

Radiation Oncology Quarterly

From the Chair...

Happy Spring!

I am very pleased that Anne Lowther accepted the challenge of revitalizing the Department newsletter and I'd like to thank her and all of the contributors for their work on this Spring edition. There's lots of "catch-up" information in this issue, but I'd like to share some "breaking news" first.

Fudan University Shanghai Cancer Center (FUS), one of the largest cancer centers located in Shanghai, will become the first affiliate member of the Radiation Therapy Oncology Group (www.rtog.org), sponsored by the Department of Radiation Oncology, Kimmel Cancer Center. This historical accomplishment was achieved by a decade of close collaboration between physicians and scientists from Fudan

University Shanghai Cancer Center and Thomas Jefferson University.

FUS is one of the top three Chinese universities, founded in 1905. Fudan consists of 28 schools and ten teaching hospitals. Fudan Cancer Hospital was established in 1931 as the sino-Belgium Radium Institute, and later became the only comprehensive cancer center in Shanghai, treating over 5,000 patients annually. It will operate the newly built Shanghai Proton and Heavy Ion Hospital opening in mid-2013.

For 40 years, the Radiation Therapy Oncology Group (RTOG) has been a recognized leader in working to increase survival and improve the quality of life for cancer patients. Based in Philadelphia, RTOG is a key clinical research component of the American College of Radiology (ACR) and serves as a multi-institutional, international clinical cooperative group funded primarily by the National Cancer Institute (NCI).

The RTOG was initially organized in 1968 under the direction of Dr. Simon Kramer at Thomas Jefferson University as a national clinical cooperative group for the purpose of conducting radiation therapy research and cooperative clinical investigations. Since its inception, the Group has activated 460 protocols, accrued a total of approximately 90,000 patients to cooperative group studies and published more than 800 papers reporting the results of its findings. RTOG provides an infrastructure for clinical investigators



*Adam P. Dicker, MD, PhD,
Chair of Radiation Oncology Department*

from the United States, Canada, and international sites to seek more effective treatments for cancer.

I would like to acknowledge Drs. Bo Lu and Ying Xiao for their assistance in helping to facilitate this relationship and Dr. Maria Werner-Wasik and the Protocol Office staff for their continued excellence in maintaining Jefferson as a full member institution in the RTOG.

The Protocol Office is a very busy place, and you may wonder what, exactly, it is that they do. Read on, we're featuring them later in this newsletter.

If you have any suggestions for future issues of the Radiation Oncology Quarterly, please contact Anne, whose contact information is listed on page 17.

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The New Department of Radiation Oncology Quality Committee

We are pleased to report the Department of Radiation Oncology Quality Committee has been officially launched. Under the direction of Dr. Mark Hurwitz, Vice-Chair for Quality, Safety, and Performance Excellence, the committee has a key role in advancing the overall quality program in the Department of Radiation Oncology as described in the committee mission statement:

The Department of Radiation Oncology Quality Committee has a primary role in defining, objectively assessing, and overseeing advancement of departmental quality initiatives and goals. The Committee, with intradepartmental multidisciplinary representation and accountability to the department chair, will serve as the oversight body for the quality activities of the department which will be aligned with institutional and national goals. The Committee will address quality from a multidisciplinary perspective encompassing the quality aims

of safety, timeliness, effectiveness, efficiency, equitability, and patient centeredness. The Committee will serve as a model for others with its work product resulting in improved patient, staff, and student experience within our department, institution, and field.

Members of the committee include:

Voichita Bar-Ad
Dan Clancy
Nick DeGregorio
Laura Doyle
Amy Harrison
Mark Hurwitz
Alisa Itri
Anne Lowther
Susan Munro
Uli Rodeck
Josh Siglin
John Smyles
Kathy Wilson

Please note participation in the quality program is not limited to the committee! All members of the department have a role to play in advancing quality. We will be seeking input from

everyone in the months ahead. Feel free to reach out to Dr. Hurwitz or other committee members with quality related ideas, questions, or concerns.

In its first month the committee has been actively:

- Developing a comprehensive “map” of quality activities in the department including their relation to individual patient care as well as institutional and national quality standards.
- Defining the current and future use of metrics to quantify quality and to measure the impact of new quality initiatives.
- Initiating pilot projects which will provide opportunity for the committee to test and optimize its approach to quality improvement while providing near term benefits.

In addition we are excited to announce the start of a new Quality Journal Club. Join us for discussion (and pizza too!) at noon on April 11th in the Simon Kramer Conference Room in the Department of Radiation Oncology.

Mark Hurwitz, MD

Inside the Radiation Oncology Protocol Group

A Protocol is a written description of, and scientific rationale for, a research activity involving human subjects.

What does the staff in the Radiation Oncology Protocol Group (ROPG) do? In five words or less, they work very hard...but let's go into further detail.

Erin Dougherty, recently promoted to supervisor of the ROPG, Kelly Shipman and Debbie Osborne are Clinical Research Associates who work as a team to screen patients for clinical

trials. They go into the clinic at the request of an attending physician and explain a trial to a patient and if the patient is interested, they have them sign a consent form, sometimes on the spot, more often, a few days later, after the patient has had time to think about this and discuss it with family. If a patient expresses an interest in participating in a clinical trial, and about 50% of those initially asked want to do so, our Protocol Office staff then check the patient's lab results, medical history and if they meet the initial

eligibility criteria as described in the Protocol (about 60-70% of those who are interested in participating), they are registered.

Mary Schafer, Jane Yu and Tracey Zimmer are also critical members of the ROPG Staff who primarily handle data management. They ensure that all forms are completed for each patient and since the ROPG is moving to a paperless environment, they also scan the charts of all patients participating in clinical trials. The new electronic research chart system was created

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Mark Hurwitz Joins Jefferson as Vice Chair for Quality, Safety and Performance Excellence in Radiation Oncology



Mark Hurwitz, MD, Vice Chair, Quality, Safety and Performance Excellence

Mark Hurwitz, MD, has been appointed Vice Chair for Quality, Safety, and Performance Excellence and Director of Thermal Oncology of the Department of Radiation Oncology at Thomas Jefferson University and Hospital.

Dr. Hurwitz is a widely recognized leader in the fields of thermal medicine and genitourinary oncology, and previously served as Director of Regional Program Development for the Department of Radiation Oncology at the Dana-Farber/Brigham and Women's Cancer Center.

Dr. Hurwitz is the first to hold these newly-established positions, as part of Jefferson's goal to continue its strong focus on quality assurance and patient safety in radiation oncology and other disciplines and to expand upon promising treatment techniques.

“I'm delighted to be joining an institution that already has a very prominent profile in quality assurance, excellence and innovation,” said Dr. Hurwitz. “I'm stepping into this new position to assist the Department of Radiation Oncology at Jefferson in reaching the next level in terms of developing a formalized, comprehensive quality assurance program that encompasses all aspects of quality, including research, education, patient care and safety.”

Stephen Graff

For the full article:
<http://www.jeffersonhospital.org/news/2013/january/mark-hurwitz-joins-jefferson-as-vice-chair-for-quality-safety-performance-excellence-in-rad-onc>

Stigma stymies prostate cancer screening, treatment in Ghana *Low screening rates and lack of treatment resulting in late-stage diagnoses, poor outcomes in prostate cancer patients in West African nation*

Infectious diseases in Ghana tend to capture the most attention, but a quiet crisis may soon take over as the country's most threatening epidemic: cancer.

A new study published in January in the journal *BMC Cancer*, led by Kosj Yamoah, MD, PhD, a resident in the Department of Radiation Oncology at Thomas Jefferson University and Hospitals, takes aim at the issue by investigating prostate cancer diagnoses and treatment delivery in black men living in the West African region, in order to devise research strategies to help improve health outcomes. Overall, many men are diagnosed at a later stage, with more than half opting out of treatment, they found. The researchers point to stigmas about cancer as a root of the problem.

“Cancer could eclipse infectious diseases as an epidemic if more aware-

ness and intervention doesn't come about,” said Dr. Yamoah, who grew up in Ghana until age 20, when he came to the United States. “Cancer can be very hush-hush because of cultural and financial issues and social stigmas associated with the disease. We need to bring awareness and address the needs of the population and barriers to care.” “Cancer is still perceived as a death sentence,” he added. “People are scared to go to their doctor to find out if they have it, let alone to follow through with treatment.”

Work to secure this grant has been recommended for funding and is pending.

Stephen Graff

For the full article:
http://www.jefferson.edu/web_options/tags/news_fullstory.cfm?articleID=506



Kosj Yamoah, MD, PhD, resident physician

Residents News

Lots of things have happened since the last edition of the newsletter. We said goodbye to Drs. Nitin Ohri and Xinglei Shen at the annual "Hail and Farewell" celebration which was held on June 26, 2012. Nitin is now working at Einstein in New York and Xinglei went home and is now working at the University of Kansas, the land of snow, snow and more snow! They're both doing very well and have started to hit the books in preparation for their June, 2013 Oral Boards.

Drs. Colin Champ and Mark Mishra became our Chief Residents last April and have done a great job this year working with our new Residency Program Director, Dr. Voichita Bar-Ad. Colin and Mark passed the Radiobiology and Medical Physics portion of their Boards in July. They'll be honored at the next "Hail and Farewell" in late June, before Colin leaves for his new position at the University of Pittsburgh and Mark heads a bit south to the University of Maryland. They'll also be studying for the written portion of the boards, which they'll take early this summer.

Drs. Joshua Siglin and Matthew Witek are in the last quarter of their research year and Drs. Harriet Eldredge and Kosj Yamoah are busy working on their proposed research projects for their

research rotation which will begin in July. Did you know that since our last newsletter Kosj became a first-time dad (Zion Kosje) and Harriet got married?

It's hard to believe that nine months ago we welcomed Drs. Tu Dan and Joshua Palmer to our Radiation Oncology residency program. It seems like in the blink of an eye it will be July, and we'll be welcoming Drs. Kamila Nowak and Hyun Kim as our new Residents.

Faculty News

Dr. Voichita Bar-Ad assumed the role of Residency Program Director on July 1, a position that Dr. Maria Werner-Wasik held for the last 10 years. Dr. Werner-Wasik is now devoting most of her efforts to clinical research and has assumed the title of Director of Clinical Research in the Department. In the Kimmel Cancer Center, she was appointed the Co-Director, National Clinical Trials Network Operations. Dr. Wenyin Shi was appointed the Radiation Oncology Director for the Stereotactic Radiosurgery Program at JHN.

In October we welcomed Dr. Mark Hurwitz as our Vice Chair, Quality, Safety and Performance Excellence and Dr. Estelle Graeffe as an Attending Physician who works at both our Riddle Hospital and Methodist Hospital locations.

We were asked by Dr. Pestell's office to compile a list of our "accomplishments" as of January 31, 2013, and so far this year, our faculty published 61 peer-reviewed journal articles, a book chapter, had 33 poster presentations and 10 oral presentations. Dr. Nicole Simone received a Junior Faculty Career Research Training Award at the 2012 Annual ASTRO Meeting and Dr. Ying Xiao became a fellow of the American Association of Physicists in Medicine in July, 2012. Dr. Yan Yu was appointed Lead Physicist on the ASTRO Workgroup on Practice Accreditation Program in 2012.

Congratulations to Dr. Matthew Studenski who was promoted to the rank of Assistant Professor and to Dr. Ying Xiao who was promoted to the rank of full Professor.

Virginia Lockamy, PhD was appointed to the Membership Committee for the AAPM, January 1, 2013 for a 2 year term. Congratulations Virginia!



Dr. Maria Werner-Wasik and a group from Pocono Medical Center (PMC) are collaborating on research.

Pictured with Dr. Werner-Wasik at the Dale and Francis Hughes Cancer Center at PMC are (from left to right) Joshua Schoppe, MPH, Senior Outreach Coordinator, Jefferson Kimmel Cancer Center, Mary Ellen Lynch, Clinical Research Associate, PMC and Michael Greenberg, MD, Lead Site Investigator, PMC.

Alumni News

Dr. Evan Wuthrick, his wife Christine and their three sons welcomed their new baby girl, Ashley Elizabeth, to their family on January 18.

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in conjunction with RTOG, and an award-winning poster describing these efforts is on display on the Ground Floor of Bodine. Additionally, the data managers are in contact with external institutions, if necessary, to retrieve follow-up data, as most of the patients enrolled to the trials in our Department are followed for life. The data managers are also specially trained to handle biological specimens, shipping them regularly to cooperative group sponsors.

Tracey Zimmer presented a poster at the Semi-Annual RTOG Meeting, in June 2011 entitled: "The Future of Medical Records. Electronic Medical Records for Clinical Research." This poster was displayed at the Research Associates Audit Workshop, and she was also asked to speak on the topic. She was awarded with a travel award for the next meeting in Atlanta, GA. One of the goals of the RTOG audit group is to eventually conduct electronic audits at all sites in the future. On April 25, 2012, the ROPG held its first ever electronic audit. The audit was conducted by Elaine Boyle, RN, CCRP, and Jerry Koss, RN, BSN, CCRP from the Radiation Therapy Oncology Group (RTOG). In preparing

for the electronic audit, Tracey began to create "Electronic Research Charts". These charts are held on a secured drive which is password protected. Once a new patient is enrolled into a clinical trial, an electronic chart is created. Patient documents, labs, Case Report Forms (CRFs), etc. are scanned into each corresponding folders.

This was also the first electronic audit for Elaine and Jerry. During our closeout, Elaine praised our efforts and was very pleased with how her first

electronic audit went. She is hoping that many more sites will follow this process. Elaine is currently holding

BRAIN TRIALS

- IIT: Phase I study of Ipilmumab combined with whole brain radiation therapy or radiosurgery for melanoma patients with brain metastases. PI: Dr. Shi
- IIT: Phase I/II study: Combination of Panobinostat and stereotactic radiation in treatment of brain tumors (Note: 12/28/12: second cohort closed; trial on hold until dose escalation is approved). PI: Dr. Shi
- RTOG: Phase II randomized study of Rituximab, Methotrexate, Procarbazine, Vincristine, and Cytarabine with and without low-dose whole brain radiotherapy for primary central nervous system lymphoma. PI: Dr. Glass
- RTOG: Randomized Phase I and II study of ABT-888 in combination with Temozolomide in recurrent (Temozolomide resistant) glioblastoma (Note: 01/14/2013: Closed temporarily per RTOG). PI: Dr. Glass

BREAST TRIALS

- RTOG: Phase II study of repeat breast preserving surgery and 3D-conformal partial breast irradiation (PBRI) for local recurrence. PI: Dr. Anné
- RTOG: A phase III trial of accelerated whole breast irradiation with hypofractionation plus concurrent boost versus standard whole breast irradiation plus sequential boost for early stage breast cancer. PI: Dr. Anné

presentations regarding electronic audits during the RTOG semi-annual meetings held in January and June.

The ROPG staff are cross-trained to handle the particulars of all clinical trials that open in the department. Some of our patients participate in Cooperative Group Protocols, studies that are done at multiple institutions, under the direction of organizations such as the Radiation Therapy Oncology Group (RTOG) and the Eastern Cooperative Oncology Group (ECOG).

Other patients are enrolled in Investigator Initiated Trials (IITs) which are in-house studies (meaning, they are conducted only at Jefferson). IITs are administratively more complicated and require the investigator to have Jefferson's Clinical Cancer Research Review Committee (CCRRC) review and approve the scientific aspects of the study. IITs, as well as Cooperative Group trials, must then be reviewed by Jefferson's Institutional Review Board (IRB), a diverse group of researchers who look at scientific as well as clinical procedures, monitoring research involving human subjects. After those reviews, the Principal Investigator (PI) of the study hosts a Site Visit, inviting all of the investigators, pharmacists, the Clinical Research Management Office (CRMO), and any additional relevant study personnel to review and discuss the trial. The CRMO handles regulatory affairs and facilitates all reviews by the IRB, after which the approved documents are forwarded to the ROPG staff for use. For many studies, the machines have to be credentialed by our physicists and then the ROPG can announce the opening of the trial to our attending physicians.

Pharmaceutical Trials are also conducted. These protocols are written and sponsored by a pharmaceutical firm and our staff handles all of the clinical and administrative tasks that are involved in these trials. The ROPG CRAs attend most of the Tumor Boards and all QA Conferences, as well as Research Strategy Meetings. They all attend the semi-annual RTOG Meeting held in Philadelphia and some of them attend the meetings held in other locations across the country.

The ROPG collaborates with many groups of employees in our Depart-

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Guess how long I've worked for Jefferson Radiation Oncology?

5 YEARS

Laura Doyle, MS
Barbara Rice, MS
Leonard Shabason, PhD

10 YEARS

Jessie DiNome, MD

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ment. The CRAs create each patient's treatment schedule according to the protocol, working with Nursing personnel, our Attending Physicians, Medical Physicists, Dosimetrists and Therapists, as well as with physicians from other Departments such as Urology, Medical Oncology, Out-patient Imaging, Nuclear Medicine and the Investigational Pharmacy staff. They also facilitate the completion of all RTOG forms by the Dosimetrists and other Department staff.

The ROPG staff also mentor Coordinators from other locations (e.g., the Methodist Hospital Division) and other Departments.

The current clinical trials that are available to our patients are: (IIT: Investigator Initiated Trial; RTOG: Cooperative Group Trial. Other: Sponsored Trials (e.g., Pharmaceutical)

Tracey Zimmer

LUNG TRIALS

- RTOG: Randomized Phase II study comparing prophylactic cranial irradiation alone to prophylactic cranial irradiation and consolidative extra-cranial irradiation for extensive disease small cell lung cancer (ED-SCLC). PI: Dr. Werner-Wasik
 - RTOG: A randomized Phase III study of sublobar resection (+/- brachytherapy) versus stereotactic body radiation therapy in high risk patients with Stage I non-small cell lung cancer (NSCLC). PI: Dr. Cowan (Note: 02/26/13: Closed to accrual per ACOSOG and RTOG)
- RTOG: Randomized Phase II study of pre-operative ChemoRT +/- Panitumanab followed by consolidation chemotherapy in potentially operable locally advanced (Stage IIIA and N2) non-small cell lung cancer. PI: Dr. Evans

UPPER GI TRIALS

- Other (Theraspheres): A humanitarian device exemption treatment protocol of Therasphere for treatment of unresectable hepatocellular carcinoma PI: Dr. Littman (12/23/10 – received IRB approval to increase enrollment from 25 to 50 patients)
- RTOG: A Phase III trial evaluating both Erlotinib and chemoradiation as adjuvant treatment for patients with resected head of pancreas adenocarcinoma. PI: Dr. Berger

GENITOURINARY STUDIES

- RTOG: A Phase III trial of short term androgen deprivation with pelvic lymph node or prostate bed only radiotherapy (SPPORT) in prostate cancer patients with a rising PSA after radical prostatectomy. PI: Dr. Dicker
- RTOG: Phase III trial of dose escalated RT and standard androgen deprivation therapy (ADT) with a GnRH agonist vs. dose escalated RT and enhanced ADT with a GnRH agonist and TAK-700 for men with high risk prostate cancer. PI: Dr. Den
- Other (Bayer/Covance Radium 223): Radium 223 chloride (Alpharadin) in castration-resistant (hormone refractory) prostate cancer patients with bone metastasis. PI: Dr. Dicker
- IIT: Phase I trial of high dose rate brachytherapy combined with stereotactic body radiation therapy for intermediate risk prostate cancer patients. PI: Dr. Den
- Other (Euclidian/Robotic Assist): Phase I study: Using EUCLIDIAN robotic assistance during prostate brachytherapy. PI: Dr. Dicker
- RTOG: A randomized phase II trial of hypofractionated radiotherapy for favorable risk prostate cancer. PI: Dr. Showalter

HEAD & NECK TRIALS

- RTOG: A Phase III study of postoperative radiation therapy (IMRT) +/- Cetuximab for locally-advanced resected head and neck cancer. PI: Dr. Axelrod
 - RTOG: A randomized Phase II study of concurrent intensity modulated radiation therapy (IMRT), Paclitaxel and Pazopanib (NSC 737754)/placebo, for the treatment of anaplastic thyroid cancer. PI: Dr. Campling
- RTOG: A randomized phase II study of adjuvant concurrent radiation and chemotherapy versus radiation alone in resected high-risk malignant salivary gland tumors. PI: Dr. Ahn (Note: 01/18/13: Temporarily closed per RTOG for safety analysis)
- RTOG: Randomized Phase II trial of PET scan-directed combined modality therapy in esophageal cancer. PI: Dr. Mitchell (Note: opened to accrual, 02/22/13)

MISC. TRIALS

- RTOG: Phase II/III study of image-guided radiosurgery/SBRT for localized spine metastasis. PI: Dr. Andrews
- RTOG: Phase II trial of adjuvant chemotherapy as primary treatment for locally advanced cervical cancer compared to chemoradiation alone: The OUTBACK trial. PI: Dr. Anné

Towards High Reliability Organizing

Background: Normal Accident Theory

Normal Accident Theory (NAT) originated from the analysis of the nuclear accident at Three Mile Island (Perrow 1981; 1984). It represents a modern departure from the traditional focus on equipment malfunctions or operator errors, to the emphasis of organizational properties that lead to accidents.

According to NAT, complex systems can experience rare but serious-breakdowns, termed normal accidents or system accidents, caused by multiple failures, which interact with each other in ways that could not be anticipated or immediately comprehended. In particular, two properties have been identified that make systems susceptible to system accidents: complex interactions (nonlinear systems) and tight coupling (cascading failures).

Complex interactions are interactions that occur in unfamiliar or unexpected sequences, which are not immediately comprehensible (Perrow, 1994). Factors considered to cause complex interactions in a system include the need to decipher unfamiliar or unintended feedback loops and make inferences, and specialized knowledge of personnel that limits their awareness of interdependencies.

A system is considered to be tightly coupled when there is minimal time lag or slack between the processes being executed, the processing sequence is invariant, there is only one method available to accomplish a task, and safety devices are built-in with little scope of improvisation.

Thus NAT's central thesis can be stated as: an occasional failure in technological systems that are complexly interactive and tightly coupled can, under certain circumstances, lead to system accidents. To make matters worse, the complex interactions can cascade very rapidly in tightly coupled systems, which have no slack for recovering from such failure.

If any of the foregoing sounds somewhat familiar to any of us working in a radiation oncology department, it is probably because our field has quietly moved to a truly complex system as defined by Perrow.

From an organizational perspective, a significant challenge is to design effective methods to ameliorate complex interactions and tight coupling simultaneously.

Background: Swiss Cheese Model

Similar to NAT, the Swiss Cheese Model (SCM) describes accident defense mechanisms as slices of cheese that have holes signifying weaknesses in each of the defense mechanisms. On occasions, there is a remote chance of all the holes momentarily aligned and permitting "a trajectory of accident opportunity" (Reason 1998).

A Movement: High Reliability Organization

In contrast to and as complement of NAT, High Reliability Theory (HRT) focuses on organizational factors and processes that contribute to reliability.

High Reliability Organizations (HRO) operate in environments where normal accidents are expected to happen, but have succeeded in

avoiding them. HROs are considered to have the following characteristics: a strategic prioritization of safety, careful attention to design and procedures, a limited degree of trial-and-error learning, redundancy, decentralized decision making, continuous training often through simulation, and strong cultures that encourage vigilance and responsiveness to potential accidents (Weick et al. 1999). A central theme in HRT is mindful organizing.

Mindfulness is characterized by: preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations (i.e. situational awareness), commitment to resilience, and under-specification of structure (deference to expertise). By under-specifying structure, organizations can encourage flexibility in favor of formal hierarchy, which allows decision-making to migrate with a problem.

HROs balance the conflicting requirements of being simultaneously centralized and decentralized by granting decision-making autonomy at lower levels and ensuring buy-in of centrally determined goals and training premises (Weick 1987). Conceptual slack is also a term used to refer how organizations implement autonomy at lower levels with centrally determined goals (Schulman 1993). In this context, the notion conceptual slack can be thought of as redundancy and skepticism; it broadens the bandwidths within which an organization can avert high risks.

As a fine example of HRO efforts in healthcare, check out Cincinnati

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Talking to Patients about Quality in Radiation

Presitigious Grant Awarded from Varian Medical Inc.

Quality continues to be an important aspect of the Department of Radiation Oncology. Quality can be difficult to quantify and measure, but how about to discuss with patients?

Laura Doyle and Amy Harrison have made quality more than an interest in returning to the classroom to learn more about quality and safety in health care. In addition to pursuing a PhD in this subject area, both physicians are investigators of a 2-year grant funded by Varian Medical Systems Inc. This grant, received December 10, 2012

enables us to apply various techniques to gain information about how to communicate with patients regarding quality and safety in radiation therapy.

Today, patients are exposed to many complex treatment options. By providing them with information about complexity in radiation, patients can become empowered to be part of the quality team. This team uses the most advanced and superior care being employed at institutions boasting the latest technological advances. The project aims to survey patients' attitudes related to treatment

options and employ various communication tools to discuss patient concerns about radiation. The primary investigators are Laura Doyle, Amy Harrison, Adam Dicker and a statistician from the TJU School of Population Health, Albert Crawford. A number of aspects of this project rely on patient feedback, so please encourage patients to complete surveys for this project. Look out for aspects of this project to be integrated into the clinic in the near future.

Laura Doyle, MS

First Skin Cancer Patient Treated in the Brachytherapy Suite

Certain types of skin cancer can be treated with radiation. Skin cancers can often be difficult to treat due to locations on curved surfaces such as extremities or areas of the scalp or face. We are proud to offer a new treatment option to patients with skin cancer, brachytherapy. The Daily Dose @ Jefferson, a TJUH blog, features a story about the first patient treated with brachytherapy for skin cancer. The article describes the wonderful spirit and attitude of this native Philadelphian, and the care she received when her skin cancer came back after surgery on her shin. The slopes on the

shin made brachytherapy a good option for delivering radiation to areas that are harder to target with beam radiation. (Below is an excerpt from the article and a link for the full text.)

Her journey started with Steven Greenbaum, MD, a clinical professor of Dermatology at Jefferson, and specialist in Mohs surgery. But because of the location of Vera's cancer, this surgery wasn't a good option: The shin was unlikely to heal correctly. So she came to the Department of Radiation Oncology, under the care of P. Rani Anné, MD, to be treated in the

brachytherapy suite. Her treatments are now complete.

Jefferson unveiled the region's only image-guided brachytherapy suite earlier this year, where patients can have radiation imaging, planning and treatment in a single location without being moved.

For the full article:

<http://www.jeffersonhospital.org/the-daily-dose/2012/december/brachytherapy-suite-treats-first-skin-cancer-patient>

Laura Doyle, MS

High Reliability Organizing....continued from page 7)

Children's website.

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Yan Yu, PhD, MBA

Ying Xiao, PhD Awarded Two Grants

Ying Xiao, PhD is an internationally recognized medical physicist and was promoted to Professor of Radiation Oncology in Jefferson Medical College in 2012. She also was awarded fellow of AAPM in 2012. Among her many roles in the department, Ying received two grants, investigating factors affecting safer and more effective therapeutic delivery of radiation for cancer patients.

The first grant, from Pennsylvania CURE program through American College of Radiology (ACR), was funded to investigate the unexpected preliminary results from Radiation Therapy Oncology Group (RTOG) #0617 protocol comparing high-dose (74 Gy) with standard-dose (60 Gy) radiotherapy for treatment of non-small cell lung cancer. Survival for the low-dose arm was more favorable. This difference was not accompanied with any identifiable difference in radiation toxicity. This unexpected result might be explained by the propagation of uncertainties that could, in effect, decrease the stated prescribed dose differences. Investigation of this unexpected result will serve as an example of the use of the modeling techniques developed in this research project. This investigation is critically important for informing the design of subsequent similar trials. Dr. Xiao plans to study uncertainties associated with all the processes of the trial, and quantify these uncertainties and their impact upon the outcome.

The second grant, from NIH/NCI administered through ACR, is intended to support the transition effort of clinical trial quality assurance. Since its inception, RTOG has included a division of Radiation Therapy Quality Assurance (RTQA) with a broad range of responsibilities.

Separating QA activities that have traditionally been integrated into the structure of the RTOG to form a new QA consortium (Imaging Radiation Oncology Core (IROC) group) that supports all cancer clinical trials activities presents unique challenges for the RTOG. This is particularly true as the RTOG moves forward in its alignment with National Surgical Adjuvant Breast and Bowel Project (NSABP) and Gynecologic Oncology Group (GOG) to form NRG. These two groups have not traditionally used the integrated QA approach developed by the RTOG.

As the clinical trials and QA groups undergo a major change, it is critical to assure that the advantages of the RTOG QA model are not lost in the reorganization process. It is for this reason that the RTOG is receiving



Ying Xiao, PhD on the occasion of her fellowship award with the AAPM

support for a physicist with considerable experience working with the QA model adopted by the RTOG.

The grant will also be used to support the additional efforts that will be required by the RTOG/RTQA to support the harmonization of NRG and IROC policies and procedures related to institutional credentialing for advanced technology protocols, documentation of RT prescription requirements, and other RTQA activities. Efforts are required for evaluation of current data submission, review and analysis of systems for adaption to NRG/IROC, for working with IT to upgrade systems, and for delivery of specifications to IT for development of additional functionalities.

Shira Carroll

NAME OUR NEWSLETTER!

We are looking for a catchy title for the Department of Radiation Oncology newsletter. Please submit your entry by May 15 to Anne.Lowther@jeffersonhospital.org. If we choose your title, you'll win a prize!

TJUH Medical Physics Residency Program Expansion

The Medical Physics division of Radiation Oncology, which has a history of educating medical physics residents over the past 20 years, is undergoing some exciting changes and is expanding its residency program to a “hub and spoke” model with the Helen F. Graham Cancer Center at Christiana Hospital in Delaware. In 2008, the residency received accreditation through the Commission on Accreditation for Medical Physics Education Programs (CAMPEP), becoming one of the first programs in the country to achieve this recognition and now is looking to become one of the first “hub and spoke” residency programs.

This expansion is mutually beneficial to both parties and provides opportunities for the training of new

medical physicists. This new course of the program has been spearheaded by the Residency Program Director, Amy Harrison, MS.

Two Associate Residency Directors have been named as well; Matthew Studenski, PhD at Jefferson and Firas Mourtada, PhD at Christiana. Dr. Studenski was a former resident at Jefferson who completed the program in 2011 and Dr. Mourtada comes from MD Anderson Cancer Center in Houston, Texas. The residency program currently has three residents; two full time clinical residents, Stephen Gardner, MS, and Elaine Sayler, MS, and one research resident, Wenzhou Chen, PhD, who splits his time between research and clinical duties. Several residents have recently gradu-

ated from the residency program and have taken faculty and medical physics positions at various institutions around the country; Ivan Buzurovic, PhD at Harvard University, Yunfeng Cui, PhD at Duke University, Kaiguo Yan, PhD at Georgetown University, and Katherine Chapman, MS at Memorial Sloan Kettering.

This year, four more residents will be hired, one full time clinical resident at Christiana and two full time clinical residents at Jefferson. One research resident will also be hired to bring the total number of residents to six. The department is looking forward to educating these new residents along their path to becoming excellent medical physicists.

Matt Studenski, PhD

ANNUAL SUNTHARALINGAM LECTURE *QA in the Era of Advanced Treatment Technologies*

The 16th Annual Suntharalingam Lecture will take place on Thursday, May 30th at 5:30pm at the Bluemle Life Sciences Building, Room 101. Geoffrey S. Ibbott, Ph.D., Professor and Chairman, Department of Radiation Physics, Division of Radiation Oncology at the University of Texas MD Anderson Cancer Center will present a lecture titled “QA in the Era of Advanced Treatment Technologies.”

Everyone is invited to attend.

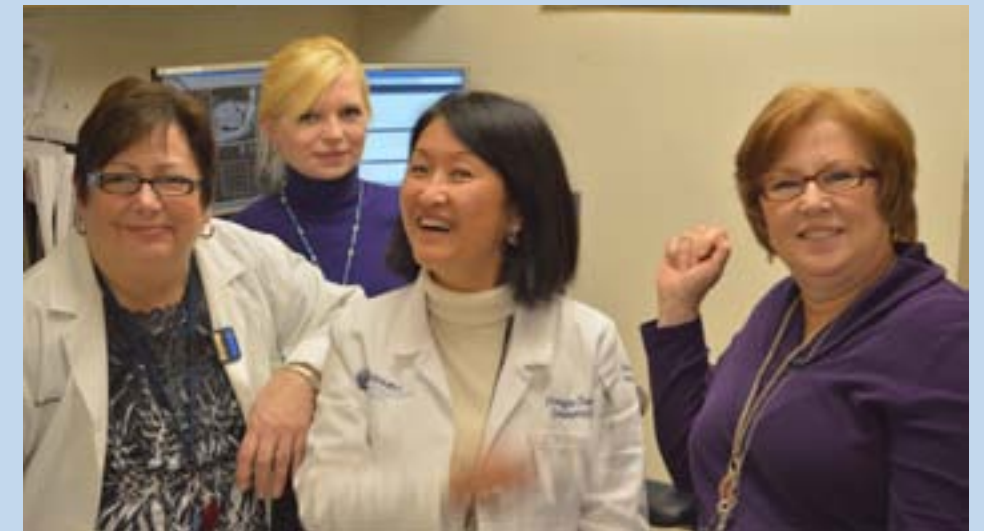
Dosimetry Spotlight: Joyce Keil

Joyce Keil was interviewed by fellow dosimetrist and longtime friend, Virginia Nettleton, who shares her story. Virginia met Joyce at Cooper Hospital in 1978, and they worked together there until 2004. “We are like sisters and continue our relationship here at Jefferson”. Joyce graduated from Drexel University with a BS in business administration and started her career in banking, as a student loan officer at Girard Bank.

There, she met her husband, Charles. They have been married for 36 years. Charles’ two children gave them four grandchildren. Joyce realized that banking was not in her future and graduated from Gwynedd College in 1977 for Radiation Therapy and went to work at Cooper Hospital for 26 years.

Her accomplishments are noteworthy and she is an icon in the field of dosimetry. “Joyce has taught half the Delaware Valley, dosimetry.” While at Cooper’s School of Radiation Therapy, Joyce taught Medical Dosimetry didactically and clinically. She is the co-author of Applied Physics for Radiation Oncology by Stanton and Stinson, having written two chapters in dosimetry.

During her time at Cooper, Joyce



Joyce Keil, Yelena Vakhnenko, Hongyu Chen and Ginger Nettleton, part of the dosimetry team, left to right.

was diagnosed with breast cancer, twice. She knows what it is like to be on both sides of the fence. She was resilient, struggling to maintain a normal life style and work schedule. Only Charles and close friends knew the ill effects of chemo and Joyce always down played how horrible she felt. Because Joyce is a cancer survivor and a health-care professional, she has been motivated all these years to always do what is best for the patient and has a passion for patient advocacy.

Her Type “A” personality shines concerning treatment planning and quality assurance. Joyce had several mentors who have supported

her throughout her career. They are Drs. Robert Lustig, Chris Koprowski, and Elida Rouby. Also, she feels Nora Walker is a phenomenal dosimetrist and mentored Joyce not only just at Jefferson, but also at Cooper.

Now, Joyce is a mentor herself. On a personal note, Joyce loves to travel the globe, sailing, skiing (when the knees worked), and a guru on motion picture trivia. Her words of wisdom and life mottos are “If it doesn’t kill you, it will strengthen you”. And, “God will not give you more than you can handle”. After all, she personally knows.

Ginger Nettleton

Division of Molecular Radiation Biology Update

Over the last several months, the Division of Molecular Radiation Biology has embarked on several educational ventures. Last fall saw the inauguration of Journal Club, which featured presentations by residents, post doctoral fellows, and students, as well as guest speakers. Invited speakers have come from within Jefferson, as well as from other prestigious institutions such as Memorial Sloan-Kettering Cancer Center and BioSpherix. So far they have presented over 15 papers representing a variety of topics of interest in cancer

biology. In addition, a cancer immunotherapy working group was created to address the uniquely interesting topic of combining radiation therapy and immunotherapy in a variety of cancer subtypes. This group has merged with the immunotherapy interest group directed by Scott Waldman of the Department of Pharmacology and Experimental Therapeutics. In January the newly revamped Radiobiology course began. It will cover a variety of topics from basic cancer biology to radioterrorism. This class, aimed towards

residents, features a variety of speakers both from within Jefferson and visiting experts. Finally, the joint team of Drs. Bo Lu and Dennis Leeper is preparing to submit an S10 Shared Instrumentation Grant to the NIH, with the goal of obtaining a SAARP CT Guided Cone Beam X-irradiator for small animals. This machine will irradiate orthotopic tumors, spontaneous tumors or normal tissue volumes down to 0.7 mm in diameter, while sparing surrounding normal tissues.

Carey Myers, MS

"...just happy to help patients that have had a rough go of it!"

- Rich Gustke

If you haven't noticed by now, the titles of my articles have been quotes by some very special and influential people; David Calderella, Dr. Marshall Goldsmith, Jerry Garcia, and now please add Mr. Richard Gustke to that list. Please, allow me to explain!

If you don't know this by now, then you don't know me. I have been a season ticket holder of our beloved Philadelphia Eagles for over 20 years, and in those 20+ years I have met a lot of people. Some have become closer than family. When I was in RT school, I still attended home games, but I spent "game time" in our Winnebago studying. I was not alone though, my fellow birdbrains assisted me with some papers, quizzing me and basically helping me to achieve my goal of graduating from Gwynedd Mercy College.

It is here that I would like to introduce some very special Eagles fans; Rich and Karen Gustke, Alexander Smith, and Daniel Quigley. You see, as long as I've been a season ticket holder, I've known the aforementioned crew. Stop what you're thinking! I am not going to emphasize the Eagles, the tailgates, the food nor the drinks. I am going to emphasize

the heart, the size of the hearts of Rich, Karen, Dan and "Lex."

You see, I asked these folks to donate their preseason tickets to some of our cancer patients. Now, going to see the Eagles is more than a day trip away from our "lives". Guess what, my friends answered the call like I knew they would. Rich and Karen, you see, live in West Palm Beach, Florida. They are faithful about attending every Eagles game. Dan and Lex live in Delaware County, no need to say the same about their Eagles faith.

From one end of this great country to the other, the tickets came pouring in and let me be the first to tell you; Karen, Rich, Dan and Lex, "They were a wonderful surprise!" said Mrs. D!

Enter August 30, 2012, the first game of the 2012-13 NFL preseason. Picture this: a beautiful Thursday night in South Philadelphia at Lincoln Financial Field. It is the Philadelphia Eagles versus the New York Jets and the normal five who adorn section 223, row 22, seats 11 through 15 were not there; nope, they were at home this night. Instead of rooting the Eagles onto a 28-10 victory and capping off

a perfect 4-0 preseason, Dan Quigley, Lex Smith, Karen & Rich Gustke, and I sat home and were just as loud as if we were in our seats this night. Our seats, however, belonged to "some patients who might be having a rough go of it." You've got to admit that we have great jobs. We are helping people who really had a rough go of it. They did not ask to get sick, they did not ask for Eagles tickets, and my friends did not ask for anything when I approached them with an idea.

The Philadelphia Eagles brought us together, cancer brought us closer, but kindness, generosity and the human spirit left an indelible mark on more lives than I could have ever thought.

So thank you to my families: at home, work, and play. I appreciate you being in my life helping me to do what I love to do when I arise everyday, but... Thank you just cannot cut it; words mean nothing here, nothing.

David Romanofski,
BHS RT (R) (CT) (T), ARRT



Pictured left to right: Allison, Mrs. D., and Renee with me



Pictured left to right: Karen, Dan, Me, Rich, and Lex

Off Campus Highlights and News

Our newest initiative is starting a Prehabilitation/Rehabilitation Program based on the STAR program (survivorship training and rehabilitation). Dr. Dinome will be acting as co-chair for the committee. Our goal is to identify, develop and coordinate care needs before, during and after treatment. We have decided to include breast, head and neck and genitourinary patients to start. We are currently gathering information about the specific problems these patients have that could be addressed by physi-

cal therapy intervention and the documented evidence that physical therapy intervention helps. An example would be axillary web syndrome in the breast cancer patient and neck flexion contracture in the head and neck patient. Our baseline will be referrals sent to physical therapy for any of our indicators in 2012.

The second part of this program will encompass formation of the brochures, physician education and measurement of increasing referrals for these sites.

For additional information regarding this program, please contact Jessie Dinome, MD @ jessie.dinome@jeffersonhospital.org

Breast Cancer Awareness

Riddle held a Breast Cancer Awareness celebration in October. Patient education was distributed as well as goodies for all patients.

UNITE FOR HER

Riddle Hospital and Jefferson Radiation Oncology are working for UNITE FOR HER to provide our breast cancer patients with a day of wellness. This is scheduled for Sunday, May 5th, 2013. Dr. Jessie Dinome and Marianne Raush, RN, are on the committee to organize and oversee the event as well as help select patients. Patients will receive massages, yoga, acupuncture, and nutritional guidance. The wellness day has been well received at other hospitals and we are excited about the opportunity for our patients.

-Jessie Dinome MD

Construction Begins!

In January, renovations at Riddle began. The staff have survived the jackhammering of an 18 inch concrete floor in the simulator room. Alas, they said goodbye to their fluorosimulator. Initials of the employees who have worked here from the beginning have now been embedded in the new concrete (although we are not telling where).

The department is installing a new True-Beam linear accelerator, Brachytherapy High Dose Rate machine and a CT scanner.

The acquisition of this new technology at Riddle will allow Jefferson physi-

cians to offer the latest cancer treatment techniques while utilizing state-of-the-art equipment.

The three phase project is scheduled to be completed by December. The first phase is the GE CT simulator with the ability to perform respiratory gating. The first phase is due to be completed by July, 2013 followed by installation and commission of the True Beam linear accelerator. More updates to follow.

-Jessie Dinome, MD



Department Debuts



LILYA BABINSKY joined the computer staff in January as a Senior Systems Analyst. She is a software developer and will be a great asset to our staff.



TAISHA BANKS joined the Department as a secretary in March. Taisha has been at Jefferson since 2000 where she worked first in Otolaryngology and most recently at Jefferson University Physicians in the Central Medical Records area.



KAREN BEN ABDALLAH, RN, BSN became part of our Nursing Division in January. Karen is a former Jefferson employee who worked in Radiation Oncology at Lower Bucks Hospital and Bodine as well as in Medical Oncology.



ELIZABETH BENEDETTI, RN, BSN, OCN joined our group in October. Elizabeth has been at Jefferson since 2007 and worked most recently as a Staff RN in the Oncology/Medical Surgical area of the Hospital.



SHIRA CARROLL joined our Medical Physics Division in December as our new Administrative Assistant. Shira comes to us from the American Association of Cancer Research where she was an Electronic Publishing Assistant.



ALAN CHAN, RT (T) joined our Therapy Division in March as a Radiation Therapist. Alan wopreviously worked at pital of the University of Pennsylvania as a senior staff radiation therapist. He is a graduate of Gwynedd Mercy College where he received an Associate Degree in Radiation Therapy.



THANGAVEL CHELLAPPAGOUNDER, PhD joined our team in January. Dr. Chellappagounder will be working in the Research area with Dr. Den. He has been a Jefferson employee since 2008 and comes to us from the Department of Cancer Biology.



DANIEL CLANCY, RN joined our JHN Division as our new Clinical Manager. Daniel joins us from Cooper University Hospital where he was a Clinical Practice Manager (Gamma Knife) in the Department of Neurosurgery/Cooper Neurological Institute. Daniel is a previous Jefferson employee who worked in our OR area.



DANYELLE LEMM, RT(T) joined our therapy team in November. She is a 2012 graduate of Gwynedd Mercy College where she received her B.S. in Radiation Therapy.



ANNE LOWTHER MSRS RT (R) (CT) joined our department in November as the new Clinical Manager of Bodine. Anne comes to us from Drexel University where she was a Clinical Professor. Anne also worked for Thomas Jefferson University Hospital for a number of years as a Lead CT/X-ray Technologist.



DANIELLE MARTYNICK, RT(R)(T) joined our Therapy Group in November. She is a 2010 graduate of Pennsylvania State University and Thomas Jefferson University where she received her B.S. in Radiologic Sciences, Radiography, and Radiation Therapy.



DIANA OLIVER-WINN is our new certified Medical Assistant, and began working in December. Diana transferred to our Department from the Department of Surgery where she worked since 2010.



SELENA RIVERA joined our Administration Division in the Medical Records area in November. She is our new Patient Records Clerk IV. Selena worked most recently with Jerff Jones Photography.



ZHEN TAO, MD joined our Radiobiology Division in February. Dr. Tao joins us from Tianjin Medical University Cancer Institute and Hospital where he was a Resident in the Department of Radiotherapy.



LIFENG YANG, MD joined our Radiobiology Division in February as a visiting researcher. He comes to Jefferson from Fudan University Shanghai Cancer Center.

Department Debuts



The Henner family welcomed their new baby boy, Patrick Neal Henner, on St. Patrick's day. Slainte!



Senior physics resident Stephen Gardner, and his family, welcomed a new baby girl in January 2013. Peighton Louise Gardner was just under 8 lbs. and is doing great!



Cheng Peng and his wife welcomed a new baby girl on October 10. Victoria weighed in at 6 lbs. 8 oz. Both baby and mom are doing well.



Tracey Nardi and Dave Zimmer were married on September 15 in Vineland New Jersey. Pictured left to right are Maria Werner-Wasik, MD, Tracey and David Zimmer, Michael J. Ramirez, MD



Erin Dougherty and Steven Keatings were married on October 26 at St. Catherine of Siena Church in Horsham. Their reception was at the Aldie Mansion in Doylestown.

Happy Birthday to You...

APRIL

Wenyin Shi, MD April 2
 Nicole Barrett April 4
 Leigh Sharkey April 4
 Dan Tu, MD April 8
 Yelena Vakhnenko April 8
 Nicole Sabb April 10
 Shira Carroll April 12
 Anne Henner April 13
 Debbie Osborne April 14
 Rani Anné, MD April 15
 Andrea Martin April 15
 Daniel Clancy, RN April 19
 Yong Wang April 21
 Gail Williams April 28
 Therese Poiesz April 28
 Ginger Nettleton April 29
 Nicole Simone, MD April 30

MAY

Virginia Lockamy, PhD May 2
 Dennis Leeper, PhD May 3
 Yi Liu May 4
 Jennifer Noonan May 8
 Heather Mott May 13
 Cheng Peng, PhD May 13
 Scot Fisher, DO May 15
 John Mercurio May 16
 Jeffrey Rosenstock, MD May 16
 Alan Baker, MS May 20
 Eric Gressen, MD May 21
 Frances Kaufman May 21
 Jane Yu May 26
 Matt Studenski, PhD May 27

JUNE

Adam Dicker, MD, PhD June 8
 Nick Zaorsky, MD June 9
 Eileen Comber June 9
 Laura Eckert June 10
 Judith Sharbaugh June 12
 Bo Lu, MD, PhD June 13
 Jessie DiNome, MD June 17
 Gloria Johnstone June 24
 Lianjin Jin June 26
 Cynthia Swanberg June 29



Monica's Morsels

Nutrition Tidbits from your KCC Dietitian!

Spring is here, which means summer is right around the corner! This means no more hiding behind baggy winter layers. Spring is the perfect time to start something new, to make healthy lifestyle changes that you've been putting off!

Our genes affect our tendency to gain weight, but this tendency is increased when food is plentiful and we use equipment and vehicles to save time and energy. It is still possible to manage your weight through balancing the calories you eat with your physical activity choices.

If you need to lose weight, it is better to do so gradually by making long-term changes in your eating behavior and physical activity, rather than going on a "diet," which implies something temporary. If you are overweight, a loss of even 5-15% of your body weight may improve your health and quality of life. A loss of 1/2-2 lbs/week is usually safe.

Monica Crawford



TIPS FOR HEALTHIER EATING

- Choose a healthful assortment of foods that includes a variety of colorful vegetables, fruits, whole grains, non-fat dairy products, fish, lean meats, poultry (skinless), nuts, seeds, and beans/legumes.
- Choose foods that are low in fat, sodium, and added sugars most of the time. Use liquid vegetable oils (such as olive and canola), fat-free sprays, or light tub margarines. Women should aim to limit added sugars to 100 calories/day (6 tspns), and men to 150 calories/day (9 tspns). *Just one 12-oz can of regular soda has 8 tspns sugar, 130 calories, no nutritional value.*
- Avoid butter and stick margarines, and limit commercially produced baked products made with partially hydrogenated trans fat or saturated fat.
- Eat sensible portions: Palm-sized for meats/protein (1/4 of your plate); fist-sized for starches (1/4 of your plate); 1/2 a plate or more of non-starchy vegetables is a good way to start.
- Try to be more active throughout the day. It is recommended that all adults get at least 30 minutes of moderate physical activity daily to maintain weight, or more than 30 minutes to lose weight.

TIPS FOR INCREASING PHYSICAL ACTIVITY

- Find a physical activity that you truly enjoy and can do year-round (cycling, tennis, swimming, walking, running, kick-boxing, latin dancing, martial arts, etc.).
- Start simply, and work up. If you've never been a runner, start with short distances, and just keep moving.
- Make physical activity a regular part of your lifestyle. Schedule a consistent time that is least likely to interfere with your work or family life.
- Increase the fun factor. Have a buddy join you, or work out as a family.
- Gradually increase your movement as you build up your strength, by increasing either the time or the distance, or adding more activities to other days of the week.
- Add to your activity level whenever possible throughout your day. Take a lunchtime walk; choose the stairs instead of the elevator; park farther away from the mall; walk/bike to do errands instead of driving; get up and walk to talk to a co-worker instead of emailing them from your desk; avoid asking someone to go get something for you – rise to the occasion and fetch it yourself!

Over time, even a small decrease in calories eaten plus a small increase in physical activity can keep you from gaining weight, or help you lose weight.

Healthy Recipe Idea : Very Vegetable Minestrone with Barley and Beans



- 1 Tbsp. Olive oil
- 1 small onion, finely chopped
- 1/4 cup finely sliced green onions (scallions), including green stems
- 1/2 cup finely sliced celery
- 1/2 cup finely chopped carrots
- 2 tsp. chopped fresh sage (1 tsp. dried may be substituted)
- 1 tsp. chopped fresh thyme (1/2 tsp. dried may be substituted)
- 2 tsp. chopped fresh parsley (1 tsp. dried may be substituted)
- 3 cloves garlic, minced
- 1 cup finely chopped Savoy cabbage
- Lite salt and freshly ground pepper to taste
- 1 (14-oz) can cannellini beans, drained and rinsed
- 3 cups reduced-sodium, fat-free chicken broth
- 1 medium potato, cut into 12-inch cubes
- 1/4 cup uncooked pearl barley
- 1 cup frozen, cut green beans
- 1 Tbsp. freshly grated Parmesan cheese (optional)

In large pot, heat oil over medium heat. Add onions, celery, carrots, sage, thyme, parsley, and garlic. Saute 5-6 minutes. Add cabbage, salt, pepper, and cannellini beans and stir. Add broth, bring to a boil, and stir in potato and barley. Reduce heat and simmer, covered, 20-22 minutes (or until potato pieces are tender when pierced with a fork), gently stirring occasionally. Stir in green beans, and continue to simmer for 5 minutes. Garnish with Parmesan cheese and serve.

Makes approximately four 1 cup servings. Per serving: 260 calories, 4 gm total fat (1 gm saturated fat), 46 gm carbohydrate, 12 gm protein, 13 gm dietary fiber, 450 mg sodium.

Biggest Loser Comes to Radiation Oncology

On February 1, 2013 we began Season Three of the Radiation Oncology biggest loser. What's unique about Season Three? Not only do we have an outside of the department contestant but in the spirit of the current season of the real biggest loser we have a child participant. Weight is a sensitive topic that many of us struggle with on a daily basis and through these biggest loser competitions we have been able to grow closer as individuals as we support one another's efforts.



Sean Boyle, winner of Biggest Loser, Season 2

PAST WINNERS

Season 1

- 1st Place: John Hopkins
- 2nd Place: Linda Ferguson
- 3rd Place: Nicole Barrett

Season 2

- 1st Place: Sean Boyle
- 2nd Place: Jiwen Yu
- 3rd Place: Gina Jarrell

Who will be the season 3 winners?

Jamie Williamson

Save the Date!

6/5/13

14th Annual

Celebration of Life

New Location!

Hamilton Building - June 5, 2013

Patients, Caregivers, Survivors, Families,
Physicians, and Staff Welcome to Attend

Health Fair Begins at 3:00 PM

Art Show, Special Guest Speakers,
Survivor Stories, and Fun Activities
4:00 PM to 7:00 PM

Registration 1-800-JEFF-NOW



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The Radiation Oncology Newsletter Committee offers their sincere appreciation to Jennifer North for her time and professional expertise in the design and publication of the newsletter.

RADIATION ONCOLOGY QUARTERLY
Spring 2013

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