

WELCOME

Message from the Chair



We have had a fabulous few months in the Department of Radiation Oncology at Penn Medicine. I appreciate everyone’s efforts and contributions to our missions and department program. On the research side, we **FINALLY** completed the proton research room and moved the small animal irradiator in place so that we can start doing protons vs. conventional radiation research. The Proton Research Room will be one of the few centers of its kind in the world. We have completed our residency match and I am thrilled with the new team members that will be joining us in the coming months. We also have a number of excellent new faculty joining us in the coming months and I want to reiterate that it is everyone’s responsibility to help integrate them into our quality and safely culture. Please don’t make any assumptions and keep vigilant.

As usual, it is great to see our team having a good time. We certainly have a reputation as a “work hard, play hard” department. Please enjoy all of the photos of events over the past few months.

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Radiation Oncology Holiday Party 2016

Staff and Faculty of Penn Radiation Oncology celebrated this year’s holiday season at the Academy of Natural Sciences Museum on Friday, December 16, 2016.



RADIATION ONCOLOGY HOLIDAY PARTY



Penn Scientists help NASA Understand Radiation Risks for Future Trips to Mars

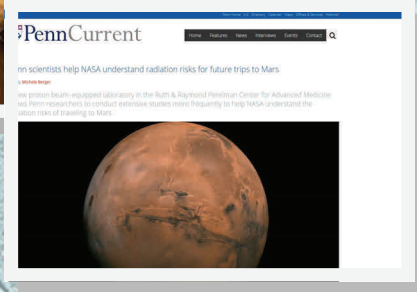
A new proton beam-equipped laboratory in the Ruth & Raymond Perelman Center allows Penn researchers to conduct extensive studies more frequently to help NASA understand the radiation risks of traveling to Mars.



Click on links below to access full articles:

<http://www.phillyvoice.com/penn-researchers-helping-nasa-bid-to-put-man-on-mars/>

https://penncurrent.upenn.edu/features/penn-scientists-help-nasa-understand-radiation-risks-for-future-trips-to-mars?utm_source=Primary&utm_campaign=aa1178e687-EMAIL_CAMPAIGN_2017_03_16&utm_medium=email&utm_term=0_3777f2ca8f-aa1178e687-43553849



Biden Speaks at Penn as Appointed Professor and Calls for Progress on Cancer Research

Former Vice President Joe Biden spoke on campus for the first time since the announcement of his new role as a Penn professor on Tuesday afternoon. Biden and Gutmann were joined by Chief Medical Officer of the American Cancer Society Otis Brawley, Director of Clinical Research for the Fred Hutchinson Cancer Research Center Nancy Davidson, Perelman School of Medicine Professor Carl June and Penn Medicine patient and pancreatic cancer survivor Kim Vernick.



Kim Vernick, a Penn Radiation Oncology patient was invited to participate on the panel and talked about the importance of care and gave a “shot out” to Dr. Metz.

Please click on link below to access full article:

<http://www.thedp.com/article/2017/02/biden-talks-cancer-research-penn>



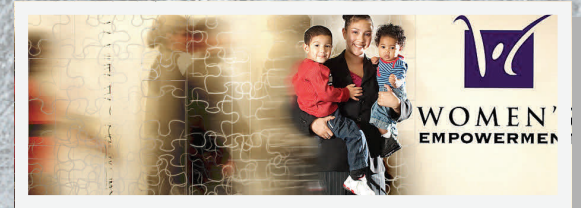
Princeton Healthcare System to Join University of Pennsylvania Health System

The Executive Committee of the University of Pennsylvania Board of Trustees has approved plans for the Princeton Healthcare System to become a part of the University of Pennsylvania Health System. The University's action follows the approvals of the Princeton HealthCare System Board and the Penn Medicine Executive Committee. Both organizations are excited about the potential of this new arrangement



Women in Transition Fundraiser

The RadOnc clinical research group raised over \$540 with their loose change jar to adopt two families through Women in Transition. A very huge thank you to everyone that donated and a special thank you to Ashley Feriozzi for hosting the jar. They've helped to make two families' holidays just a little brighter. please visit their website at www.helpwomen.org.



Opioid Epidemic

Penn Medicine News Blog featured article written by Erin McMenamin, MSN, CRNP, who provided a great insight on the opioid epidemic.

Click on link below to read full article:

<https://www.pennmedicine.org/news/news-blog>

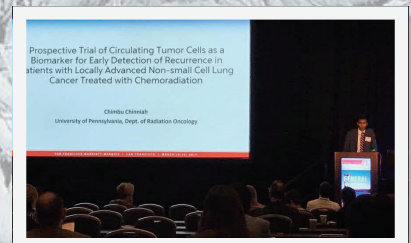


Blood Tests Spot Returning Lung Cancers

Penn research fellow and lead author, Chimu Chinniah, presented at this year's American Society for Radiation Oncology (March 16, 2017) about this trial study which tests blood results for early detection of returning lung cancer.

Click on link below to access full article:

<http://health.usnews.com/health-care/articles/2017-03-20/blood-test-may-spot-lung-cancers-return-even-before-scans>



Philadelphia Antique and Art Show: April 21-23, 2017

Support Penn Radiation Oncology by attending this year's Philadelphia Antique and Art Show. Proceeds will benefit Penn Radiation Oncology Quality of Life Program to improve wellbeing of patients.

A BENEFIT FOR PENN MEDICINE

THE PHILADELPHIA ANTIQUES & ART SHOW

ANNOUNCES THE 2017 BENEFICIARY

The Philadelphia Antiques & Art Show is excited to announce Penn Medicine's Department of Radiation and Oncology as its 2017 beneficiary.

Show proceeds will help build the department's Quality of Life Program, designed to improve the overall wellbeing of patients and caregivers within the department's waiting areas, making patients' first encounter on the journey of healing to be a transformative and holistic experience by providing a place of calm, community, optimism, inspiration, and support.

The Philadelphia Antiques & Art Show is an exciting opportunity to experience history through a world of extraordinary treasures. With over 60 distinguished exhibitors presenting exceptional handcrafted items and art from the Colonial to the Mid-20th Century eras, come see why the Philadelphia Show has been called one of the finest of its kind for over 50 years.

Plan to Join us at the Preview Party to support this amazing program!

APRIL 21-23, 2017

PREVIEW PARTY APRIL 20th

SAVE THE DATE

www.Philadelphiaantiquesandartshow.com for ticket information.

Welcome New Employees

Lei Dong, PhD
Vice Chair & Director of Medical Physics

Brittany Attardi, MSW, LCSW
Social Work

Christina Paul, BS
Dosimetrist

**Kristine Rennert, BSN, MAMS, RN,
OCN, HN-BC**
Nurse

**Audrey Caspar Clark, MA, RD, CSO,
LDN**
Advanced Practice Clinical Dietitian
Specialist

Cynthia Beyer, BSN, RN
Nurse

Chelsea Davis
Administrative Assistant

Sloane Rabe, BSN, RN
Nurse

Tara Ryan, BSN, RN
Nurse

John Marcantognini, MBA
Director of Finance

Kristen D'Elida, BSN, RN
Nurse

Macy Limanni, BSN, RN, CPHON
Nurse

Victoria Cuthbert Rate, BSN, RN, OCN
Nurse

Naomi Fecca, BS
Per Diem Radiation Therapist

Alireza Fotouhi Ghiam, MD, MS
Radiation Oncologist

Rebecca Struwe
Associate Director of Strategic Planning
and Chief of Staff

Promotions/ Appointments/ Awards

Steven Feigenberg, MD
Chair of Clinical Research and Chief of the Thoracic Service

Surbhi Grover, MD
Head of Oncology Department, Botswana Radiation Oncology

Patrick Tripp, MD
Associate Professor of Clinical Radiation Oncology

Shannon O'Reilly, PhD
Physics Chief Resident

David Alkins, BS
Lead Application Analyst

Neha Vapiwala, MD
Academy of Master Clinicians

Clara Hilton, BSN, RN
Distinguished Nurse Clinician Academy

James Metz, MD
IBA Pioneer Award

James Kolker, MD
Clinical Associate Professor of Radiation Oncology

Sloane Rabe, BSN, RN
Vilma Griffiths, BSN, RN
Erin Davis, MSN, CRNP
Christine Colon
Patient Safety Good Catch Award



You did it!
Congratulations

You did it!
Congratulations



Distinguished Nurse Clinician Academy

Congratulations Clara Hilton BSN, RN who has been selected for induction into the Penn Medicine **Distinguished Nurse Clinician Academy** from her nomination by Dr. Berman. The Distinguished Nurse Clinician Academy recognizes clinical nurses in all settings who exemplify practice excellence. This recognition is for clinical nurses who have demonstrated mastery in clinical practice and represent the gold standard in collegiality within the interprofessional team while keeping the patient and family at the center of care.

The Penn Medicine Distinguished Nurse Clinician Academy will recognize achievement in nurses who consistently work in a manner to improve the culture of service, engagement and patient / family advocacy in their practice across Penn Medicine. Please join me in congratulation Clara in this prestigious recognition.

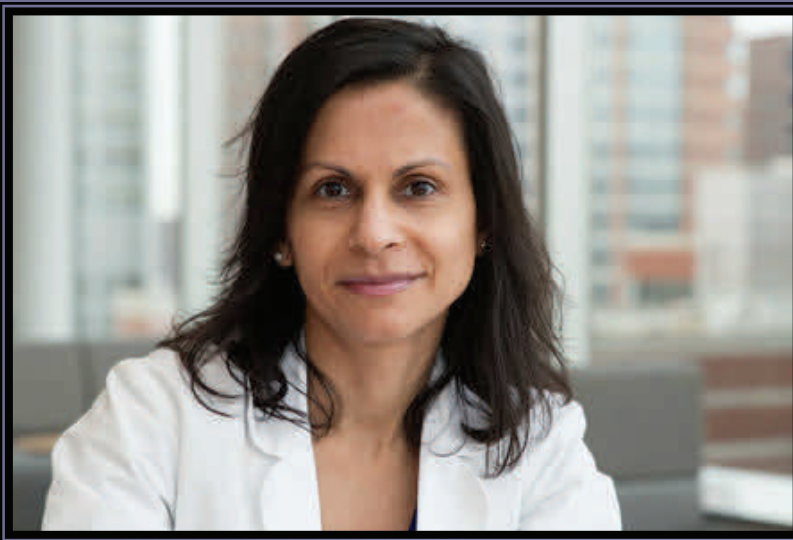


Patient Safety Good Catch Award

Congratulations to Sloane Rabe, BSN, RN, Vilma Griffiths, BSN, RN, Erin Davis, MSN, CRNP and Christine Colon (not pictured) who are this year's good catch recipients from radiation oncology.



The Academy of Master Clinicians



Congratulations **Neha Vapiwala, MD**, for being named a new member of the Academy of Master Clinicians.

The Academy is a distinguished honor that upholds a commitment to clinical excellence that dates to the founding of our medical school more than 250 years ago. Recipients

of this honor are role models who combine diagnostic acumen, technical proficiency and an abiding devotion to compassionate care.

Dr. Vapiwala brings all of these aspects and more to her role here in the Department providing the highest level of clinical excellence, professionalism and mentorship to staff and faculty while providing the most compassionate care to her patients and their caregivers.

We are proud and delighted for Dr. Vapiwala's appointment to the Academy of Master Clinicians and look forward to her continuing success.

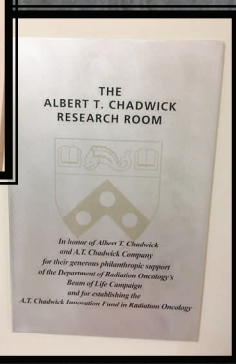
Dr. Vapiwala joins Dr. Gary Freedman in receiving this very prestigious honor in 2013.





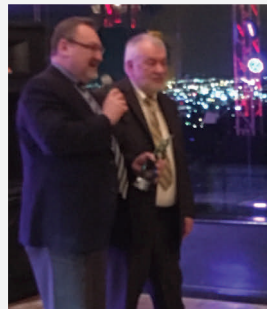
Honoring Proton Research Room Donor

Mr. Albert Chadwick was honored by James Metz, MD with a new signage for his contributions to the new Proton Research Room.



IBA Honors James Metz, MD

James Metz, MD was awarded a Pioneer award by IBA at the IBA User's Meeting in Shreveport, LA.



Celebrating Jim McDonough's Retirement

Erin Davis, MSN, CRNP (Nurse Practitioner), Sarah Lowitz, RT(T), and Karima Cooper RT(T) (Radiation Therapists) celebrate retirement of Jim McDonough, PhD.



2017 Mummer's Parade



**John Kirby, OTR,
MBA, Associate
Executive Director,
HUP**

**Administration
marched in this
New Year's 2017
Mummers
Parade!**



Radiation Oncology Medical Residency Program

We are very happy to share with you the results of this year's radiation oncology medical residency match. Below are the 4 outstanding applicants who will be joining our department in July 2018 (after an internship year with the Department of Medicine at HUP which will start in June 2017). Also listed are their anticipated degrees from their current institutions, as well as their undergraduate training affiliations.

Timothy Kegelman, MD, PhD

**Virginia Commonwealth University School of Medicine,
BS, University of Notre Dame (Chemical Engineering)**

Shwetha Manjunath, MD

**University of Rochester School of Medicine and Dentistry
BS, Haverford College (Biology)**

Graeme Williams, MD

**Lewis Katz School of Medicine at Temple University
B.S.E., University of Pennsylvania (Systems Science Engineering)**

Christopher Wright, MD

**Sidney Kimmel Medical College at Thomas Jefferson University
BS, University of Rochester (Biochemistry, Mathematics)**

We would like to thank everyone for their efforts in supporting all of the medical students who spend time in our department. We sincerely appreciate everyone's contributions that collectively ensure the success of our recruitment process each year.

Radiation Oncology Physics Residency

We are happy to share with you the results of the medical physics residency match for 2017. As always, admission to the medical physics residency program is highly competitive and we are delighted that the following four individuals (in alphabetical order) will join our department on July 1st, 2017.

William Scott Ingram, PhD, Medical Physics, University of Texas MD Anderson (expected June 2017)

Irina Malajovich, PhD, Physics, University California Santa Barbara, and Medical Physics Certificate, University of Pennsylvania

Fionnbarr Timothy O'Grady, PhD, Physics, University of Arizona, and Masters in Medical Physics, University of Pennsylvania

Heather Marie Petroccia, PhD, Physics, University of Florida (expected April 2017), and Masters in Physics, University of Florida

We want to thank all the people involved in all aspects of the medical physics residency program as it is a collective effort. The reputation that we have built up over the years have enabled us to attract the most outstanding candidates to Penn. Please join us in welcoming these outstanding candidates to our program!

Onsite Proton Education



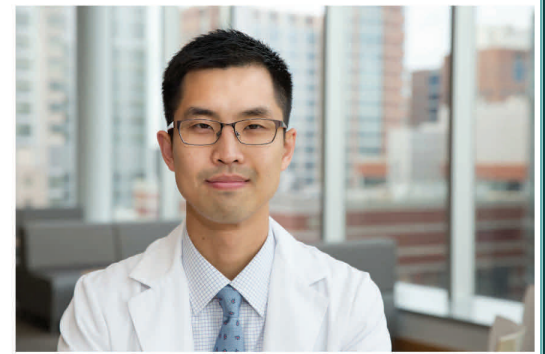
International visiting physicists, Shouping Xu and Yue Zhang arrived from China and trained in proton therapy from *January 9—February 3, 2017.*

Why Medical Schools Must Teach Future Doctors How to Make Mistakes

In joint opinion editorials, Neha Vapiwala, MD, associate professor of Radiation Oncology and vice chair of Education, and fourth-year PSOM student Jason Han, share insights and experiences that highlight the importance of teaching medical students how to cope with errors and how learning to manage mistakes is important to physician training at every level.

How the victim of a medical error learned to face his own mistake

Updated: DECEMBER 30, 2016 — 10:10 AM EST



Please click on link below to read full article:

<http://www.philly.com/philly/blogs/healthcare/How-the-victim-of-a-medical-error-learned-to-face-his-own-mistake.html>

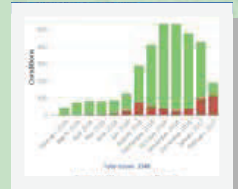
Spring 2017 Quality Update:

ASTRO APEX Accreditation Progress: Our onsite assessment was conducted on Friday January 13, 2017 at 5 locations (all on the same EMR): Chestnut Hill, Doylestown, PCAM, Pennsy, Valley Forge. We will receive a determination by the end of February.

ACRO Accreditation for Rad Onc at Cherry Hill: We have just submitted the application toward ACRO accreditation at Cherry Hill. This will take several months to gather the required cases. After all of our preparation for APEX, we feel confident in our ability to meet the ACRO requirements as well.

Strong Safety Culture: “Effective risk management depends crucially on establishing a reporting culture. Without a detailed analysis of mishaps, incidents, and near misses, we have no way of uncovering recurrent error traps. Trust is a key element of a reporting culture, and this in turn, requires the existence of a just culture - one possessing a collective understanding of where the line should be drawn between blameless and blameworthy actions. Engineering a just culture is an essential early step in creating a safe culture.” West J Med. 2000 June; 172(6): 393–396. Human error models and management. James Reason

Reporting in the Rad Onc Condition Reporting System is crucial to our safety culture. Raising our engagement to an even higher level is a FY17 quality goal. (This cart depicts reports as of 2/16/17).



ONCOLINK UPDATES

The OncoLink team is proud to announce the expansion of our **Treatment Binder Builder**. This tool for healthcare professionals enables you to build a patient centered binder of diagnosis, treatment, side effect, nutrition, and coping information tailored to the needs of each patient.

We've expanded our diagnosis pathways to include brain, sarcoma, heme (leukemia/myeloma), lymphoma, GU, lower GI, upper GI, GYN and skin cancers in addition to already existing pathways for head and neck, prostate, lung and breast cancers. Newly approved medications have been added to our Rx lists by disease site so you can now include the most up to date treatment information. You can find the Treatment Binder Builder at <https://www.oncolink.org/treatment-binder>

If you have questions about the Treatment Binder Builder or would like a demo, please don't hesitate to contact the OncoLink team: christina.bach@uphs.upenn.edu. Help your patients get the most up to date information to help navigate their cancer journey.

Congratulations!

First Place Poster Award at the Fifteenth Annual Biomedical Postdoctoral Research Symposium “The Immunomodulatory Effects of Surgery on Photodynamic Therapy of Pleural Cancer” (**Davis RW 4th, Miller J, Houser CL, Yuan M, Carter S**, Klampatsa A, Albelda S, **Cengel K, Busch TM**)

Funding News:

Dr. Andy Minn, DOD Breast Cancer Breakthrough grant: *Combinatorial Strategies to Overcome Resistance to Immune Checkpoint Blockade in Breast Cancer*

Institute for Translational Medicine and Therapeutics (ITMAT) grant: *In vivo surrogate markers of clinically-relevant molecular characteristics of glioblastoma, based on multivariate machine learning and clinically-acquired MRI;*

PI: Christos Davatzikos, Co-PI: **Costas Koumenis**, Co-PI: Donald O’Rourke, Co-I: **Ioannis Verginadis**

Radiation Oncology Translational Center of Excellence (TCE) pilot grant awardees:

Using Radiation and Blockade of Interferon Signaling to Improve Durable Response to Immune Checkpoint Blockade

Co-PIs: **Andy Minn, MD, PhD** (RadOnc) & Taku Kambayashi, MD, PhD, (Pathology and Laboratory Medicine)

Co-I: E. John Wherry, PhD (Microbiology)

PD-1 Blockade to Attenuate Surgery-Induced Immunosuppression during Intraoperative Photodynamic Therapy

Co-PIs: **Theresa Busch, PhD** & Edmund Moon, MD (Medicine), **Keith Cengel, MD, PhD**

Co-Is: **Andrea Facciabene, PhD** (RadOnc), Mary Putt, PhD, (Biostatistics and Epidemiology) & Sunil Singhal, MD (Surgery)

Hypofractionated radiotherapy as a vaccine in combination with the TLR7/8 agonist resiquimod for metastatic melanoma

Co-PIs: **Amit Maity, MD, PhD** (RadOnc), George Xu, MD, PhD (Pathology and Laboratory Medicine), & Alain Rook, MD (Dermatology)

Co-I: **Andrea Facciabene, PhD** (RadOnc)

Diffusion Weighted MRI to Assess Esophageal Tumor Response to Neoadjuvant Chemoradiation

Co-PIs: **Edgar Ben-Josef, MD** Co-I: Mark Rosen, MD, PhD

Lymphoma RADVAX™: Low Dose Radiotherapy with Immunomodulators in Hodgkin and Non-Hodgkin Lymphomas

Co-PIs: **John Plastaras, MD, PhD** Co-I: Jakub Svoboda, MD



Welcome:

We want to give a big welcome to the newest members of the Research Division: **Khayrullo Shoniyozov, PhD**, our new SARRP Technical Operator; **Renzo Perales, PhD**, to the Facciabene lab and **Ilias Karagounis, PhD**, to the Maity lab.

Upcoming Research Seminars:

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

Thursday, March 23, Invited Speaker: Dr. Shi-yuan Cheng, Northwestern University

Thursday, April 13, RBI Seminar: Dr. Robert Mach, UPenn

Wednesday, April 19, Invited Speaker: Dr. David R. Gius, Northwestern University

Monday, May 1, Invited Speaker: Dr. Albert C. Koong, Stanford Cancer Institute

Thursday, May 11, RBI Seminar: Dr. Theresa Busch, UPenn

Thursday, May 25, Invited Speaker: Dr. Eileen P. Connolly, Columbia University Medical



Our department will be hosting the first annual **Xstrahl Spring Symposium and User meeting** at the Smilow building on April 10-11, 2017. Xstrahl Life Science is the developer of the SARRP, and users will be attending from various institutes. Please register from the link below: <https://www.signmeup.com/site/online-event-registration/118375>

A Huge and special THANK YOU to the following team members who really made the Proton Research Room transition smooth and possible!

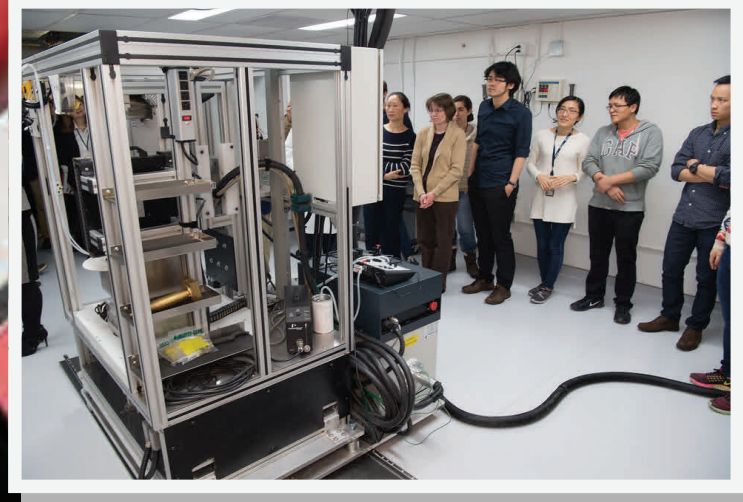


Steve Tuttle
Kurt Morath
Tom Meele
Cam Koch
Tim Jenkins
Eric Diffenderfer
Khayrullo Shoniyozov
Chiharu Sako

SARRP Technical Operator, Khayrullo Shoniyozov, in the new Proton Research Room

Proton Research Room Opening Ceremony

March 15, 2017



Purple Stride Pancreatic Cancer Walk



Dr. Et-Tsu Chen attended the Purple Stride Pancreatic Cancer Walk with Mary Thomas, RN, and Trish Gambino (in red), who was Team captain (October, 2016).



Holiday Party

The staff of Valley Forge , Dr. Et-Tsu Chen, Mary Thomas, RN, OCN, and her daughter Ali Thomas, attended this year's holiday party at the Academy of Natural Sciences Museum on December 16, 2017.



For Pete's Sake Cancer Respite Foundation Beach Ball: 1/28/2017

Dr. Et-Tsu Chen, Mary Thomas, RN, OCN, and Michelle Sparrow, MBA, RN, attended this year's For Pete's Sake Cancer Respite Foundation Beach Ball. Trish Gambino was honored at the event by FPS President Marci Schankweiler .



MOVIE REVIEW: LA LA Land*Directed by: Damien Chazelle**Review By: Eli Glatstein, MD*

Finally, I got around to seeing “La La Land”, and it’s a very enjoyable musical. I have to say that I don’t think it’s the best movie of the year, but it’s certainly entertaining and it’s well acted with a story that seems believable, especially when compared to many of the old Hollywood musicals, which usually have a very flimsy story, but strong music, singing and dancing.

The plot is simple enough; Mia, played by Emma Stone, is an aspiring actress, actually working in a studio lot café serving latte’s to various stars; Sebastian, on the other hand, played by Ryan Gosling, is a jazz musician who is really focused on jazz, and absolutely loves it. He seeks out a living by playing routine piano in a cocktail lounge, and the two lead characters initially meet on the freeway after an opening dance number on the freeway where all the cars are stalled and various drivers start to dance while waiting for the traffic jam to unwind. The plot itself of “La La Land” is one in which you can easily get interested in. Although the movie is very enjoyable, I can’t really list it as the best movie of the year, in my opinion.

Chazelle’s last movie before this was “Whiplash”, which dealt with music in a different way and it was a movie you could really sink your teeth into with an offbeat story with excellent performances and, again, a musical and jazz spectacular as you absorbed the music as an essential part of the film.

One of the reasons why musicals have fallen by the wayside is that they are very expensive to make. You need an orchestra, you need multiple dancers and singers and you need leads who can do both as well as act. Stone and Gosling are very good in their acting performances but their dancing is very limited and their singing voices are really pretty tinny. It’s not like Judy Garland or Mario Lanza. I couldn’t help but think during the dancing between Stone and Goslings, spectacularly overlooking Los Angeles, and comparing it to the other spectacular dance scene in “The Band Wagon” with Fred Astaire and Cyd Charisse. There were some phenomenal dance scenes in the old musicals such as Fred Astaire in “Royal Wedding”, dancing with a coat rack as a partner and later dancing on the ceiling no less! In another remarkable scene in “Anchors Aweigh”, Gene Kelly dances with the cartoon mouse Jerry, quite an unforgettable number.

The thing is, when you watch those Astaire and Kelly films, they’re dancing to perfection. Every movement was flawless and they represented our highest aspirations with music and dance. Stone and Gosling give it their best and it’s reasonable, but it’s far from perfect. Also the music, composed by Julian Hurwitz with lyrics by Benj Pasek and Justin Paul, is certainly pleasant enough, but it’s not like the music from “The Band Wagon”. The music is perfectly nice to listen to but it’s not Berlin, it’s not Porter, it’s not Gershwin, it’s not Rogers and Hammerstein. You walk away feeling warm but you are not singing the songs, which is largely what we used to do in the 50’s and 60’s.

In any event, the millennials seem to like this movie very, very much, and I don’t blame them, but I think they would benefit by going back in the 50s looking at those old MGM spectaculars, including “Royal Wedding”, “The Band Wagon”, and of course “An American in Paris”. The musicals will never completely go out of style, but they do evolve in a different type of production from the classic MGM spectaculars. In “La La Land”, Los Angeles looks spectacular and Hollywood always worships films about itself. But go see it because it is simply a wonderful film.



Apinorasethkul, Ontina. Pencil beam scanning proton therapy vs rotational arc radiation therapy: A treatment planning comparison for postoperative oropharyngeal cancer [http://www.meddos.org/article/S0958-3947\(16\)30082-6/fulltext](http://www.meddos.org/article/S0958-3947(16)30082-6/fulltext)

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Lin L, Huang S, Kang M, Hiltunen P, Vanderstraeten R, Lindberg J, Siljamaki S, Wareing T, Davis I, Barnett A, McGhee J, Simone II CB, Solberg TD, McDonough JE, and Ainsley C: A Benchmarking Method to Evaluate the Accuracy of a Commercial Proton Monte Carlo Pencil Beam Scanning Treatment Planning System *Journal of Applied Clinical Medical Physics* In Press 2017.

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