

You are cordially invited to a Computational Genomics Seminar:

**Time:** Wednesday, 21/1/2015, 11:15

**Place:** Schreiber 309

**Speaker:** Effi Kenigsberg, Amos Tanay's group, Weizmann

**Title:** Studying tissue heterogeneity by measuring single-cell gene expression

**Abstract:** The human body is composed of trillions of cells that are classically classified into cell-types by simple features like location, shape, or expression of “marker” genes. I will present our recent method for simultaneous measurement of gene expression over thousands of single cells and modelling of heterogeneous tissues where distinct cell types do not necessarily exist. This analysis identifies combinatorial cell states and complex regulatory networks within “cell types” and raises fundamental questions on the dynamics of transcriptional states during the processes of differentiation and disease.

**Host:** Ron Shamir ([rshamir@tau.ac.il](mailto:rshamir@tau.ac.il)), School of Computer Science, Tel Aviv University