Danish Diabetes Academy

Bone, Energy Metabolism and Diabetes
- Integrated Physiology and Clinical Applications

3 & 4 October 2016
Sinatur Hotel Storebælt, Østerøej 121, Nyborg

Organisation committee:

* Michaela Tencerova, Post Doc, Molecular Research Lab KMEB, Odense University Hospital
* Morten Frost, Post Doc, Dept. of Endocrinology, Odense University Hospital
* Kurt Hajlund, Professor, Dept. of Endocrinology, Odense University Hospital
* Pernille Herman, Consultant, Dept. of Endocrinology, Odense University Hospital
* Moustapha Kassem, Professor, Dept. of Endocrinology, Odense University Hospital
Programme
Monday– 3 October

09:15 – 09:50 Welcome

Moustapha Kassem, Professor, University of Southern Denmark & Odense University Hospital & Kim Brixen, Director at Odense University Hospital & Professor at University of Southern Denmark

Session 1 Bone and energy metabolism: integrated physiology
Chair: Lars Folkestad, PhD student, Odense University Hospital

10:00 – 10:30 “A crosstalk between bone and muscle function: a role in regulation energy metabolism”

Gerald Karsenty, Professor, Genetics and Development, Columbia University, NY, USA

10:30-11:00 “Exercise and insulin sensitivity: cellular and vascular effects”

Erik Richter, Professor, Dept. of Nutrition, Exercise and Sports, University of Copenhagen, Denmark

11:00 – 11:15 Break

11:15-11:45 “Effects of exercise on kynurenine metabolism in people with normal glucose tolerance or type 2 diabetes”

Anna Krook, Professor, Dept. of Physiology and Pharmacology, Karolinska Institute, Stockholm, Sweden

11:45-12:00 “Osteocalcin signaling in myofibers favors adaptation to exercise by increasing uptake and utilization of nutrients in adult mice”

Paula Mera, Post Doc, Genetics and Development, Columbia University, NY, USA

12:00-13:00 Lunch

Session 2 Adipose tissue and energy metabolism
Chair: Michaela Tencerova, Post Doc
13:00 – 13:30  "Adipose in control of systemic insulin sensitivity"

Michael Czech, Professor, Program in Molecular Medicine, University of Massachusetts Medical School, Worcester, USA

13:30-14.00  “The multiple roles of macrophages in insulin resistance”

Myriam Aouadi, Assistant Professor, Dept. of Medicine, Karolinska Institute, Huddinge, Sweden

14:00-14:15  Break

14:15-14:45  “Circadian control of brown adipose energy-expending potential”

Zach Gerhart-Hines, Assistant Professor, Section for Metabolic Receptology, University of Copenhagen, Denmark

14:45-15:15  “Novel elements of insulin signaling in adipose tissues”

Brice Emanuelli, Assistant Professor, Section for Integrative Physiology, University of Copenhagen, Denmark

15:15-15:45  Coffee break

Session 3  Cellular energy metabolism and cell function

Chair: Morten Frost, Post Doc

15:45-16:15  "Polypharmacological modulation of the PPARγ/α gene programs is anabolic for the bone"

Beata Lecka-Czernik, Professor, Dept. of Orthopaedic Surgery, University of Toledo, Ohio, USA

16:15-16:30  “Dlk1 neutralizing antibody as a treatment in bone loss”

Florence Figeac, Post Doc, Molecular Research Lab KMEB, Odense University Hospital, Denmark

16:30-16:45  “Bone marrow fat, obesity and type 2 diabetes”

Michaela Tencerova, Post Doc, Molecular Research Lab KMEB, Odense University Hospital, Denmark

18:00  Speaker’s dinner (only for invited guests)
Tuesday 4 October

**Session 1**  
**Bone and diabetes: the clinical approach**  
Chair:  
**Vikram Shanbhogue**, PhD student

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<tr>
<td>09:00-09:30</td>
<td>“Diabetic bone diseases: the clinical syndrome”</td>
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<td><strong>Ghada El-Hajj Fuleihan</strong>, Professor &amp; Director, The Calcium Metabolism and Osteoporosis Program &amp; WHO Collaborating Centre for Metabolic Bone Disorders, Beirut, Lebanon</td>
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<td>09:30-10:00</td>
<td>“Epidemiology of diabetic bone diseases”</td>
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<td><strong>Bo Abrahamsen</strong>, Professor, Dept. of Medicine, Holbæk Hospital, Denmark</td>
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<td>10:00-10:15</td>
<td>Break</td>
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<td>10:15-10:45</td>
<td>“Antidiabetic drugs and bone”</td>
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<td><strong>Peter Vestergaard</strong>, Professor, Dept. of Endocrinology, Aalborg University Hospital, Denmark</td>
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<td>10:45-11:00</td>
<td>“Lrp5 and bone diseases”</td>
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<td><strong>Morten Frost</strong>, Post Doc, Dept. of Endocrinology, Odense University Hospital, Denmark</td>
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<td>11:00-11:30</td>
<td>Coffee break</td>
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**Session 2**  
**Methods in investigating bone structure and metabolism**  
Chair:  
**Abbas Jafari**, Post Doc

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<tr>
<td>11:30-12:00</td>
<td>“Distinct Metabolic Role of Bone Marrow Adipose Tissue”</td>
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<td><strong>Riku Kivaranta</strong>, Adjunct Professor, MD, PhD, University of Turku &amp; Turku University Hospital, Finland</td>
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<td>12:00-12:30</td>
<td>“Gut hormones and bone remodeling”</td>
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<td><strong>Bolette Hartmann</strong>, Associate Professor, Dept. of Biomedical Sciences, University of Copenhagen, Denmark</td>
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12:30-12:45  “Extreme microCT scan in evaluation of the bone structure”
Vikram Shanbhogue, Post Doc, Dept. of Endocrinology, Odense University Hospital, Denmark

12:45-13:45  Lunch

Session 3  Epigenetics, proteomics and energy metabolism
Chair: Florence Figeac, Post Doc

13:45-14:15  “Transcriptional networks regulating mesenchymal stem cell differentiation”
Susanne Mandrup, Professor, Dept. of Biochemistry and Molecular Biology, University of Southern Denmark, Denmark

14:15-14:45  “Epigenetic inheritance in obesity and insulin resistance”
Romain Barrés, Associate Professor, The Novo Nordisk Foundation Center for Metabolic Research, University of Copenhagen, Denmark

14:45-15:00  Break

15:00-15:30  “Unanticipated role of the epidermal barrier in whole body physiology and metabolism”
Nils Færgeman, Professor, Dept. of Biochemistry and Molecular Biology, University of Southern Denmark, Denmark

15:30-16:00  “Islet inflammation in type 2 diabetes: in search of new therapeutic targets”
Jamileh Movassat, Professor, Dept. of Functional and Adaptive Biology and Pathology of the Endocrine Pancreas, University Paris Diderot, France

16:00-16:15  “LGMN, a new molecule in regulation of bone metabolism”
Abbas Jafari, Post Doc, DanStem & KMEB, University of Copenhagen, Denmark

16:15-16:30  “CFH in regulation of osteogenesis and adipogenesis”
Chen Li, Assistant Professor, Molecular Research Lab KMEB, Odense University Hospital, Denmark

16:30-16:45  Concluding remarks

16:45-17:45  Reception and Networking including tapas and drinks