

# Advances in Molecular Pathology

Date 17 – 18 – 19 June 2019

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 17, 2019, Next generation sequencing in pathology; brain and head&neck

- 09:00 Opening, and course introduction (30min), *Dr. W. de Leng / Dr. S. Willems*
- 09:30 NGS technology: Platforms and assays to detect mutations, structural variations and translocation  
*Molecular Biologist: Dr. W.P. Kloosterman 45min*
- 10:15 NGS in regular cancer diagnostics  
*Clinical Scientist in Molecular Pathology: Dr. W. de Leng 45min*
- 11:00 Coffee break +  
Practical session: How to analyse a NGS file and its consequences  
*Clinical Scientist in Molecular Pathology: Dr. J.W.J. Hinrichs and Clinical Scientist in Molecular Pathology in training : Dr. A.M.L. Jansen / Senior technician NGS Pathology Dr. P.J.P. de Vree*
- 13:00 Lunch break
- 14:00 Multidisciplinary Expert Board: Evaluation of NGS results and clinical aspects, including digital microscopy  
*Clinical Scientist in Molecular Pathology: Dr. J.W.J. Hinrichs / Pathologist: Dr. T.Q. Nguyen 45min*
- 15:00 Brain tumors (MGMT hypermeth/FGFR ampl)  
*Clinician: Dr. F.Y.F.L. de Vos 30min / Pathologist: Prof. Dr. P. Wesseling 30min*
- 16:00 Tea break
- 16:15 Head and Neck Cancer new developments for therapy  
*Clinician: Dr. L. Devriese 30min / Pathologist (Molecular): Dr. S.M. Willems 30min*
- 17:15 End

## Dag 2: Tuesday June 18, 2019, Ethical issues; Colorectal, mamma, pediatric and hematology

- 09:00 Whole genome sequencing in diagnostics *Molecular Biologist: Prof. Dr. E.P.J.G. Cuppen 45min*
- 09:45 Molecular Pathology of Paediatric tumors (Neuroblastoma)  
*Pathologist: Dr. R.R. de Krijger 30min / Molecular Biologist: Dr. J.J. Molenaar 30min*
- 10:45 Coffee break
- 11:00 Molecular approaches in Hematology  
*Clinical laboratory geneticist: E. Waanders 30min / Hematologist: Dr. A. van Rhenen 30min*
- 12:00 Ethical issues: Unsolicited findings and informed consent  
*Dr. R.H.P. Wouters, Julius Center Utrecht 60 min*
- 13:00 Lunch
- 13:45 Molecular aspects of Gastroenterology in relation to therapy  
*Pathologist: Dr. M.M. Laclé 30min / Oncologist: Prof.dr. M. Koopman or Dr. J.M.L. Roodhart 30min*
- 14:45 Germline vs somatic alterations  
*Clinical Geneticist: Dr. M.G.E.M. Ausems 30min / Clinical Scientist in Molecular Pathology: Dr. W. de Leng 30min*
- 15:45 Tea break
- 16:00 Mamma pathology  
*Pathologist: Drs. M. de Boer (multihead, dept. Of Pathology) 30min*
- 16:30 Practical session: microscopy of Mamma carcinoma  
*Pathologist: Drs. M. de Boer (multihead, dept. Of Pathology) 30min*
- 17:00 End

## Dag 3: Wednesday June 19, 2019, FISH analysis in pathology; lung oncology

- 09:00 Targeted therapy in Lung cancer  
*Pulmonologist in oncology: Dr. A.S.R. van Lindert 45min / Clinical Scientist in Molecular Pathology in training : Dr. A.M.L. Jansen 45min*
- 10:30 Pathology diagnostics by FISH (translocations and copy number variations)  
*Clinical Scientist in Molecular Pathology in training: Dr. R.W.J. Meijers 45min*
- 11:15 Coffee break
- 11:30 Practical session: FISH cases. *Dr. R.W.J. Meijers / T. Peeters 90min*
- 13:00 Lunch
- 14:00 Multidisciplinary Expert Board: FISH interpretation, including digital microscopy (*Multihead, dept. of Pathology*)  
*Dr. S.M. Willems / T. Peeters 45min*
- 14:45 Liquid biopsies; in lung cancer (NGS + targeted)  
*Clinical Chemist: Dr. D. van den Broek, AVL-NKI, Amsterdam 60min*
- 15:45 Tea break
- 16:00 Tumor mutational burden  
*Pulmonologist: Dr. J.A. Burgers, AVL-NKI, Amsterdam 30 min/ Clinical Scientist in Molecular Pathology in training: Dr. A.M.L. Jansen 30min*
- 17:00 Course closure and evaluation, *Dr. W. de Leng / Dr. S. Willems*
- 17:15 End