

31st Pediatric Work Physiology Children & Exercise

Welcome to PWP 2019 in Umeå

When: 11 to 14 September 2019

Where: Väven, Umeå



pwp2019.com

Organizers



Main partners



Tuesday, Sep 10

- 11:00 - 16:00** **Arrival to Väven for Check in at PWP2019**
Street address: Storgatan 46A, 5th floor at P5 congress center
- 16:00 - 18:00** **Dinner buffet at Great Space**
Street address: Kungsgatan 63D
- 18:00 - 18:30** **PWP2019 Opening at Great Space**
Neil Armstrong, Professor at Exeter University, UK
Christer Malm, Professor at Umeå University, Sweden
Apostolos Theos, Head of Section for Sports Medicine, Umeå University, Sweden
Ulrika Haake, Head of School of Sport Sciences, Umeå University, Sweden
- 18:30 - 19:30** **Rutenfranz Lecture**
Don't sit – get up and go!
Ulf Ekelund, Professor at Norwegian School of Sport Sciences
- 19:30 - 22:00** **House Warming Activity**

Wednesday, Sep 11

08:00 - 09:30 **Early Life**

Chair: Ulf Ekelund, Professor at Norwegian School of Sport Sciences

Title to be announced

Paul W Franks, Professor at Lund University, Sweden

Abstract: "Measurement of physical activity in preschoolers by activity type versus schoolyard location"
K.A. Clevenger, Michigan State University, USA

09:30 - 10:30

FIKA

10:30 - 12:00 **Development**

Chair: Richard Way, CEO Sport for Life, Canada

Long-Term Development in Sport and Physical Activity

John Cairney, Professor at University of Toronto

Abstract: "Effects of a 2-year Lifestyle Intervention on Cardiorespiratory Fitness in 6-8 year-old Children"
A. Agbaje, University of Eastern Finland

12:00 - 12:45

LUNCH

12:45 - 13:45 **Opening Ceremony at Rådhusstorget**

Delegates from PWP & IPLC together with participating school classes

14:00 - 15:00 **Abstract Presentations (10 + 5 min)**

Chair: Ulrika Haake, Associate Professor at Umeå University, Sweden

"The role of functional asymmetries in the young tennis players' performance"

A. Andreeva, Russian state university of physical education, sport, youth and tourism, and Moscow Centre of Advanced Sport Technologies

The Effect of a Physical Activity Intervention on Bone Health in Childhood Cancer Survivors: A Randomized Controlled Trial (SURfit)

R. Jung, University of Zurich, Switzerland

"The effect of placebo on endurance capacity in normal weight children - a randomized trial"

S. Fanti-Oren, University of Haifa and Tel Aviv University, Israel

Achilles Tendon Tissue Structure in Children with Overweight and Children with Obesity

M. Pantanowitz, Wingate Institute & Tel Aviv University, Israel

15:00 - 16:00

FIKA

16:00 - 17:15 **Strength & Power**

Chair: Apostolos Theos, Senior Lecturer at Umeå University

Strength training for children and youth: where are we now?

Michail Tonkonogi, Professor at Dalarna University, Sweden

Abstract: "Combined impact of resistance training and sports participation on bone mineral density accrual in adolescents: ABCD-Growth Study"

R. Agostinete, Sao Paulo State University, Brazil

17:15 - 18:15 **Oded Bar-Or Lecture**

Chair: Neil Armstrong, Professor at Exeter University, UK

Children's fitness and health: an epic scandal of poor methodology, inappropriate statistics, questionable editorial practices and a generation of misinformation

Jo Welsman, Lecturer at Exeter University, UK

18:15 - 19:00 Free time

19:00 - 22:00 **DINNER AT GOTTHARDS**

Thursday, Sep 12

08:00 - 09:30

Metabolism & Endocrinology

Chair: Michael Svensson, Senior Lecturer at Umeå University, Sweden

Exercise and bone metabolism – from preterm to adulthood

Dan Nemet, Professor at Tel Aviv University, Israel

Genes, hormones and exercise

Alon Eliakim, Professor at Tel Aviv University, Israel

09:30 - 10:30

FIKA & POSTERS

Allometric scaling of aerobic fitness outputs in school-aged pubertal girls

D. Martinho, University of Coimbra, Portugal

Allometric Modelling of Left Ventricular Mass in female Adolescent Soccer Players

D. Martinho, University of Coimbra, Portugal

Energy expenditure during school and free days in children: a focus on recess

G. Baquet, Lille University, France

Comparability of Raw and Count-Based Metrics from ActiGraph GT9X and wGT3X-BT Accelerometers during Free-Living in Youth

K. Pfeiffer, Michigan State University, USA

Differences in muscular endurance and strength in recreational vs elite/competitive youth rock climbers

S. Siegel, University of San Francisco, USA

Predicting development in 20-m shuttle run in adolescence with machine learning

L. Joensuu, University of Jyväskylä, Finland

Relative age effect in individual sports

J. Jakobsson, Umeå University, Sweden

10:30 - 12:00

The female athlete

Chair: Karin Larsén, Professor at Umeå University, Sweden

“The effect of the menstrual cycle and oral contraceptive use on responses to resistance training”

Lisbeth Wikström-Frisén, Senior Lecturer at Umeå University, Sweden

Abstract: Anaerobic performance of overweight female adolescents with and without Polycystic Ovary Syndrome

M. Pantanowitz, Tel Aviv University, Israel

12:00 - 13:30

LUNCH & POSTERS

13:30 - 14:30

Abstract Presentations (10 + 5 min)

Chair: Jo Welsman, Lecturer at Exeter University

The development of anaerobic capacity during growth and maturation is highly influenced by concomitant variations in body mass

A. Diry, French Rowing Federation & French Institute of Sport, France

A Novel Approach to Analyze Acute Responses to Body-Weight Circuit and treadmill-based high-intensity interval exercise in children

J. Ricci, Michigan State University, USA

Fat mass does not mediate the positive impact of lean mass on bone density accrual in adolescents engaged in different sports: ABCD Growth Study

R. Fernandes, Sao Paulo State University, Brazil

Effect of high-intensity training on the pulmonary V·O₂ kinetics of adolescents with asthma

M. McNarry, Swansea University, UK

14:30 - 15:30

FIKA & POSTERS

15:30 - 17:00

Expert's Corner

Chair: Alon Eliakim, Professor at Tel Aviv University, Israel

Paolo Pianosi, Professor at University of Minnesota, USA

Dan Nemet, Professor at Tel Aviv University, Israel

Jaak Jürimäe, Professor at University of Tartu, Estonia

Neil Armstrong, Professor at Exeter University, UK

17:00 - 19:00

Free time (PWP Board Meeting at P5)

19:00 - 22:00

DINNER AT GOTTHARDS

Friday, Sep 13

08:00 - 09:30

Statistics in Sport Science

Chair: **Jun Yu**, Professor at Umeå University, Sweden

The Do and Don't

Lina Schelin, Senior Lecturer at Umeå University, Sweden

Introduction to multivariate statistics

Erik Johansson, Lead Data Scientist at Sartorius Stedim Data Analytics AB, Sweden

09:30 - 10:30

FIKA

10:30 - 12:00

WORKSHOPS

Aerobic & Anaerobic testing

Demonstration of VYNTUS™ CPX METABOLIC CART (former Jaeger)

Room 1

Tim Takken & Erik Hulzebos, University Medical Center Utrecht

Strength & Power testing

Demonstration of OPTOJUMP NEXT

Room 2

Apostolos Theos & Daniel Jansson, Umeå University, Sweden

Multivariate statistics in sports

Introduction to SIMCA

Room 3

Erik Johansson, Lead Data Scientist, Sartorius Stedim Data Analytics AB, Sweden

12:00 - 13:00

LUNCH

13:00 - 14:30

Cold air, physical activity and the airways

Chair: **Nikolai Stenfors**, Senior Lecturer at Umeå University, Sweden

Asthma among Swedish adolescent cross-country skiers

Tommie Irewall, MD at Östersund Hospital, Sweden

Cold air and airway immunology

Helen Hanstock, Senior Lecturer at Mid Sweden University

Exercise-induced laryngeal obstruction

Leif Nordang, Associate Professor at Uppsala University Hospital, Sweden

14:30-15:30

FIKA

15:30 – 16:30

P-O Åstrand Lecture

Chair: **Christer Malm**, Professor at Umeå University, Sweden

Pediatric Work Physiology in studies of healthy brain function in children

Örjan Ekblom, Associate Professor at The Swedish School of Sport and Health

16:30 - 19:00

Free time (PWP Board Meeting at P5)

19:00 - 22:00

DINNER AT GOTTHARDS

Saturday, Sep 14 (At NOLIA Activity Center)

08:00 Transport to NOLIA (2 km walk or chartered bus)

Map: <https://goo.gl/maps/yTQmyamcyRckPFPv8>

08:00 - 09:30 Abstract Presentations (10 + 5 min)

Chair: **Michael Svensson**, Senior Lecturer at Umeå University, Sweden

Are self-paced walking and running accurate and practical methods for individual calibration of physical activity intensity in children?

E. Haapala, University of Jyväskylä, Finland

Sex Differences in Respiratory Variability During Steady State Exercise Reflect differences in average tidal volume

G. Biltz, University of Minnesota, USA

Thermoregulatory responses and thermal perception of pre-pubescent children performing a low intensity exercise in the cold - An evaluation of thermal comfort

R. Arlegui, Loughborough University, UK

Relationship between sports participation in early life and indicators of obesity in adulthood

D. Christofaro, São Paulo State University, Brazil

09:30 - 10:30

FIKA

10:30 - 12:00 Abstract Presentations (10 + 5 min)

Chair: **Apostolos Theos**, Senior Lecturer at Umeå University, Sweden

Holistic fitness intervention program for persons with intellectual disabilities – a community pilot programme with SG Enable

M. Lim, KK Women's and Children's Hospital, Singapore

Sex-specific differences in exercise performance over time in patients after tetralogy of Fallot repair

G. Eshuis, University of Groningen, The Netherlands

A Web-Based Motor Intervention for Children and Adolescents with Congenital Heart Disease: Preliminary results from a randomized controlled study

M. Meyer, Technical University of Munich, Germany

"The use of Near InfraRed Spectroscopy (NIRS) to determine local oxygenation at the brains and muscles during cardiopulmonary exercise testing in healthy and diseased children"

I. Coomans, University Hospital Ghent, Belgium

Physical Activity and Cognitive Health in Children and Youth

L. Vanderloo, ParticipACTION, Canada

12:00 - 13:00

LUNCH

13:00 - 14:00

Physical Literacy

Chair: **Apostolos Theos**, Senior Lecturer at Umeå University, Sweden

Physical literacy as the gateway to active participation and safety

Dean Kriellaars, Associate Professor at University of Manitoba, Canada

14:00 - 15:00

Visit to Change the Game

Host: **Tom Englén**, Physical literacy coordinator, Change the Game Umeå

15:00-16:00

Presentations from PWP2021 & 2020 NASPEM

Chair: **Neil Armstrong**, Professor at Exeter University, UK

16:00 - 19:00

Free time

19:00 - 22:00

DINNER AT GOTTHARDS LIVINGROOM WITH AWARDS & CLOSING

Maps

