

Biotechnology and Biosciences Seminars



## Dipartimento di Biotecnologie e Bioscienze – UNIMIB

giovedì 3 marzo, 2022, ore 16:30, aula U3-04 / Webex

## Snf1/AMPK:

## a master regulator of metabolism

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**Abstract:** Robust biological systems are able to adapt to internal and environmental perturbations. This is ensured by a thick crosstalk between metabolism and signal transduction pathways, through which cell cycle progression, metabolism and growth are coordinated. Cell signaling strongly controls metabolism, mainly through transcriptional regulation and post-translational modifications. Strikingly, also metabolism regulates signal transduction, acting through protein-metabolite interactions (PMIs), which result in the modification of protein activities. Our laboratory has long been involved in the study of these cross-regulations, especially focusing on the yeast protein kinase AMPK. It is a highly conserved key enzyme in all eukaryotic cells, essential for energy homeostasis and adaptation to glucose limitation. I will discuss our findings on AMPK regulation on cell cycle and metabolism and its crosstalk with other signaling pathways in the model organism *Saccharomyces cerevisiae*.

Gli attestati di partecipazione al seminario sono validi anche per l'acquisizione dei CFU, per informazioni visitare la pagina del seminariobtbs.unimib.it-Twitter: @BtBsUNIMIB-YouTube channel: BtBsUNIMIB-infobtbs@unimib.it

