National Genome Research Network

5th Annual Meeting of NGFN-Plus and NGFN-Transfer in the Program of Medical Genome Research

December 11 – 13, 2012
Communication Center DKFZ, Heidelberg

Program-at-a-glance

Tuesday, December 11th

12.00 – 02.00 pm	**Satellite Symposium**: Small RNAs (Org. Jürgen Haas and Jürgen Brosius)
02.00 – 02.30 pm	**Coffee Break**
02.30 – 04.00 pm	**Satellite Symposium**: Next-Generation Sequencing (Org. Stefan Wiemann and Bernd Timmermann)
04.00 – 04.30 pm	**Coffee Break**
04.30 – 05.00 pm	***Welcome***
05.00 – 07.00 pm	**Symposium I - International Projects in the Program of Medical Genome Research** Michael Taylor - Peter Lichter - Matthew Meyerson - Hans Lehrach
07.00 pm	**Supper**

Wednesday, December 12th

09.00 – 10.30 am	**Symposium II – International Projects in Genome Research** John Blangero - Joris A. Veltmann - Gerard D. Schellenberg
10.30 – 11.00 am	**Coffee Break**
11.00 – 12.00 am	**Symposium II – International Projects in Genome Research** Peter Jones - Jörn Walter
12.00 – 02.00 pm	***Lunch Break and Poster Session I*** **Company Satellite Sessions** Affymetrix - Caliper a Perkin Elmer Company - Illumina - Bio-Rad Laboratories
02.00 – 03.30 pm	**Symposium II – International Projects in Genome Research** Wolfgang Wurst - Martin Hrabě de Angelis - Matthias Mann
03.30 – 4.00 pm	**Coffee Break**
04.00 – 05.00 pm	**Symposium III – Genomics of Common Disease I** André Reis - Vanessa Nieratschker - Andre Franke - Robert Häsler
05.00 – 05.30 pm	**Coffee Break**
05.30 – 06.00 pm	**Symposium III – Genomics of Common Disease I** Anke Hinney - Ralf Herwig
06.00 – 07.00 pm	**Evening Lecture:** Randolph Nesse
07.00 – 10.00 pm	***Get-Together (Wine, Cheese, Live Music)***

Thursday, December 13th

09.00 - 10.15 am	**Symposium IV – Genomics of Common Disease II** Hugo A. Katus (Keynote) - Christina Loley - Martin Peifer - Christel Herold-Mende
10.15 – 10.45 am	**Coffee Break**
10.45 – 12.00 pm	**Symposium V – Functional Genomics** Jan Korbel - Gerrit Erdmann - Sven Lindner - Sören Westphal - Zouhair Aherrahrou

12.00 - 02.00 pm	***Lunch Break and Poster Session II*** **Company Satellite Sessions:** Life Technologies - Roche Diagnostics - SEQUENOM GmbH - Nanostring Technologies
02.00 - 02.15 pm	**Ceremony: "Annemarie Poustka Poster Award 2012" sponsored by Roche Diagnostics Deutschland GmbH**
02.15 - 03.45 pm	**Symposium VI: Personalized Medicine** Rudi Balling (Keynote) - Nicole Teichmann - Margret Hoehe - Jeanette Erdmann - Brajesh Kaistha
03.45 - 04.00 pm	**Concluding Remarks: Markus Nöthen**, Spokesperson for the Project Committee of NGFN-Plus / NGFN-Transfer in the Program of Medical Genome Research
04.00 - 04.30 pm	**Closing Coffee**

Program

Tuesday, December 11, 2012

Satellite Symposia - Krehl Klinik Auditorium, Im Neuenheimer Feld 410

12.00 – 02.00 pm	**Satellite Symposium**: Small RNAs (Org. Jürgen Haas and Jürgen Brosius)
02.00 – 02.30 pm	**Coffee Break**
02.30 – 04.00 pm	**Satellite Symposium**: Next-Generation Sequencing (Org. Stefan Wiemann and Bernd Timmermann)
04.00 – 04.30 pm	**Coffee Break** (DKFZ Communication Center)

Welcome - DKFZ Communication Center, Main Auditorium

04.30 – 05.00 pm	**Wolfgang Wurst**, Helmholtz Zentrum Munich, Germany, Speaker Project Committee of NGFN-Plus / NGFN-Transfer in the Program of Medical Genome Research **N.N.**, Federal Ministry of Education and Research, Germany **Christof von Kalle,** National Center for Tumor Diseases (NCT)/ German Cancer Research Center (DKFZ), Heidelberg, Germany

Symposium I: International Projects in the Program of Medical Genome Research

05.00 – 05.30 pm	*International Cancer Genome Consortium (ICGC)* **Michael Taylor**, The Hospital for Sick Children, Toronto, Cananda
05.30 – 06.00 pm	*International Cancer Genome Consortium (ICGC)* **Peter Lichter**, German Cancer Research Center, Heidelberg, Germany *Novel findings in pediatric brain tumors revealed by high resolution genome, methylome and transcriptome analyses*
06.00 – 06.30 pm	*International Cancer Genome Consortium (ICGC)* **Matthew Meyerson**, Dana Farber Cancer Institute, Boston, USA *Genome Alterations in Human Lung Cancers*
06.30 – 07.00 pm	*1000 Genomes Project* **Hans Lehrach,** MPI for Molecular Genetics, Berlin, Germany *1000 Genomes Project – An integrated map of genetic variation*
07.00 pm	**Supper**

Wednesday, December 12, 2012

Symposium II: International Projects in Genome Research

09.00 – 9.30 am
John Blangero, Texas Biomedical Research Institute, San Antonio, USA
Identification of Complex Disease Genes Using Whole Genome Sequencing in Large Pedigrees

09.30 – 10.00 am
Joris A. Veltman, Radboud University Nijmegen Medical Centre, Nijmegen, The Netherlands
De novo diagnostics in patients with intellectual disability

10.00 – 10.30 am
Alzheimer's Disease Genetics Consortium (ADGC)
Gerard D. Schellenberg, University of Pennsylvania School of Medicine, Philadelphia, USA
Neurodegenerative disease genetics; GWAS, exomes and beyond

10.30 – 11.00 am
Coffee Break

11.00 – 11.30 am
International Human Epigenome Consortium (IHEC)
Peter Jones, USC Norris Comprehensive Cancer Center, Los Angeles, USA
The Cancer Epigenome

11.30 – 12.00 pm
International Human Epigenome Consortium (IHEC)
Jörn Walter, Saarland University, Germany
Control of DNA-methylation in development

12.00 – 02.00 pm
Lunch Break and Poster Session I
12:00 – 1.00 pm odd numbers
1:00– 2.00 pm even numbers

Company Satellite Sessions

12.10 – 12.40 pm
Maik Pruess, Affymetrix UK Ltd
From basic research to clinical samples. When are microarrays the right tool for the job?

12.45 – 01.15 pm
Hannes Arnold, Caliper a PerkinElmer Company
Automation of NGS Sample Preparation: From Benchtop NGS to Genome Centers

01.20 – 01.50 pm
Luc Smink, Illumina UK Ltd
Illumina's Genomics Research Portfolio: From Whole Genomes to Targeted approaches

01.55 – 02.25 pm
Pia Scheu, Bio-Rad Laboratories GmbH
Droplet Digital PCR: Molecular Biology in High Resolution

Symposium II:	**International Projects in Genome Research**
02.00 – 02.30 pm	*International Knockout Mouse Consortium / EUCOMM* **Wolfgang Wurst**, Helmholtz Zentrum Munich, Germany *International Mouse Knock-out Consortium: Resource to functionally validate all genes*
02.30 – 03.00 pm	*International Mouse Phenotyping Consortium / EUMODIC* **Martin Hrabě de Angelis**, Helmholtz Zentrum Munich, Germany *Creating a comprehensive encyclopedia of mammalian gene function*
03.00 – 03.30 pm	**Matthias Mann,** Max Planck Institute for Biochemistry, Munich, Germany *High resolution, quantitative mass spectrometry combines proteomics and genomics*
03.30 – 04.00 pm	***Coffee Break***

Symposium III:	**Genomics of Common Disease I**
04.00 – 04.15 pm	**André Reis**, University Erlangen-Nuremberg, Germany *Range of genetic mutations associated with severe non-syndromic sporadic intellectual disability: An exome sequencing study*
04.15 – 04.30 pm	**Vanessa Nieratschker**, Central Institute for Mental Health, Mannheim, Germany *Pre-, peri- and postnatal stress in human and non-human off-spring: A convergent approach to study genetic and epigenetic impact on depression*
04.30 – 04.45 pm	**Andre Franke**, University Hospital Schleswig-Holstein, Kiel, Germany *Host-microbe interactions shape genetic risk for inflammatory bowel disease*
04.45 – 05.00 pm	**Robert Häsler,** Christian Albrechts University of Kiel, Germany *Mapping the functional epigenome of Ulcerative Colitis in monozygotic twins*
05.00 – 05.30 pm	***Coffee Break***
05.30 – 05.45 pm	**Anke Hinney**, University of Duisburg-Essen, Germany *Childhood ADHD and obesity: Evidence for a common genetic link*
05.45 – 06.00 pm	**Ralf Herwig**, Max Planck Institute for molecular Genetics, Berlin, Germany *An integrated catalogue of genome, methylome and gene expression variations in colon cancer*

Evening Lecture:	
06.00 – 07.00 pm	**Randolph Nesse**, The University of Michigan, Ann Arbor, USA *Evolutionary Medicine and Molecular Medicine: Synergistic Siblings*
07.00 – 10.00 pm	***Get-Together (Wine, Cheese, Live Music)***

Thursday, December 13, 2012

Symposium IV: Genomics of Common Disease II

09.00 – 09.30 am **Keynote: Hugo A. Katus,** Heidelberg University Hospital, Germany
Innovations in translational research – Successes of NGFN

09.30 – 09.45 am **Christina Loley**, University of Lübeck, Germany
Association of X-chromosomal variants with coronary heart disease: Results from a meta-analysis

09.45 – 10.00 am **Martin Peifer**, University of Cologne, Germany
Toward a novel genomics-based taxonomy of lung cancer: The Clinical Lung Cancer Genome Project

10.00 – 10.15 am **Christel Herold-Mende**, University of Heidelberg, Germany
Aberrant self-renewal and quiescence contribute to Glioblastoma aggressiveness

10.15 – 10.45 am ***Coffee Break***

Symposium V: Functional Genomics

10.45 – 11.00 am **Jan Korbel**, The European Molecular Biology Laboratory, Heidelberg, Germany
Genome sequencing of childhood medulloblastoma brain tumors links chromothripsis with TP53 mutations

11.00 – 11.15 am **Gerrit Erdmann**, German Cancer Research Center, Heidelberg, Germany
Secretion of Wnts is required for Wnt/ß-catenin pathway activity in colorectal cancer (CRC) despite APC or ß-catenin mutations

11.15 – 11.30 am **Sven Lindner**, University Hospital Essen, Germany
LIN28B induces neuroblastoma and enhances MYCN levels via let-7 suppression

11.30 – 11.45 am **Sören Westphal**, University Clinic Ulm, Germany
Human BCL2-associated athanogene 3 (BAG3) mutations lead to dilated cardiomyopathy in zebrafish

11.45 – 12.00 pm **Zouhair Aherrahrou**, University of Lübeck, Germany
Cyp17a1 deficient mice display increased body weight, visceral/subcutaneous fat deposition and altered lipid metabolism

12.00 – 02.00 pm ***Lunch Break and Poster Session II***
12:00 – 1.00 pm odd numbers
1:00– 2.00 pm even numbers

Company Satellite Sessions:

12.10 – 12.40 am	**Raimo Tanzi, Life Technologies GmbH** Ion torrent next Generation sequencing technology: the revolution of the revolution
12.45 – 01.15 pm	**Janine Altmüller, Roche Diagnostics Deutschland GmbH** Whole exome sequencing (WES) speeds up gene identification in monogenetic human diseases
01.20 – 01.50 pm	**Rebekka Krumbach, Oncotest, Susanne Müller, SEQUENOM GmbH** Translating Genomic Discovery into Human Health - The MassARRAY® for Somatic Mutation Profiling in Cancer and Quality Control for NGS Projects
01.55 – 02.25 pm	**Jim White, Nanostring Technologies** Gene Expression Analysis Down to the single Cell level by Digital Quantification of Nucleic Acids Utilizing a Color-Coded Barcode Technology

Poster Award Ceremony:

02.00 – 02.15 pm	**Ceremony: "Annemarie Poustka Poster Award 2012"** sponsored by Roche Diagnostics GmbH **Christine Kuch**, Roche Diagnostics Deutschland GmbH **Hugo A. Katus**, Heidelberg University Clinics, Project Committee of NGFN-Plus / NGFN-Transfer in the Program of Medical Genome Research

Symposium VI: Personalized Medicine

02.15 – 02.45 pm	**Keynote: Rudi Balling**, Luxembourg Centre for Systems Biomedicine, Luxembourg *Systems approaches to Parkinson´s disease*
02.45 – 03.00 pm	**Nicole Teichmann**, University Hospital rechts der Isar, Munich, Germany *A promising therapy strategy for PDAC: MEK1/2 inhibition with the novel chemotherapeutic drug BAY 86-9766 (RDEA119)*
03.00 – 03.15 pm	**Margret Hoehe**, Max Planck Institute for Molecular Genetics, Berlin, Germany *Haplotype-resolving multiple human genomes: Key to personalized medicine and genome biology*
03.15 – 03.30 pm	**Jeanette Erdmann**, University of Lübeck, Germany *The risk of myoacardial infarction is increased by digenic mutation in GUCY1A3 and CCT7 - identified by exome sequencing in an extended family*
03.30 – 03.45 pm	**Brajesh Kaistha**, University of Marburg, Germany *High-throughput cell-based assays identify Placenta-specific 8 (Plac8; Onzin) as a key regulator of proliferation and survival in pancreatic cancer cells*
03.45 – 04.00 pm	**Concluding Remarks: Markus Nöthen**, Friedrich-Wilhelms University, Bonn, Spokesperson for the Project Committee of NGFN-Plus / NGFN-Transfer in the Program of Medical Genome Research
04.00 – 04.30 pm	**Closing Coffee**