



Brooke Howitt

Irene Adler Professor
Pathology

CLINICAL OFFICE (PRIMARY)

- **Surgical Pathology**

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Bio

BIO

Dr. Howitt is a gynecologic and sarcoma pathologist, with academic interests in gynecologic mesenchymal tumors and morphologic and clinical correlates of molecular alterations in gynecologic neoplasia.

CLINICAL FOCUS

- Gynecologic Disease
- Endometrial Neoplasms
- Fallopian Tube Neoplasms
- Endometrial Stromal Tumors
- Vulvar Neoplasms
- Adenosarcoma
- Mesonephric Ducts
- Anatomic and Clinical Pathology

ACADEMIC APPOINTMENTS

- Professor - University Medical Line, Pathology
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Irene Adler Endowed Scholar, School of Medicine, (2024-2025)

PROFESSIONAL EDUCATION

- Fellowship: Brigham and Women's Hospital Dept of Pathology (2014) MA

- Medical Education: Stanford University School of Medicine (2010) CA
- Fellowship, Brigham and Women's Hospital , Women's and Perinatal Pathology (2014)
- Residency: Brigham and Women's Hospital (2013) MA
- Board Certification: Anatomic Pathology, American Board of Pathology (2013)

Teaching

STANFORD ADVISEES

Postdoctoral Faculty Sponsor

Rongting Huang, Jose Liboy Lugo, Khyati Meghani

Doctoral Dissertation Reader (NonAC)

Alvina Adimoelja, Christine Yiwen Yeh

Publications

PUBLICATIONS

- **Expression of the antibody-drug conjugate targets TROP2, CLDN6, B7-H3, and DLL3 in mesonephric-like adenocarcinoma of the female genital tract.** *Gynecologic oncology*
Zhang, X., Shahryari, J., Kingsley, L. G., McCluggage, W. G., Howitt, B. E.
2026; 209: 62-68
- **Enriched methylomes of low-input and fragmented DNA using fragment ligation EXclusive methylation sequencing.** *Nucleic acids research*
Yu, J., Ahmann, L. S., Yao, Y. Y., Toland, A., Snowden, A., Ho, C., Loyfer, N., Kaplan, T., Vogel, H., Wang, L., Howitt, B. E., Holmes, B., Lowe, et al
2026; 54 (9)
- **Inhibition of the m6A RNA demethylase FTO radiosensitizes cervical cancer by enhancing DNA damage: Preclinical data on an emerging novel cancer therapeutic target**
Adams, E., Kuganesan, N., Pu, L., Liang, B., Melemenidis, S., Richter, S., Jackson, S., Ghezelayagh, T., Kidd, E., Howitt, B., Graves, E., Rankin, E.
ACADEMIC PRESS INC ELSEVIER SCIENCE.2026: S370-S371
- **Clinicopathologic features of uterine carcinosarcoma: Revisiting prognostic significance of the sarcomatous component**
Sasse, S., Hammer, P., Lawson, S., Zhang, J., Kasimov, A., Howitt, B.
ACADEMIC PRESS INC ELSEVIER SCIENCE.2026: 388
- **Compartmental shift and prognostic significance of IGF2 expression in uterine serous and carcinosarcoma**
Sasse, S., Kingsley, L., Shahryari, J., Lawson, S., Kasimov, A., Zdravkovic, S., Hammer, P., Howitt, B.
ACADEMIC PRESS INC ELSEVIER SCIENCE.2026: S421
- **GLI1-Rearranged Tumors of the gynaecologic Tract: A Detailed Clinicopathologic Study of 10 Cases.** *The American journal of surgical pathology*
Zyla, R. E., Howitt, B. E., Bosse, T., van Slooten, F. E., Oza, A., Ma, D., Kolin, D. L., Croce, S., Merck, L., Buist, H., Arora, R., Karnezis, A., Alnuaim, et al
2026
- **Informatics-driven spatial-omics for cancer immunotherapy discovery in gynecologic cancers.**
Huang, R., Libert, D., Kasimov, A., Kingsley, L., Nasr, S., Al-Humadi, R., Finch, L. A., Diver, E., Reddy, R. A., Litkouhi, B., Bixel, K., Jiang, S., Howitt, et al
AMER ASSOC CANCER RESEARCH.2026
- **Mullerian Adenosarcoma of the Uterus, Ovary and Peritoneum: Whole Transcriptomic Digital Spatial Profiling (DSP) in a Cohort of 42 Tumors.** *Human pathology*
D'Angelo, E., Kingsley, L. G., Espinosa, I., Cipriani, V., Marotta, A., Nasr, S., Zdravkovic, S., Howitt, B. E., Prat, J.
2026: 106117

- **Same-Slide Spatial Multi-Omics Integration with IN-DEPTH Reveals Tumor Virus-Linked Spatial Reorganization of the Tumor Microenvironment.** *Cancer discovery*
Yiu, S. P., Chang, Y., Yeo, Y. Y., Qiu, H., Wu, W., Michel, H. A., Jin, X., Huang, R., Kure, S., Parmelee, L., Luo, S., Cramer, P., Lee, et al
2026
- **Interobserver Agreement and Diagnostic Certainty in Adenosarcoma**
Howitt, B., Tokuyama, M., Kasimov, A., Forgo, E., Parra-Herran, C., Quick, C., Garg, K., Bennett, J., Nucci, M., Kolin, D., Joehlin, A., D'Angelo, E., McCluggage, et al
ELSEVIER SCIENCE INC.2026
- **Assessing the diagnostic utility of immunohistochemical surrogates of recurrent molecular alterations in uterine smooth muscle tumors: a clinicopathological study of 85 benign, borderline, and malignant cases**
Younes, S., Hammer, P., Kasimov, A., Lawson, S., Charville, G., Howitt, B.
ELSEVIER SCIENCE INC.2026
- **Prevalence and Significance of Adenosarcoma-like Morphology in Uterine Carcinosarcoma**
Gao, H., Hammer, P., Sasse, S., Bagci-Turkmen, S., Kasimov, A., Finch, L., Howitt, B.
ELSEVIER SCIENCE INC.2026
- **Diagnostic Utility of Novel Marker TRIM63 ISH in the Workup of Uterine Perivascular Epithelioid Cell Tumors**
Hammer, P., Liang, B., Longacre, T., Howitt, B., Sangoi, A.
ELSEVIER SCIENCE INC.2026
- **Leveraging Cloud-Based Whole Slide Imaging for Rare Cancer Repository Building: Uterine Mesenchymal Tumors**
McCleary, T., Kasimov, A., Tokuyama, M., Forgo, E., D'Angelo, E., Leader, A., Wiedemeyer, K., Kommoss, F., Joehlin, A., Garg, K., Ordulu, Z., Sharma, A., Al-Humadi, et al
ELSEVIER SCIENCE INC.2026
- **Vaginal Cancer, Version 2.2026** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Abu-Rustum, N. R., Campos, S. M., Amarnath, S., Arend, R., Barber, E., Bradley, K., Brooks, R., Chino, J., Chon, H., Crispens, M., Damast, S., Fisher, C. M., Frederick, et al
2026; 24 (3): 101-126
- **Significance of Atypia in Endometrial Hyperplasia in Predicting Progression to Carcinoma and Response to Progesterone: A Longitudinal Study**
Sparger, C., Kasimov, A., Howitt, B., Yang, E., Lawson, S.
ELSEVIER SCIENCE INC.2026
- **scAmp analyzes focal gene amplifications at single-cell resolution.** *bioRxiv : the preprint server for biology*
Jones, M. G., Weiser, N. E., Hung, K. L., Yan, X., Agarwal, S., Luebeck, J., Gnanasekar, A., Howitt, B. E., Curtis, E. J., Yu, K., Rose, J. C., Kraft, K., Amiri, et al
2026
- **Serous Ovarian Cancer Following Opportunistic Bilateral Salpingectomy.** *JAMA network open*
Sowamber, R., Mei, A. J., Kaur, P., McLeod, J., McKay, E., Lukey, A., Bakum-Gamez, J., Buza, N., Cohen, P. A., Devins, K., Farrell, R., Garcia, C., Gilks, et al
2026; 9 (2): e2557267
- **Clinicopathologic and Molecular Features of Tubo-Ovarian Carcinosarcomas with an Emphasis on p53 Wild-Type, KRAS-Mutated Tumors.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Hammer, P. M., Kingsley, L. G., Sasse, S. A., Howitt, B. E.
2026: 100971
- **Racial differences in endometrial stripe thickness among uterine cancer patients**
Sasse, S., Lawson, S., Williams, S., Kasimov, A., Blemur, D., Howitt, B.
ACADEMIC PRESS INC ELSEVIER SCIENCE.2026
- **Primary Cutaneous SWI/SNF-Deficient Carcinomas: Morphologic, Immunohistochemical, and Molecular Analysis of Seven Cases.** *The American journal of surgical pathology*
Ronen, S., Masliah-Planchon, J., Cokelaere, K., Taix, S., Habeeb, O., von Deimling, A., Kommoss, F. K., Toberer, F., Howitt, B., Calonje, E., Billings, S. D., Kervarrec, T.

2026

- **Uterine Sarcomas Harboring Novel FOXO1 Gene Rearrangements: Report of A Case Series.** *The American journal of surgical pathology*
Pilkington, T., Watt, C., Dermawan, J., Haider, A., Agaimy, A., Howitt, B. E., Chiang, S., Antonescu, C., McCluggage, W. G.
2025
- **Cervical Cancer, Version 2.2026** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Abu-Rustum, N. R., Campos, S. M., Amarnath, S., Arend, R., Barber, E., Bradley, K., Brooks, R., Chino, J., Chon, H., Crispens, M., Damast, S., Fisher, C. M., Frederick, et al
2025; 23 (12)
- **Mesonephric-like Adenocarcinoma (MLA) Diagnostic Criteria and Controversies: Perspectives and Guidance From Pathologists in the MLA Consortium.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
Mills, A. M., Euscher, E. D., McCluggage, W. G., Mirkovic, J., Park, K. J., Kolin, D. L., Hoang, L., Kim, H. S., How, J. A., Lu, K. H., Ring, K. L., Howitt, B. E.
2025
- **Heterogeneity and Scoring Reproducibility of Folate Receptor 1 Immunohistochemistry in High-grade Serous Carcinoma.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
Liang, B., Tenney, T. B., Han, L., Zhang, X., Wang, A., Barry-Holson, K. Q., Rosenzweig, E. R., Toland, A. M., Diver, E. J., Deutschman, E., Method, M., Sloss, C. M., Yang, et al
2025
- **Evaluating the effectiveness of opportunistic salpingectomy (OS) for the prevention of epithelial ovarian cancer**
Sowamber, R., Mei, A. J., Kaur, P., McLeod, J., McKay, E., Lukey, A., Bakkum-Gamez, J., Buza, N., Cohen, P., Devins, K., Farrell, R., Garcia, C., Gilks, et al
AMER ASSOC CANCER RESEARCH.2025
- **Ovarian Sex Cord Tumor with Annular Tubules (SCTAT) Harbor Recurrent Copy Number Alterations, Including Monosomy 22.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Leader, A. M., Neil, A., Siegmund, S., Dehghani, A., Ligon, A., Matulonis, U. A., Nucci, M. R., McCluggage, W. G., Howitt, B. E., Kolin, D. L.
2025: 100891
- **Folate receptor alpha (FR α /FOLR1) and HER2 immunohistochemical staining in high-grade endometrial carcinoma with aberrant p53 expression.** *Histopathology*
McHenry, A., Liang, B., Libert, D., Hammer, P. M., Tokuyama, M., Tenney, T., Zhang, X., Folkins, A., Longacre, T. A., Howitt, B. E.
2025
- **Exceptional response to trastuzumab deruxtecan in recurrent neuroendocrine cervical cancer: A case report** *GYNECOLOGIC ONCOLOGY REPORTS*
Tostrud, L., Howitt, B. E., Mills, M., Karam, A., Bixel, K. L.
2025; 60
- **Uterine Neoplasms, Version 3.2025 Featured Updates to the NCCN Guidelines** *JOURNAL OF THE NATIONAL COMPREHENSIVE CANCER NETWORK*
Abu-Rustum, N. R., Campos, S. M., Amarnath, S., Arend, R., Barber, E., Bradley, K., Brooks, R., Chino, J., Chon, H., Crispens, M., Damast, S., Fisher, C. M., Frederick, et al
2025; 23 (8): 284-291
- **Exceptional response to trastuzumab deruxtecan in recurrent neuroendocrine cervical cancer: A case report.** *Gynecologic oncology reports*
Tostrud, L., Howitt, B. E., Mills, M., Karam, A., Bixel, K. L.
2025; 60: 101798
- **Clonal lineage tracing of innate immune cells in human cancer.** *bioRxiv : the preprint server for biology*
Liu, V., Sandor, K., Yan, P. K., Miao, M., Yin, Y., Stickels, R. R., Chen, A. Y., Hiam-Galvez, K., Gutierrez, J., Zhang, W., Sajjath, S. M., Valbuena, R., Wang, et al
2025
- **Membrane-wide screening identifies potential tissue-specific determinants of SARS-CoV-2 tropism.** *PLoS pathogens*
Dinesh, R. K., Wang, C., Qu, Y., Rustagi, A., Cousins, H., Zengel, J., Wang, X., Barnard, T. R., Johnson, W. A., Xu, G., Zhang, T., Magazine, N., Beck, et al
2025; 21 (7): e1013157

- **Analysis of knockout mice reveals critical female-specific roles for the Hippo pathway component PTPN14.** *Genes & development*
McCrea, E. M., Makrides, N., Tabata, T., Reineking, W., Vilches-Moure, J. G., Wang, M., Lake, J. S., Vogel, H., Howitt, B., Zhang, X., Attardi, L. D.
2025
- **Single cell characterization of uterine carcinosarcoma and analysis of transcriptomic shifts in tumor-associated macrophages in metastatic and chemotherapy-treated tumors.**
Nief, C. A., Zdravkovic, S., Nasr, S., Hammer, P., Howitt, B.
LIPPINCOTT WILLIAMS & WILKINS.2025: e17615
- **Single-cell multimodal analysis reveals tumor microenvironment predictive of treatment response in non-small cell lung cancer.** *Science advances*
Zheng, Y., Sadée, C., Ozawa, M., Howitt, B. E., Gevaert, O.
2025; 11 (21): eadu2151
- **Dominant Negative PTEN Alterations in Endometrial Carcinoma Are Associated With Retained Immunohistochemical PTEN Expression.** *The American journal of surgical pathology*
Keyhanian, K., Busca, A., Howitt, B., Hammer, P., Kingsley, L., Lo, B.
2025
- **Comparison of Endometrial Serous and Gastric HER2 Immunohistochemistry Scoring Schemes in Endometrial Carcinomas With Aberrant p53 Expression: Reproducibility and In Situ Hybridization Correlation.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
McHenry, A., Liang, B., Hammer, P. M., Libert, D., Mack, T., Tokuyama, M., Tenney, T., Zhang, X., Folkins, A., Longacre, T. A., Howitt, B. E.
2025
- **Corrigendum to "POLE-Mutated Uterine Carcinosarcomas: A Clinicopathologic and Molecular Study of 11 Cases": [Modern Pathology 38 (2025) 100676].** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Hammer, P. M., Momeni-Boroujeni, A., Kolin, D. L., Kingsley, L., Folkins, A., Geisick, R. L., Ho, C., Suarez, C. J., Howitt, B. E.
2025: 100784
- **Mesonephric-like adenocarcinoma of the female genital tract: Pathologic diagnosis, clinical outcomes, and novel therapeutics.** *Gynecologic oncology*
Ring, K. L., Mills, A. M., Howitt, B. E., Grisham, R. N., Euscher, E. D., Kim, H. S., Klopp, A. H., Kolin, D. L., McCluggage, W. G., Mirkovic, J., Park, K. J., Aoun, E., Awujo, et al
2025; 197: 57-65
- **Fertility-sparing treatment for atypical polypoid adenomyoma** *GYNECOLOGIC ONCOLOGY REPORTS*
Beshar, I., Lang, S., Dorigo, O., Howitt, B. E., Liu, C., Karam, A.
2025; 58
- **Fertility-sparing treatment for atypical polypoid adenomyoma.** *Gynecologic oncology reports*
Beshar, I., Lang, S., Dorigo, O., Howitt, B. E., Liu, C., Karam, A.
2025; 58: 101714
- **Single-Cell Molecular Characterization of Uterine Carcinosarcoma**
Phansalkar, R., Wang, A., Al-Humadi, R., Nasr, S., Sandor, K., Lu, X., D'Ambrogia, K., Korgaonkar, K., Howitt, B.
ELSEVIER SCIENCE INC.2025
- **Digital Spatial Profiling (DSP) Identifies Different Molecular Signatures Between Uterine Atypical Polyps and Adenosarcomas**
D'Angelo, E., Kingsley, L., Espinosa, I., Cipriani, V., Marotta, A., Nasr, S., Zdravkovic, S., Howitt, B., Prat, J.
ELSEVIER SCIENCE INC.2025
- **Clinicopathologic and Molecular Features of Ovarian Carcinosarcomas**
Hammer, P., Kingsley, L., Sasse, S., Howitt, B.
ELSEVIER SCIENCE INC.2025
- **Adapting Pathology Foundation Models for BRCA Mutation Status Classification in High-Grade Serous Ovarian Carcinoma**
Zyla, R., Ma, J., Soni, S., Yousef, P., Kobel, M., Rahimi, K., Howitt, B., Tadross, O., Mulligan, A., Wang, B., Clarke, B.
ELSEVIER SCIENCE INC.2025
- **Molecular Insights into the "Estrogenic Link" between Sex Cord-Stromal Tumors and Endometrial Carcinomas**

Cataldas, Y., Hammer, P., Donthi, D., Falzarano, S., Gars, E., Kolin, D., Mahadik, J., Neil, A., Parra-Herran, C., Rivera-Zengotita, M., Sharma, A., Nucci, M., Rabban, et al
ELSEVIER SCIENCE INC.2025

- **DNA Methylation Profiling of Uterine Mesenchymal Tumors Suggests Adenosarcomas Are a Heterogeneous Group of Neoplasms**
Tokuyama, M., Forgo, E., D'Angelo, E., Al-Humadi, R., Kingsley, L., Kasimov, A., Zdravkovic, S., Lawson, S., McCleary, T., Bennett, J., Parra-Herran, C., Kolin, D., Nucci, et al
ELSEVIER SCIENCE INC.2025
- **Deep learning uncovers histological patterns of YAP1/TEAD activity related to disease aggressiveness in cancer patients.** *iScience*
Schmauch, B., Cabeli, V., Domingues, O. D., Le Douget, J. E., Hardy, A., Belbahri, R., Maussion, C., Romagnoni, A., Eckstein, M., Fuchs, F., Swalduz, A., Lantuejoul, S., Crochet, et al
2025; 28 (1): 111638
- **Transcript-specific enrichment enables profiling of rare cell states via single-cell RNA sequencing.** *Nature genetics*
Abay, T., Stickels, R. R., Takizawa, M. T., Nalbant, B. N., Hsieh, Y. H., Hwang, S., Snopkowski, C., Yu, K. K., Abou-Mrad, Z., Tabar, V., Howitt, B. E., Ludwig, L. S., Chaligné, et al
2025
- **Same-Slide Spatial Multi-Omics Integration Reveals Tumor Virus-Linked Spatial Reorganization of the Tumor Microenvironment.** *bioRxiv : the preprint server for biology*
Yeo, Y. Y., Chang, Y., Qiu, H., Yiu, S. P., Michel, H. A., Wu, W., Jin, X., Kure, S., Parmelee, L., Luo, S., Cramer, P., Lee, J. L., Wang, et al
2024
- **POLE-mutated uterine carcinosarcomas: a clinicopathologic and molecular study of 11 cases.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Hammer, P. M., Momeni-Boroujeni, A., Kolin, D. L., Kingsley, L., Folkins, A., Geisick, R. L., Ho, C., Suarez, C. J., Howitt, B. E.
2024: 100676
- **Resolving the Microarchitecture of Classic and Transformed Follicular Lymphoma By Single Cell Alignment to Spatial Transcriptomes**
Noordenbos, T., Schroers-Martin, J. G., Hamilton, M. P., Jun, S., Sugio, T., Sworder, B. J., Steen, C., Olsen, M., Liu, C., Newman, A., Howitt, B., Natkunam, Y., Miklos, et al
ELSEVIER.2024: 2993-2994
- **Spatial Characterization of Molecular Pathways Suggests the Dysregulation of LGR5 Expressing Fibroblasts in Patients with sclerodermatous Chronic Graft-Vs-Host Disease**
Afrin, M., Nasr, S., De Souza, C., Howitt, B., Mueller, A., Arai, S., Shizuru, J., Wernig, G.
ELSEVIER.2024
- **Origins and impact of extrachromosomal DNA.** *Nature*
Bailey, C., Pich, O., Thol, K., Watkins, T. B., Luebeck, J., Rowan, A., Stavrou, G., Weiser, N. E., Dameracharla, B., Bentham, R., Lu, W., Kittel, J., Yang, et al
2024; 635 (8037): 193-200
- **Antihyperglycemic medication may alter early endometrioid endometrial cancer outcomes**
Nief, C., McCleary, T., Howitt, B.
ACADEMIC PRESS INC ELSEVIER SCIENCE.2024: S187
- **Uterine mesenchymal tumours harboring the KAT6B/A::KANSL1 gene fusion represent a distinct type of uterine sarcoma based on DNA methylation profiles.** *Virchows Archiv : an international journal of pathology*
Kommoss, F. K., Charbel, A., Kolin, D. L., Howitt, B. E., Kobel, M., Lee, J., McCluggage, W. G., Agaimy, A., Dickson, B. C., von Deimling, A., Lee, C.
2024
- **Diabetes mellitus complications associated with recurrence of stage I endometrioid endometrial cancer: A single-center retrospective study.** *Gynecologic oncology*
Nief, C. A., Long, S. E., McCleary, T. L., Kidd, E., Litkouhi, B., Howitt, B.
2024; 190: 298-306
- **SOX17 expression in mesonephric-like adenocarcinomas and mesonephric remnants/hyperplasia of the female genital tract: Expanding its utility as a Müllerian biomarker.** *Histopathology*
Zhang, X., McCluggage, W. G., Howitt, B. E., Hirsch, M. S.

2024

- **Clinical research in endometrial cancer: consensus recommendations from the Gynecologic Cancer InterGroup.** *The Lancet. Oncology*
Creutzberg, C. L., Kim, J. W., Eminowicz, G., Allanson, E., Eberst, L., Kim, S. I., Nout, R. A., Park, J. Y., Lorusso, D., Mileskin, L., Ottevanger, P. B., Brand, A., Mezzaninica, et al
2024; 25 (9): e420-e431
- **Prognostic performance of FIGO 2023 endometrial carcinoma staging: a comparison to FIGO 2009 staging in the setting of known and unknown molecular classification.** *Histopathology*
Libert, D., Hammer, P. M., Hui, C., Kidd, E. A., Folkins, A. K., Longacre, T., Yang, E. J., Charu, V., Howitt, B. E.
2024
- **Mapping spatial organization and genetic cell-state regulators to target immune evasion in ovarian cancer.** *Nature immunology*
Yeh, C. Y., Aguirre, K., Laveroni, O., Kim, S., Wang, A., Liang, B., Zhang, X., Han, L. M., Valbuena, R., Bassik, M. C., Kim, Y. M., Plevritis, S. K., Snyder, et al
2024
- **STK11 (LKB1) immunohistochemistry is a sensitive and specific marker for STK11 adnexal tumours.** *Histopathology*
Dehghani, A., Sharma, A. E., Siegmund, S. E., Carreon, C. K., Stewart, C. J., Medeiros, F., Mirkovic, J., Nucci, M. R., Crum, C. P., Hornick, J. L., Howitt, B. E., McCluggage, W. G., Kolin, et al
2024
- **Changes in the tumour microenvironment mark the transition from serous borderline tumour to low-grade serous carcinoma.** *The Journal of pathology*
Vallejos, R., Zhantuyakova, A., Negri, G. L., Martin, S. D., Spencer, S. E., Thornton, S., Leung, S., Lynch, B., Qin, Y., Chow, C., Liang, B., Zdravko, S., Douglas, et al
2024
- **A pathologist-AI collaboration framework for enhancing diagnostic accuracies and efficiencies.** *Nature biomedical engineering*
Huang, Z., Yang, E., Shen, J., Gratzinger, D., Eyerer, F., Liang, B., Nirschl, J., Bingham, D., Dussaq, A. M., Kunder, C., Rojansky, R., Gilbert, A., Chang-Graham, et al
2024
- **The spectrum of oestrogen receptor expression in endometrial carcinomas of no specific molecular profile.** *Histopathology*
Alafraidi, M., Hoang, L., Howitt, B. E., Longacre, T. A., McAlpine, J. N., Jamieson, A., Singh, N., Gilks, C. B., Pors, J.
2024
- **Molecular classification of metastatic and recurrent endometrial endometrioid carcinoma: prognostic relevance among low- and high-stage tumours.** *Histopathology*
McHenry, A., Devereaux, K., Ryan, E., Chow, S., Allard, G., Ho, C. C., Suarez, C. J., Folkins, A., Yang, E., Longacre, T. A., Charu, V., Howitt, B. E.
2024
- **Molecular Classification Outperforms Histologic Classification in Prognostication of High-grade Endometrial Carcinomas With Undifferentiated and Sarcomatous Components.** *The American journal of surgical pathology*
Hammer, P. M., Wang, A., Vermij, L., Zdravkovic, S., Heilbronner, L., Ryan, E., Geisick, R. L., Charu, V., Longacre, T. A., Suarez, C. J., Ho, C., Jenkins, T. M., Mills, et al
2024
- **Favorable Outcome of High-grade Endometrial Stromal Sarcoma in an Adolescent.** *Journal of pediatric hematology/oncology*
Hu, B., Howitt, B. E., Cizek, S., Diver, E., Hiniker, S., Crane, J., Daldrup-Link, H., Spunt, S. L.
2024
- **Endometrioid Endometrial RNA Index Predicts Recurrence in Stage I Patients.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
Nief, C. A., Hammer, P. M., Wang, A., Charu, V., Tanweer, A., Litkouhi, B., Kidd, E., Gentles, A. J., Howitt, B. E.
2024
- **Scattering-Based Light Sheet Microscopy Imaging of HPV-Associated Squamous Lesions of the Anal Canal: A Proof-of-Principle Study.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Liang, B., Zhao, J., Kim, Y., Barry-Holson, K. Q., Bingham, D. B., Charville, G. W., Darragh, T. M., Folkins, A. K., Howitt, B. E., Kong, C. S., Longacre, T. A., McHenry, A. J., Toland, et al
2024: 100493

- **From morphology to methylome: epigenetic studies of Müllerian mesonephric-like adenocarcinoma reveal similarities to cervical mesonephric adenocarcinoma†.** *The Journal of pathology*
Lin, L. H., Howitt, B. E., Kolin, D. L.
2024
- **The Malignant Potential of Ovarian Steroid Cell Tumors Revisited: A Multi-institutional Clinicopathologic Analysis of 115 Cases.** *The American journal of surgical pathology*
Fadare, O., Fard, E. V., Bhargava, R., Desouki, M. M., Hanley, K. Z., Ip, P. P., Li, J. J., Lu, B., Medeiros, F., Ng, J. H., Parkash, V., Pinto, A., Quick, et al
2024
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