



NORBIS

## DETAILED PROGRAM NORBIS SUMMER SCHOOL JUNE 13-17 2016

### MONDAY – GENE EXPRESSION

09:30 Welcome to the summer school, introduction to NORBIS, and to 'omics

*Inge Jonassen / Christine Stansberg, UiB*

10:00 What it is all about - the molecular biology of the cell

*Vinnit George, UiB*

10:30 Analysis of gene expression

*Chinh Bkrong Nguyen, UiO*

11:00 COFFEE

*Everyone*

11:30 Statistical analysis of differential gene expression

*Agnieszka Blachowicz, SUT*

12:00 Automation of operations by programming

*Teshome Mulugeta, NMBU*

12:30 Regulation of gene expression: epigenetics and methylation

*Anne-Catrin Adam, NIFES*

13:00 LUNCH

*Everyone*

14:00 KEYNOTE LECTURE AND DISCUSSION - Gene expression and epigenetics

*Leonardo Meza-Zepeda, OUS*

15:30 POSTER SESSION

*Everyone*

18:30 SCHOOL DINNER

*Everyone*

### TUESDAY - GENETICS

09:00 Introduction to NGS - what happens in the lab?

*Christine Stansberg, UiB*

09:30 Analysis of NGS data

*Roman Spanek, UiB*

10:00 Design of high throughput experiments

*Ilona Urbarova, UiT*

10:30 COFFEE

*Everyone*

11:00 Principles of genetics and inheritance, Mendelian diseases

*Christina Saghaug, UiB*

11:30	Case control studies and GWAS <i>Romain Gutton, UiB</i>
12:00	What can we learn from animal models? <i>Liv Østevik, NMBU</i>
12:30	LUNCH <i>Everyone</i>
13:30	KEYNOTE LECTURE AND DISCUSSION - Psychiatric genetics <i>Stephanie Le Hellard, UiB</i>
15:00	GROUP WORK <i>Everyone</i>
17:00	FINISHED

### WEDNESDAY - METAGENOMICS

09.00	Reproducible research and version control <i>Boris Simovski, UiO</i>
09.30	Molecular evolution and sequence comparison <i>Oceane Tourniere, UiB</i>
10.00	Analysis of sequences <i>Hilde Vinje, NMBU</i>
10.30	COFFEE <i>Everyone</i>
11:00	Introduction to structural bioinformatics <i>Roza Berhanu Lemma, UiO</i>
11:30	Metagenomics <i>Irja Roiha, NIFES</i>
12:00	Analysis of metagenomics data <i>Yaxin Xue, UiB</i>
12:30	LUNCH <i>Everyone</i>
13:30	KEYNOTE LECTURE AND DISCUSSION - Metagenomics <i>Lise Øvreås, UiB</i>
15:00	GROUP WORK <i>Everyone</i>
17:00	FINISHED

### THURSDAY – MODELLING AND SYSTEMS BIOLOGY

09.00	Non-coding RNA and regulation of translation <i>Kornel Labun, UiB</i>
09.30	An introduction to supervised methods and machine learning <i>Antonin Klima, NTNU</i>

10:00	Integration of data from different sources <i>Chloe Beate Steen, UiO</i>
10:30	COFFEE <i>Everyone</i>
11:00	Biological networks <i>Zhaoran Zhou, UiB</i>
11:30	Metabolomics, metabolic networks and systems biology <i>Elise Moltzau Wanderås, UiB</i>
12:00	Simulation <i>Janne Mannseth, UiB</i>
12:30	LUNCH <i>Everyone</i>
13:30	KEYNOTE LECTURE AND DISCUSSION - Metabolic modelling <i>Ines Heiland, UiT</i>
15:00	GROUP WORK <i>Everyone</i>
17:00	FINISHED

## FRIDAY - PROTEOMICS

09.00	Introduction to proteomics <i>Vegard Tveit, UiB</i>
09.25	Proteomics at the lab <i>Trung Tran, UiO</i>
09.50	Analysis of proteomics data <i>Håvard Øritsland Eggestøl, UiB</i>
10.15	COFFEE <i>Everyone</i>
10.30	KEYNOTE LECTURE AND DISCUSSION - Proteomics <i>Harald Barsnes, UiB</i>
12:00	LUNCH <i>Everyone</i>
13:00	GROUP WORK - presentation of results <i>Everyone</i>
14:30	WRAP UP AND EVALUATION <i>Everyone</i>
15:30	GOODBYE!

