BII – Complex Cellular Phenotype Analysis Publications

*** (Publications sorted: Newest to Oldest)*

1.	**Lee JYJ, Yeong J, Lee LWJN, Loo LH, Dong J.** "ImmunoAtlas: an online public portal for sharing, visualizing, and referencing multiplex immunohistochemistry/ immunofluorescence (mIHC/IF) images and results for immuno-oncology". Journal for ImmunoTherapy of Cancer, 9 (Suppl 2):A657 (2021).
2.	**Leong TKM, Shern LW, Lee WEZ, Tan B, Zhao LX, Wen LL, Nadia J, Lee JYJ, Suresh N, Loo LH, Szu E, Yeong J.** Leveraging advances in immunopathology and artificial intelligence to analyze in vitro tumor models in composition and space. Advanced Drug Delivery Reviews, 1 Sept 21, doi: 10.1016/j.addr.2021.113959
3.	**Goh JJN, Behn J, Chong CS, Zhong G, Maurer-Stroh S, Fan H, Loo LH.** Structure-based virtual screening of CYP1A1 inhibitors: towards rapid tier-one assessment of potential developmental toxicants. Archives of Toxicology, 2021, doi : 10.1007/s00204-021-03111-2
4.	**Hussain F, Basu S, Jun HHH, Loo LH, Zink D.** Predicting direct hepatocyte toxicity in humans by combining high-throughput imaging of HepaRG cells and machine learning-based phenotypic profiling. Archives of Toxicology 2020, doi: 10.1007/s00204-020-02778-3.
5.	**Jaladanki CK, He Y, Zhao LN, Maurer-Stroh S, Loo LH, Song HW, Fan H.** Virtual screening of potentially endocrine-disrupting chemicals against nuclear receptors and its application to identify PPARγ-bound fatty acids. Arch Toxicol (2020). https://doi.org/10.1007/s00204-020-02897-x
6.	**Miller JA, Loo LH.** Optimum concentration-response curve metrics for supervised selection of discriminative cellular phenotypic endpoints for chemical hazard assessment. Archives of Toxicology 2020, doi: 10.1007/s00204-020-02813-3
7.	**Van der Ven LT ,Rorije E, Sprong RC, Zink D, Derr R, Hendriks G, Loo LH, Luijten M** (2020). A Case Study with Triazole Fungicides to Explore Practical Application of Next-Generation Hazard Assessment Methods for Human Health. Chemical Research in Toxicology, 2020, 33, 3, Pg. 834-848, doi: 10.1021/acs.chemrestox.9b00484
8.	**Bougen-Zhukov NM, Lee YY, Lee JJ, Lee P, Loo LH.** (2019). PI3K Catalytic Subunits α and β Modulate Cell Death and IL-6 Secretion Induced by Talc Particles in Human Lung Carcinoma Cells. American Journal of Respiratory Cell and Molecular Biology, 2019 Sep 12. doi: 10.1165/rcmb.2019-0050OC
9.	**Friedman KP, Gagne M, Loo LH, Karamertzanis P, Netzeva T, Sobanski T, Franzosa J, Richard A, Lougee R, Gissi A, Lee JJ, Angrish M, Dorne JL, Foster S, Raffaele K, Bahadori T, Gwinn M, Lambert J, Whelan M, Rasenberg M, Barton-Maclaren T, Thomas RS.** (2019). Utility of In Vitro Bioactivity as a Lower Bound Estimate of In Vivo Adverse Effect Levels and in Risk-Based Prioritization. Toxicological Sciences, 2019, Sep 18, 10.1093/toxsci/kfz201
10.	**Slikker W Jr, de Souza Lima TA, Archella D, de Silva JB Junior, Barton-Maclaren T, Bo L, Buvinich D, Chaudhry Q, Chuan P, Deluyker H, Domselaar G, Freitas M, Hardy B, Eichler HG, Hugas M, Lee K, Liao CD, Loo LH, Okuda H, Orisakwe OE, Patri A, Sactitono**

	C, Shi L, Silva P, Sistare F, Thakkar S, Tong W, Valdez ML, Whelan M, Zhao-Wong A. (2018). Emerging technologies for food and drug safety. Regul Toxicol Pharmacol. 2018 Oct;98:115-128. doi: 10.1016/j.yrtph.2018.07.013.
11.	**Lee JJ, Miller JA, Basu S, Kee TV, Loo LH.** (2018). Building predictive in vitro pulmonary toxicity assays using high-throughput imaging and artificial intelligence. Arch Toxicol. 2018 Jun;92(6):2055-2075. doi: 10.1007/s00204-018-2213-0.
12.	**Loo LH, Zink D.** (2017). High-throughput prediction of nephrotoxicity in humans. Altern Lab Anim. 2017 Nov;45(5):241-252.
13.	**Loo LH, Bougen-Zhukov NM, Tan WC.** (2017). Early spatiotemporal-specific changes in intermediate signals are predictive of cytotoxic sensitivity to TNFα and co-treatments. Sci Rep. 2017 Mar 8;7:43541. doi: 10.1038/srep43541
14.	**Bougen-Zhukov N, Loh SY, Lee HK, Loo LH.** (2017). Large-scale image-based screening and profiling of cellular phenotypes. Cytometry A. 2017 Feb;91(2):115-125. doi: 10.1002/cyto.a.22909.
15.	**Su R, Xiong S, Zink D, Loo LH.** (2016). High-throughput imaging-based nephrotoxicity prediction for xenobiotics with diverse chemical structures. Arch Toxicol. 2016 Nov;90(11):2793-2808.
16.	**Kandasamy K, Chuah JK, Su R, Huang P, Eng KG, Xiong S, Li Y, Chia CS, Loo LH, Zink D.** (2015). Prediction of drug-induced nephrotoxicity and injury mechanisms with human induced pluripotent stem cell-derived cells and machine learning methods. Sci Rep. 2015 Jul 27;5:12337. doi: 10.1038/srep12337.
17.	**Su R, Li Y, Zink D, Loo LH.** (2014). Supervised prediction of drug-induced nephrotoxicity based on interleukin-6 and -8 expression levels. BMC Bioinformatics. 2014;15 Suppl 16:S16. doi: 10.1186/1471-2105-15-S16-S16.
18.	**Loo LH, Laksameethanasan D, Tung YL.** (2014). Quantitative Protein Localization Signatures Reveal an Association between Spatial and Functional Divergences of Proteins. BMC Bioinformatics. 2013;14 Suppl 16:S4. doi: 10.1186/1471-2105-14-S16-S4.
19.	**Laksameethanasan D, Tan R, Toh G, Loo LH.** (2013). cellXpress: a fast and user-friendly software platform for profiling cellular phenotypes. BMC Bioinformatics. 2013;14 Suppl 16:S4. doi: 10.1186/1471-2105-14-S16-S4.
20.	**Loo LH, Lin HJ, Singh DK, Lyons KM, Altschuler SJ, Wu LF.** (2009). Heterogeneity in the physiological states and pharmacological responses of differentiating 3T3-L1 preadipocytes. J Cell Biol. 2009 Nov 2;187(3):375-84. doi: 10.1083/jcb.200904140.
21.	**Loo LH, Lin HJ, Steininger RJ, Wang Y, Wu LF, Altschuler SJ.** (2009). An approach for extensibly profiling the molecular states of cellular subpopulations. Nat Methods. 2009 Oct;6(10):759-65. doi: 10.1038/nmeth.1375.
22.	**Loo LH, Roberts S, Hrebien L, Kam M.** (2007). New criteria for selecting differentially expressed genes. IEEE Eng Med Biol Mag. 2007 Mar-Apr;26(2):17-26.
23.	**Loo LH, Wu LF, Altschuler SJ.** (2007). Image-based multivariate profiling of drug responses from single cells. Nat Methods.2007 May;4(5):445-53;445-5310.1038/nmeth1032