

Week 1 Schedule; NCMM Molecular Medicine Research Course

Date	Day/Room	Time	Topic	Title	Lecturer
07.11.2022	Mon Hagen 1+2	09.00 – 09.10	Organizational	Info & organization	Emma Haapaniemi
Session: Computational Biology Chair: Dr Anthony Mathelier					
07.11.2022	Mon Hagen 1+2	09.10 - 09.15	Brief introduction of speakers		Anthony Mathelier
07.11.2022	Mon Hagen 1+2	09.15 – 10:00	Computational Biology	Computational Biology of Adaptive Immunity	Victor Greiff
07.11.2022	Mon	10.15 – 12.00	Student poster session		All students
07.11.2022	Mon Hagen 1+2	12:15 –13:00	Computational Biology	Novel analytics in personalized medicine	Anthony Mathelier
07.11.2022	Mon Hagen 1+2	13.00 – 13.45	Computational Biology	A network approach to personalized medicine	Marieke Kuijjer
07.11.2022	Mon Hagen 1+2	14.00 – 14.45	Computational Biology	Germline vs somatic mutations: commonalties, distinctions, and interplay	Sebastian Waszak
07.11.2022	Mon Hagen 1+2	15.00 – 15.45	Computational Biology	Probabilistic rank-based transcriptomic analyses via the Bayesian Mallows model	Valeria Vitelli
Session: Epigenetics and Disease Chair: Dr Nikolina Sekulic					
08.11.2022	Tue Hagen 1+2	09:00 – 09:05	Brief introduction of speakers		Nikolina Sekulic

08.11.2022	Tue Hagen 1+2	09:05- 09.50	Introduction to epigenetics	Introduction to epigenetics and chromatin organisation	Nikolina Sekulic
08.11.2022	Tue Hagen 1+2	10:00 10.45	Introduction to epigenetics	Transcription factors in gene regulation and overview of NGS methods in studying epigenetics	Biswajyoti Sahu
08.11.2022	Tue Hagen 1+2	11.00 – 11.45	Epigenetics and development	Epitranscriptomic regulation in Disease	Arne Klungland
08.11.2022	Tue Hagen 1+2	12.00 – 12.45	Epigenetics and development	How neurons are made: by Nature and in the laboratory	Joel Glover
08.11.2022	Tue Hagen 1+2	14.00 – 14.45	Epigenetics and disease	Targeting transcriptional addictions in cancer	Deo Prakash Pandey <i>Early finish</i>
Session: Imaging Disease Chair: Dr Biswajyoti Sahu					
09.11.2022	Wed Hagen 1+2	09:00 – 09:05	Brief introduction of speakers		Biswajyoti Sahu
09.11.2022	Wed Hagen 1+2	09.05 – 09.50	Imaging disease	Translational Molecular Imaging in Cancer	Emmet Mc Cormack
09.11.2022	Wed Hagen 1+2	10.00 – 10.45	Imaging disease	Cortial spreading depression and epilepsy	Rune Enger
09.11.2022	Wed Hagen 1+2	11.00 – 11.45	Imaging disease	Image-based profiling for precision medicine	Lassi Paavolainen
09.11.2022	Wed	12.00 – 12.45	Imaging disease	Light microscopy – imaging from molecules to organisms	Kay Schink

	Hagen 1+2				
09.11.2022	Wed Hagen 1+2	14.00 – 14.45	Imaging disease	Brain MR imaging in schizophrenia and bipolar disorder	Ole Andreassen <i>*online</i>
09.11.2022	Wed Hagen 1+2	15.00 – 15.45	Structure based drug discovery	Basics of Chemical Biology and High throughput screening	Johannes Landskron
Session: Biobanks, Health registries and Biomarker Discovery Chair: Dr Sebastian Waszak					
10.11.2022	Thu Hagen 1+ 2	09:00 – 09:05	Brief introduction of speakers		Sebastian Waszak
10.11.2022	Thu Hagen 1+2	09.05 – 09:50	Biobanks, health registries and biomarker discovery	Cancer biomarkers: from discovery to clinical practice	Helga Bergholtz
10.11.2022	Thu Hagen 1+2	10.00 – 10.45	Biobanks, health registries and biomarker discovery	Predictive medicine: Use of health registries and epidemiology	Trude Eid Robsahm
10.11.2022	Thu Hagen 1+2	11.00 – 12.30	Biobanks, health registries and biomarker discovery	Use of population biobanks to understand human disease	Kristian Hveem
10.11.2022	Thu Hagen 1+2	13:00 – 13:45	Epigenetics and disease	Stem cells and sarcoma single-cell transcriptional landscapes and beyond	Ragnhild Eskeland
10.11.2022	Thu Hagen 1+2	14.00 – 15.45	Imaging disease	Imaging cardiovascular diseases in animal models and patients	Magnus Aronsen William Louch

Session: Animal Models of Disease Chair: Dr Camila Esguerra					
11.11.2022	Fri Hagen 1+2	09:00 – 09:05	Brief introduction of speakers		Camila Esguerra
11.11.2022	Fri Hagen 1+2	09.05 – 09.50	Animal Models of Disease	Drosophila models of disease – what fruit flies can teach us	Helene Knævelsrud
11.11.2022	Fri Hagen 1+2	10.00 – 10.45	Animal Models of Disease	The use of zebrafish to model and understand mechanisms underlying neurological disorder	Camila Esguerra
11.11.2022	Fri Hagen 1+2	11.00 – 11.45	Animal Models of Disease	Disease mechanisms and animal models of cardiovascular disease	Andreas Romaine
11.11.2022	Fri Hagen 1+2	12.00 – 12.45	Animal Models of Disease	Modelling diseases in pigs	Jean-Luc Boulland
11.11.2022	Fri Hagen 1+2	13.30 – 14.15	Animal Models of Disease	Molecular and viral strategies (DREADDs, etc)	Solomiia Korchynska
11.11.2022	Fri Hagen 1+2	14:30 – 15:15	Animal Models of Disease	Stem cells and organoids	Stefan Krauss

Week 2 Schedule; NCMM Molecular Medicine Research Course

Date	Day/Room	Time	Topic	Title	Lecturer
Session: Tailored and Personalized Medicine Chair: Prof Janna Saarela					
14.11.2022	Mon Hagen 1+2	09:00 – 09:05	Brief introduction of speakers		Janna Saarela
14.11.2022	Mon Hagen 1+2	09.05 – 09.50	Tailored and personalized medicine	Introduction to Precision Medicine	Janna Saarela
14.11.2022	Mon Hagen 1+2	10.00 – 10.45	Tailored and personalized medicine	Precision cancer medicine, implementation and the IMPRESS-Norway trial	Kjetil Taskén
14.11.2022	Mon Hagen 1+2	11.00 – 11.45	Tailored and personalized medicine	Precision medicine in everyday practice - rare diseases	Dag Undlien
14.11.2022	Mon Hagen 1+2	12:00 – 12:45	Tailored and personalized medicine	Lipid vesicles and lipid nanoparticles for drug delivery and vaccination	Irep Gözen
14.11.2022	Mon Hagen 1+2	14.00 – 15.45	Tailored and personalized medicine	Drug sensitivity testing and personalized medicine in leukemia	Krister Wennerberg
Session: Advanced cell- based therapies Chair: Dr Emma Haapaniemi					
15.11.2022	Tue Hagen 1+2	09:00 – 09:05	Brief introduction of speakers		Emma Haapaniemi
15.11.2022	Tue Hagen 1+2	09.05 – 09.50	Advanced cell-based therapies	Cell based therapies – Laboratory workflow and clinical practice	Else Marit Inderberg
15.11.2022	Tue	10:00 – 10:45	Advanced cell-based therapies	Cell-based therapies currently in clinical use	Hans Christian Erichsen

	Hagen 1+2				
15.11.2022	Tue Hagen 1+2	11.00 – 11.45	Advanced cell-based therapies	Introduction to use of gene editing/CRISPR	Emma Haapaniemi
15.11.2022	Tue Hagen 1+2	12.00 – 12.45	Advanced cell-based therapies	Cell based therapies for limbal stem cells deficiency	Cecilie Bredrup
15.11.2022	Tue Hagen 1+2	14.00 – 14.45	Advanced cell-based therapies	National Centre for Advanced Cell Therapy and clinical trials	Karl-Johan Malmberg
15.11.2022	Tue Hagen 1+2	15.00 – 15.45	Advanced cell-based therapies	T cell-based immunotherapy in cancer	Saskia Meyer
Session: Virology & Immunology Chair: Dr Irep Gözen					
16.11.2022	Wed Hagen 1+2	09:00 – 09:05	Brief introduction of speakers		Irep Gözen
16.11.2022	Wed Hagen 1+2	09.05 – 09:50	Virology & Immunology	Vaccine strategies against SARS-CoV-2: pandemic and post-pandemic needs	Gunnveig Grødeland
16.11.2022	Wed Hagen 1+2	10:00 – 10:45	Virology & Immunology	SARS-CoV-2 replication, detection and drug targeting	Christine Hanssen Rinaldo
16.11.2022	Wed Hagen 1+2	11.00 – 11.45	Virology & Immunology	Covid modelling	Arnoldo Frigessi
16.11.2022	Wed Hagen 1+2	12.00 – 12.45	Virology & Immunology	Epitranscriptomic Regulation of Virus Infections	Mari Kaarbø
16.11.2022	Wed Hagen 1+2	14.00 – 14.45	Tailored and personalized medicine	Genomics in Action - Prevention of Ischemic Heart Disease	Elisabeth Widen

16.11.2022	Wed Hagen 1+2	15.00 – 15.45	Tailored and personalized medicine	Genetic variation and risk of common diseases over the life course	Samuli Ripatti
Session: Virology & Immunology, Disease Mechanisms, Neuroscience Chair: Dr Anna Komisarczuk					
17.11.2022	Thu Hagen 1+2	09:45 -10:00 Later start	Brief introduction of speakers		Anna Komisarczuk
17.11.2022	Thu Hagen 1+2	10:00 -10:45	Virology & Immunology	Metabolism dictates T cell functionality	Bjørn Steen Skålhegg
17.11.2022	Thu Hagen 1+2	11.00 – 11.45	Neuroscience	What is hyperpolarized Metabolic Imaging and what can it tell us?	Christoffer Laustsen
17.11.2022	Thu Hagen 1+2	12.00 - 12.45	Disease mechanisms	Mechanisms of autoimmunity	Rasmus Iversen
17.11.2022	Thu Hagen 1+2	14.00 – 14.45	Disease mechanisms	Gut and liver inflammation	Espen Melum
17.11.2022	Thu Hagen 1+2	15.00 - 15.45	Virology & Immunology	Lecture title TBC	Johanne Jacobsen online
Session: Neuroscience Chair: Dr Charlotte Boccara					
18.11.2022	Fri Hagen 1+2	09:00 – 09:05	Brief introduction of speakers		Charlotte Boccara
18.11.2022	Fri Hagen 1+2	09.05 – 09:50	Neuroscience	Memory function of sleep	Charlotte Boccara
18.11.2022	Fri Hagen 1+2	10:00 – 10:45	Neuroscience	Imagination and its neuropsychological deficits	Alessandro Treves

18.11.2022	Fri Hagen 1+2	11.00 – 11.45	Neuroscience	Cerebellar Cognition	Cathrin Canto
18.11.2022	Fri Hagen 1+2	12.00 – 12.45	Neuroscience	You do not enter the same place cells twice - on spatial representation in the brain	Dori Derdikman
18.11.2022	Fri Hagen 1+2	13.00 – 13.45	Neuroscience	Lecture title TBC	Benjamin Adric Dunn
18.11.2022	Fri Hagen 1+2	14.00	Organizational	Summary course & Pizza	Charlotte Boccara

NCMM Molecular Medicine Research Course

Course no.: MF9120BTS - Molecular Medicine (national PhD-level course)

Time: November 7-18, 2022

Place: [Oslo Science Park](#), Level 0, Room: Hagen 1+2

Organized by: Centre for Molecular Medicine Norway, Nordic EMBL Partnership, University of Oslo and Oslo University Hospital

Contacts:

Course responsible: NCMM Group Leaders

Janna Saarela, email: janna.saarela@ncmm.uio.no

Anthony Mathelier, email: anthony.mathelier@ncmm.uio.no

Camila Esguerra, email : c.v.esguerra@biotek.uio.no

Nikolina Sekulic, email : nikolina.sekulic@ncmm.uio.no

Irep Gözen, email : irep.gozen@ncmm.uio.no

Marieke Kuijjer, email: marieke.kuijjer@ncmm.uio.no

Sebastian Waszak, e-mail: wszak@ncmm.uio.no

Charlotte Boccara, e-mail: charlotte.boccara@medisin.uio.no

Biswajyoti Sahu, e-mail. biswajyoti.sahu@ncmm.uio.no

IT: Melaku Tadesse: melaku.tadesse@ncmm.uio.no

Logistics: Larissa Lily, email: larissal@ncmm.uio.no