Poster Presentations

qPCR & NGS 2015
7th international qPCR & NGS Symposium
Industrial Exhibition & Application Workshops

“Advanced Molecular Diagnostics for Biomarker Discovery”

Scientific coordination: Michael W. Pfaffl
Physiology, Freising – Weihenstephan
TUM School of Life Sciences
Weihenstephaner Berg 3
Technical University Munich (TUM)
85354 Freising
Germany

www.qPCR-NGS-2015.net
<table>
<thead>
<tr>
<th>Time</th>
<th>Sunday 22nd March</th>
<th>Monday 23rd March</th>
<th>Tuesday 24th March</th>
<th>Wednesday 25th March</th>
<th>Thursday 26th March</th>
<th>Friday 27th March</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lecture Hall no. 14 (HS 14)</td>
<td>Lecture Hall no. 15 (HS 15)</td>
<td>Foyer &amp; Seminar Rooms S1 &amp; S2</td>
<td>Lecture Hall no. 14 (HS 14)</td>
<td>Lecture Hall no. 15 (HS 15)</td>
<td>Lecture Hall no. 14 (HS 15)</td>
</tr>
<tr>
<td></td>
<td>12:00 – 18:00 Industrial Exhibition Built up</td>
<td>8:00 – 10:00 Arrival &amp; Registration</td>
<td>10:00 – 21:00 Industrial Exhibition in Foyer</td>
<td>12:30 – 14:00 Lunch</td>
<td>12:30 – 14:00 Lunch Poster Session in Foyer</td>
<td>12:30 – 14:00 Lunch Poster Session in Foyer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
<td></td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
</tr>
<tr>
<td>10:00 – 10:30</td>
<td>Opening of the Symposium Welcome by Michael W. Pfaff</td>
<td>10:30 – 12:30</td>
<td>12:30 – 14:00 Lunch</td>
<td>12:30 – 14:00 Lunch</td>
<td>12:30 – 14:00 Lunch</td>
<td>12:30 – 14:00 Lunch</td>
</tr>
<tr>
<td>10:30 – 12:30</td>
<td>Adv. Molecular Diagnostics 1</td>
<td>12:30 – 14:00 Lunch</td>
<td>13:00 – 14:00 Life Technologies: Lunch-time seminars</td>
<td>12:30 – 14:00 Lunch</td>
<td>13:45 – 14:00 BDQ Poster Awards in HS 15</td>
<td>12:30 – 14:00 Lunch</td>
</tr>
<tr>
<td>14:00 – 18:00</td>
<td>Adv. Molecular Diagnostics 2</td>
<td>14:00 – 18:00 Next Generation Sequencing 1</td>
<td>14:00 – 18:30 Biomarker Discovery &amp; Circulating Nucleic Acids</td>
<td>14:00 – 18:00 Lunch</td>
<td>14:00 – 18:00 Molecular Diagnostics</td>
<td>14:00 – 17:00 Poster Take Down</td>
</tr>
<tr>
<td>14:00 – 18:00</td>
<td>Next Generation Sequencing 1</td>
<td>14:00 – 18:00 Lunch</td>
<td>12:30 – 14:00 Lunch</td>
<td>14:00 – 18:00 Lunch</td>
<td>14:00 – 17:00 Poster Take Down</td>
<td>14:00 – 17:00 Poster Take Down</td>
</tr>
<tr>
<td>18:00 – 22:00</td>
<td>Evening Poster Session</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
<td>18:00 – 22:00 Evening Poster Session in Foyer</td>
</tr>
<tr>
<td>19:30 – 24:00</td>
<td>Symposium Gala Dinner</td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
<td>19:30 – 24:00 Symposium Gala Dinner</td>
</tr>
</tbody>
</table>

**qPCR & NGS 2015 Event Agenda Overview**

- **Monday 23rd March**
  - 10:00 – 10:30 Opening of the Symposium Welcome by Michael W. Pfaff
  - 10:30 – 12:30 Adv. Molecular Diagnostics 1
  - 12:30 – 14:00 Lunch
  - 14:00 – 18:00 Adv. Molecular Diagnostics 2

- **Tuesday 24th March**
  - 8:30 – 10:30 Digital PCR
  - 11:00 – 12:30 Life Technologies: Lunch-time seminars
  - 12:30 – 14:00 Lunch
  - 13:00 – 14:00 Agilent Technologies: Lunch-time seminars

- **Wednesday 25th March**
  - 8:30 – 12:50 Optimisation, MIQE & QC in qPCR
  - 12:30 – 14:00 Lunch
  - 12:30 – 13:00 BDQ Editors Meeting
  - 13:45 – 14:00 BDQ Poster Awards in HS 15

- **Thursday 26th March**
  - 8:30 – 12:30 qPCR BioStatistics & BioInformatics
  - 12:30 – 14:00 Lunch
  - 12:30 – 14:00 Lunch Poster Session in Foyer

- **Friday 27th March**
  - 8:30 – 14:00 Industrial Exhibition in Foyer
  - 12:30 – 14:00 Lunch
  - 14:00 – 17:00 Poster Take Down

**Event Agenda Details**

- **Sunday 22nd March**
  - Lecture Hall no. 14 (HS 14)
  - Lecture Hall no. 15 (HS 15)
  - Foyer & Seminar Rooms S1 & S2

- **Monday 23rd March**
  - 10:00 – 10:30 Opening of the Symposium Welcome by Michael W. Pfaff
  - 10:30 – 12:30 Adv. Molecular Diagnostics 1
  - 12:30 – 14:00 Lunch
  - 14:00 – 18:00 Adv. Molecular Diagnostics 2

- **Tuesday 24th March**
  - 8:30 – 10:30 Digital PCR
  - 11:00 – 12:30 Life Technologies: Lunch-time seminars
  - 12:30 – 14:00 Lunch
  - 13:00 – 14:00 Agilent Technologies: Lunch-time seminars

- **Wednesday 25th March**
  - 8:30 – 12:50 Optimisation, MIQE & QC in qPCR
  - 12:30 – 14:00 Lunch
  - 12:30 – 13:00 BDQ Editors Meeting
  - 13:45 – 14:00 BDQ Poster Awards in HS 15

- **Thursday 26th March**
  - 8:30 – 12:30 qPCR BioStatistics & BioInformatics
  - 12:30 – 14:00 Lunch
  - 12:30 – 14:00 Lunch Poster Session in Foyer

- **Friday 27th March**
  - 8:30 – 14:00 Industrial Exhibition in Foyer
  - 12:30 – 14:00 Lunch
  - 14:00 – 17:00 Poster Take Down

**Event Details**

- **Sunday 22nd March**
  - Lecture Hall no. 14 (HS 14)
  - Lecture Hall no. 15 (HS 15)
  - Foyer & Seminar Rooms S1 & S2

- **Monday 23rd March**
  - 10:00 – 10:30 Opening of the Symposium Welcome by Michael W. Pfaff
  - 10:30 – 12:30 Adv. Molecular Diagnostics 1
  - 12:30 – 14:00 Lunch
  - 14:00 – 18:00 Adv. Molecular Diagnostics 2

- **Tuesday 24th March**
  - 8:30 – 10:30 Digital PCR
  - 11:00 – 12:30 Life Technologies: Lunch-time seminars
  - 12:30 – 14:00 Lunch
  - 13:00 – 14:00 Agilent Technologies: Lunch-time seminars

- **Wednesday 25th March**
  - 8:30 – 12:50 Optimisation, MIQE & QC in qPCR
  - 12:30 – 14:00 Lunch
  - 12:30 – 13:00 BDQ Editors Meeting
  - 13:45 – 14:00 BDQ Poster Awards in HS 15

- **Thursday 26th March**
  - 8:30 – 12:30 qPCR BioStatistics & BioInformatics
  - 12:30 – 14:00 Lunch
  - 12:30 – 14:00 Lunch Poster Session in Foyer

- **Friday 27th March**
  - 8:30 – 14:00 Industrial Exhibition in Foyer
  - 12:30 – 14:00 Lunch
  - 14:00 – 17:00 Poster Take Down
Poster Presentations

All 76 posters will be displayed at all three poster sessions in parallel, starting on Monday evening 6 pm until Wednesday early afternoon 2 pm:

**Poster Viewing Session 1:**  Monday Evening  
*Time:* Monday, 23rd March 2015  6:00pm - 10:00pm  
*Location:* Foyer - lower level

**Poster Viewing Session 2:**  Tuesday Lunch Time  
*Time:* Tuesday, 24th March 2015  12:30pm - 2:00pm  
*Location:* Foyer - lower level

**Poster Viewing Session 3:**  Wednesday Lunch Time  
*Time:* Wednesday, 25th March 2015  12:30pm - 2:00pm  
*Location:* Foyer - lower level

Online poster presentations and poster numbering (PDF) => [http://posters.qPCR-NGS-2015.net](http://posters.qPCR-NGS-2015.net)

---

**Poster Sessions and Poster Numbers**

Next Generation Sequencing -- Poster 01 – 16 ................................................................. 4
Non-coding RNAs -- Poster 17 - 25 ......................................................................................... 5
Biomarker Discovery -- Poster 26 - 41 .................................................................................. 6
Advanced Molecular Diagnostics -- Poster 42 - 49 ........................................................... 7
Molecular Diagnostics in Agriculture, Veterinary Medicine, Food & Environmental Science -- Poster 50 - 69 ................................................................. 8
Data Analysis -- Poster 70 - 73 ............................................................................................. 10
Poster “Late Arrivals” -- Poster 74 - 76 ................................................................................ 10

---

**BDQ Young Scientist Poster Awards**

The new open access journal Biomolecular Detection and Quantification (BDQ) is proud to sponsor three "BDQ Young Scientist Poster Awards" at the qPCR & NGS 2015 event.

The posters will be evaluated by an international jury on the basis of originality of the approach; quality of the work (e.g. appropriate methodology, interpretation of results, conclusiveness); quality of the presentation (e.g. clarity, response to questions); and self-reliance and independence (not one of co-authors, but the most active, if more than one author).

**Eligible for the BDQ Young Scientist Poster Award:**
The contest is open to students and early career scientists.

**Award Presentation**
BDQ Editor-in-Chief Stephen Bustin will award the three poster prizes on Wednesday afternoon directly after the lunch break March 25, 2015.

1. **BDQ Young Scientist Poster Award - First Prize**  
The winner is awarded 700 Euros and a free submission to BDQ

2. **BDQ Young Scientist Poster Award – Second Prize**  
The winner is awarded 200 Euros and a free submission to BDQ

3. **BDQ Young Scientist Poster Award – Third Prize**  
The winner is awarded 100 Euros and a free submission to BDQ

**Procedure for Application**
Authors will be able to express their interest in participating in the BDQ Young Scientist Poster Award contest when submitting their abstract. Note that authors are only able to participate if their paper has been selected as a poster by the conference organizer. Please register and submit your abstract using the Internet based ConfTool registration and submission platform => [Registration.qPCR-NGS-2015.net](http://Registration.qPCR-NGS-2015.net)
Poster 01
Potential of Next Generation Sequencing Technology in Molecular Diagnostics – High-Throughput Analysis of the Human Mitochondrial Genome
Agnieszka Piotrowska¹, Ewa Kosior-Jarecka², Tomasz Zarnowski³, Rafał Płosiński⁴, Katarzyna Tońska⁵, Ewa Bartnik¹,⁴
¹Institute of Genetics and Biotechnology, Faculty of Biology, University of Warsaw, Poland; ²Department of Diagnostics and Microsurgery of Glaucoma, Medical University of Lublin, Poland; ³Department of Medical Genetics, Medical University of Warsaw, Poland; ⁴Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Poland: spiotrowska@biol.uw.edu.pl

Poster 02
RNA-sequencing as a diagnostic method for infectious diseases
Maria Lind Karlberg, Per Sikora, Erik Alm, Mattias Mild
Public Health Agency of Sweden, Sweden; maria.lind.karlberg@folkhalsomyndigheten.se

Poster 03
An Improved cDNA Library Generation Protocol for Transcriptome Analysis from a Single Cell
François-Xavier Sicot¹, Rachel Fish², Sally Zhang³, Magnolia Bostick⁴, Cynthia Chang⁵, Suvarna Gandiur⁶, Andrew Farmer²
¹Takara Bio Europe, France; ²Clontech Laboratories, Inc., Mountain View, CA 94043, USA; francois-xavier.sicot@takara-clontech.eu

Poster 04
Detection of Blood Storage on the Basis of miRNA Expression Pattern as a First Step to Detect Autologous Blood Doping
Anna Henke¹, Michael W. Pfaffì, Reinhard Henschler², Christian Wichmann², Irmgard Riedmaier²
¹Technical University Munich, Physiology Weihenstephan, Freising, Germany; ²Ludwig-Maximilian University Hospital, Department of Transfusion Medicine, Cell Therapeutics and Hemostaseology, Munich, Germany; Anna.Henke@wzw.tum.de

Poster 05
Streamlining NGS workflows by the application of the DNA Integrity Number (DIN) from the Genomic DNA ScreenTape Assay
Eva Schmidt¹, Barry McHoul², Isabell Pechtl³, Marcus Gassmann¹
¹Agilent Technologies, Germany; ²Agilent Technologies, UK; eva_schmidt@agilent.com

Poster 06
DNA Methylation Patterns in Pseudorabies Virus Identified by Short-Read and Single-Molecule Sequencing Methods.
Péter Oláh¹, Dóra Tombácz¹, Zsolt Csabai¹, Michael Snyder², Zsolt Boldogkői¹
¹Dept. of Medical Biology, University of Szeged, Hungary; ²Dept. of Genetics, Stanford University, USA; olah.peter@med-u-szeged.hu

Poster 07
The Mix² Model Leads To Significantly Improved Accuracy In Transcript Concentration Estimates And Detection Of Differential Expression In RNA-Seq Data
Andreas Tuerk, Gregor Wiktorin, Serhat Güler
Lexogen GmbH, Austria; gregor.wiktorin@lexogen.com

Poster 08
Insights by Next-Generation Small RNA Sequencing: Comparison of miRNAs and piRNAs in Bovine Blood and Plasma
Melanie Spornrafft, Benedikt Kirchner, Michael W. Pfaffi, Irmgard Riedmaier
Chair of Physiology, Technical University Munich TUM, Freising-Weihenstephan, Germany; melanie.spornrafft@wzw.tum.de

Poster 09
Culture Independent Next Generation Sequencing Based Diagnosis of Blood Stream Infection.
Solomon Bupe Mwaigwisya¹, Tim Leary⁴, Szymon Tomasz Callus⁵, Nick Loman¹, Justin O’Grady¹
¹Norwich Medical School, University of East Anglia, Norwich, Norfolk, UK; ²Critical Care Complex, Norfolk and Norwich University Hospital, Norwich, UK; ³Institute for Microbiology and Infection, School of Biosciences, University of Birmingham, Birmingham, UK:s.mwaigwisya@uEA.ac.uk

Poster 10
Evaluation of QuantSeq 3’ mRNA Sequencing with Spike-in Transcripts
Pamela Moll, Musashi Tsujita, Michael Ante, Lukas Paul, Irmlind Gabler, Alexander Seitz, Torsten Reda
Lexogen GmbH, Austria; lukas.paul@lexogen.com

Poster 11
Next Generation Sequencing And Genetic Variant Analysis In Otosclerosis
Simon Koren¹, Nataša Toplak¹, Katarina Trebušak Podkaršek², Gašper Klančar³, Saba Battelino³, Minka Koča³
¹Omega d.o.o., Ljubljana, Slovenia; ²Centre for Medical Genetics, University Children’s Hospital, University Medical Centre Ljubljana, Slovenia; ³Department of Otorhinolaryngology and Cervicofacial Surgery, University Medical Centre Ljubljana, Slovenia; simon.koren@omega.si

Poster 12
Non-invasive Prenatal Testing (NIPT): Quantitation Of NGS Reads To Detect Fetal Trisomies
Thomas Harasim, Christian Heberle, Annett Wagner, Imma Rost, Hanns-Georg Klein
Zentrum für Humangenetik und Laboratoriumsdiagnostik, Dr. Klein, Dr. Rost und Kollegen, Germany: thomas.harasim@medizinische-genetik.de
Poster 13

Optimization of Library Preparation Protocol for Next Generation Sequencing of Plant RNA Virus

Irena Mavrić Pleško1, Simon Koren2, Mojca Viriček Marn3, Minka Kovač2, Nataša Toplak2
1Kmetijski inštitut Slovenije, Hacquetova ulica 17, SI-1000 Ljubljana, Slovenia; 2Omega d.o.o., Dolniškoova 8, SI-1000 Ljubljana, Slovenia; nataša.toplak@omega.si

Poster 14

Quality control for SureSelect Strand-Specific RNA library preparation protocol using the Agilent 2200 TapeStation system

Hans Brunnett1, Arunkumar Padmanaban2, Alex Siebold2, Eva Schmidt2
1Agilent Technologies, Germany; 2Agilent Technologies, India; 3Agilent Technologies, USA; hans_brunnett@agilent.com

Poster 15

RNA Sequencing in degraded tumor RNA samples: Two natural enemies finally reconciled

Alexandra Dangel1, Claudia Löfler2, Stefan Kotschote3, Aljoscha Kleinhammer4, Jürgen Löfler2, Michael Bonin1
1IMGM Laboratories GmbH, Germany; 2Molekulärbiologie, Infektionologie und Immunogenetik, Universitätsklinikum Würzburg; alexandra.dangel@imgm.com

Poster 16

A method for assessing bacterial enrichment for the removal of human DNA for metagenomic analysis using qPCR and High throughput qPCR

Jernej Pavšič1,2, Denise M. O’Sullivan3, Sasithon Temisak3, Justin O’Grady4, Viktorija Tomić2, Nataša Fajfar3, Jana Žel4, Jim F. Huggett3
1National Institute of Biology, Ljubljana, Slovenia; 2Jožef Stefan International Postgraduate School, Ljubljana, Slovenia; 3LGC, Teddington, UK; 4Norwich Medical School, University of East Anglia, Norwich, UK; 5University Clinic of Respiratory and Allergic Diseases Golnik, Golnik, Slovenia; jernej.pavsic@nbsi.si

Poster Session -- Non-coding RNAs -- Poster 17 - 25

Poster 17

A complete workflow for high-throughput isolation of serum microRNAs and downstream analysis using qPCR: application to cancer biomarker discovery

Linda Wong1, Sara E. Brown1, Alex J. Rai1, Guarionex J. Decastro2, Luming Qu1, Marie Gonzalez1, Laura Chapman3, Alexander V. Vlassov1, Susan Magdaleno2, Emily Zeringer4
1Thermo Fisher Scientific, South San Francisco, CA, USA; 2Columbia University, Department of Pathology and Cell Biology, New York, NY, USA; 3Columbia University, Department of Urology, New York, NY, USA; 4Thermo Fisher Scientific, Austin, TX, USA; sara.brown@thermofisher.com

Poster 18

A High Performance qPCR Assay Platform for Circulating MicroRNA Biomarker Development

Lihan Zhou1, Ruiyang Zou1, Heng-Phon Too3,4
1MiRXES Pte Ltd, Singapore; 2Bioprocessing Technology Institute, A*STAR, Singapore; 3National University of Singapore; lihan_zhou@mirxes.com

Poster 19

Serum MicroRNA Biomarker Panels for Non-invasive Detection of Gastric Cancer

Ruiyang Zou1, Lihan Zhou1, Jimmy So3,4, Wei-Peng Yong3,4, Feng Zhu3,4, Khay-Guan Yeoh3,4, Heng-Phon Too1,3
1Bioprocessing Technology Institute, Singapore; 2MiRXES Pte Ltd; 3National University of Singapore, Singapore; 4National University Hospital; zou_ruiyang@bti.a-star.edu.sg

Poster 20

Microparticles Associated MiRNA Release By M2 But Not By M1 Macrophages From Patients With Psychiatric Diseases.

Marion Schneider1, Markus Hippich2, Maximilian Strunz2, Robert P. Loewe3
1Universitätsklinikum Ulm, Germany; 2GeneWake GmbH, Germany; maximilian.strunz@genewake.com

Poster 21

Development Of Non-invasive MicroRNAs Tests As Tools For Early Detection Of Colorectal Cancer

Chia-Chun Chen1, Pi-Yueh Chang1, Yu-Sun Chang1, Jinn-Shiuen Chen1, Err-Cheng Chan1
1Chang Gung University, Taiwan, Republic of China; 2Chang Gung Memorial Hospital, Taiwan, Republic of China; chenchia@mgmail.cgu.edu.tw

Poster 22

microRNA assessment in cerebrospinal fluid for diagnosis of primary central nervous system lymphoma

Maria Barbara Cieslikowska1, Michalina Zajdel2, Grzegorz Rymkiewicz2, Magdalena Chechańska1, Katarzyna Blachnio1, Zbigniew Bystydzieniński1, Krzysztof Goryca1, Agnieszka Druzd-Sitek2, Maria Sromek1, Jan Walewski2, Jan Konrad Siwicki1
1Department of Immunology, Cancer Centre and Institute of Oncology in Warsaw, Poland; 2Department of Pathology and Laboratory Diagnostics, Cancer Centre and Institute of Oncology in Warsaw, Poland; 3Department of Genetics, Cancer Centre and Institute of Oncology in Warsaw, Poland; 4Department of Lymphoid Malignancies, Cancer Centre and Institute of Oncology in Warsaw, Poland; mcieslikowska@cci.waw.pl

Poster 23

How to be one step ahead by streamlining an existing microRNA cDNA synthesis kit

Markus Hippich, Robert P. Loewe
Genewake GmbH, Germany; markus.hippich@genewake.com
Poster 24

Long Non-Coding RNAs Implicated in the Pathogenesis of Parkinson Disorder

Eszter Szlávicz1, Nikoletta Nagy1,2, Nóra Török3, Péter Klivenyi3, Márta Szél1,2
1University of Szeged, Faculty of Medicine, Department of Dermatology and Allergology, Szeged, Hungary; 2University of Szeged, Faculty of Medicine, Medical Genetics Institute, Szeged, Hungary; 3University of Szeged, Faculty of Medicine, Department of Neurology, Szeged, Hungary; szlavicz.eszter@gmail.com

Poster 25

Exosomal microRNAs in urine - promising biomarkers for disease

Ditte Andressen1, Anni R. Thomsen1, Jacob Fredsøe2, Thorarinn Blondal3, Jörg Krummheuer1, Maria W. Theilum1, Niels Tolstrup3, Michael Borre1, Christa Haldrup1, Torben F. Ørntoft2, Karina D. Sørensen1, Peter Mourtizen1
1Exiqon, Denmark; 2Dept of Urology, Aarhus University Hospital, Denmark; 3Dept. of Molecular Medicine, Aarhus University Hospital, Denmark; dia@exiqon.com

Poster 26

Applicability of Blood RNA Quality Biomarkers for EDTA Tubes in High-Throughput qPCR Gene Expression Experiments Using BioMark System from Fluidigm

Vlasta Korenková1, Lucie Langerová1, Jana Slyšková1, David Švec1, Pavel Vodička2, Mikael Kubista1,2, Hui Zhang4
1Department of Gene Expression, Institute of Biotechnology AS CR, Prague, Czech Republic; 2Department of the Molecular Biology of Cancer, Institute of Experimental Medicine AS CR, Prague, Czech Republic; 3TATAM Biocenter, Göteborg, Sweden; 4DiaGenic ASA, Oslo, Norway; vlasta.korenkova@ibt.cas.cz

Poster 27

A Reliable Method to Quantify Transcript Isoform Expression of Apoptotic Genes Involved in the Response to Tyrosine Kinase Inhibitor (TKI) Therapy in Chronic Myeloid Leukemia (CML)

Justine Marum1, Bradley Chereda1, Wendy Parker1, Leanne Purins1, Doris Stangl1, David Yeung1,2, Timothy Hughes3, Susan Branford1
1Genetics and Molecular Pathology, SA Pathology, Adelaide, South Australia, Australia; 2Department of Haematology, SA Pathology (RAH Campus), Adelaide, South Australia, Australia; justine.marum@health.sa.gov.au

Poster 28

Biomarkers for Metastatic Colorectal Cancer

Christopher J. Hayes1,2, Patrick A. Kiely1,2, Tara M. Dalton1
1Stokes Institute, University of Limerick, Ireland; 2Department of Life Sciences, University of Limerick, Ireland.
christopher.hayes@ul.ie

Poster 29

Characterization of Antigenic Profiles of Primary Non-small Cell Lung Cancer Tumors and Lung Cancer Cell Lines for Vaccine Development

Ondřej Palata1, Naďa Hradilová1, Lenka Sadilková1, Dagmar Myšiková2, Robert Lischke1, Irena Vančurová1, Luděk Sojka1,2, Irena Adkins1,2
1Sotio a.s., Prague, Czech Republic; 2Department of Immunology, 2nd Faculty of Medicine, Charles University and University Hospital Motol, Prague, Czech Republic; 3Thoracic and Lung Transplantation Division, 3rd Department of Surgery, 1st Faculty of Medicine, Charles University in Prague and University Hospital Motol; palata@sotio.com

Poster 30

Development of an in-house method to quantify BCR-ABL1 p210 transcripts aligned to the International Scale standards with high sensitivity

Marcos Tadeu dos Santos, Ana Maria Fragal, Melina Gonçalves dos Santos Barth, Danyella Silva Pereira, Miguel Mitne-Neto, Vanessa Dionisio Cantagalli, Maria Carolina Tostes Pintão, Maria de Lourdes Lopes Ferrari Chauffaille
Grupo Fleury, Brazil; marcos.santos@grupofleury.com.br

Poster 31

Diabetes Causal Molecular and Cellular Mechanisms underlying the COBLL1 locus

Viktoria Magdalena Glunk
TU München, Germany; viktoria.glunk@tum.de

Poster 32

Evaluation of Bias Associated with High Multiplex Target-Specific Pre-amplification

Haya Sarras1, Steven T. Okino1, Michelle Kong1, Yan Wang1
1Gene Expression Division, Life Science Group, Bio-Rad Laboratories, Hercules, CA, USA; 2Gene Expression Division, Life Science Group, Bio-Rad Laboratories, Mississauga, ON, Canada; haya_sarras@biorad.com

Poster 33

Gene Expression Profiling of Circulating Tumor Cells and Peripheral Blood Mononuclear Cells of Breast Cancer Patients

Michał Hensler1, Irena Vančurová1,6, Ondřej Palata1, Pavel Strnad2, Petra Tesařová1, Etienne Becht3, David Švec4, Mikael Kubista5, Radek Špišek7,8, Luděk Sojka1,8
Systems Biology Using Single Cells
Dave Ruff
Fluidigm, United States of America; dave.ruff@fluidigm.com

A Micro-fabricated Single Cell Isolation System To Process 1000s Of Individual Cells For Genomics Applications
Shanavaz Nasarabadi1, Imsinder Mann1, Harris Shapiro2, Phil Lin1, Ricelle Acob2, Michael Slater3, Syed Husain4, Alain Mir5, Thomas Schaal1, Magali Soumillion1, Tarjei Mikkelsen1, Maithreyan Srinivasan1
1WaferGen Biosystems, 7400 Paseo Padre Parkway, Fremont, CA (USA); 2Broad Technology Labs, Broad Institute, Cambridge, MA (USA); Shanavaz.Nasarabadi@wafergen.com

Upstream Open Reading Frames Regulate Cannabinoid Receptor 1 Expression Under Baseline Conditions And During Cellular Stress
Marlene Eggert1, Martina Pfoh1, Gustav Schelling2, Ortруд Steinlein1
1Institute of Human Genetics, University Hospital, Ludwig-Maximilians-University Munich, Germany; 2Department of Anesthesiology, University Hospital, Ludwig-Maximilians-University, Munich, Germany; Marlene.Eggert@med.uni-muenchen.de

Virus Serotyping by TaqMan and SYTO 9 in Single Reaction
Martina Matonohova1, Karel Bilek1, Hana Andelova1, Daniel Ruzek2,3,4, Martin Palus2,3
1National Institute for NBC Protection, Czech Republic; 2Laboratory of Arbovirology, Institute of Parasitology, Biology Centre, Academy of Sciences of the Czech Republic; 3Faculty of Sciences, University of South Bohemia, Czech Republic; 4Veterinary Research Institute, Czech Republic; matonohova@sujchbo.cz

ZFP64 – a predictive RNA biomarker for cancer treatment with the HDAC-inhibitor Resminostat
Cornelia Hock1, Stefan Kotschote1, Thomas Herz2
1IMGM Laboratories GmbH, Germany; 2SC AG, Germany; stefan.kotschote@imgm.com

Sensitive, specific and highly-multiplexed qPCR using MNAzymes and PASS primers
Lit Yeen Tan, Elisa Mokany, Samantha M Walker, Tina Lonergan, Simon M Erskine, Alison V Todd
SpeeDx Pty Ltd, Australia; alisont@speedx.com.au

Rapid High Sensitivity Monitoring of Tumor Genetic Changes for Targeted Therapy of Cancer
Michael Joseph Powell, Aiguo Zhang, Madhuri Ganta, Elena Peletskaya
DiaCarta, Inc., United States of America; mppowell@apollolongevity.com

Detection of DNA mutations with an electro-switchable PNA chip
Zsuzsanna Mayer1, Wolfgang Kaiser2, Kristin Wörner2, Ralf Strasser2, Ulrich Rant2, Jörg Kleiber1
1Weihenstephan-Triesdorf University of Applied Sciences, Department of Biotechnology and Bioinformatics, Freising; 2Dynamic Biosensors GmbH, Planegg, Germany; zsuzsanna.mayer@hsfw.de

Smartphone sized real-time PCR device
Christian Ahrberg, Pavel Neuzil, Andreas Manz
KIST Europe, Germany; c.ahrberg@kist-europe.de

Open qPCR: The Design of an Open Source, $2000 Real-Time PCR Instrument
Josh Perfetto
Chai, United States of America; josh@chaibio.com

TaqMan® Rare Mutation Assays for QuantStudio® 3D Digital PCR System
Marion Laig, Brian Ho, Nivedita Majumdar, Le Lac, Frances Chan, Ramesh Sathiya, Iain Russel, Paco Cifuentes, Ted Straub, Kamini Varma, David Keys
Thermo Fisher Scientific, United States of America; marion.laig@thermofisher.com
Poster 46

**Methods of Comparing Digital PCR Experiments**

Michał Jan Burdukiewicz, Piotr Sobczyk, Paweł Mackiewicz, Stefan Rödiger

1University of Wrocław, Poland; 2Wroclaw University of Technology, Wroclaw, Poland; 3BTU Cottbus - Senftenberg, Senftenberg, Germany; michalburdukiewicz@gmail.com

Poster 47

**High Resolution Melting Typing Approach For CTX-M β-Lactamases Differentiation**

Maksim Bratchikov, Silvija Kiverytė

Department of Physiology, Biochemistry, Microbiology and Laboratory medicine, Faculty of Medicine, Vilnius university, Lithuania; maksim@pcr.lt

Poster 48

**Engineered DNA Polymerases Tailor-Made For Your Needs**

Ramon Kranaster

myPOLS Biotec UG (haftungsbeschränkt), Universitätsstr. 10, 78457 Konstanz, Germany; T +49(0)7531 884654, www.mypols.com; ramon.kranaster@mypols.de

Poster 49

**Biodistribution of Advanced Therapy Medicinal Products (ATMPs): Workflow of a typical study at a professional pre-clinical service provider**

Amelie Schreieck, Cornelia Hock, Aljoscha Kleinhammer

IMGM Laboratories GmbH, Germany; amelie.schreieck@imgm.com

**Poster Session -- Molecular Diagnostics in Agriculture, Veterinary Medicine, Food & Environmental Science -- Poster 50 - 69**

Poster 50

**Concentration of Pathogenic Viruses from Seawater Samples using Monolithic Chromatographic Supports and Downstream Detection using Quantitative PCR**

Mukundh Narayanan Balasubramanian, Jose Goncalves, Nejc Rački, Katarina Kovač, Matjaz Hren, Valentina Turk, Maja Ravnikar

1BioSistemika Ltd., Pot za Brdom 102, SI-1000 Ljubljana, Slovenia; 2Department of Biotechnology and Systems Biology, National Institute of Biology, Vecna pot 111, SI-1000 Ljubljana, Slovenia; 3Marine Biology Station, National Institute of Biology, SI-6330 Piran, Slovenia; bmukundh@gmail.com

Poster 51

**Evaluation And Quantification Of The Lactogenesis Of Primary Bovine Epithelial Cells In Vitro - 3D Cell Culture Model Of The Bovine Mammary Gland.**

Maria Hillreiner, Christiane Schmautz, Milica Maier, Michael W. Pfaffl, Heike Kliewer

Physiology Weihenstephan, Technische Universität München, Weihenstephaner Berg 3, D-85354 Freising; Maria.Hillreiner@wzw.tum.de

Poster 52

**The Fungal Nutritional ENCODE Project: Exploring Fungal Carbon Perception in the Model Filamentous Fungus *Neurospora crassa* by a Large Scale RNA-Seq Approach**

Nils Thieme, Vincent Wu, N. Louise Glass, J. Philipp Benz

1Technische Universität München, Munich, Bavaria Germany; 2University of California, Berkeley, California USA; thieme@hfm.tum.de

Poster 53

**What’s The Difference Between A White And A Red Strawberry? A Comparative Approach To Gain Insight Into Expression Of Anthocyanin Biosynthesis Pathway Genes**

Katja Schulenburg, Katrin Franz-Oberdorf, Wilfried Schwab

TUM, Weihenstephan, Germany; katja.schulenburg@tum.de

Poster 54

**High-throughput Gene Expression Analysis In Pigs As Model For Respiratory Infections**

Kerstin Skovgaard, Louise Brogaard, Kirstine Klitgaard Schou, Ralf Dürwald, Michael Schengel, Peter M. H. Heegaard

1Technical University of Denmark, Denmark; 2Technical University of Denmark, Denmark; 3Technical University of Denmark, Denmark; 4IDT, Germany; 5IDT, Germany; 6Technical University of Denmark, Denmark; keski@vet.dtu.dk

Poster 55

**Pooling of fecal and environmental samples for the detection of Salmonella spp. by qPCR**

Emir Hodzic

University of California, Davis, United States of America; ehodzic@ucdavis.edu

Poster 56

**Strategies To Monitor Extraintestinal Pathogenic E.coli ExPEC**

Bernhard Setzer

BS-Diagnostik, Germany; info@bs-diagnostik.de
Poster 57

**Small RNA sequencing in milk of cycling and pregnant cows**

*Corina I. Schanzenbach*, 1 Susanne E. Ulbrich, 1 Benedikt Kirchner, 1 Michael W. Pfaffl 1

1Lehrstuhl für Physiologie, TU München, Germany; 2ETH Zürich, Animal Physiology, Institute of Agricultural Sciences, Switzerland; corina.schanzenbach@wzw.tum.de

Poster 58

**In-house Validation of DNA Extraction Method from Flour Samples and Rye, Maize and Oat Flour contents in Wheat Flour Based Composite Breads**

*Remziye Yılmaz*, 1 Hamit Köksel, 3 Ceren Bayraç, 2 Arzu Başman, 3 İskın Engin 1

1Middle East Technical University, Central Laboratory, Molecular Biology and Biotechnology R&D Center, Genome Analysis Laboratory, 06800 Ankara, Turkey; 2Hacettepe University, Food Engineering Department, 06800, Beytepe, Ankara, Turkey; 3Karamanoğlu Mehmetbey University, Department of Bioengineering, 70100, Karaman, Turkey; isinkose@gmail.com

Poster 59

**Development of a Molecular Method for the Detection of Hepatitis E Virus (HEV) in Pancreatin.**

*Simone Peletto*, 1 Paola Modesto, 1 Maria Grazia Maniaci, 1 Umberto Cavallazzi, 2 Pier Luigi Acutis 1

1Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d’Aosta, Italy; 2Terhormon S.R.L., Italy; simone.peletto@izsto.it

Poster 60

**Effects of prostaglandin F2alpha on some local luteotropic and angiogenic factors in corpus luteum during induced luteolysis in cow**

*Bajram Berisha*, 1,2 Dieter Schams, 2 Michael W. Pfaffl 2

1University of Prishtina, Kosovo; 2Technical University of Munich, Germany; berisha@wzw.tum.de

Poster 61

**Digital PCR For Quantification Of Listeria monocytogenes**

*Miha Kovač*, 1 Simon Koren, 2 Minka Kovač, 2 Barbara Jeršek, 3 Nataša Toplak 1

1Omega d.o.o., Dolinškova 8, SI-1000 Ljubljana, Slovenia; 2University of Ljubljana, Veterinary Faculty, Gerbičeva 60, SI-1000 Ljubljana, Slovenia; 3University of Ljubljana, Biotechnical faculty, Department of Food Technology, Jamnikarjeva 101, 1000 Ljubljana, Slovenia; devadekrmak@gmail.com

Poster 62

**Postprandial recovery of colostral exosomes and RNA in calf plasma**

*Dominik Buschmann*, 1 Benedikt Kirchner, 1 Vijay Paul, 2 Michael W. Pfaffl 1

1TUM School of Life Sciences Weihenstephan, Technical University Munich, Freising, Germany; 2ICAR-National Research Centre on Yak, Dirang, Arunachal Pradesh, India; dominik.buschmann@wzw.tum.de

Poster 63


*Tugce Ceren Tugrul*, 1 Remziye Yılmaz, 2 Hüseyin Avni Öktem, 1,2 Meral Yücel 1,2,3

1Middle East Technical University, Biotechnology Department; 2Middle East Technical University, Central Laboratory, Molecular Biology and Biotechnology R&D Center; 3Middle East Technical University, Biology Department; e165007@metu.edu.tr

Poster 64

**Incidence And Detection Of Beak And Feather Disease In Psittacine Birds In The UAE**

*Fatima Hakimuddin*, 1 Fatima Abidi, 1 Osman Jafer, 1 Ulrich Wernery, 2 Kamal Khazanehdari 1

1Molecular Biology and Genetics Laboratory, United Arab Emirates; 2Central Veterinary Research Laboratory, United Arab Emirates; hakim@mbg.ae

Poster 65

**Incidence And Detection Of Beak And Feather Disease In Psittacine Birds In The UAE**

*Fatima Hakimuddin*, 1 Fatima Abidi, 1 Osman Jafer, 1 Ulrich Wernery, 2 Kamal Khazanehdari 1

1Molecular Biology and Genetics Laboratory, United Arab Emirates; 2Central Veterinary Research Laboratory, United Arab Emirates; hakim@mbg.ae

Poster 66

**Influence Of Milk Procession On miRNA Stability And Its Relevance In The Immune System**

*Benedikt Kirchner*, 1 Markus Ege, 2 Michael Pfaffl 1

1Animal Science, Physiology, Technical University Munich, Freising, Germany; 2Dr von Hauner Children’s Hospital, Ludwig Maximilian University, Munich, Germany; benedikt.kirchner@wzw.tum.de

Poster 67

**Real-time PCR Based Concept for Monitoring of Genetically Modified Oilseed Rape (Brassica napus L.) along Transport Routes**

*Melanie Stoeckert, Melanie Pavlovic, Patrick Guertler, Ulrich Busch*

Bavarian Health and Food Safety Authority; patrick.guertler@lgl.bayern.de
**Poster 68**

**Molecular identification and Physiological characterization by Flow Cytometry of bacteria and yeasts producing polygalacturonic (PG) isolated from fermented cassava microbiota**

Sonagnon H.S. Kouhoundé¹,²,³, Alfred S. Traore¹, Fatiou Toukourou¹, Annick Lejeune¹, Huu Thanh Nguyen¹, Philippe Thonart¹, Frank Delvigne¹

¹Université de Liège, Belgium; ²Université de Ouagadougou, Burkina-Faso; ³Université d’Abomey-Calavi, Bénin; kouhoundes@hotmail.fr

**Poster 69**

**Sequence Differences In Corynebacterium Pseudotuberculosis Isolated From Caprine And Camel Species**

Fatima Hakimuddin¹, Motasem Ismail¹, Fatima Abidi¹, Ulrich Wernery², Kamal Khazanehdari¹

¹Molecular Biology and Genetics Laboratory, United Arab Emirates; ²Central Veterinary Research Laboratory, United Arab Emirates; fhakim@mbg.ae

**Poster Session -- Data Analysis -- Poster 70 - 73**

**Poster 70**

**The dpcR Package – a Framework for Analysis and Visualization of Digital PCR Experiments**

Michał Burdukiewicz¹, Jim Huggett², Simon Cowen², Bart K.M. Jacobs³, Lieven Clement³, Peter Schierack¹, Stefan Rödiger⁴

¹University of Wroclaw, Wroclaw, Poland; ²Molecular and Cell Biology Team, LGC, Teddington, United Kingdom; ³Department of Applied Mathematics, Computer Science and Statistics, Ghent University, Belgium; ⁴BTU Cottbus - Senftenberg, Germany; Stefan.Roediger@b-tu.de

**Poster 71**

**The reliability of two different calibration of 2⁻ΔΔCt method for analysing relative gene expression in real time pcr**

Devy Firena Garna¹,², Mandeeq Ghuman¹, Francis Hughes¹

¹King’s College London, United Kingdom; ²Padjadjaran University, Indonesia; devy.garna@kcl.ac.uk

**Poster 72**

**RKWard: a Software Framework for Analysis of qPCR, dPCR, qIA and Melting Curve Data**

Stefan Rödiger¹, Michał Burdukiewicz², Andrej-Nikolai Spiess³, Konstantin Blagodatskikh³, Peter Schierack¹

¹BTU Cottbus - Senftenberg, Senftenberg, Germany; ²University of Wroclaw, Wroclaw, Poland; ³University Medical Center Hamburg-Eppendorf, Hamburg, Germany; ⁴All-Russia Research Institute of Agricultural Biotechnology, Moscow, Russia; Stefan.Roediger@b-tu.de

**Poster 73**

**Advantages in Real-time PCR Quantification Using SOD and CyO Methods**

Michele Guescini, Davide Sisti, Marco B.L. Rocchi, Vilberto Stocchi

University of Urbino, Italy; michele.guescini@uniurb.it

**Poster Session -- “Late Arrivals” -- Poster 74 - 76**

**Poster 74**

**Automated Normalization and Pooling of DNA with the Labcyte Echo® Liquid Handler to enable Next Generation Sequencing**

John Lesnick¹, Carl Jarman¹, Carl Peters²

¹Labcyte Inc., Sunnyvale, CA, USA; ²BMG LABTECH, Cary, NC, USA; Carl.Jarman@labcyte.com

**Poster 75**

**High Throughput Miniaturized Quantitative PCR using the Echo® 525 Liquid Handler**

Carl Jarman, Brent Eaton, Sammy Datwani

Labcyte Inc., Sunnyvale, CA, USA; Carl.Jarman@labcyte.com

**Poster 76**

**An RT-qPCR Automated Platform: Validation Methods for the Access™ Workstation, the Echo® Liquid Handler, and RealTime Ready™ Reagents**

Carl Jarman, Randy Dyer, Sammy Datwani

Labcyte Inc., Sunnyvale, CA, USA; Carl.Jarman@labcyte.com

**Poster 77**

**Applications of Next Generation Sequencing in Plant Breeding.**

Regina Dick, Axel Strittmatter, Georg Gradl

Eurofins Genomics, Anzinger Str. 7a, 85560 Ebersberg, Germany; georggradl@eurofins.com
Sponsors, Exhibitors & Media Partners

Lead Sponsor: 
LABCYTE

Gold Sponsors:

Agilent Technologies
BIOLINE
Quanta BioSciences, Inc.
GATC Biotech
Takara
Clontech

Silver Sponsors:

ubiquitome
eurofins
Roche
tataabiocenter
multi2d
LGC Genomics

Further Companies in the Industrial Exhibition:

biogazelle
ELLA Biotech
4GILSON
fluorogenics
Biozynm
SureTherm

Media partners:

A new Open Access journal on molecular methodology applications
Biomolecular Detection and Quantification