

SNOG-FiBTRA Symposium: Multidisciplinary Neuro-Oncology

Radisson Blu Seaside Hotel, Helsinki, 19-21 May 2022

Thursday 19 May 2022

8:00-9:30 Arrival and registration

Opening of the symposium

9:30 Opening words
Adjunct professor Kirsi Granberg, President of SNOG and Chair of FiBTRA, Tampere University, Tampere, Finland

Session 1 Brain tumors among us today

Chair: Adjunct Professor Hanna Mäenpää and Professor Roger Henriksson

9:40 Are brain tumors becoming more common?
Adjunct professor Nea Malila, Director of the Finnish Cancer Registry, Cancer Society of Finland, Finland

10:10 Risk factors for brain tumors – current evidence
Professor Anssi Auvinen, Tampere University, Tampere, Finland

10:40 Elderly and glioma – Nordic perspective
Associate Professor Miikka Korja, University of Helsinki and Helsinki University Hospital, Helsinki, Finland

11:10 Sponsor presentation by 10x Genomics, Zeiss and Lioness Therapeutics

Luncheon with Novocure

Moderator: Professor Roger Henriksson

11:20 Picking up the lunch

11:35 TTFields: Transitioning cancer treatment - The journey from research to guideline recommendation
Introduction -
Professor Roger Henriksson, Umeå University, Umeå, Sweden

Preclinical overview
Doctor Moshe Giladi, Novocure, Haifa, Israel

Clinical experience
Professor NaTosha Gatson, Banner MD Anderson Cancer Center (BMDACC) and University of Arizona School of Medical, Phoenix, Arizona and Geisinger Commonwealth School of Medicine (GCSOM), Scranton, Pennsylvania, USA

Discussion

12:20-12:30 Break

Session 2 Heterogeneity and evolution of brain tumors

Chair: Professor Pirjo Laakkonen and Adjunct Professor Kirsi Granberg

12:30 Malignant networks in the brain (and how to target them)
Professor Frank Winkler, University Hospital Heidelberg and German Cancer Research Center, Heidelberg, Germany

13:15 Mutational processes shaping the evolution of brain tumours
Doctor Joachim Weischenfeldt, Rigshospitalet and University of Copenhagen, Copenhagen, Denmark

Abstract talks

- 13:45 Neural-network based deconstruction of glioblastoma developmental plasticity at a single cell resolution
Doctor Yizhou Hu, Karolinska Institutet, Stockholm, Sweden
- 14:00 Gatekeeper inactivation drives tumor progression to secondary glioblastoma
Anja Hartewig, Tampere University and Tays Cancer Center, Tampere University Hospital, Tampere, Finland
- 14:15 Oncogenic enhancer-promoter interactions in medulloblastoma
Eduardo Dias, University of Copenhagen, Copenhagen, Denmark
- 14:30-15:00 Coffee break -visit poster presenters (Group 1) and sponsors

Session 3 Up-to-date treatment modalities

Chair: Adjunct Professor Hanna Mäenpää and Doctor Matti Seppälä

- 15:00 Boron Neutron Capture Therapy (BNCT)
Doctor Hanna Koivunoro, Neutron Therapeutics Finland, Helsinki, Finland
- 15:15 Tumor treating fields (TTFields)
Doctor Sara Kinhult, Lund University, Lund, Sweden
- 15:30 Protons or photons in IDH-mutated grade II and III diffuse gliomas?
Doctor Petter Brandal, The Norwegian Radium Hospital, Oslo University Hospital, Oslo, Norway
- Abstract talks
- 15:45 CCNU/temozolomide versus standard temozolomide radiochemotherapy +/- Tumor Treating Fields for patients with MGMT promotor methylated IDHwt glioblastoma. Phase 3 study
Doctor Annika Malmström, Linköping University, Linköping, Sweden
- 16:00 Triplet kinase-phosphatase targeting to overcome kinase inhibitor tolerance in brain tumor cells
Doctor Oxana Denisova, Turku Bioscience Centre, University of Turku and Åbo Akademi University, Turku, Finland
- 16:15 Orthogonal targeting of KDM6A/B and HDACs mediates potent therapeutic effects in IDH1-mutant glioma
Associate Professor Tugba Bagci-Onder, Koç University, Istanbul, Turkey
- 16:30 The DCCC Brain Tumor Center. National Research Center for Target therapy
Professor Hans Skovgaard Poulsen, The DCCC Brain Tumor Center, Copenhagen University Hospital, Copenhagen, Denmark
- 16:45 Updates from Nordic countries
Several speakers
- 17:15 Sponsor presentations by Tenboron, Cancer Foundation Finland, and Johnson&Johnson
- 17:25 Day wrap-up and discussion
- 18:00- Reception

Friday 20 May 2022

Session 4 Biomarkers in brain tumors

Chair: Professor Hans Skovgaard Poulsen and Doctor Petter Brandal

- 9:00 Longitudinal evolution of glioma in adult patients
Professor Roel Verhaak, Jackson Laboratory, Farmington, CT, USA and Amsterdam University Medical Center, Amsterdam, Netherlands
- Abstract talks
- 9:45 Integrative DNA methylation analysis of pediatric brain tumors reveals tumor type-specific developmental trajectories and epigenetic signatures of malignancy
Joonas Uusi-Mäkelä, Tampere University and Tays Cancer Center, Tampere University Hospital, Tampere, Finland
- 10:00 EGFR expression and non-methylated MGMT predicts distant recurrence in glioblastoma patients treated with standard therapy
Doctor Thomas Urup, The DCCC Brain Tumor Center, Rigshospitalet, Copenhagen, Denmark

- 10:15 Accurate classification of central nervous system tumors based on DNA methylation data from a reduced set of genomic regions
Doctor Alejandra Rodríguez Martínez, Tampere University and Tays Cancer Center, Tampere University Hospital, Tampere, Finland
- 10:30 Sponsor presentations by Orion and NanoString Technologies
- 10:40-11:00 Coffee break and visit sponsors

Session 5 Neurosurgery

Chair: Doctor Matti Seppälä and Adjunct Professor Hanna Mäenpää

- 11:00 Intra-operative monitoring in glioma surgery
Doctor Päivi Koroknay-Pal, Helsinki University Hospital, Helsinki, Finland
- 11:30 Aspects on the surgery of low grade gliomas
Professor Ole Solheim, St. Olavs Hospital, Trondheim, Norway
- 12:00 Laser ablation in neuro-oncology
Doctor Jiri Bartek, Karolinska University Hospital, Stockholm, Sweden
- Abstract talks
- 12:15 Integrated PDX analysis, single-cell profiling and computational modeling to reveal route-specific mechanisms of GBM invasion
Doctor Milena Doroszko, Uppsala University, Uppsala, Sweden
- 12:30 A Personalized BRAF Mutant Glioblastoma Model using Human ex-vivo Cortical Cultures
Junyi Zhang, University of Freiburg, Germany
- 12:45-14:00 Lunch and visit sponsors and posters
13:30-14:00 Visit poster presenters (Group 1)

Session 6 Signaling in brain tumors

Chair: Professor Jukka Westermarck and Professor Matti Nykter

- 14:00 Generation of brain cancer avatars through genome engineering of human iPSCs
Professor Frank Furnari, University of California San Diego (UCSD) and Ludwig Institute for Cancer Research, San Diego, USA
- 14:45 Novel insight into gliomas: from biology to treatment.
Adjunct professor Simone Niclou, Luxembourg Institute of Health, Luxembourg and University of Bergen, Bergen, Norway
- Abstract talks
- 15:15 Vessel co-option and glioblastoma resistance to therapy are induced by cell state transition and senescence
Doctor Giorgio Seano, Institut Curie Research Center, Paris-Orsay, France
- 15:30 Spatially resolved glioblastoma Invadome identifies neurodevelopmental pathway reprogramming and therapeutic opportunities
Doctor Vadim Le Joncour, University of Helsinki, Helsinki, Finland
- 15:45-16:15 Coffee break -visit poster presenters (Group 2) and sponsors

Session 7 Why targeted therapies fail in clinical trials?

Chair: Professor Roger Henriksson and Professor Jukka Westermarck

- 16:15 Panel discussion
Professor Frank Furnari, Adjunct Professor Simone Niclou, Professor Roel Verhaak and Professor Monika Hegi
- 17:15-17:30 Day wrap-up and discussion
- 19:00-Symposium dinner

Saturday 21 May 2022

Session 8 Brain tumor microenvironment and immunology

Chair: Adjunct Professor Kirsi Granberg and Doctor Jiri Bartek

- 9:00 Cellular plasticity and interactions within the glioma microenvironment
Doctor Itay Tirosh, Weizmann Institute of Science, Rehovot, Israel
- Abstract talks
- 9:45 Single-cell analysis of tumor-associated microglia and macrophages from human glioblastoma
Doctor Rikke Sick Andersen, Odense University Hospital, Odense, Denmark
- 10:00 Immunophenotyping reveals complex immune cell phenotypes in brain tumour microenvironment, including unreported myeloid subsets
Ismail Hermelo, Tampere University and Tays Cancer Center, Tampere University Hospital, Tampere, Finland
- 10:15-10:30 Coffee break -visit sponsors

Session 9 Patient stratification and treatment

Chair: Doctor Petter Brandal and Professor Hans Skovgaard Poulsen

- 10:30 Grade 2 and 3 IDH mutant gliomas: the state of the art in 2022
Professor Martin van den Bent, ErasmusMC Cancer Institute, Rotterdam, the Netherlands
- 11:00 Epigenetic vulnerabilities – markers and treatment opportunities
Professor Monika Hegi, Lausanne University Hospital and University of Lausanne, Lausanne, Switzerland
- Abstract talks
- 11:30 The Role of Aging in Glioblastoma
Doctor Vidhya Madapusi Ravi, University of Freiburg, Germany
- 11:45 Gliotarget: a Danish nationwide phase I/II platform trial focusing on individualized targeted treatment for newly diagnosed glioblastoma patients based on genomic profiling.
Vincent Nicolay Fougner, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark
- 12:00 -13:15 Lunch and visit sponsors and posters
12:45-13:15 Visit poster presenters (Group 2)

Session 10 Brain metastases

Chair: Professor Pirjo Laakkonen and Professor Matti Nykter

- 13:15 Strategies to challenge brain metastasis lethality in mice and human
Doctor Manuel Valiente, CNIO, Madrid, Spain
- Abstract talks
- 13:45 Brain metastases NAVIGATOR as a novel theranostic tool
Abiodun Ayo, University of Helsinki, Helsinki, Finland
- 14:00 Method for intraoperative detection of IDH mutation in gliomas with differential mobility spectrometry
Ilkka Haapala, Tampere University Hospital, Tampere, Finland
- 14:15 Closing words
*Host of the next SNOG meeting and
Adjunct professor Kirsi Granberg, President of SNOG and Chair of FiBTRA, Tampere University, Tampere, Finland*
- 14:30 End of the symposium