

UVA Pathology is extremely proud of our ability to engage and mentor residents in clinically relevant research. Here is a sampling of recent primary research publications on which UVA Pathology residents and fellows served as first author.

Resident-Driven Research:

- ME Dibbern, TN Bullock, TM Jenkins, LR Duska, MH Stoler, AM Mills. Loss of MHC Class I Expression in HPV-Associated Cervical and Vulvar Neoplasia: A Potential Mechanism of Resistance to Checkpoint Inhibition. *Am J Surg Pathol* 2020 *in press*.
- A Volaric, C Bacchi, A Gru. PD-1 and PD-L1 Immunohistochemistry as a Diagnostic Tool for Classic Hodgkin Lymphoma in Small-Volume Biopsies. *Am J Surg Pathol*. 2020 *in press*.
- J Curley, MR Conaway, Z Chinn, LR Duska, M Stoler, AM Mills. Looking past PD-L1: expression of immune checkpoint TIM-3 and its ligand galectin-9 in cervical and vulvar squamous neoplasia. *Mod Pathol*. 2020 *Epub ahead of print*.
- JY Ju, G Wehrl. The effect of entrustable professional activities on pathology resident confidence in blood banking/transfusion medicine. *Transfusion*. 2020. *Epub ahead of print*.
- R Whitehair, LC Peres, AM Mills. Expression of the immune checkpoints LAG-3 and PD-L1 in high-grade serous ovarian carcinoma: Relationship to tumor-associated lymphocytes and germline *BRCA* status. *Int J Gynecol Pathol*. 2020 *Epub ahead of print*.
- C Westover, C Bacchi, AA Gru. Clear Cell Sarcoma With Cutaneous Presentation in a 4-Year-Old Boy. *Am J Dermatopathol*. 2020 *Epub ahead of print*
- Ju JY, Dibbern ME, Mahadevan MS, Fan J, Kunk PR, Stelow EB. Mismatch repair protein deficiency/microsatellite instability is rare in Cholangiocarcinomas and associated with distinctive morphologies. *Am J Clin Pathol*. 2020;153(5):598-604.
- LA Friedman, Ring KL, AM Mills. LAG-3 and GAL-3 in endometrial carcinoma: Emerging candidates for immunotherapy. *Int J Gynecol Pathol* 2020; 39(3):203-2012.
- JY Ju, EB Stelow, MS Mahadevan, J Fan, NS Aguilera. Atypical lymphoid proliferations and clonality in Helicobacter-associated inflammatory infiltrates in children. *Am J Surg Pathol* 2019;43(10):1361-67.
- M Moore, KL Ring, AM Mills. TIM-3 in Endometrial Carcinomas: An Immunotherapeutic Target Expressed by Mismatch Repair-Deficient and Intact Cancers. *Mod Pathol*. 2019;32(8):1168-79.
- JY Ju, EB Stelow. Clinicopathologic features of anal and perianal squamous cell carcinomas and their relationship to human papillomavirus. *Am J Surg Pathol*. 2019;43(6):827-834.
- JD Coppock, AK Volaric, AM Mills, AA Gru. Concordance levels of PD-L1 expression by immunohistochemistry mRNA in situ hybridization, and outcome in lung carcinomas. *Human Pathol* 2018;82:282-288.
- A Volaric, R Genzler, R Hall, JH Mehaffey, EB Stelow, TN Bullock, LW Martin, AM Mills. Indoleamine-2,3-Dioxygenase in Non-Small Cell Lung Cancer: A targetable

mechanism of immune resistance frequently coexpressed with PD-L1. *Am J Surg Pathol* 2018;42(9):1216-1229.

- S Zadeh, L Duska, AM Mills. Androgen receptor expression in endometrial carcinoma. *Int J Gynecol Pathol* 2018;37(2):167-173.
- JY Ju, AM Mills, MS Mahadevan, J Fan, SH Culp, MH Thomas, HP Cathro. Universal Lynch syndrome screening should be performed in all upper tract urothelial carcinomas. *Am J Surg Pathol* 2018;42(9):1216-1229.
- J Coppock, B Willis, M Stoler, AM Mills. HPV RNA in situ hybridization can inform cervical cytology-histology correlation. *Cancer Cytopathol* 2018.126(8):533-540.
- SE Gradecki, JS Grange, EB Stelow. Concordance of PD-L1 expression between core biopsy and resection specimens of non-small cell lung cancer. *Am J Surg Pathol* 2018;43(8):1090-94.
- JJ Davick, J Kim, MR Wick, AA Gru. Indeterminate dendritic cell tumor: A report of two new cases lacking the *ETV3-NCOA3* translocation and a literature review. *Am J Dermatopathol*. 2018;40(10):736-48.
- EA Dill, PM Dillon, TN Bullock, AM Mills. IDO Expression Across Breast Cancer Subtypes: An Assessment of 242 Primary and 39 Metastatic Cases. *Mod Pathol* 2018. 31(10) 1513-22.
- JJ Davick, E Gaughan, M Barry, AA Gru. Primary cutaneous small/medium CD4+ T-cell lymphoproliferative disorder occurring in patients with metastatic melanoma. *Am J Dermatopathol* 2018;40(1):60-63.
- EA Dill, AA Gru, KA Atkins, ME Moore, LA Friedman, TN Bullock, JV Cross, PM. Dillon, AM Mills. PD-L1 expression and intratumoral heterogeneity across breast cancer subtypes and stages: An assessment of 245 primary and 40 metastatic tumors. *Am J Surg Pathol*. 2017 Mar;41(3):334-342.
- EA Sloan, KL Ring, B Willis, SC Modesitt, AM Mills. PD-L1 expression in mismatch repair deficient endometrial carcinomas, including Lynch syndrome-associated and MLH1 promoter hypermethylated Tumors. *Am J Surg Pathol* 2017;41(3):326-333.
- CE Gottlieb, AM Mills, JV Cross, KL Ring. Tumor-associated macrophage expression of PD-L1 in implants of high-grade serous ovarian carcinoma: A comparison of matched primary and metastatic tumors. *Gynecol Oncol* 2017;144(3):607-612.
- EA Sloan, CA Moskaluk, AM Mills. Mucinous Differentiation with tumor infiltrating lymphocytes is a feature of sporadically methylated endometrial carcinomas. *Int J Gynecol Pathol* 2017; 36(3):205-216.

Fellow-Driven Research

- TM Jenkins KZ Hanley, LE Schwartz, L Cantrell, MH Stoler, AM Mills. Mismatch repair deficiency in uterine carcinosarcoma: A multi-institutional retrospective review. *Am J Surg Pathol*. 2020 Epub ahead of print.
- Adkins BD. Recent Advances in Anatomic and Clinical Pathology Board Examination Pass Rates. *Arch Pathol Lab Med*. 2020 May 8;. doi: 10.5858/arpa.2019-0594-ED. Epub ahead of print.

- Adkins BD, Ramos JC, Bliss-Moreau M, Gru AA. Updates in lymph node and skin pathology of adult T-cell leukemia/lymphoma, biomarkers, and beyond. *Semin Diagn Pathol*. 2020 Jan;37(1):1-10.
- Shanes ED, LA Friedman, AM Mills. PD-L1 expression and tumor-infiltrating lymphocytes in uterine smooth muscle tumors: Implications for immunotherapy. *Am J Surg Pathol*. 2019; 43(6):792-801.
- Z Chinn, Stoler MH, AM Mills. PD-L1 and IDO Expression in Cervical and Vulvar Invasive and Intraepithelial Squamous Neoplasias: Implications for Combination Immunotherapy. *Histopathology* 2019;74(2):256-268.
- T Terzic, AM Mills, S Zadeh, KA Atkins, KZ Hanley. Gata3 Expression in common gynecologic carcinomas: A potential pitfall. *Int J Gynecol Pathol* Epub ahead of press.
- B Willis, EA Sloan, KA Atkins, MH Stoler, AM Mills. Mismatch repair status and PD-L1 Expression in Ovarian and Endometrial Clear Cell Carcinomas. *Mod Pathol* 2017;30(11):1622-1632.