DUKE UNIVERSITY MEDICAL PHYSICS GRADUATE PROGRAM

2016 ALUMNI NEWSLETTER

The Official Newsletter of the Duke Medical Physics Alumni Association (DUMPAA)

IN THIS ISSUE

Preparing for some zip-line fun at the 2016 program retreat!

Exciting News from the Program Director

Ehsan Samei PhD, DABR, FAAPM, FSPIE

Dear Duke Medical Physics alumni and friends,

Please accept my warm greetings from your Alma Matter, your leading institution of Medical Physics, your professional origin! It warms my heart every time I think of the great presence that you bring to our profession through your dedication and quality of work. On behalf of our program, I can say that we are full of pride in the small contribution that we have made in honing your intelligence to enable such an outcome.

Things are well at home. Your program is in a good place, and beyond that, has been on a steady course of advancement. I highlight just a few:

CONTINUED ON PAGE 4

Irina Vergalasova PhD, DABR
DUMPAA President

Our New Alumni Association

Greetings from your new and improved Duke University Medical Physics Alumni Association! As President of DUMPAA, I would first like to introduce myself to those of you who I haven't previously met. I joined the graduate program in the fall of 2008 as a PhD candidate and graduated in 2013 with a doctoral degree focused on image-guided radiation therapy. I loved my time at Duke and was fortunate enough to continue my training as a resident in the Department of Radiation Oncology at Duke University Medical Center. I then accepted a physicist position with Duke and was committed to maintaining strong ties to the graduate program. Dr. Samei and Dr. Yin approached me to chair a Task Force on establishing a more formal Alumni Association in the summer of 2016. I gladly accepted this position and began to work with a number of talented Duke alumni to officially create DUMPAA.

Together we composed the by-laws and lay the groundwork for establishing Executive and Planning committees. At the completion of the Task Force, I transitioned into my new role as President of DUMPAA. The alumni introduced below graciously volunteered to assist on the Executive and Planning committees. With Dr. Samei's initiative, our vision for this new and improved association is two-fold. First and foremost, our goal is to serve as a valuable resource for current alumni as well as future alumni, i.e. Duke medical physics graduate students. This means that we aim for DUMPAA to be a tool in aiding alumni throughout the progression of their careers, whether that be through reunion dinners, continuing education workshops, or just fun-filled adventures unrelated to work. We hope to foster a sense of closeness and familiarity within our Duke family, even as we continue to grow larger and spread farther. Our second goal for DUMPAA is to enable the growing alumni community to stay connected to their roots within the graduate program. Although we are our own independent association, it is also our intention to serve as a liaison between the graduate program and the alumni network in order to provide opportunities to give back to the program that helped get us where we are today. Together, we believe we can achieve both of these goals and create long-lasting positive experiences for all.

ACKNOWLEDGEMENT & MANY THANKS TO DUMPAA TASK FORCE MEMBERS

Liwei Zhang, MS, DABR
Joshua Wilson, PhD, DABR
Cindy Qin, MS, DABR
Samuel Brady, PhD, DABR
Taoran Li, PhD, DABR
David Sterling, MS, DABR
Irina Vergalasova, PhD, DABR

DUMPAA Board & Committee Chairs

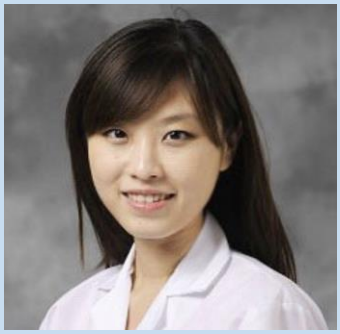
Born and raised in Jamaica, **Javian Malcolm** is finishing up his PhD in Radiation Oncology at the University of Oxford in England. He is working on designing radiation treatments informed by cancer biology. He earned his Medical Physics MS from Duke University in 2015, and maintains his ties with the program as Vice-President of the alumni foundation, DUMPAA. Outside of research, he enjoys anytime by the beach, playing piano and a good game of soccer/football.

Javian Malcolm, MS
DUMPAA Vice President

Matt Goss, MS, DABR
DUMPAA Secretary

Matthew Goss is a 2007 MS alumni of the Duke Medical Physics Program and secretary of the Duke University Medical Physics Alumni Association. Matt worked in Baltimore from 2007-2011, then took a job in the External Beam Planning department at the main campus of Memorial Sloan Kettering Cancer Center in New York City. He became board certified in 2012 and while continuing to learn and advance at MSK, he has become involved with the Radiating Hope Foundation, currently working to setup educational and clinical training and best practices in Nairobi. Outside the clinic Matt enjoys playing rugby, climbing mountains, sailing, skiing and volunteering at New York's Explorer's Club and with the Michael J. Fox Foundation for Parkinson's Reseach.

After graduating from Duke in 2013, **Cindy Qin** went to Henry Ford Hospital for a therapy residency, which led to staff physicist position afterwards. She recently pass the ABR, and moved to Chicago to work as a therapeutic medical physicist at Advocate Healthcare. Cindy currently serves as the treasurer for the alumni association.
Cindy's specialty is small field and stereotactic radiosurgery. She is also actively collaborating with interventional radiologist in China on the application of LDR for liver and esophageal cancer. She hopes to continue facilitating communication between student and alumni while serving on the board.



Cindy Qin, MS, DABR
DUMPAA Treasurer

Irene Zawisza, MS
DUMPAA Newsletter Co-Chair

Irene Zawisza is a 2015 master of science alumni of the Duke Medical Physics Program and is co-chairperson of the Duke Alumni newsletter. She is chief resident at Montefiore Medical Center in the Bronx, NY in therapeutic radiation. After residency she will pursue a clinical career and full board certification. Her academic interests include high precision tumor tracking and MR alone for radiotherapy treatment planning. Additionally, Irene spends time doing yoga, running and spending time with family and friends and always cheers on the Blue Devils Basketball. GO DUKE!

LaToya Crayton (MS '09) is co-chairperson of the Duke Alumni Newsletter. She is a board-certified Medical Physicist in Radiation Therapy. Currently she works at the USMD Cancer Center in Arlington, TX where in addition to her clinical duties, she serves as the Radiation Safety Officer. During her tenure as co-chairperson of the alumni newsletter, she hopes to continue to produce a media where alumni are provided a means of communication that helps to continue establishing and maintaining our alumni network; in addition to providing a place where alumni professional and personal achievements can be shared.

LaToya Crayton, MS, DABR
DUMPAA Newsletter Co-Chair

Deon Dick, MS
DUMPAA Activities & Events Chair

An MSc 2012 graduate of the Duke Medical Physics Graduate Program, **Deon Dick** is now pursuing her Doctoral studies (PhD) in Biomedical Engineering with a concentration in Medical Physics at the University of Miami. Concurrently, she is gaining experience as a licensed medical physicist at the Cyberknife Center of Miami where she specializes in SRS and SBRT radiation therapy treatments. Prior to starting her doctoral studies, Deon worked as a medical physicist at the largest hospital in the Caribbean, the Kingston Public Hospital, Jamaica and was also an adjunct lecturer in the physics department at the University of the West Indies (UWI). Upon receiving her PhD, she plans to work with the existing medical physics team where she will apply her knowledge, skill and experience to enhance the quality of cancer care in that country.

Exciting News from the Program Director

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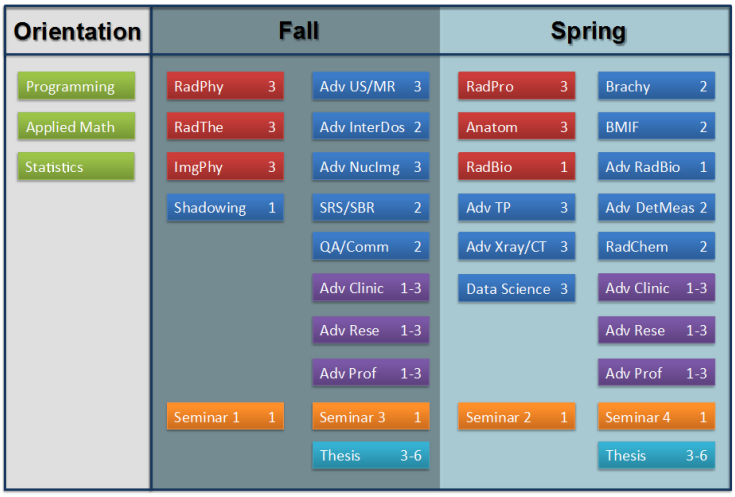
Curricular Development

Our curriculum has been largely unchanged in the first 11 years of its history. Perhaps the biggest advance of the program has been in its curricular update, under the direct oversight of our new exemplary DGS, Dr. Anuj Kapadia. The program formed a Task Force for Educational Excellence charged with revising and updating the curriculum. The changes were designed to improve customized specialization, flexibility, coherence, quality, and practical training of the curriculum. A second Task Force was launched on Professional Enhancement to devise a professional training component for the program. The work led to four, focused professional practicums to enhance the leadership and management competencies of the students. Finally a third Task Force was formed to revise the program's Qualifying Exam to improve the content, rigor, quality, timing, and duration of the qualifying exam. Overall there is a great deal of excitement among students about the new curriculum. Phase one of the new curriculum has already been initiated in 2016-17, and the implementation is anticipated to be completed in the 2017-18 academic year.



A schematic of the new curriculum.

Community Development

One of the strategic initiatives that came about as part of my initial interviews with faculty and students, was the formation of a Culture Task Force. This Task Force was charged with recommending actions that foster improvements in the cultural practices and identity of our program. The recommendations led to a new monthly Medical Physics Distinguished Lectureship series, increased practical training, intentional faculty recruitment for enhanced diversity, and a first ever program-wide Medical Physics Retreat in September 2016. The retreat's theme was leadership. With over 80 attendees (students, alumni, and faculty), the program offered an array of advanced training opportunities in leadership and life skills, inter-mingled with inspiring testimonials, recreational activities, team building, and even a variety show that was judged to be a highly memorable experience.

Scenes from the first program-wide retreat

Exciting News from the Program Director

Publicity Development

Publicity was one of the major focuses of our advancement this past year. A Publicity Task Force devised new means to update and inform the Duke community on medical physics news and opportunities. The Medical Physics Newscast is now a bi-monthly newsletter that is issued by the program, with much thought gone into its design to be efficient and effective. I further initiated a monthly faculty update email post, entitled “From the Director’s Desk,” to ensure key developments are not overlooked.

Outreach

The program undertook a number of notable outreach activities. Among those is the Task Force on Alumni Relations, (led by your own Irina Vergalasova and Josh Wilson) which advanced to the formation of a new association to help foster a broader sense of community and resource for you, our “ambassadors!” The program further supported its sister program that it helped start at Duke Kunshan University. DKU was also voted by the Duke Academic Council to initiate its planned undergraduate college, which led by our own Jim Dobbins, will add a whole new enterprise to our Chinese partnership. Furthermore, this year the program was honored to host the United Nations Scientific Visit on radiation safety in medicine. The workshop brought radiological professionals from around the world to share experience and strategy on radiation protection, informed by our own processes in place at Duke.

Resources and Partnership

One of the most significant advances of this year was the formation of four notable partnerships. A year-long negotiation with Siemens Medical Solutions led to the formation of an educational partnership giving us access to the Siemens educational facility in Cary, one of four such centers in the world. With a complete array of imaging equipment and educational resources, the facility can effectively be used as a practicum “university” for our education.

DUKE UNIVERSITY MEDICAL PHYSICS GRADUATE PROGRAM

Newscast **Nov 18, 2016**

Royal Society Award
Congratulations to Marthony Robins, Medical Physics PhD candidate, for receiving the Royal Society award to attend the Commonwealth Science Conference in Singapore (June 2017). The conference aims to celebrate excellence in science, provide opportunities for ... (Read more)

AAPM President Elect Visits Duke
The Distinguished Lecture Series continued on November 10th with featured speaker Melissa Martin, the president elect of the AAPM and president of Therapy Physics Inc. Her talk, titled "Leadership Skills for Today and the Future in Medical Physics", centered around her ... (Read more)

Duke Medical Center in IAEA News
Over a period of one week of October 17-21,2016, Duke University engaged with 17 prominent international visitors from nine IAEA Member States from the region of Europe. The visitors included radiology department chairs, radiation technologists, and lead diagnostic medical ...(Read more)

DUKE UNIVERSITY MEDICAL PHYSICS GRADUATE PROGRAM

Newscast **Nov 04, 2016**

International Medical Physics Day
The MedPhys Graduate Program will celebrate the 2016 International Day of Medical Physics on Monday, November 7, with educational trivia games and food for this year's theme "Education in Medical Physics - the Key to Success". This annual celebration aims to educate and ... (Read more)

New Grant on X-ray Scatter Imaging
Congratulations to Dr. Anuj Kapadia (Radiology) and Dr. Joel Greenberg (Duke ECE) for receiving a $ 200K grant to progress their research in x-ray imaging in security and medical applications for their project "Characterizing, Modeling, and Mitigating Texturing in X-ray Diffraction... (Read more)

Forum with the President of NCRP
Council on Radiation Protection (NCRP), John Boice, will be at Duke on November 17-19 and will lead an open forum with the Medical Physics students. He has 27 years of experience in the US Public Health Service, and became the first chief of the Radiation Epidemiology ...(Read more)

Two samples of the Medical Physics Newscast.

Exciting News from the Program Director

A second partnership with GE Healthcare led to the donation of a clinical CT Workstation to our program (a $250k value) for educational purposes. The program further received funding (124k) for a new fellowship by Imalogix to advance the science of dose and image quality informatics. Finally, taking advantage of our adjunct faculty, we initiated a partnership to offer a shadowing opportunity at UNC so our graduating class would have a broader perspective on differing clinical practices.

As I have previously noted in the last issue of the Newsletter, we have a strong desire to seek as much input and contribution from our alumni as possible. I thus implore you to maintain and foster your relationship with the program. Let your (now working) experience inform the future of the program that you can rightly claim as your own.

As always, we love to hear from you and wish to encourage you in your career ahead. And we would love to see you at the AAPM meeting in Denver in July 2017.

Yours truly,
Ehsan

UN Scientific Visit hosted at Duke (top) and the students shadowing at UNC (bottom).

Alumni Q&A

Leith Rankine (MS '13, DABR) attended Washington University St. Louis for therapeutic medical physics residency, and moved back to UNC to work as a medical physicist and clinical instructor. As of September 2016, Leith enrolled back in the Duke Medical Physics program to pursue a Ph.D. degree.

It is great to have you here, Leith. You have come a long way in the field of medical physics. Can you share with us what makes you passionate about this field?

Leith: I like physics, but I also find it very rewarding to engage with patients and to be directly involved with patient treatments on a daily basis. Everything I do in the clinic directly affects patient care, and (I like to think that) everything I do in research might ultimately improve patient care. Basically, I'm a people-person with a physics-brain, so Medical Physics is a good fit for me.

After residency, what made you come back for a Ph.D. degree?

Leith: After residency, I accepted a faculty position at UNC and moved back to Durham. I was scheduled as clinical physics 3-4 days per week and research 1-2 days per week. Although the UNC department has plenty of great internal research opportunities, I wanted to branch out and collaborate with exciting research groups outside of the field of radiation oncology. I've always been a collaborator;

I find that we (scientists) don't effectively communicate across disciplines, or even sub-disciplines, and sometimes problems and challenges that we are facing have already been solved elsewhere. I thought that getting a PhD would be a great way to get involved with another well-established research group and see what could translate back to radiation oncology. I was accepted into the PhD programs at both UNC BME and Duke MedPhys, but after meeting Dr. Bastiaan Driehuys and the CIVM Hyperpolarized-Xenon MRI research team, the choice was pretty simple.

What kind of research are you interested in? How do you see it fit into your clinical duty?

Leith: I started out working in PET with Dr. Tim Turkington during my Duke Masters, which was very hands on and practical research – I loved it. Before finishing at Duke I had migrated into Radiation Oncology to explore PET response to radiation therapy (RT), which is where I met the esteemed and downright awesome, Dr. Shiva Das. While there, I also managed to find time for a couple of cool 3D Dosimetry projects with Dr. Mark Oldham… our Australian and British accents made for the perfect scientific combination! During residency at Washington University, my main area of interest was motion management: MR-guided RT with tumor tracking and gating; CBCT fiducial-tracking on conventional linacs for abdominal SBRT; and even implementing proton therapy breath-hold treatments. This research was incredibly rewarding because it was all directly applied to patient treatments. Now, back at UNC/Duke and on to my PhD project, we are looking at functional imaging of the lung and how that might help in planning/assessment of lung RT… this doesn't affect my day-to-day clinical work just yet, but will hopefully influence the management of lung cancer patients in years to come.

How do you juggle being a full time medical physicist and a full time PhD student? What is your typical day like?

Leith: Well, as part of my day-job I am required to do research 1-2 days a week, which I have simply extended to include "all of my spare time". Plus, at Wash U they had a couple of sayings: "Of course we allocate scheduled reading time for our residents: it's from 3am-6am on Sunday mornings," and, "We give our physicists plenty of assigned research time – every day from 6pm to 6am." So, once you've survived two years of residency at Wash U, anything is possible. In all honesty, my UNC boss & advisor, Dr. Shiva Das, is very encouraging and gives me the freedom I need to manage my work + PhD balance, my co-physicists at UNC are very accommodating and always willing to switch/trade clinical tasks if I ever need to be in two places at once, my Duke advisor, Dr. Bastiaan Driehuys, is very flexible and understanding, and my wife Benay is the most encouraging, supportive, and loveable person on the planet.

Where do you see yourself in 10 years?

Leith: Based on my track record, in 10 years I will most likely be back at Duke getting another degree! All kidding aside, after my PhD I'd be very happy in a 50/30/20 clinical/research/teaching position, if that exists. I want to maintain my clinical responsibilities so that my research will stay clinically relevant and innovative, and I would love to teach the next generation of medical physicists. I can also envision myself getting involved in a leadership position with the AAPM, if such an opportunity presents itself.

The most important question of the day: which team are you rooting for, Duke or UNC?

Leith: Is that even a question? *~Forever Duke!~*

Alumni Spotlight

Corey Clift (MS '09, DABR) is a board-certified physicist in Therapeutic Radiologic Physics. He is currently a Medical Physicist in the Radiation Oncology Department at Novant Health in Virginia.

Trying to remember the beginning of the last ten years is a reminder of just how old I've gotten. I started at Duke nearly a decade ago yet the arc of my career is in many ways just beginning. I was asked to briefly describe its trajectory through time and space and include anything else I would like to share. Here is my best effort:

Starting Out

My time at Duke was critically important to my career today for all the obvious reasons. Other than the effect it had on my career, some of my best friends today (and my wife) are folks I met at Duke. The most critical professional decision I made while I was in school (or ever) was to not stay and do a PhD. To be completely honest I don't know if this was a good decision. Short term, it was. Long term, I still have no idea. At any rate, the decision was remarkably critical. My decision to be done with graduate school when I finished my master's led to a 6 month stent doing lab work (which was actually an incredibly fun and satisfying time in my life) followed by moving to New York City to do a residency. Living in the city was fantastic for maybe the first weekend or two. It was noisy, cold, expensive and residency was, well, hard. Why did I think it would be easy!?

I learned an incredible amount in two years, then landed my first job back in my home state of North Carolina. I got to work with Justin Keener (another Duke alum) and passed my ABR exam during that time. I spent two years in NC and then I followed my soon-to-be bride to the D.C. area.

I have had a couple jobs around DC. The first one was essentially a solo physicist position; two years later I was ready to move on. In my current position I work in a Noah's arc model: two doctors, two nurses, two physicists, two planners, and two linacs. I handle all the SRS, SBRT and prostate implants while my counterpart handles the HDR, Xofigo, and Y90. We crossed trained each other just enough to keep our bases covered when one of us is out, but we still respect each other's established wheel houses. For me its the perfect situation.

Hobbies & A Look Ahead

In the future I plan on working less and fishing more. I am fortunate enough to live close to truly world class smallmouth bass fisheries. The confluence of the Radian and Rappahannock Rivers has been considered by some to be the optimal spot in the US for these fish to flourish. It is a difficult spot to get to so I typically only make it there a few times per year. Typically I fish from my kayak on the Potomac above Little Falls near the I495 bridge or near the Riverbend Park. Every other Monday from roughly April to November I try to get on the water.

Since you asked, my go-to lure is a Texas rigged 6 inch lizard (any dark color will do). Before the spawn or later in the year when the water cools

Aerial photo of the Radian and Rappahannock Rivers

down I go for a big white spinner bait or a light colored shallow diving crank bait. My fishing goals for 2017 are to fish the tidal portion of the Potomac for largemouth bass and for--the much hated and invasive--northern snakehead. If you catch one you are required by fish and game to dispatch it immediately. For all other wild fish I am an advocate of catch and release. By the way, snakehead meat is firm and mild and is great on a sandwich with coleslaw.

To wrap this up: my professional career has been perhaps a garden variety in its general details. However it was marked by 2 or 3 critical decisions that at the time seemed to me to be truly earthmoving. My life outside of work is spent on the river or with my loving wife. She has been incredibly supportive of my work and outdoor life and she deserves most of the credit for my current state of bliss.

Clift (MS '09) with a big catch

David Sterling (MS '08, DABR) is a board-certified physicist in Therapeutic Radiologic Physics. He is currently a Medical Physicist at the University of Minnesota, where he is also enrolled in the Medical Physics PhD Program.

Clinical Duties

For the past five years, I have worked as a medical physicist in the radiation therapy department at the University of Minnesota. My position is rare for a MS physicist because it includes clinical work, teaching and research.

In the department, I'm currently responsible for the HDR brachytherapy program and for the Surface Image Guided Radiation Therapy program. (We were the second clinical site in the U.S. to use the C-Rad Surface Imaging System.) Additionally, I share clinical responsibilities with the five other medical physicists on the team for all patients who are treated with radiation at the university hospital. I really enjoy the opportunity to lecture in the medical physics graduate program, as well as in the radiation therapy school.

Research

I have participated in research projects over the past few years, but I was accepted into the university's Medical Physics Ph.D. program this past fall to be able to focus on specific topics. My research focuses on two areas: 3D printing and machine learning applied to radiation therapy. Currently, we are 3D printing bolus and immobilization devices for dogs treated with

with radiation at the university's veterinary hospital.

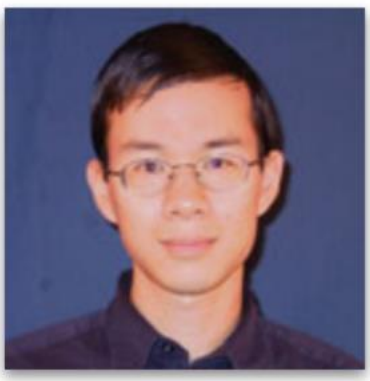
Because dogs have emergent tumors — as opposed to the induced tumors in mice — and because they share their living environments with humans, a canine cancer model is able to address questions that are unanswerable with mice. We are also currently working on determining how to utilize machine learning to improve areas of patient care, from simulation to plan evaluation.

I previously have held medical physics positions with Aurora Healthcare in eastern Wisconsin and Virginia Mason in Seattle. I graduated from Duke in 2008 as part of the second class of the Medical Physics program.

Faculty Research

Dean Darnell (PhD, MS '15) currently works in the department of Radiology at Duke University and is an associate professor at his alma mater, Duke University.

The Brain Imaging and Analysis Center (BIAC) hardware lab focuses on new, innovative MRI technologies that improve in vivo structural and functional imaging for a number of clinical and research applications. As an example, our team has patented an integrated RF coil design that can perform simultaneous MRI signal reception and localized, adaptive B_0 shimming, which improves susceptibility-induced geometric distortions and recovers signal loss for both brain and body imaging. Additional research interests being investigated include: "stand-alone" MRI receive coils, next generation portable scanners, and MRI based therapy techniques. The lab team members include: Dean Darnell, Trong-Kha Truong, Allen Song, Jonathan Cuthbertson, Yixin Ma, Naomi Morales-Medina, and Devin Willey.

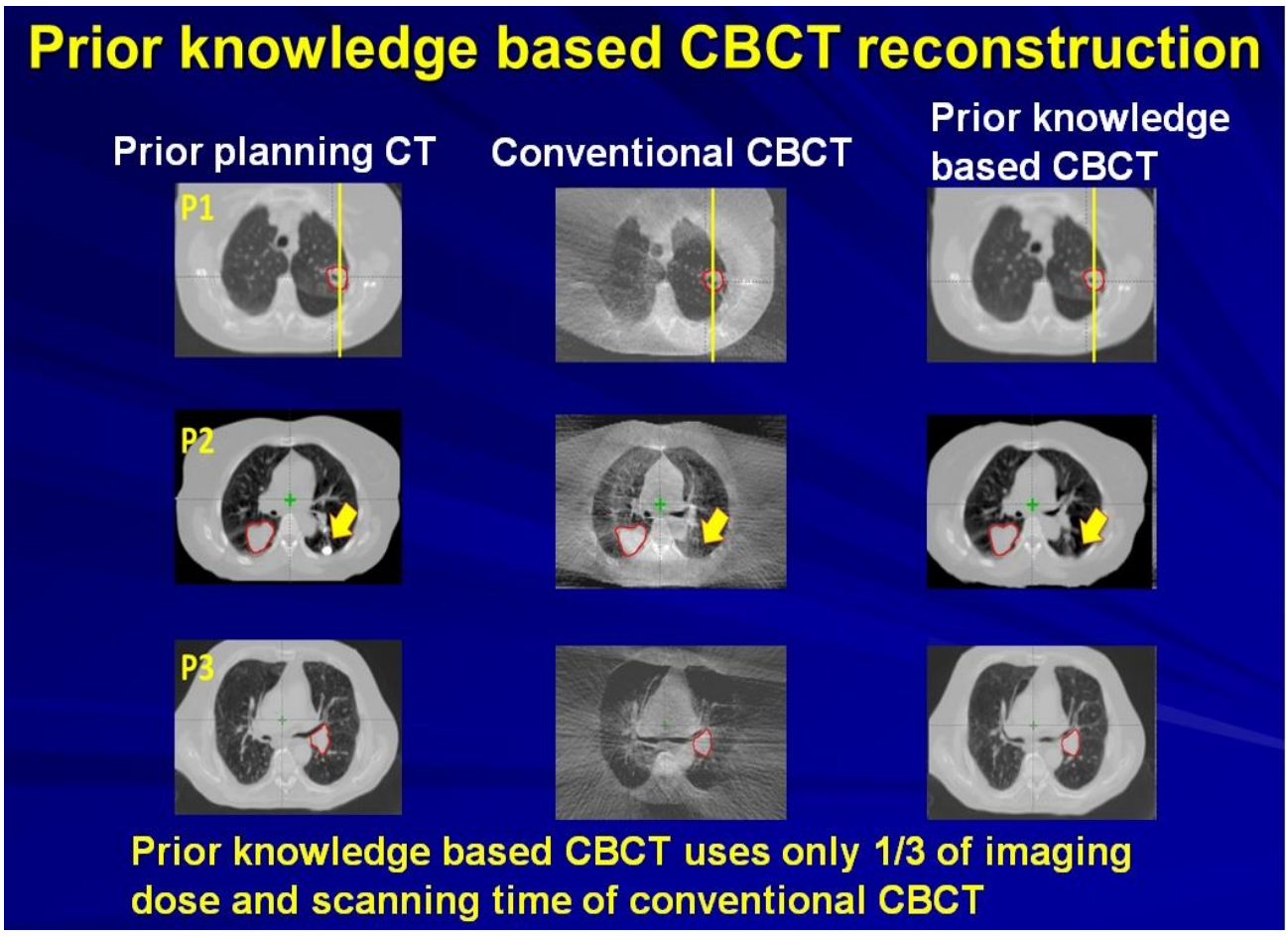


Faculty Research

Lei Ren (PhD '09, DABR) is a board-certified physicist in Therapeutic Medical Physics. He is currently an Assistant Professor in the Department of Radiation Oncology at Duke University Medical Center. He is also a faculty member and thesis advisor for many students of the Duke Medical Physics Graduate Program, from which he also graduated from in 2009.

My group's research areas are mostly related to image guided radiation therapy (IGRT), including imaging dose reduction in radiotherapy, novel image reconstruction and scatter correction methods for cone-beam CT (CBCT), image registration, and real time 3D MR imaging techniques. Specifically, we have been developing a limited-angle intra-fraction verification (LIVE) system to use patient prior knowledge and deformation models to reconstruct 4D-CBCT images based on limited angle kV/MV projections. LIVE can be potentially used for intrafraction verification of hypo-fractionated radiation therapy treatments of lung cancer to minimize the localization errors during the treatment.

Another focus of my research is to develop a volumetric cine MRI (VC-MRI) technique to provide real time 3D MRI images for MR-guided radiation therapy of lung and liver cancer. In addition, I have been collaborating with other groups to develop a synchronized moving grid (SMOG) system to address the scatter issue in CBCT to improve its image quality for IGRT applications. My current lab members include masters, PhD students and postdocs, and the lab is currently funded by industry and federal grants.



Alumni News

Kelly Loman (MS '15) is currently living in Indianapolis, Indiana as a first year medical student at Marian University College of Osteopathic Medicine.

Kelly Loman and Andrew LaDuke

Steve Bache (MS '14) and his wife Gretchen had their first child, a son! Oliver Monroe Bache was born on June 24, 2016 in Houston, TX. Steve completed the Imaging Physics Residency Program at the University of Texas MD Anderson Cancer Center in Houston, TX in August. Working towards board certification he passed Part II of the ABR Exam (Diagnostic) in August. In September, he started a new position as a Diagnostic Medical Physicist at Mission Hospital in Asheville, NC. The family is happy to be back in North Carolina!

Justin Keener (MS '07) started a new job with Centura Health in Denver, Colorado. He and his wife have their first baby due in February!

Scott Senick and his beautiful growing family.

Scott Senick (MS '10) is now the Senior Physics Instructor for the Education Department at Varian. He currently teaches all products, but focuses attention on TrueBeam, Eclipse Commissioning and Cone Planning. He has a growing family with Graydon, 6 years, Liam, 2.5 years and another baby boy on the way and due in March!

Benjamin Pollard (MS '08) and his wife had a baby girl named Adelyn Jo Pollard on January 18, 2016.

Jessica Kelley (PhD, MS '11) graduated from the University of Florida with a PhD in nuclear engineering and MBA in May 2016. She is currently in residency training at NYU Langone Medical Center.

Katie Albanese (MS '16) is studying Patent Law at Villanova University School of Law.

Maryann Abogunde (MS '09) got married on September 10, 2016 in Texas.

Maryann Abogunde and her husband at their wedding in Texas.

Alumni News

Ethan Crockett celebrates engagement

Jason Bond (MS '13) and his wife had their second child last year; Thalia Khrystyne was born Feb 26. She is adorable and she has him right where she wants him. His time with the Air Force has ended, which was a great experience and allowed for travel. He took a new job as a diagnostic consultant with Landauer Medical Physics in September, working primarily in Connecticut with group services all over New England. He passed part 2 of the ABR this summer. He is now loving life, hanging out in the snow, and exploring the beautiful countryside.

Ethan Crockett (MS '15) got engaged in August.

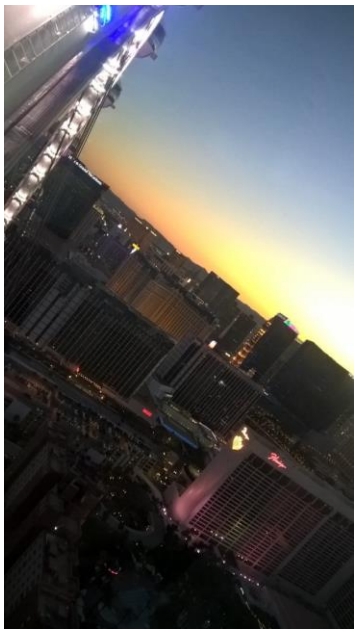
Justin Roper (PhD '10) family is expecting their third child in the spring of 2017.

Roland Womack officiating the Belley wedding.

Matthew Belley (PhD '16) got married in October of 2015. The wedding was officiated by Roland Womack (MS '15).

Jeremiah Sanders (MS '16) completed his first semester in the Medical Physics PhD program at MD Anderson Cancer Center in December of 2016. He recently filed two patent applications - one with his advisor at Duke, Ehsan Samei, and one with the Air Force Research Labs.

Justin Roper and family are expecting a new addition!



Matt Schmidt sends a picture from the new High Roller observation wheel in Las Vegas - the tallest observation wheel in the world.

Natalie (Januzis) Beckmann (MS '13, PhD '16) got married on April 24, 2016.

Christopher Smitherman (MS '14) got engaged in July 2016.

Matt Schmidt (MS '12) has had an eventful few years. He moved from Las Vegas to Providence, RI to work at Rhode Island Hospital, and unable to stay away from the sun and fun moved back to Las Vegas returning to Varian. He currently is an instructor at Varian Medical Systems teaching Varian products to clinical physicists. Though his primary responsibility is teaching Eclipse and TrueBeam courses, he spends most of my time developing training videos and course materials for research products such as Eclipse Scripting API and TrueBeam Developer Mode. In his free time he works on his website, thoughtsfromthebeerkeg.com, that houses discussion on today's hot topics along with programming tutorials in C#, Python, SQL, JavaScript and more.

Student Spotlight

Michael Trager (MS '17) is a recipient of the Duke University Medical Physics Award for Excellence in Academic Performance for the 2015-2016 academic year. He is currently interviewing for medical physics residency positions in radiation oncology. Michael was a student coordinator for the fall 2016 and spring 2017 open houses, co-coordinator for the Student Mentorship program, and continues to serve as a member of the Students and Trainees Subcommittee of the AAPM.

As my time in the Duke Medical Physics Graduate Program nears its conclusion, I am excited to see where the program is headed. Our faculty members are very receptive to suggestions and have a great vision for the future of our already excellent program. Dr. Kapadia recently assumed the role of Director of Graduate Studies and has already proven to be active and supportive.

Our program has added many beneficial options for our students and faculty this year, while enhancing its foundations. Curriculum advancement, an annual retreat, clinical shadowing opportunities, and distinguished lectures are just some of our program leaders' new initiatives. Here is my take on some of these additions and more:

MS Interviews

Beginning in 2017, the admissions interview process will be extended to medical physics Master's students. The interviews will take place during the Spring Open House along with PhD student interviews. This will make the selection process more rigorous and ensure acceptance of only the best and brightest candidates, leading to an overall positive experience for everyone.

Distinguished Lecture Series

New this past fall semester was the addition of a Medical Physics Distinguished Lecture Series. These monthly lectures brought in excellent high profile speakers who explored topics beyond individual research projects. Melissa Martin, AAPM President Elect, discussed her journey into medical physics and how we can assert ourselves as leaders in the field. Dr. Lawrence Marks, Chair of Radiation Oncology at UNC, spoke about error bars in medical imaging and gave his take on relying too heavily on imaging when creating tumor margins. Dr. Mark Rivard, Chief Medical Physicist at Tufts, walked us through the creation and purpose of AAPM Task Groups. Personally, I think this series was one of the greatest additions to our program because the lectures provide a greater understanding of different opportunities in the medical physics field and where our field is headed.

Annual Medical Physics Retreat

A new initiative in our program is the annual Duke Medical Physics Graduate Program Retreat for students, faculty and alumni held in September. This retreat replaced the former annual student-only retreat. A retreat of this nature helps strengthen the already prominent family dynamic of our program, allows students to meet many faculty members, and enhances various skills for both our trainees and professionals.

Last September, we launched our first retreat centered on the theme of leadership. Throughout the weekend, keynote speakers, professionals in and out of our field, and even our own faculty members held various sessions in which we learned about what makes a great leader, how to be an effective leader in our field, and organization and project management skills. We also had the opportunity to participate in numerous team-building activities including a challenge course and zip-line. The weekend was a perfect mix of education and fun. The 2017 Duke Medical Physics Graduate Program Retreat will be held September 8-10 at Haw River State Park. I look forward to future retreats and encourage all to attend!

Student Spotlight

Clinical Shadowing Opportunity

With increased competition in obtaining a residency, my class has been seeking any opportunity possible to stand out in our applications. One area we felt could use some improvement was in clinical experience. Drs. Samei and Kapadia were extremely receptive to our feedback. This past fall semester, they launched an introductory clinical shadowing course at Duke for first year students to gain exposure to the various environments in which we can work as medical physicists, and an advanced clinical shadowing course at UNC for second year students (we left our Blue Devil pride in Durham). My experience in the second year course was exceptional. We had the privilege of spending up to 6 hours at a time learning about and getting hands-on exposure to monthly QA, HDR brachytherapy, treatment planning, and SRS and SBRT.

Intramural Sports

Our medical physics program has been increasingly excited about participating in intramural sports. Teams have consisted of medical physics students, faculty members, physics residents, and even dosimetrists! In the fall semester we had flag football, volleyball, and ultimate Frisbee teams. During the spring semester, we plan to have basketball, soccer, kickball, softball, and wallyball (volleyball on a racquetball court) teams. Although we have not yet taken first place in any sport, we are very ambitious about this upcoming season!