Welcome to the Winter edition of the Penn Radiation Oncology Newsletter! We hope everyone had a wonderful holiday season as we move forward with the second half of the academic year. We are getting more and more participation in the newsletter with each edition, so thank you to all that have contributed! We are giving you more opportunity to participate by showing the Radonc Logo in locations of your choice and submitting your photos for publication. So use your coworkers, travels, and imagination to get involved in the next newsletter.

Congratulations to faculty for all the recent publications in the department. We have an impressive list this month. Keep up the good work! OncoLink at 20 years is an extraordinary feat as the oldest and one of the largest Internet cancer resources in the world, which is based out of our offices in RadOnc. We could not have done it without all the volunteers in radiation oncology and across the institution over the years. Thanks to all the OncoLink staff that have tirelessly worked to find new ways to deliver the highest quality information on the Internet for all these years!

**MORE THAN CANCER CARE**

**Nursing staff at Valley Forge come to aid of man in full cardiac arrest**

This past summer, a woman whose husband was in full cardiac arrest pulled into the parking lot at Valley Forge after seeing the Penn Medicine sign. The woman quickly thought that this was her best chance to get help for her husband. The medical oncology nursing staff and radiation nurse (Mary Thomas, shown right) performed CPR on the man and called 9-1-1.

After the events of that day in June, the staff at Valley Forge had not heard any more about the gentleman and weren’t even sure that he survived. Then, on October 18th, the man and his wife returned with flowers for the staff to thank them for what they had done for him four months prior. Without their fast action, this story may have had a very different ending.

Thank you to our nurses, and all of our staff, who not only make a difference in the lives of our cancer patients, but also within the community!
WELCOME TO OUR NEW EMPLOYEES

We are pleased to welcome the following new employees to the Department of Radiation Oncology:

**Meena Swaminathan, CPA, CRA**
Chief Financial & Administrative Officer, Research Division

**Andre Konski, M.D.**
Clinical Director, Chester County Hospital

**Angel Howzell**
Administrative Coordinator

**Nicole Ellis**
Social Worker

**Mary McFadien**
Social Worker

**Michael Donato, MBA**
Director of Finance

**Karen Furtek**
Therapist Scheduler

**Patricia Oglesby**
PSR

**Kristin Noble**
PRN Dosimetrist

**Michael Brown**
PRN Radiation Therapist

**Ann Beck**
PRN Dosimetrist

CONGRATULATIONS!!!

**Welcomed Baby**
Katie Chong
Ryan Hofmann
Rebecca Wilson

**Wedding Bells**
Jamie Gardiner
Lisa Smedley
Giovanna DiCicco

**Board Certification**
Pete Gabriel, M.D.
Clinical Informatics

**Promotions & Appointments**
Peng Wang, Ph.D.
Assistant Chief Resident of Medical Physics

John Plastaras, M.D.
Chief of the GI/Lymphoma Service

Curt Deville, M.D.
Chief of the GU and Sarcoma Services

Sam Swisher-McClure, M.D.
Program Director, Medical Residency Program

Annemarie Fernandes, M.D.
Chief Resident

Jacob Shabason, M.D.
Assistant Chief Resident

Amy Avellino, MS, RN
Director of Clinical Operations

Kurt Morath
Director of Operations

AWARDS

**Cordy Baffic**
2014 ACGME-GME Program Coordinator Excellence Award

**Amy Avellino**
Kendall Fund for Excellence and Leadership in Nursing

**Justin Bekelman, M.D.**
Kligerman Fund for Excellence and Leadership in Healthcare Economics and Outcomes Research

**Nela Maskuti**
Photograph accepted in the Celebration of Life and Art Exhibit
OH, THE PLACES YOU’LL GO . . . WITH THE PENN RADOnc LOGO!

How creative can you get?
The mountain tops, the movies, a fishing boat I bet!
How exciting it will be,
and interesting for all to see
you with the Penn RadOnc logo
in all the unique places you will go go!

The Challenge:
Use shirts, jackets, bags, signs, stickers, etc., to sport the Penn RadOnc logo in the most unique, creative and/or unusual places!

The How-to:
(1) Find our logo on the share drive: I:\Shared\RadOnc Presentation Template\PennRadOnc Logo.JPG
(2) Take a picture of you with your logo in a unique location
(3) Submit your photo to Kat Voetelink at kat.voetelink@uphs.upenn.edu

The Reward:
The most creative photos will be featured in the next edition of the newsletter! Each new edition of the newsletter will be an opportunity to showcase your unique photo.

So get to snapping before it’s too late!
Your photos are sure to be great.
Everyone will get a good chuckle when they see the logo on a belt buckle in the middle of the desert dry or from an airplane in the sky!
Oh, what a clever idea that would be.
Now onto your journeys and let your imaginations run free!!
Congratulations OncoLink®!!!
OncoLink Celebrates its 20th Anniversary

In March of 1994, Dr. Joel Goldwein launched OncoLink, the first cancer information site on the Internet, from his office at the University of Pennsylvania. Dr. Goldwein thought OncoLink would be a good way for physicians to share information. Little did he know that this would become one of the most trusted sources of cancer information for patients, families and healthcare professionals. As we celebrate its 20th anniversary (how many websites can say that?), let’s look back and see just how far it’s come!

In January of 1994, there were only 30,000 domains on the Internet – compare that with almost one billion today. OncoLink started as a source of links to cancer information on the web, before Google, or any browser for that matter! Not long after its inception, the team of doctors and nurses involved started writing their own content and today OncoLink houses over 150,000 articles. This soon expanded to include conference coverage – physicians reporting from professional meetings so colleagues around the globe could get the latest research reported the day it was presented.

Over the next few years, the OncoLink team expanded to include content written by many disciplines, including nursing, dieticians, physical and occupational therapists, social workers and more. This multidisciplinary approach allows OncoLink to cover the many areas a patient may be interested in learning about, such as treatment information, side effect management, nutrition and complementary therapies.

You may not know that OncoLink is run by a full-time staff of just 3 people! The site relies on the generosity and commitment of hundreds of volunteer clinicians and survivors who believe in its mission and give their time and expertise to develop and review content. It is this group that sets OncoLink apart from other sites.

The OncoLink team likes to dream big- think about things outside the usual healthcare box – and put those ideas into motion. This attitude has allowed OncoLink to be crowned with a few online “firsts”:

- First website to provide same-day reporting from professional meetings for physicians
- First to use an online, IRB approved, electronic consent form for a study
- First major US-based, online cancer resource translated into Spanish
- First website to have a clinical trials matching program, in collaboration with Emerging Med
- First to develop a personalized Cancer Survivorship Care Plan program
- First to develop a cancer risk assessment tool encompassing all cancers

In the past few years, technology has continued to expand and the OncoLink team have worked hard to keep up! OncoLink has social media pages (Facebook, Twitter and Google+) and have added lots of video content (see the Vimeo page). The blogs include inspiring survivors and caring oncology nurses and Registered Dieticians. OncoLink host webinars at least once a month, addressing many topics that are useful to both patients and caregivers. To meet the needs of mobile and tablet users, OncoLink underwent a redesign using responsive design technology.

Half of its users are nurses who are seeking patient education tools and information for themselves. The treatment binder builder allows care providers to create an educational booklet tailored to the needs of their specific patient. OncoPilot helps new patients navigate the cancer journey and keep track of appointments, medications and more. The medication teaching sheets are used by nurses all over the world! OncoLink’s survivorship care plan builder has been used to create over 35,000 care plans to date.

As it enters its third decade, the team is committed to continuing to improve the experience of cancer patients and caregivers by empowering them with reliable information. Happy Birthday OncoLink - congratulations on this milestone!

Want to get involved? Become a blogger, a reviewer, a writer, a webinar host, a supporter....We need you to continue carrying the OncoLink mission into the next decade and beyond! For more information, email at hampshire@uphs.upenn.edu or cvachani@oncolink.org
RESEARCH UPDATE

In October, the Research Division welcomed Meena Swaminathan as the Chief Financial and Administrative Officer for our division. Meena was previously a business/grants manager in the Finance Department of the Wharton School. Before this, she was a grants manager in the Department of Dermatology and a business administrator in the Department of Neuropsychiatry/Psychiatry in the Perelman School of Medicine. We are delighted for the many years of experience in research administration that she brings to our division. Her office is located on the 8th floor of the Smilow Center for Translational Research.

Also new to the division in recent months are Dr. Mariana Cooke to the Dorsey lab, Drs. Vladimir Popov and John (Ioannis) Verginadis to the Koumenis Lab, and Alan Mitter, Peihong Ma, and Menggui Huang to the Fan Lab. We are happy to have them join us in the 8th floor laboratories of the Smilow Center, and look forward to hearing more about their research findings in future seminars and publications of the Research Division.

In funding news, congratulations to Dr. Theresa Busch, together with co-investigators Drs. John Plastaras, Arjun Yodh and Mary Putt on funding for the R01 grant entitled “Effects of Photodynamic Therapy on Tumor Oxygenation and Blood Flow”. We also received news of excellent scores for two other R01 grants. The first is co-led by Drs. Amit Maity and Alex Lin, with co-investigators Drs. Costas Koumenis, Peter Ahn, Steve Hahn, David Mankoff, Daniel Pryma, Rosie Mick. The PI of the second well-scored grant was Dr. Jay Dorsey, with co-investigators Drs. Gary Kao, Yi Fan and Andrew Tsourkas. We look forward to sharing news of their funding in the upcoming months.

QUALITY UPDATE

Progress with FY14 Quality Goals

Each fiscal year we establish 3 Rad Onc quality goals. In prior years, we have met or exceeded all of our quality goals. Progress on the FY14 objectives is notable.

1) Feedback and Communication about error specifically focused on 2 questions from the safety culture survey: “We are given feedback about changes put into place based on event reports” and “We are informed about errors that happen in this department”. Feedback conditions have been established, CRSFB, and are being shared during staff meetings.

2) Medication Reconciliation completed by Attending Physician during Consult, OTV, and Follow-up appointments was a quality goal in FY13. Congratulations to Attending Physicians on exceeding the FY13 goal. In our continued focus to move from good to great, this is again a quality goal for FY14. Attending Physicians achieved high performance with this goal in November and December.

3) Timeliness of CT Sim Instruction Sheets has been meeting the goal for percentage due by Noon day prior to Sim. This year’s focus continues on the percentage due by 8am the day of Simulation. Since July, Attending Physicians achieved Threshold 5 of 6 months, and Target one of 6 months. Efforts and focus continues as we are confident that Target is attainable for the second half of FY14. In addition, beginning January 2014, Network affiliates will begin tracking this metric.
AROUND THE NETWORK

Chester County Hospital
We are pleased to announce the appointment of Andre A. Konski, MD, MBA, MA, FACR as the Medical Director of the Department of Radiation Oncology at Chester County Hospital.

Dr. Konski earned his Medical Degree in 1984 from New York Medical College. He earned a Master’s in Business Administration, as well as a Master of Arts in Economics from the University of Toledo in 1995 and 1998 respectively. In 1998, he completed his residency in radiation oncology at Strong Memorial Hospital in Rochester, New York.

At Chester County Hospital, Dr. Konski will be responsible for further building upon the clinical services already offered at the hospital, including evaluation, treatment, and follow-up care. The Radiation Oncology program will be expanding the scope of services offered using its TrueBeam linear accelerator, as well as adding a new CT simulator and high dose rate (HDR) brachytherapy in summer 2014.

Pennsylvania Hospital
Pennsylvania Hospital has been selected as one of America's Best Breast Centers by the Women's Choice Award from Women Certified. Our center was selected because it met the criteria, including NAPBC accreditation and ACR BICOE accreditation. Fewer than 300 breast centers are being honored with this award in 2014, making us one of the very best breast centers in the nation.

Doylestown Hospital
Rachel Saks, MSS, LCSW is our new social worker. She’s a Doylestown Hospital employee who works for our Penn Rad Onc Doylestown practice 8 hours per week. She joined us last fall and since has made a huge difference for our patients and even staff. She completes assessments on every patient and screens them for distress, offering helpful information and resources, as well as support. This year she even helped acquire a car through a non-profit agency for a family that truly needed it. We are thrilled to have Rachel as a team member at Doylestown!

Phoenixville
Penn RadOnc at Phoenixville hosted an open house to showcase the new Varian TrueBeam on October 23rd.

Valley Forge
Happy 1st Anniversary! Although the celebration was canceled due to inclement weather, we marked the one year anniversary of the opening of Penn Radiation Oncology at Valley Forge.

For more information about the Penn Radiation Oncology Network, please contact:
Rose Mueller, Network Operations Director-215-776-4031
Dr. Bill Rate, Clinical Director, Network 267-880-2710
Karen Zatzariny, Network Practice Manager 267-234-4452
SOCIAL SCOOP

Holiday Fun
The bad weather couldn't keep us from enjoying the holiday season! Employees celebrated with the Charity Basket Raffle and the Annual Department Holiday Party!

Dress on a Dime
As a major sponsor of the Dress on a Dime event, Penn RadOnc put together a coveted basket for the auction called Black and White Approved and Dr. Et-tsu Chen was the MC for the 5th year.

Phoenixville Color Run
As one of the event organizers, Mary Thomas, along with Dr. Et-tsu Chen and Beth Leszkowicz, lead therapist at VF, participated in the Phoenixville Color Run charity event. Last year the event had a little over 100 participants, but this year, an amazing 1100 runners participated!!
RECOGNITION ROUND-UP

Employee Rewards & Recognition Peer Recognition
Excellence is exhibited in the Department of Radiation Oncology each and every day! With our dedicated and hard-working staff, we continue to make patient care our number one priority. Join us in congratulating the following employee’s who were nominated by their colleagues for their contributions to the department.

Diana Alcavage   Mike Bieda   Amber Clemmer   Nikki Davis
Kelly Farrady   Elizabeth Garver   Erin Hendrickson   Genevieve Hollis
Paul James   Roberto Lorenzo   Sarah Lowitz   Kim Nocito
Dana Patsch   Kevin Teo   Patricia Velez

EDUCATION CONNECTION

Clinical Trials Course
On October 4th, our department held the 2nd Annual Course on Clinical Trials in Radiation Oncology, where we welcomed over 100 residents and junior faculty from primarily the northeast. Faculty were from seven institutions (Harvard, Memorial Sloan-Kettering, Johns Hopkins, University of Maryland, Radiation Therapy Oncology Group (RTOG), Jefferson, and Yale University), in addition to John P. Plastaras, MD, PhD from Penn Radiation Oncology and Corey Langer, MD, from Medical Oncology at Penn. Highlights included a “Meet-the-Professor” lunch and a happy hour for participants and faculty, in addition to a day of lectures. Neha Vapiwala, MD and Abigail T. Berman, MD served as course co-directors.

Proton Therapy Clinical Education Program
We are pleased to announce that Penn Medicine's Department of Radiation Oncology, Roberts Proton Therapy Center, OncoLink and IBA (Ion Beam Applications SA) have launched the first comprehensive Proton Therapy Clinical Education program. The Proton Therapy Clinical Education Program is made up of a wide array of educational modules, ranging from an introduction to proton therapy to very specific clinical topics such as the treatment of non-small cell lung cancer or head and neck cancers with pencil beam scanning. By participating in this program, proton therapy centers can train their staff members to safely and effectively start proton therapy treatment in their facilities. It will also help to accelerate the ramp-up of patient treatment and increase the variety of cases treated. These comprehensive training modules are constructed by members of Penn Medicine’s Department of Radiation Oncology and Roberts Proton Therapy Center.

Resident Awards

Brian Baumann
Abstract selected for presentation at the Best of ASTRO conference, 2013
Elected to Sigma Xi Scientific Research Society

Annemarie Fernandes
ASTRO Annual Meeting Travel Award, 2013

Xuanfeng Ding
2012 Award of Excellence for the best Medical Imaging Article, Journal of Applied Clinical Medical Physics
MOVIE REVIEW: GRAVITY
by Eli Glatstein, M.D.

This is a movie that you really have to see on a wide screen in 3D. The technical expertise that went into this movie are astonishing and the imagery unbelievable. The movie starts with a shuttle Explorer gradually orbiting into sight. There are three astronauts outside the ship; one of them is a rookie astronaut on her first trip to space, played by Sandra Bullock, who is basically a scientist with minimal training. The second astronaut is a veteran astronaut played by George Clooney. Clooney has a secondary role here, but his star magnetism comes through even though it is primarily his voice that you identify with as he is covered up by a cocoon of a space suit. There is a third astronaut who initially is flipping around doing tricks in space shouting WEEEE!

The amazing thing about this movie is that it is taking place in space. The earth is in the background and the absence of gravity makes everything seem abnormal, but peaceful and serene. The movie capitalizes enormously on technology and the silence of space, which is in its own way another character.

Very few words are spoken from Houston. The Russians have demolished an old satellite and it is sending debris flying through the belt in which the shuttle is orbiting. I’m not entirely clear as to why the debris is so violent, but it strikes the spacecraft with tremendous force sending Clooney and Bullock hurtling in space, spinning and somersaulting. Bullock’s character is adrift and tumbling over, she is weightless and is cut off from communications with Houston and she is breathing too fast and using up her oxygen. It is sort of like a horror film, but the horror in this film is the nothingness of space.

Bullock’s character floating in space is a kind of a metaphor for her life that has been in a permanent suspension. This is Bullock’s picture and she gives a tremendous performance. The rest of the movie is basically how to get her back to earth and her passion for survival. As I said before, you want to see this one on a big screen and preferably in 3D. By the time it is over, you will be as exhausted as Sandra Bullock!

DELICIOUS DISH: A Memorable Meatball at Little Nonna's
by Rebecca Wilson

Little Nonna’s is an Italian restaurant from the brilliant culinary minds of Marcie Turney and Valerie Safran. I have been a huge fan of Turney and Safran’s restaurants that have turned 13th Street into a mecca of delectable food choices (e.g.; Baruzzo, Jamonera and Lolita). We expected a homely restaurant complete with an Italian mother’s cooking and that was exactly what we got. We started with the Grilled Little Gem Caesar and Garlic Bread. Both were done well and we enjoyed the crispy pieces of polenta in the Caesar. For our entrees we ordered the Spaghetti and Meatballs and Lemon Chicken "Al Manton". The meatballs were large and surprisingly filled with fontina cheese. We have had our share of meatballs and these were exceptional. They were not heavy or dry and the cheese added flavor and complexity. The Lemon Chicken was also cooked to perfection. My favorite aspect of this dish was the crispy fingerlings. I couldn't stop eating them! They were perfectly seasoned and crispy.

The success of Little Nonna’s is in the details. Everything about the restaurant makes you feel like you are in an Italian mother's kitchen. The restaurant is small, which adds to the ambiance. From the outside, it looks quaint with a striped awning and lace curtains. Inside it is welcoming with warm colors and decorative tchotchkes that remind you of your grandmother’s home. Because of its small size, I would recommend reservations. Patrons walked in without reservations and were told they could sit at the bar - not the best option. Unfortunately, we couldn't fit dessert, but what we saw looked good. From start to finish, there were smiles all around and for a reasonable price. I will definitely return for some homey Italian cooking and some memorable meatballs.
DEPARTMENT PUBLICATIONS

Radiation Injury to the Normal Brain Measured by 3D-Echo-Planar Spectroscopic Imaging and Diffusion Tensor Imaging: Initial Experience

Stage Migration in Planning PET/CT Scans in Patients Due to Receive Radiotherapy for Non-Small-Cell Lung Cancer

mRNA Expression Profiles for Prostate Cancer following Fractionated Irradiation Are Influenced by p53 Status
Simone CB 2nd, John-Aryankalayil M, Palayoor ST, Makinde AY, Cerna D, Falduto MT, Magnuson SR, Coleman CN.

What's in a Label? Radioimmunotherapy for Metastatic Prostate Cancer
Simone CB 2nd, Hahn SM.

Palliative care for patients with locally advanced and metastatic non-small cell lung cancer
Simone CB 2nd, Jones JA.

Experimental characterization of two-dimensional spot profiles for two proton pencil beam scanning nozzles
Lin L, Ainsley CG, Solberg TD, McDonough JE.

Non-human primate model of human radiation-induced venocclusive liver disease and hepatocyte injury

Localization accuracy and immobilization effectiveness of the stereotactic body frame for a variety of disease sites

Multi-staged robotic stereotactic radiosurgery for large cerebral arteriovenous malformations
Ding C, Solberg TD, Hrycushko B, Medin P, Whitworth L, Timmerman RD.
DEPARTMENT PUBLICATIONS (continued)

**Predicting tumor radiation response using noninvasive BOLD and TOLD MRI**
Magnetic Resonance in Medicine, [Epub ahead of print], 2013.

**Optimization of normalized prescription isodose selection for stereotactic body radiation therapy: conventional vs. robotic linac**
Ding C, Solberg TD, Hrycushko B, Xing L, Heinzerling J, Timmerman RD.

**Comprehensive Commissioning of the Varian TrueBeam Linear Accelerator: A Multi-institutional study**

**Depletion of regulatory T cells does not influence the inflammation caused by high dose hemi-body irradiation**
Ma S, Richardson JA, Bitmansour A, Solberg TD, Pidikiti R, Song K, Vitetta E, Meyer JM.

**Spinal cord tolerance to single-fraction uniform irradiation in swine: implications for a dose-volume effect**
Medin PM, Foster RD, van der Kogel AJ, Sayre JW, McBride WH, Solberg TD.

**Development of a Locally Advanced Orthotopic Prostate Tumor Model in Rats for Assessment of Combined Modality Therapy**

**2D-3D registration for brain radiation therapy using a 3D CBCT and a single limited field-of-view 2D kV radiograph**
Reshma Munbodh, Douglas J Moseley

**Quantifying cell migration as a contributing factor to the development of rectal toxicity after prostate radiotherapy**
Reshma Munbodh, Andrew Jackson,
Medical Physics. In press.

**Impact of internet-based cancer survivorship care plans on health care and lifestyle behaviors**
DEPARTMENT PUBLICATIONS (continued)

Implementation of an improved dose-per-MU model for double scattered proton beams to address inter-beamline modulation width variability
Li Yong Lin, Jijian Shen, Christopher G Ainsley, Timothy D Solberg, James E McDonough
Accepted by Journal of Applied Clinical Medical Physics, 2014

Charged Particle Radiotherapy
William P. Levin, M.D. and Thomas F. DeLaney, M.D.

Physiologically guided approach to characterizing respiratory motion
B. White, T. Zhao, J. Lamb, J. Bradley, D. Low.

Modeling and incorporating cardiac-induced lung tissue motion in a breathing motion model
Med. Phys. 41(3)(2013)

Comparison between existing and proposed 4DCT protocols
Oral Presentation, ESTRO Annual Meeting 2014

A novel fast-helical 4DCT acquisition technique to generate low noise artifact-free images at user selected breathing phases
D. Thomas, J. Lamb, B. White, S. Jani, S. Gaudio, P. Lee, D. Ruan, M. McNitt-Gray, D. Low.

Overlooked Lymph Nodes in Rib Cage Have Prognostic Power for Mesotheioma Patients
Melissa Culligan, Mary Putt, Stephen M. Hahn, Evan Alley, Charles Simone, Daniel Sterman, and Keith A. Cengel.
Oral Presentation, International Association for the Study of Lung Cancer’s 15th World Conference on Lung Cancer

Practical considerations in the calibration of CT scanners for proton therapy
C Ainsley, C Yeager

Integrating Nurse Practitioners Into Radiation Oncology: One Institution’s Experience
G. Hollis, E. McMenamin
J Adv Pract Oncol 2014;5:42–46

Optimizing bladder cancer locoregional failure risk stratification after radical cystectomy using SWOG 8710
John Christodouleas, Brian Baumann, Jiwei He, Wei-Ting Hwang, Kai Tucker, Justin Bekelman, Cathy Tangen, Seth Lerner, Thomas Guzzo, S. Bruce Malkowicz
Cancer, 2014.
DEPARTMENT PUBLICATIONS (continued)

**Occult Pelvic Lymph Node Involvement in Bladder Cancer: Implications for Definitive Radiation**
Benjamin Goldsmith, Brian Baumann, Jiwei He, Kai Tucker, Justin Bekelman, Curtiland Deville, Neha Vapiwala, David Vaughn, Stephen M. Keefe, Thomas Guzzo, S. Bruce Malkowicz, John Christodouleas
IJROBP, 2014.

**Patient Reported Outcomes After Prostate Cancer Treatment**
Surbhi Grover, MD, MPH, James M. Metz, MD, Carolyn Vachani, MSN, RN, AOCN, Margaret K. Hampshire RN, BSN, OCN, Gloria A. DiLullo, MSN, CRNP, Christine Hill-Kayser, MD.
Accepted for publication in Journal of Clinical Urology

**Patterns Of Intracranial Control After Stereotactic Radiosurgery To The Resection Cavity**
Ojerholm E, Thawani J, Miller D, Alonso-Basanta M, Lee JYK.

**Gamma knife radiosurgery to 4 or more brain metastases in patients without prior intracranial radiation or surgery**
Ojerholm E, Lee JYK, Kolker J, Lustig R, Dorsey J, Alonso-Basanta M.
*Cancer Medicine.* Forthcoming 2014.

**Clinical utility of integrated positron emission tomography/computed tomography imaging in the clinical management and radiation treatment planning of locally advanced rectal cancer**
PRO (currently in press)

**Radiotherapy and the tumor microenvironment: mutual influence and clinical implications**
Thompson RF, Maity A.

**Prospective Trial of Proton Re-irradiation of Recurrent Pelvic Tumors: Dosimetric Analysis**
Berman AT, Both S, Sharkoski T, Metz JM, Apisarnthanarax S, Tochner Z, Plastaras, JP.
In press at International Journal of Proton Therapy.

**A Comprehensive Dosimetric Study of Pancreatic Cancer Treatment Using Three Dimensional (3D) Conformal Radiation Therapy, Intensity-Modulated Radiation Therapy (IMRT), Volumetric Modulated Radiation Therapy (VMAT), Passive Scattering and Modulated Scanning Proton Therapy (PT)**
Medical Dosimetry (in press)

**Is There a Need for Resident Training in Clinical Trial Design?**
Berman AT, Shea J, Baffic C, Vapiwala N.
In press at Int J Radiat Oncol Biol Phys.
DEPARTMENT PUBLICATIONS (continued)

Assessing Interpersonal and Communication Skills in Radiation Oncology Residents: a Pilot Standardized Patient Program
Ju M, Berman AT, Hwang, WT, LaMarra, D, Baffic C, Suneja G, Vapiwala N.
In press at Int J Radiat Oncol Biol Phys.

Absolute calibration of optical power for PDT: Report of AAPM TG140
Zhu TC, Bonnerup C, Colussi VC, Dowell ML, Finlay JC, Lilge L, Slowey TW, Sibata C.

Triple negative breast cancer initiating cell subsets differ in functional and molecular characteristics and in γ-secretase inhibitor drug responses

Mitigating effects of L-selenomethionine on low-dose iron ion radiation-induced changes in gene expression associated with cellular stress
Nuth M, Kennedy AR.

Leukocyte activity is altered in a ground based murine model of microgravity and proton radiation exposure

Effects of solar particle event proton radiation on parameters related to ferret emesis
Radiat Res. 2013 Aug;180(2):166-76.

Is Disseminated Intravascular Coagulation the Major Cause of Mortality from Radiation at Relatively Low Whole Body Doses?
Krigsfeld GS, Kennedy AR.
Radiat Res. 2013 Sep;180(3):231-4

Relative biological effectiveness of simulated solar particle event proton radiation to induce acute hematological change in the porcine model
Sanzari JK, Wan SX, Diffenderfer ES, Cengel KA, Kennedy AR.

The Myc-miR-17-92 axis amplifies B-cell receptor signaling via inhibition of ITIM proteins: a novel lymphomagenic feed-forward loop
Psathas JN, Doonan PJ, Raman P, Freedman BD, Minn AJ, Thomas-Tikhonenko A.
Blood. 2013 Dec 19;122(26):4220-9
DEPARTMENT PUBLICATIONS (continued)

A phase I study of nelfinavir concurrent with temozolomide and radiotherapy in patients with glioblastoma multiforme

Monte Carlo modeling in CT-based geometries: dosimetry for biological modeling experiments with particle beam radiation
Diffenderfer ES, Dolney D, Schaettler M, Sanzari JK, McDonough J, Cengel KA.

Gold-Loaded Polymeric Micelles for Computed Tomography-Guided Radiation Therapy Treatment and Radiosensitization

miR-218 opposes a critical RTK-HIF pathway in mesenchymal glioblastoma