

Latest Publications



PathLAKE
Computational Pathology Excellence

1. Abbasi WA, Yaseen A, Hassan FU, Andleeb S, Minhas F. ISLAND: in-silico proteins binding affinity prediction using sequence information. *BioData Min.* 2020;13(1):20.
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4. Ali M, Evans H, Whitney P, Minhas F, Snead DRJ. Using Systemised Nomenclature of Medicine (SNOMED) codes to select digital pathology whole slide images for long-term archiving. *J Clin Pathol.* 2022.
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6. Atallah NM, Toss MS, Green AR, Mongan NP, Ball G, Rakha EA. Refining the definition of HER2-low class in invasive breast cancer. *Histopathology.* 2022.
7. Atallah NM, Toss MS, Verrill C, Salto-Tellez M, Snead D, Rakha EA. Potential quality pitfalls of digitalized whole slide image of breast pathology in routine practice. *Mod Pathol.* 2022;35(7):903-10.
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12. Browning L, Colling R, Rakha E, Rajpoot N, Rittscher J, James JA, et al. Digital pathology and artificial intelligence will be key to supporting clinical and academic cellular pathology through COVID-19 and future crises: the PathLAKE consortium perspective. *J Clin Pathol.* 2021;74(7):443-7.

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13. Browning L, Colling R, Verrill C. WHO/ISUP grading of clear cell renal cell carcinoma and papillary renal cell carcinoma; validation of grading on the digital pathology platform and perspectives on reproducibility of grade. *Diagn Pathol.* 2021;16(1):75.
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15. Browning L, White K, Siiankoski D, Colling R, Roskell D, Fryer E, et al. RFID analysis of the complexity of cellular pathology workflow-An opportunity for digital pathology. *Front Med (Lausanne).* 2022;9:933933.
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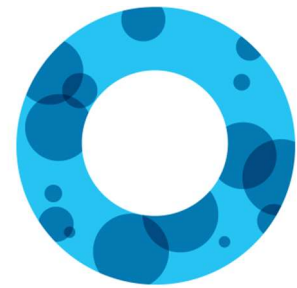
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30. Hassan T, Javed S, Mahmood A, Qaiser T, Werghi N, Rajpoot N. Nucleus classification in histology images using message passing network. *Med Image Anal*. 2022;79:102480.
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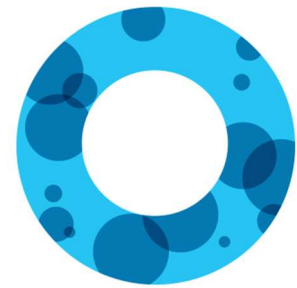
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Pre-Prints and Conference Proceedings

1. Simon Graham, Mostafa Jahanifar, Ayesha Azam, Mohammed Nimir, Yee-Wah Tsang, Katherine Dodd, Emily Hero, Harvir Sahota, Atisha Tank, Ksenija Benes, Noorul Wahab, Fayyaz Minhas, Shan E. Ahmed Raza, Hesham El Daly, Kishore Gopalakrishnan, David Snead, and Nasir M. Rajpoot, "Lizard: A Large-Scale Dataset for Colonic Nuclear Instance Segmentation and Classification," in proc. IEEE/CVF International Conference on Computer Vision (ICCV) Workshop workshop on Computational Challenges in Digital Pathology (CDpath), pp. 684–93, 2021. [Link](#)
2. Srijay Deshpande, Fayyaz Minhas, and Nasir M. Rajpoot, "Synthesis of Colon Cancer Tissue Images from Glandular Structure Layout", poster in Medical Imaging meets NeurIPS workshop (MedNeurips), Dec 14, 2021. [Link](#)
3. Dawood, Muhammad, Kim Branson, Nasir M. Rajpoot, and Fayyaz ul Amir Afsar Minhas. "All You Need Is Color: Image Based Spatial Gene Expression Prediction Using Neural Stain Learning." In proc. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD, PharML 2021: Applications of Machine Learning in Pharma and Healthcare), 13th -

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17th September 2021, Machine Learning and Principles and Practice of Knowledge Discovery in Databases, pp. 437–50. Communications in Computer and Information Science. Cham: Springer International Publishing, 2021. [Link](#)

4. Minhas, Fayyaz, Michael S. Toss, Noor ul Wahab, Emad Rakha, and Nasir M. Rajpoot. “L1-Regularized Neural Ranking for Risk Stratification and Its Application to Prediction of Time to Distant Metastasis in Luminal Node Negative Chemotherapy Na\“ive Breast Cancer Patients.” in proc. European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD, PharML 2021: Applications of Machine Learning in Pharma and Healthcare worksop), pp. 390-400, 13th - 17th September 2021, ArXiv:2108.10365 [Cs, Stat], 2021. [Link](#)
5. Dawood, Muhammad, Kim Branson, Nasir M. Rajpoot, and Fayyaz ul Amir Afsar Minhas. “ALBRT: Cellular Composition Prediction in Routine Histology Images.” In International Conference on Computer Vision (ICCV-Computational Challenges in Digital Pathology (CDPath) Workshop) Oct. 11-17, 2021 ArXiv:2108.08306 [Eess, q-Bio], 2021. [Link](#) .