

PROGRAM OF THE EUROPEAN MEETING ON MOLECULAR DIAGNOSTICS 2015

Grand Hotel Huis ter Duin, Noordwijk aan Zee,
October 14 – 16, 2015

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
(see abstract book page 127)

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 Raghvani, Sylvie Koekkoek, Menno de Jong, Oliver Pybus, Janke Schinkel
AMC, AMSTERDAM, The 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, The Netherlands
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, The Netherlands
Abstract number: 38

12:00 – 13:15 LUNCH + POSTERS
(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 Carolina 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 MNzyme 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, The 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, The Netherlands
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 Vandamme, 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, The Netherlands
Abstract number: 57
- 17:15 – 19:00 **WELCOME RECEPTION**
(will be served in the exhibition & poster area, posters can be viewed during the reception)

Thursday October 15, 2015

7:15 – 8:45 *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)
(see abstract book page 128)

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

9:40 – 10:20 Keynote 2: ***EBOLA VIRUS OUTBREAK: WORKING IN A FIELD DIAGNOSTIC LABORATORY IN LIBERIA, 2014-2015***
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 Meersseman, 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, The Netherlands
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, The Netherlands
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, HVIDOVRE, 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, W.R. Geurts-Giele, C. Leeijen, E. Hazenberg, D. Mulder, J.C. van der Linden,
A.J.C. van den Brule

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 Damiaan, OSTEND, 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)

(see abstract book page 121)

Friday October 16, 2015

7:15 – 8:45 *Company sponsored satellite symposium: **Cepheid Benelux***
Subject: "Redefining molecular norm"
Location: Panorama room 7 (2nd floor)
(see abstract book page 129)

Session 6: 9:00 – 9:55
MOLECULAR DIAGNOSTICS IN CHRONIC DISEASES

Chairs: 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 Humaan Leukocyte Antigens DQ2.5, DQ2.2 en DQ8***
Monique Oostru, Ingrid Gotink, Janine Hulstein
Gelre hospitals, APELDOORN, The Netherlands
Abstract number: 15

9:55 – 10:25 POSTER PITCHES:
Presented by: 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

Chairs: 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, 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,
ENSCHEDE, The Netherlands
Abstract number: 79
- 14:10 – 14:50 Keynote 2: ***DIFFERENTIAL AMPLICONS (Δ AMP) - A NEW METHOD FOR QUALITY ASSESSMENT OF RNA IN MOLECULAR DIAGNOSTICS***
Mr. Jens Björkman
TATAA Biocenter AB, GÖTEBORG, Sweden
Abstract number: 96
- 14:50 – 15:20 ***Analysis of volatile metabolites for disease diagnosis, phenotyping and prognosis.***
Dr. Marc. P. van der Schee
Academic Medical Centre, University of Amsterdam, AMSTERDAM, The Netherlands
Abstract number: 90
- 15:20 – 15.30 CLOSURE OF THE MEETING AND FINAL REMARKS**