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CLINICAL FOCUS

- Anatomic Pathology

ACADEMIC APPOINTMENTS

- Assistant Professor - Med Center Line, Pathology
- Member, Bio-X

PROFESSIONAL EDUCATION

- 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)
- Medical Education: Stanford University School of Medicine Registrar (2010) CA

Publications

PUBLICATIONS

- **Pathological chemotherapy response score is prognostic in tubo-ovarian high-grade serous carcinoma: A systematic review and meta-analysis of individual patient data.** *Gynecologic oncology*
Cohen, P. A., Powell, A., Bohm, S., Gilks, C. B., Stewart, C. J., Meniawy, T. M., Bulsara, M., Avril, S., Brockbank, E. C., Bosse, T., de Azevedo Focchi, G. R., Ganesan, R., Glasspool, et al
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Ditzel, H. M., Strickland, K. C., Meserve, E. E., Stover, E., Konstantinopoulos, P. A., Matulonis, U. A., Muto, M. G., Liu, J. F., Feltmate, C., Horowitz, N., Berkowitz, R. S., Gupta, M., Hecht, et al
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- **Clinicopathologic and Immunohistochemical Correlates of CTNNB1 Mutated Endometrial Endometrioid Carcinoma.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*

- Costigan, D. C., Dong, F., Nucci, M. R., Howitt, B. E.
2019
- **International Endocervical Adenocarcinoma Criteria and Classification (IECC): correlation with adverse clinicopathological features and patient outcome.** *Journal of clinical pathology*
Hodgson, A., Olkhov-Mitsel, E., Howitt, B. E., Nucci, M. R., Parra-Herran, C.
2019
 - **Practical Issues and Updates in Gynecologic Pathology.** *Surgical pathology clinics*
Howitt, B. E.
2019; 12 (2): xi-xii
 - **International Endocervical Adenocarcinoma Criteria and Classification Validation and Interobserver Reproducibility** *AMERICAN JOURNAL OF SURGICAL PATHOLOGY*
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 - **Uterine Mesenchymal Tumors: Update on Classification, Staging, and Molecular Features.** *Surgical pathology clinics*
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2019; 12 (2): 363–96
 - **The fallopian tube, "precursor escape" and narrowing the knowledge gap to the origins of high-grade serous carcinoma.** *Gynecologic oncology*
Soong, T. R., Howitt, B. E., Horowitz, N., Nucci, M. R., Crum, C. P.
2018
 - **A Combined Morphologic and Molecular Approach to Retrospectively Identify KRAS-Mutated Mesonephric-like Adenocarcinomas of the Endometrium.** *The American journal of surgical pathology*
Kolin, D. L., Costigan, D. C., Dong, F., Nucci, M. R., Howitt, B. E.
2018
 - **Evidence for lineage continuity between early serous proliferations (ESPs) in the Fallopian tube and disseminated high-grade serous carcinomas** *JOURNAL OF PATHOLOGY*
Soong, T., Howitt, B. E., Miron, A., Horowitz, N. S., Campbell, F., Feltmate, C. M., Muto, M. G., Berkowitz, R. S., Nucci, M. R., Xian, W., Crum, C. P.
2018; 246 (3): 344–51
 - **Clinicopathologic and Immunohistochemical features of uterine Adenomyomatous polyps.** *Human pathology*
Strickland, K. C., Yuan, L., Quade, B. J., Nucci, M. R., Howitt, B. E.
2018
 - **HPV 6-associated HSIL/Squamous Carcinoma in the Anogenital Tract.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
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 - **Inter-pathologist and pathology report agreement for ovarian tumor characteristics in the Nurses' Health Studies** *GYNECOLOGIC ONCOLOGY*
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2018; 150 (3): 521–26
 - **Targeted Genomic Profiling of Female Adnexal Tumors of Probable Wolffian Origin (FATWO).** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
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2018
 - **Evidence of a Monoclonal Origin for Bilateral Serous Tubal Intraepithelial Neoplasia.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
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2018

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- **Mesonephric proliferations of the female genital tract** *PATHOLOGY*
Howitt, B. E., Nucci, M. R.
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- **WITHDRAWN: International Society of Gynecological Pathologists (ISGyP) Endometrial Cancer Project: Guidelines From the Special Techniques and Ancillary Studies Group.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
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2018
- **Targeted Genomic Profiling Reveals Recurrent KRAS Mutations in Mesonephric-like Adenocarcinomas of the Female Genital Tract.** *The American journal of surgical pathology*
Mirkovic, J., McFarland, M., Garcia, E., Sholl, L. M., Lindeman, N., MacConaill, L., Dong, F., Hirsch, M., Nucci, M. R., Quick, C. M., Crum, C. P., McCluggage, W. G., Howitt, et al
2018; 42 (2): 227–33
- **Targeted next-generation sequencing in the detection of mismatch repair deficiency in endometrial cancers.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
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Meserve, E. E., Mirkovic, J., Conner, J. R., Yang, E., Muto, M. G., Horowitz, N., Strickland, K. C., Howitt, B. E., Crum, C. P.
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Howitt, B. E., Herfs, M., Tomoka, T., Kamiza, S., Gheit, T., Tommasino, M., Delvenne, P., Crum, C. P., Milner, D.
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- **Clear cell ovarian cancers with microsatellite instability: A unique subset of ovarian cancers with increased tumor-infiltrating lymphocytes and PD-1/PD-L1 expression.** *Oncoimmunology*
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- **Architectural overlap between benign endocervix and pattern-A endocervical adenocarcinoma: Are all pattern-A tumors invasive?** *Pathology, research and practice*
Douglas, G., Howitt, B. E., Schoolmeester, J. K., Schwartz, L., Kos, Z., Islam, S., Djordjevic, B., Parra-Herran, C.
2017; 213 (7): 799–803
- **Cervical mesonephric hyperplasia lacks KRAS/NRAS mutations.** *Histopathology*
Mirkovic, J., Schoolmeester, J. K., Campbell, F., Miron, A., Nucci, M. R., Howitt, B. E.
2017; 71 (6): 1003–5
- **A BRCA1/2 Mutational Signature and Survival in Ovarian High-Grade Serous Carcinoma.** *Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology*
Dong, F., Davineni, P. K., Howitt, B. E., Beck, A. H.
2016; 25 (11): 1511–16
- **Solitary Fibrous Tumor of the Uterus Presenting With Lung Metastases: A Case Report.** *International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists*
Strickland, K. C., Nucci, M. R., Esselen, K. M., Muto, M. G., Chopra, S., George, S., Howitt, B. E.
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- **Mammary-type Myofibroblastoma: Clinicopathologic Characterization in a Series of 143 Cases.** *The American journal of surgical pathology*
Howitt, B. E., Fletcher, C. D.
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- **Association and prognostic significance of BRCA1/2-mutation status with neoantigen load, number of tumor-infiltrating lymphocytes and expression of PD-1/PD-L1 in high grade serous ovarian cancer.** *Oncotarget*
Strickland, K. C., Howitt, B. E., Shukla, S. A., Rodig, S., Ritterhouse, L. L., Liu, J. F., Garber, J. E., Chowdhury, D., Wu, C. J., D'Andrea, A. D., Matulonis, U. A., Konstantinopoulos, P. A.
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- **Genetic Basis for PD-L1 Expression in Squamous Cell Carcinomas of the Cervix and Vulva.** *JAMA oncology*
Howitt, B. E., Sun, H. H., Roemer, M. G., Kelley, A., Chapuy, B., Aviki, E., Pak, C., Connelly, C., Gjini, E., Shi, Y., Lee, L., Viswanathan, A., Horowitz, et al
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- **Morphologic correlates of molecular alterations in extrauterine Müllerian carcinomas.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
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- **Molecular Pathology: Predictive, Prognostic, and Diagnostic Markers in Uterine Tumors.** *Surgical pathology clinics*
Ritterhouse, L. L., Howitt, B. E.
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- **Tumors of the Testis: Morphologic Features and Molecular Alterations.** *Surgical pathology clinics*
Howitt, B. E., Berney, D. M.
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- **Uterine polyps with features overlapping with those of Müllerian adenosarcoma: a clinicopathologic analysis of 29 cases emphasizing their likely benign nature.** *The American journal of surgical pathology*
Howitt, B. E., Quade, B. J., Nucci, M. R.
2015; 39 (1): 116–26
- **Many postchemotherapy sarcomatous tumors in patients with testicular germ cell tumors are sarcomatoid yolk sac tumors: a study of 33 cases.** *The American journal of surgical pathology*
Howitt, B. E., Magers, M. J., Rice, K. R., Cole, C. D., Ulbright, T. M.
2015; 39 (2): 251–59
- **Targeted genomic analysis of Müllerian adenosarcoma.** *The Journal of pathology*
Howitt, B. E., Sholl, L. M., Dal Cin, P., Jia, Y., Yuan, L., MacConaill, L., Lindeman, N., Kuo, F., Garcia, E., Nucci, M. R., Quade, B. J.
2015; 235 (1): 37–49
- **Inflammatory myofibroblastic tumor of the uterus: clinical and pathologic review of 10 cases including a subset with aggressive clinical course.** *The American journal of surgical pathology*
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2015; 39 (2): 157–68
- **Evidence for a dualistic model of high-grade serous carcinoma: BRCA mutation status, histology, and tubal intraepithelial carcinoma.** *The American journal of surgical pathology*
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2015; 39 (3): 287–93
- **GATA3 Is a Sensitive and Specific Marker of Benign and Malignant Mesonephric Lesions in the Lower Female Genital Tract.** *The American journal of surgical pathology*
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2015; 39 (10): 1411–19
- **Association of Polymerase e-Mutated and Microsatellite-Unstable Endometrial Cancers With Neoantigen Load, Number of Tumor-Infiltrating Lymphocytes, and Expression of PD-1 and PD-L1.** *JAMA oncology*
Howitt, B. E., Shukla, S. A., Sholl, L. M., Ritterhouse, L. L., Watkins, J. C., Rodig, S., Stover, E., Strickland, K. C., D'Andrea, A. D., Wu, C. J., Matulonis, U. A., Konstantinopoulos, P. A.
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- **Perivascular epithelioid cell neoplasm (PEComa) of the gynecologic tract: clinicopathologic and immunohistochemical characterization of 16 cases.** *The American journal of surgical pathology*
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2013; 231 (4): 402–12
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