The Saltin Symposium
Exercise and Integrative Physiology
June 2-4, 2015

Venue:
Rigshospitalet, Auditorium I
Copenhagen, Denmark

Arranged by

Scientific Committee
Henriette Pilegaard, Henrik Klitgaard and Robert Boushel

Organizing Committee
Bente K. Pedersen, Emil Holm Toft,
Inge Holm, Marie Kvistgaard and Morten Zacho

Consultancy Committee
Gisela Sjøgaard, Gunnar Grimby, Mark Hargreaves,
Michael Joyner, Peter Schantz and Ylva Hellsten

www.aktivsundhed.dk
PROGRAM

June 2

15:00-15:10 Opening: Jannik Hilsted, Medical Director of Rigshospitalet

The History - Continuing in the Steps of Krogh and Lindhard


15:25-15:40 Formative Years in Stockholm
Peter Schantz

15:40-15:55 The August Krogh Institute: Capillaries and beyond
Gisela Sjøgaard

The Copenhagen Muscle Research Centre

15:55-16:10 Chairs: Jerome Dempsey & Peter B. Raven

16:10-16:25 How to Get Value for Money
Peder Olesen Larsen

16:25-16:40 The Activity
Michael Kjær

16:40-16:55 The International Standing
Michael Joyner

17:00-19:00 Reception (Rigshospitalet)
Saltin Salutations and Networking

June 3

Muscle Physiology

08:30-08:45 Chairs: Erik A. Richter & Stephen Harridge

08:45-09:00 Overview of Muscle and Exercise
Mark Hargreaves

09:00-09:15 Muscle Fibre Type and Beyond
Stefano Schiaffino

09:15-09:30 New Insights on Muscle Metabolic Profile
Niels Ørtenblad

09:30-09:45 Muscle Adaptation to Exercise: New Paradigms
Frank Booth
09:45-10:15 Discussion

10:15-10:45 Coffee/Tea

Signalling Events and Muscle Metabolism

10:45-11:00 Chairs: Henriette Pilegaard and Terry Graham

11:00-11:15 Imaging: Muscle Structure and Substrates
Clara Prats

11:15-11:30 Exercise and Muscle Signal Transduction
Jørgen Wojtaszewski

11:30-11:45 Mitochondrial Function and Exercise
Darrell Neufer

11:45-12:00 Oxidative Capacity vs. Exercise VO2
Eva Blomstrand

12:00-12:30 Discussion

12:30-13:30 Lunch

Cardiovascular Physiology I


13:45-14:00 Muscle Vasodilator Mechanisms
Ylva Hellsten

14:00-14:15 The Role of ATP in Muscle Blood Flow
Jose Gonzalez-Alonso

14:15-14:30 Central and Regional Blood Flow Regulation
Jose A.L. Calbet

14:30-14:45 Reflex Control of Circulation
Paul Fadel

14:45-15:15 Discussion

15:15-15:45 Coffee/Tea
Cardiovascular Physiology II

15:45-16:00  *Chairs: Jaya Rosenmeier & Susanne Vissing*

16:00-16:15  Cardiovascular Regulation with Aging and Training
              *Stefan Mortensen*

16:15-16:30  Regulation of the Circulation at Altitude
              *Carsten Lundby*

16:30-16:45  Cardiovascular Regulation in the Arctic
              *Robert Boushel*

16:45-17:00  Cardiovascular Regulation After Bedrest and Spaceflight
              *Benjamin Levine*

17:00-17:15  Modeling O$_2$ Transport as an Integrated System: Effect of Training
              *Peter D. Wagner*

17:15-17:45  Discussion

19:00  Dinner in Tivoli Gardens

**Celebrating Bengt’s 80th birthday**

*Chairs: Jens Bangsbo & Susanne Vissing*

June 4

Applied and Comparative Physiology

09:00-09:15  *Chairs: Eva Jansson and Gerrit van Hall*

09:15-09:30  Sport Physiology
              *Jens Bangsbo*

09:30-09:45  Olympic Scientific Activity
              *Stefan Lindeberg*

09:45-10:00  Elite Skiers
              *Hans Christer Holmberg*

10:00-10:30  The Kenyan Runners
              *Henrik Larsen / William Sheel*

10:30-10:50  *Coffee/ Tea*

10:50-11:05  Comparative Mitochondrial Physiology
              *Erich Gnaiger*

11:05-11:35  Discussion
Exercise and Health

11:35-11:50  Chair: Bente Klarlund Pedersen

11:50-12:05  The 'Saltin-Grimby Physical Activity Level Scale' and its Application to Health Research
              Gunnar Grimby

12:05-12:20  Muscle, Exercise and Health throughout the Lifespan
              Mark Tarnapolsky

12:20-12:35  Discussion

12:35-12:45  Award Presentation
              To be announced

12:45-13:00  Awardee Talk

13:00  Closing: Inge Holm

Symposium Chairs, Lecturers and Organizers

Benjamin Levine
Director, Institute for Exercise and Environmental Medicine, S. Finley Ewing Jr. Chair for Wellness at Texas Health Presbyterian Dallas, Harry S. Moss Heart Chair for Cardiovascular Research, Professor of Medicine and Cardiology, Distinguished Professorship in Exercise Science, University of Texas Southwestern Medical Center at Dallas, USA

Bente Klarlund Pedersen
Professor, Director, Centre for Physical Activity Research (CFAS) and Centre of Inflammation and Metabolism (CIM), Rigshospitalet and University of Copenhagen, Denmark

Birgitta Essén-Gustavsson
Associate Professor, Swedish University of Agricultural Sciences, Department of Large Animal Clinical Sciences, Uppsala, Sweden

Carsten Lundby
Professor, Center for Integrative Human Physiology (ZIHP), University of Zurich, Institute of Physiology, Zürich, Switzerland

Clara Prats
Associate Professor, Systems Biology Research Section, Panum Institute, University of Copenhagen, Denmark
Darrell Neufer  
Director, Professor, Departments of Physiology and Kinesiology, East Carolina Diabetes and Obesity Institute, USA

Emil Holm Toft  
Administrative student assistant; BA of Laws, Centre for Physical Activity Research (CFAS) and Centre of Inflammation and Metabolism (CIM), Rigshospitalet and University of Copenhagen, Denmark

Erich Gnaiger  
Professor, Daniel Swarovski Research Laboratory, Department of Visceral, Transplant and Thoracic Surgery, Medical University of Innsbruck and CEO, Oroboros Instruments Corp., Austria

Erik A. Richter  
Professor, Section of Molecular Physiology, Department of Nutrition, Exercise and Sports, University of Copenhagen, Denmark

Eva Blomstrand  
Professor in Nutrition Physiology, GIH, Swedish School of Sport and Health Sciences, Stockholm, Sweden

Eva Jansson  
Professor, Division of Clinical Physiology, Department of Laboratory Medicine, Karolinska Institute, Stockholm, Sweden

Frank Booth  
Professor, Departments of Biomedical Sciences, Medical Pharmacology and Physiology, and Nutrition and Exercise Physiology, Dalton Cardiovascular Institute, University of Missouri, USA

Gerrit van Hall  
Professor, Department of Endocrinology, Rigshospitalet and University of Copenhagen, Denmark

Gisela Sjøgaard  
Professor, Department of Sports Science and Clinical Biomechanics, University of Southern Denmark, Denmark

Gunnar Grimby  
Professor Emeritus, Department of Neuroscience and Physiology, Section of Clinical Neuroscience and Rehabilitation, University of Gothenburg, Sweden

Hans-Christer Holmberg  
Professor, HLV, Mid Sweden University, Sweden
Henriette Pilegaard  
Professor, Senior Group Leader, Centre for Physical Activity Research (CFAS) and Centre of Inflammation and Metabolism (CIM), Department of Biology, University of Copenhagen, Denmark

Henrik Klitgaard  
Henrik Klitgaard, PhD, Vice President, Neuroscience Therapeutic Area, UCB Pharma, Belgium

Henrik B. Larsen  
Cand. Scient., Copenhagen, Denmark

Inge Holm  
Head (administration); Centre for Physical Activity Research (CFAS) and Centre of Inflammation and Metabolism (CIM), Rigshospitalet and University of Copenhagen, Denmark

Jan Henriksson  
Professor Emeritus, Department of Physiology and Pharmacology, Karolinska Institute, Stockholm, Sweden

Jaya Birgitte Rosenmeier  
Chief Consultant Cardiologist Ph.d., Department of Cardiology, Bispebjerg Hospital, Copenhagen, Denmark

Jens Bangsbo  
Professor, Deputy Head of Research, Integrative Physiology, Department of Nutrition, Exercise and Sport, University of Copenhagen, Denmark

Jere H. Mitchell  
Clinical Professor, Internal Medicine, Physiology, Biomedical Engineering, UT Southwestern Medical Center, Dallas, USA

Jerome Dempsey  
John R. Sutton Professor Emeritus of Population Health Sciences Director, John Ranking Laboratory of Pulmonary Medicine, School of Medicine and Public Health, University of Wisconsin-Madison, USA

José A.L. Calbet  
Professor of Exercise Physiology, Dept. of Physical Education, University of Las Palmas de Gran Canaria, Spain

José Gonzalez-Alonso  
Professor of Exercise and Cardiovascular Physiology, Director of Centre for Sports Medicine and Human Performance, Brunel University London, United Kingdom
Jørgen Wojtaszewski  
Professor, Section of Molecular Physiology, August Krogh Centre, Department of Nutrition, Exercise and Sports, University of Copenhagen, Denmark

Marie Kvistgaard  
Symposium secretary, Centre for Physical Activity Research (CFAS) and Centre of Inflammation and Metabolism (CIM), Rigshospitalet and University of Copenhagen, Denmark

Mark Hargreaves  
Pro Vice-Chancellor of Melbourne Research, Professor of Physiology, Dept. of Physiology, Faculty of Medicine Dentistry and Health Sciences, University of Melbourne, Australia

Mark Tarnapolsky  
Professor, Department of Pediatrics and Department of Medicine, McMaster University, Hamilton, Ontario, Canada

Michael Joyner  
Professor, The Human and Integrative Physiology and Clinical Pharmacology laboratories, Mayo Clinic, Rochester, USA

Michael Kjær  
Professor of Sports Medicine, Institute of Sports Medicine and Centre for Healthy Ageing, Bispebjerg Hospital and University of Copenhagen, Denmark.

Niels H. Secher  
Clinical Professor, Institute for Clinical Medicine, Rigshospitalet, University of Copenhagen, Denmark

Niels Ørtenblad  
Associate Professor, Head of Research Unit, Institute of Sports Science and Clinical Biomechanics, Muscle Physiology and Biomechanics, University of Southern Denmark, Denmark

Paul Fadel  
Associate Professor, Medical Pharmacology and Physiology, School of Medicine, University of Missouri Health System, USA

Peder Olesen Larsen  
Head of the Board and Director of the Danish National Research Foundation from 1991 to 1998, University of Copenhagen, Denmark

Peter B. Raven  
Professor, Department of Integrative Physiology and Anatomy, University of North Texas Health Science Center, Fort Worth, USA
Peter Schantz
Professor in Human Biology, GIH, Swedish School of Sport and Health Sciences, Stockholm, Sweden

Peter D. Wagner
Distinguished Professor of Medicine and Bioengineering, Division of Physiology, Department of Medicine, University of California, San Diego, USA

Robert Boushel
Professor, GIH, Swedish School of Sport and Health Sciences, Stockholm, Sweden

Stefan Lindeberg
President of the Swedish Olympic Committee (SOK) Executive Board, Stockholm, Sweden

Stefan Mortensen
Associate Professor, Cardiovascular and Renal Research, University of Southern Denmark, Denmark

Stefano Schiaffino
Professor Emeritus, University of Padova, and Vice President, Venetian Institute of Molecular Medicine (VIMM), Italy

Stephen Harridge
Professor of Human and Applied Physiology, Director at Centre of Human and Aerospace Physiological Sciences, Faculty of Life Sciences and Medicine, Kings College London, United Kingdom

Susanne Vissing
MD, DMSc, Medical Specialist, Dermatology, Copenhagen, Denmark

Terry Graham
Professor Emeritus, Human Health and Nutritional Sciences, University of Guelph, Canada

William Sheel
Professor, University of British Columbia, Vancouver, Canada

Ylva Hellsten
Professor, Integrated Physiology, Department of Nutrition, Exercise and Sport, University of Copenhagen, Denmark
The Saltin Symposium
‘Exercise and Integrative Physiology’

*is supported by*

Rigshospitalet

TrygFonden &

DANISH DIABETES ACADEMY

*The Danish Diabetes Academy is supported by The Novo Nordisk Foundation*

Saltin Symposium Contact Information

The Saltin Symposium Secretariat
Address: Rigshospitalet, 7641, Blegdamsvej 9, DK-2100 Copenhagen Ø
Tel +45 3545 7641
E-mail: saltin2015@inflammation-metabolism.dk
www.aktivsundhed.dk