

ICIEM 2013 Barcelona - Scientific Programme

TUESDAY, SEPTEMBER 3rd

15:00 - Plenary Session 1

16:30 GLYCOSYLATION DEFECTS

AUDITORIUM

Chairs:

Jaak Jaeken, *University Hospital Gasthuisberg, Leuven, Belgium*

Paz Briones, *Hospital Clínic and CSIC, Barcelona, Spain*

15:00 **Type 2 Golgi - biochemical update**

Hudson H. Freeze, *Sanford-Burnham Medical Research Institute, La Jolla CA, United States*

15:30 **Clinical phenotype update diagnostic algorithms**

Eva Morava, *Tulane University Medical School , New Orleans LA, United States*

16:00 **Animal and cellular models**

Christian Koerner, *Center for Child and Adolescent Medicine Heidelberg, Heidelberg, Germany*

17:00 - Plenary Session 2

19:00 MOVEMENT DISORDERS AND INBORN ERRORS OF METABOLISM

AUDITORIUM

Chairs:

Emilio Fernández, *Hospital Sant Joan de Deu, Barcelona, Spain*

Michael Gibson, *Washington State University, Spokane, United States*

17:00 **Clinical approach to metabolic dystonias**

Jean Pierre Lin, *Guy's and St Thomas' NHS Foundation Trust, London, United Kingdom*

17:30 **Rigid akinetic syndrome in inborn errors of metabolism**

Angels García Cazorla, *Hospital Sant Joan de Déu , Barcelona, Spain*

18:00 **The link between the GBA gene and parkinsonism**

Kathrin Brockmann, *Zentrum für Neurologie, Abteilung Neurodegeneration, Tübingen, Germany*

18:30 **Neurodegeneration with brain iron accumulation (NBIA)**

Susan Hayflick, *Oregon Health and Science University, Portland, United States*

WEDNESDAY, SEPTEMBER 4th

08:30 -

Plenary Session 3

10:30

NOVEL TREATMENT STRATEGIES IN INBORN ERRORS OF METABOLISM

AUDITORIUM

Chairs:

Guillem Pintos, *Hospital Germans Trias i Pujol, Badalona, Spain*

Janice Fletcher, *Women's and Children's Hospital, North Adelaide, Australia*

08:30 **Strategies for gene therapy**

Fátima Bosch, *Universidad Autónoma de Barcelona, Barcelona, Spain*

09:00 **Adenosine deaminase gene therapy**

Alessandro Aiuti, *Ospedale San Raffaele, Milano, Italy*

09:30 **Chaperone therapies. Functional principles**

Ania Carolina Muntau, *Dr. von Hauner Children's Hospital, Munich, Germany*

10:00 **Liver stem cells transplantation**

Etienne Sokal, *Cliniques Universitaires St Luc, Leuven, Belgium*

11:00 -

PARALLEL WORKSHOPS

12:30

ROOM H1+H2

Workshop 1: NEUROTRANSMITTER DEFECTS

Chairs:

Nenad Blau, *University Children's Hospital, Heidelberg, Germany*

Simon Heales, *Great Ormond Street Hospital, London, United Kingdom*

ROOM H3+J

Workshop 2: PHENYLKETONURIA. RECENT TRENDS IN THERAPY

Chairs:

Verónica Cornejo, *University of Chile, Santiago, Chile*

Francjan van Spronsen, *University Medical Centre Groningen, Groningen, The Netherlands*

AUDITORIUM

Workshop 3: LYSOSOMAL DISEASES

Chairs:

Roberto Giugliani, *Hospital de Clinicas de Porto Alegre, Porto Alegre, Brazil*

Hiroyuki Ida, *Jikei University School of Medicine, Nishi-Shimbashi, Minato-ku, Tokyo, Japan*

ROOM F

Workshop 4: FATTY ACID OXIDATION DISORDERS AND METABOLISM OF KETONE BODIES

Chairs:

Jörn Oliver Sass, *University of Zürich Children's Hospital, Zürich, Switzerland*

Grant Mitchell, *Medical Genetics, CHU Sainte-Justine, Montreal, Canada*

**15:00 -
16:30**

PARALLEL ORAL PRESENTATIONS

ROOM F

Oral presentations 1: NUTRITION AND DIETETICS

Chairs:

Marjorie Dixon, *Great Ormond Street Hospital, London, United Kingdom*

M^a Luz Couce, *Hospital Universitario de Santiago, Santiago de Compostela, Spain*

ROOM H3+J

Oral presentations 2: ORGANIC ACIDS AND CREATINE DISORDERS

Chairs:

Gajja Salomons, *VU University Medical Center, Amsterdam, The Netherlands*

Belén Pérez Dueñas, *Hospital Sant Joan de Déu, Barcelona, Spain*

AUDITORIUM

Oral presentations 3: MITOCHONDRIAL DISORDERS I

Chairs:

Ute Spiekerkoetter, *University Children's Hospital, Freiburg, Germany*

M^a Teresa García-Silva, *Hospital 12 de Octubre, Madrid, Spain*

ROOM H1+H2

Oral presentations 4: MISCELLANEOUS

Chairs:

Philip Mayne, *Children's University Hospital, Dublin, Ireland*

M^a Ángeles Ruiz, *Hospital Son Espases, Palma de Mallorca, Spain*

17:00 -

18:30

PARALLEL ORAL PRESENTATIONS

AUDITORIUM

Oral presentations 5: MITOCHONDRIAL DISORDERS II

Chairs:

Shamima Rahman, *Institute of Child Health, London, United Kingdom*

Frederic Tort, *Hospital Clínic-CIBERER, Barcelona, Spain*

ROOM H1+H2

Oral presentations 6: AMINO ACID DISORDERS

Chairs:

Victor Kozich, *Charles University In Prague, First Faculty of Medicine, Prague, Czech Republic*

Mireia del Toro, *Hospital Universitari Vall d'Hebron, Barcelona, Spain*

ROOM F

Oral presentations 7: METHODS AND TREATMENT STRATEGIES

Chairs:

Philippa Mills, *Institute of Child Health, London, United Kingdom*

M^a José Coll, *Hospital Clínic, Barcelona, Spain*

ROOM H3+J

Oral presentations 8: CDG, LYSOSOMAL AND PEROXISOMAL DISORDERS

Chairs:

Fanny Mochel, *Hospital Pitié-Salpêtrière, Paris, France*

Marisa Girós, *Hospital Clinic, Barcelona, Spain*

THURSDAY, SEPTEMBER 5th

08:30 -

10:30

AUDITORIUM

Plenary Session 4

THE CHANGING FACE OF LABORATORY DIAGNOSTICS OF INBORN ERRORS OF METABOLISM

Chairs:

Christine Vianey-Saban, *Centre de Biologie et de Pathologie Est (CBPE)
CHU de Lyon, Lyon, France*

Johannes Zschocke, *Medical University Innsbruck, Innsbruck, Austria*

08:30 Targeted metabolomic approach using Tandem Mass Spectrometry

Neil Dalton, *King's College London, Evelina Children's Hospital, London,
United Kingdom*

09:00 Exome function and content, perspectives for diagnosis and treatment

Bas van Balkom, *University Medical Center Utrecht, Utrecht, The
Netherlands*

09:30 Exome and Genome sequencing. Bioinformatics

Gert Matthijs, *University of Leuven, Leuven, Belgium*

10:00 **The role of targeted DNA enrichment panels in the diagnosis of inborn errors of metabolism**

Xavier Estivill, *Center for Genomic Regulation, Barcelona , Spain*

11:00 -
12:30

PARALLEL WORKSHOPS

AUDITORIUM

Workshop 5: OUTCOME OF PATIENTS DETECTED THROUGH EXPANDED NEWBORN SCREENING

Chairs:

Georg Hoffmann, *University Children's Hospital, Heidelberg, Germany*

Avihu Boneh, *Royal Children's Hospital, Melbourne, Australia*

ROOM F

Workshop 6: THE POTENTIAL OF MODEL SYSTEMS TO UNDERSTAND INBORN ERRORS OF METABOLISM

Chairs:

Ubaldo Caruso, *Gaslini Institute- University , LABSIEM , Genova, Italy*

Fumio Endo, *Kumamoto University, Kurokami Kumamoto, Japan*

ROOM H1+H2

Workshop 7: METABOLIC LEUKODYSTROPHIES

Chairs:

Frederic Sedel, *Pitie-Salpêtrière Hospital, Paris, France*

Barbara Plecko, *Kinderspital Zurich, Zurich, Switzerland*

ROOM H3+J

Workshop 8: NUCLEAR ENCODED MITOCHONDRIAL DISEASES

Chairs:

Ramon Martí, *Vall d'Hebron Institut de Recerca, Barcelona, Spain*

Wolfgang Sperl, *Paracelsus Medical University- Landeskliniken, Salzburg, Austria*

FRIDAY, SEPTEMBER 6th

08:30 -

10:30

AUDITORIUM

Plenary Session 5

DISEASES RELATED TO MITOCHONDRIAL COFACTOR METABOLISM

Chairs:

Carlos Santos-Ocaña, *Universidad Pablo de Olavide, Sevilla, Spain*

Holger Prokisch, *Klinikum Rechts der Isar, Munich, Germany*

08:30 CoQ10 deficiencies

Michio Hirano, *Columbia University Medical Center, New York, United States*

09:00 Defects of thiamine transport and metabolism

Garry Brown, *University of Oxford, Oxford, United Kingdom*

09:30 Lipoic acid biosynthesis defects

Johannes Mayr, *Paracelsus Medical University, Salzburg, Austria*

10:00 Diseases related to iron sulphur cluster metabolism

Roland Lill, *Philipps-Universität Marburg, Marburg, Germany*

11:00 -

12:30

PARALLEL WORKSHOPS

ROOM H1+H2

Workshop 9: TRANSPORT DEFECTS

Chairs:

Graziela Uziel, *Istituto Neurologico C. Besta, Milano, Italy*

Lourdes Desviat, *Universidad Autónoma de Madrid, Madrid, Spain*

AUDITORIUM

Workshop 10: PURINE/PYRIMIDINE AND UREA CYCLE DISORDERS

Chairs:

José Antonio Arranz, *Hospital Universitari Vall d'Hebron, Barcelona, Spain*

Jorgen Bierau, *Maastricht University Medical Centre, Maastricht, The Netherlands*

Netherlands

ROOM F

Workshop 11: COUNTRIES WITH EMERGING INBORN ERRORS OF METABOLISM SERVICES

Chairs:

Mubeccel Demirkol, *Children's Hospital, 1st Med Faculty, Istanbul, Turkey*

Anil Jalan, *Navi Mumbai Institute of Research, Navi Mumbai, India*

ROOM H3+J

Workshop 12: DISORDERS OF COMPLEX LIPIDS

Chairs:

Ronald Wanders, *Academic Medical Center, Amsterdam , The Netherlands*

Barbara Burton, *Ann and Robert H Lurie Children's Hospital, Chicago, United States*

13:30 -

16:45

AUDITORIUM

Chairs:

Cornelis Jakobs, *VU University Medical Center, Amsterdam, The Netherlands*

Peter Clayton, *Institute of Child Health, London, United Kingdom*

HOT TOPICS AND LATE BREAKING NEWS

13:30 LBN-01: A new congenital disorder of glycosylation (CDG) discovery of signal sequence receptor SSR3 to be essential for efficient protein-N-glycosylation at distinct sites

Rust S¹, Moormann S, Reunert J, Wada Y, Marquardt T

¹Leibniz-Inst for Arteriosclerosis Res, Münster, Germany

13:45 LBN-02: identification of mutations in LIPT1 as a cause of an early onset fatal disease associated with a specific lipoylation defect of the 2-oxoacid dehydrogenase complexes

Tort F¹, Garcia-Cazorla A, Ferrer-Cortès X, Thió M, Quintana E, Bujan N, Navarro-Sastre A, Matalonga L, Artuch R, Acquaviva C, Vianey-Saban C, Briones P, Ribes A

¹*Hospital Clínic, IDIBAPS, U737-CIBERER, Barcelona, Spain*

14:00 **LBN-03: Efficacious and sustained gene-therapy of canavan disease by single intravenous doses of novel rAAVs**

Gao G¹, Ahmed S, Matalon R

¹*University of Massachusetts Medical School, Worcester, USA*

14:15 **LBN-04: Mutations in NALCN cause an autosomal recessive syndrome with mild facial dysmorphism variable hypotonia, speech delay, chronic constipation and intellectual disability**

Al-Sayed M¹, Al-Zaidan H, Albakheet A, Hakami H, Kenana R, Al-Yafee Y, Al-Dosary M, Qari A, Al-Sheddi T, Al-Muheiza M, Al-Qubbaj W, Lakmache Y, Al-Hindi H, Ghaziuddin M, Colak D, Kaya N

¹*King Faisal Specialist Hospital and Research Center, Riyadh, Saudi Arabia*

14:30

KOMROWER LECTURE: The daily challenge of understanding and treating metabolic diseases in children

Carlo Dionisi-Vici, *Children's Research Hospital Bambino Gesù, Rome, Italy*

15:15

EMMANUEL SHAPIRA AWARD (To the best paper of MGM)

Restoration of impaired nitric oxide production in MELAS syndrome with citrulline and arginine supplementation.

Molecular Genetics and Metabolism Volume 105, Issue 4, (April 2012) pg 607-614.

Ayman El-Hattab, *Children's Hospital King Fahad Medical City Riyadh, Saudi Arabia*

15:45

ARCHIBALD GARROD AWARD (To the best paper of JIMD)

The Adult Galactosemic Phenotype

Journal of Inherited Metabolic Diseases, 2012, vol 35, pages 279-286

Susan E. Waisbren, Children's Hospital Boston, Boston, MA, USA