

THOMAS JEFFERSON UNIVERSITY  
DEPARTMENT OF RADIATION ONCOLOGY  
DEPARTMENT ACCOMPLISHMENTS  
JANUARY 1, 2021 – DECEMBER 31, 2021

PUBLICATIONS

1. Andrews DW, Judy K, Scott CB, Garcia S, Harshyne LA, Kenyon LC, Talekar K, Flanders A, Atsina KB, Kim L, Martinez N, **Shi W**, **Werner-Wasik M**, **Liu H**, Prosniak M, Curtis MT, Kean RB, Ye DY, Bongiorno E, Sauma S, Exley MA, Pigott K, Hooper DC: Phase 1b Clinical Trial of IGV-001 for Patients with Newly Diagnosed Glioblastoma. Clin Cancer Res. 2021 Jan 26:clincanres.3805.2020. doi: 10.1158/1078-0432.CCR-20-3805. Online ahead of print. PMID: 33500356
2. Salmon KM, Ruiz C, Cognetti DM, Curry JM, Luginbuhl AJ, **Bar-Ad V**, Leiby BE: Functional Swallow-Related Outcomes Following Transoral Robotic Surgery for Base of Tongue Carcinoma. Dysphagia. 2021 Jan 25. doi: 10.1007/s00455-021-10246-y. Online ahead of print. PMID: 33492468
3. **Fernandez C**, Forrest P, Sivalingam M, Milman T, Ramesh S, **Shi W**: Exenteration and Adjuvant Radiotherapy for Primary Carcinosarcoma of the Anterior Orbit: A Case Report. Ophthalmic Plast Reconstr Surg. 2021 Jan 19. doi: 10.1097/IOP.0000000000001911. Online ahead of print. PMID: 33481539
4. **Shi W**, Blumenthal DT, Bush NAO, Kebir S, Lukas RV, Muragaki Y, Zhu JJ, Glas M: Correction to: Global post-marketing safety surveillance of Tumor Treating Fields (TTFields) in patients with high-grade glioma in clinical practice. J Neurooncol. 2021 Jan 4. doi: 10.1007/s11060-020-03681-8. Online ahead of print. PMID: 33398537
5. Yoon J, Kim M, Posadas EM, Freedland SJ, Liu Y, Davicioni E, **Den RB**, Trock BJ, Karnes RJ, Klein EA, Freeman MR, You S: A comparative study of PCS and PAM50 prostate cancer classification schemes. Prostate Cancer Prostatic Dis. 2021 Feb 2. doi: 10.1038/s41391-021-00325-4. Online ahead of print. PMID: 33531653
6. Aliotta E, **Nourzadeh H**, Patel SH: Extracting diffusion tensor fractional anisotropy and mean diffusivity from 3-direction DWI scans using deep learning. Magn Reson Med. 2021 Feb;85(2):845-854. doi: 10.1002/mrm.28470. Epub 2020 Aug 18. PMID: 32810351
7. **Mueller AC**, Piper M, Goodspeed A, Bhuvane S, Williams JS, Bhatia S, Phan AV, Van Court B, Zolman KL, Peña B, Oweida AJ, Zakem S, Meguid C, Knitz MW, Darragh L, Bickett TE, Gadwa J, Mestroni L, Taylor MRG, Jordan KR, Dempsey P, Lucia MS, McCarter MD, Del Chiaro M, Messersmith WA, Schulick RD, Goodman KA, Gough MJ, Greene CS, Costello JC, Galvao Neto A, Lagares D, Hansen KC, Van Bokhoven A, Karam SD: Induction of ADAM10 by RT drives fibrosis, resistance, and EMT in pancreatic cancer. Cancer Res. 2021 Feb 1:canres.CAN-20-3892-A.2020. doi: 10.1158/0008-5472.CAN-20-3892. Online ahead of print. PMID: 33526513

8. Guan Y, Xiong J, Pan M, **Shi W**, Li J, Zhu H, Gong X, Li C, Mei G, Liu X, Pan L, Dai J, Wang Y, Wang E, Wang X: Safety and efficacy of Hypofractionated stereotactic radiosurgery for high-grade Gliomas at first recurrence: a single-center experience. BMC Cancer. 2021 Feb 5;21(1):123. doi: 10.1186/s12885-021-07856-y. PMID: 33546642
9. Feng FY, Huang HC, Spratt DE, Zhao SG, Sandler HM, Simko JP, Davicioni E, Nguyen PL, Pollack A, Efstathiou JA, **Dicker AP**, Todorovic T, Margrave J, Liu YS, Dabbas B, Thompson DJS, Das R, Dignam JJ, Sweeney C, Attard G, Bahary JP, Lukka HR, Hall WA, Pisansky TM, Shah AB, Pugh SL, Shipley WU, Tran PT: Validation of a 22-Gene Genomic Classifier in Patients With Recurrent Prostate Cancer: An Ancillary Study of the NRG/RTOG 9601 Randomized Clinical Trial. JAMA Oncol. 2021 Feb 11:e207671. doi: 10.1001/jamaoncol.2020.7671. Online ahead of print. PMID: 33570548
10. Mahadevan A, Emami B, Grimm J, Kleinberg LR, Redmond KJ, Welsh JS, Rostock R, Kemmerer E, Forster KM, Stanford J, Shah S, **Asbell SO**, **LaCouture TA**, Scofield C, Butterwick I, Xue J, Muacevic A, Adler JR: Potential Clinical Significance of Overall Targeting Accuracy and Motion Management in the Treatment of Tumors That Move With Respiration: Lessons Learnt From a Quarter Century of Stereotactic Body Radiotherapy From Dose Response Models. Front Oncol. 2021 Feb 9;10:591430. doi: 10.3389/fonc.2020.591430. eCollection 2020. PMID: 33634020
11. Jiang L, Li X, Zhang J, Li W, Dong F, Chen C, Lin Q, Zhang C, Zheng F, **Yan W**, Zheng Y, Wu X, Xu B: Combined High-Dose LATTICE Radiation Therapy and Immune Checkpoint Blockade for Advanced Bulky Tumors: The Concept and a Case Report. Front Oncol. 2021 Feb 12;10:548132. doi: 10.3389/fonc.2020.548132. eCollection 2020. PMID: 33643893
12. **Manukian G**, Kivolowitz C, DeAngelis T, Shastri A, Savage JE, Camphausen K, Rodeck U, Zarif J, **Simone NL**: Caloric restriction impairs regulatory T-cells within the tumor microenvironment after radiation and primes effector T-cells. Int J Radiat Oncol Biol Phys. 2021 Feb 26:S0360-3016(21)00207-8. doi: 10.1016/j.ijrobp.2021.02.029. Online ahead of print. PMID: 33647370
13. Lacerda Q, Tantawi M, **Leeper DB**, Wheatley MA, Eisenbrey JR: Emerging Applications of Ultrasound-Contrast Agents in Radiation Therapy. Ultrasound Med Biol. 2021 Feb 27:S0301-5629(21)00057-0. doi: 10.1016/j.ultrasmedbio.2021.01.032. Online ahead of print. PMID: 33653626
14. Dan T, Shastri AA, Palagani A, Buraschi S, Neill T, Savage JE, Kapoor A, DeAngelis T, Addya S, Camphausen K, Iozzo RV, **Simone NL**: miR-21 Plays a Dual Role in Tumor Formation and Cytotoxic Response in Breast Tumors. Cancers (Basel). 2021 Feb 20;13(4):888. doi: 10.3390/cancers13040888. PMID: 33672628
15. **Greenberger BA**, **Werner-Wasik M**: Stupp the Wolf. Int J Radiat Oncol Biol Phys. 2021 Apr 1;109(5):1140-1141. doi: 10.1016/j.ijrobp.2020.07.2319. PMID: 33714524
16. Sagheer SH, Bornstein J, **Bar-Ad V**, Cheng M, Cummins A, Cognetti DM, Curry J, Yao M, Lavertu P, Kutler DI, Zender C, Luginbuhl AJ: Adjuvant Cesium-131 Brachytherapy for Patients Intolerant of External Beam Radiation Therapy. Laryngoscope. 2021 Mar 17. doi: 10.1002/lary.29406. Online ahead of print. PMID: 33729580

17. **Taylor JM, Song A**, Nowak K, Dan T, Simone B, **Harrison A**, Doyle L, Lockamy V, **Anne P, Simone N**: Dosimetric Comparisons of Simulation Techniques for Left-Sided Breast Cancer in the COVID-19 Era: Techniques to Reduce Viral Transmission and Respect the Therapeutic Ratio. Cureus. 2021 Feb 15;13(2):e13354. doi: 10.7759/cureus.13354. PMID: 33747655
18. Ahmad M, **Nourzadeh H**, Siebers J: A regression-based approach to compute the pixels sensitivity map of linear accelerator portal imaging devices. Med Phys. 2021 Mar 27. doi: 10.1002/mp.14862. Online ahead of print. PMID: 33774827
19. Crockett CB, Samson P, Chuter R, Dubec M, Faivre-Finn C, Green OL, Hackett SL, McDonald F, Robinson C, Shiarli AM, Straza MW, Verhoeff JJC, **Werner-Wasik M**, Vlacich G, Cobben D: Initial Clinical Experience of MR-Guided Radiotherapy for Non-Small Cell Lung Cancer. Front Oncol. 2021 Mar 10;11:617681. doi: 10.3389/fonc.2021.617681. eCollection 2021. PMID: 33777759
20. **Kubli A**, Pukala J, Shah AP, Kelly P, Langen KM, Bova FJ, Mañon RR, Meeks SL: Variability in commercially available deformable image registration: A multi-institution analysis using virtual head and neck phantoms. J Appl Clin Med Phys. 2021 Mar 30. doi: 10.1002/acm2.13242. Online ahead of print. PMID: 33783960
21. **Song AJ**, Evans N, Cowan S, Guo J, Zhan T, **Lu B, Werner-Wasik M**: Stereotactic body radiation therapy (SBRT) for patients with stage I non-small cell lung cancer is applicable to more tumors than sublobar resection. J Thorac Dis. 2021 Mar;13(3):1576-1583. doi: 10.21037/jtd-20-2001. PMID: 33841949
22. Mandigo AC, Yuan W, Xu K, Gallagher P, Pang A, Guan YF, Shafi AA, Thangavel C, Sheehan B, Bogdan D, Paschalis A, McCann JJ, Laufer TS, Gordon N, Vasilevskaya IA, Dylgjeri E, Chand SN, Schiewer MJ, Domingo-Domenech J, **Den RB**, Holst J, McCue PA, de Bono JS, McNair C, Knudsen KE: RB/E2F1 as a master regulator of cancer cell metabolism in advanced disease. Cancer Discov. 2021 Apr 20:candisc.1114.2020. doi: 10.1158/2159-8290.CD-20-1114. Online ahead of print. PMID: 33879449
23. Zhang P, Marill J, Darmon A, Mohamed Anesary N, **Lu B**, Paris S: NBTXR3 Radiotherapy-Activated Functionalized Hafnium Oxide Nanoparticles Show Efficient Antitumor Effects Across a Large Panel of Human Cancer Models. Int J Nanomedicine. 2021 Apr 12;16:2761-2773. doi: 10.2147/IJN.S301182. eCollection 2021. PMID: 33880022
24. Knitz MW, Bickett TE, Darragh LB, Oweida AJ, Bhatia S, Van Court B, Bhuvane S, Piper M, Gadwa J, **Mueller AC**, Nguyen D, Nangia V, Osborne DG, Bai X, Ferrara SE, Boss MK, Goodspeed A, Burchill MA, Tamburini BAJ, Chan ED, Pickering CR, Clambey ET, Karam SD: Targeting resistance to radiation-immunotherapy in cold HNSCCs by modulating the Treg-dendritic cell axis. J Immunother Cancer. 2021 Apr;9(4):e001955. doi: 10.1136/jitc-2020-001955. PMID: 33883256
25. Schelin ME, **Liu H, Ali A, Shi W, Yu Y, Mooney KE**: Dosimetric comparison of Gamma Knife® Icon™ and linear accelerator-based fractionated stereotactic radiotherapy (FSRT) plans for the re-irradiation of large (>14 cm<sup>3</sup>) recurrent glioblastomas. J Radiosurg SBRT. 2021;7(3):233-243. PMID: 33898087

26. **Taylor JM**, Dasgeb B, Liem S, **Ali A, Harrison A**, Finkelstein M, Cha J, **Anne R**, Greenbaum S, Sherwin W, **Shi W**: High-Dose-Rate Brachytherapy for the Treatment of Basal and Squamous Cell Carcinomas on Sensitive Areas of the Face: A Report of Clinical Outcomes and Acute and Subacute Toxicities. Adv Radiat Oncol. 2020 Dec 16;6(2):100616. doi: 10.1016/j.adro.2020.10.028. eCollection 2021 Mar-Apr. PMID: 33912732
27. Banerjee R, Shah N, **Dicker AP**: Next-Generation Implementation of Chimeric Antigen Receptor T-cell (CAR-T) Therapy Using Digital Health. JCO Clin Cancer Inform. 2021 Jun;5:668-678. doi: 10.1200/CCI.21.00023. PMID: 34110929
28. Ding YC, Wu H, Davicioni E, Karnes RJ, Klein EA, **Den RB**, Steele L, Neuhausen SL: Prostate cancer in young men represents a distinct clinical phenotype: gene expression signature to predict early metastases. J Transl Genet Genom. 2021;5:50-61. doi: 10.20517/jtgg.2021.01. Epub 2021 Mar 9. PMID: 33928239
29. Vassilakopoulou M, Won M, Curran WJ, Souhami L, Prados MD, Langer CJ, Rimm DL, Hanna JA, Neumeister VM, Melian E, Diaz AZ, Atkins JN, **Komarnicky LT**, Schultz CJ, Howard SP, Zhang P, **Dicker AP**, Knisely JPS: BRCA1 Protein Expression Predicts Survival in Glioblastoma Patients from an NRG Oncology RTOG Cohort. Oncology. 2021 May 6:1-9. doi: 10.1159/000516168. Online ahead of print. PMID: 33957633
30. Forghani F, Patton T, Kwak J, Thomas D, Diot Q, Rusthoven C, Castillo R, Castillo E, Grills I, Guerrero T, Miften M, **Vinogradskiy Y**: Characterizing spatial differences between SPECT-ventilation and SPECT-perfusion in patients with lung cancer undergoing radiotherapy. Radiother Oncol. 2021 May 6;160:120-124. doi: 10.1016/j.radonc.2021.04.022. Online ahead of print. PMID: 33964328
31. Liu D, Augello MA, Grbesa I, Prandi D, Liu Y, Shoag JE, Karnes RJ, Trock BJ, Klein EA, **Den RB**, Demichelis F, Davicioni E, Sboner A, Barbieri CE. Tumor subtype defines distinct pathways of molecular and clinical progression in primary prostate cancer. J Clin Invest. 2021 May 17;131(10):147878. doi: 10.1172/JCI147878. PMID: 33998599
32. Rayford W, Beksac AT, Alger J, Alshalalfa M, Ahmed M, Khan I, Falagarino UG, Liu Y, Davicioni E, Spratt DE, Schaeffer EM, Feng FY, Mahal B, Nguyen PL, **Den RB**, Greenberger MD, Bradley R, Watson JM, Beamer M, Stamatakis L, Carmen DJ, Awasthi S, Hwang J, Weil R, Merisaari H, Mohamed N, Deane LA, Chakravarty D, Yadav KK, Yamoah K, Nair SS, Tewari AK: Comparative analysis of 1152 African-American and European-American men with prostate cancer identifies distinct genomic and immunological differences. Commun Biol. 2021 Jun 3;4(1):670. doi: 10.1038/s42003-021-02140-y. PMID: 34083737
33. Hamid AA, Huang HC, Wang V, Chen YH, Feng F, **Den R**, Attard G, Van Allen EM, Tran PT, Spratt DE, Dittamore R, Davicioni E, Liu G, DiPaola R, Carducci MA, Sweeney CJ: Transcriptional profiling of primary prostate tumor in metastatic hormone-sensitive prostate cancer and association with clinical outcomes: correlative analysis of the E3805 CHARTED study. Ann Oncol. 2021 Jun 12:S0923-7534(21)02050-0. doi: 10.1016/j.annonc.2021.06.003. Online ahead of print. PMID: 34129855
34. Jim HSL, Knoop H, **Dicker AP**: Immune Checkpoint Inhibitor Therapy Toxicities. JAMA. 2021 Jul 6;326(1):87. doi: 10.1001/jama.2021.6030. PMID: 34228072

35. **Miller RC**, Simone BA, **Lombardo JF**, **Taylor J**, Nowak-Choi K, Ko K, **Ferguson L**, **Donnelly A**, **Ali AS**, **Shi W**, **Dicker AP**, **Simone NL**: A Pilot Trial Using Telemedicine in Radiation Oncology: The Future of Health Care Is Virtual. Telemed Rep. 2021 Jun 14;2(1):171-178. doi: 10.1089/tmr.2021.0007. eCollection 2021. PMID: 34250522
36. O'Donnell M, Zaya R, Correia E, Krishnasamy S, Sahu J, **Shi W**, Cha J, Alpdogan SO, Porcu P, Nikbakht N: Disease characteristics, prognosis, and response to therapy in patients with large-cell transformed mycosis fungoides: a single-center retrospective study. J Am Acad Dermatol. 2021 Jul 14:S0190-9622(21)02106-X. doi: 10.1016/j.jaad.2021.07.013. Online ahead of print. PMID: 34273458
37. Yang Y, Ma Y, Lu J, Du S, Zhang J, Meng H, Chen Z, Zhang Q, Zhang X, **Shi W**, Girolamo F, Cepeda S, Kang J: Evaluation of the reporting quality of clinical practice guidelines on gliomas using the RIGHT checklist. Ann Transl Med. 2021 Jun;9(12):1002. doi: 10.21037/atm-21-2604. PMID: 34277802
38. Dasgeb B, Leila Y, Saeidian AH, Kang J, **Shi W**, Shoenberg E, Ertel A, Fortina P, Vahidnezhad H, Uitto J: Genetic Predisposition to Numerous Large Ulcerating Basal Cell Carcinomas and Response to Immune Therapy. Int J Dermatol Venereol. 2021 Jun 8;4(2):70-75. doi: 10.1097/JD9.000000000000170. eCollection 2021 Jun. PMID: 34278326
39. Padilla L, Burmeister JW, Burnett OL, Covington EL, **Den RB**, Dominello MM, Du KL, Galavis PE, Junell S, Kahn J, Kishore M, **Mooney K**, Mukhopadhyay ND, Studenski MT, Yechieli RL, Fields EC: Interprofessional Image Verification Workshop for Physician and Physics Residents: A Multi-Institutional Experience. Int J Radiat Oncol Biol Phys. 2021 Aug 8:S0360-3016(21)02619-5. doi: 10.1016/j.ijrobp.2021.07.1706. Online ahead of print. PMID: 34380009
40. Khanna O, Fathi Kazerooni A, Farrell CJ, Baldassari MP, Alexander TD, Karsy M, **Greenberger BA**, Garcia JA, Sako C, Evans JJ, Judy KD, Andrews DW, Flanders AE, Sharan AD, **Dicker AP**, **Shi W**, Davatzikos C: Machine Learning Using Multiparametric Magnetic Resonance Imaging Radiomic Feature Analysis to Predict Ki-67 in World Health Organization Grade I Meningiomas. Neurosurgery. 2021 Aug 30:nyab307. doi: 10.1093/neuros/nyab307. Online ahead of print. PMID: 34460921
41. Gonzalez BD, Eisel SL, Bowles KE, Hoogland AI, James BW, Small BJ, Sharpe S, Hyland KA, Bulls HW, Christy SM, Mansfield J, Nelson AM, Alla R, Maharaj K, Kennedy B, Lafranchise E, Williams NL, Jennewein S, Oswald LB, Postow MA, **Dicker AP**, Jim HSL: Meta-Analysis of Quality of Life in Cancer Patients Treated with Immune Checkpoint Inhibitors. J Natl Cancer Inst. 2021 Sep 11:djab171. doi: 10.1093/jnci/djab171. Online ahead of print. PMID: 34508604
42. Ramotar M, Chua MLK, Truong H, Hosni A, Pintilie M, Davicioni E, Fleshner NE, **Dicker AP**, Bristow RG, He HH, van der Kwast T, **Den RB**, Berlin A: Subpathologies and genomic classifier for treatment individualization of post-prostatectomy radiotherapy. Urol Oncol. 2021 Sep 16:S1078-1439(21)00376-8. doi: 10.1016/j.urolonc.2021.08.013. Online ahead of print. PMID: 34538726
43. Philips R, Sagheer H, Barsouk A, Swendseid B, Johnson J, **Bar Ad V**, Luginbuhl A, Curry J, Cognetti D: Trends in Adjuvant Therapy After Surgery for Oropharyngeal Squamous Cell

Carcinoma. Laryngoscope. 2021 Sep 23. doi: 10.1002/lary.29870. Online ahead of print. PMID: 34553790

44. Fleming JL, Pugh SL, Fisher BJ, Lesser GJ, Macdonald DR, Bell EH, McElroy JP, Becker AP, Timmers CD, Aldape KD, Rogers CL, Doyle TJ, **Werner-Wasik M**, Bahary JP, Yu HM, D'Souza DP, Laack NN, Sneed PK, Kwok Y, Won M, Mehta MP, Chakravarti A: Long-Term Report of a Comprehensive Molecular and Genomic Analysis in NRG Oncology/RTOG 0424: A Phase II Study of Radiation and Temozolomide in High-Risk Grade II Glioma. JCO Precis Oncol. 2021 Sep 1;5:PO.21.00112. doi: 10.1200/PO.21.00112. eCollection 2021. PMID: 34589661
45. Bounias D, Singh A, Bakas S, Pati S, Rathore S, Akbari H, Bilello M, **Greenberger BA, Lombardo J**, Chitalia RD, Jahani N, Gastounioli A, Hershman M, Roshkovan L, Katz SI, Yousefi B, Lou C, Simpson AL, Do RKG, Shinohara RT, Kontos D, Nikita K, Davatzikos C: Interactive Machine Learning-Based Multi-Label Segmentation of Solid Tumors and Organs. Appl Sci (Basel). 2021 Aug 2;11(16):7488. doi: 10.3390/app11167488. Epub 2021 Aug 15. PMID: 34621541
46. Mandigo AC, Shafi AA, McCann JJ, Yuan W, **Laufer TS**, Bogdan D, Gallagher L, Dylgjeri E, Semenova G, Vasilevskaya IA, Schiewer MJ, McNair C, de Bono JS, Knudsen KE: Novel oncogenic transcription factor cooperation in RB-deficient cancer. Cancer Res. 2021 Oct 8;canres.1159.2021. doi: 10.1158/0008-5472.CAN-21-1159. Online ahead of print. PMID: 34625422
47. Ciraku L, Moeller RA, Esquea EM, Gocal WA, Hartsough EJ, **Simone NL**, Jackson JG, Reginato MJ: An Ex Vivo Brain Slice Model to Study and Target Breast Cancer Brain Metastatic Tumor Growth. J Vis Exp. 2021 Sep 22;(175). doi: 10.3791/62617. PMID: 34633392
48. **Harrison AS, Sullivan P, Kubli A, Wilson KM, Taylor A, DeGregorio N, Riggs J, Werner-Wasik M, Dicker A, Vinogradskiy Y**: How to respond to a ransomware attack? One radiation oncology department's response to a cyber-attack on their record and verify system. Pract Radiat Oncol. 2021 Oct 10:S1879-8500(21)00275-7. doi: 10.1016/j.ppro.2021.09.011. Online ahead of print. PMID: 34644601
49. Almahariq MF, Parzen JS, Quinn TJ, Lee KC Jr, Guckenberger M, Klement RJ, Belderbos J, Sonke JJ, Hope AJ, Giuliani ME, **Werner-Wasik M**, Ye H, Grills IS: Stereotactic Body Radiotherapy (SBRT) With Biologically Equivalent Dose > 150 Gy is Associated With Improved Local Control in Patients With Squamous but not Non-Squamous Cell Carcinoma of the Lung: A Multi-Institutional Analysis. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):S127. doi: 10.1016/j.ijrobp.2021.07.289. PMID: 34700450
50. Nguyen PL, Huang HC, Davicioni E, Sandler HM, Shipley WU, Efsthathiou JA, Simko J, Pollack A, **Dicker AP**, Roach M 3rd, Rosenthal SA, Morginstin M, Mendez L, Hartford AC, Hall WA, Desai AB, Rabinovitch R, Peters CA, Rodgers J, Feng FY. Validation of a 22-gene Genomic Classifier in the NRG Oncology/RTOG 9202, 9413 and 9902 Phase III Randomized Trials: A Biopsy-Based Individual Patient Meta-Analysis in High-Risk Prostate Cancer. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):S50. doi: 10.1016/j.ijrobp.2021.07.133. PMID: 34700571

51. **Vinogradskiy Y**, Castillo R, Castillo E, Schubert LK, Jones BL, Faught AM, Gaspar LE, Kwak J, Bowles DW, Waxweiler TV, Dougherty M, Gao D, Stevens CW, Miften M, Kavanagh BD, Grills IS, Rusthoven CG Jr, Guerrero TM: Results of a Multi-Institutional Phase II Clinical Trial for 4DCT-Ventilation Functional Avoidance Thoracic Radiotherapy. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):S8-S9. doi: 10.1016/j.ijrobp.2021.07.053. PMID: 34700636
52. Holt DE, Carr AL, Roberts S, Milgrom SA, Kolva E, Kavanagh BD, Switzer GE, Eitel C, Nelson J, Miller BW, Shiao JC, **Mueller A**, Karam SD, Dzingile W, Clapp T: 3D Virtual Reality Volumetric Imaging Review in Cancer Patients' Understanding and Education of their Disease and Treatment. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e157. doi: 10.1016/j.ijrobp.2021.07.623. PMID: 34700805
53. Arbab M, Chaurasia AR, Merfeld E, Hassanzadeh CJ, Feng CH, Sherer M, **Fernandez C**, Everett A, Holmes JA, Puckett L, Schuster JM: Formalized Mentorship in Radiation Oncology: Bridging Existing Gaps in Mentorship. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e185-e186. doi: 10.1016/j.ijrobp.2021.07.686. PMID: 34700868
54. **Lombardo J**, Nelson NG, Smith A, Mehta MP, **Shi W**, **Simone NL**: Circadian Factors Impact Survival From Brain Metastases for Patients Treated With Whole Brain Radiation. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e248. doi: 10.1016/j.ijrobp.2021.07.830. PMID: 34701011
55. McDonald AM, DeMora L, Lenzie A, Hoyle J, Yang ES, Michalski JM, Parliament MB, Bahary JP, **Hurwitz MD**, Iii MR, Spratt DE, Mishra MV, Valicenti RK, Lau H, Souhami L, Mendez L, Chen Y, Doncals DE, Feng FY, Sandler HM: Body Composition and Risk of All-Cause Mortality in Men Treated With Radiation Therapy for Prostate Cancer: A Pooled Analysis of NRG/RTOG 9406 and NRG/RTOG 0126. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e285-e286. doi: 10.1016/j.ijrobp.2021.07.911. PMID: 34701093
56. Nieto JD, Parker SM, Jacobson GM, **Irabor OC**, Tenenholz TC: Predictors of Emergency Department Visits and Hospital Admissions During Head and Neck Radiation Therapy. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e375-e376. doi: 10.1016/j.ijrobp.2021.07.1105. PMID: 34701304
57. **Ali A**, **Niazi MZK**, Andrews DW, Evans J, Judy K, Farrell C, Glass J, Kim L, Martinez N, Alnahhas I, **Werner-Wasik M**, **Bar-Ad V**, Leiby BE, **Shi W**: Scalp-Sparing Volume Modulated Radiation Therapy (VMAT) for Newly Diagnosed Gliomas: A Phase 2 Trial. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e585. doi: 10.1016/j.ijrobp.2021.07.1568. PMID: 34701807
58. Basree MM, **Ali A**, Garg S, Glass J, Kim L, Farrell C, Evans J, Judy K, Andrews DW, **Shi W**, **Werner-Wasik M**, Palmer JD: Temozolomide Rechallenge in Patients With Recurrent High-Grade Glioma Treated With Re-Irradiation. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e587-e588. doi: 10.1016/j.ijrobp.2021.07.1574. PMID: 34701812
59. **Miller RC**, **Song AJ**, **Ali A**, **Bar-Ad V**, Martinez N, Glass J, Alnahhas I, Andrews DW, Judy K, Evans J, Farrell C, **Werner-Wasik M**, Chervoneva I, Ly M, Palmer JD, **Liu H**, **Shi W**: SPARE Trial: Scalp Sparing Radiation With Concurrent Temozolomide and Tumor Treating Fields (200 kHz) for Patients With Newly Diagnosed Glioblastoma. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e594-e595. doi: 10.1016/j.ijrobp.2021.07.1590. PMID: 34701831

60. **Ali A, Niazi MZK, Bar-Ad V, Werner-Wasik M**, Andrews DW, Farrell C, Evans J, Judy K, Glass J, Martinez N, Alnahhas I, Chervoneva I, **Shi W**: Concurrent Chemoradiation and Tumor Treating Fields (TTFields, 200 kHz) for Patients With Newly Diagnosed Glioblastoma May Increase the Rate of Distant Recurrence. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e596. doi: 10.1016/j.ijrobp.2021.07.1593. PMID: 34701834
61. **Taylor J, Miller RC, Ali A, Bar-Ad V**, Martinez N, Glass J, Alnahhas I, Andrews DW, Judy K, Farrell C, **Liu H, Shi W**: Concurrent TTFields (200 kHz) With Chemoradiation for Patients With Newly Diagnosed Glioblastoma May Increase the Rate of Pseudoprogression: Analysis of a Pilot Clinical Trial. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e601-e602. doi: 10.1016/j.ijrobp.2021.07.1606. PMID: 34701849
62. Reyngold M, Karam SD, Hajj C, Wu AJ, Romesser PB, Cuaron JJ, Yorke ED, Schefter T, Jones BL, **Vinogradskiy Y**, Crane CH, Goodman KA: Phase I Dose Escalation Trial Using 3-Fraction SBRT for Locally Advanced Pancreatic Cancer. Int J Radiat Oncol Biol Phys. 2021 Nov 1;111(3S):e70-e71. doi: 10.1016/j.ijrobp.2021.07.428. PMID: 34701952

## GRANTS

1. **Adam Mueller, MD, PhD**: \$150,000, Radiological Society of North America: “Investigating ADAM10 mediated EMT and therapeutic resistance in Pancreas Cancer.” May 2021.
2. **Adam Mueller, MD, PhD**: ViewRay: “Enhancing the efficacy of PDAC directed SBRT by prevention of ADAM10 driven cytotoxic resistance and metastasis.”
3. **Adam Mueller, MD, PhD & Ayesha Ali, MD**: ViewRay: “The Role of Virtual Reality (VR) in Patient Experience When Used for MRgRT (Magnetic Resonance-Guided Radiation Therapy)”
4. **Amy Harrison, PhD**: ViewRay: “MR Physics Direct Patient Care Initiative and Consultations”
5. **Bo Lu, MD, PhD**: ViewRay: A Pilot Study with MRgRT for Toxicity Reduction among Lung Cancer Patients Under Combined Thoracic RT (TRT) and Immunotherapy”
6. **Yevgeniy Vinogradskiy, PhD**: \$350,000, NIH/NCI: “Quantitative Lung Function Imaging to Reduce Toxicity for patients treated with Radiation and Immunotherapy,” July 2021.

## ABSTRACTS & POSTER PRESENTATIONS

1. **Jacob Belardo, MS, Alexander Kubli, MS, Amy Harrison, MS, PhD, Reza Taleei, PhD**: Abstract accepted for ePoster presentation, 2021 American Brachytherapy Society Annual Meeting – “Acceptance and Implementation of the Oncentra Applicator Model Library for Automatic Catheter Reconstruction in Multichannel Vaginal Cylinder Applicators.”
2. **Shuying Wan, PhD**: Abstract accepted for oral presentation, Canadian Organization of Medical Physicists Annual Scientific Meeting 2021 – “Development of a Novel Dual-Modality Balloon Implant for Simultaneous HDR Brachytherapy and Magnetic Nanoparticle Hyperthermia of Brain Tumor Resection Cavities.”



3. **Ayesha Ali, MD** (presenting author), **Muneeb Niazi, DO**, David Andrews, MD, James Evans, MD, Kevin Judy, MD, Christopher Farrell, MD, Jon Glass, MD, Lyndon Kim, MD, Nina Martinez, MD, Iyad Alnahhas, MD, **Maria Werner-Wasik, MD, Voichita Bar-Ad, MD**, Benjamin Leiby, PhD, **Wenyin Shi, MD, PhD**: Abstract accepted for Poster Viewing Q&A, 2021 American Society for Radiation Oncology Annual Meeting – “Scalp-Sparing Volume Modulated Radiation Therapy (VMAT) for Newly Diagnosed Gliomas: A Phase 2 Trial.”
4. Mustafa Basree, DO, **Ayesha Ali, MD**, Shivank Garg, MD, Jon Glass, MD, Lyndon Kim, MD, Christopher Farrell, MD, James Evans, MD, Kevin Judy, MD, David Andrews, MD, **Wenyin Shi, MD, PhD, Maria Werner-Wasik, MD**, Joshua Palmer, MD: Abstract accepted for Poster Viewing Q&A, 2021 American Society for Radiation Oncology Annual Meeting – “Temozolomide rechallenge in patients with recurrent high-grade glioma treated with re-irradiation.”
5. **Ryan Miller, MD**, (presenting author) **Andrew Song, MD, Ayesha Ali, MD, Voichita Bar-Ad, MD**, Nina Martinez, MD, Jon Glass, MD, Iyad Alnahhas, MD, David Andrews, MD, Kevin Judy, MD, James Evans, MD, Christopher Farrell, MD, **Maria Werner-Wasik, MD**, Inna Chervoneva, PhD, Michele Ly, Joshua Palmer, MD, **Haisong Liu, PhD, Wenyin Shi, MD, PhD**: Abstract accepted for Poster Viewing Q&A, 2021 American Society for Radiation Oncology Annual Meeting – “SPARE trial: Scalp sparing radiation with concurrent temozolomide and Tumor Treating Fields (200 kHz) for patients with newly diagnosed glioblastoma.”
6. **Y. Vinogradskiy**, R. Castillo, E. Castillo, L. K. Schubert, B. L. Jones, A. M. Faught, L. E. Gaspar, J. Kwak, D. W. Bowles, T. V. Waxweiler, M. Dougherty, D. Gao, C. W. Stevens, M. Miften, B. D. Kavanagh, I. S. Grills, C. G. Rusthoven Jr, and T. M. Guerrero: Abstract accepted for Oral Presentation, 2021 American Society for Radiation Oncology Annual Meeting – “15 Results of a Multi-Institutional Phase II Clinical Trial for 4DCT-Ventilation Functional Avoidance Thoracic Radiotherapy.”
7. Matlack L, **Lombardo J**, Nelson N, Smith A, **Shi W, Simone N**: Abstract accepted for poster presentation, 2021 San Antonio Breast Cancer Symposium – “Implications for chronoradiobiology: Differential effect of radiation response for breast cancer patients with brain metastases depending on treatment time.”
8. **Ryan Miller, Andrew Song, Ayesha Ali, Voichita Bar-Ad**, Nina Martinez, Jon Glass, Iyad Alnahhas, David W Andrews, Kevin Judy, James J Evans, Christopher Farrell, **Maria Werner-Wasik**, Inna Chervoneva, May Ly, Joshua D Palmer, **Haisong Liu, Wenyin Shi**: Abstract accepted for poster presentation, 2021 Society of Neuro-Oncology Annual Meeting – “Scalp sparing radiation with concurrent temozolomide and tumor treatment fields (SPARE) for patients with newly diagnosed glioblastoma.”
9. **Ayesha Ali, Muneeb Niazi, Voichita Bar-Ad, Maria Werner-Wasik**, David Andrews, Christopher Farrell, James Evans, Kevin Judy, Jon Glass, Nina Martinez, Iyad Alnahhas, Inna Chervoneva, **Wenyin Shi**: Abstract accepted for poster presentation, 2021 Society of Neuro-Oncology Annual Meeting – “Concurrent chemoradiation and Tumor Treating Fields

(TTFields, 200 kHz) for patients with newly diagnosed glioblastoma may increase the rate of distant recurrence.”

10. **Muneeb Niazi, James Taylor, Ryan Miller, Ayesha Ali, Voichita Bar-Ad**, Nina Martinez, Jon Glass, Iyad Alnahhas, David W Andrews, Kevin Judy, James J Evans, Christopher Farrell, **Haisong Liu, Wenyin Shi**: Abstract accepted for poster presentation, 2021 Society of Neuro-Oncology Annual Meeting – “Concurrent TTFields (200 kHz) with chemoradiation for patients with newly diagnosed glioblastoma may increase the rate of pseudoprogression: analysis of a pilot clinical trial.”
11. **Wenyin Shi**, Lawrence Kleinberg, Suriya A Jeyapalan, Samuel A Goldlust, Seema Nagpal, Stephanie E Combs, David Roberge, Ryo Nishigawa, David Reardon, Rachel Grossman, Martin: Glas: Abstract accepted for poster presentation, 2021 Society of Neuro-Oncology Annual Meeting – “TRIDENT phase 3 trial (EF-32): first-line Tumor Treating Fields (TTFields; 200 kHz) concomitant with chemo-radiation, followed by maintenance TTFields/temozolomide in newly-diagnosed glioblastoma.”
12. Dario Rodrigues, **Shuying Wan**, Paul Stauffer, Janet Kwiatkowski, Robert Goldstein, Marty Bloem, Jeremy Polf, Samir Patel, **Yan Yu**, Kevin Judy, **Wenyin Shi, Mark Hurwitz**: Abstract accepted for poster presentation, 2021 Society of Neuro-Oncology Annual Meeting – “Development of a Novel Dual-Modality Balloon Implant for Simultaneous High-Dose-Rate Brachytherapy and Magnetic Nanoparticle Hyperthermia of Brain Tumor Resection Cavities.”
13. Nancy Ann Oberheim-Bush, **Wenyin Shi**, Michael McDermott, Alexander Grote, Julia Stindl, Leonardo Lustgarten: Abstract accepted for poster presentation, 2021 Society of Neuro-Oncology Annual Meeting – “The safety profile of Tumor Treating Fields (TTFields; 200 kHz) concomitant with ventriculo-peritoneal shunts in patients with glioblastoma and hydrocephalus.”

## PRESENTATIONS AND INVITED SPEAKERSHIPS

1. **Reza Taleei, PhD**: Invited Speaker, 2021 Radiation Research Society Annual Meeting, Topical Review Session – “Proton therapy - status and new directions.” San Juan, Puerto Rico October 3-6, 2021.
2. **Adam Dicker, MD, PhD**: Invited Speaker, 2021 Presidential Symposium, 63<sup>rd</sup> American Society for Radiation Oncology Annual Meeting, Chicago, IL, October 24-27, 2021
3. **Maria Werner-Wasik, MD**: Panelist, “A Training Program for Radiation Technology and Combined Radiation and Immune Therapy” of Global Collaborative Oncology Group (GCOG), Hong Kong, China (virtual meeting), May 27, 2021.
4. **Maria Werner-Wasik, MD**: “Special considerations in radiation oncology clinical trials.” Jefferson Clinical Trials Boot Camp, Thomas Jefferson University, Philadelphia, PA (virtual meeting), June 7, 2021.
5. **Maria Werner-Wasik, MD**: “Introduction: MR Linac in the Radiotherapy Clinic.” 5th Polish Oncology Congress, Wroclaw, Poland, October 20-23, 2021.

6. **Maria Werner-Wasik, MD:** “Lung cancer therapy – justified optimism.” 5th Polish Oncology Congress, Wroclaw, Poland, October 20-23, 2021.

## **HONORS & AWARDS**

1. **Victor Chen, MD, MPH:** Inductee, Delta Omega Public Health Honor Society, Thomas Jefferson University Delta Psi Chapter, April 2021.
2. **Victor Chen, MD, MPH:** Recipient of the 2021 Thomas Jefferson University Outstanding Master of Public Health Student Achievement Award

## **BOOK CHAPTERS**

1. **Reza Taleei, PhD, Sarah Boswell:** “Helical Tomotherapy Treatment and Dosimetry.” Published in *Radiation Therapy Dosimetry: A Practical Handbook Editor: Arash Drafshah*. March 9, 2021.

## **APPOINTMENTS & PROMOTIONS**

1. **Nicole Simone, MD:** Appointed Vice Chair of Research, Department of Radiation Oncology
2. **Karen Mooney, PhD:** Promoted to Clinical Assistant Professor, Department of Radiation Oncology
3. **Voichita Bar Ad, MD:** Promoted to Professor, Department of Radiation Oncology
4. **Yevgeniy Vinogradskiy, PhD:** Appointed Associate Professor, Department of Radiation Oncology
5. **Jessie DiNome, MD:** Appointed Director of Quality and Safety, Department of Radiation Oncology at Thomas Jefferson University Hospital and Jefferson Hospital for Neuroscience