# european practicum on cardiopulmonary exercise testing

18 - 20 September 2019 | Graz



### Wednesday, 18 Sept 2019: The Basis

Registration
Welcome and Introduction
Physiological Basis of Exercise Performance (Part 1+2) Susan Ward
Coffee break, Refreshments
Pathophysiology of Exercise Limitation Piergiuseppe Agostoni
Interactive tutorial sessions in small groups (Beginners, Intermediate, Advanced)
Lunch break
Conducting the clinical study: equipment, calibration, technical troubleshooting Arno Schmidt-Trucksäss
Protocols: Ramp Tests, Constant Work Rate Tests  Marshall Riley
Normal values and their pitfalls  Alfred Hager
Formatting exercise test results  Daniel Dumitrescu
Coffee break, Refreshments
Group Photograph
The history of CPET - how have we got here?  Paul Older
Key note lecture "The summit is the goal"  Peter Habeler

### Thursday, 19 Sept 2019

### Focus 1: The Heart, the Lung and the Lung Vessels

8:30 – 9:00	Exercise Testing in Heart Failure Piergiuseppe Agostoni
9:00 – 9:30	Exercise Testing in Congenital Heart Disease Alfred Hager
9:30 – 10:00	Exercise Testing in Pulmonary Disease Joachim Meyer
10:00 – 10:30	Cardiac Output Measurements during exercise Piergiuseppe Agostoni
10:30 - 11:00	Coffee break, Refreshments
11:00 – 11:30	Pulmonary Hemodynamics during exercise Gabor Kovacs

11:30 – 12:00	Exercise Testing in pulmonary vascular disease Daniel Dumitrescu
12:00 – 12:30	Exercise Echocardiography Philipp Douschan
12:30 – 13:30	Workshop 1: Ramp exercise test
13:30 - 14:30	Lunch break

### Focus 2: Surgery and Rehabilitation

14:30 – 15:00	Exercise Testing for perioperative risk assessment Denny Levett
15:00 – 15:30	Pre- and rehabilitation concepts in malignant diseases Sandy Jack
15:30 – 16:00	Pulmonary rehabilitation and CPET Ralf Zwick
16:00 – 16:30	Coffee break, Refreshments
16:30 – 17:00	Cardiac rehabilitation and CPET Piergiuseppe Agostoni
17:00 - 18:00	Workshop 2: Constant workload test

## Friday, 20 Sept 2019: Special Issues and Repetition

8:30 – 9:00	Gas Exchange Patterns in Metabolic Myopathies  Marshall Riley
9:00 – 9:30	Exercise Testing in Children Tim Takken
9:30 – 10:00	Cardiopulmonary Adaptation to high altitude  Mike Grocott
10:00 - 10:15	Coffee break, Refreshments
10:15 – 10:45	Usefulness of CPET in Athletes Karin Vonbank
10:45 – 11:15	Critical appraisal for the anaerobic threshold  Horst Olschewski
11:15 – 12:15	Interactive tutorial sessions in small groups (Cardiac, Pulmonary, Pediatric/CHD, Preoperative)
12:15 – 12:45	General Assembly Meeting CPX International
12:30 - 13:30	Lunch break
13:30 – 14:45	Abstract Competition / Young Investigator Award Susan Ward and Faculty
14:45 – 15:00	Coffee break, Refreshments
15:00 – 16:15	Use of CPET in clinical practice: Clinical Cases and Case based self-examination Daniel Dumitrescu and Faculty
16:15 – 17:00	General Discussion, Certificate Award, Concluding Remarks