BII – Computational Digital Pathology Lab Publication List

*** (Sorted according to publication type)*

1.	Gole L, Yeong J, Lim JCT, Ong KH, Han H, Thike AA, Poh YC, Yee S, Iqbal J, Hong W, Lee B, Yu W, Tan PH. **Quantitative stain-free imaging and digital profiling of collagen structure reveal diverse survival of triple negative breast cancer patients.** Breast Cancer Research 22, 1-13, (2020)
2.	Tan EE, Hopkins RA, Lim CK, Jamuar SS, Ong C, Thoon KC, Koh MJ, Shin EM, Lian DW, Weerasooriya M, Lee CZ, Soetedjo AAP, Lim CS, Au VB, Chua E, Lee HY, Jones LA, James SS, Kaliaperumal N, Kwok J, Tan ES, Thomas B, Wu LX, Ho L, Fairhurst AM, Ginhoux F, Teo AK, Zhang YL, Ong KH, Yu W, Venkatesh B, Tergaonkar V, Reversade B, Chin KC, Tan AM, Liew WK, Connolly JE. **Dominant-negative NFKBIA mutation promotes IL-1β production causing hepatic disease with severe immunodeficiency.** Journal of Clinical Investigation, 10.1172/JCI98882, 2020
3.	F Liu, L Gole, KH Ong, L Li, D Young, J Zhao, H Rao, W Yu*, L Wei*. **Quantitative Collagen Profiling of HCV Patient Signifies the Fibrosis Reversibility Post Sustained Virologic Response.** Hepatology 70, 1006A-1007A. (2019)
4.	Copenhagen K, Malet-Engra G, Yu W, Scita G, Gov N, Gopinathan A. **Frustration-induced phases in migrating cell clusters.** Science advances 4 (9), eaar 8483-14. 2018
5.	Cliffe A, Doupé DP, Sung HH, Lim KH, Ong KH, Cheng L, Yu W*. **Quantitative analysis of complex individual cell behaviors in highly coordinated in vivo collective cell migration.** Nature Communication and in press. (2017)
6.	Malinverno C, Corallino S, Giavazzi F, Bergert M, Li Q, Leoni M, Disanza A, Frittoli E, Oldani A, Martini E, Lendenmann T, Deflorian G, Beznoussenko GV, Poulikakos D, Haur OK, Uroz M, Trepat X, Parazzoli D, Maiuri P, Yu W, Ferrari A, Cerbino R, Scita G. **Endocytic re-awakening of motility in jammed epithelia**. Nature Material, 1476-4660,http://dx.doi.org/10.1038/nmat4848, (2017)
7.	Diz-Muñoz A, Romanczuk P, Yu W, Bergert M, Ivanovitch K, Salbreux G, Heisenberg CP, Paluch EK. **Steering cell migration by alternating blebs and actin-rich protrusions.** BMC Biology, Sep 2;14:74. DOI: 10.1186/s12915-016-0294-x, (2016)
8.	Ong KH, De J, Cheng L, Ahmed S*, Yu W*. **NeuronCyto II: An automatic and quantitative solution for crossover neural cells in high throughout screening**. Cytometry Part A May 27. doi: 10.1002/cyto.a.22872, (2016)
9.	Gole L*, Ong KH, Boudier T, Yu W*, Ahmed S*. **OpenSegSPIM: a user-friendly segmentation tool for SPIM data**. Bioinformatics. doi: 10.1093/bioinformatics/btw093, (2016).
10.	Ono Y, Yu W, Jackson HE, Parkin CA, Ingham PW. **Adaxial cell migration in the zebrafish embryo is an active cell autonomous property that requires the Prdm1a transcription factor.** Differentiation, http://dx.doi.org/10.1016/j.diff.2015.03.002, (2015)
11.	Malet-Engra G, Yu W, Oldani A, Rey-Barroso J, Gov NS, Scita G, Dupré L. **Collective Cell Motility Promotes Chemotactic Prowess and Resistance to Chemorepulsion.** Current Biology 25, 242–250,http://dx.doi.org/10.1016/j.cub.2014.11.030, (2015).
12.	Yu W*, Lee HK, Hariharan S, Bu W, Ahmed S. **Evolving Generalized Voronoi Diagrams of Active Contours for Accurate Cellular Image Segmentation.** Cytometry Part A77A pg. 379~386, (2010).
13.	Yu W*, Lee HK, Hariharan S, Bu W, Ahmed S. **Quantitative Neurite Outgrowth Measurement Based on Image Segmentation with Topological Dependence.** Cytometry Part A, 75A, pg. 289-297, (2009).

14.	Yu W*, Lee HK, Vallotton P, Hariharan S, Shvetha S , Ahmed S. **Segmentation of Neural Stem/Progenitor Cells Nuclei within 3-D Neurospheres.** International Symposium on Visual Computing (ISVC 2009), Lecture Notes of Computer Science, 5875, pg. 531-543, (2009)