

# Department of Pathology

## Publications

- Parisi X, **Peric M**, Bennett AE, **Al-Ibraheemi A**, **Sun Y**. Primary Adrenal Epithelioid Angiosarcoma: A Case Report. *Int J Surg Pathol*. 2023 Jul 17:10668969231188907. doi: 10.1177/10668969231188907. Epub ahead of print. PMID: 37461274.
- Jain S, Pei L, Spraggins JM, Angelo M, Carson JP, Gehlenborg N, Ginty F, Gonçalves JP, Hagood JS, Hickey JW, Kelleher NL, Laurent LC, Lin S, Lin Y, Liu H, Naba A, Nakayasu ES, Qian WJ, Radtke A, Robson P, Stockwell BR, Van de Plas R, **Vlachos IS**, Zhou M; HuBMAP Consortium; Börner K, Snyder MP. Advances and prospects for the Human BioMolecular Atlas Program (HuBMAP). *Nat Cell Biol*. 2023 Aug;25(8):1089-1100. doi: 10.1038/s41556-023-01194-w. Epub 2023 Jul 19. PMID: 37468756.
- Lee SH, Pankaj A, Neyaz A, **Ono Y**, Rickelt S, Ferrone C, Ting D, Patil DT, **Yilmaz O**, Berger D, **Deshpande V**, **Yilmaz O**. Immune microenvironment and lymph node yield in colorectal cancer. *Br J Cancer*. 2023 Oct;129(6):917-924. doi: 10.1038/s41416-023-02372-1. Epub 2023 Jul 28. PMID: 37507544; PMCID: PMC10491581.
- Sentana-Lledo D, Academia E, Viray H, Rangachari D, Kobayashi SS, **VanderLaan PA**, Costa DB. *EGFR* exon 20 insertion mutations and *ERBB2* mutations in lung cancer: a narrative review on approved targeted therapies from oral kinase inhibitors to antibody-drug conjugates. *Transl Lung Cancer Res*. 2023 Jul 31;12(7):1590-1610. doi: 10.21037/tlcr-23-98. Epub 2023 Jul 5. PMID: 37577308; PMCID: PMC10413034.
- Neyaz A, Rickelt S, **Yilmaz OH**, Parrack PH, Lu C, **Yilmaz O**, Wu EY, Choi WT, Gala M, Ting DT, Odze RD, Patil DT, **Deshpande V**. Quantitative p53 immunostaining aids in the detection of prevalent dysplasia. *J Clin Pathol*. 2023 Sep;76(9):582-590. doi: 10.1136/jcp-2022-208721. Epub 2023 Feb 23. PMID: 36823143.
- Dai X, **Wei W**. Lactate fuels mitosis. *Mol Cell*. 2023 May 18;83(10):1549-1551. doi: 10.1016/j.molcel.2023.04.013. PMID: 37207623.
- Lee M, Eng G, Handte-Reinecker A; MGH-MIT Gastrointestinal Cohorts Working Group; **Deshpande VS**, **Yilmaz OH**, Gala MK. Germline Determinants of Esophageal Adenocarcinoma. *Gastroenterology*. 2023 Jul 26:S0016-5085(23)04789-3. doi: 10.1053/j.gastro.2023.07.015. Epub ahead of print. PMID: 37507074.
- **Quintana LM**, **Collins LC**. Diagnostic Pitfalls in Breast Cancer Pathology With an Emphasis on Core Needle Biopsy Specimens. *Arch Pathol Lab Med*. 2023 Sep 1;147(9):1025-1038. doi: 10.5858/arpa.2023-0007-RA. PMID: 37651393.
- Panella R, Petri A, Desai BN, Fagoonee S, Cotton CA, Nguyen PK, Lundin EM, Wagshal A, Wang DZ, Näär AM, **Vlachos IS**, Maratos-Flier E, Altruda F, Kauppinen S, Paolo Pandolfi P. MicroRNA-22 Is a Key Regulator of Lipid and Metabolic Homeostasis. *Int J Mol Sci*. 2023 Aug 17;24(16):12870. doi: 10.3390/ijms241612870. PMID: 37629051; PMCID: PMC10454516.

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## Publications

- Kakoulidis P, **Vlachos IS**, Thanos D, Blatch GL, Emiris IZ, Anastasiadou E. Identifying and profiling structural similarities between Spike of SARS-CoV-2 and other viral or host proteins with Machaon. *Commun Biol.* 2023 Jul 19;6(1):752. doi: 10.1038/s42003-023-05076-7. PMID: 37468602; PMCID: PMC10356814.
- Lotfollahzadeh S, Xia C, Amraei R, Hua N, Kandror KV, Farmer SR, **Wei W**, Costello CE, Chitalia V, Rahimi N. Inactivation of Minar2 in mice hyperactivates mTOR signaling and results in obesity. *Mol Metab.* 2023 Jul;73:101744. doi: 10.1016/j.molmet.2023.101744. Epub 2023 May 26. PMID: 37245847; PMCID: PMC10267597.
- Harris CK, Chen Y, Alston EL, Brown A, Chabot-Richards D, Dintzis SM, Graber ML, Jackups R Jr, Lomo LC, Laudadio J, Markwood PS, Nielson KJ, Samedi V, Sampson B, **Haspel RL**, Zafar N, Montone KT, Childs J, White KL, Heher YK. The next phase in patient safety education: Towards a standardized, tools-based pathology patient safety curriculum: *A call to action from the Association of Pathology Chairs' Residency Program Directors Section Training Residents in Patient Safety Workgroup.* *Acad Pathol.* 2023 Jun 2;10(2):100081. doi: 10.1016/j.acpath.2023.100081. PMID: 37313035; PMCID: PMC10258240.
- **Deshpande V**, Lee SH, Crabbe A, Pankaj A, Neyaz A, **Ono Y**, Rickelt S, Sonal S, Ferrone CR, Ting DT, Patil D, **Yilmaz O**, Berger D, **Yilmaz O**. Clinical, pathological, genetics and intratumoural immune milieu of micropapillary carcinoma of the colon. *J Clin Pathol.* 2023 May 31:jcp-2023-208895. doi: 10.1136/jcp-2023-208895. Epub ahead of print. PMID: 37258254.
- Gibson RS, Salian P, Beckles A, Stavert R, **Tahan S**, Kimball AB, Porter ML. Treatment of necrobiosis lipoidica with secukinumab (Cosentyx): a case series. *Int J Dermatol.* 2023 Sep;62(9):1198-1201. doi: 10.1111/ijd.16780. Epub 2023 Jul 1. PMID: 37392065.
- Wang J, Wang Z, Inuzuka H, **Wei W**, Liu J. PRMT1 methylates METTL14 to modulate its oncogenic function. *Neoplasia.* 2023 Aug;42:100912. doi: 10.1016/j.neo.2023.100912. Epub 2023 Jun 1. PMID: 37269817; PMCID: PMC10248872.
- Lu W, Bakhtary S, Oliver L, Stephens L, Tanhehco Y, **O'Brien K**. How do we direct a transfusion service/blood bank with limited laboratory staff. *Transfusion.* 2023 Aug 29. doi: 10.1111/trf.17510. Epub ahead of print. PMID: 37642158.
- Jauniaux E, Fox KA, Einerson B, Hussein AM, **Hecht JL**, Silver RM. Perinatal assessment of complex cesarean delivery: beyond placenta accreta spectrum. *Am J Obstet Gynecol.* 2023 Aug;229(2):129-139. doi: 10.1016/j.ajog.2023.02.021. Epub 2023 Mar 2. PMID: 36868338.
- Sasamoto N, Stewart PA, Wang T, Thompson ZJ, Yoder SJ, **Hecht JL**, Cleveland JL, Conejo-Garcia J, Fridley BL, Terry KL, Tworoger SS. Associations between prediagnostic aspirin use and ovarian tumor gene expression. *Cancer Med.* 2023 Aug 1. doi: 10.1002/cam4.6386. Epub ahead of print. PMID: 37525619.
- Li C, Yoon B, Stefani G, **Slack FJ**. Lipid kinase PIP5K1A regulates let-7 microRNA biogenesis through interacting with nuclear export protein XPO5. *Nucleic Acids Res.* 2023 Sep 1:gkad709. doi: 10.1093/nar/gkad709. Epub ahead of print. PMID: 37655623.

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## Publications

- Maher T, D'Angelo R, Palmeri N, Bode-Sojobi I, **VanderLaan P**, Larnard J, Stillman IE, Zimetbaum P. Percutaneous Aspiration of Lead-Associated Vegetation During Pacemaker Extraction in a Patient With Polymicrobial Device Infection. *JACC Clin Electrophysiol*. 2023 Aug;9(8 Pt 2):1621-1623. doi: 10.1016/j.jacep.2023.03.011. Epub 2023 May 24. PMID: 37227353.
- Quardokus EM, Saunders DC, McDonough E, Hickey JW, Werlein C, Surette C, Rajbhandari P, Casals AM, Tian H, Lowery L, Neumann EK, Björklund F, Neelakantan TV, Croteau J, Wiblin AE, Fisher J, Livengood AJ, Dowell KG, Silverstein JC, Spraggins JM, Pryhuber GS, Deutsch G, Ginty F, Nolan GP, Melov S, Jonigk D, Caldwell MA, **Vlachos IS**, Muller W, Gehlenborg N, Stockwell BR, Lundberg E, Snyder MP, Germain RN, Camarillo JM, Kelleher NL, Börner K, Radtke AJ. Organ Mapping Antibody Panels: a community resource for standardized multiplexed tissue imaging. *Nat Methods*. 2023 Aug;20(8):1174-1178. doi: 10.1038/s41592-023-01846-7. Epub 2023 Jul 19. PMID: 37468619; PMCID: PMC10406602.
- Harpaz N, Goldblum JR, Shepherd NA, Riddell RH, Rubio CA, Vieth M, **Wang HH**, Odze RD. Colorectal dysplasia in chronic inflammatory bowel disease: a contemporary consensus classification and interobserver study. *Hum Pathol*. 2023 Aug;138:49-61. doi: 10.1016/j.humpath.2023.05.008. Epub 2023 May 27. PMID: 37247824.
- Xiang Y, Yuan Y, Liu J, Xu X, Wang Z, Hassan S, Wu Y, Sun Q, Shen Y, Wang L, Yang H, Sun J, Xu G, **Huang Q**. A nomogram based on clinical factors to predict calendar year readmission in patients with ulcerative colitis. *Therap Adv Gastroenterol*. 2023 Jul 31;16:17562848231189124. doi: 10.1177/17562848231189124. PMID: 37533706; PMCID: PMC10392194.
- Hogstrom JM, Cruz KA, Selfors LM, Ward MN, Mehta TS, Kanarek N, Philips J, Dialani V, Wulf G, **Collins LC**, Patel JM, Muranen T. Simultaneous isolation of hormone receptor-positive breast cancer organoids and fibroblasts reveals stroma-mediated resistance mechanisms. *J Biol Chem*. 2023 Aug;299(8):105021. doi: 10.1016/j.jbc.2023.105021. Epub 2023 Jul 7. PMID: 37423299; PMCID: PMC10415704.
- Suster DI, Gross JM, Fayad L, Wenokor C, **Goldsmith JD**, **Ward A**, Early C, Lazano-Calderon S, Klein MJ. Sclerosing epithelioid fibrosarcoma of bone with hybrid features: clinicopathologic, radiologic, and molecular analysis of three cases. *Skeletal Radiol*. 2023 Jul 31. doi: 10.1007/s00256-023-04412-6. Epub ahead of print. PMID: 37524934.
- Schmidt DR, Gramatikov IMT, Sheen A, Williams CL, Hurwitz M, Dodge LE, Holupka E, Kiger WS 3rd, Cornwall-Brady MR, Huang W, Mak HH, Cormier KS, Condon C, Dane Wittrup K, **Yilmaz ÖH**, Stevenson MA, Down JD, Floyd SR, Roper J, Vander Heiden MG. Ablative radiotherapy improves survival but does not cure autochthonous mouse models of prostate and colorectal cancer. *Commun Med (Lond)*. 2023 Aug 9;3(1):108. doi: 10.1038/s43856-023-00336-3. PMID: 37558833; PMCID: PMC10412558.
- **Hirt CK**, **Padmanabha N**, Michaels PD. Cohesin complex mutations in myeloid neoplasms are enriched for SRSF2, RUNX1, TET2, and NRAS co-mutations and morphologic dysplasia. *Leuk Res*. 2023 Sep;132:107357. doi: 10.1016/j.leukres.2023.107357. Epub 2023 Jul 20. PMID: 37481994.

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## Publications

- Krispin E, Didier R, Shainker SA, Duffy CR, **Hecht J**, Shamshirsaz AA. Diagnostic fetoscopy: important resource of prenatal assessment. *Ultrasound Obstet Gynecol*. 2023 Sep 7. doi: 10.1002/uog.27469. Epub ahead of print. PMID: 37676469.
- Roberts DJ, Baergen RN, Boyd TK, Carreon CK, Duncan VE, Ernst LM, Faye-Petersen OM, Folkins AK, **Hecht JL**, Heerema-McKenney A, Heller DS, Linn RL, Polizzano C, Ravishankar S, Redline RW, Salafia CM, Torous VF, Castro EC. Neonatologist responsibility to ensure placentas are received for pathologic examination-response to comment on criteria for placental examination for obstetric and neonatal providers. *Am J Obstet Gynecol*. 2023 Jun;228(6):762-763. doi: 10.1016/j.ajog.2023.01.027. Epub 2023 Jan 31. PMID: 36731816.
- Krishnamurthy K, **Merkulova Y**, **Guzman-Arocho Y**, **Rosen S**, **Sun Y**. Diffuse WT1 Positivity in Smooth Muscle Component Supports Dual Differentiation of Mesothelial Cells in the Histogenesis of Leiomyoadenomatoid Tumors-A Report of two Cases. *Int J Surg Pathol*. 2023 Aug;31(5):866-871. doi: 10.1177/10668969221137521. Epub 2022 Dec 6. PMID: 36474354.
- Li R, Zheng J, Zayed MA, **Saffitz JE**, Woodard PK, Jha AK. Carotid atherosclerotic plaque segmentation in multi-weighted MRI using a two-stage neural network: advantages of training with high-resolution imaging and histology. *Front Cardiovasc Med*. 2023 May 24;10:1127653. doi: 10.3389/fcvm.2023.1127653. PMID: 37293278; PMCID: PMC10244753.
- **Haspel RL**, McKenna DH. Major incompatible red blood cell transfusions prior to bone marrow transplantation: Not worth the risk. *Br J Haematol*. 2023 Sep 8. doi: 10.1111/bjh.19101. Epub ahead of print. PMID: 37681639.
- **Nishino M**, **VanderLaan P**, Troncione G, Bellevicine C, Ohori NP, Kondo T, and Buffet C (2023). Molecular and Other Ancillary Tests. In: S.Z. Ali and P.A. VanderLaan (Eds.), *The Bethesda System for Reporting Thyroid Cytopathology*, 3rd Edition. Cham, Switzerland: Springer.
- Krishnamurthy K, Stillman IE, **Hecht JL**, **Vyas M**. Defining the Nature and Clinicopathologic Significance of Mallory-Denk-like Inclusions in Ovarian Fibromas: A Potential Degenerative Phenomenon Associated With Torsion. *Int J Gynecol Pathol*. 2023 Jul 18. doi: 10.1097/PGP.0000000000000974. Epub ahead of print. PMID: 37562060.
- Universal PCR for Bacteria, Mycobacteria, and Fungi: A 10-year Retrospective Review of Clinical Indications and Patient Outcomes Jeffrey Kubiak, Alexandra Morgan, Andrea Kirmaier, **Ramy Arnaout**, **Stefan Riedel** medRxiv 2023.08.02.23293145; doi: <https://doi.org/10.1101/2023.08.02.23293145>
- SARS-CoV-2 live virus culture and sample freeze-thaw stability Phyllis J. Kanki, Donald J. Hamel, **Stefan Riedel**, Sanjuncta Dutta, **Annie Cheng**, Charlotte A. Chang, **Ramy Arnaout**, **James E. Kirby** medRxiv 2023.07.29.23293373; doi: <https://doi.org/10.1101/2023.07.29.23293373>

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## Publications

- The Coviral Portal: Multi-Cohort Viral Loads and Antigen-Test Virtual Trials for COVID-19 Alexandra Morgan, Elisa Contreras, Michie Yasuda, Sanjuncta Dutta, Donald Hamel, Tarini Shankar, Diane Balallo, **Stefan Riedel**, **James E. Kirby**, Phyllis J. Kanki, **Ramy Arnaout** medRxiv 2023.05.05.23289582; doi: <https://doi.org/10.1101/2023.05.05.23289582>
- Case Report and Mini-Review: Sarcina ventriculi in the Stomach of an 80-Year-Old Female Kirmaier, A.; Kubiak, J.; Mahler, L.; Qian, X.; Wu, L.; **Ono, Y.**; **Riedel, S.**; Medline, A.; Yang, X.; Elamin, S.; Afdhal, N.; Arnaout, R.
- Preprints 2023, 2023070572. <https://doi.org/10.20944/preprints202307.0572.v1>
- A Conceptual Framework for Nomenclatural Stability and Validity of Medically Important Fungi: A Proposed Global Consensus Guideline for Fungal Name Changes. Supported by ABP, ASM, CLSI, ECMM, ESCMID-EFISG, EUCAST-AFST, FDLC, IDSA, ISHAM, MMSA, and MSGERC. Sybren de Hoog, Thomas J. Walsh, Sarah A. Ahmed, Ana Alastruey-Izquierdo, Barbara D., Alexander, Maiken Cavling Arendrup, Esther Babady, Feng-Yan Bai, Joan-Miquel Balada-Llasat, Andrew Borman, Anuradha Chowdhary, Andrew Clark, Robert C. Colgrove, Oliver A. Cornely, Tanis C. Dingle, Philippe J. Dufresne, Jeff Fuller, Jean-Pierre Gangneux, Connie Gibas, Heather Glasgow, Yvonne Gräser, Jacques Guillot, Andreas H. Groll, Gerhard Haase, Kimberly Hanson, Amanda Harrington, David L. Hawksworth, Randall T. Hayden, Martin Hoenigl, Vit Hubka, Kristie Johnson, Julianne V. Kus, Ruoyu Li, Jacques F. Meis, Michaela Lackner, Sixto M. Leal Jr., Francesca Lee, Shawn R. Lockhart, Paul Luethy, Isabella Martin, Kyung J. Kwon-Chung, Wieland Meyer, M. Hong Nguyen, Luis Ostrosky-Zeichner, Elizabeth Palavecino, Preeti Pancholi, Peter G. Pappas, Gary W. Procop, Scott A. Redhead, Daniel D. Rhoads, **Stefan Riedel**, Bryan Stevens, Kaede Ota Sullivan, Paschalis Vergidis, Emmanuel Roilides, Amir Seyedmousavi, Lili Tao, Vania A. Vicente, Roxana G. Vitale, Qi-Ming Wang, Nancy L. Wengenack, Lars Westblade, Nathan Wiederhold, Christina M. Wojewoda, Sean X. Zhang
- Erfani H, Hessami K, Salmanian B, Castro EC, Kopkin R, **Hecht JL**, Gogia S, Jackson JN, Dong E, Fox KA, Gessner M, Fang ME, Shainker SA, Baroni MD, Modest AM, Shamshirsaz AA, Nassr AA, Espinoza J, Aagaard KM, Shamshirsaz AA. Basal Plate Myofibers and the Risk of Placenta Accreta Spectrum in the Subsequent Pregnancy: A Large Single-Center Cohort. Am J Perinatol. 2023 Jul 20. doi: 10.1055/a-2109-3977. Epub ahead of print. PMID: 37311540.
- Xiang Y, Liu J, Wang NY, Tang D, Wang L, Zou PX, Xu G, **Huang Q.** The Characteristics and Treatment Outcomes of 71 Duodenal Brunner's Gland Adenomas with Endoscopic Submucosal Dissection. Dig Dis. 2023 Aug 17:1-8. doi: 10.1159/000531231. Epub ahead of print. PMID: 37591214.
- Wang Z, Liu J, Chen H, Qiu X, Xie L, Kaniskan HÜ, Chen X, Jin J, **Wei W.** Telomere Targeting Chimera Enables Targeted Destruction of Telomeric Repeat-Binding Factor Proteins. J Am Chem Soc. 2023 May 17;145(19):10872-10879. doi: 10.1021/jacs.3c02783. Epub 2023 May 4. PMID: 37141574.