MMM - Modeling Molecular Mechanisms of Cell Differentiation

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**Job description:** Modern high-throughput measurement techniques (e.g. next-generation sequencing, microarrays, mass-spectrometer, single cell technologies) provide quantitative time-course data of biological processes at molecular level. This information, combined with dynamical and statistical modeling, can be used to gain insight into the underlying molecular mechanisms. The goal of this project is to use dynamical modeling techniques to study cell differentiation mechanisms and to use the models to generate testable biological hypothesis in collaboration with experimental biologists. The project requires a good knowledge of mathematics, statistics, programming (e.g. Matlab), and basics of/interest in molecular biology.

**Additional information:** [http://research.ics.aalto.fi/csb/](http://research.ics.aalto.fi/csb/)