

CURRICULUM VITAE

The Johns Hopkins University School of Medicine

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

2014-present Assistant Professor, Radiation Oncology and Molecular Radiation Sciences
2014-present Assistant Professor, Department of Otolaryngology – Head and Neck Surgery, The Johns Hopkins University School of Medicine
2017-present Residency Program Director, Radiation Oncology and Molecular Radiation Sciences
The Johns Hopkins University School of Medicine

Personal Data

Department of Radiation Oncology and Molecular Radiation Sciences
Sidney Kimmel Comprehensive Cancer Center
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Baltimore, MD 21287
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Education and Training

Undergraduate
1997-2001 B.S., Chemical Engineering, University of Virginia, Charlottesville, VA

Graduate
2001-2008 M.D., Duke University School of Medicine, Durham, NC
2003-2008 Ph.D., Biomedical Engineering, Duke University, Durham, NC

Post-doctoral
2008-2009 Intern, Internal Medicine, University of North Carolina, Chapel Hill, NC
2009-2013 Resident, Radiation Oncology, Memorial Sloan-Kettering Cancer Center, New York, NY
2012-2013 Post-doctoral Fellow, Radiology, The Johns Hopkins University School of Medicine, Baltimore, MD

Professional Experience

2013-2014 Instructor, Radiation Oncology and Molecular Radiation Sciences, The Johns Hopkins University School of Medicine, Baltimore, MD
2014-present Assistant Professor, Radiation Oncology and Molecular Radiation Sciences and Otolaryngology, The Johns Hopkins University School of Medicine, Baltimore, MD
2017-present Residency Program Director, Radiation Oncology and Molecular Radiation Sciences, Johns Hopkins University, Baltimore, MD

PUBLICATIONS

Original Research [OR]

1. Zeller PJ, Skalak TC, **Ponce AM**, Price RJ. In vivo chemotactic properties and spatial expression of PDGF in developing mesenteric microvascular networks. *Am J Physiol Heart Circ Physiol*. 2001;280(5):H2116-H2125.
2. **Ponce AM**, Price RJ. Angiogenic stimulus determines the positioning of pericytes within capillary sprouts in vivo. *Microvasc Res*. 2003;65(1):45-48.
3. Anderson CR, **Ponce AM**, Price RJ. Absence of OX-43 antigen expression in invasive capillary sprouts: identification of a capillary sprout-specific endothelial phenotype. *Am J Physiol Heart Circ Physiol*. 2004;286(1):H346-H353.
4. Anderson CR, **Ponce AM**, Price RJ. Immunohistochemical identification of an extracellular matrix scaffold that microguides capillary sprouting in vivo. *J Histochem Cytochem*. 2004;52(8):1063-1072.
5. Viglianti BL, **Ponce AM**, Michelich CR, Yu D, Abraham SA, Sanders L, Yarmolenko PS, Schroeder T, Macfall JR, Barboriak DP, Colvin OM, Bally MB, Dewhirst MW. Chemodosimetry of in vivo tumor liposomal drug concentration using MRI. *Magn Reson Med*. 2006;56(5):1011-1018.
6. **Ponce AM**, Viglianti BL, Yu D, Yarmolenko PS, Michelich CR, Woo J, Bally MB, Dewhirst MW. Magnetic resonance imaging of temperature-sensitive liposome release: drug dose painting and antitumor effects. *J Natl Cancer Inst*. 2007;99(1):53-63.
7. Vlahovic G*, **Ponce AM***, Rabbani Z, Salahuddin FK, Zgonjanin L, Spasojevic I, Vujaskovic Z, Dewhirst MW. Treatment with imatinib improves drug delivery and efficacy in NSCLC xenografts. *Br J Cancer*. 2007;97(6):735-740. *Equal contributing authors
8. **Kiess AP**, McArthur HL, Mahoney K, Patil S, Morris PG, Ho A, Hudis CA, McCormick B. Adjuvant trastuzumab reduces locoregional recurrence in women who receive breast-conservation therapy for lymph node-negative, human epidermal growth factor receptor 2-positive breast cancer. *Cancer*. 2012;118(8):1982-1988.
9. **Kiess AP**, Damast S, Makker V, Kollmeier MA, Gardner GJ, Abu-Rustum NR, Barakat RR, Alektiar KM. Five-year outcomes of adjuvant carboplatin/paclitaxel chemotherapy and intravaginal radiation for stage I-II papillary serous endometrial cancer. *Gynecol Oncol*. 2012;127(2):321-325.
10. **Kiess AP**, Yahalom J. Primary follicular lymphoma of the gastrointestinal tract: effect of stage, symptoms and treatment choice on outcome. *Leuk Lymphoma*. 2013;54(1):177-180.
11. Desai NB, **Kiess AP**, Kollmeier MA, Abu-Rustum NR, Makker V, Barakat RR, Alektiar KM. Patterns of relapse in stage I-II uterine papillary serous carcinoma treated with adjuvant intravaginal radiation (IVRT) with or without chemotherapy. *Gynecol Oncol*. 2013;131(3):604-608.
12. Marcus C, Ciarallo A, Tahari AK, Mena E, Koch W, Wahl RL, **Kiess AP**, Kang H, Subramaniam RM. Head and Neck PET/CT: Therapy response interpretation criteria ('Hopkins Criteria') - Interreader reliability, accuracy and survival outcomes. *J Nucl Med*. 2014;55(9):1411-1416.
13. **Kiess AP**, Wang H, Travis, WD, Yahalom J. Sarcoid in cancer patients: clinical characteristics and associated disease status. *Sarcoidosis Vasc Diffuse Lung Dis*. 2015;32(3):200-207.
14. **Kiess AP**, Wolchok JD, Barker CA, Postow MA, Tabar V, Huse JT, Chan TA, Yamada Y, Beal K. Stereotactic radiosurgery for melanoma brain metastases in patients receiving ipilimumab: safety profile and efficacy of combined treatment. *Int J Radiat Oncol Biol Phys*. 2015;92(2):368-375.
15. Guo T, Qualliotine JR, Ha PK, Califano JA, Kim Y, Saunders JR, Blanco RG, D'Souza G, Zhang Z, Chung, CH, **Kiess AP**, Gourin CG, Koch W, Richmon JD, Agrawal N, Eisele D, Fakhry C. Surgical salvage improves overall survival for patients with HPV-positive and HPV-negative recurrent locoregional and distant metastatic oropharyngeal cancer. *Cancer*. 2015;121(12):1977-1984.
16. Cheng Y, **Kiess AP**, Herman JM, Pomper MG, Meltzer SJ, Abraham JM. Phosphorus-32, a clinically available drug, inhibits cancer growth by inducing DNA double-strand breakage. *PLoS One*. 2015;10(6):e0128152.
17. Robertson SP, Quon H, **Kiess AP**, Moore JA, Yang W, Cheng Z, Afonso S, Allen M, Richardson M, Choflet A, Sharabi A, McNutt T. A data-mining framework for large scale analysis of dose-outcome relationships in a database of irradiated head and neck cancer patients. *Med Phys*. 2015;42(7):4329-4337.
18. **Kiess AP**, Minn I, Chen Y, Hobbs R, Sgouros G, Mease RC, Pullambhatla M, Shen C, Foss CA, Pomper MG. Auger radiopharmaceutical therapy targeting prostate-specific membrane antigen. *J Nucl Med*. 2015;56(9):1401-1407.
19. Wang Y, Springer S, Mulvey C, Silliman N, Schaeffer J, Sausen M, James N, Rettig E, Guo T, Pickering C, Bishop J, Chung C, Califano J, Eisele D, Fakhry C, Gourin C, Ha P, Kang H, **Kiess AP**, Koch W, Myers J, Quon H, Richmon J, Sidransky D, Tufano R, Westra W, Bettegowda C, Diaz L, Papadopoulos N, Kinzler K, Vogelstein B, Agrawal N. Detection of Somatic Mutations and HPV in the Saliva and Blood of Patients with

- Head and Neck Squamous Cell Carcinomas. *Sci Transl Med*. 2015;7(293):293ra104.
20. Sheikhabaei S, Taghipour M, Ahmad R, Fakhry C, **Kiess AP**, Chung CH, Subramaniam RM. Diagnostic accuracy of follow-up FDG PET or PET/CT in patients with head and neck cancer after definitive treatment: a systematic review and meta-analysis. *AJR Am J Roentgenol*. 2015;205(3):629-639.
 21. Baxter M, Chan JYK, Mydlarz WK, Labruzzo SV, **Kiess AP**, Ha PK, Aygun N, Agrawal N. Retropharyngeal lymph node involvement in human papillomavirus-associated oropharyngeal squamous cell carcinoma. *Laryngoscope*. 2015;125(11):2503-2508.
 22. Chung CH, Rudek MA, Kang H, Marur S, Pritish J, Tsottles N, Bonerigo S, Veasey A, **Kiess A**, Quon H, Cmelak A, Murphy BA, Gilbert J. A phase I study of afatinib/carboplatin/paclitaxel induction chemotherapy followed by standard chemoradiation in HPV-negative or high-risk HPV-positive locally advanced stage III/IVa/IVb head and neck squamous cell carcinoma. *Oral Oncol*. 2016;53:54-59.
 23. **Kiess AP**, Minn I, Vaidyanathan G, Hobbs R, Josefsson A, Shen C, Brummet M, Chen Y, Choi J, Koumarianou E, Baidoo K, Brechbiel M, Mease RC, Sgouros G, Zalutsky MR, Pomper MG. (2S)-2-(3-(1-Carboxy-5-(4-[211At]astatobenzamido)pentyl)ureido)-pentanedioic acid for PSMA-targeted α -particle radiopharmaceutical therapy. *J Nucl Med*. 2016;57(10):1569-1575.
 24. D'Souza G, Westra WH, Wang, SJ, van Zant A, Wentz A, Kluz N, Rettig E, Ryan WR, Ha PK, Kang H, Bishop J, Quon H, **Kiess AP**, Richmon JD, Eisele DW, Fakhry C. Differences in the prevalence of human papillomavirus (HPV) in head and neck squamous cell cancers by sex, race, anatomic tumor site, and HPV detection method. *JAMA Oncol*. 2017;3(2):169-177.
 25. Marciscano AE, Charu V, Starmer HM, Best SR, Quon H, Hillel AT, Akst LM, **Kiess AP**. Evaluating post-radiotherapy laryngeal function with laryngeal videostroboscopy in early stage glottic cancer. *Front Oncol*. 2017;7:124.
 26. Britt CJ, Chang HY, Quon H, Kang H, **Kiess AP**, Eisele DW, Frick KD, Gourin CG. Quality indicators of laryngeal cancer care in commercially insured patients. *Laryngoscope*. 2017;129(12):2805-2812.
 27. Cheng Z, Nakatsugawa M, Hu C, Robertson SP, Hui X, Moore JA, Bowers MR, **Kiess AP**, Page BR, Burns L, Muse M, Choflet A, Sakaue K, Sugiyama S, Utsunomiya K, Wong JW, McNutt TR, Quon H. Evaluation of classification and regression tree (CART) model in weight loss prediction following head and neck cancer radiotherapy. *Adv Radiat Oncol*. 2017;3(3):346-355.
 28. Quon H, Hui X, Cheng Z, Robertson S, Peng L, Bowers M, Moore J, Choflet A, Thompson A, Muse M, **Kiess AP**, Page, B, Fakhry C, Gourin C, O'Hare J, Graham P, Szczesniak M, Maclean J, Cook I, McNutt T. Quantitative evaluation of head and neck cancer treatment-related dysphagia in the development of a personalized treatment deintensification paradigm. *Int J Radiat Oncol Biol Phys*. 2017;99(5):1271-1278.
 29. Day AT, Chang HY, Quon H, Kang H, **Kiess AP**, Eisele DW, Frick KD, Gourin CG. Treatment, short-term outcomes, and costs associated with larynx cancer care in commercially insured patients. *Laryngoscope*. 2018;128(1):91-101.
 30. Gourin CG, Herbert RJ, Fakhry C, Quon H, Kang G, **Kiess AP**, Koch WM, Eisele DW, Frick KD. Quality indicators of oropharyngeal cancer care in the elderly. *Laryngoscope*. 2018;128(10):2312-2319.
 31. Rao AD, Coquia S, De Jong R, Gourin C, Page B, Latronico D, Dah S, Su L, Clarke S, Schultz J, Rosati LM, Fakhry C, Wong J, DeWeese TL, Quon H, Ding K, **Kiess AP**. Effects of biodegradable hydrogel spacer injection on contralateral submandibular gland sparing in radiotherapy for head and neck cancers. *Radiother Oncol*. 2018;126(1):96-99.
 32. Motz K, Herbert RJ, Fakhry C, Quon H, Kang H, **Kiess AP**, Eisele DW, Koch WM, Frick KD, Gourin CG. Short- and long-term outcomes of oropharyngeal cancer care in the elderly. *Laryngoscope*. 2018;128(9):2084-2093.
 33. Rettig EM, Fakhry C, Hales RK, Kisuule F, Quon H, **Kiess AP**, Yin LX, Zhang Y, Blackford AL, Drummond MB, Gourin CG, Koch WM, Eisele DW, D'Souza G. Pilot randomized controlled trial of a comprehensive smoking cessation intervention for patients with upper aerodigestive cancer undergoing radiotherapy. *Head Neck*. 2018;40(7):1534-1547.
 34. Gourin CG, Fakhry C, Quon H, Kang H, **Kiess AP**, Herbert RJ, Eisele DW, Frick KD. Treatment, survival, and costs of oropharyngeal cancer care in the elderly. *Laryngoscope*. 2018;128(5):1103-1112.
 35. Peng L, Hui X, Bowers MR, Moore J, Cecil E, Choflet A, Thompson A, Muse M, **Kiess AP**, Page BR, Gourin CG, Fakhry C, Szczesniak M, Maclean J, Wu P, Cook I, McNutt TR, Quon H. Prospective evaluation of patient reported swallow function with the Functional Assessment of Cancer Therapy (FACT), MD Anderson

Dysphagia Inventory (MDADI) and the Sydney Swallow Questionnaire (SSQ) in head and neck cancer patients. *Oral Oncol.* 2018;84:25-30.

36. Park J, Gourin C, **Kiess AP**, Mehra R, Forastiere A, Kang H. Pattern of planned systemic therapy usage in newly diagnosed, non-metastatic squamous cell carcinoma of head and neck in a commercially insured population in the United States. *Head Neck.* 2018;40(12):2612-2620.
37. Nakatsugawa M, Cheng Z, **Kiess AP**, Choflet A, Bowers M, Utsunomiya K, Sugiyama S, Wong J, Quon H, McNutt T. The needs and benefits of continuous model updates on the accuracy of RT-induced toxicity prediction models within a learning health system. *Int J Radiat Oncol Biol Phys.* 2019;103(2):460-467.
38. Cheng Z, Nakatsugawa M, Zhou X, Hu C, Greco S, **Kiess AP**, Page BR, Alcorn SR, Haller J, Utsunomiya K, Sugiyama S, Fu W, Wong J, Lee J, McNutt TR, Quon H. Utility of a clinical decision support system in weight loss prediction after head and neck cancer radiotherapy. *JCO Clin Cancer Inform.* 2019;3:1-11.
39. Windon M, D'Souza G, Faraji F, Troy T, Koch W, Gourin C, **Kiess AP**, Pitman K, Eisele D, Fakhry C. Priorities, concerns, and regret among patients with head and neck cancer. *Cancer.* 2019;125(8):1281-1289.
40. Han P, Lakshminarayanan P, Jiang W, Shpitsner I, Hui X, Lee SH, Cheng Z, Guo Y, Taylor RH, Siddiqui SA, Bowers M, Sheikh K, **Kiess AP**, Page BR, Lee J, Quon H, McNutt TR. Dose/volume histogram patterns in salivary gland subvolumes influence xerostomia injury and recovery. *Sci Rep.* 2019;9(1):3616.
41. Gourin CG, Herbert RJ, Quon H, Fakhry C, **Kiess AP**, Eisele DW, Frick KD. Quality of care and short and long-term outcomes of oropharyngeal cancer care in the elderly. *Head Neck.* 2019;41(10):3542-3550.
42. Windon MJ, Fakhry C, Faraji F, Troy T, Gourin CG, **Kiess AP**, Koch W, Eisele DW, D'Souza G. Priorities of human papillomavirus-associated oropharyngeal cancer patients at diagnosis and after treatment. *Oral Oncol.* 2019;95:11-15.
43. Fakhry C, Waterboer T, Westra WF, Rooper LM, Windon M, Troy T, Koch W, Gourin CG, Bender N, Yavvari S, **Kiess AP**, Miles BA, Ryan WR, Ha PK, Eisele DW, D'Souza G. Distinct biomarker and behavioral profiles of human papillomavirus-related oropharynx cancer patients by age. *Oral Oncol.* 2020;101:104522.
44. Banerjee SR, Minn I, Kumar V, Josefsson A, Lisok A, Brummet M, Chen J, **Kiess AP**, Baidoo K, Brayton C, Mease RC, Brechbiel M, Sgouros G, Hobbs RF, Pomper MG. Preclinical evaluation of 203/212Pb-labeled low-molecular-weight compounds for targeted radiopharmaceutical therapy of prostate cancer. *J Nucl Med.* 2020;61(1):80-88.
45. Shen C, Minn I, Hobbs RF, Chen Y, Josefsson A, Brummet M, Banerjee SR, Brayton CF, Mease RC, Pomper MG, **Kiess AP**. Auger radiopharmaceutical therapy targeting prostate-specific membrane antigen in a micrometastatic model of prostate cancer. *Theranostics.* 2020;10(7): 2888-2896.
46. Windon MJ, D'Souza G, Waterboer T, Rooper L, Westra WH, Troy T, Pardoll D, Tan M, Yavvari S, **Kiess AP**, Miles B, Mydlarz WK, Ha PK, Bender N, Eisele DW, Fakhry C. Risk factors for human papillomavirus-positive nonoropharyngeal squamous cell carcinoma. *Head Neck.* 2020;42(8):1954-1962.
47. Wright JL, Alcorn S, McNutt T, Han-Oh S, Gonzalez R, Lin L, Anderson R, Wieworka J, Deville C, Ladra M, Meyer J, Hales R, Voong R, Narang A, Vogel J, Asrari F, **Kiess AP**, Song D, Tran P, Kleinberg L, Redmond K, Tsien C, Quon H, Croog V, Walker A, Greco S, Laiho M, Viswanathan A. An Integrated Program in a Pandemic: Johns Hopkins Radiation Oncology Department. *Adv Radiat Oncol.* 2020;5(4):666-672.
48. Hill C, Deville C, Alcorn S, **Kiess A**, Viswanathan A, Page B. Assessing and Providing Culturally Competent Care in Radiation Oncology for Deaf Cancer Patients. *Adv Radiat Oncol.* 2020;5(3):333-344.
49. Hasan H, Deek MP, Phillips R, Hobbs RF, Malek R, Radwan N, **Kiess AP**, Dipasquale S, Huang J, Caldwell T, Leitzel J, Wendler D, Wang H, Thompson E, Powell J, Dudley S, Deville C, Greco SC, Song DY, DeWeese TL, Gorin MA, Rowe SP, Denmeade S, Markowski M, Antonarakis ES, Carducci MA, Eisenberger MA, Pomper MG, Pienta KJ, Paller CJ, Tran PT. A phase II randomized trial of Radium-223 dichloride and SABR versus SABR for oligometastatic prostate cancer (RAVENS). *BMC Cancer.* 2020;20(1):492.
50. Nicholas SE, Fu W, Liang AL, DeLuna R, Vujaskovic L, Bishop J, Page BR, Quon H, Gourin C, Fakhry C, Eisele D, **Kiess AP**. Radiation therapy after surgery resection improves outcomes for patients with recurrent pleomorphic adenoma. *Adv Radiat Oncol.* 2021;6(3):100674.
51. Mease RC, Kang C, Kumar V, Ray S, Minn I, Brummet M, Gabrielson K, Feng Y, Park A, **Kiess AP**, Sgouros G, Vaidyanathan G, Zalutsky M, Pomper MG. An improved 211At-labeled agent for PSMA-targeted alpha therapy. *J Nucl Med.* 2021; Jun 4;jnumed.121.262098. Online ahead of print.

1. **Ponce AM**, Wright A, Dewhirst MW, Needham D. Targeted bioavailability of drugs through triggered release of liposomes. *Future Lipidol*. 2006;1(1):25-34.
2. **Ponce AM**, Vujaskovic Z, Yuan F, Needham D, Dewhirst MW. Hyperthermia mediated liposomal drug delivery. *Int J Hyperther*. 2006;22(3):205-213.
3. **Kiess AP**, Cho S, Pomper M. Translational molecular imaging of prostate cancer. *Curr Radiol Reports*. 2013;1(3):216-226.
4. Rettig E, **Kiess AP**, Fakhry C. The role of sexual behavior in head and neck cancer: implications for prevention and therapy. *Exp Rev Anticanc Ther*. 2014;15(1):35-49.
5. Kang H, **Kiess AP**, Chung CH. Emerging biomarkers in head and neck cancer in the era of genomics. *Nat Rev Clin Oncol*. 2014;12(1):11-26.
6. Pasha MA, Marcus C, Fakhry C, Kang H, **Kiess AP**, Subramaniam RM. FDG PET/CT for management and assessing outcomes of squamous cell cancer of the oral cavity. *Am J Roentgenol*. 2015;W1-W12.
7. **Kiess AP**, Banerjee SR, Mease RC, Rowe SP, Rao A, Foss CA, Chen Y, Yang X, Cho SY, Nimmagadda S, Pomper M. Prostate-specific membrane antigen as a target for cancer imaging and therapy. *Q J Nucl Med Mol Imaging*. 2015;56(9):1401-1407.
8. Gooi Z, Fakhry C, Goldenberg D, Richmon J, **Kiess AP**. AHNS Series: Do you know your guidelines? Principles of radiation therapy for head and neck cancer: A review of the National Comprehensive Cancer Network guidelines. *Head Neck*. 2016;38(7):987-992.
9. Fragomeni Salas RA, Amir T, Sheihbahaei S, Harvey SC, Javadi MS, Solnes L, **Kiess AP**, Allaf ME, Pomper M, Gorin MA, Rowe SP. Imaging of non-prostate cancers using PSMA-targeted radiotracers: rationale, current state of the field, and a call to arms. *J Nuc Med*. 2018;59(6):871-877.
10. Quon H, McNutt T, Lee J, Bowers M, Jiang W, Lashminarayanan P, Cheng Z, Han P, Hui X, Shah V, Moore J, Nakatsugawa M, Robertson S, Page B, **Kiess AP**, Wong J, DeWeese T. Needs and challenges for radiation oncology in the era of precision medicine. *Int J Radiat Oncol Biol Phys*. 2019;103(4):809-817.

Case Reports [CR]

1. Ma TM, Kang H, Rowe SP, **Kiess AP**. Response to R-CHOP in HPV-related squamous cell carcinoma of base of tongue: a case report. *Cancers Head Neck*. 2018;3:2.
2. Moughames E, **Kiess AP**, Akst LM, Azar A. Sirolimus for the treatment of airway obstruction due to indolent T-lymphoblastic proliferation. *Case Reports Immunol*. 2019 Dec 9;2019:1724083.

Book Chapters, Monographs [BC]

1. Needham D, **Ponce AM**. Nanoscale drug delivery vehicles for solid tumors: a new paradigm for localized drug delivery using temperature sensitive liposomes. In MM Amiji (Ed.), *Nanotechnology for Cancer Therapeutics* (pp.675-719). Boca Raton, FL: Taylor & Francis/CRC Press, 2006.
2. Quon H, **Kiess AP**, Chung C, Eisele D. Salivary gland malignancies. In LL Gunderson and JE Tepper (Eds.), *Clinical Radiation Oncology*, 4th Edition. Philadelphia, PA: Elsevier/Churchill Livingstone, 2014.
3. **Kiess AP**, Quon H. Management of inoperable malignant neoplasms. In PJ Bradley and DW Eisele (Eds.), *Salivary Gland Neoplasms. Advances in Otorhinolaryngology*. Basel: Karger, 2016;78:157-167.
4. **Kiess AP**, Gourin CG, Forastiere A. Locally intermediate glottic cancer: chemoradiotherapy. In R Dedivitis (Ed), *Laryngeal Cancer: Approach Based on Clinical Cases*. Thieme, 2018.
5. Stachelek G and **Kiess AP**. Adjuvant radiotherapy for oral cavity cancer. In C Fakhry, **AP Kiess**, D Eisele, K Pitman (Eds.), *Oral Cancer: Evaluation, Therapy, and Rehabilitation*. Thieme, 2021.
6. Guo T and **Kiess AP**. Does recurrent cutaneous squamous cell carcinoma of the head and neck warrant adjuvant treatment after surgical resection? In Z Ghooi and N Agrawal (Eds.), *Difficult Decisions in Head and Neck Oncologic Surgery*. Springer, 2019:247-257.
7. **Kiess AP**, Mackley HB, and Chen X. External beam radiation therapy for thyroid malignancy. In D. Goldenberg (Ed.), *Head and Neck Endocrine Surgery*. Thieme, 2020 (In Press).
8. Kut C, Liang A, and **Kiess AP**. A case of fistula after adjuvant external beam radiotherapy and lenvatinib for high risk follicular thyroid cancer. In D. Cooper (Ed.), *Thyroid Cancer - A Case-Based Approach*. Springer Nature, 2021:249-260.

Books, Textbooks [BK]

1. C Fakhry, K Pitman, **AP Kiess**, D Eisele (Eds.), Oral Cancer: Evaluation, Therapy, and Rehabilitation. Thieme, 2020.
2. Head and Neck Cancer **Section Editor** and Author for DD Chamberlain, JB Yu, and RH Decker (Eds), Pocket Guide to Radiation Oncology. New York: Demos Medical, 2016
 - Parekh A and **Kiess AP**. Nasopharynx cancer. 33-36.
 - Nicholas S and **Kiess AP**. Nasal cavity and paranasal sinus. 37-40.
 - Guss Z and **Kiess AP**. Oropharynx cancer. 41-44.
 - Shen C and **Kiess AP**. Oral cavity and lip cancers. 45-50.
 - Ferro A and **Kiess AP**. Major salivary gland tumors. 51-54.
 - Chen L and **Kiess AP**. Larynx and hypopharynx cancers. 55-60.
 - **Kiess AP**. Thyroid cancer. 61-64.
 - Mian O and **Kiess AP**. Occult primary cancer of the head and neck. 65-68.

Guidelines/Consensus Statements [CS]

1. **Kiess AP**, Agrawal N, Brierley JD, Duvvuri U, Ferris RL, Genden E, Wong, RJ, Tuttle M, Lee NY, Randolph GW. External beam radiation for differentiated thyroid cancer locoregional control – a statement of the American Head and Neck Society. Head Neck. 2016; 38(4):493-498.
2. Buatti JM, Pryma DA, **Kiess AP***, Mailman J, Ennis RD, Menda Y, White GA, Pandit-Taskar N. A framework for patient-centered pathways of care for radiopharmaceutical therapy (RPT): an ASTRO consensus document. Int J Rad Onc Biol Phys. 2020;109(4):913-922.

**Responsible for initial concept/outline and wrote major sections of manuscript.*

Editorials [ED]

1. Seiwert TY and **Kiess AP**. Time to Debunk an Urban Myth? The ‘Abscopal Effect’ with Radiation and Anti-PD-1. Journal of Clinical Oncology. 2021, Jan; 39(1): 1-3.
2. Buatti J and **Kiess AP**. The Rapid Evolution of Theranostics in Radiation Oncology. In **Buatti J and Kiess AP (Special Issue Eds)**, Seminars in Radiation Oncology. 2021, Jan; 31(1): 1-2.

FUNDING

Research Extramural Funding

Current

- | | |
|-----------|--|
| 2015-2021 | Systemic Radionuclide Therapy Targeted to VEGF Receptors in Tumor Vasculature
NIH SBIR/ SIBTech
National Cancer Institute |
| 2016-2021 | Radiopharmaceutical Therapy in Prostate Cancer: New Agents for Phase I Trials
Commonwealth Foundation |
| 2018-2023 | Dose Response in Radionuclide Therapy
NIH R01 CA116477
National Cancer Institute |
| 2021-2023 | Radiolabeled Systemic Therapy with SABR for Castration Sensitive Prostate Cancer Oligometastatic Disease
Movember PCF Challenge Award |

Previous

- 2004-2006 Predicting Drug Concentration Distribution Using a Validated Finite Element Model in Locally Advanced Breast Cancer
DAMD 17-03-1-0348
Predoctoral Traineeship, Department of Defense Breast Cancer Program
- 2014-2019 Small Molecule PSMA-Targeted Alpha Therapy
NIH R01 CA184228
National Cancer Institute

Other Extramural Funding

Current

- 2018- The Mecheri and Mosur Family Fund for Cancer Research

Research Intramural Funding

Current

- 2020-2021 HPV E7-Specific Soluble T Cell Receptor Radiopharmaceutical Therapy
Theodore L. DeWeese Award in Innovative Research

Previous

- 2013-2014 Targeted Molecular Radiotherapy for Micro-Metastatic Prostate Cancer
FH B33 CRF
Faculty Recruitment Award, Cigarette Restitution Fund Program
State of Maryland Department of Health and Mental Hygiene
- 2016-2017 Targeted Radiopharmaceutical Therapy for ACC
Adenoid Cystic Cancer Research Foundation

CLINICAL ACTIVITIES

Certification, Licensure, Board certification

- 2013-present Maryland Board of Physicians, D0075730
2014-present American Board of Radiology, Certificate in Radiation Oncology, ID 64595
2014-present Drug Enforcement Administration License (available on request)
2015-present Maryland Department of Health and Mental Hygiene, Division of Drug Control, M78709
2019-present District of Columbia Board of Medicine, MD047354

Clinical Responsibilities

- 2013-present Full-time clinical faculty member treating head and neck cancer and skin cancer with external beam radiation, and multiple metastatic cancers with radiopharmaceutical therapies. Participant in weekly head and neck cancer tumor conference and multidisciplinary clinic. Participant in monthly thyroid cancer tumor conference.

Membership/Examiner for Specialty Board

- 2020-present Board Member and Examiner for Head, Neck, and Skin Category for Radiation Oncology; American Board of Radiology

EDUCATIONAL ACTIVITIES

Educational Focus

As residency program director, I have an interest in both medical school and graduate medical training in radiation oncology. At the national level, my education focus is on developing curricula for radiopharmaceutical therapy training for residents, developing curricula for radiation education for medical students, and serving as a board member and examiner for radiation oncology.

- 2020-present Invited Expert, Radiation Course for Medical Students and Professionals. Virtual Meeting of Experts, National Academies of Sciences, Engineering and Medicine. Washington DC, Nov 2020. Pending manuscript proceeding from this meeting.
- 2021-present Leader, ASTRO Theranostics Curriculum Work Group

Teaching

Classroom Instruction (regional)

- 2013-2016 JHH/UMD Radiation Oncology Journal Club - Discussion leader, once per year
- 2013-present Radiation Oncology Resident Didactics - 4 lectures per year on head/neck cancer
- 2015-2017 Johns Hopkins School of Medicine, Genes to Society course - 1 lecture per year
- 2015-present UMD Speech Pathology Graduate Program - 1 lecture per year
- 2019-present Otolaryngology Resident Didactics – 1 lecture per year
- 2020-present Radiation Oncology Medical Student Elective – 1 lecture per block (5 per year)
- 2021 Loyola University, Bioethics course – Lecturer
- 2021 Johns Hopkins School of Medicine, Cutting Edge Technology to Clinical Practice course – Lecturer
- 2013-present JHH Multidisciplinary Oncology Journal Club - Reviewer, once per year

Classroom Instruction (international)

- 2020-present Rayos Contra Cancer (SE Asia), Head and Neck Cancer Contouring course – 1 lecture per year
- 2019-present Aliada Clinic (Peru), Joint Radiation Oncology Case Review – 1 session per year

Clinical Instruction (regional)

- 2015-2017 Radiation Oncology Elective, Course Director, The Johns Hopkins University School of Medicine, 10-20 medical students/year.

CME Instruction (regional)

- 2014 Organ preservation protocols and long term impact of radiation. Advanced Topics in Surgical Voice Restoration: Re-Evaluating Swallowing and Voice in the Era of Organ Preservation. Lecturer. Baltimore, MD.
- 2014 Radiotherapy considerations for head and neck cancer of unknown primary: playing the odds. Updates in HPV and Head and Neck Cancer. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2015 Radiation therapy in differentiated thyroid cancer. Contemporary Surgical Management of Thyroid and Parathyroid Disease. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2015 Changes in radiation therapy for HPV-related oropharynx cancer. Updates in HPV and Head and Neck Cancer. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2016 Radiation therapy for head and neck cancer. MD/DC Chapter of SOHN, 21st Annual Spring Conference. Lecturer. Greater Baltimore Medical Center, Baltimore, MD.
- 2016 Radiation therapy in thyroid cancer. Current Concepts in Management of Thyroid and Parathyroid Tumors. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2017 Radiation therapy in differentiated thyroid cancer. Current Concepts in Management of Thyroid and Parathyroid Tumors with Transoral Thyroidectomy. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2018 Current standard of care for oropharynx cancer: NCCN radiotherapy guidelines. Updates in Head and Neck Cancer. Lecturer. Johns Hopkins Suburban Hospital, Rockville, MD.

- 2018 Radiation therapy in differentiated thyroid cancer. Current Concepts in Management of Thyroid and Parathyroid Tumors with Transoral Thyroidectomy. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2019 Aggressive thyroid cancer panel. Contemporary Surgical Management of Thyroid and Parathyroid Disease. Panelist. Johns Hopkins Hospital, Baltimore, MD.
- 2020 Managing COVID-positive patients in radiation oncology. Radiation Oncology Morbidity and Mortality Conference. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2021 Airway Complications in Locally Advanced Head and Neck Cancer. Radiation Oncology Morbidity and Mortality Conference. Radiation Oncology Morbidity and Mortality Conference. Lecturer. Johns Hopkins Hospital, Baltimore, MD.
- 2021 Radiation Induced Mucositis in a Patient with Cernunnos Syndrome. Radiation Oncology Morbidity and Mortality Conference. Lecturer. Johns Hopkins Hospital, Baltimore, MD.

Workshops/Seminars

- 2014 H&N Patient Education Day, Speaker at Physician Q&A Session

Educational Program Building/Leadership

- 2014-present Member, Clinical Residency Clinical Competency Committee, Department of Radiation Oncology
- 2014-present Member, Clinical Residency Program Evaluation Committee, Department of Radiation Oncology
- 2015-2017 Course Director, Radiation Oncology Consult Elective, The Johns Hopkins University School of Medicine
- 2015-2017 Associate Residency Program Director, Department of Radiation Oncology. Participated in all residency activities as assistant PD.
- 2015-present Member, Physics Residency Program Steering Committee, Department of Radiation Oncology
- 2017-present Residency Program Director, Department of Radiation Oncology. This role includes advising residents, evaluating residents, developing curriculum, and leading interview and selection process. (20% effort)

RESEARCH ACTIVITIES

Inventions, Patents, Copyrights

- 2010 Viglianti BL, Dewhirst MW, **Ponce AM**. MR imageable liposomes for the evaluation of treatment efficacy, thermal distribution, and demonstration of dose painting. US Patent# 7769423.
- 2014 Pomper M, Mease RC, **Kiess AP**, Yang X, Chen Y, Minn I. Small molecular PSMA inhibitors radiolabeled with Auger electron emitting radiohalogens for cancer therapy. JHTT Disclosure, June 2014. US Patent pending.
- 2021 **Kiess AP**, Jia A, Hinrichs C, Pomper M, Mease RC, Foss C, Minn I, Seiwert T, Fakhry C. Human Papilloma Virus E7-specific Soluble T-cell Receptor Radiopharmaceutical Therapy. JHTT Disclosure, Feb 2021.

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES

System Innovation and Quality Improvement efforts within JHM

- 2013-2014 Implemented routine use of simulation headrest and flat table for all H&N PET/CT scans at JHH, resulting in improved image fusion for treatment planning

2014-2015 Clinical Leader, Change team for formalizing workflow process in periods of extended machine downtime, Department of Radiation Oncology

ORGANIZATIONAL ACTIVITIES

Institutional Administrative Appointments

2014-2020 Member, Junior Faculty Resource Advisory Council, School of Medicine
2017-present Member, Graduate Medical Education Committee

Editorial Activities

2021 Guest Editor, Special issue of Seminars in Radiation Oncology (Rapid Evolution in Theranostics)

Journal Peer Review Activities

2007-2020 International Journal of Hyperthermia
2013-2017 American Journal of Clinical Oncology

Advisory Committees, Review Groups, Study Sections

2015-2019 Member, ASTRO Annual Meeting Education Committee
2015-present Vice Chair (2021) and Member, ASTRO Promoting Science Through Research and Training Committee
2016-2017 Reviewer, RSNA Radiation Oncology Research Study Section
2017-present Member, NIH/NCI Targeted Radionuclide Therapy Working Group
2018-2019 Member, American Thyroid Association Spring Satellite Symposium Committee
2018-present Member, ASTRO Theranostics Work Group
2019-2021 Member, ASTRO/SNMMI Panel for Patient-Centered Path of Care for Radiopharmaceuticals
2020-present Invited Expert, Radiation Course for Medical Students and Professionals. Virtual Meeting of Experts, National Academies of Sciences, Engineering and Medicine. Washington DC, Nov 2020. Pending manuscript proceeding from this meeting.
2021-present Leader, ASTRO Theranostics Curriculum Work Group

Professional Societies

2009-present Member, American Society for Radiation Oncology (committees above)
2016-present Member, Society of Nuclear Medicine and Molecular Imaging
2018 Member, American Thyroid Association
2018 Member, Radiation Research Society
2019-present Member, Radiologic Society of North America

Conference Organizer

2014, 2020 Organizer, Annual Scientific Retreat of the Department of Radiation Oncology and Molecular Radiation Sciences, JHMI, Baltimore, MD
2019, 2020, 2021 Lead Organizer and Moderator, ASTRO Theranostics Workshops. ASTRO Annual Meetings, Sept 2019, Oct 2020, Oct 2021. *Responsible for concept, proposal, organization and moderation of the 1st - 3rd annual ASTRO Theranostics Workshop with over 350 registered participants.*

Session Chair

2019 Moderator, Presidential Symposium Expanded Learning Session: Radiopharmaceuticals Will Replace External Beam RT for Treatment of Metastasis in the Next Decade. ASTRO Annual Meeting, Chicago, Sept 2019

RECOGNITION

Awards and Honors

1997-2001	University of Virginia Achievement Scholar (full tuition)
1999	Undergraduate Research Fellowship, University of Virginia
2000-2001	Selected to live on University of Virginia Lawn (50 per class)
2001	Thesis Contest prize, University of Virginia School of Engineering
2001-2008	Medical Scientist Training Program Fellowship
2005	Scholar in Training Travel Award, Radiation Research Society
2006	Best Abstract Award, Department of Radiation Oncology, Duke Cancer Center
2011	AAWR Eleanor Montague Distinguished Resident Award in Radiation Oncology
2012	Junior Brachytherapy Travel Award, World Congress of Brachytherapy
2015	ARRO Educator of the Year, JHH Department of Radiation Oncology
2015	The Mecheri and Mosur Family Fund for Cancer Research (personal endowment)
2016	Editor's Choice Award for Journal of Nuclear Medicine (top 3 manuscripts)
2019	Theodore L. DeWeese Award in Innovative Research
2020	Top Doctors, Baltimore Magazine