

**University of Maryland
Department of Radiation Oncology**

**Schedule of
Presentations and Activities**



ASTRO 2024
Targeting Provider Wellness
FOR EXCEPTIONAL PATIENT CARE

2024 Annual Meeting
Washington, DC
September 29–October 2

Sunday, September 29 Presentations

11:40–11:55 AM Ballroom A/B/C Oral, Presidential Session

The space-time continuum in metastatic castration-sensitive prostate cancer: The final frontier?

Tran P

Oral, Presidential Session

2:45–4:15 PM Hall C Poster

[Rates of attrition in black patients with prostate cancer enrolled on clinical trials: A pooled secondary analysis of RTOG 9601, 9902, 0126, and 0415](#)

Hamza M, Cherng H-R, Sun K, Tran P, Bentzen S, Mishra M

3:37–3:47 PM Room 140 Oral, invited

Challenges and solutions for capturing better normal tissue dose/volume/outcome data to facilitate its analyses: Perspective and implications

Bentzen S

4:45–6:00 PM Hall C Poster

[Improving liver SBRT target localization with hybrid MRI/CBCT technology](#)

Chen M, Zhang Z, Lu K, Zhong H, Jiang Z, Yin F-F, Ren L

4:45–6:00 PM Hall C Poster

[One fiducial for all modalities: Optimized trackability and minimized beam perturbation for fiducials used across multi-modalities](#)

Liu J, Bamberger C, Iqbal N, Reynolds K, Shah S, Li X, Wang P, Fan J, Choe K, Chawla A, Kim D, Rahimi R

4:45–6:00 PM Hall C Poster

[Integrating radiation-induced functionally weighted airway damage modeling with radiation-induced parenchymal damage modeling improves prediction of post-RT ventilation loss](#)

Vicente EN, Gutierrez N, Oakes J, Cammin J, Gopal A, Kipritidis J, Modiri A, Mossahebi S, Mohindra P, Citron W, Matuszak MM, Timmerman, RD, Sawant A

4:45–6:00 PM Hall C Poster

[Clinical background of the tolerance of the in-air spot size variation of proton beams](#)

Yi BY, MacFarlane M, Yao W, Zakhary M

5:05–5:15 PM Room 147 Oral

[Evaluating neurocognitive recovery following stereotactic radiosurgery and whole brain radiation therapy: Insights from a pooled analysis of three phase III trials](#)

Cherng H-R, Sun K, Bentzen S, Brown PD, Armstrong TS, Gondi V, Mehta MP, Mishra MV

University of Maryland Department of Radiation Oncology Welcome Dinner Reception

Sunday, September 29

6:30–9:30 PM

Elizabeth's on L Street

1341 L Street NW, Suite 2

Washington, DC

Monday, September 30 Presentations

8:00–9:00 AM Hall C Poster

[Interstitial high-dose rate brachytherapy with or without interstitial hyperthermia for gynecologic malignancies](#)

Thompson AD, Pollock AE, Savla B, Mohindra P, Krc RF, Cohen JD, Sun K, Rodrigues D, Guerrero M, Lamichhane N, McAvoy SA, Molitoris JK, Rana ZH, Kunaprayoon D, Marter K, Roque DM, Rao G, Bentzen SM, Nichols EM

10:45 AM–10:55 PM Room 150 Oral

[Assessment of circulating tumor cells in oligometastatic castration-sensitive prostate cancer patients from the ORIOLE trial](#)

Bazyar S, Sutera P, Deek MP, Wang J, Phillips R, Radwan N, Marshall C, Mishra M, Rana Z, Molitoris J, Kwok Y, Gupta A, Wenstrup R, DeWeese TL, Song DY, Pienta KJ, Antonarakis ES, Kiess A, Tran PT

10:45 AM–12:00 PM Hall C Poster

[Identifying risk factors associated with outcomes for patients with recurrent and progressive meningiomas: A secondary analysis of SWOG S9005](#)

Cherng H-R, Woodworth GF, Ahmad H, Pham L, Kwok Y, Regine WF, Mishra MV

10:45 AM–12:00 PM ROOM 140 Session Moderator

Diversity, equity, and inclusion in health care

Domogauer J, Vyfhuis M

10:55–11:05 AM Room 140 Oral

[Centering Black voices: Factors influencing a cancer patient's decision to join a clinical trial](#)

Gomez C, Baker K, Eggleston C, Ferris M, Molitoris J, Rana Z, McAvoy S, Nichols E, Regine W, Bentzen S, Vyfhuis MAL

3:00–4:00 PM Hall C Poster

[Comparison between proton LET-dependent RBE dose and photon physical dose for acute radiation dermatitis in Caucasian and African-American breast cancer patients undergoing radiation therapy](#)

Biswal NC, Lee SW, Zhang B, Jatczak J, McAvoy S, Cheston S, Yi BY, Nichols EN, Yao W

3:00–4:00 PM Hall C Poster

[Can surface-guided radiation therapy \(SGRT\) be used to monitor intrafraction motion of patients receiving accelerated partial breast irradiation \(APBI\)?](#)

Zhou J, Chen S, Zhang B, Lasio G, Xu H, Xu J, Chen Q, Benda R

3:10–3:20 PM Room 232 Oral

[Optimized hybrid model for radiation incident reporting in multi-site centers](#)

Li X, Rahimi R, Su F-C, Chawla A, Miner A, Fan J

Monday, September 30 Presentations (cont.)

5:00–6:00 PM Hall C Poster

Investigating the role of TNIK in the pathogenesis of lung squamous cell carcinoma

Chang J, Dutta Chowdhury D, Council D, Nguyen T, Jagtap S, Chan A, Khan MA, Connis N, Torres-Ayuso P, Brognard J, Rezaee M, Lafargue A, Hann CL, Tran PT

5:00–6:00 PM Hall C Poster

Patient-derived pancreatic tumor organoids as a surrogate to predict radiation and chemotherapy response in individual patients: A model for precision medicine

Keepers Z, Roy S, Bhandary B, Carrier F, Lamichhane N, Molitoris J, Regine W, Shukla H

5:00–6:00 PM Hall C Poster

Modeling Twist1 overexpression in a pancreatic ductal adenocarcinoma mouse model

Ajmal Khan M, Chang J, Nguyen T, Council D, Dutta Chowdhury D, Shetty A, Song Y, Chan A, Patel P, Tran L, Chen J, Nugent K, Lemtiri-Chlieh G, Malek R, Thielman NR, Li K, Zheng L, Gabrielson K, Tran PT, Lafargue A

5:00–6:00 PM Hall C Poster

Impact of TWIST1 transactivation domain towards oncogene-induced senescence suppression in non-small cell lung cancer

Lafargue A, Wang H, Thiruganasambandam S, Gajula RP, Shetty A, Song Y, Simons BW, Nguyen T, Connis N, Dutta Chowdhury D, Chang J, Council D, Nugent K, Siddiqui I, Taparra K, Rezaee M, Zachara N, Morris ZS, McFarland C, Abdulkadir SA, Hann C, Tran PT

Additional Department presentations

- **Ryan Cherng, MD**, radiation oncology resident, was selected to participate in the Annual ASTRO Press Program on September 30 with his presentation “Evaluating neurocognitive recovery following stereotactic radiosurgery and whole brain radiation therapy: Insights from a pooled analysis of three phase III trials”
- **Charlyn Gomez**, UMSOM medical student, was selected to participate in the Annual ASTRO Press Program on September 30 with her presentation “Centering Black voices: Factors influencing a cancer patient’s decision to join a clinical trial.”
- **Mariana Guerrero, PhD**, will be a panel participant in “Career pathways in radiation oncology” part of the Aspiring Scientists and Physicians Program (ASPP), from 11:00 AM to 2:30 PM on September 29. The ASPP hosts undergraduate, medical, and graduate students from institutions of higher learning in cities where ASTRO’s annual meeting is held to participate in a day of science discovery and career exploration. Also participating as faculty in the meeting will be **Melissa Vyfhuis, MD, PhD**, and **Sarah McAvoy, MD**.
- **Amit Sawant, PhD**, and **Jason Molitoris, MD, PhD**, will be participating in Varian User Meeting and exhibit booth events.

Tuesday, October 1 Presentations

12:45–2:00 PM	Hall C	Poster
<u>Promising pathologic response of spatially fractionated radiotherapy preceding standard neoadjuvant conventionally fractionated radiotherapy in aggressive soft tissue sarcoma</u>		
	Olabumuyi AA, Brown MH, Bazyar S, Kunaprayoon D, Ng V, Regine WF, Molitoris JK	
2:30–3:45 PM Hall C Poster		
<u>Demographic differences between consenting versus non-consenting participants for biospecimen collection on NRG prostate cancer trials</u>		
	Kamran SC, Borges M, Spratt DE, Vapiwala N, Efstatithiou JA, Miyamoto DT, Mouw KW, Vyfhuis MAL, Le QT, Willers H, Van Allen EM, Huang FW, Michalski JM, Bahary JP, Helou J, Lukka H, Pugh S, Wenzel J, Feng FY, Tran PT	
2:50–3:00 PM	Room 207	Oral (late-breaking abstract)
<u>Outcomes of Radium-223 and SABR Versus SABR for oligometastatic prostate cancer – The RAVENS phase 2 randomized trial</u>		
	Tran OT, Sherry AD, Bazyar S, Wang J, Sutera P, Radwan N, Phillips R, Deek MP, Lu J, Dipasquale S, Deville CJr, DeWeese TL, Song D, Wang H, Abramowitz MC, Desai NB, Berlin A, Stish BJ, Tang C, Kiess AP	
4:00–5:00 PM	Hall C	Poster
<u>Multi-omics models can predict prostate-specific membrane antigen avidity for computed tomography lesions in oligometastatic castration-sensitive prostate cancer</u>		
	Kumar R, Zhang C, Sutera P, Hathout L, Jabbour A, Ren L, Tran PT, Nie K, Deek MP, Bazyar S, Sutera P, Phillips R, Deek MP, Radwan N, Marshall CH, Mishra MV, Rana ZH, Molitoris JK, Kwok Y, Gupta S, Wenstrupur R, DeWeese TL, Song D, Feng FY, Pienta K, Antonarakis ES, Kiess AP, Tran PT	
4:00–5:00 PM	Room 147	Panel moderator
Interpretability and uncertainty quantification: A way toward trustworthy AI in radiation oncology Ren L		
4:02–4:17 PM	Room 147	Oral
Interpretable AI: Advancements, challenges and paths ahead Ren L		
4:40–4:50 PM	Room 204	Quick pitch oral
<u>A retrospective comparison of acute toxicities in patients receiving pelvic radiation for newly diagnosed gynecologic primaries with intensity modulated proton therapy and volume modulated arc therapy</u>		
	Brown M, Pollock A, Li E, Sun K, Risher H, Rao G, Roque DM, Bentzen S, Mohindra P, McAvoy S, Nichols E	
5:35–5:45 PM	Room 152	Quick pitch oral
<u>Genomic predictors of response to metastasis directed therapy with or without androgen deprivation therapy</u>		
	Sutera P, Van der Eecken K, Song Y, Shetty AC, Hakansson A, Davicioni E, Verbeke S, Van Dorpe J, Fonteyne V, De Laere B, Hathout L, Ennis R, Jabbour SK, Rana Z, Molitoris J, Kiess A, Song DY, Tran PT, Ost P, Deek	

Wednesday, October 1, Presentations

8:00–8:10 AM Room 207 Oral

A digital pathology multimodal artificial intelligence algorithm is associated with pro-metastatic genomic pathways in oligometastatic prostate cancer

Song Y, Shetty A, Sutera P, Deek MP, Mendes AA, Van der Eecken K, Chen E, Showalter T, Royce TJ, Todorovic T, Huang H-C, Houck SA, Yamashita R, Kiess AP, Song DY, Lotan T, Esteva A, Feng FY, Ost P, Tran PT

8:10–8:20 AM Room 207 Oral

Validation of a digital pathology-based multimodal artificial intelligence model in oligometastatic castration-sensitive prostate cancer including in patients from the STOMP and ORIOLE phase II randomized clinical trials

Sutera P, Deek MP, Mendes AA, Song Y, Shetty A, Van der Eecken K, Chen E, Showalter T, Royce TJ, Todorovic T, Huang H-C, Houck SA, Yamashita R, Kiess AP, Song DY, Lotan T, Esteva A, Feng FY, Tran PT, Ost P

8:20–8:30 AM Room 147 Quick pitch oral

Plan-specific range tolerance method for CBCT triggered adaptive plans in intensity modulated proton therapy: Pilot study on head and neck

Yao W, Zhang B, Ferris M, Molitoris J, Huang M, Biswal NC, Yi BY

8:30–8:40 AM Room 207 Oral

Examination of Decipher prostate genomic classifier in patients with de novo metastatic disease from a large scale real-world clinical and transcriptomic data linkage

Moningi S, Ho YH, Proudfoot JA, Sutera P, Deek M, Phillips R, Rana Z, Molitoris J, Kwok Y, Mishra M, Spina C, Engelman A, Ross AE, Liu Y, Davicioni E, Jia A, Spratt DE, Leapman MS, Tran PT

10:30–11:45 AM Hall C Poster

CT-based radiomic biomarkers for predicting progression-free survival in head and neck squamous cell carcinoma

Ling X, Bazyar S, Ferris M, Molitoris J, Allor E, Thomas H, Arons D, Schumaker L, Krc R, Mendes WS, Tran P, Mehra R, Gaykalova DA, Ren L

12:30–12:50 PM Room 151 Quick pitch oral

Investigating the roles of the epithelial-mesenchymal transition program in small cell lung cancer tumorigenesis and chemoradiation response

Nguyen T, Chang J, Gabrielson K, Shetty A, Song Y, Lafargue A, Jagtap S, Council D, Chan A, Dutta Chowdhury D, Khan MA, Connis N, Carrieri FA, Imada E, Sforza D, Gardner E, McFarland C, Marchionni L, Rezaee M, Hann C, Tran

Additional Presentations not included in pre-meeting brochure

[Standard dose vs. reduced dose single fraction preoperative radiosurgery for resected brain metastases: A PROPS-BM International Multicenter Cohort study](#)

Prabhu RS, Akinyelu T, Vaslow ZK, Matsui JK, Haghghi N, Dan T, Mishra MV, Murphy WS, Boyles S, Perlow HK, Palmer JD, Udovivich C, Patel T, Wardak Z, Woodworth GF, Ksendzovsky A, Yang K, Chao ST, Asher A, Burri SH.

[Multi-institutional phase II trial using dose escalated five fraction stereotactic partial breast irradiation \(S-PBI\) with a cobalt stereotactic unit for early-stage breast cancer](#)

Rahimi AS, Kim DN, Leitch M, Parsons DDM, Nichols EM, Gu X, Lu W, Becker SJ, Alluri PG, Nwachukwu CR, Ahn C, Zhang Y, Stein M, Igbeka V, Farr S, Wooldridge R, Bahrami S, Stojadinovic S, Timmerman RD

[Prostate Advanced Radiation Technologies Investigating Quality of Life \(PARTIQoL\): Phase III randomized clinical trial of proton therapy vs. IMRT for localized prostate cancer](#)

Efstathiou JA, Yeap BY, Nichalski JM, Horick N, Zietman AL, Christodouleas JP, Kamran SC, Parikh RR, Vapiwala N, Mihalcik SA, Miyamoto DR, Zeng Z, Gay HA, Pisansky TM, Mishra MV, Wisdom AJ, Spratt DE, Mendenhall NP, Soffen EM, Bekelman JE

[Validation of patient-reported outcomes in patients with nonmetastatic breast cancer receiving comprehensive nodal irradiation in the RadComp Trial](#)

Hahn EA, Puglisi SL, Lu H, Vela AM, Gillespie EF, Nichols EM, Wright JL, MacDonald SM, Cahlon O, Baas C, Brainstein LZ, Fang LC, Freedman GM, Jimenez RB, Kessler CM, Mishra MV, Mutter RW, Ohri N, Rosen LR, Urbanic JJ, Jaggi R, Mitchell SA, Bekelman JE, Cella D, Study Group Investigators.

[Impact of definitive radiotherapy on metabolic response measured with ⁶⁸Ga-PSMA-PET/CT in patients with intermediate-risk prostate cancer](#)

Onal HC, Guler OC, Torun, N, Elmali Dogan A, Sutera P, Deek M, Reyhan M, Yavuz MN, Tran PT