

**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, Sutura 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, Jatzak 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**

Khan MA, 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

### **TWIST1-induced suppression of oncogene-induced senescence in non-small cell lung cancer requires the transactivation domain of TWIST1**

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 October 1 at 9:00 AM 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 October 1 at 9:00 AM 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

**Promising pathologic response of spatially fractionated radiotherapy preceding standard neoadjuvant conventionally fractionated radiotherapy in aggressive soft tissue sarcoma**

Olabumuyi AA, Brown MH, Bazyar S, Kunaprayoon D, Ng V, Regine WF, Molitoris JK

2:30–3:45 PM      Hall C      Poster

**Inequities in the NRG prostate cancer biobank are linked to non-White race, Hispanic/Latino ethnicity, and higher socioeconomic disadvantage**

Kamran SC, Borges M, Spratt D, Vapiwala N, Efstathiou J, Miyamoto D, Mouw K, Vyfhuis M, Le Q-T, Willers H, Van Allen E, Huang F, Michalski J, Bahary J-P, Helou J, Lukka H, Pugh SL, Wenzel J, Feng F, Tran PT

2:50–3:00 PM      Room 207      Oral (late-breaking abstract)

**Outcomes of Radium-223 and SABR Versus SABR for oligometastatic prostate cancer – The RAVENS phase 2 randomized trial**

Kiess A.....Tran PT

4:00–5:00 PM      Hall C      Poster

**Multi-omics models can predict prostate-specific membrane antigen avidity for computed tomography lesions in oligometastatic castration-sensitive prostate cancer**

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, Wenstrup 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

**A retrospective comparison of acute toxicities in patients receiving pelvical radiation for newly diagnosed gynecologic primaries with intensity modulated proton therapy and volume modulated arc therapy**

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

**Genomic predictors of response to metastasis directed therapy with or without androgen deprivation therapy**

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 MP

## Wednesday, October 2 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, Bazzyar 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