

Gordon Research Conference

Mitochondria in Nitrogen Metabolism

Discussion Leader: **Warwick Dunn**(University of Liverpool, United Kingdom)

7:40 pm - 7:50 pm

Introduction by Discussion Leader

7:50 pm - 8:50 pm

Craig Thompson (MSKCC, United States)
"The Central Role of Mitochondria in Nitrogen Metabolism"

8:50 pm - 9:10 pm

Discussion

9:10 pm - 9:30 pm

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Monday am

The Microbiome and Human Metabolome

Discussion Leader: **Elaine Holmes**(Murdoch University, Australia)

9:00 am - 9:05 am

Introduction by Discussion Leader

9:05 am - 9:30 am

Rima Kaddurah-Daouk (Duke University, United States)
"Brain Health at Cross Roads of Gut Microbiome Exposome Genome and Metabolome"

9:30 am - 9:45 am

Discussion

9:45 am - 10:10 am

Sofia Forslund (ECRC (MDC & Charité), Germany)
"Joint Host-Microbiome Investigations into some Immune-Related Health States"

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Monday am cont'd

10:55 am - 11:20 am

Matej Oresic (Örebro University, Sweden)
"Gut Microbiome as Mediator of Chemical
Exposome - Host Metabolism Crosstalk"

11:20 am - 11:35 am

Discussion

11:35 am - 12:00 pm

Dirk Haller (Technical University of Munich,
Germany)
"Microbiome-Metabolite Interactions and
Inflammation"

12:00 pm - 12:15 pm

Discussion

12:15 pm - 12:30 pm

General Discussion

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Monday evening

Immunometabolism

Discussion Leader: **Thomas Hankemeier**
(Leiden University, The Netherlands)

6:00 pm - 6:05 pm

Introduction by Discussion Leader

6:05 pm - 6:40 pm

Ron Heeren (Maastricht University, The
Netherlands)
"Spatial Metabolomics of Health and Disease"

6:40 pm - 6:55 pm

Discussion

6:55 pm - 7:30 pm

David Wishart (University of Alberta, Canada)
"Metabolomics and Immunometabolism- What
Can We Learn?"

7:30 pm - 7:45 pm

Discussion

7:45 pm - 8:00 pm

General Discussion

8:00 pm - 9:00 pm

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Tuesday am

Nutrition and Precision Health

Discussion Leader: **Susan Sumner**(University of North Carolina at Chapel Hill, United States)

9:00 am - 9:05 am

Introduction by Discussion Leader

9:05 am - 9:30 am

Elaine Holmes (Murdoch University, Australia)
"Metabolic Phenotyping for Precision Health"

9:30 am - 9:45 am

Discussion

9:45 am - 10:10 am

Soumeya Bekri (Rouen University Hospital, France)
"Cross-Talk between Rare and Common Diseases through Omics Lenses"

10:10 am - 10:25 am

Discussion

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Tuesday am cont'd

Wiebke Arlt (MRC London Institute of Medical Sciences (LMS), United Kingdom)
"Steroid Metabolism and Contribution to Health and Disease"

11:20 am - 11:35 am

Discussion

11:35 am - 12:00 pm

Hannelore Daniel (Technical University of Munich, Germany)
"Metabolic Phenotyping for Precision Nutrition"

12:00 pm - 12:15 pm

Discussion

12:15 pm - 12:30 pm

General Discussion

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Tuesday evening

Capturing the Spatial Organization of Metabolism
Discussion Leader: **Ron Heeren** (Maastricht University, The Netherlands)

6:00 pm - 6:05 pm

Introduction by Discussion Leader

6:05 pm - 6:30 pm

Per Andren (Uppsala University, Sweden)
"Mapping Neurotransmitter Networks in the Brain"

6:30 pm - 6:40 pm

Discussion

6:40 pm - 7:05 pm

Ingela Lanekoff (Uppsala University, Sweden)
"Spatial Metabolomics – Picturing Activities *in situ*"

7:05 pm - 7:15 pm

Discussion

7:15 pm - 7:40 pm

Shawn Davidson (Princeton University, United States)
"Spatially-Resolved Assessment of Metabolism using Iso-Imaging"

7:40 pm - 7:50 pm

Discussion

7:50 pm - 8:00 pm

General Discussion

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Wednesday am

Multomics to Assess Disease and Health Status
Discussion Leader: **Karsten Suhre** (Weill Cornell Medicine-Qatar, Qatar)

9:00 am - 9:10 am

Introduction by Discussion Leader

9:10 am - 9:35 am

Julian Griffin (University of Aberdeen, United Kingdom)
"Regulation of Lipid Metabolism and its Interplay with Health and Diseases of Overnutrition"

9:35 am - 9:50 am

Discussion

9:50 am - 10:15 am

Jingyuan Fu (University Medical Center Groningen, The Netherlands)
"Tacking the Gut-Liver Axis in Human Metabolome: From Association to Organ-on-a-Chip"

10:15 am - 10:30 am

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Wednesday am cont'd

11:00 am - 11:25 am

Thomas Hankemeier (Leiden University, The Netherlands)
"Integrative Multiomics for Health and Disease"

11:25 am - 11:40 am

Discussion

11:40 am - 12:00 pm

General Discussion

12:00 pm - 12:30 pm

Poster Previews

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Wednesday pm

Biohacking Metabolism for Prolonged Lifespan and Healthspan

Discussion Leader: **Rima Kaddurah-Daouk** (Duke University, United States)

6:00 pm - 6:25 pm

Johan Auwerx (Ecole Polytechnique Federale de Lausanne, Switzerland)
"Cross-Species Genetic Mapping of New Players in Mitochondria and Aging"
Cross-Species Genetic Mapping of New Players in Mitochondria and Aging"

6:25 pm - 6:40 pm

6:40 pm - 7:05 pm

Discussion

Norbert Perrimon (Harvard Medical School, United States)
"Metabolic Dysregulation Associated with a Drosophila Cachexia Model"

7:05 pm - 7:20 pm

7:20 pm - 7:45 pm

Discussion

Eileen White (Rutgers Cancer Institute, United States)

"Role of Autophagy in Metabolism"

7:45 pm - 8:00 pm

Discussion

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Thursday am

Advances in Metabolomics Technologies

Discussion Leader: **David Wishart** (University of Alberta, Canada)

9:00 am - 9:05 am

Introduction by Discussion Leader

9:05 am - 9:30 am

Maria Fedorova (Technical University Dresden, Germany)

"Lipidomics Measures of Human Health Status"

9:30 am - 9:45 am

Discussion

9:45 am - 10:10 am

Christian Metallo (The Salk Institute for Biological Studies, United States)

"Quantifying Organelle-Specific Metabolic Processes to Decipher Biochemical Networks Within Cells"

10:10 am - 10:25 am

Discussion

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Thursday am cont'd

Claire O'Donovan (EMBL-EBI, United Kingdom)
"Infrastructures to Support Metabolomics"

11:20 am - 11:35 am

Discussion

11:35 am - 12:00 pm

Yulan Wang (Nanyang Technological University, Singapore)

"Human Metabolome Technologies"

12:00 pm - 12:15 pm

Discussion

12:15 pm - 12:30 pm

General Discussion

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Thursday evening

Harnessing Metabolic Individuality for Studying Health and Disease

Discussion Leader: **Matej Oresic** (Örebro University, Sweden)

6:00 pm - 6:15 pm

Introduction by Discussion Leader

6:15 pm - 6:40 pm

Karsten Suhre (Weill Cornell Medicine-Qatar, Qatar)
 "Connecting the Metabolome, Epigenome and Proteome for a Deeper Understanding of Human Disease"

6:40 pm - 6:55 pm

Discussion

6:55 pm - 7:05 pm

Short Talk Selected from Poster Abstracts

7:05 pm - 7:10 pm

Discussion

7:10 pm - 7:20 pm

Short Talk Selected from Poster Abstracts

7:20 pm - 7:25 pm

Discussion

7:25 pm - 7:35 pm

Short Talk Selected from Poster Abstracts

7:35 pm - 7:40 pm

Discussion

7:40 pm - 8:00 pm

General Discussion