

**Science and career development:
Top gear in science –
Focus on infection biology and neuroscience**

**The Norwegian Academy of Science and Letters (DNVA)
Oslo, Norway
June 19th-20th, 2015**

Program

Friday June 19

8:30 Registration

9:00 Tone Tønjum, University of Oslo (UiO), Oslo University Hospital (OUH), Norway:
Welcome and introduction to the meeting

9:05 Rector Ole Petter Ottersen, UiO, Norway:
Science and society: Infection biology and neuroscience as prime examples

9:10 Mike Koomey, UiO, Norway:
Infection biology in the 21st century: Infection Biology and Antimicrobials (IBA)

Session I – Intracellular pathogens

Chair: Steve Lory

9:15

Dan Portnoy, University of California, USA:
Listeria monocytogenes pathogenesis, innate immunity and cancer immunotherapy

9:45

Pam L.C. Small, University of Tennessee, USA:
Mysteries of *Mycobacterium ulcerans*

10:15

Brigitte Gicquel, Institut Pasteur, Paris, France and Shanghai, China:
New vaccines against *Mycobacterium tuberculosis*

10:45

Trude Helen Flo, NTNU, Trondheim, Norway:
Inner life of a mycobacterium-infected macrophage

11:15 Coffee and something light to eat

Session II - Secretion systems

Chair: Mike Koomey

11:45

Maria Sandkvist, University of Michigan, USA:
Cell surface localization via the type II secretion system

12:15

Melanie Blokesch, EPFL, Lausanne, Switzerland:
Killing for DNA - the type VI secretion system of *Vibrio cholerae* fosters horizontal gene transfer

12:45

Jeremy P. Derrick, University of Manchester, UK:
Type IV pilus biogenesis: assembling the puzzle

13:15 Lunch

Session III – Genome dynamics

Chair: Tone Tønjum

14:15

Lene Juel Rasmussen, University of Copenhagen, Denmark:
The role of microbial pathogenesis in genome instability of human host: deregulation of DNA repair and mitochondrial bioenergetics

14:45

Kirsten Skarstad, UiO, Norway:
Stabilization of replication forks in *Escherichia coli* and *Vibrio cholera*

15:15

Young scientific investigator (YSI): Solomon Yimer, OUH/UiO, Norway:
The emerging *Mycobacterium tuberculosis* lineage 7 strains from Ethiopia

15:30 Coffee

Session IV – Recent progress in neuroscience

Chair: Lene Juel Rasmussen

15:45

Erlend A. Nagelhus, UiO, Norway:
Roles of glial aquaporins in brain water and ion homeostasis

16:15

Reidun Torp, Department of Molecular Medicine, IMB, UiO, Norway: The neuroanatomy of Alzheimer's disease (AD)

16:45

YSI: Meryl S. Lillenes, OUH/UiO, Norway:
DNA repair in Alzheimer's disease

17:00

Kristine B. Walhovd, UiO, Norway:
Lifespan changes in brain and cognition studied by MRI

17:30

Break - serving of mineral water and fruit. Short guided tour in the DNVA building

19:00 Aperitif with strawberries

19:30 Dinner at DNVA

Saturday June 20

Session V – Bacterial pathogenesis and vaccine development

Chair: Sun Nyunt Wai

9:00

Mariagrazia Pizza, GSK, Italy:

A journey toward the development of a new vaccine against *meningococcus B*

9:30

Dominique A. Caugant, National Institute of Public Health, Oslo, Norway:

Dynamics of meningococcal disease epidemiology

10:00

Bernt Eric Uhlin, Umeå University, Sweden:

Expression and regulatory features of pathogenic *E. coli* adhesion factors

10:30

Eliora Ron, Migal University/Tel Aviv University, Israel:

Functional genomics of septicemic *E. coli*

11:00

Johanna U Ericson Sollid, University of Tromsø, Norway:

Molecular *Staphylococcus aureus* - man relationships promoting colonisation, immune evasion and blood survival

11:30

YSI: Åshild Vik, UiO, Norway:

O-linked protein glycosylation in *Neisseria gonorrhoeae*

11:45 **Coffee and something light to eat**

Session VI – Bacterial pathogenesis and evolution

Chair: Hans Wolf-Watz

12:00

Stephen Lory, Harvard Medical School, USA:

Genome-wide detection of virulence determinants and new regulatory pathways in *Pseudomonas aeruginosa*

12:30

Victor J. Dirita, Michigan State University, USA:

Campylobacter jejunii - a human pathogen that prefers chicken

13:00

Sun Nyunt Wai, Umeå University, Sweden:

Bacterial membrane vesicles and host interaction

13:30

YSI: Amine Namouchi, OUH/UiO, Norway:

Mycobacterium tuberculosis in the era of next generation sequencing

13:45

Hans Wolf-Watz, Umeå University, Sweden:

Regulation of virulence in *Yersinia*

14:15 Tone Tønjum, UiO/OUH: Concluding remarks

14:30 **Lunch**

PS! The program might be due to minor changes