

Coarse Micro-array and DNA-chip-technology

Monday April 19 2010

Array-technology

Theme: Introduction, background and applications of array-technology

General introduction array technology; array types (chips and micro-arrays), array probes, array production, array applications	Dr. J.T. den Dunnen (Human and Clinical Genetics, LUMC, Leiden)
Think before you start Sample preparation, work plan and quality control	Mevr. Dr. J.M. Boer (Human and Clinical Genetics, LUMC, Leiden)
Methods for target amplification and labelling	Dr. P.A.C. 't Hoen (Human and Clinical Genetics, LUMC, Leiden)
Applications of array technology - an overview; gene expression profiling, SNP-typing, Copy Number Variation (arrayCGH), tiling arrays, promoter arrays, etc.	Mevr. Dr. J.M. Boer (Human and Clinical Genetics, LUMC, Leiden)
From array scan to data (1); normalisation, error correction and quality control	Dr. P.A.C. 't Hoen (Human and Clinical Genetics, LUMC, Leiden)
Questions & discussion	Dr. P.A.C. 't Hoen; dr. J.T. den Dunnen mevr. dr. J.M Boer (Human and Clinical Genetics, LUMC, Leiden);

Coarse Micro-array and DNA-chip-technology

Tuesday April 20 2010

Theme: Methods of Data Analysis

From scan to data (2); analyzing array data using different methods - basic statistical models (incl. time series).	Dr. P.A.C. 't Hoen (Human and Clinical Genetics, LUMC, Leiden)
Short survey of clustering array data	Prof. dr. ir. M.J.T. Reinders (Faculty of Electrical Engineering, Mathematics and Computer Science; Delft University of Technology; Delft)
Arrays for identification of micro-organisms	Dhr. F.Schuren (TNO Defensie en Veiligheid, Rijswijk)
Expression profiling using whole-genome exon arrays	Mevr. dr. J. Peeters (Bioinformatics; UMC Rotterdam)
Platform comparisons and meta-analysis	Dr. P.A.C. 't Hoen (Human and Clinical Genetics, LUMC, Leiden)
Array CGH and CNV analysis	Dhr.J.Oosting(Human and Clinical Genetics, LUMC, Leiden)

Coarse Micro-array and DNA-chip-technology

Wednesday April 21 2010

Theme: Applications and Future

Large-scale whole genome SNP typing; the Rotterdam study	Mw.dr.J.B.J. van Meurs (dept. internal medicine, Erasmus MC, Rotterdam)
CNV: SNP arrays versus arrayCHG	Dr.C.A.L.Ruivenkamp (LUMC, Centre for human and clinical Genetics,Leiden)
Genome-wide analysis of methylation using array technology	Dr. C. Tensen (dept dermatology, LUMC; Leiden)
Kinome profiling using peptide arrays	Dr. S.H. Diks (Immunology Division, RU Groningen)
Next generation sequencing: Will arrays survive?!	Dr. J.T. den Dunnen (Human and Clinical Genetics, LUMC, Leiden)
Concluding remarks and drinks	Dr. J.T. den Dunnen (Human and Clinical Genetics, LUMC, Leiden)