

**WELCOME**

**Message from the Chair**



Happy Holidays! I hope you will be able to join us for our annual holiday party being held on December 15, 2017. This year we will be on the Battleship New Jersey outside decks where there will be heated tents with clear sides to see the Philly skyline and enjoy the evening. We will also have a shuttle from the parking area to the Battleship New Jersey. It promises to be a fun filled event!

Please take some time to review what is going on with our team in this edition of the newsletter. I want to especially thank all of the people that volunteered and contributed to the successful proton 3 day training program in November. We could not have done it without all of your help and participation. It was another great event with 23 countries represented. Our training programs will be expanding with a recent contract with Varian to offer proton education programs to their customers. Also, congratulations to the Halcyon team as Penn treated the first patients in the world with this new linear accelerator platform this Fall. Our team continues to work to expand indications and optimize treatment delivery for the future. Have a wonderful Holiday Season!!

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Friday, December 15, 2017  
 6:00 - 10:00 PM  
*Penn Radiation Oncology*  
*Holiday Party*  
 The Battleship New Jersey  
 100 Clinton Street Camden, New Jersey  
 A parking shuttle will take you to and from the parking lot and ship



# Fourth Annual Course on **PROTON THERAPY**

November 17-19, 2017

## Training the World

### **Penn Radiation Oncology Draws Global Crowd for Proton Therapy Course**

This year's Fourth Annual Course on Proton Therapy took place from November 17-19, 2017 and welcomed over 145 participants from all over the world including Argentina, Belgium, Brazil, Canada, Cyprus, Colombia, Hong Kong, Italy, Ireland, England, India, , Japan, Monaco, Pakistan, Panama, Qatar, Russia, Singapore, Sweden, Turkey, UK and Uzbekistan. The three day comprehensive course has received positive feedback and increasing popularity in the international proton community.

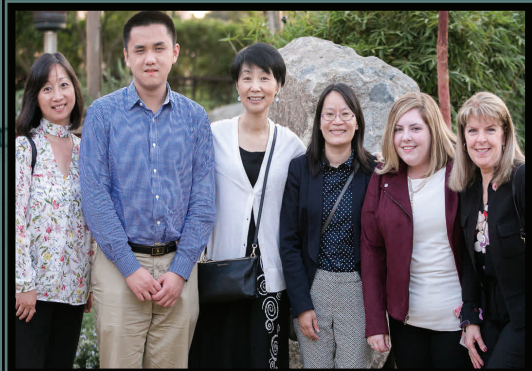




# ASTRO 2017

## San Diego, California

### September 24– 27, 2017



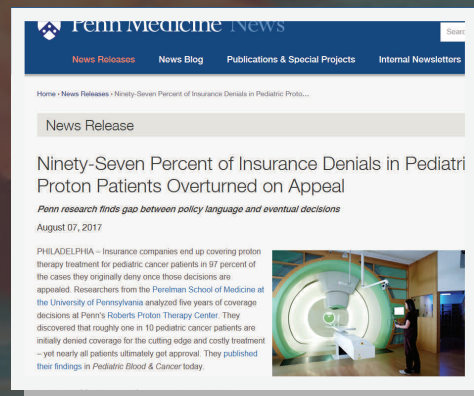


### Penn Study: Insurance Policies Should Be Revised to Cover Costly Proton Therapy for Pediatric Cancer

A new study from **Eric Ojerholm, MD**, an instructor of Radiation Oncology, and **Christine Hill-Kayser, MD**, an assistant professor of Radiation Oncology, shows 97 percent of pediatric cancer patients whose insurance denied coverage of proton therapy was able to successfully appeal that decision.

Click on link below to read full article:

<https://www.penmedicine.org/news/news-releases/2017/august/ninety-seven-percent-of-insurance-denials-in-pediatric-proton-patients-overturned-on-appeal>



### Penn Medicine Radiation Oncology Delivers First Treatment in the World with Halcyon

Penn Medicine Radiation Oncology successfully delivered the first treatment in the world with the new Halcyon Linear Accelerator technology on 09/13/2017. The department spent the past 2 years developing this unique cancer treatment with Varian. It is an incredibly proud moment that was preceded with extensive efforts and coordination to get everything in order.



Thank you to the entire department for your support on so many levels to make this happen. There are so many direct and indirect efforts that contributed to the success of this project. We will continue exploring the ap-

plications of this technology in the coming months and years. Everyone should be proud of this successful launch in the department. This is an important step for the department and Penn Medicine as we continue to lead the world in next generation treatment for cancer patients.

### Varian Partners with Penn Medicine for Proton Therapy Training and Education Program

Varian announced it is partnering with Penn Medicine to develop and launch a comprehensive proton therapy training and education program.

Comprised of both online and in-person training sessions, participants will have the opportunity to learn key clinical concepts firsthand from proton therapy experts at Penn Medicine.

<https://www.prnewswire.com/news-releases/varian-partners-with-penn-medicine-for-proton-therapy-training-and-education-program-300561931.html>





Holiday Charity Basket Raffle  
December 14, 2017 : 12:00—3:00 PM

The Raffle takes place on:  
December 14<sup>th</sup> 12:00pm to 3:00pm  
TRC 2 West

(Preview Day December 13<sup>th</sup> 12pm-2pm in conference room 2-311 (behind Susan's Office)  
(Drawing to be held at 3:00pm, you do not need to be present to win)

- There will be 10 consolation prizes chosen at the end of the day.

Last Year, we received 46 baskets and raised \$3600.



Rad Onc Clinical Research Team - Adopt-a-Family

The Clinical Research Group is again hosting a loose change jar to adopt a family for the holidays through Women in Transition. We invite everyone to donate their loose change and more to help make a family's holidays a little brighter. This year, their family is Giften and her four children, Janet (18), Rachel (7), Richelle (5) and P. Emmanuel (2). The jar is located on the fourth floor at the cubicles near the kitchen. All donations will be accepted through Dec. 13. Last year, they raised over \$540 to adopt two families!

Since 1971, Women in Transition has provided empowerment counseling, referrals and advocacy to women in Philadelphia who are endangered by domestic violence and/or substance abuse. For more information about the work of Women in Transition, please visit their website at [www.helpwomen.org](http://www.helpwomen.org).



**ADOPT A FAMILY**  
**HOLIDAYS 2017**



**Brendan Burgdorf, MMP**

Medical Physicist

**John J. Wilson, MD**

Clinical Associate

**Olivia Kamara, BA**

New Patient Coordinator

**Bahirah Nadar**

Financial Service Representative

**Michelle Halligan, BSN, RN**

Nurse

**Tara Ryan, BSN, RN**

Nurse

**Lemuel S Ariaratnam, MD**

Clinical Associate

**Deborah A. Butzbach MD**

Clinical Associate

### Welcome New Employees

**Dana Goodlett, MPH, MA**

Research Engagement Coordinator

**Neil Taunk, MD**

Instructor

**Andrzej Wojcieszynski, MD**

Instructor

**Alexis Harvey, MD**

Clinical Associate

**Silvia Beghi, MS**

Visiting Scholar

**Samuel Jean-Baptiste, BS**

Research, Fellow

**Christine Sbarra, MSN, RN, OCN**

Nurse

**Nicolas, Seranio, BS**

Research, Fellow

**Eric Ojerholm, MD**

Instructor

**Kate Gray, BSN, RN**

Clinical Nurse Manager

**Mary-Kate Cellmer, MBA**

Director of Operations

**Christopher Copeland, BS**

Application Support Analyst

**Kuo Men**

Postdoctoral Researcher

**Francesca Costabile, MS**

Visiting Scholar

**Andrea Rycroft, BS**

Research Administrative Coordinator

**Catherine S. Kim, MD**

Clinical Associate

**David D. Wilson, MD, MS**

Clinical Associate

### Promotions & Appointments

**Costas Koumenis, PhD**

Richard H. Chamberlain Professor of Research Oncology

**Laura Kendrick, MHA, BS RTT**

**Theresa Burke**

Joined Health Care Provider Education Team

**Marinela Maskuti, MPH**

Manager, Global Education & Patient Engagement

**Ghecora Boyd, MPH**

Coordinator, Patient Engagement and Business Development

### Awards/Grants/Recognition

**Stephen Avery, PhD**

At-Large Member of AAPM Board of Directors

**Nicole Ellis, MSW**

Oncology Social Work Certification

**Genny Hollis, MSN, CRNP**

University of Pennsylvania School of Nursing, Department of Bio-behavioral Health Sciences Clinical Practice Award

**Maura Kirk, MMP**

First Place Winner of Proton Therapy: Advanced Applications for the Most Challenging Cases

You did it!  
*Congratulations*

### 25 /30 Year Club Inductee

**Linda Mas (25 Years)**

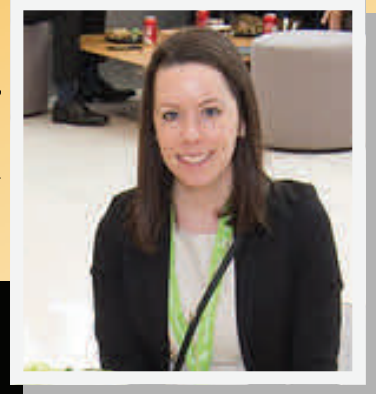


You did it!  
*Congratulations*



Proton Therapy Advanced Applications Winner

Congratulations to Maura Kirk, MMP for winning 1<sup>st</sup> place award in the most challenging proton case competition!



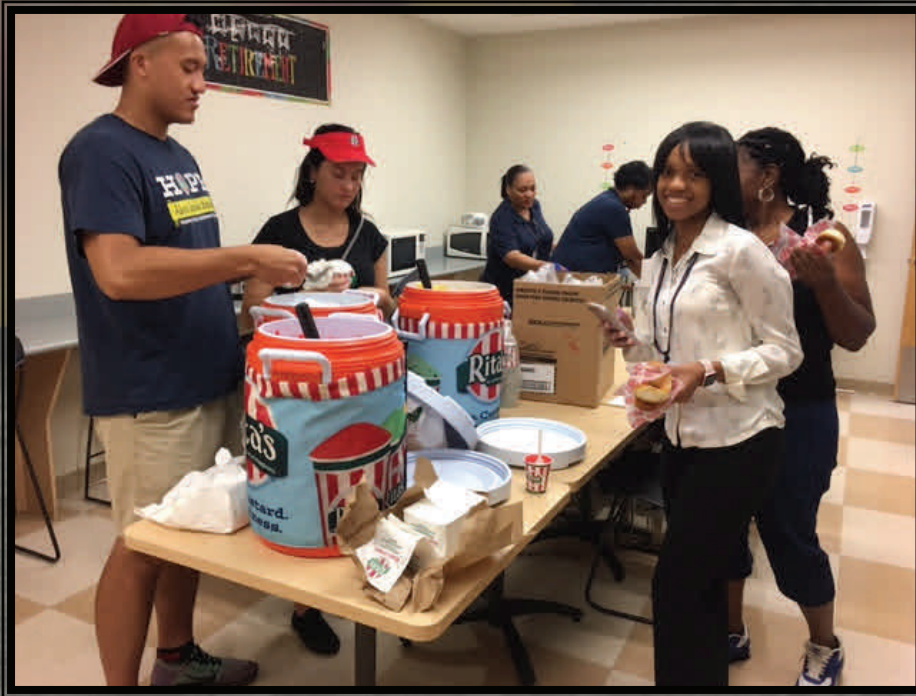
25 Year Employee Induction Dinner—September 28, 2017

Congratulations Linda Mas!

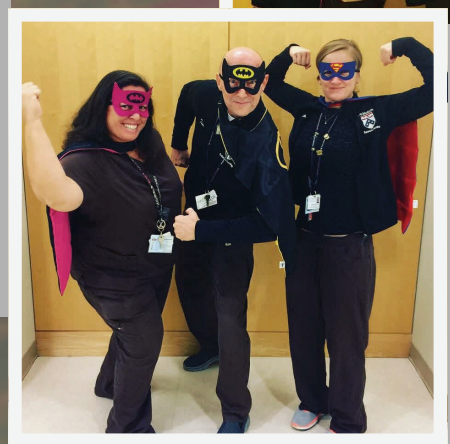
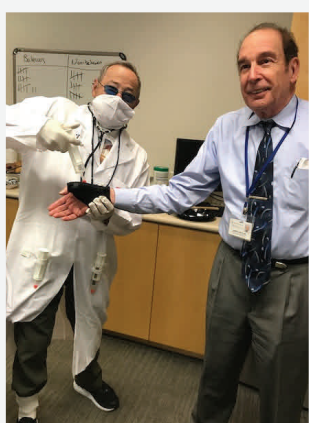




**Rewards & Recognition Update: Rita's Water Ice Event  
8/23/2017**



**Radiation Oncology Celebrates Halloween: 10/31/2017**





**ASTRO/ADROP 2017**



Pictured left to right: Neha Vapiwala, Mitchell Machtay, Libby Harris, Thomas Dilling, Cordy Baffic

**Rewards and Recognition Committee**  
**Awards Basket Charity Money**

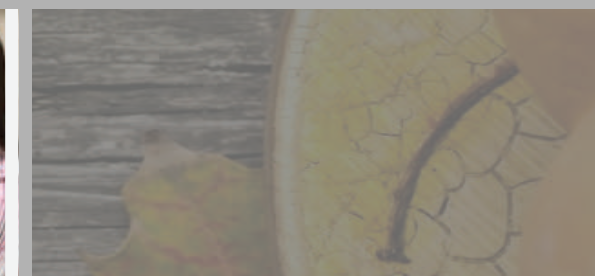
**Hearts United Against Cancer**

Sharon Civa and Dana DiGenova presented a donation to our non-profit from Penn Radiation Oncology's Employee Rewards and Recognition Committee. Part of this donation will be used to purchase supplies that this wonderful Committee will then turn into homemade blankets to bring warmth and comfort to Cancer Heroes. Thank you Sharon, Dana, and all the members of this Committee for your generosity. We truly appreciate your support that will help us deliver joy to Cancer Heroes ❤️





**Making Blankets to Benefit Cancer Patients for  
Hearts United Against Cancer— 11/13/2017**





# Social Scene

FALL 2017 NEWSLETTER

## Philly Fights Cancer—10/28/2017



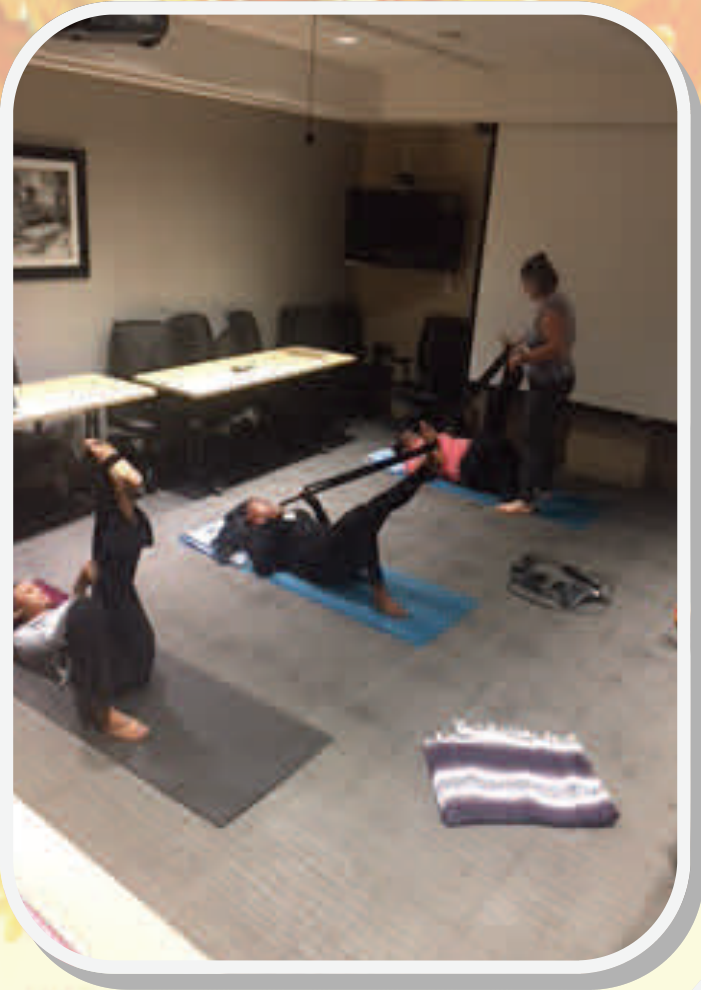
Abramson Cancer Center  
Penn Medicine



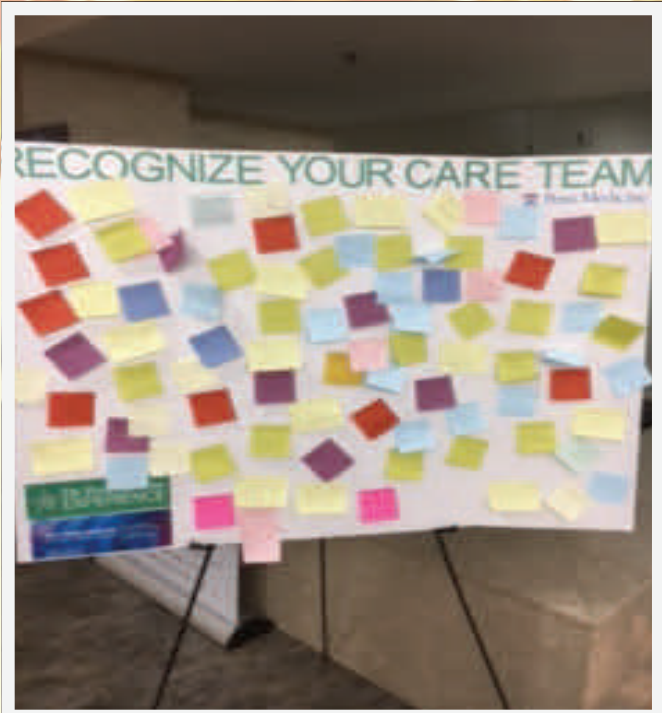
PHILLY FIGHTS  
CANCER  
▶▶ ROUND 3 ◀◀



**Penn Medicine Experience Week - October 16—20, 2017**



**Yoga**



**Patients Recognizing Staff for their Hard Work**



**Tailgate Spirit Day**



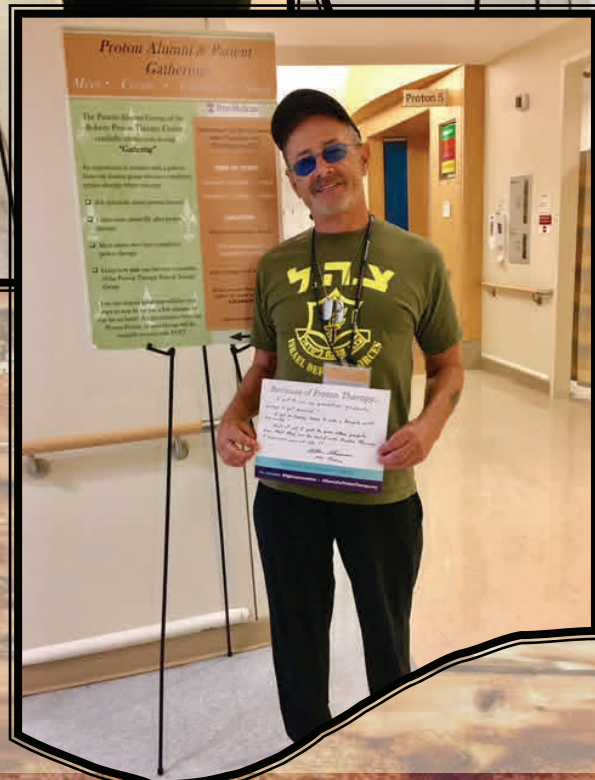
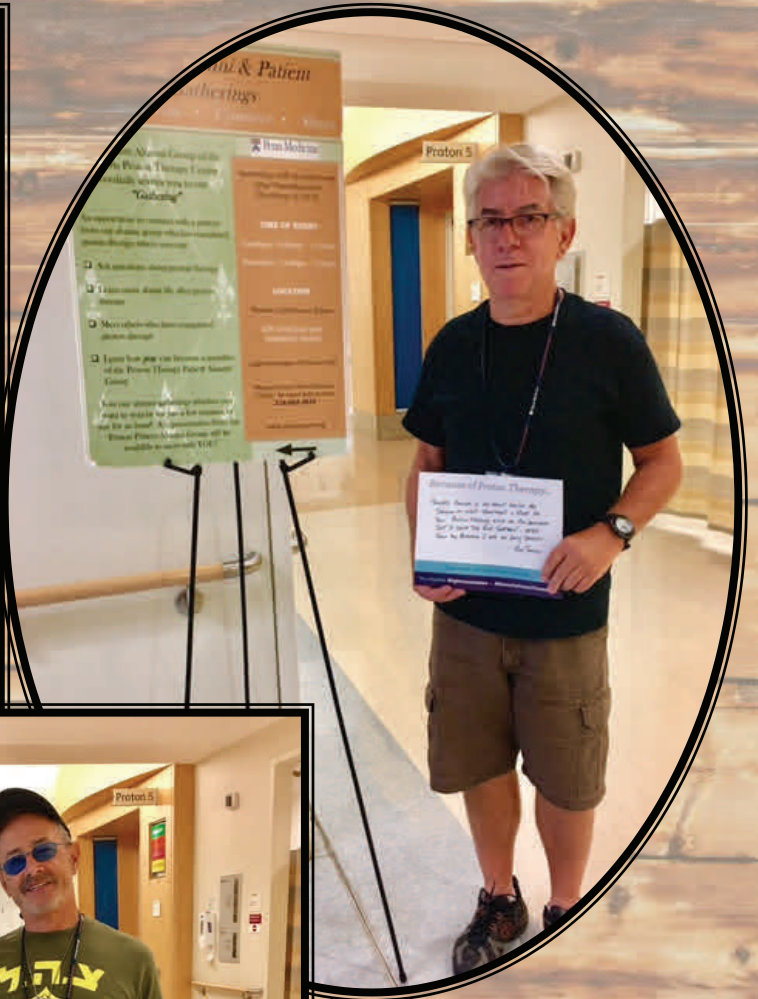
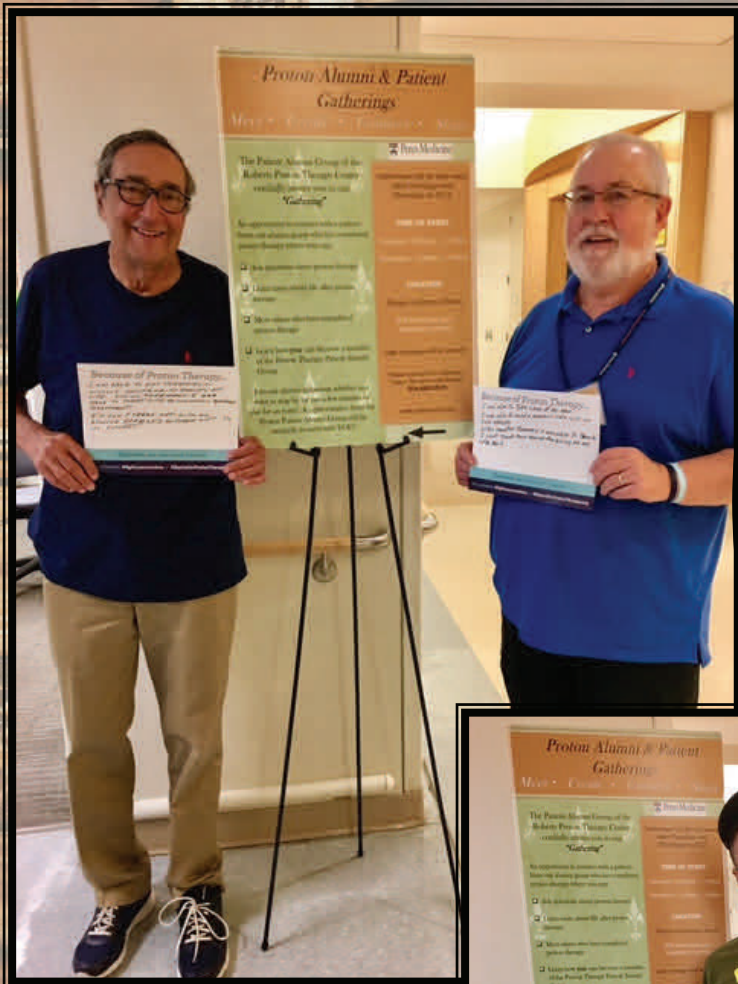
**Employees Recognizing Peers**



**Patient Advocacy Campaign**

**Proton alumni patients share their stories about the benefits of proton radiation therapy.**

**“Because of Proton Therapy.....”**





### Global Education Training Program:

### *Upcoming Visitors & Training Dates*

Proton Partners International (England/UK) - January 8—February 16, 2018

Christie Hospital (England/UK) - February 19—March 2, 2018

Apollo Proton Therapy Center (India) - March—April 2018

### RadOnc Medical & Physics Residency Program

### Escape the Room 7/28/17



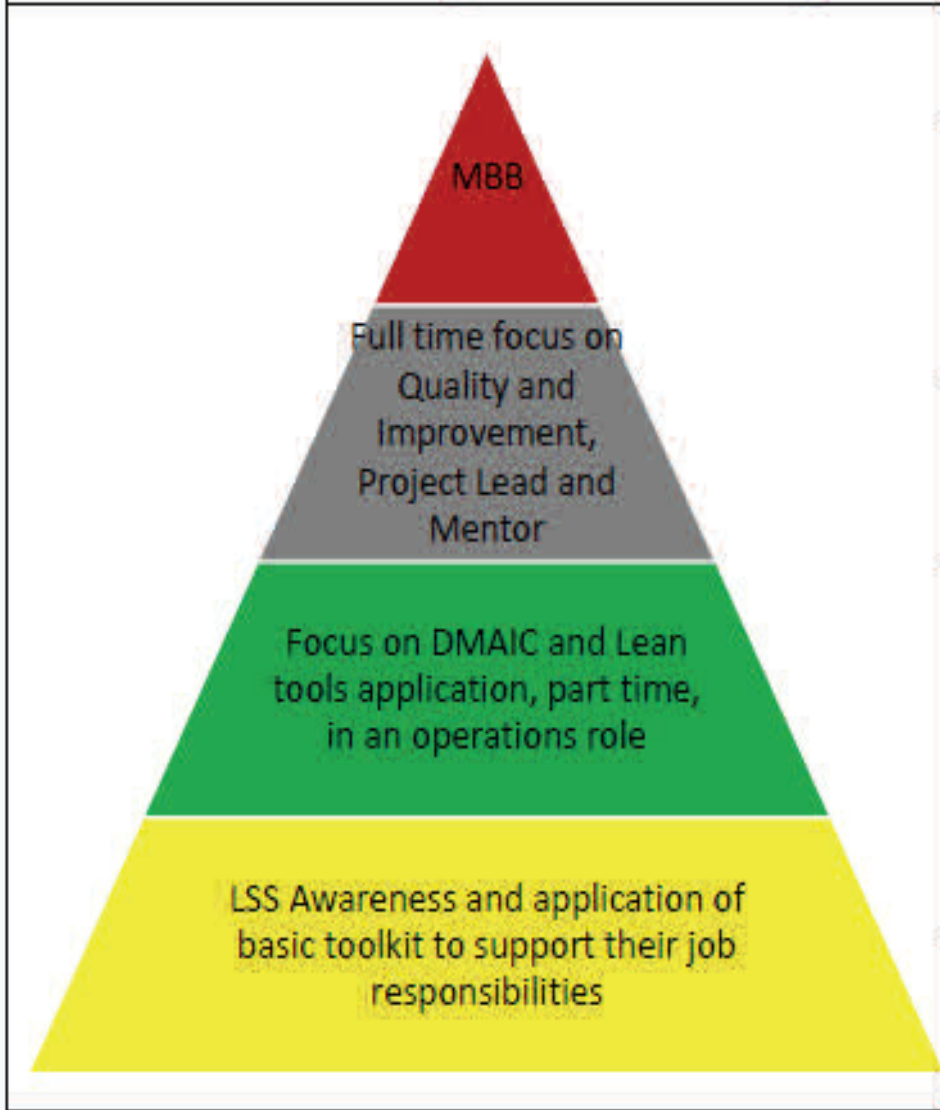
### College students “DREAM” of a career in medical physics

The American Association of Physicists in Medicine (AAPM) Diversity Recruitment through Education and Mentoring program (DREAM) is a summer program designed to increase the number of underrepresented groups in medical physics by creating new opportunities, outreach and mentoring geared toward diversity recruitment of undergraduate students in the field of medical physics.



<p><b>Lean</b> Remove Waste Increase Speed Remove Non-Value Add steps <b>Speed</b></p>	<p>Lean / Six Sigma Intersection Improved Quality Improved Delivery Satisfied Customers Satisfied Employees</p>	<p><b>Six Sigma</b> Reduce Variation Improve Quality Optimize Customer Focus <b>Accuracy</b></p>	
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## Penn Med Rad Onc is building Lean Six Sigma capability

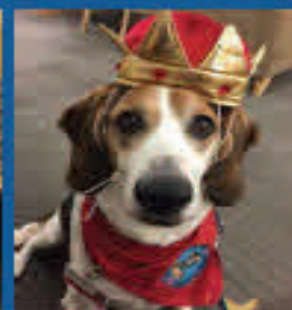
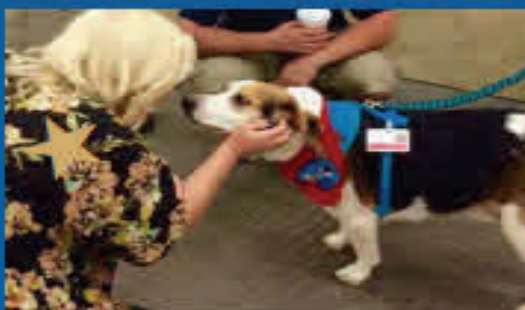


- MBB:**  
at the health system level
- Black Belts:**
- Edna Volz, MS, CMQ/OE, CLSSBB
  - Open, Sr Improvement Advisor
- Green Belts:**
- Meg Garret, RN, CLSSGB
  - Nate Anderson, MS, Physicist, CLSSGB
- Yellow Belts:**
- Michelle Sparrow, RN, Associate COO
  - Erin Davis, CRNP (yellow belt in training)
  - Sarah Lowitz, RTT Manager (yellow belt in training)
- Lean Change Agent:**
- Mary Kate Cellmer, Dir Clinical Operations



*In Loving Memory of*  
**Finn Bach**

founder of the Penn Radiation Oncology Pet Therapy Program



The Department of Radiation Oncology at Penn thanks Finn for the love he brought to our patients, caregivers and staff. He will be forever in our hearts.



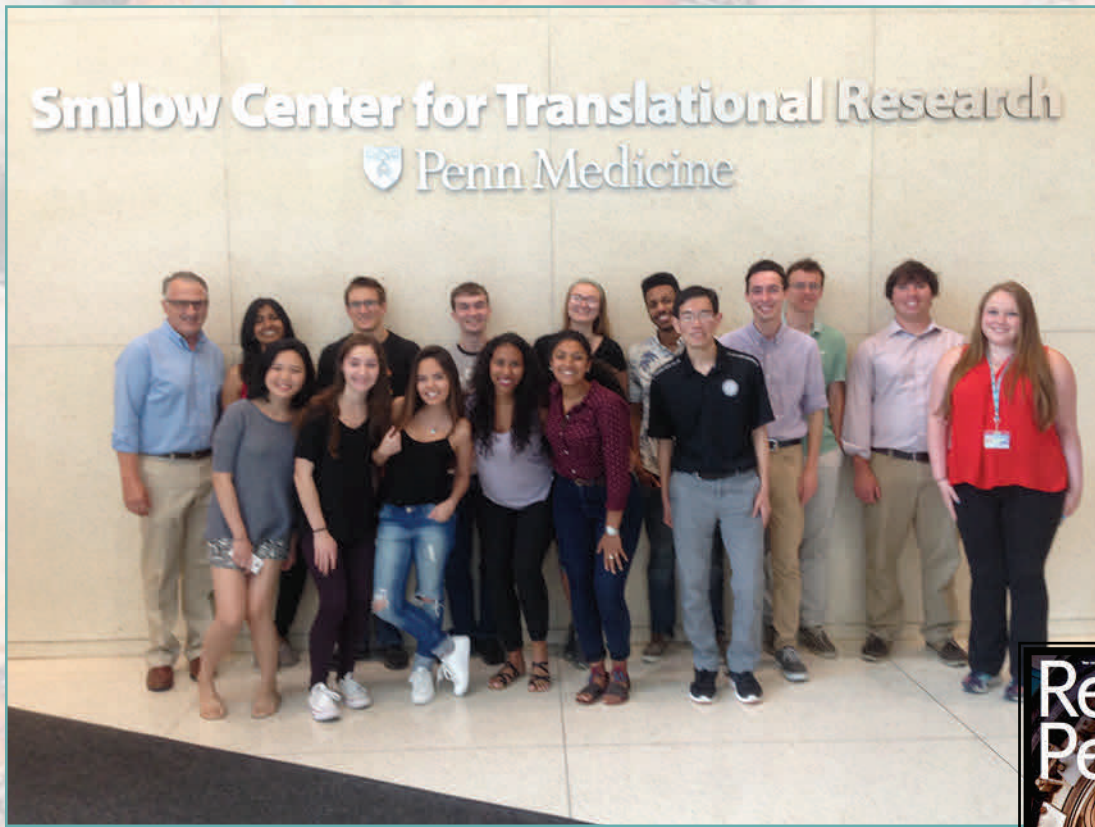
### Congratulations!

To **Dr. Yi Fan** for recently receiving the following 3 awards: The Sharpe Award from National Brain Tumor Society (NBTS); the Early Career Investigator Award from the Radiation Research Society (RRS) and the Brain Cancer Investigator Award from B\*Cured Foundation.

To **Dr. Costas Koumenis** for appointment as the Richard H. Chamberlain Professor of Research Oncology.

To **Dr. Jay Dorsey** and **Dr. Andy Minn** for their promotions to Associate Professor of Radiation Oncology.

**Summer Undergraduate Program for Educating Radiation Scientists (SUPERS) 2017** came to an end on August 10<sup>th</sup> with the day long End of Year Retreat. Each of the 15 students gave a 20-minute presentation on the findings of his or her own hypothesis-driven research. Keynote speaker, Dr. Celeste Simon, Scientific Director of the Abramson Family Cancer Research Institute, inspired the students with the story of her own research on, "Hypoxia, Metabolism, and Tumor Progression". We wish the SUPERS students all the best as they continue their scientific pursuits.



*SUPERS students, class of 2017, with Program Director, Dr. Stephen Tuttle.*



### Welcome to Research!

The lab of Dr. Andrea Facciabene welcomes 3 new members: Postdoctoral fellow, **Sergey Pustynnikov, PhD**; along with two visiting grad students, **Francesca Costabile** and **Silvia Beghi**. Kao Lab also welcomes 2 members: **Samuel Jean-Baptiste** and **Nicolas Seranio**, both research fellows. Over the summer, **Gwendolyn Cramer, PhD** joined the labs of Dr. Busch and Dr. Cengel as a postdoctoral fellow. The Koumenis Lab welcomes their new lab manager, **Frank Chinga**.



**Register/Submit Abstracts Now:** You are invited to attend the Annual ACC Radiobiology and Imaging Retreat on Friday, December 1, 2017, in the Smilow Center.

### **Abramson Cancer Center Annual Radiobiology and Imaging (RBI) Program Retreat**

**Friday, December 1, 2017**

**9:00am - 4:00pm**

Arthur H. Rubenstein Auditorium  
Smilow Center for Translational Research  
University of Pennsylvania

**Keynote Speaker:**

**George Sgouros, Ph.D.**  
Professor of Radiology and Radiological Science  
Johns Hopkins University

**Call for Abstracts and Registration Information:**

[http://www.xrt.upenn.edu/RBIRetreat\\_registration.html](http://www.xrt.upenn.edu/RBIRetreat_registration.html)



### **Upcoming Research Seminars:**

All Seminars are in SCTR 8-146AB from 12-1pm

*Thursday, December 14, Invited Speaker: Dr. David R. Gius, Northwestern University*

*Thursday, January 11, Radiobiology & Imaging Seminar: Dr. Edgar Ben-Josef, UPenn*

*Thursday, January 18, Invited Speaker: Dr. Chandan Guha, Einstein College of Medicine*

*Thursday, January 25, Invited Speaker: Eddy S. Yang, University of Alabama-Birmingham*

*Thursday, February 8, Radiobiology & Imaging Seminar: Dr. Jeffrey Winkler, UPenn*

*Thursday, February 22, Invited Speaker: Dr. Joseph Deasy, Memorial Sloan Kettering Cancer Center*

*Thursday, March 8, Radiobiology & Imaging Seminar: Dr. Lin Z. Li, UPenn*

*Thursday, March 22, Invited Speaker: Steven Lin, MD Anderson Cancer Center, University of Texas*



### Where in the World is Penn Radiation Oncology??

William Rate, MD (Doylestown) and Vicki Rate, RN, (PCAM) visited Surbhi Grover, MD to assist with the Gaborone clinic in Botswana, South Africa.



Gaborone, Botswana



Cape of Good

Hope



Victoria Falls, Zimbabwe





### Heart Walk—11/04/2017

Terri Synder (Network Operations Director) Dionne Graves (Lead Radiation Therapist, Pennsylvania Hospital) and RadOnc team participated at this year's Heart Walk that took place on November 4, 2017.



From L to R (Back Row:) Brett Dougherty, Angela Dougherty, Terri Snyder, Gwen Gardner, Tamar Smith, Brianna St. Hilaire, Anita Schoolfield and Dionne Graves

From L to R (Front Row:) N'dya Graves, Jai'aire Gurley, Braeden Smith, Brooklynn Smith, Elijah St. Hilaire, Aiden Gardner



Shabason JE, **Minn AJ**. Radiation and Immune Checkpoint Blockade: From Bench to Clinic. *Semin Radiat Oncol*. 2017 Jul;27(3):289-98; PMID:28577836.

Sattiraju A, Xiong X, Pandya DN, Wadas TJ, Xuan A, Sun Y, Jung Y, Solingapuram Sai KK, **Dorsey JF**, Li KC, Mintz A. Alpha particle enhanced Blood Brain/Tumor Barrier permeabilization in glioblastomas using integrin alpha-v beta-3 targeted liposomes. *Mol Cancer Ther*. 2017 Jun 15; PMID:28619756.

Alley EW, Katz SI, **Cengel KA**, Simone CB, 2nd. Immunotherapy and radiation therapy for malignant pleural mesothelioma. *Transl Lung Cancer Res*. 2017 Apr;6(2):212-9; PMID:28529903; PMCID: PMC5420537.

Das JJ, Andersen A, Chen ZJ, Dimofte A, Glatstein E, Hoisak J, Huang L, Langer MP, Lee C, Pacella M, Popple RA, Rice R, Smilowitz J, Sponseller P, **Zhu T**. State of dose prescription and compliance to international standard (ICRU-83) in intensity modulated radiation therapy among academic institutions. *Pract Radiat Oncol*. 2017 Mar - Apr;7(2):e145-e55; PMID:28274405.

**Nabet BY**, Qiu Y, Shabason JE, Wu TJ, **Yoon T**, **Kim BC**, **Benci JL**, DeMichele AM, Tchou J, Marcotrigiano J, **Minn AJ**. Exosome RNA Unshielding Couples Stromal Activation to Pattern Recognition Receptor Signaling in Cancer. *Cell*. 2017;170(2):352-66 e13.

Harding SM, **Benci JL**, Irianto J, Discher DE, **Minn AJ**, Greenberg RA. Mitotic progression following DNA damage enables pattern recognition within micronuclei. *Nature*. 2017.

Sivanand S, Rhoades S, Jiang Q, Lee JV, **Benci J**, Zhang J, Yuan S, Viney I, Zhao S, Carrer A, Bennett MJ, **Minn AJ**, Weljie AM, Greenberg RA, Wellen KE. Nuclear Acetyl-CoA Production by ACLY Promotes Homologous Recombination. *Mol Cell*. 2017;67(2):252-65 e6.

Baumann BC, Zeng C, Freedman GM, **Verginadis, II**, MacArthur KM, Lin LL, Vachani C, **Koumenis C**, Solberg TD, Metz JM. Avoiding antiperspirants during breast radiation therapy: Myth or sound advice? *Radiother Oncol*. 2017.

Mohapatra PP, Chiemezie CO, Kligman A, **Kim MM**, **Busch TM**, **Zhu TC**, Greer A. 31 P NMR Evidence for Peroxide Intermediates in Lipid Emulsion Photooxidations: Phosphine Substituent Effects in Trapping. *Photochem Photobiol*. 2017.

Lei J, Rosenzweig JM, Mishra MK, Alshehri W, Brancusi F, McLane M, Almalki A, Bahabry R, Arif H, Rozzah R, Alyousif G, Shabi Y, Alhehaily N, Zhong W, **Facciabene A**, Kannan S, Kannan RM, Burd I. Maternal dendrimer-based therapy for inflammation-induced preterm birth and perinatal brain injury. *Sci Rep*. 2017;7(1):6106. PMCID: PMC5522481.

Yang L, Zhang Y, Shan W, Hu Z, Yuan J, Pi J, Wang Y, Fan L, Tang Z, Li C, Hu X, Tanyi JL, **Fan Y**, Huang Q, Montone K, Dang CV, Zhang L. Repression of BET activity sensitizes homologous recombination-proficient cancers to PARP inhibition. *Sci Transl Med*. 2017;9(400).

Chandra A, Wang L, Young T, Zhong L, Tseng WJ, Levine MA, **Cengel K**, Liu XS, Zhang Y, Pignolo RJ, Qin L. Proteasome inhibitor bortezomib is a novel therapeutic agent for focal radiation-induced osteoporosis. *FASEB J*. 2017.

**Brady LK**, Wang H, Radens CM, Bi Y, Radovich M, **Maity A**, Ivan C, Ivan M, Barash Y, **Koumenis C**. Transcriptome analysis of hypoxic cancer cells uncovers intron retention in EIF2B5 as a mechanism to inhibit translation. *PLoS Biol*. 2017;15(9):e2002623.

Christofidou-Solomidou M, Pietrofesa RA, Arguiri E, **Koumenis C**, Segal R. Radiation Mitigating Properties of Intranasally Administered K14 Surfactant in a Murine Model of Radiation-Induced Lung Damage. *Radiat Res*. 2017.

**Benci JL**, **Minn AJ**, Vachani CC, Bach C, Arnold-Korzeniowski K, Hampshire MK, Metz JM, Hill-Kayser CE. Survivorship care planning in skin cancer: An unbiased statistical approach to identifying patterns of care-plan use. *Cancer*. 2017.

**Facciabene A**, De Sanctis F, **Pierini S**, Reis ES, Balint K, Facciponte J, Rueter J, Kagabu M, Magotti P, Lanitis E, DeAngelis RA, Buckanovich RJ, Song WC, Lambris JD, Coukos G. Local endothelial complement activation reverses endothelial quiescence, enabling t-cell homing, and tumor control during t-cell immunotherapy. *Oncoimmunology*. 2017;6(9):e1326442. PMCID: PMC5599081.

Hoppe BS, Hill-Kayser CE, Tseng YD, Flampouri S, Elmongy HM, Cahlon O, Mendenhall NP, **Maity A**, McGee LA, Plastaras JP. Consolidative proton therapy after chemotherapy for patients with Hodgkin lymphoma. *Ann Oncol*. 2017;28(9):2179-84.

Patel AM, Berger I, Wileyto EP, Khalid U, Torigian DA, Nachiappan AC, Barbosa EM, Jr., Gefter WB, Galperin-Aizenberg M, Gupta NK, Simone CB, 2nd, Haas AR, Alley EW, Singhal S, **Cengel KA**, Katz SI. The value of delayed phase enhanced imaging in malignant pleural mesothelioma. *J Thorac Dis*. 2017;9(8):2344-9. PMCID: PMC5594138



McMillan MT, Ojerholm E, Verma V, et al. Radiation treatment time and overall survival in locally advanced non-small cell lung cancer. *International Journal of Radiation Oncology, Biology, Physics* 98:1142-1152, 2017

Ojerholm E, Hill-Kayser CE. Insurance coverage decisions for pediatric proton therapy. *Pediatric Blood & Cancer* - in press.

Ojerholm E, Van Arsdalen KN, Roses RE, Tripp P: Initiative to reduce bone scans for low-risk prostate cancer patients: a quasi-experimental before-and-after study in a Veterans Affairs hospital. *Advances in Radiation Oncology* - in press

Ojerholm E, Bekelman JE: Finding value for protons: the case of prostate cancer? *Seminars in Radiation Oncology* - in press

Ojerholm E, Freedman GM, Bekelman JE: The dollars and sense of hypofractionated breast radiation. *Journal of the National Cancer Institute* - in press

Guttmann DM, Frick MA, Carmona R, Deville C, Levin WP, Berman AT, Chinniah C, Hahn, SM, Plastaras JP, Simone CB. A prospective study of proton reirradiation for recurrent and secondary soft tissue sarcoma. *Radiotherapy and Oncology*. 2017 Aug;124(2):271-276. Cited in PUBMED: 28697854.

Guttmann DM, Mitra N, Metz JM, Plastaras J, Feng W, Swisher-McClure S. Neoadjuvant chemoradiation is associated with improved overall survival in elderly patients with esophageal cancer. *Journal of Geriatric Oncology*. *Manuscript accepted- Epub ahead of print*. Cited in PUBMED: 28887066.

Yu, Y., Nowak Choi, K., Lockamy, V. "Treatment Planning." In *Principles and Practice of Image-Guided Radiation Therapy of Lung Cancer*, edited by Cai, J., Chang, J.Y., Yin, F.F., 43-74. Boca Raton, FL: Taylor & Francis Group, 2017.

Vogel J, Lin L, Simone C B, II, Berman A T: Risk of Major Cardiac Events in Patients with Thymic Malignancies Treated with Following Adjuvant Proton Therapy versus Intensity-modulated Photon Radiation Therapy for Patients with Thymic Malignancies. *Acta Oncologica*. Taylor & Francis, 56(8): 1060-1064, June 2017.

Chang JY, Zhang X, Knopf A, Li H, Mori S, Dong L, Lu H, Liu W, Badiyan S N, Both S, Meijers A, Lin L, Flampouri S, Li Z, Umegaki K, Simone CB, II, Zhu XR: Consensus guidelines for implementing pencil beam scanning proton therapy for thoracic malignancies on behalf of PTCOG thoracic and lymphoma subcommittee. *International Journal of Radiation Oncology, Biology, Physics* 99(1): 41-50, Sept 2017.

Vogel J, Lin L, Berman A and Simone CB: Predicted Rate of Secondary Malignancies Following Adjuvant Proton Versus Photon Radiation Therapy for Thymoma. *International Journal of Radiation Oncology, Biology, Physics* 99(2): 427-433, Oct 2017.

Stuezer K, Lin A, Kirk M and Lin L: Superiority in robustness of multi-field optimization over single-field optimization for pencil-beam proton therapy for oropharynx carcinoma: an enhanced robustness analysis. *International Journal of Radiation Oncology, Biology, Physics* 99(3): 738-749, November 2017.

Rwigema JM, Verma V, Lin L, Berman AT, Levin WP, Evans TL, Aggarwal C, Rengan R, Langer C, Cohen RB, Simone CB, II: Prospective Study of Proton Beam Radiation Therapy for Limited-stage Small Cell Lung Cancer. *Cancer In Press* 2017.