Wednesday October 14, 2015

8:30 – 10:00  
Company sponsored satellite symposium: Mediphos Medical Supplies BV  
Subject: “Molecular Challenges, Solutions and Interpretations in diagnosing gastroenteritis”  
Location: Margriet, Irene and Christina Salon, Ground floor  
Website link: registered satellite meetings

10:15 – 10:20  
OPENING EMMD 2015  
(All plenary sessions will take place in the Pické rooms 2&3)

Session 1A:  
10:20 – 12:00  
MOLECULAR DIAGNOSTICS IN INFECTIOUS DISEASES

Chairs:  
Dr. S. Coughlan & Prof. M. Eloit

10:20 – 11:00  
Keynote: The diagnostic of infectious diseases by Whole-Genome Next Generation Sequencing  
Prof. Marc Eloit  
Institut Pasteur, Pathogen Discovery Laboratory, Paris, France  
Abstract number: 85

11:00 – 11:15  
Clinical metagenomics: a new paradigm for the diagnosis of infectious diseases?  
Etienne Ruppe, Damien Baud, Stéphane Schicklin, Emmanuelle Santiago-Allexant, Ghislaine Guigon, Jacques Schrenzel  
HOPITAUX UNIVERSITAIRES DE GENEVE, GENEVE, Switzerland  
Abstract number: 55

11:15 – 11:30  
PACBIO SEQUENCING OF THE GENETIC DIVERSITY OF THE HEPATITIS C VIRUS ENVELOPE REGION: FROM EARLY ACUTE TO CHRONIC INFECTION  
Richard Molenkamp, Cynthia Ho, Jayna Raghwani, Sylvie Koekkoek, Menno de Jong, Oliver Pybus, Janke Schinkel  
AMC, AMSTERDAM, Netherlands  
Abstract number: 4

11:30 – 11:45  
Comparison of diagnostic and bioinformatics real-time PCR assays for detection of human astroviruses  
Roel Nijhuis, Igor Sidorov, Anastasia Gulyaeva, Sasha Gorbalenya, Eric Claas  
LUMC, LEIDEN, Nederland  
Abstract number: 50

11:45 – 12:00  
Comparison of digital PCR platforms and semi-nested qPCR as a tool to determine the size of the HIV reservoir  
Kobus Bosman, Monique Nijhuis, Petra van Ham, Annemarie Wensing, Karen Vervisch, Linos Vandekerckhove, Ward De Spiegelaere  
UMC Utrecht, UTRECHT, Netherlands  
Abstract number: 38

12:00 – 13:15  
LUNCH  
(lunch will be served in the exhibition & poster area, posters can be viewed during lunch)
Wednesday October 14, 2015

Session 1B: 13:15 – 14:40
MOLECULAR DIAGNOSTICS IN INFECTIOUS DISEASES

Chairs: Dr. R.L. Hodinka & Dr. S. Pas

13:15 – 13:55 Keynote: The Miniaturization of Molecular Technologies for Infectious Disease Testing
Dr. Richard. L. Hodinka
University of South Caroline school of Medicine, Greenville, USA
Abstract number: 87

13:55 – 14:10 Hand-held Point-of-Care Test Device for the Rapid Detection of Infectious Diseases
James Mahony, Christopher Stone
McMaster University, HAMILTON, Canada
Abstract number: 40

14:10 – 14:25 Highly multiplexed assay for detection of antimicrobial resistance using PASS MNAzyme qPCR: Mycoplasma genitalium and macrolide resistance
Elisa Mokany, Lit Yeen Tan, Samantha Walker, Marin Poljak, J Twin, Suzanne Garland, Catriona Bradshaw, Christopher Fairley, Sepehr Tabrizi
SpeeDx Pty Ltd, EVELEIGH, Australia
Abstract number: 47

14:25 – 14:40 Micelle PCR reduces artifact formation during 16S rRNA microbiota profiling
R Jansen, Stefan Boers, John Hays
Streeklab Haarlem, HAARLEM, Netherlands
Abstract number: 17

14:40 – 15:10 COFFEE/TEA BREAK
(will be served in the exhibition & poster area, posters can be viewed during the break)
Wednesday October 14, 2015

Session 2:  
15:10 – 17:15  
MOLECULAR DIAGNOSTICS IN ONCOLOGY: diagnostics and therapy monitoring

Chairs:  
Prof. dr. EJ Speel & Prof. dr. R. Büttner

15:10 – 15:50  
Keynote 1: **Experiences from the Network of Genomic Medicine (NGM)**  
Prof. dr. Reinhard Büttner  
Institute of Pathology, Medical Clinic I, Cologne University Hospital and Center for Integrated Oncology (CIO), Cologne-Germany  
Abstract number: 81

15:50 – 16:30  
Keynote 2: **RNA-seq of tumor-educated platelets enables blood-based pan-cancer, multiclass and molecular pathway cancer diagnostics**  
Prof. dr. Tom Würdinger  
Dept of Oncology, VU Medical Center / Cancer Center Amsterdam  
Abstract number: 80

16:30 – 16:45  
**BRAF and KRAS are not mutually exclusive: next generation sequencing reveals two cases of concomitant KRAS and BRAF mutation in metastatic colorectal cancer**  
Joke Breyne, Anneleen Vandenbussche, Emmanuel De Laere, Franceska Dedeurwaerdere  
AZ Delta Roeselare, ROESELARE, Belgium  
Abstract number: 29

16:45 – 17:00  
**EVALUATION OF THE IDYLLA BRAF MUTATION ASSAY PERFORMANCE USING THE NOVEL FULLY-AUTOMATED IDYLLA SYSTEM ON FORMALIN-FIXED PARAFIN EMBEDDED MELANOMA SAMPLES & COLORECTAL CANCER SAMPLES**  
Isabel Micalessi, J Frans, V Noten, I Van Hee, C Goris, W Wynendaele, C Bourgain, PJ Cuyle  
Imelda Hospital, BONHEIDEN, Belgium  
Abstract number: 36 / 37

17:00 – 17:15  
**Differentiation between second primary lung cancers and metastatic disease using next-generation sequencing**  
Paul Roepman, A Heuvel, ten, K Scheidel-Jacobse, DAM Heideman, GJM Herder, JA Kummer  
Pathologie DNA, NIEUWEGEIN, Nederland  
Abstract number: 57

17:15 – 18:45  
**WELCOME RECEPTION**  
(Will be served in the exhibition & poster area, posters can be viewed during the reception)
Company sponsored satellite symposium: Biocartis N.V
Subject: “Molecular diagnostics beyond simplicity. Evaluation of the novel, rapid and fully automated Idylla platform”
Location: Panorama room 7 (2nd floor)
Website link: registered satellite meetings

Session 3: 9:00 – 11:05
MOLECULAR DIAGNOSTICS IN OUTBREAK MANAGEMENT

Chairs: Dr. R. Molenkamp & Dr. M. Holden

9:00 – 9:40 Keynote 1: Whole genome sequencing as a tool for micro-epidemiological investigations, what have we learnt?
Dr. Matthew Holden, Reader in Bacterial Genomics
School of Medicine, University of St Andrews, St Andrews, Fife, UK.
Abstract number: 89

Dr. Emmie de Wit,
Laboratory of Virology, Rocky Mountain Laboratories, NIAID, NIH, Hamilton, MT, USA
Abstract number: 94

10:20 – 10:35 Evaluation of a rapid Ebola virus triage test on the Idylla™ system
Lieselotte Cnops, L HEYNDRICKX, B DE SMET, M VAN ESBROECK, D NAUWELAERS, R THIJS, G MEERSEMAN, S VAN DEN HERREWEGEN, P VAN DEN EEDE, J BADEN, N VERGAUWE, KK ARIËN
Institute of Tropical Medicine, ANTWERP, Belgium
Abstract number: 48

10:35 – 10:50 Assessing the public health benefit of defective-interfering influenza viruses
M Jonges, B Rockx, A Meijer, MPG Koopmans
National Institute for Public Health and the Environment, BILTHOVEN, Nederland
Abstract number: 46

10:50 – 11:05 Transmission of high risk K. pneumoniae clones in health care networks largely challenges the current infection prevention and control system
John Rossen, M Lokate, RH Deurenberg, M Tepper, JP Arends, GC Raangs, J Lo-Ten-Foe, H Grundmann, K Zhou, AW Friedrich
UMCG, GRONINGEN, Nederland
Abstract number: 9

11:05 – 11:35 COFFEE / TEA BREAK
(will be served in the exhibition & poster area, posters can be viewed during the break)
Thursday October 15, 2015

Session 4: 11:35 – 13:10
MOLECULAR DIAGNOSTICS IN POPULATION BASED CANCER SCREENING

Chairs: Dr. J. Bonde & Dr. S. Coughlan

11:35 – 12:15 Keynote 1: Molecular markers for detection of colorectal cancer
Prof. dr. M. van Engeland
Dept. of Pathology, GROW-School for Oncology and Developmental Biology, Maastricht University, Maastricht, The Netherlands
Abstract number: 95

12:15 – 12:55 Keynote 2: The daunting challenge of molecular HPV testing and biomarker implementation in Cervical Cancer Screening
Dr. Jesper Bonde
Molecular Pathology Lab, Hvidovre Hospital, Denmark
Abstract number: 91

12:55 – 13:10 CERVICAL CANCER SCREENING IN THE NETHERLANDS: DETERMINATION OF HPV PREVALENCE USING THREE DIFFERENT SYSTEMS.
C.J.J. Huijsmans
Jeroen Bosch Hospital, 'S-HERTOGENBOSCH, Netherlands
location Jeroen Bosch Hospital, 's-Hertogenbosch, The Netherlands;
Abstract number: 13

13:10 – 14:40 LUNCH + POSTER SESSION (poster presenters will be at their posters)
(lunch will be served in the exhibition & poster area, posters can be viewed during lunch)
Thursday October 15, 2015

Session 5A  14:40 – 15:50
STANDARDISATION AND QUALITY CONTROL IN MOLECULAR DIAGNOSTICS

Chairs:  Dr. M. Raymaekers & Dr. M. Madej

14:40 – 15:20  Keynote:  Assuring quality patient testing: Standardization challenges in new and rapidly evolving molecular diagnostics
Dr. Roberta M. Madej
QCMD, Glasgow, Scotland.
Abstract number: 88

15:20 – 15:35  Improvement of diagnostic method validation processes in a Finnish hospital laboratory using lean methods and a software solution
Tommi Hirvonen, Akseli Virtanen, Laura Mannonen, Raisa Loginov, Maija Lappalainen
Finbiosoft, Espoo, Finland
Abstract number: 58

15:35 – 15:50  Multicenter performance evaluation of BRCA MASTR, CFTR MASTR and FMF MASTR on Roche 454 and Illumina MiSeq® massively parallel sequencing platforms
Jurgen Del Favero
Noor Remmerie, Sarah Berwouts, Martine Goergen, Jurgen Del-Favero
Multiplicom N.V., Niel, Belgium
Abstract number: 66

15:50 – 16:20  COFFEE / TEA BREAK (will be served in the exhibition & poster area, posters can be viewed during the break)

Session 5B  16:20 – 17:15
STANDARDISATION AND QUALITY CONTROL IN MOLECULAR DIAGNOSTICS

Chairs:  Dr. M. Raymaekers & Dr. M. Madej

16:20 – 17:00  Keynote:  NGS data analysis, quality aspects for diagnostics
Dr. Marc Noguera Julian
IrsiCaixa – AIDS research Institute, Hospital Universitari Germans Trias i Pujol, Badalona, Catalonia, Spain.
Abstract number: 82

17:00 – 17:15  Five years of experience with ISO 15189 accreditation in Belgian molecular diagnostics laboratories. Presented on behalf of MolecularDiagnostics.be
M Raymaekers, Dr. sc. Philippe Van Lint, L Cnops, B Vanmassenhove, J Gras, K Vandepoele, A Vankeerberghen, F Vaeyens, P Descheemaeker, P Van Lint
Jessa Hospital, HASSELT, Belgium & AZ Damián, OOSTEND, Belgium
Abstract number: 67

17:15 – 18:30  VMDG and other working groups meetings

19:00 – 22:00  CONFERENCE DINNER
(Location: Restaurant Bries Noordwijk, Koningin Astrid Boulevard 102)
Friday October 16, 2015

7:15 – 8:45  Company sponsored satellite symposium: Cepheid Benelux
Subject: “Redefining molecular norm”
Location: Panorama room 7 (2nd floor)
Website link: registered satellite meetings

Session 6:  9:00 – 9:55
MOLECULAR DIAGNOSTICS IN CHRONIC DISEASES
Chair: Dr. H. K. Ploos van Amstel & Dr. E. Worthey

9:00 – 9:40  Keynote: What clinically useful information can whole genome sequencing of rare or complex disease suffering or of healthy individuals provide?
Dr. Elisabeth Worthey
Hudson Alpha Institute for Biotechnology, Huntsville, AL, USA
Abstract number: 92

9:40 – 9:55  Development of 2 multiplex real-time PCR assays for the detection of the Celiac disease related Human Leukocyte Antigens DQ2.5, DQ2.2 en DQ8
Monique Oostra, Ingrid Gotink, Janine Hulstein
Gelre hospitals, APeldoorn, Netherlands
Abstract number: 15

POSTER PITCHES: 9:55 – 10:25
Chair: Dr. S. Coughlan

10:25 – 10:55  COFFEE / TEA BREAK
(will be served in the exhibition & poster area, posters can be viewed during the break)

Session 7:  10:55 – 12:15
MOLECULAR DIAGNOSTICS IN PHARMACOGENETICS AND LABORATORY MEDICINE
Chair: Prof. dr. R. van Schaik & Dr. H.K. Ploos van Amstel

10:55 – 11:35  Keynote 1: DNA diagnostics for guiding drug therapy: latest developments at the European level
Prof. dr. Ron van Schaik
Dept. Clinical Chemistry, International Expertcenter Pharmacogenetics, Erasmus MC, Rotterdam, the Netherlands
Abstract number: 86

11:35 – 12:15  Keynote 2: Pharmacogenomic and epigenomic biomarkers for predicting interindividual differences in drug metabolism and response
Prof. dr. Magnus Ingelman-Sundberg
Department of Physiology and Pharmacology, Karolinska Institutet, SE-171 77 Stockholm, Sweden
Abstract number: 83

12:15 – 13:30  LUNCH + POSTERS
(Lunch will be served in the exhibition & poster area, posters can be viewed during lunch)
Friday October 16, 2015

Session 8: 13:30 – 16:35
FUTURE DIAGNOSTIC TECHNOLOGIES

Chairs: Prof. dr. P. Savelkoul & Prof. dr. ir. A. van den Berg

13:30 – 14:10 Keynote 1: 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
Abstract number: 79

14:10 – 14:50 Keynote 2: Differential amplicons (ΔAmp) - a new method for quality assessment of RNA in Molecular Diagnostics
Mr. Jens Björkman
TATAA Biocenter AB
Abstract number: 96

Dr. Marc. P. van der Schee
Academic Medical Centre, University of Amsterdam, the Netherlands
Abstract number: 90

15:20 – 15.30 CLOSURE OF THE MEETING AND FINAL REMARKS