



COSBI

# Internship opportunities at COSBI



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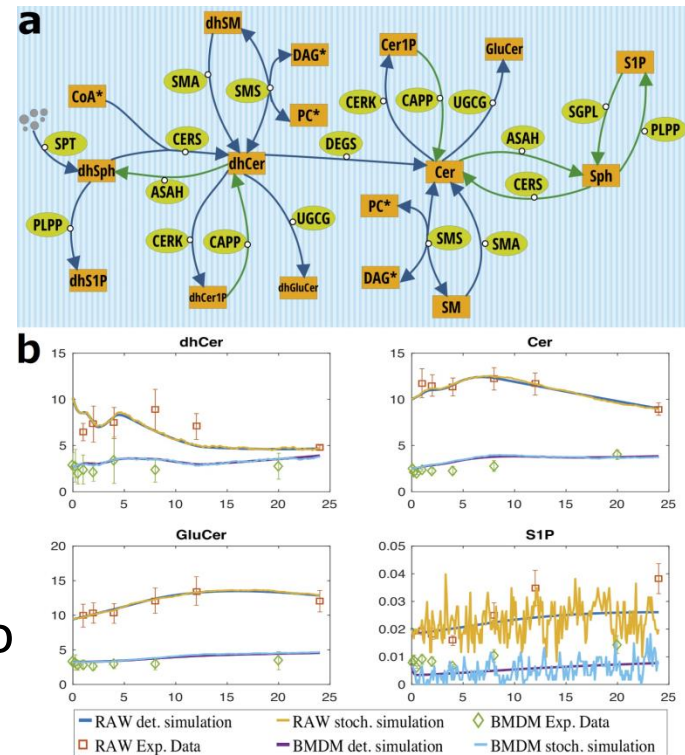
# COSBI in a nutshell

- The Microsoft Research - University of Trento Centre for Computational and Systems Biology (COSBI) is a non profit research institute
  - location: ex-Manifattura Tabacchi in Rovereto
  - founded: December 6, 2005
  - Field of research: model, simulate and analyze complex biological systems
- A multi-disciplinary group of researchers working on projects with national and international partners (Sanofi, NIHS, Cornell Univ., NIH)
- Very international, young (ave age <35y), 40% female work environment



# Internships opportunities at COSBI (1/2)

- Mathematical models for molecular biology
  - Development and implementation of algorithms for model simulation
  - Graphical interfaces for model construction by non-technical users
  - Multiscale models encompassing molecular, cellular, tissutal and whole organism levels
  - Applications of the above techniques to systems of biomedical interest, such as comprehensive modeling of insulin/glucose balance in diabetes



# Internships opportunities at COSBI (2/2)

- Analysis of high throughput data for biomarker identification
  - Algorithms for signature-based classification based on expression profiles
  - Extension of existing method to new types of data: proteomics, methylation, genotypes
  - Applications to early diagnosis, patient stratification, personalized medicine applications, and neurodegenerative disease investigations

