

The 23rd International Puijo Symposium:

**“PHYSICAL EXERCISE FOR HEALTH
PROMOTION AND MEDICAL CARE –
TRANSLATION OF RESEARCH
EVIDENCE TO EVERYDAY PRACTISE”**

**Kuopio, Finland
June 27 – 30, 2022**

Organized by:

Kuopio Research Institute of Exercise Medicine

In partnership with:

Federation of Finnish Learned Societies

City of Kuopio

Finnish Society of Clinical Physiology

Finnish Physiological Society

Finnish Association of Physiotherapists

Faculty of Sport and Health Sciences, the University of Jyväskylä

Finnish Centres of Excellence in Sports and Exercise Medicine

Faculty of Health Sciences, the University of Eastern Finland

Expertise and Business Network for North Savo rehabilitation services

Supported by:

Finnish Youth and Sport Experts Association

Scientific Program

MONDAY, June 27

09:00 **Registration**

12:15 **OPENING CEREMONIES**
Jukka Mönkkönen, Rector, University of Eastern Finland
Sari Essayah, Member of Parliament of Finland, Member of IOC

ROLE OF INACTIVITY IN CHRONIC DISEASES: EVOLUTIONARY INSIGHT AND PATHOPHYSIOLOGICAL MECHANISMS

Chairperson Dr Kai Savonen, Finland

13:00 **Why we run**
Dr Bernd Heinrich, USA

13:40 **Why we never evolved to exercise**
Dr Daniel Lieberman, USA

14:20 **Physical activity enhances longevity**
pro Dr Jonathan Myers, USA
con Dr Urho Kujala, Finland

15.00 **Break**

FROM BENCH TO BEDSIDE...TO THE COMMUNITY HEALTH

Chairperson Dr Olli J. Heinonen, Finland

15.30 **Lifelong exercise as a countermeasure against age-related decline in ability to function**
Dr Alejandro Lucia, Spain

16.00 **Promoting health-enhancing physical activity: successful examples**
Dr Tommi Vasankari, Finland

16.30 **Responsibility of sport and exercise medicine in preventing chronic disease**
Dr Mats Börjesson, Sweden

18:30 **Reception of the city of Kuopio**
Town Hall

FROM SCIENCE TO CLINICAL PRACTICE I – Cardiorespiratory performance

Chairperson Dr Arto Hautala, Finland

- 08:00** **Pulmonary limits to maximal cardiorespiratory performance in health and disease**
Dr Jerome Dempsey, USA
- 08:30** **Limitations to maximal cardiorespiratory performance in health and disease**
Dr Andrew Jones, UK
- 09:00** **The clinical importance of maximal cardiorespiratory performance: the past, present and future**
Dr Jonathan Myers, USA
- 09:30** **Cardiopulmonary exercise testing for risk prediction in major surgery**
Dr Denny Levett, UK
- 10:00** **Break**

FROM SCIENCE TO CLINICAL PRACTICE II - Cardiovascular diseases

Chairperson Dr Juha Hartikainen, Finland

- 10:30** **Exercise and endothelium**
Dr Arno Schmidt-Trucksäss, Switzerland
- 11:00** **Exercise and retinal microvascular function across the lifespan**
Dr Henner Hanssen, Switzerland
- 11:30** **Towards a personalized approach in exercise-based cardiovascular rehabilitation: how can translational research help?**
Dr Nicolle Kräinkel, Germany
- 12:00** **CPET imaging in cardiology: applications and perspectives**
Dr Marco Guazzi, Italy
- 12:30** **Lunch**

Chairperson Dr Tomi Laitinen, Finland

- 13:45** **Too much exercise for cardiovascular health? Myth or fact?**
Dr Paul Thompson, USA
- 14:15** **Mechanical cardiopulmonary interactions during exercise in heart failure**
Dr Piergiuseppe Agostoni, Italy
- 14:45** **Exercise training and physical activity in patients with heart failure**
Dr Matthias Wilhelm, Switzerland
- 15:15** **The clinical benefit of high-intensity interval training outweighs the potential risks**
pro Dr Trine Moholdt, Norway
con Dr Juha Hartikainen, Finland
- 18:30** **Oral presentations at Old Harbour restaurant at Kuopio Passenger Harbour**

FROM SCIENCE TO CLINICAL PRACTICE III - Metabolic diseases

Chairperson Dr Timo Lakka, Finland

- 08:00** **Role of inactivity in the development of metabolic syndrome**
Dr Frank Booth, USA
- 08:40** **The Fat but Fit paradox**
Dr Mikael Fogelholm, Finland
- 09:20** **A time to eat, a time to exercise: circadian biology and metabolic health**
Dr John Hawley, Australia
- 10:00** **Break**
- 10:30** **Mitochondria and aging - the role of exercise as a countermeasure**
Dr Mark Tarnopolsky, Canada
- 11:10** **Exercise as a modulator of intestinal microbiome**
Dr Andrea Ticinesi, Italy

MARTTI J. KARVONEN YOUNG INVESTIGATOR AWARD PRESENTATIONS

- 11:45** **Finalist 1**
- 12:00** **Finalist 2**
- 12:15** **Finalist 3**

12:30 **Lunch**

RALPH S. PAFFENBARGER JR. POSTER COMPETITION

- 13:45** **Finalist 1**
- 14:00** **Finalist 2**
- 14:15** **Finalist 3**

14:30 **PUIJO SYMPOSIUM 2014 HONORARY LECTURE**
Dr Martin Halle, Germany

METHODOLOGICAL FRONTIERS OF EXERCISE MEDICINE

Chairperson Dr Vesa Kiviniemi, Finland

- 08:30** **Statistical pitfalls of personalized medicine, Dr Stephen Senn, UK**
- 09:10** **The human risks of bias in medical and rehabilitation research and practice
Dr Antti Malmivaara, Finland**
- 09:50** **How to design the optimal exercise-based RCT – ask the experts
moderator Dr Vesa Kiviniemi, Finland**
- 10:30** **Break**
- 11:00** **From evidence-based knowledge to evidence-based decision-making
Dr Kari Raivio, Finland**

PUIJO SYMPOSIUM HALL OF FAME: GREETINGS FROM THE GIANTS OF EXERCISE MEDICINE

Chairperson Dr Rainer Rauramaa, Finland

- 11:35** **Dr Ilkka Vuori, Finland**
- 12:05** **Recipient of Heikki Pekkarinen Memorial Award**
- 12:35** **Lunch**
- 13:45** **Martti J. Karvonen Young Investigator Award ceremony**
- 14:00** **Ralph S. Paffenbarger Jr. Poster Competition Award ceremony**
- 14:15** **Understanding the cellular and molecular mechanisms of physical activity-induced health
benefits
Dr P. Darrell Neuffer, USA**
- 15:00** **Closing of the Symposium
Dr Martin Halle, Germany**

For information and registration on-line:

www.puijosymposium.org

E-mail: puijo.symposium@kultu.fi

PUIJO SYMPOSIUM SECRETARIAT

**Foundation for Research in
Health Exercise and Nutrition,
Kuopio Research Institute of Exercise Medicine
Haapaniementie 16, FI-70100 KUOPIO, Finland**

ABSTRACT SUBMISSION

Please submit your previously unpublished abstract by e-mail to
puijo.symposium@kultu.fi by April 30th, 2022.

Abstracts will be selected on the basis of scientific merit and presented as oral presentations. All abstracts will take part in The Ralph S. Paffenbarger Jr. Abstract Award unless the author inform his/hers unwillingness. Notification of the acceptance will be made by May 15, 2022. If you have any further questions, please contact Puijo Symposium Secretariat by contact form or email.

Please note abstracts will be processed further after receiving the registration fee. Instructions for the preparation of abstracts and advice for oral presentations and posters, see our website www.puijosymposium.org

Heikki Pekkarinen Memorial Award will be delivered for the third time in the 23rd International Puijo Symposium. The Award is to honour Heikki's pioneering and extensive commitment in developing both the substance as well as modern teaching methods in health sciences.

CONGRESS VENUE

Puijo Symposium will be held at IsoCee Cinema Centre in the heart of Kuopio.

ACCOMMODATION

Hotel Puijonsarvi and Scandic Atlas are the official hotels of the symposium.

HOTEL PUJONSARVI
Minna Canthin katu 16,
FI-70100 Kuopio, Finland
Tel. +358 (0)17 1922 000
Fax +358 (0)17 1922 001
sales.kuopio@sokoshotels.fi
www.sokoshotels.fi/en/hotels/kuopio/

SCANDIC ATLAS KUOPIO
Haapaniemenkatu 22,
FI-70100 Kuopio, Finland
Tel. +358 300308455
atlas@scandichotels.com
<http://www.scandichotels.com/hotels/finland/kuopio/scandic-atlas>

WELCOME TO THE KUOPIO REGION

The Kuopio region is situated in central Finland, in the verdant province of North Savo, which is interspersed with thousands of lakes.

The backdrop for the summer atmosphere in the Kuopio region is provided by lakes and islands, great to explore on boat cruises, as well as by the landscape of forest-covered hills. Boating, hiking and other forms of outdoor recreation are really spoilt for choice here. The region also boasts a wide variety of cultural activities and events.

The lakes, which abound with fish, guarantee good catches throughout the year. Leisure spas with their bubbling pools and baths offer relaxation and invigoration whenever you feel the need.

How to reach Kuopio

By flight: connections are excellent as there are 5-10 daily flights (duration 50 minutes) from capital Helsinki.
www.finnair.com

By train: There are several trains daily from Helsinki to Kuopio and the journey takes about four hours.
www.vr.fi/eng

By car: Kuopio is situated by one of the arterial roads of the country, highway 5 leading from Helsinki to Lapland.
The Kuopio region can also be reached by bus from Helsinki.