor/Advisee Get-together – Breast Imaging Division faculty advisors gathered with their Diagnostic Radiology resident advisees in December 2014 for dinner and holiday cheer! Pictured L-R: Ami Vakharia, Lana Rivers, Shaun Rybak, Lee Bell, Patrick Keating (all Diagnostic Radiology residents) and Heidi Hartman (Breast Imaging Faculty).

UNC Radiology held its first-ever Diagnostic Radiology residency alumni reunion weekend in April 2015. Over a two-day period, residency alums from around North Carolina and beyond returned with their families to Chapel Hill to attend a noon conference guest-lectured by Class of 2010 alumnus Dr. Arun Krishnaraj; to partake in the department’s Annual Resident-Faculty Basketball Game (alums “graduated” to faculty team draft); and to enjoy several receptions and a picnic hosted by the Department. We look forward to bringing more alums back in town for future reunion weekends!

Among the 23 UNC School of Medicine and UNC HCS teams participating in “Movember at UNC,” the UNC Movember Network -- a dynamic group of students, educators, researchers, scientists, professionals, friends and extended family -- committed itself locally to a global fundraising campaign in support of men’s health programs. The Department of Radiology team generated $13,493, securing its place as the top fundraising group for the UNC Movember Network.
Katherine Birchard, MD, presented, “Imaging of the Right Heart Abnormalities” at the 3rd Asian Congress of Thoracic Imaging in Taipei, Taiwan, in March 2015.

Charles Burke, MD, presented, “Diagnosis and Management of Type II Endoleaks” at the Endovascular Therapies Symposium in Pinehurst, NC, in October 2014.

Charles Burke, MD, presented, “Non-Vascular Palliative Care Interventions” at the Radiological Society of North America (RSNA)’s 100th Scientific Assembly and Annual Meeting in Chicago, IL, November 30 – December 5, 2014.


Charles Burke, MD, served as moderator and coordinator of the “Embolization III: Trauma” workshop at the Society of Interventional Radiology (SIR)’s 40th Annual Scientific Meeting in March 2015 in Atlanta, GA.

Charles Burke, MD, served as moderator, coordinator and speaker at the “IR Economics: Navigating the Affordable Healthcare Act and ACOs” workshop at the Society of Interventional Radiology (SIR)’s 40th Annual Scientific Meeting in March 2015 in Atlanta, GA.

Charles Burke, MD, presented, “Biliary Interventions: Tools and Techniques” at the Society of Interventional Radiology (SIR)'s 40th Annual Scientific Meeting in March 2015 in Atlanta, GA.

Charles Burke, MD, presented, “Non-Vascular Interventions II” at the Society of Interventional Radiology (SIR)'s 40th Annual Scientific Meeting in March 2015 in Atlanta, GA.

Ziga Cizman, MD, presented, “Short- to mid-term safety and efficacy of prostatic artery embolization: a systematic review” at the Society of Interventional Radiology (SIR)’s 40th Annual Scientific Meeting in March 2015 in Atlanta, GA (Authors: Issacson A, Cizman Z, Burke C).

Bob Dixon, MD, presented, “Radiation Safety for the Orthopaedist” as a UNC Department of Orthopaedics Grand Rounds guest lecturer in September 2014 in Chapel Hill, NC.


Lynn Fordham, MD, presented, “Ultrasound Evaluation of Renal Failure in Children” at the Ultrasound in the Critically Ill Child session at the American Institute of Ultrasound in Medicine (AIUM)’s 2015 Annual Convention in Orlando, FL, in March 2015.

Lynn Fordham, MD, served as “Pediatric Case of the Day” coordinator, scoring 1000-1200 answers daily, at the Radiological Society of North America (RSNA)’s 100th Scientific Assembly and Annual Meeting in Chicago, IL, November 30 – December 5, 2014. (Cases co-authors: Sams C, Han TI, Scatliff J, Fordham L).

Wei Gao, PhD, received two-year R21 funding ($418K) in March 2015 from (NIH)'s National Institute of Neurological Disorders and Stroke for his project entitled, “Creating Normative Functional Brain Atlases During Infancy.”

Louise Henderson, PhD, received the Radiological Society of North America (RSNA)'s 2014 Radiology Editor's Recognition Award -- an honor awarded to the top 5% of RSNA peer reviewers – in January 2015 for reviewing manuscripts with Special Distinction.

Louise Henderson, PhD, presented, “Technologist Effect on the Accuracy of Mammography Project” at the Vermont Mammography Registry Radiology Technologist Annual Meeting at Central Vermont Medical Center in Barre, VT, in October 2014.

Louise Henderson, PhD, presented, “Performance of digital diagnostic mammography by race” at the American Association for Cancer Research Meeting on Health Disparities in San Antonio, TX, in November 2014 (Authors: Henderson LM, Benefield T, Marsh MW).


Ari Isaacson, MD, presented, "Techniques for Obtaining CTA" and "Findings of Aneurysmal Disease on CTA" at the CTA of Aneurysmal Disease Workshop at the Society of Interventional Radiology (SIR)’s 40th Annual Scientific Meeting in March 2015 in Atlanta, GA.

Valerie Jewells, DO, presented, “Cervical and Thoracic Spine Trauma” and “Lumbar Spine Trauma” as an invited lecturer at the October 2014 American Osteopathic College of Radiology (AOCR)’s mid-year conference (“Diagnostic and Interventional Spine”) in October 2014 in Chicago, IL.

Valerie Jewells, DO, was jointly appointed to the UNC Department of Neurology Epilepsy Division as Associate Professor in January 2015.


Sheri Jordan, MD, was honored in fall 2014 on the Radiological Society of North America (RSNA)’s “Radiology Cares Caring Quilt,” a forum for patients to express appreciation toward a radiologist or radiologic technologist who made a difference in that patient’s life. She received two patient-to-radiologist tributes on the quilt.

Sheri Jordan, MD, was recertified in October 2014 by the Radiology Coding Certification Board (RCCB) as a Radiology Certified Coder (RCC).

Sheri Jordan, MD, served as Co-Director of the North Carolina Radiological Society’s 21st Annual Breast Imaging Weekend Review Course in Charlotte, NC, in January 2015.


Sheri Jordan, MD, presented, "From Dread to Delight: Optimizing Breast Imaging's RadPath Conference" as an invited lecturer at Duke Comprehensive Cancer Center’s Department of Radiology “Lunch and Learn” in February 2015.


Amir Khandani, MD, presented, “PET/MR: Three Years of Clinical Experience” as Visiting Professor at the Mayo Clinic’s Department of Radiology in Rochester, MN, in April 2015.

Amir Khandani, MD, served as Program Director for the 2015 Nuclear Medicine and Molecular Imaging Update at the 3rd Annual American College of Radiology Review Course in March 2015 in Charlotte, NC.

Amir Khandani, MD, presented, “PET in Lung Cancer” as an invited speaker at the 2015 Nuclear Medicine and Molecular Imaging Update at the 3rd Annual American College of Radiology Review Course in March 2015 in Charlotte, NC.

Amir Khandani, MD, presented, “PET Radiotracers other than FDG” for Grand Rounds as a Visiting Professor in Nuclear Medicine at Montefiore Medical Center of the Albert Einstein College of Medicine, New York, NY, in October 2014.

Amir Khandani, MD, presented, “PET/MR: Basic Concepts and Clinical Applications” for Grand Rounds as a Visiting Professor in Nuclear Medicine at Montefiore Medical Center of the Albert Einstein College of Medicine in New York, NY, in October 2014.

Amir Khandani, MD, and Terry Wong, MD, PhD, co-moderated the “Nuclear Medicine: PET/CT for Oncology” session at the Radiological Society of North America (RSNA)'s 100th Scientific Assembly and Annual Meeting in Chicago, IL, November 30 – December 5, 2014.

Jeremy Kim, MD, presented, "Cone-beam, CT-guided gastrojejunostomy placement in patients with difficult access: reducing a two-stage procedure to a single visit” at the Society of Interventional Radiology (SIR)’s 40th Annual Scientific Meeting in March 2015 in Atlanta, GA (Authors: Kim J, Isaacson A, Yu H).


Cherie Kuzmiak, DO, was appointed Chair of the Radiological Society of North America (RSNA)’s Breast Imaging Refresher Course Track in December 2014.


Yueh Z. Lee, MD, PhD, presented, “Imaging permeability: general concepts and clinical importance” as an invited lecturer at the 21st Annual Blood-Brain Barrier Consortium Meeting in Stevenson, WA, in March 2015.

Yueh Z. Lee, MD, PhD, and co-investigators received a Phase II Translational Team Science Award (TTSA) – $200,000 over two years, pending renewal – in October 2014 for their project entitled, “Stationary Chest Tomosynthesis for Imaging Young Patients with Cystic Fibrosis” (Multi-P.I.: Lee YZ, Zhou O, Lu J, Sams C, Fordham L, Birchard K, Muhlebach M, Donaldson S, Goralski J, Boucher R).

Yueh Z. Lee, MD, PhD, presented, “Stationary Digital Breast Tomosynthesis: Initial Clinical Experience With a Carbon Nanotube-Enabled Device” at the Breast Imaging scientific session at the American Roentgen Ray Society (ARRS)’s Annual Meeting in April 2015.

Zibo Li, PhD, received a one-year $2K award in February 2015 for his project entitled, “NTR-1 targeted imaging for prostate cancer diagnosis” as a part of the North Carolina Translational and Clinical Sciences (NCTraCS) Institute’s 38th cycle of $2K funding for clinical and translational research projects.

Zibo Li, PhD, was awarded a one-year Small Instrumentation Grant ($30K), jointly by UNC’s Core Facilities Advocacy Committee (CFAC) and Biomedical Research Imaging Center (BRIC) in March 2015 for his project entitled, “Dedicated Radio-HPLC for Preclinical Tracer Synthesis.”

Zibo Li, PhD, received one-year New Method Development funding ($10K) from UNC’s Core Facilities Advocacy Committee (CFAC) in March 2015 for his project entitled, “Establish 18F-FLT production for preclinical research.”

Matt Mauro, MD, was nominated for “2015 North Carolina Doctor of the Year” in March 2015 by the North Carolina Medical Society, as a part of its NC Doctors’ Day initiative.

Daniel Nissman, MD, presented, “Introduction to Musculoskeletal Imaging” as an invited lecturer for the Human Movement Sciences program at UNC’s Division of Allied Health Sciences in February 2015.

Daniel Nissman, MD, was appointed to a renewed, three-year term on the Radiological Society of North America (RSNA)’s Scientific Program Committee in October 2014. He also moderated the Musculoskeletal Soft Tissue Tumor Session at the RSNA’s 100th Scientific Assembly and Annual Meeting in Chicago, IL, November 30 – December 5, 2014.


Richard Semelka, MD, presented, “PET/CT Quantification: the Devil is in the Details” within the “Nuclear Medicine Series: Assessment of Cancer Treatment Response” at the Radiological Society of North America (RSNA)’s 100th Scientific Assembly and Annual Meeting in Chicago, IL, November 30 – December 5, 2014.

Terry Wong, MD, PhD, moderated the “Nuclear Medicine Series: Assessment of Cancer Treatment Response” session at the RSNA’s 100th Scientific Assembly and Annual Meeting in Chicago, IL, November 30 – December 5, 2014.

Terry Wong, MD, PhD, presented, “PET/CT Quantification: the Devil is in the Details” within the “Nuclear Medicine Series: Assessment of Cancer Treatment Response” at the Radiological Society of North America (RSNA)’s 100th Scientific Assembly and Annual Meeting in Chicago, IL, November 30 – December 5, 2014.
Terry Wong, MD, PhD, presented, “PET/CT in the Evaluation of CNS Tumors” at the American Roentgen Ray Society (ARRS)’s Annual Meeting in Toronto, Canada, in April 2015.

Terry Wong, MD, PhD, presented, “Radiation Dose in PET/CT” at the Best Practices in PET/CT Symposium in Sonoma, CA, in April 2015.

Terry Wong, MD, PhD, presented, “PET/CT: Issues in Quantification and Response to Therapy” at the District of Columbia Metropolitan Radiological Society in Washington, DC, in March 2015.

Terry Wong, MD, PhD, served as a Visiting Professor at George Washington University’s Department of Radiology in Washington, DC, in March 2015.

Terry Wong, MD, PhD, presented two lectures -- “The New Biomedical Research Imaging Center (BRIC) at UNC” and “Imaging for Alzheimer’s Disease” -- at the American College of Radiology (ACR)’s North Carolina Chapter 2015 Nuclear Medicine and Molecular Imaging Update in Charlotte, NC, in March 2015.

Terry Wong, MD, PhD, presented three lectures -- “Approach to Rare Cancers: Not All is Hot,” “SUV: All You Need to Know and Current Trends” and “PET/ MR Applications: Current and Future” -- at the American College of Radiology (ACR)’s Annual PET/CT Symposium in Chicago, IL, in March 2015.

Terry Wong, MD, PhD, presented four lectures -- “The Optimized PET/CT Protocol: One Size Does Not Fit All,” “Best Non-oncologic Indications for PET/CT,” “Quantifying Metabolic Response to Therapy: When, How, and Why?” and “Latest PET Research That Will Likely Impact Your Clinical Practice Within the Next Three Years”-- and served as symposium Co-Chair at the Dartmouth Radiology 8th Annual PET/CT Symposium in Stowe, VT, in late February/early March 2015.

Terry Wong, MD, PhD, presented, “The FDG Experience: Approval and Reimbursement Strategies for New PET Drug Development” at the Society of Nuclear Medicine and Molecular Imaging (SNMMI)’s mid-winter meeting in San Antonio, TX, in January 2015.

Guorong Wu, PhD, and Dinggang Shen, PhD, co-authored, “Motion-guided resolution enhancement for lung 4D-CT,” presented at the International Conference on Control, Automation, Robotics and Vision (ICARCV) in December 2014 in Marina Bay Sands, Singapore. [Authors: Bhavsar A, Wu G, Shen D]


In Memory: Carol A. Mittelstaedt, MD  
UNC Department of Radiology: 1976 – 2015

On April 24th, Department of Radiology members, UNC School of Medicine colleagues and close family members and friends gathered to remember Professor Emeritus Dr. Carol Mittelstaedt -- affectionately known by many at UNC as “Dr. Mitt” -- a Department faculty member for almost 40 years. During a period of expansion under then-Chairman Dr. James Scatliff, Mittelstaedt’s 1976 arrival at UNC infused the Department of Radiology with clinical strength in a young and advancing field of imaging -- medical ultrasound. As one of four radiologists to form UNC’s Imaging Division, Mittelstaedt was also the Department’s first female full-time faculty member.

Dr. Julia Fielding, Department Vice Chair of Finance, Professor of Radiology and Mittelstaedt’s successor as Abdominal Imaging Division Chief, noted: “Carol Mittelstaedt was one of only a few female radiologists in the country and in her own right was a pioneer in the development of ultrasound. She lectured nationally and internationally and wrote the seminal textbook (General Ultrasound – 1992) in her area of subspecialization. She was always demanding of her residents and technologists but also took great joy in her work. She had a lot of enthusiasm for life beyond work as well, hostessing wonderful Christmas parties and fabulous Southwestern lunches!”

Dr. Richard Clark, Professor Emeritus of Radiology, former Vice Chair of Research, Associate Department Chairman and a close colleague of Mittelstaedt’s in the Abdominal Imaging division, reflected: “I had the pleasure of knowing and working with Carol over her entire professional career at UNC. Dr. Scatliff's recruitment of her was one of his most important personnel decisions during the early years of our department's expansion. Carol took hold of the reigns of her young field in those early years when ultrasound needed an articulate, gracious, and believable advocate. There was no one in this country more successful in this role. In many ways, Dr. Mitt was the 'Mother of Ultrasound' in North Carolina. Her caring nature and careful practice of medicine carried over into everything she did both in and out of the hospital. She taught us guys gentle, but firm lessons of collegiality, loyalty, inclusivity and fairness. I will miss her very much!”