

## 5th Annual meeting 30<sup>th</sup> of September-2<sup>nd</sup> of October 2019 Oscarsborg Fortress

### Monday 30<sup>th</sup> September

- 17:45                    **WELCOME** by Inge Jonassen
- 18:00                    **Computational Modelling of Stress-Triggered Cytoplasmic Phase Separation** by Sushma Grellscheid (UiB)
- 19:00                    *DINNER*
- 21:00                    **Poster session 1** – Odd number presenters

### Tuesday 1<sup>st</sup> October

- 08:00-09:00           *BREAKFAST*
- 09:00                    **MORNING SESSION** (Chair: Manuela Zucknick)
- The Earth Biogenome Project – a moonshot for mankind, and some computational challenges** by Kjetill Sigurd Jakobsen (UiO)
- 10:00-11:00           **Student talks:**
- Lipidomics in Ulcerative Colitis Reveal Alteration in Mucosal Lipid Composition Associated with the Disease State** by Joseph Diab (UiT)
- Maximizing the coverage of target prediction methods using a combination of approaches based on molecular similarity and machine learning** by Neann Mathai (UiB)
- mtR\_find: A bio-informatic tool to identify, annotate and quantify mitochondrial small RNAs** by Asan Meera Sahib Haja Mohideen (NU)
- Bioinformatic analysis of targeted sequencing data from endometrial cancer patients** by Ashish Kumar Singh (NTNU)
- 11:00                    *BREAK (with feedback from Post doc evaluation board)*
- 11:20                    **Forum for students**  
Election of Student board members for the NORBIS steering board  
Discussion and evaluation of NORBIS
- 12:00-13:00           *LUNCH*
- 13:30- 15:00           **Team-building activities: 7-kamp!**

- 15:30-16:00 *COFFEE AND SNACK*
- 16:00-17:00 **AFTERNOON SESSION** (Chair: Rebecca Gladstone)  
**Student talks:**  
**Simulation and analysis of immune receptor repertoire frequency distributions** by Lonneke Scheffer (UiO)  
**Biomass composition for modelling approaches** by Christian Schulz (NTNU)  
**The role of lumican in cardiac fibrosis and remodeling** by Chloe Rixon (UiO)  
**Ultra-deep whole-genome bisulfite sequencing reveals mitochondrial DNA methylation hotspot in the human brain** by Romain Guiton (UiB)
- 17:00 **NORBIS Summer school 2020 at Sommarøy!** by Ines Heiland
- 17:10 *BREAK (with feedback from Post doc evaluation board)*
- 17:30 **Poster session 2**– Even number presenters
- 19:30- *DINNER inside the fortress*

## Wednesday 2<sup>nd</sup> October

- 08:00-09:00 *BREAKFAST and check-out (before 10:00)*
- 09:00 **MORNING SESSION** (Chair: Diana Domanska)  
**How do bacterial pathogen populations evolve in reality? A couple of recent lessons learnt from population genomics can bring us new and better vaccines** by Jukka Corander
- 10:00-10:45 **Student talks:**  
**Multivariate Bayesian variable selection for structured outcomes and high-dimensional features** by Zhi Zhao (UiO)  
**Dispensability and strict co-evolution of the MHC II pathway in teleosts** by Arseny Dubin (NU)  
**Reconstruction of a genome-scale metabolic model for the analysis of the oleaginous phenotype of *Aurantiochytrium* sp. T66** by Vetle Simensen (NTNU)
- 10:45 *BREAK (with feedback from Post doc evaluation board)*
- 11:00 **LATE MORNING SESSION** (Chair: Suraj Sharma)  
**Identification of evolutionary and kinetic drivers of NAD-dependent signaling** by Ines Heiland
- 11:30 **Closing remarks** by Manuela Zucknick
- 11:40 *LUNCH*
- 12:45 **Boat leaves Oscarsborg fortress**

## List of posters

1. Amrinder Singh (UiT) Constructing coherent regulatory network model of IBD using machine learning methods
2. Anna Pöntinen (UiO) A high-throughput microbial growth data assembly and analysis protocol for investigating strain variability of bacterial growth under stress – *Listeria monocytogenes* in NaCl
3. Asbjørn Holmgren (UiO) Isoform-level transcription in the etiology of bipolar disorder
4. Carl Jones (UiB) Measuring physical properties of stress granules from their fluctuation spectra
5. Cecilie Bucher-Johannessen (CRN) Epigenetic changes in testicular cancer survivors treated with cisplatin
6. Chandini Ratnadevi (UiB) Comprehensive genome profiling of a novel thermoacidophilic methanotroph, *Methylophilum sp.* strain Yel.
7. Eirik Høye (OUH) A comprehensive microRNA signature of primary and metastatic colorectal cancer
8. Endre Bakken Stovner (NTNU) Reanalysis of The Epigenome Roadmap data
9. Jørn Dietze (UiT) Isotopologue Correction for Incomplete Mass Spectroscopy Datasets
10. Leiv Rønneberg (UiO) Multiple kernel learning with structured Gaussian processes: an application to drug interaction prediction
11. Mahsa Jalili (NTNU) Altered transcription levels of immune markers in head kidney of Atlantic salmon after different feedings
12. Marcin Wojewodzic (CRN) Whole Genome Bisulfite Sequencing from The Janus Serum Bank opens door for Epigenome-Wide Association Studies
13. Olena Fedotkina (UiB) Effect of perinatal famine on the genetics of microvascular complications in type 2 diabetes patients
14. Pattama Wapeesittipan (UiB) Sex differences in gene expression in the human brain
15. Rajesh Shigdel (UiB) Oral microbiome and lung function
16. Rebecca Gladstone (UiO) Genomic definition of the global pneumococcal population to contextualise disease, vaccine impact and antibiotic resistance
17. Sinan Ugur Umu (CRN) Prediagnostic serum RNA dynamics in lung cancer patients
18. Solveig Brunstad (UiB) Epigenetic modifications in childhood trauma and severe mental disorders
19. Suraj Sharma (UiT) NAD – A dynamic hub for metabolism and signalling
20. The Tien MAI (UiO) Composite local low-rank structure in learning drug sensitivity
21. Tingting Feng (NTNU) Symptoms of anxiety and depression and risk of atrial fibrillation-the HUNT study
22. Yusuf Khan (INN) RNA-seq pipeline and transcriptome response to resistance training

## Practical information

**Oscarsborg fortress hotel** (<https://festningshotellene.no/oscarsborg-hotel-resort/>, telephone 64904000) is located at the one of the most historically important fortifications of Norway. The fortress is located on an island, beautifully situated in the Oslo fjord. Both lectures and poster sessions will be held at “Aron”.

### Student talks

We have invited eleven PhD students to present their research project by giving a talk. We have selected students widely, to represent all universities present and the wide variety of topics that are studied by NORBIS students. Please keep to the ten minutes limit and allow five minutes for discussion. A committee consisting of NORBIS post docs will evaluate the student talks and give constructive feedback to each of the PhD students.

### Poster session

The poster session will take place at “Aron” on Monday and Tuesday evening. We appreciate it if you can put your poster up as soon as possible on Monday afternoon, or on Tuesday before the afternoon session, so we can enjoy them during breaks as well. Please remove your posters during the break on Wednesday morning.

### Forum for students

This year we will have to elect two new student representatives for the NORBIS steering board. We are also organising a discussion/evaluating session with the aim of collecting ideas and thoughts from our students about their experiences from NORBIS. An on-line evaluation form has to be filled in by all NORBIS PhD students.

### Teambuilding activity

The activity takes place outside, so please dress according to the weather.

### Transport from Gardermoen and Oslo City Centre to Oscarsborg fortress

Common (NORBIS organised) transportation from Gardermoen:

Everybody wanting to join the common transportation needs to be at the bus information desk at Gardermoen **no later than 14:40**. From there, you will go to the assigned platform at the airport as a group. The bus will leave Gardermoen at **14:50**.

Common (NORBIS organised) transportation from Oslo city centre:

The bus will stop outside Thon Hotel Opera. Everybody needs to be there **no later than 15:35**. The bus is estimated to leave at **15:40**.

Public transportation to Oscarsborg fortress:

The Oslo Airport Express Train leaves the airport frequently and will transport you to the main train station in Oslo (Oslo S) (duration: approx. 25 minutes). From Oslo bussterminal (just next to Oslo S), busses are leaving frequently to Sundbrygga, Drøbak (see details at [ruter.no](http://ruter.no)) From Sundbrygga, you can join the ferry to Oscarsborg (duration: 5 minutes). The ferry to Oscarsborg fortress will be paid by NORBIS. Make sure you tell them you are with NORBIS, and you will not be charged.

### Expenses

NORBIS covers all expenses (traveling, accommodation and foods) for NORBIS master students, PhD students and post-docs who are presenting their work by a talk or a poster. Please keep your receipts and we will inform you how to get reimbursed after the meeting.

### Nametags

We ask everybody to please hand in their nametags during lunch on Wednesday October 2<sup>nd</sup>. For environmental reasons, we plan to reuse them for participants joining next year.