

## Schedule Metabolic pathway analysis course

Location: [K3 3.069](#) (Basement floor, between 'Kjemiblokk' 3 and 4), Gløshaugen, NTNU

### *Monday 30th of October*

10:00 – 11:00 Course Introduction

11:00 – 12:30 Introduction into Constrain based modelling with COBRA

12:30 Lunch

13:30 – 16:00 Hands on session SBML and Cobra-toolbox

### *Tuesday 1<sup>st</sup> of November*

9:00 – 12:00 Modelling approaches for genome scale modelling, pathway reconstruction and metabolic engineering

12:00 Lunch

13:00 Hands on session COBRA-toolbox, metabolic modelling and engineering

### *Wednesday 2<sup>nd</sup> of November*

9:00 – 11:30 Hands on session COBRA-toolbox and distribution of home work project

12:15 – 12:50 Lunch seminar by Barbara Bakker on: Robustness of fatty-acid oxidation in health and disease

13:15 – 16:00 Introduction into ODE-based modelling of metabolic pathways and metabolic control analysis

18:00 Dinner at [Una Pizzeria e Bar](#)

### *Thursday 3<sup>rd</sup> of November*

9:00 – 12:00 Hands on COPASI, pathway reconstruction and analysis

12:00 Lunch

13:00 – 15:30 Theory and hands on metabolic control analysis and parameter estimation

15:30 – 16:00 Distribution of home work second part

### *Friday 5<sup>th</sup> of November*

09:00 – 12:00 Theory and hands on sensitivity analysis

12:00 Lunch

13:00 – 14:00 Course summary

Delivery of homework deadline 17<sup>th</sup> of November