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 EMMD 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 Colloides 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 Wolfs, 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 Clinico 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 Kühn1
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, Anni Kötz1
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.Hofko2, A.Mischnik1, M.Kaase3, 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 Moraga², José Luis Rodríguez-Peralto², Javier Hernández³, Enrique Ochoa de Aranda³, Rosario Cospedal¹, Mª Luisa Villahermosa¹  
¹Genomica, COSLADA, Spain  
²Pathological Anatomy Service. Hospital Doce de Octubre, MADRID, Spain  
³Molecular Biology Laboratory. Pathological Anatomy Service, Hospital Universitari, 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 Cycler*  
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**  
Prof. 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:**  
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 Groot, 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 Schuurman, Susan Aiken, Michelle Bronze, Carole Wallis, Lieven Stuyver, Kim Steegen, Sheila Balinda, Cissy Kityo, Wendy Stevens, Tobias Rinke de Wit  
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 HPV TEST, HYBRID CAPTURE II AND GP 5+/6+ HR-HPV PCR ON SUREPATH CYTOLOGY SCRAPES**  
Paul Smits, Adriaan van den Brule, A Heijne-Tol, Ilse de Vrije, M Bussemaker, R Bakker, J van der Linden, J Westerga  
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 Ossel, Martin Reijans, Rogier Litjens, Monique Ummelen, Anton Hopman, Guus Simons  
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 Vanderhuyzen², Mark Köck², Isabelle Vanden Bempt²,
  Ina Vandenbroucke¹, Geert Maertens¹, Erwin Sablon²
  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 Nieters
  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 Vojis, 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 Breynœ², Elke Boone², Jo Van Dorpe³, Ingel Demedts³,
  KOKSIJDE, Belgium
  ²Department of Molecular Diagnostics, AZ Delta Roeselare Menen, ROESELARE, Belgium
  ³Department of Pathology, AZ Delta Roeselare Menen, ROESELARE, Belgium
12:15 - 12:30  
**Viral and host microRNAs in human papillomavirus associated diseases**  
Eeva Auvinen¹, Kui Qian¹, 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