



Christian Kunder

Clinical Associate Professor, Pathology

CLINICAL OFFICE (PRIMARY)

- **Surgical Pathology**

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Bio

CLINICAL FOCUS

- Surgical Pathology
- Urological Pathology
- Soft Tissue Pathology
- Molecular Pathology
- Anatomic and Clinical Pathology

ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Pathology

ADMINISTRATIVE APPOINTMENTS

- Assistant Medical Director, Molecular Pathology Laboratory, (2015-2018)
- Associate Medical Director, Molecular Pathology Laboratory, (2018- present)

PROFESSIONAL EDUCATION

- Fellowship: Stanford University Hematopathology Fellowship (2014) CA
- Residency: Stanford University Pathology Residency (2013) CA
- Fellowship: Stanford University Molecular Genetic Pathology Fellowship (2015) CA
- Board Certification: Molecular Genetic Pathology, American Board of Pathology (2015)
- Board Certification, American Board of Pathology , Molecular Genetic Pathology (2015)
- Fellowship, Stanford Health Care , Molecular Genetic Pathology (2015)
- Board Certification, American Board of Pathology , Hematology (2014)
- Fellowship, Stanford Health Care , Hematopathology (2014)
- Board Certification, American Board of Pathology , Anatomic Pathology (2013)

- Fellowship, Stanford Health Care , Surgical Pathology (2013)
- Residency, Stanford Health Care , Anatomic Pathology (2013)
- Medical Education: Duke University School of Medicine (2010) NC

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My main interest is in understanding the biology of human neoplasms, using traditional histopathology, molecular genetic techniques, and other modalities. In particular, I am interested in soft tissue and genitourinary neoplasms, especially prostate cancer.

I am also interested in the classification and nomenclature of neoplasms and in practical research that helps us refine these, using a variety of techniques but still principally guided by histopathology.

I also work on developing next generation sequencing-based tests for genotyping tumors and in expanding the scope of this testing with the goal of identifying patients eligible for novel targeting therapies.

Publications

PUBLICATIONS

- **Immune repertoire profiling uncovers pervasive T-cell clonal expansions in benign prostatic hyperplasia.** *The Journal of clinical investigation*
Pollack, A. S., Kunder, C. A., Ho, C. C., Chou, J., Pollack, A. J., Geisick, R. L., Zhang, B. M., West, R. B., Brooks, J. D., Pollack, J. R.
2025
- **High-grade Anaplastic Transformation of Ovarian Serous Borderline Tumor: A Distinctive Morphology With Abundant Dense Eosinophilic Cytoplasm and Dismal Prognosis.** *The American journal of surgical pathology*
Zhang, X., Devereaux, K. A., Ryan, E., Fei, F., Kunder, C. A., Longacre, T. A.
2024
- **External validation of an artificial intelligence model for Gleason grading of prostate cancer on prostatectomy specimens.** *BJU international*
Schmidt, B., Soerensen, S. J., Bhambhani, H. P., Fan, R. E., Bhattacharya, I., Choi, M. H., Kunder, C. A., Kao, C. S., Higgins, J., Rusu, M., Sonn, G. A.
2024
- **Analysis of Circulating Tumor DNA Predicts Outcomes of Short Course Consolidation Immunotherapy in Unresectable Stage III Non-Small Cell Lung Cancer.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Jun, S., Shukla, N. A., Durm, G., Hui, A. B., Cao, S., Ganti, A. K., Jabbour, S. K., Kunder, C., Alizadeh, A. A., Hanna, N. H., Diehn, M.
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
- **RAPHIA: A deep learning pipeline for the registration of MRI and whole-mount histopathology images of the prostate.** *Computers in biology and medicine*
Shao, W., Vesal, S., Soerensen, S. J., Bhattacharya, I., Golestani, N., Yamashita, R., Kunder, C. A., Fan, R. E., Ghanouni, P., Brooks, J. D., Sonn, G. A., Rusu, M.
2024; 173: 108318
- **Critical evaluation of artificial intelligence as a digital twin of pathologists for prostate cancer pathology.** *Scientific reports*
Eminaga, O., Abbas, M., Kunder, C., Tolkach, Y., Han, R., Brooks, J. D., Nolley, R., Semjonow, A., Boegemann, M., West, R., Long, J., Fan, R. E., Bettendorf, et al
2024; 14 (1): 5284

- **UCHL1 is a potential molecular indicator and therapeutic target for neuroendocrine carcinomas.** *Cell reports. Medicine*
Liu, S., Chai, T., Garcia-Marques, F., Yin, Q., Hsu, E. C., Shen, M., Shaw Toland, A. M., Bermudez, A., Hartono, A. B., Massey, C. F., Lee, C. S., Zheng, L., Baron, et al
2024: 101381
- **High expression of Trop2 is associated with aggressive localized prostate cancer and is a candidate urinary biomarker.** *Scientific reports*
Liu, S., Hawley, S. J., Kunder, C. A., Hsu, E. C., Shen, M., Westphalen, L., Auman, H., Newcomb, L. F., Lin, D. W., Nelson, P. S., Feng, Z., Tretiakova, M. S., True, et al
2024; 14 (1): 486
- **Diagnostic impact of RNA-based next-generation sequencing fusion panel for solid tumors: A single-institution experience.** *American journal of clinical pathology*
Fei, F., Kunder, C. A., Ho, C., Zehnder, J. L., Tomasello, G., Fung, E., Suarez, C. J.
2023
- **Spatial transcriptomics identifies candidate stromal drivers of benign prostatic hyperplasia.** *JCI insight*
Pollack, A. S., Kunder, C. A., Brazer, N., Shen, Z., Varma, S., West, R. B., Cunha, G. R., Baskin, L. S., Brooks, J. D., Pollack, J. R.
2023
- **Low-grade fibromyxoid sarcoma of the breast: genetic characterization and immunohistochemical comparison to morphologic mimics.** *Human pathology*
Cloutier, J. M., Moreland, A., Wang, L., Kunder, C. A., Allard, G., Wang, A., Krings, G., Charville, G. W., Bean, G. R.
2023
- **High-Grade Transformation of Ovarian Serous Borderline Tumors: A Series and Literature Review, Emphasizing Distinctive Morphology with Abundant Dense Eosinophilic Cytoplasm, Driver Mutations, and Extremely Dismal Prognosis**
Zhang, X., Devereaux, K., Ryan, E., Fei, F., Kunder, C., Longacre, T.
ELSEVIER SCIENCE INC.2023: S1008-S1010
- **Low-Grade Fibromyxoid Sarcoma of the Breast: Evaluating the Utility of MUC4 Immunohistochemistry in Mammary Spindle Cell Lesions**
Cloutier, J., Moreland, A., Kunder, C., Allard, G., Krings, G., Charville, G., Bean, G.
ELSEVIER SCIENCE INC.2023: S116
- **A Pilot Study of 68Ga-PSMA11 and 68Ga-RM2 PET/MRI for Biopsy Guidance in Patients with Suspected Prostate Cancer.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*
Duan, H., Ghanouni, P., Daniel, B., Rosenberg, J., Thong, A., Kunder, C., Mari Aparici, C., Davidzon, G. A., Moradi, F., Sonn, G. A., Iagaru, A.
2022
- **A Pilot Study of 68Ga-PSMA11 and 68Ga-RM2 PET/MRI for Evaluation of Prostate Cancer Response to High Intensity Focused Ultrasound (HIFU) Therapy.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*
Duan, H., Ghanouni, P., Daniel, B., Rosenberg, J., Davidzon, G. A., Mari Aparici, C., Kunder, C., Sonn, G., Iagaru, A.
2022
- **A review of artificial intelligence in prostate cancer detection on imaging.** *Therapeutic advances in urology*
Bhattacharya, I., Khandwala, Y. S., Vesal, S., Shao, W., Yang, Q., Soerensen, S. J., Fan, R. E., Ghanouni, P., Kunder, C. A., Brooks, J. D., Hu, Y., Rusu, M., Sonn, et al
2022; 14: 17562872221128791
- **The genetic landscape of germline DDX41 variants predisposing to myeloid neoplasms.** *Blood*
Li, P., Brown, S., Williams, M., White, T. A., Xie, W., Cui, W., Peker, D., Lei, L., Kunder, C. A., Wang, H., Murray, S. S., Vagher, J., Kovacovics, et al
2022
- **Computational Detection of Extraprostatic Extension of Prostate Cancer on Multiparametric MRI Using Deep Learning.** *Cancers*
Moroianu, S. L., Bhattacharya, I., Seetharaman, A., Shao, W., Kunder, C. A., Sharma, A., Ghanouni, P., Fan, R. E., Sonn, G. A., Rusu, M.
2022; 14 (12)
- **Analysis of circulating tumor DNA in the phase 2 BTCRC LUN 16-081 trial of consolidation nivolumab with or without ipilimumab after chemoradiation in stage III non-small cell lung cancer.**
Jun, S., Shukla, N., Durm, G., Hui, A. B., Cao, S., Kunder, C., Alizadeh, A. A., Hanna, N. H., Diehn, M.
LIPPINCOTT WILLIAMS & WILKINS.2022

- **GRM1 Immunohistochemistry Distinguishes Chondromyxoid Fibroma From its Histologic Mimics.** *The American journal of surgical pathology*
Toland, A. M., Lam, S. W., Varma, S., Wang, A., Howitt, B. E., Kunder, C. A., Kerr, D. A., Szuhai, K., Bovée, J. V., Charville, G. W.
2022
- **Bridging the gap between prostate radiology and pathology through machine learning.** *Medical physics*
Bhattacharya, I., Lim, D. S., Aung, H. L., Liu, X., Seetharaman, A., Kunder, C. A., Shao, W., Soerensen, S. J., Fan, R. E., Ghanouni, P., To'o, K. J., Brooks, J. D., Sonn, et al
2022
- **Correlation of 68Ga-RM2 PET with Post-Surgery Histopathology Findings in Patients with Newly Diagnosed Intermediate- or High-Risk Prostate Cancer.** *Journal of nuclear medicine : official publication, Society of Nuclear Medicine*
Duan, H., Baratto, L., Fan, R. E., Soerensen, S. J., Liang, T., Chung, B. I., Thong, A. E., Gill, H., Kunder, C., Stoyanova, T., Rusu, M., Loening, A. M., Ghanouni, et al
2022
- **Combinatorial Inactivation of Tumor Suppressors Efficiently Initiates Lung Adenocarcinoma with Therapeutic Vulnerabilities.** *Cancer research*
Yousefi, M., Boross, G., Weiss, C., Murray, C. W., Hebert, J. D., Cai, H., Ashkin, E. L., Karmakar, S., Andrejka, L., Chen, L., Wang, M., Tsai, M. K., Lin, et al
2022; 82 (8): 1589-1602
- **Percent Agreement Between Immunohistochemistry and Next-Generation Sequencing in Testing Patients for Mismatch Repair Deficiency.** *Applied immunohistochemistry & molecular morphology : AIMM*
Lawrence, L., Longacre, T., Saleem, A., Kunder, C.
2022
- **Molecular Characterization of Urachal Neoplasms**
Khan, O., Kunder, C., Kao, C., Sangoi, A.
SPRINGER NATURE.2022: 614-615
- **Spitz nevus with EHP1-ALK fusion and distinctive membranous localization of ALK.** *Journal of cutaneous pathology*
Bahrani, E., Kunder, C. A., Teng, J. M., Brown, R. A., Rieger, K. E., Novoa, R. A., Cloutier, J. M.
1800
- **Integrating zonal priors and pathomic MRI biomarkers for improved aggressive prostate cancer detection on MRI**
Bhattacharya, I., Shao, W., Soerensen, S. C., Fan, R. E., Wang, J. B., Kunder, C., Ghanouni, P., Sonn, G. A., Rusu, M., Drukker, K., Iftexharuddin, K. M.
SPIE-INT SOC OPTICAL ENGINEERING.2022
- **Immunofluorescent and molecular characterization of effusion tumor cells reveal cancer site#of#origin and disease#driving mutations** *Cancer Cytopathology*
Zhu, Y., Wang, A., Allard, G. M., Nordberg, J. J., Nair, R. V., Kunder, C. A., Lowe, A. C.
2022
- **EXTERNAL VALIDATION OF AN ARTIFICIAL INTELLIGENCE ALGORITHM FOR PROSTATE CANCER GLEASON GRADING AND TUMOR QUANTIFICATION**
Schmidt, B., Bhambhani, H. P., Fan, R. E., Kunder, C., Kao, C., Higgins, J. P., Rusu, M., Sonn, G. A.
LIPPINCOTT WILLIAMS & WILKINS.2021: E1004
- **Automated Detection of Aggressive and Indolent Prostate Cancer on Magnetic Resonance Imaging.** *Medical physics*
Seetharaman, A., Bhattacharya, I., Chen, L. C., Kunder, C. A., Shao, W., Soerensen, S. J., Wang, J. B., Teslovich, N. C., Fan, R. E., Ghanouni, P., Brooks, J. D., To'o, K. J., Sonn, et al
2021
- **Nodular Fasciitis of the Breast: Clinicopathologic and Molecular Analysis of 12 Cases with Identification of Novel USP6 Fusion Partners**
Cloutier, J., Kunder, C., Charville, G., Hosfield, E., Sibley, R., West, R., Troxell, M., Allison, K., Bean, G.
SPRINGER NATURE.2021: 92
- **MR method for measuring microscopic histologic soft tissue textures.** *Magnetic resonance in medicine*
Sonn, G. A., Fan, R. E., Kunder, C. A., Gold, G. E., James, K. M., Parker, I. D., Carlson, J. M., Cannizzaro, S. M., James, T. W.
2021

- **Neurofibrosarcoma Revisited: An Institutional Case Series of Uterine Sarcomas Harboring Kinase-related Fusions With Report of a Novel FGFR1-TACC1 Fusion.** *The American journal of surgical pathology*
Devereaux, K. A., Weiel, J. J., Mills, A. M., Kunder, C. A., Longacre, T. A.
2021
- **Identification and characterization of effusion tumor cells (ETCs) from remnant pleural effusion specimens.** *Cancer cytopathology*
Zhu, Y., Allard, G. M., Ericson, N. G., George, T. C., Kunder, C. A., Lowe, A. C.
2021
- **Selective identification and localization of indolent and aggressive prostate cancers via CorrSigNIA: an MRI-pathology correlation and deep learning framework.** *Medical image analysis*
Bhattacharya, I., Seetharaman, A., Kunder, C., Shao, W., Chen, L. C., Soerensen, S. J., Wang, J. B., Teslovich, N. C., Fan, R. E., Ghanouni, P., Brooks, J. D., Sonn, G. A., Rusu, et al
2021; 75: 102288
- **Weakly Supervised Registration of Prostate MRI and Histopathology Images**
Shao, W., Bhattacharya, I., Soerensen, S. C., Kunder, C. A., Wang, J. B., Fan, R. E., Ghanouni, P., Brooks, J. D., Sonn, G. A., Rusu, M., DeBruijne, M., Cattin, P. C., Cotin, et al
SPRINGER INTERNATIONAL PUBLISHING AG.2021: 98-107
- **Nodular fasciitis of the breast: clinicopathologic and molecular characterization with identification of novel USP6 fusion partners.** *Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc*
Cloutier, J. M., Kunder, C. A., Charville, G. W., Hosfield, E. M., Garcia, J. J., Brown, R. A., Troxell, M. L., Allison, K. H., Bean, G. R.
2021
- **Well-differentiated lipomatous neoplasms with p53 alterations: A clinicopathologic and molecular study of eight cases with features of atypical pleomorphic lipomatous tumor.** *Histopathology*
Hammer, P. M., Kunder, C. A., Howitt, B. E., Charville, G. W.
2021
- **3D Registration of pre-surgical prostate MRI and histopathology images via super-resolution volume reconstruction.** *Medical image analysis*
Sood, R. R., Shao, W. n., Kunder, C. n., Teslovich, N. C., Wang, J. B., Soerensen, S. J., Madhuripan, N. n., Jawahar, A. n., Brooks, J. D., Ghanouni, P. n., Fan, R. E., Sonn, G. A., Rusu, et al
2021; 69: 101957
- **Performance Characteristics of Mutational Signature Analysis in Targeted Panel Sequencing.** *Archives of pathology & laboratory medicine*
Lawrence, L. n., Kunder, C. A., Fung, E. n., Stehr, H. n., Zehnder, J. n.
2021
- **In vivo imaging of methionine aminopeptidase II for prostate cancer risk stratification.** *Cancer research*
Xie, J. n., Rice, M. A., Chen, Z. n., Cheng, Y. n., Hsu, E. C., Chen, M. n., Song, G. n., Cui, L. n., Zhou, K. n., Castillo, J. B., Zhang, C. A., Shen, B. n., Chin, et al
2021
- **A functional taxonomy of tumor suppression in oncogenic KRAS-driven lung cancer.** *Cancer discovery*
Cai, H. n., Chew, S. K., Li, C. n., Tsai, M. K., Andrejka, L. n., Murray, C. W., Hughes, N. W., Shuldiner, E. G., Ashkin, E. L., Tang, R. n., Hung, K. L., Chen, L. C., Lee, et al
2021
- **Cutaneous T-cell lymphomas with pathogenic somatic mutations and absence of detectable clonal T-cell receptor gene rearrangement: two case reports.** *Diagnostic pathology*
Rojansky, R., Fernandez-Pol, S., Wang, E., Rieger, K. E., Novoa, R. A., Zehnder, J. L., Kunder, C. A., Kim, Y. H., Khodadoust, M. S., Brown, R. A.
2020; 15 (1): 122
- **Inflammatory Myofibroblastic Tumors associated with the placenta, a series of 9 cases.** *Human pathology*
Makhdoum, S., Nardi, V., Devereaux, K. A., Kunder, C. A., Nielsen, G. P., Oliva, E., Young, R. H., Roberts, D. J.
2020
- **Recurrent EGFR alterations in NTRK3 fusion negative congenital mesoblastic nephroma.** *Practical laboratory medicine*
Lei, L., Stohr, B. A., Berry, S., Lockwood, C. M., Davis, J. L., Rudzinski, E. R., Kunder, C. A.

2020; 21: e00164

- **Pregnancy-associated Inflammatory Myofibroblastic Tumors of the Uterus Are Clinically Distinct and Highly Enriched for TIMP3-ALK and THBS1-ALK Fusions** *AMERICAN JOURNAL OF SURGICAL PATHOLOGY*
Devereaux, K. A., Fitzpatrick, M. B., Hartinger, S., Jones, C., Kunder, C. A., Longacre, T. A.
2020; 44 (7): 970–81
- **Registration of pre-surgical MRI and histopathology images from radical prostatectomy via RAPSODI.** *Medical physics*
Rusu, M., Shao, W., Kunder, C. A., Wang, J. B., Soerensen, S. J., Teslovich, N. C., Sood, R. R., Chen, L. C., Fan, R. E., Ghanouni, P., Brooks, J. D., Sonn, G. A.
2020
- **Sub-solid lung adenocarcinoma in Asian versus Caucasian patients: different biology but similar outcomes.** *Journal of thoracic disease*
Lui, N. S., Benson, J., He, H., Imielski, B. R., Kunder, C. A., Liou, D. Z., Backhus, L. M., Berry, M. F., Shrager, J. B.
2020; 12 (5): 2161-2171
- **Molecular profiling of a primary cutaneous signet-ring cell/histiocytoid carcinoma of the eyelid.** *Journal of cutaneous pathology*
Raghavan, S., Clark, M., Louie, C., Jensen, K. C., Dietrich, B., Beadle, B. M., El-Sawy, T., Baik, F., Kunder, C. A., Brown, R. A.
2020
- **Integrating genomic features for non-invasive early lung cancer detection.** *Nature*
Chabon, J. J., Hamilton, E. G., Kurtz, D. M., Esfahani, M. S., Moding, E. J., Stehr, H., Schroers-Martin, J., Nabet, B. Y., Chen, B., Chaudhuri, A. A., Liu, C. L., Hui, A. B., Jin, et al
2020; 580 (7802): 245-251
- **Merkel Cell Carcinoma of Lymph Node is Metastatic Cutaneous Merkel Cell Carcinoma**
Lawrence, L., Kunder, C., Stehr, H., Saleem, A., Natkunam, Y., Zehnder, J., Pinsky, B., Sahoo, M., Tan, S.
NATURE PUBLISHING GROUP.2020: 824–26
- **Correlation of Mutation Status with Immunohistochemistry in Breast Carcinomas**
Bean, G., Lin, C., Kunder, C., Chen, Y., Krings, G.
NATURE PUBLISHING GROUP.2020: 108–9
- **Increasing Clinical Trial Accrual via Automated Matching of Biomarker Criteria.** *Pacific Symposium on Biocomputing. Pacific Symposium on Biocomputing*
Chen, J. W., Kunder, C. A., Bui, N. n., Zehnder, J. L., Costa, H. A., Stehr, H. n.
2020; 25: 31–42
- **Is Merkel Cell Carcinoma of Lymph Node Actually Metastatic Cutaneous Merkel Cell Carcinoma?** *American journal of clinical pathology*
Lawrence, L. E., Saleem, A. n., Sahoo, M. K., Tan, S. K., Pinsky, B. A., Natkunam, Y. n., Kunder, C. A., Stehr, H. n., Zehnder, J. L.
2020
- **Trop2 is a driver of metastatic prostate cancer with neuroendocrine phenotype via PARP1.** *Proceedings of the National Academy of Sciences of the United States of America*
Hsu, E. C., Rice, M. A., Bermudez, A. n., Marques, F. J., Aslan, M. n., Liu, S. n., Ghoochani, A. n., Zhang, C. A., Chen, Y. S., Zlitni, A. n., Kumar, S. n., Nolley, R. n., Habte, et al
2020
- **Pregnancy-associated Inflammatory Myofibroblastic Tumors of the Uterus Are Clinically Distinct and Highly Enriched for TIMP3-ALK and THBS1-ALK Fusions.** *The American journal of surgical pathology*
Devereaux, K. A., Fitzpatrick, M. B., Hartinger, S. n., Jones, C. n., Kunder, C. A., Longacre, T. A.
2020
- **KEAP1/NFE2L2 mutations predict lung cancer radiation resistance that can be targeted by glutaminase inhibition.** *Cancer discovery*
Binkley, M. S., Jeon, Y. J., Nesselbush, M. n., Moding, E. J., Nabet, B. Y., Almanza, D. n., Kunder, C. n., Stehr, H. n., Yoo, C. H., Rhee, S. n., Xiang, M. n., Chabon, J. J., Hamilton, et al
2020
- **ProsRegNet: A deep learning framework for registration of MRI and histopathology images of the prostate.** *Medical image analysis*
Shao, W. n., Banh, L. n., Kunder, C. A., Fan, R. E., Soerensen, S. J., Wang, J. B., Teslovich, N. C., Madhuripan, N. n., Jawahar, A. n., Ghanouni, P. n., Brooks, J. D., Sonn, G. A., Rusu, et al

2020; 68: 101919

- **Disseminated Pneumocystis jirovecii Infection with Osteomyelitis in a Patient with CTLA-4 Haploinsufficiency.** *Journal of clinical immunology*
Siddiqi, A. E., Liu, A. Y., Charville, G. W., Kunder, C. A., Uzel, G. n., Sadighi Akha, A. A., Oak, J. n., Martin, B. n., Sacha, J. n., Lewis, D. B., Gernez, Y. n.
2020
- **Targeted deep sequencing of cell-free DNA in serous body cavity fluids with malignant, suspicious, and benign cytology.** *Cancer cytopathology*
Yang, S., Mooney, K. L., Libiran, P., Jones, C. D., Joshi, R., Lau, H. D., Stehr, H., Berry, G. J., Zehnder, J. L., Long, S. R., Kong, C. S., Kunder, C. A.
2019
- **Evaluating Racial Differences in KRAS-Mutant Non-Small Cell Lung Cancer**
Aredo, J., Padda, S., Kunder, C., Han, S., Wakelee, H.
ELSEVIER SCIENCE INC.2019: S1133
- **A Clinicopathologic and Molecular Analysis of Fumarate Hydratase-Deficient Renal Cell Carcinoma in 32 Patients.** *The American journal of surgical pathology*
Lau, H. D., Chan, E., Fan, A. C., Kunder, C. A., Williamson, S. R., Zhou, M., Idrees, M. T., Maclean, F. M., Gill, A. J., Kao, C.
2019
- **Structural. Variation Detection by Proximity Ligation from Formalin-Fixed, Paraffin-Embedded Tumor Tissue** *JOURNAL OF MOLECULAR DIAGNOSTICS*
Troll, C. J., Putnam, N. H., Hartley, P. D., Rice, B., Blanchette, M., Siddiqui, S., Ganbat, J., Powers, M. P., Ramakrishnan, R., Kunder, C. A., Bustamante, C. D., Zehnder, J. L., Green, et al
2019; 21 (3): 375–83
- **Next-Generation Sequencing for HER2 Status in Breast Cancer: Comparison with Immunohistochemistry and in situ Hybridization by 2018 Focused Update**
Mooney, K., Stehr, H., Kunder, C., Zehnder, J., Allison, K., Lin, C.
NATURE PUBLISHING GROUP.2019
- **Concordance Between Immunohistochemistry and Next Generation Sequencing in Testing Patients for Hereditary Nonpolyposis Colorectal Cancer**
Lawrence, L., Longacre, T., Saleem, A., Kunder, C.
NATURE PUBLISHING GROUP.2019
- **Molecular Profiling of Intraductal Tubulopapillary Neoplasm**
Saleem, A., Stehr, H., Zehnder, J., Kunder, C., Lin, C.
NATURE PUBLISHING GROUP.2019
- **Molecular Profiling of Intraductal Tubulopapillary Neoplasm**
Saleem, A., Stehr, H., Zehnder, J., Kunder, C., Lin, C.
NATURE PUBLISHING GROUP.2019
- **Case series of MET exon 14 skipping mutation-positive non-small-cell lung cancers with response to crizotinib and cabozantinib.** *Anti-cancer drugs*
Wang, S. X., Zhang, B. M., Wakelee, H. A., Koontz, M. Z., Pan, M., Diehn, M., Kunder, C. A., Neal, J. W.
2019
- **A Case of Disseminated Pneumocystis Jiroveci in a Non-Human Immunodeficiency Virus Infected Patient**
Siddiqi, A. E., Sacha, J., Saenz, R., Liu, A., Kunder, C., Uzel, G., Martin, B., Lewis, D. B., Gernez-Goldhammer, Y.
SPRINGER/PLENUM PUBLISHERS.2019: S73–S74
- **Molecular profiling of clear cell adenocarcinoma of the urinary tract.** *Virchows Archiv : an international journal of pathology*
Lin, C. Y., Saleem, A. n., Stehr, H. n., Zehnder, J. L., Pinsky, B. A., Kunder, C. A.
2019
- **ALK-rearranged Tumors Are Highly Enriched in the STUMP Subcategory of Uterine Tumors** *AMERICAN JOURNAL OF SURGICAL PATHOLOGY*
Devereaux, K. A., Kunder, C. A., Longacre, T. A.

2019; 43 (1): 64–74

- **Framework for the co-registration of MRI and Histology Images in Prostate Cancer Patients with Radical Prostatectomy**
Rusu, M., Kunder, C., Fan, R., Ghanouni, P., West, R., Sonn, G., Brooks, J., Angelini, E. D., Landman, B. A.
SPIE-INT SOC OPTICAL ENGINEERING.2019
- **Impact of KRAS mutation subtype and concurrent pathogenic mutations on non-small cell lung cancer outcomes.** *Lung cancer (Amsterdam, Netherlands)*
Aredo, J. V., Padda, S. K., Kunder, C. A., Han, S. S., Neal, J. W., Shrager, J. B., Wakelee, H. A.
2019; 133: 144–50
- **An Lkb1-Sik axis suppresses lung tumor growth and controls differentiation.** *Cancer discovery*
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