IFCC-Worldlab-Euromedlab Berlin 2011

21st International Congress of Clinical Chemistry and Laboratory Medicine
19th IFCC-EFCC European Congress of Clinical Chemistry and Laboratory Medicine
8th Annual Meeting of the German Society of Clinical Chemistry and Laboratory Medicine

Berlin, Germany
ICC Berlin – Internationales Congress Centrum
15 –19 May 2011

SUNDAY, 15 MAY 2011

17:30 - 19:30 **Opening Ceremony**

Welcome Addresses

Awards Ceremony

Opening Lecture

Music Performances

19:30 - 22:30 **Welcome Party**

MONDAY, 16 MAY 2011

9:00 - 11:00 **Symposium 1: Biomarkers for the diagnosis of cardiovascular diseases**

Clinical implication of high sensitive troponin testing
S. Blankenberg

Quality specifications for troponin assays
R. Christenson

Cellular and molecular imaging
R.P. Choudhury

BNP and hearth failure
C. Müller

Symposium 2: Diagnostic challenges in liver disease

Non alcoholic fatty liver disease (NAFLD)
V. Ratziu

Biomarkers of fibrogenesis for the diagnosis and the activity of the fibrosis process in liver diseases
M. Vaubourdolle

Hepatocellular carcinoma: molecular pathogenesis and clinical aspects
H. Blum

Occult hepatitis B infection: diagnosis and significance
W. Gerlich

Year in review: Clinical chemistry 2010 and beyond: opportunities and challenges for the next decade

Next-generation sequencing of plasma DNA for molecular diagnosis
D. Lo

Drugs of abuse testing, from urine to oral fluid: scientific and legal ramifications
M. Huestis

Laboratory and clinical implications of high-sensitivity troponin assays
F. Apple

Quantifying proteins in clinical samples by LC-MS
A. Hoofnagle

Symposium 3: Tumor markers in cancer

Circulating tumor cells and bone marrow micrometastases
K. Pantel

Measurement and diagnostic use of prostate-specific antigen (PSA)
U. Stenman

Methylated genes in cancer progression and clinical application
D. Sidransky

Proteomic approaches for novel biomarker discovery
V. Kulasingam

IFCC Symposium: e-Learning and distance education in clinical chemistry and laboratory medicine

Webinairs, steaming media, blogs and other e-communications
T.T. Van

Labtests online: transmitting laboratory medicine in the context of national and international guidelines
M. Klouche

IFCC distance learning
E. Jacobs

e-Learning experiences of national societies of clinical chemistry and laboratory medicine
P. Kocna

Symposium 4: Kidney diseases - acute and chronic

Unmet clinical needs in assessing CKD
G. Jones

Cystatin C as estimates of renal function in CKD
A. Grubb

Biomarkers of acute kidney injury
C. Ronco

Dyslipidemia in chronic renal disease
O. Samuelsson

DGKL Symposium: Role of non-medical scientists in the medical laboratory

Scientific methods in medicine
W. Bauersfeld

The advance of the science in medicine
G. Raabe-Meyer

Medical laboratory manager – Non-analytical work
R. Lichtinghagen

Requirements for excellence in laboratory medicine – A melting pot of biosciences and medicine
N. Gässler

Workshop 1: Reporting HbA_{1C} for monitoring and diagnosis: the devil's in the detail

Estimated average glucose 2 years on
E.S. Kilpatrick

Status of HbA_{1C} measurement and goals for improvement
R. Little

EQA: HbA_{1C} fit for the diagnosis of diabetes?
C.W. Weykamp

11:30 - 12:45 **Plenary session: Molecular tumor diagnostic**

The potential impact of individualized therapy approaches on pediatric cancer clinical research: technology validation and global access
G.H. Reaman

Cancer gene expression: a systems biology approach to biomarker and drug development
W.N. Keith

Posttranslational modifications in tumor diagnosis
C. Wagener

13:00 - 14:00 **Poster discussion**

13:00 - 17:45 **Industry-sponsored workshops**

14:30 - 16:30 **Symposium 5: From bench to bedside in autoimmunity**

Antiphospholipid syndrome: pathogenesis
T. Koike

Novel strategies for the treatment of rheumatoid arthritis
S. Gay

Title will follow
J. Sheldon

New clinical aspects in rheumatoid arthritis - Guideline-based management
J.S. Smolen

Symposium 6: Diabetes

IFCC standardised HbA_{1c}: should the world be as one?
W.G. John

Genetics of type 2 diabetes - Are we getting any closer?
L. Groop

HbA_{1c} in the diagnosis of diabetes: opportunities and problems
D. Sacks

Molecular and biochemical mechanisms of diabetic complications
P. Gillery

Workshop 2: Emerging infections at AFCB countries

Malaria: a global threat
E.T. Khalil

Tuberculosis: persisting problem in Arab countries
G. Shannan

EFCC Symposium: How to assess the clinical effectiveness of laboratory tests?

Industry and regulatory perspectives: clinical evidence for IVDs
R. Jesus

Laboratory perspectives: testing a test - Phases of biomarker evaluation
A.R. Horvath

Epidemiologic and economic perspectives: evaluating the effectiveness and costs of monitoring
P. Bossuyt

Clinical prespectives: clinical effectiveness of self-monitoring oral anticoagulant treatment
C. Heneghan

DGKL Symposium: Laboratory medicine - quo vadis? Conditions, structures and developmental trends in Europe

Concentration in German laboratory medicine - where are we headed?
M. Müller

Laboratory medicine as a medical discipline - Is the physician in the laboratory (in)dispensable?
R. Klakow-Franck

Laboratory medicine in competition - The Swiss experience
A.R. Huber

France on its way to centralised laboratory diagnostics
B. Wiegel

Interactive session: Pitfalls in the hemostasiologic diagnostics: clinical cases

Current aspects and future trends in the analysis of blood coagulation
T. Preissner Klaus

New anticoagulants and routine coagulation tests
H. Alexander

Two puzzling cases
L. Bernhard

General case report
W. Günter

TUESDAY, 17 MAY 2011

9:00 - 11:00

Symposium 7: Pharmacogenetics and pharmacogenomics

Pharmacogenetics in the treatment of psychiatric diseases
C. Hiemke

Pharmacogenetic predictors of drug-induced liver injury
M. Pirmohamed

Pharmacogenetics of anti-cancer therapy
R. Van Schaik

Year in review: Advances in clinical chemistry in the field of nephrology and endocrinology

New markers for acute kidney injury
C. Ronco

Beyond creatinine standardisation
J. Delanghe

POCT glucose measurement and its limitations
D. Bruns

The management of vitamin D deficiency
M.F. Holick

Workshop 3: Oxidative stress in diabetes mellitus

Role of nrf2 and the antistress gene response in countering oxidative stress in diabetes mellitus
P.J. Thornalley

Oxidative stress markers in diabetic complications
A. Ceriello

Oxidative stress and caloric restriction
J. Skrha

Symposium 8: Infectious diseases

Helicobacter pylori – A global carcinogenic pathogen
S. Suerbaum

Title to be announced
S. Becker

The fourth dimension: combining epidemiologic and typing data for the transition from data to knowledge for infectious diseases
D. Harmsen

IFCC Symposium: Biobanking and laboratory medicine: two resources for modern health care

Biobanking infrastructures: networks for future biomedical research in laboratory medicine
M. Neumaier

Ethical and biolegal aspects: crossborder experiences in Europe
M. Kiehntopf

Public health and biobanking
A. Brand

The key role of biobanking for the study of complex diseases
M. Ferrari

Symposium 9: Haematology and anemia

Diagnostic of talassemia
A. Huber

How can hepcidin help us in the diagnosis of iron disorders?
D.W. Swinkels

Regulation of systemic homeostasis in health and disease
M. Muckenthaler

Laboratory diagnosis of hereditary spherocytosis
M.J. King

DGKL Symposium: Award lecture – Prize biochemical analysis

Workshop 4: Update on cardiac troponin - Clinical and laboratory issues

A roadmap for cardiac troponin I standardization and traceability
D. Bunk

The round robin study for cardiac troponin I - Progress report
J. Tate

Clinical use of high-sensitivity troponin assays
H.A. Katus

11:30 - 12:45 **Plenary session: Advances in clinical and diagnostic immunology**

Chronic inflammatory bowel disease – From bench to bedside
M.F. Neurath

Genomic signatures and the adaptive immune response
H.W. Nicholas

Gene-environment interaction in chronic inflammatory disease
H. Renz

13:00 - 14:00 **Poster discussion**

13:00 - 17:45 **Industry-sponsored workshops**

14:30 - 16:30 **Symposium 10: Diagnostic use and value of function tests in endocrinology**

Laboratory diagnostics in endocrinology
F. Raue

Diagnostic workup of primary aldosteronism
M. Stowasser

Methods for vitamin D measurement: analytical problems and clinical relevance
E. Cavalier

Hormonal changes after gastric surgery and obesity interventions
C. Le Roux

Symposium 11: Point of care testing - Practical aspects

Management of POCT program in a teaching hospital
D. Rogic

Update on current and developing POCT applications with a global and emerging country focus
B. Goldsmith

The operator is key in delivering quality in POCT
I. Watson

Designing a quality POCT program using CLSI documents
L.A. Wyer

Workshop 5: Lessons from the Asian-Pacific multicenter reference interval study

Study design: strategy for collaboration in the definition of reference intervals
K. Ichihara

Statistical considerations in the generation of reference intervals
J. Boyd

Obtaining reference intervals traceable to reference measurement systems
M. Panteghini

EFCC symposium: Accreditation should be focussed on more than well organized examinations with the laboratory

IVD directive 98/79/CE in relation to ISO 15189
J.C. Libeer

ISO 15189: coverage of pre-examination aspects and traceability of results: is this sufficient?
L. Sprongl

ISO 15189: coverage of validation of results and post-examination aspects: is this sufficient?
Z. Simone

The specific roles of assessors during accreditation and beyond
W. Huisman

DGKL Symposium: Quality management according to the German RiliBAEK: an international perspective

German medical associations directive for quality assurance for medical laboratory tests: history and last issues
W. Vogt

Clinical laboratory quality assurance and management: status in Italy
M. Ogriseg

Clinical laboratory quality assurance and management: status in Austria
M. Hubmann

Root mean square of measurement deviation: a new approach in German medical

associations directive for quality assurance for medical laboratory tests
R. Macdonald

Workshop 6: The 2009 influenza pandemic - Lessons learned
Speakers to be announced

WEDNESDAY, 18 MAY 2011

9:00 - 11:00 **Symposium 12: Biomarkers in acute and chronic brain diseases**

Alzheimer disease
G. Casadeus

Multiple sclerosis
A.H. Cross

Blood biomarkers for the diagnosis and prognosis of stroke
W. Whiteley

S100B protein: a screening tool for the diagnosis of minor head injury
J.L. Beaudeux

Year in review: Developments in clinical laboratory practice

Translational medicine: the case of laboratory medicine
M. Plebani

Risk management in the pre-analytical phase
G. Lippi

Risk management in the analytical phase
J. Westgard

Reference values and beyond
F. Ceriotti

Workshop 7: Clinical pharmacogenetics

Pharmacogenetics of tamoxifen: can we or should we implement?
D. Flockhart

Genetic predictors of warfarin response: the Warfarin Consortium
J. Johnsson

Symposium 13: Prenatal and neonatal screening

Pre-eclampsia: genetic and epigenetic aspects
C.B.M. Oudejans

An update on antenatal screening for Down's syndrome
N. Wald

Fetal DNA in the maternal circulation: prospects for prenatal screening and diagnosis
D. van den Boom

Recommendations in prenatal screening in the World and their connection to other diseases as thyreopathie
T. Zima

IFCC Symposium: Standardization in molecular diagnostics

The need for standardization in molecular diagnostics
M. Pazzagli

Development of reference methods and materials for molecular diagnostic testing
D. Payne

The IFCC network of molecular diagnostic centres
F. Rousseau

An IFCC molecular diagnostics centre in action: pharmacogenetics
R. Van Schaik

Symposium 14: Allergy diagnostics

Emerging concepts in individualized therapy of atopic dermatitis
T. Bieber

Component-based diagnostics - Recombinant allergens as diagnostic tools
R. Valenta

Carbohydrate allergens
T. Werfel

DGKL Symposium: Development of a transcriptomic, proteomic and metabolomic database for human blood cells

Problems and solutions for consolidated blood cell proteome analysis
H.E. Meyer

Generating a consolidated database for transcriptomics, proteomics and metabolomics of human blood cells
L. Martens

The proteome of resting and activated platelets
A. Sickmann

Transcriptomics, proteomics and lipidomics from megakaryopoesis to platelet senescence
G. Schmitz

Workshop 8: Molecular diagnosis of infection

Molecular diagnosis of tuberculosis
C. Boehme

Challenges of molecular diagnosis - The leprosy model
V. Vissa

Molecular diagnosis of viral infections
L. Tadeu Moraes Figueiredo

11:30 - 12:45 **Plenary session: The brain: biological markers and cerebral diseases**

Alzheimer's disease: from molecular pathology to diagnosis and treatment approaches
R.N. Martins

Biomarkers in multiple sclerosis
M. Comabella

Mechanisms of neurotoxicity and neurodegeneration
A. Aguzzi

13:00 - 14:00 **Poster discussion**

13:00 - 17:45 **Industry-sponsored workshops**

14:30 - 16:30 **Symposium 15: New developments in haemostasiology**

Coagulation factor XIII deficiency
L. Muszbek

Genetics and epidemiology of thrombophilia
F.R. Rosendaal

Platlets
W. Ulrich

Monitoring of anticoagulant therapy
B. Lämmle

Symposium 16: Contribution of laboratory medicine in leukaemia

AML: molecular diagnostics and MRD
A. Neubauer

Identification of prognostic subgroups in acute leukemia by novel phenotypic patterns and MDR assay
J. Kappelmayer

Speaker and title to be announced

Workshop 9: What papers will be preferred in the future related to laboratory medicine? Editors point of view

Ethical issues involving publications
A.H.B. Wu

Position in your journal about the peer review? In there any alternative?
M. Plebani

The role of editors in improving scientific journals
N. Rifai

EFCC Symposium: A scientific approach to the post-analytical phase

How to use information on biological variation in an evidence-based way
B. Bartlett

Reflective testing - Is there evidence that it is worthwhile and for which clinical problems?
W. Oosterhuis

Post-analytical external quality assessment - A way to assess test requesting and interpretation?
S. Sandberg

Post-analytical errors in lipid and lipoprotein testing: need for clinical added value
M. Langlois

DGKL Symposium: Research funding by the Foundation of Pathobiochemistry and Molecular Diagnostics of the DGKL - 10 years on

Immunoprofiling of the new variable immunoreceptor of neutrophils in acute systemic inflammation
W. Kaminski

Pathogenesis of the antiphospholipid syndrome
N. Prinz

Role of protease signalling in vascular disease
B. Isermann

Sphingoid bases - A new class of biomarkers?
T. Hornemann

Interactive session: Challenges at the clinical interfaces

Interpretative paradigm 1: Endocrinology case
D. Freedman

Interpretative paradigm 2: Water and electrolytes case
A.R. Horvath

Interpretative paradigm 3: Toxicology case
M. Hallworth

Interpretative paradigm 4: Diabetes case
E. Kilpatrick

THURSDAY, 19 MAY 2011

9:00 - 11:00 **Symposium 17: New strategies in molecular diagnostic**

DNA melting analysis: from fundamentals to practical applications
C.T. Wittwer

Quality assurance and quality control in the routine molecular diagnostic laboratory
H. Kessler

Next-generation sequencing in leucemia diagnostics
A. Kohlmann

High throughput qPCR expression profiling: from tissue samples to single cells
M. Kubista

Symposium 18: Standardization and quality control issue in emerging and developing countries

Analytical quality in Latin America area
G. Migliarino

Quality assurance program in Arab countries
F. Harb

Standardization and quality control issue in emerging and developing countries
E. Frank

Current status of quality management in laboratory medicine in China
S. Hong

Workshop 10: Novel insights in iron metabolism: implications for diagnostic medicine

Newly identified inherited diseases of iron metabolism
Speaker to be announced

Anemia of chronic disease: markers for diagnosis and treatment monitoring
G. Weiss

Hepcidin as a novel potential biomarker for disorders of iron metabolism
L. Thomas

Symposium 19: Current challenges in the pediatric laboratory

The immature platelet fraction as a novel dynamic cellular parameter for predicting and monitoring the course of neonatal thrombocytopenia
A. Weimann

Laboratory markers for differential diagnosis of bacterial and viral infections in children with fever
N. Mayansky

Childhood metabolic syndrome: pathophysiology and laboratory assessment
K. Adeli

Clinical relevance of B-type natriuretic peptide assay in newborns with congenital heart diseases
M. Cantinotti

EFCC Symposium: Standardization of the pre-analytical phase for biomarkers

Standardisation and improvement of generic pre-analytical tools and procedures for in-vitro diagnostics
U. Oelmueller

Impact of the pre-analytical phase in colorectal cancer diagnosis
K. Zatloukal

Pre-analytical aspects of the Carmague study
P. Laitinen

Evidence-based quality guidelines for the pre-analytical phase of blood samples
M. Pazzagli

Symposium 20: Vitamin D: myth or magic

Vitamin D requirements for health
H. Bischoff-Ferrari

A new paradigm for vitamin D activity in bone: autocrine/paracrine actions
H. Morris

Chemistry and metabolism of vitamin D and its metabolities
G. Jones

25-Hydroxyvitamin D assays - Are they fit for purpose?
G. Carter

IFCC-WASPaLM Workshop: Chronic kidney disease - Developing a national testing program

CKD - A global clinical perspective
F. Alcantara

Why a national program for CKD testing?
D. Seccombe

Key factors in successful national CKD programs
G. Jones

Workshop 11: Biomarkers of acute and neurodegenerative brain damages

Diagnostic value of biomarkers for Alzheimer disease
S. Lehmann

No future for CSF Alzheimer disease biomarkers without standardisation of preanalytical steps
A. Perret-Liaudet

Cerebrospinal fluid biomarkers for the diagnosis/prognosis of neurological diseases
I. Quadrio

11:30 - 12:45 **Plenary session: New avenues in laboratory diagnostics**

Next-generation sequencing and its translation to patient care
K.V. Voelkerding

Post-translational modification
D.F. Hochstraser

Clinical application of nanotechnology
A.J.R. Heck

14:30 - 16:30 **Symposium 21: New technologies in clinical application**

NMR-spectroscopy in the diagnosis of metabolic diseases
R. Wevers

Strategies for protein quantification by integrated elemental and molecular mass spectrometry
Q. Wang

Screening, identifying and quantifying small molecules by hyphenated mass spectrometry in toxicology and drug monitoring
H. Maurer

Recent developments in the biology and applications of plasma nucleic acids
D. Lo

Symposium 22: Intertwining emergency medicine and laboratory medicine

Medical emergencies: what is the laboratory's role?
D.S. Young

What should the clinical laboratory and the toxicologist-pharmacologist offer the poisoned patient?
Do.R.A. Uges

The clinical laboratory and acts of chemical or biological terrorism… Can we be prepared?
M.D. Kellogg

Laboratory resources needed to address unanticipated disasters
C. Kosack

Workshop 12: Joint session with IATDMCT: Trends in therapeutic drug monitoring: personalized immunosuppression

TDM of immunosuppressants: current practice and guidelines
T. Van Gelder

Use of endogenous biomarkers to achieve personalized immunosuppression in transplant recipients
M. Oellerich

Impact of pharmacogenetics to optimize immunosuppressive therapy
I. MacPhee

IFCC Symposium: Traceability, standardisation, harmonisation: concepts and implementation

Traceability in laboratory medicine: a review of the international activities
A. Kessler

Heterogeneous analytes: standardisation or harmonisation (Part I)
L. Siekmann

Heterogeneous analytes: standardisation or harmonisation (Part II)
L. Thienpont

Implementation of standardization in clinical practice: not always an easy task
M. Panteghini

Workshop 13: Vitamin deficiency in elderly people: diagnosis, prevention and effect on age-related diseases

B-vitamins and neurodegeneration
R. Obeid

Vitamin D and cardiovascular disease: a review of the epidemiological and clinical evidence
R. Scragg

Vitamin K and bone health
M.J. Shearer

16:30 - 17:45 **Closing ceremony**

ORGANIZING SECRETARIAT

MZ CONGRESSI srl
Via Carlo Farini 81 - 20159 Milano (Italy)
Tel: +39 02 66802323 – Fax: +39 02 6686699
E-mail: info@berlin2011.org