



## Yuanning Zheng

Postdoctoral Scholar, Biomedical Informatics

### Bio

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#### HONORS AND AWARDS

- NIH K99/R00 Pathway to Independence Award, NIH/NCI (2025-2030)

#### STANFORD ADVISORS

- Olivier Gevaert, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **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.  
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- **Generation of synthetic whole-slide image tiles of tumours from RNA-sequencing data via cascaded diffusion models.** *Nature biomedical engineering*  
Carrillo-Perez, F., Pizurica, M., Zheng, Y., Nandi, T. N., Madduri, R., Shen, J., Gevaert, O.  
2024
- **Digital profiling of gene expression from histology images with linearized attention** *Nature Communications*  
Pizurica\*, M., Zheng\*, Y., Carrillo-Perez, F., Noor, H., Yao, W., Wohlfart, C., Vladimirova, A., Marchal, K., Gevaert, O.  
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- **EpiMix is an integrative tool for epigenomic subtyping using DNA methylation.** *Cell reports methods*  
Zheng, Y., Jun, J., Brennan, K., Gevaert, O.  
2023; 3 (7): 100515
- **Spatial cellular architecture predicts prognosis in glioblastoma.** *Nature communications*  
Zheng, Y., Carrillo-Perez, F., Pizurica, M., Heiland, D. H., Gevaert, O.  
2023; 14 (1): 4122
- **A deep-learning algorithm to classify skin lesions from mpox virus infection.** *Nature medicine*  
Thieme, A. H., Zheng, Y., Machiraju, G., Sadee, C., Mittermaier, M., Gertler, M., Salinas, J. L., Srinivasan, K., Gyawali, P., Carrillo-Perez, F., Capodici, A., Uhlig, M., Habenicht, et al  
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- **Response to anti-angiogenic therapy is associated with AIMP protein family expression in glioblastoma and lower-grade gliomas.** *Cancer research communications*  
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- **A 20-feature radiomic signature of triple-negative breast cancer identifies patients at high risk of death.** *NPJ breast cancer*  
Noor, H., Zheng, Y., Mantz, A. B., Zhou, R., Kozlov, A., DeMartini, W. B., Chen, S. T., Okamoto, S., Ikeda, D. M., Telli, M. L., Kurian, A. W., Ford, J. M., Vinayak, et al  
2025; 11 (1): 79
- **Evaluating Vision and Pathology Foundation Models for Computational Pathology: A Comprehensive Benchmark Study.** *Research square*  
Gevaert, O., Bareja, R., Carrillo-Perez, F., Zheng, Y., Pizurica, M., Nandi, T., Shen, J., Madduri, R.  
2025
- **Revealing cancer driver genes through integrative transcriptomic and epigenomic analyses with Moonlight.** *PLoS computational biology*  
Nourbakhsh, M., Zheng, Y., Noor, H., Chen, H., Akhuli, S., Tiberti, M., Gevaert, O., Papaleo, E.  
2025; 21 (4): e1012999
- **Reliability-enhanced data cleaning in biomedical machine learning using inductive conformal prediction.** *PLoS computational biology*  
Zhan, X., Xu, Q., Zheng, Y., Lu, G., Gevaert, O.  
2025; 21 (2): e1012803
- **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
- **Digital Spatial Profiling identifies distinct patterns of immuno-oncology-related gene expression within oropharyngeal tumours in relation to HPV and p16 status** *Frontiers in Oncology*  
Brooks\*, J. M., Zheng\*, Y., Hunter, K., Willcox, B., Dunn, J., Nankivell, P., Gevaert, O., Mehanna, H.  
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- **Multimodal deep learning to predict prognosis in adult and pediatric brain tumors.** *Communications medicine*  
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- **Early Dietary Exposures Epigenetically Program Mammary Cancer Susceptibility through Igf1-Mediated Expansion of the Mammary Stem Cell Compartment.** *Cells*  
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- **Overexpression of IGF-1 During Early Development Expands the Number of Mammary Stem Cells and Primes them for Transformation.** *Stem cells (Dayton, Ohio)*  
Luo, L., Santos, A., Konganti, K., Hillhouse, A., Lambertz, I. U., Zheng, Y., Gunaratna, R. T., Threadgill, D. W., Fuchs-Young, R. S.  
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