

Systems Medicine in Practice

(focus on the practical example and then go back to the underlying methodology)

6 examples:

- **Network Diffusion Approach to Predict LncRNA Disease Associations Using Multi-Type Biological Networks: LION.**

Sumathipala M, Maiorino E, Weiss ST, Sharma A.

Front Physiol. 2019 Jul 16;10:888. doi: 10.3389/fphys.2019.00888. eCollection 2019.
PMID: 31379598

- **Network Medicine in the Age of Biomedical Big Data.**

Sonawane AR, Weiss ST, Glass K, Sharma A.

Front Genet. 2019 Apr 11;10:294. doi: 10.3389/fgene.2019.00294. eCollection 2019. Review.
PMID: 31031797

- **A Systems Approach to Refine Disease Taxonomy by Integrating Phenotypic and Molecular Networks.**

Zhou X, Lei L, Liu J, Halu A, Zhang Y, Li B, Guo Z, Liu G, Sun C, Loscalzo J, Sharma A, Wang Z.

EBioMedicine. 2018 May;31:79-91. doi: 10.1016/j.ebiom.2018.04.002. Epub 2018 Apr 6.
PMID: 29669699

- **Spatiotemporal Multi-Omics Mapping Generates a Molecular Atlas of the Aortic Valve and Reveals Networks Driving Disease.**

Schlotter F, Halu A, Goto S, Blaser MC, Body SC, Lee LH, Higashi H, DeLaughter DM, Hutcheson JD, Vyas P, Pham T, Rogers MA, Sharma A, Seidman CE, Loscalzo J, Seidman JG, Aikawa M, Singh SA, Aikawa E.

Circulation. 2018 Jul 24;138(4):377-393. doi: 10.1161/CIRCULATIONAHA.117.032291.
PMID: 29588317

- **Integration of Molecular Interactome and Targeted Interaction Analysis to Identify a COPD Disease Network Module.**

Sharma A, Kitsak M, Cho MH, Ameli A, Zhou X, Jiang Z, Crapo JD, Beaty TH, Menche J, Bakke PS, Santolini M, Silverman EK.

Sci Rep. 2018 Sep 27;8(1):14439. doi: 10.1038/s41598-018-32173-z.
PMID: 30262855

- **Integrative epigenomic analysis in differentiated human primary bronchial epithelial cells exposed to cigarette smoke.**

Glass K, Thibault D, Guo F, Mitchel JA, Pham B, Qiu W, Li Y, Jiang Z, Castaldi PJ, Silverman EK, Raby B, Park JA, Yuan GC, Zhou X.

Sci Rep. 2018 Aug 24;8(1):12750. doi: 10.1038/s41598-018-30781-3.
PMID: 30143676