



**5th Saltin International Graduate Course
in Exercise and Clinical Physiology
Snekkersten, Denmark, 2019**

International PhD Course entitled:

**Exercise as Medicine:
a Translational Perspective**

September 23rd – 26th, 2019

Organized by:



PRELIMINARY PROGRAM

Course format

The PhD Course consists of two integrated parts: the PhD Course sessions (Sept 23rd – 25th) and a Symposium on “Exercise as Medicine in a Mechanistic Perspective” (Sept 26th).

Venue

Comwell Borupgaard, Snekkersten, Denmark

Program Committee

Ylva Hellsten, Niels Ørtenblad, Clara Prats, Abigail Mackey
and Bente Klarlund Pedersen

Organizing Committee

Bente Klarlund Pedersen, Inge Holm and Emil Toft



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Program Day 1

09:00-09:30 **Registration and Coffee**

09:30-09:45 **Welcome and Introduction**
Bente Klarlund Pedersen

Session #1: Exercise as Medicine – the Methods

Chair: *Ylva Hellsten*

09:45-10:05 **Measurements of physical activity and fitness**
Paolo Caserotti

10:05-10:25 **Physiological methods in exercise**
Carsten Lundby

10:25-10:45 **Molecular methods in exercise**
Robert Boushel

10:45-11:05 **Animal models in exercise**
Henriette Pilegaard

11:05-11:15 **Short break**

11:15-12:15 **Workshop on how to design a translational study**
Facilitators: *Clara Pratts and Abigail Mackey*

12:15-13:00 **Lunch**

Session #2: Exercise, Muscle and Tendons

Chair: *Robert Boushel*

13:00-13:30 **Skeletal muscle cell interactions during human tissue repair and exercise adaptation**
Abigail Mackey

13:30-14:00 **Muscle lipid droplet and glycogen metabolism in exercise, training and disease**
Niels Ørtenblad

14:00-14:30 **Discussion**



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- 14:30-17:00 **Recreational Break**
- 17:00-19:00 **Workshop on research dissemination and pitching**
Facilitators: Rudi Westendorp and Morten Zacho
- 19:00-20:30 **Dinner, networking and science games**

Program Day 2

Session #3: Exercise and Diabetes

Chair: Clara Prats

- 08:00-08:30 **Models and basic mechanisms**
Jørgen Wojtaszewski
- 08:30-09:00 **Exercise as means to counter hyperglycemia**
David Wright
- 09:00-09:30 **Clinical intervention studies**
Mathias Ried-Larsen
- 09:30-10:00 **Discussion**
- 10:00-10:30 **Break**

Session #4: Exercise and the Cardiopulmonary System

Chair: Niels Ørtenblad

- 10:30-11:00 **How to train a patient with cardiovascular disease**
Michael J. Joyner
- 11:00-11:30 **Humans in hypoxia: A conspiracy of maladaptation?**
Jerry A. Dempsey
- 11:30-12:00 **The impact of exercise training on vascular function in hypertension**
Ylva Hellsten
- 12:00-12:30 **Discussion**
- 12:30-13:15 **Lunch**



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13:15-14:00 **Workshop on how to design a translational study, cont.**
Facilitators: Clara Prats and Abigail Mackey

Session #5: Exercise and Aging

Chair: *Terry Graham*

14:00-14:30 **Title to be decided**
Gianni Parise

14:30-15:00 **Strength and power training for the oldest old:
can we reverse the functional clock?**
Paolo Caserotti

15:00-18:30 **Recreational Break –**
Optional outing to e.g. Louisiana Museum of Modern Art

18:30-19:30 **Poster pitching**

19:30-20:30 **Dinner**

Program Day 3

Session #6: Exercise and Obesity

Chair: *David Wright*

08:00-08:30 **Title to be decided**
Mary-Ellen Harper

08:30-09:00 **Skeletal muscle metabolism during exercise and obesity**
Clara Prats

09:00-09:30 **Exercise and postprandial metabolism**
Terry Graham

09:30-10:00 **Discussion**

10:00-10:30 **Break**



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Session #7: Exercise and Neurology

Chair: Abigail Mackey

10:30-11:00 **Exercise and multiple sclerosis**

Ulrik Dalgas

11:00-11:30 **Exercise and dementia**

Steen Hasselbalch (tbc)

11:30-12:00 **Discussion**

12:00-13:00 **Lunch**

Session #8: Exercise and Cancer

Chair: TBA

13:00-13:30 **A translational perspective on exercise and cancer**

Jesper F. Christensen

13:30-14:00 **Barriers and motivation in exercise and cancer**

Julie Midtgaard

14:00-14:30 **Discussion**

14:30-16:00 **Group presentations of how to design a translational study**

Facilitators: Clara Prats and Abigail Mackey

16:00-16:30 **Course Evaluation**

16:30-18:00 **Recreational Break**

18:00-19:00 **Poster pitching**

19:00-20:45 **Dinner and Saltin memorial talks by Jerry, Terry, and Mike**

20:45-21:00 **Poster and Study Design Prize Award Ceremony**



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Program Day 4

**INTERNATIONAL SYMPOSIUM ON
*Exercise as Medicine in a Mechanistic Perspective***

09:00-09:30 **Registration and coffee**

09:30-09:35 **Welcome**
Bente Klarlund Pedersen

09:35-10:15 **Key-note lecture on: Exercise as Medicine (Title to be decided)**
Michael J. Joyner

10:15-10:45 **Exercise, Muscle and Tendons (Title to be decided)**
Michael Kjær

10:45-11:15 **Coffee**

11:15-11:45 **Exercise and Insulin Sensitivity**
Erik A. Richter

11:45-12:15 **Exercise and the Cardiopulmonary System (Title to be decided)**
Ylva Hellsten

12:15-14:00 **Lunch and Poster Pitching**

14:00-14:30 **Exercise and Aging (Title to be decided)**
Stephen Harridge

14:30-15:00 **Exercise and Obesity (Title to be decided)**
Mary-Ellen Harper

15:00-15:30 **Coffee**

15:30-16:00 **Exercise and Neurology (Title to be decided)**
Jens Brüning

16:00-16:30 **Exercise and Cancer (Title to be decided)**
TBA

16:30-16:45 **PhD Course and Symposium closing**
Bente Klarlund Pedersen



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Lecturers, Speakers and Chairpersons

Abigail Mackey

Assoc. Prof., Dept. of Biomedical Sciences, University of Copenhagen, Denmark

Bente Klarlund Pedersen

Professor and Centre Director, Centre for Physical Activity Research, Rigshospitalet and University of Copenhagen, Denmark

Carsten Lundby

Professor, Inland Norway University of Applied Sciences, Lillehammer, Norway and Centre of Physical Activity Research, Rigshospitalet, Copenhagen, Denmark

Clara Prats

Assoc. Professor, Dept. of Biomedical Sciences, University of Copenhagen, Denmark

David Wright

Professor, Human Health and Nutritional Sciences, University of Guelph, Canada

Erik A. Richter

Professor, Dept. of Exercise and Sport Sciences, University of Copenhagen, Denmark

Gianni Parise

Professor, McMaster University, Canada

Henriette Pilegaard

Professor, Cell Biology and Physiology, University of Copenhagen, Denmark

Jens Brüning

Professor, Dr., Max Planck Institute for Metabolism Research, Germany

Jerry A. Dempsey

Professor, Dept. of Population Health Sciences, University of Wisconsin, Madison, USA

Jesper F. Christensen

Postdoc, PhD, Centre for Physical Activity Research, Rigshospitalet, Copenhagen, Denmark

Julie Midtgaard

Assoc. Professor, University Hospital Centre for Health Research, Rigshospitalet and University of Copenhagen, Denmark



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Jørgen Wojtaszewski

Professor, Dept. of Exercise and Sport Sciences, University of Copenhagen, Denmark

Mary-Ellen Harper

Professor, Dept. of Biochemistry, Microbiology and Immunology, University of Ottawa, Canada

Mathias Ried-Larsen

Senior Researcher and group leader, PhD., Centre of Physical Activity Research, Rigshospitalet, Copenhagen, Denmark

Michael J. Joyner

Professor, Mayo Clinic, Rochester, USA

Michael Kjær

Professor, Institute of Sports Medicine Copenhagen, Bispebjerg Hospital and University of Copenhagen, Denmark

Morten Zacho

Teaching Assoc. Professor, University of Southern Denmark, Odense, Denmark

Niels Ørtenblad

Professor, Dept. of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark

Paolo Caserotti

Assoc. Professor, Dept. of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark

Robert Boushel

Professor, School of Kinesiology, University of British Columbia, Vancouver, Canada

Rudi Westendorp

Professor, Section of Epidemiology, University of Copenhagen, Denmark

Steen Hasselbalch

Professor, Danish Dementia Research Centre, Rigshospitalet and University of Copenhagen, Denmark (tbc)



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Stephen Harridge

Professor, Centre for Human & Applied Physiological Sciences, King's College London, United Kingdom

Terry Graham

Professor, Human Health and Nutritional Sciences, University of Guelph, Canada

Ulrik Dalgas

Assoc. Professor, Department of Public Health - Sport Science, Aarhus University, Denmark

Ylva Hellsten

Professor, Dept. of Exercise and Sport Sciences, University of Copenhagen, Denmark



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Local Program and Organizing Committees

Abigail Mackey

Assoc. Prof., Dept. of Biomedical Sciences, University of Copenhagen, Denmark

Bente Klarlund Pedersen

Professor and Centre Director, Centre for Physical Activity Research, Rigshospitalet and University of Copenhagen, Denmark

Clara Prats

Assoc. Professor, Dept. of Biomedical Sciences, University of Copenhagen, Denmark

Emil Toft

Course Secretary, Centre for Physical Activity Research, Rigshospitalet and University of Copenhagen, Denmark

Inge Holm

Head of Section, Administration, Centre for Physical Activity Research, Rigshospitalet and University of Copenhagen, Denmark

Niels Ørtenblad

Professor, Dept. of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark

Ylva Hellsten

Professor, Dept. of Exercise and Sport Sciences, University of Copenhagen, Denmark

Canadian Co-Organizing Committee

David Wright

Professor, Human Health and Nutritional Sciences, University of Guelph, Canada

Mary-Ellen Harper

Professor, Dept. of Biochemistry, Microbiology and Immunology, University of Ottawa, Canada

Robert Boushel

Professor, School of Kinesiology, University of British Columbia, Vancouver, Canada

Terry Graham

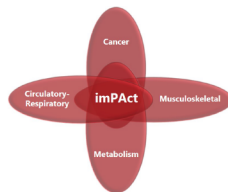
Professor, Human Health and Nutritional Sciences, University of Guelph, Canada



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TrygFonden

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