

Advances in Molecular Pathology (preliminary program)

Date June 21-23 2021

Location lectures: STR. 2.106 and STR. 2.112

Course organized in collaboration with the CTO program of the Utrecht Graduate School of Life Sciences

Day 1: Monday June 21, Next generation sequencing in pathology

- 09:00 Opening, and course introduction, *Dr.ir. W.W.J. de Leng* 30min
- 09:30 NGS technology: Platforms and assays to detect mutations, structural variations and translocation
Postdoc dLAB, center for molecular medicine Dr. M. Jager 45min
- 10:15 NGS in regular cancer diagnostics
Clinical Scientist in Molecular Pathology: Dr. A.M.L. Jansen 45min
- 11:00 Coffee break 15min
- 11:15 Practical session: How to analyse a NGS file and its consequences
Clinical Scientist in Molecular Pathology: Dr. A.M.L. Jansen 45min and *technician : M.H.G. Kreté* 45min
- 12:45 Lunch break 60min
- 13:45 Multidisciplinary Expert Board: Evaluation of NGS results and clinical aspects, including digital microscopy
Clinical Scientist in Molecular Pathology: Dr. A.M.L. Jansen / Pathologist: Dr. T.Q. Nguyen 45min
- 14:30 Whole genome sequencing in diagnostics
Molecular Biologist: Prof. dr.ir. E.P.J.G. Cuppen 45min
- 15:15 Tea break 15min
- 15:30 Ethical issues: Unsolicited findings and informed consent
Dr. R.H.P. Wouters, Julius Center Utrecht 30 min and *Clinical Geneticist: Dr. M.G.E.M. Ausems* 30min
- 16:30 End

Dag 2: Tuesday June 22, molecular approaches in different tumor types

- 09:00 Targeted therapy in Lung cancer
Pulmonologist in oncology: Dr. A.S.R. van Lindert 45min and *Clinical Scientist in Molecular Pathology: Dr.ir. W.W.J. de Leng* 30min
- 10:15 Coffee break 15min
- 10:30 Liquid biopsies; in lung cancer (NGS + targeted)
Clinical Chemist: Dr. D. van den Broek, AVL-NKI, Amsterdam 45min
- 11:15 Tumor mutational burden
Pulmonologist: Dr. J.A. Burgers, AVL-NKI, Amsterdam 30 min/ *Clinical Scientist in Molecular Pathology: Dr. R.W.J. Meijers* 30 min
- 12:15 Lunch 60min
- 13:15 Molecular aspects of Gastroenterology in relation to therapy + lynch
Clinical Scientist in Molecular Pathology: Dr.ir. W.W.J. de Leng 30min / *Oncologist: Prof. dr. M. Koopman* 30min
- 14:15 Molecular approaches in Hematology
Clinical laboratory geneticist: Dr.ing. E. Waanders 30min / *pathologist: Dr. R.J. Leguit* 30min.
- 15:15 Tea break 15min
- 15:30 Molecular approaches in Melanoma (titel nog te bepalen)
Pathologist: Dr. W.A.M. Blox 30 min en *Dr. K.P.M. Suijkerbuijk* 30 min.
- 16:30 End

Dag 3: Wednesday June 23, other molecular techniques

- 09:00 RNA sequencing
Clinical Scientist in Molecular Pathology in training: Dr. L.A. Kester 45 min
- 09:45 Methylation array
Clinical Scientist in Molecular Pathology: Dr.ir. W.W.J. de Leng 30 min
- 10:15 Coffee break 15min
- 10:30 Translocation and copy number variation detection by FISH
Clinical Scientist in Molecular Pathology: Dr. R.W.J. Meijers 45min
- 11:15 Cases sarcoma + nanostring –(titel nog te bepalen)
Pathologist: Dr. L.S. Hiemcke-Jiwa 30 min and *Clinical Scientist in Molecular Pathology: Dr. R.W.J. Meijers* 30 min
- 12:15 Lunch 60min
- 13:15 Molecular Pathology of Paediatric tumors
Pathologist: Dr. R.R. de Krijger 30min / *Clinical Scientist in Molecular Pathology in training: Dr. L.A. Kester* 30min
- 14:15 Tea break 15min
- 14:30 Neuro Molecular Tumor Board; case discussions.
Pathologist: Dr. A. Muhlebner 45min and *Clinical Scientist in Molecular Pathology in training: Dr. E. Driehuis* 45min
- 16:00 Course closure and evaluation, *Dr.ir. W.W.J. de Leng*
- 16:15 End