

EUROPEAN MEETING ON MOLECULAR DIAGNOSTICS

2nd – 4th October, 2013 in the Kurhaus Hotel, Scheveningen,
the Netherlands

Wednesday October 2nd, 2013

08:30 - 10:00 Company sponsored satellite meeting by Curetis AG / Mediphos Medical Supplies
Molecular microbiology - the future of infectious diseases testing?
Room: Adama Zijlstra 1&2
(for more information see page 122 & 123)

10:00 - 10:15

Opening EEMD 2013

(All plenary sessions will take place in the Jacob Pronk Hall)

Session 1 10:15 - 14:00

MOLECULAR DIAGNOSTICS IN CLINICAL MICROBIOLOGY

Chair: Prof. Paul. Savelkoul & Prof. Jerome Bibette

10:15 - 11:00 **Keynote: *Bacterial Growth in Droplets : Phenotypic Diversity and Antibiotic inhibition***

Prof. Dr. Jérôme Bibette

Laboratoire Colloïdes et Matériaux divisés, ESPCI Paris Tech, PARIS, France

11:00 - 11:15 ***Metagenomic molecular determination of antibiotic resistance: unravelling changes in the resistome of travellers***

Petra Wolffs, Christian Von Wintersdorff, P. Savelkoul, E.E. Stobberingh,
John Penders

Maastricht University Medical Center, MAASTRICHT, the Netherlands

11:15 - 11:30 ***Reduction in Overall Hospital Cost and Improvement in Patient Management by utilizing GeneXpert® System for C.difficile infection***

Erminia Casari, Antonella Ferrario, Concetta De Luca, Calabro Maria,
Michele Lagioia

Instituto Clinco Humanitus, MILAN, Italy

11:30 - 11:45 ***Broad-Range PCR Monitoring of Bacteremia in Patients Supported by Extracorporeal Membrane Oxygenation***

Michael G. Lorenz¹, Peter Orszag², Claudia Disqué¹, Sonja Keim¹, Axel Haverich²,
Christian Kühn²

¹Molzym GmbH & Co. KG, BREMEN, Germany

²Medizinische Hochschule Hannover (HTTG), HANNOVER, Germany

11:45 - 12:00 ***Detection of sixteen diarrhea-causing bacteria, virus and parasites using multiplexed in-house real-time PCR***

Peter Nilsson¹, Sandra Kazemi², Christoffer Lindsten¹, Malin Karlsson¹,
Arne Kötzt¹

¹Halmstad County Hospital, HALMSTAD, Sweden

²Devyser AB, STOCKHOLM, Sweden

12:00 - 12:15 ***Detection of various carbapenemase resistance genes by real-time PCR and melt-curve analysis on the BD MAX platform***

Alexander Dalpke¹, M.Hofko¹, A.Mischnik¹, M.Kaase², S.Zimmermann¹

¹University Hospital Heidelberg, HEIDELBERG, Germany

²National Reference Laboratory for multidrug-resistant
gram-negative bacteria, BOCHUM, Germany

12:15 - 12:30 ***Multi-target PCR should be rule***

Anne phd Vankeerberghen, Deborah apr. Steensels, Dr. Hans De Beenhouwer, OLV
Hospital Aalst, AALST, Belgium

Lunch + Posters 12:30 - 14:00

(lunch will be served in the exhibition space)

Session 2 14:00 – 17:00
MOLECULAR DIAGNOSTICS IN CLINICAL GENETICS AND PATHOLOGY

Chair: Dr. Adriaan van den Brule & Prof. Dr. Richard Sinke & Prof. Dr. Andreas Jung

14:00 - 14:45 **Keynote: *Next generation diagnostics in clinical genetics***
Prof. Dr. Richard Sinke
Faculteit Medische Wetenschappen UMCG, GRONINGEN, the Netherlands

14:45 - 15:30 **Keynote: *Molecular Pathology of Colorectal Cancer applying Next Generation Sequencing***
Prof. Dr. Andreas Jung
Pathologisches Institut der Universität München, LMU, MÜNCHEN, Germany

15:30 - 15:45 **Optimisation of an in-house multiplex real-time PCR for the simultaneous detection of 3 major mutations in the hemochromatosis (HFE) gene on the Rotor Gene Q**
Ben Vanmassenhove, Gudrun Alliet
AZ Damiaan, OOSTENDE, Belgium

15:45 - 16:00 **CLART® CMA- KRAS•BRAF•PI3K: A NEW DIAGNOSTIC KIT TO DETECT POINT MUTATIONS IN COLORRECTAL CANCER PATIENTS.**
Juan Moscoso del Prado¹, Nuria Manjón¹, Ana Isabel Moraga¹, José Luis Rodríguez-Peralto², Javier Hernández³, Enrique Ochoa de Aranda⁴, Rosario Cospedal¹, M^a Luisa Villahermosa¹
¹Genomica, COSLADA, Spain
²Pathological Anatomy Service. Hospital Doce de Octubre, MADRID, Spain
³Molecular Biology Laboratory. Pathological Anatomy Service, Hospital Universitar, BARCELONA, Spain
⁴Molecular Biopathology Laboratory. Hospital Provincial de Castellón, CASTELLÓN, Spain

16:00 – 17:00 Member meeting VMDG (invited members only)
Adama Zijlstra zaal

Welcome reception at La Galleria 17:30 – 19:00 (reception only, dinner will be at own expense)
(for address information see abstract book page nr. 117)

Thursday October 3rd, 2013

07:15 - 8:45 Company sponsored satellite meeting by Focus Diagnostics
Sample to Answer Testing for infectious diseases with Simplexa™ Molecular Products on the 3M Integrated Cyclor
Room: Adama Zijlstra 1&2
(for more information see page 122 & 123 of the abstract book)

Session 3 09:00 – 11:00
MOLECULAR DIAGNOSTICS IN CLINICAL CHEMISTRY / PHARMACOGENETICS

Chair: Prof. Ron van Schaik & Prof. Dr. Ingolf Cascorbi

09:00 - 9:45 **Keynote: *Challenges of Introducing Pharmacogenetics in Clinical Practice***
Prof. Dr. Ingolf Cascorbi
University Hospital Schleswig-Holstein, Institute of Experimental and Clinical Pharmacology, KIEL, Germany

09:45 - 10:30 ***Current status of routine Pharmacogenetics in The Netherlands***
Ron van Schaik
Dept. Clinical Chemistry, Erasmus MC, ROTTERDAM, the Netherlands

Coffee break + Posters 10:30 - 11:00

Session 4 11:00 – 14:00
QUALITY CONTROL IN MOLECULAR DIAGNOSTICS

Chair: Dr. Marijke Raymaekers & Prof. Dr. Els Dequeker

11:00 - 11:45 **Keynote: *title to be confirmed***
Prof. Dr. Els Dequeker
Biomedical Quality Assurance Research Unit KU Leuven, Department of Medical Diagnostics UZ LEUVEN, Belgium

11:45 - 12:00 ***Fifteen Years of External Quality Assessment of Molecular Diagnostics for Infectious Diseases: Progress and Challenges***
Anton van Loon¹, Stuart West², Caterina Di Lorenzo², Paul Wallace²
¹University Medical Centre Utrecht, UTRECHT, the Netherlands
²QCMD, GLASGOW, United Kingdom

12:00 - 12:15 ***Evaluating the ability of laboratories to identify clinically relevant bacterial strains using commercially available MALDI-TOF MS systems.***
Caterina Di Lorenzo¹, Mark Wilks², Paul Wallace¹, Anton Van Loon³
¹QCMD, GLASGOW, United Kingdom
²Barts and The London NHS Trust, LONDON, United Kingdom
³University Medical Centre Utrecht, UTRECHT, the Netherlands

Lunch + Posters 12:15 - 14:00
(lunch will be served in the Kursaal restaurant)

Session 5 14:00 – 16:00
MOLECULAR DIAGNOSTICS IN VIROLOGY

Chair: Dr. Suzie Coughlan & Prof. Dr. Paul Kellam

14:00 - 14:45 **Keynote: *Virus genome deep sequencing, a disruptive technology for clinical virology***
Prof. Dr. Paul Kellam
Welcome Trust Sanger Institute, HINXTON, United Kingdom

14:45 - 15:00 ***Detection of 6 gastro-enteritis viruses in a university hospital in the Netherlands by routine performance of multiplex real-time PCR for a period of more than 5 years.***
E. Wessels, J.J.C. De Vries, E.C.J. Claas
LUMC, LEIDEN, the Netherlands

- 15:00 - 15:15 **Laboratory diagnosis of infectious uveitis; complementarity of PCR and detection of intraocular antibody production.**
Jolanda de Groot¹, Annabel Groot, Claire Pennekamp, Joke de Boer, Rob Schuurman, Annemarie Wensing, Anton van Loon
 UMCU, UTRECHT, the Netherlands
- 15:15 - 15:30 **A Pragmatic Approach to HIV-1 Drug Resistance Determination in Resource-Limited Settings using a Novel RT-only Genotyping Assay**
 Rob Schuurman¹, Susan Aiken¹, Michelle Bronze², Carole Wallis³, Lieven Stuyver⁴, Kim Steegen², Sheila Balinda⁵, Cissy Kityo⁵, Wendy Stevens², Tobias Rinke de Wit⁶
¹University Medical Center Utrecht, UTRECHT, the Netherlands
²University of the Witwatersrand, JOHANNESBURG, South Africa
³Lancet Laboratories, JOHANNESBURG, South Africa
⁴Janssen Diagnostics BVBA, BEERSE, Belgium
⁵Joint Clinical Research Centre, KAMPALA, Uganda
⁶Amsterdam Institute for Global Health and Development, AMSTERDAM, the Netherlands
- 15:30 - 15:45 **COMPARISON OF THE REALTIME HIGH RISK HPVTEST, HYBRID CAPTURE II AND GP 5+/6+ HR-HPV PCR ON SUREPATH CYTOLOGY SCRAPES**
Paul Smits¹, Adriaan van den Brule², A Heijne-Tol¹, Ilse de Vrije², M Bussemaker¹, R Bakker¹, J van der Linden², J Westerga¹
¹Slotervaart Hospital, AMSTERDAM, the Netherlands
²Jeroen Bosch Hospital, DEN BOSCH, the Netherlands
- 15:45 - 16:00 **Detection of 20 HPV types by PapillomaFinder SMART 20 assay**
Jessica Ossel¹, Martin Reijans¹, Rogier Litjens², Monique Ummelen², Anton Hopman², Guus Simons¹
¹PathoFinder BV, MAASTRICHT, the Netherlands
²Maastricht University, MAASTRICHT, the Netherlands

Poster session 16:00 - 18:30
POSTER SESSION PLUS INFORMAL GATHERING
 (drinks & finger food included, Mesdag room 1 & 2, Kandinsky restaurant)

Conference dinner at Crazy Piano's 19:00
 (for address information see abstract book page nr.117)

Friday October 4th 2013

07:15 8:45 Company sponsored satellite meeting by Cepheid Benelux
Impact of Rapid Molecular Diagnostics on Healthcare
Room: Adama Zijlstra 1&2
(for more information see page 122 & 123 of the abstract book)

Session 6 09:00 – 11:00
AUTOMATION & STANDARDISATION IN MOLECULAR DIAGNOSTICS

Chair: Dr. Caterina Di Lorenzo & Ms. Clare Morris

09:00 - 09:45 **Keynote: *International Standards for Infectious Disease***
Ms. Clare Morris
National Institute for Biological Standards and Control, HERTFORDSHIRE, United Kingdom

09:45 - 10:00 ***The FlowG Middleware solution: evolving to perfection***
Jeroen Poodt¹, Fons Klijn², Bert Niesters²
¹LabHelp, BLADEL, the Netherlands
²Department of Medical Microbiology, Division of Clinical Virology UMC Groningen, GRONINGEN, the Netherlands

10:00 - 10:15 ***BRAF V600 mutation testing on FFPE samples using a novel fully integrated molecular diagnostics platform shows excellent concordance with deep sequencing***
Bart Claes¹, Benoit Devogelaere¹, Koen Van Acker¹, Inky De Baere¹, Pascale Holemans¹, Tania Ivens¹, Evelien Rondelez¹, Geneviève Vandercruyssen¹, Mark Kockx², Isabelle Vanden Bempt², Ina Vandenbroucke¹, Geert Maertens¹, Erwin Sablon¹
¹Biocartis NV, MECHELEN, Belgium
²HistoGeneX NV, BERCHEM, Belgium

10:15 - 10:30 ***Applicability of the Cepheid Infinity GeneXpert Xpert Flu NG Assay in the Rapid Diagnosis of Influenza Infections.***
Jildou Wijma, Timothy Schuurman, Sevgim Ugurlu, Hubert Niesters
University Medical Center Groningen, GRONINGEN, the Netherlands

Coffee break + Posters 10:30 – 11:00

Session 7 11:00 – 13:30
MOLECULAR DIAGNOSTICS IN PATHOLOGY

Chair: Dr. Winand Dinjens & Prof. Dr. George I. Mias

11:00 - 11:45 **Keynote: *Integrating Dynamic Omics into Personalized Medicine***
Prof. Dr. George I. Mias
Snyder Lab, dept. of Genetics, CA, United States of America

11:45 - 12:00 ***A comparison of KRAS and EGFR mutation analysis on different detection platforms***
John Hinrichs, Marja Van Blokland, Michiel Moons, Remco Radersma, Joyce Radersma-van Loon, Carmen De Voijs, Sophie Rappel, Marco Koudijs, Nicolle Besselink, Stefan Willems, Roel De Weger
UMC Utrecht, UTRECHT, the Netherlands

12:00 - 12:15 ***Frequency of EGFR-mutations in patients with non-small cell lung cancer in Belgium***
Matthijs Oyaert¹, Matthijs Oyaert², Joke Breyne², Elke Boone², Jo Van Dorpe³, Ingel Demedts⁴, KOKSIJDE, Belgium
²Department of Molecular Diagnostics, AZ Delta Roeselare Menen, ROESELARE, Belgium
³Department of Pathology, AZ Delta Roeselare Menen, ROESELARE, Belgium
⁴Department of Pneumology, AZ Delta Roeselare Menen, ROESELARE, Belgium

12:15 - 12:30 ***Viral and host microRNAs in human papillomavirus associated diseases***
Eeva Auvinen¹, Kui Qian², Tuuli Pietilä², Dario Greco³, Petri Auvinen²
¹Helsinki University Hospital Laboratory, HUS HELSINKI, Finland
²University of Helsinki, Institute of Biotechnology, HELSINKI, Finland
³Finnish Institute of Occupational Health, HELSINKI, Finland

Lunch & Posters **12:30 – 13:30**
(lunch will be served in the exhibition space)

Session 8 13:30 – 15:00
NEW TECHNOLOGIES IN MOLECULAR DIAGNOSTICS

Chair: Prof. Paul Savelkoul & Dr. Richard Molenkamp

13:30 - 14:15 ***Keynote: Labs-on-a-Chip for medical applications***
Prof. Dr. Ir. Albert van den Berg
BIOS/Lab on a Chip group, MESA+ Institute for Nanotechnology, University of Twente, the Netherlands

14:15 - 14:30 ***Clinical evaluation of a novel method for enrichment of pathogen DNA from large volumes of blood***
MP Bos¹, Bart Van Meerbergen², Anna Rubenjan¹, Sarah Berghmans², Geert Maertens², Paul Savelkoul³
¹Microbiome, AMSTERDAM, the Netherlands
²Biocartis, MECHELEN, Belgium
³VU Medical Center, AMSTERDAM, the Netherlands

14:30 - 14:45 ***Integrated purification and enrichment of nucleic acids for rapid point-of-care diagnostics***
Marlieke Overdijk, Toon Evers, MWJ Prins, RC Den Dulk, KA Schmidt, S Liebana
Philips, EINDHOVEN, the Netherlands

14:45 - 15:00 ***Same day sequencing for bacterial epidemiology and diagnostics.***
Graeme Doran, Alex Rolfe, Thomas Clarke
Pathogenica, BOSTON, United States of America

15:00 - 15:15 Closure of the Meeting and final remarks

15:15 End of Meeting on Molecular Diagnostics