**You are cordially invited to a** **Computational Genomics Seminar**

**Prof. Dvir Aran**

Faculty of Biology, the Taub Faculty of Computer Science (secondary appointment), and the Lorry I. Lokey Interdisciplinary Center for Life Sciences and Engineering, the Technion

*"* *Research in the data-rich biomedical era to advance precision medicine"*

Wednesday **December 23** at **11:15**

**Join us in the online seminar here**:  <https://zoom.us/j/98088090316?pwd=UVd4OXlwTUsyVGVTSTFBaU9TSUIzUT09>

**Abstract:** The booming of new technologies has transformed biomedical science into a digitized, data-intensive discipline. Computational researchers are tackling the challenge of integrating massive multidimensional biomedical data — including genomics and clinical data — to advance precision medicine and improve therapeutic strategies. The talk will focus on recent studies I led to obtain new insights from biomedical data, including using diverse clinical data to predict labor and delivery complications, the efficacy of treatments for cancer patients, and the heterogenous physiological response to SARS-CoV-2 infection. In addition, I will present xCell and SingleR, computational methods I developed to allow for a better understanding of cellular heterogeneity in complex tissues using bulk and single-cell RNA-seq, and their applications for promoting precision medicine.

Host: Prof. Ron Shamir, School of Computer Science, TAU