**Paediatric Sport & Exercise Medicine**

**2024**

**Location Heidelberglaan 100, Utrecht**

Course Director: *Tim Takken, PhD*

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| **Monday, 19-8-2024 Lecture Room: HVDB 2.41.****Introduction**  |  |
| **Time** | **Activity** | **Description** | **Lecturer** |
| *Lecture Room:*  |  |  |  |
| *9:00-9:15* | *Lecture* | *Course introduction and welcome*  | *Tim Takken, PhD (Utrecht)* |
| *9:15-10:15* | *Lecture* | *Introduction in Paediatric Sports & Exercise Physiology* | *Tim Takken PhD (Utrecht)* |
| *10:15-10:30* | *Break* |  |  |
| *10:30-11:30* | *Lecture* | *Pediatric Sports Medicine in Practice* | *Prabath Lodewijks, MD* |
| *11:45-12:45* | *Lecture* | *Growth, Maturation, and Physical Activity in Pediatrics* | *Sarah Moore PhD (Canada)* |
| *12:45-13:30* | *Lunch* |  |  |
| *13:30-14:15* | *Lecture*  | *The Importance of Physical Literacy* | *Johannes Noordstar PhD (Utrecht)* |
| *14:15-14:45* | *Break* |  |  |
| *14:45 - 16:45* | *Workshop* | *Physical Literacy* | *Johannes Noordstar PhD (Utrecht), Sarah Moore PhD (Canada) & Erik Hulzebos (Utrecht)* |
| *17:00* |  | *Tour through Children’s Hospital & Garden, and Salads* | *Child Health – Research Focus Area* |

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| **Tuesday, 20-8-2024 Lecture Room: HVDB 2.41**.**Muscle & Body composition** |  |
| **Time** | **Activity** | **Description** |  |
| *9:00-9:45* | *Lecture* | *Nutrition & Performance* | *Marco Mensink, PhD (Wageningen)* |
| *9:45-10:30* | *Lecture* | *Promoting the Daily Usage of Physical Wearables & Data for AL* | *Dan Halvorsen, PhD (USA)* |
|  | *Break* |  |  |
| *11:00-11:45* | *Lecture* | *How Muscles Work* | *Lisa Pomp, PhD© (Utrecht)* |
| *12:00-12:45* | *Lecture* | *Testing Muscle Function* | *Bart Bartels PT, PhD (Utrecht)* |
| *12:45-13:30* | *Lunch* |  |  |
| *13:30-17:00* | *Workshop* | *Muscle Function assessment* | *S4S lab WKZ – Roos Brenninkmeijer, Erik Hulzebos & Tim Takken* |

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| **Wednesday, 21-8-2024 Lecture Room: HVDB 2.41**.**Exercise testing in pediatric conditions** |  |
| **Time** | **Activity** | **Description** |  |
| *9:00-10:00* | *lecture* | *Principles of exercise testing in the lab & field*  | *Tim Takken PhD, (Utrecht)* |
| *10:00-10:30* | *lecture* | *Exercise testing in lung diseases*  | *Erik Hulzebos PhD, (Utrecht)* |
| *10:30-11:00* | *Break* |  |  |
| *11:00-12:00* | *Lecture* | *Field testing in Sports*  | *Olav Versloot PhD, (Utrecht)* |
| *12:00-12:30* | *Lecture* | *Instructions assignment* | *Marco van Brussel, PhD. (Utrecht) / Tim Takken PhD, (Utrecht)* |
| *12:30-13:30* | *Lunch* |  |  |
| *13:30-17:00* | *Workshop* | *Fitness and body composition testing (PMC)* | *Erik Hulzebos & Tim Takken & Dan Halvorsen* |

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| **Thursday, 22-8-2024 Lecture Room: HVDB 2.41**.**CPET Interpretation** |  |
| **Time** | **Activity** | **Description** |  |
| *9:00-10:00* | *Lecture* | *The importance of sleep*  | *Jeroen Dudink, MD PhD, (Utrecht)* |
| 10:30-11:30 | *Lecture* | *Systematic Approach to Interpreting & Reporting of CPET data in Pediatrics* | *Marco van Brussel PhD, (Utrecht)* |
| *11:30-12:30* | *Lecture* | *Exercise training in children* | *Tim Takken PhD (Utrecht)* |
| *12:30-13:30* | *Lunch* |  |  |
| *13:30-16:30* | *Subgroup / plenary discussion* | *Systematic Approach to Interpreting & Reporting of CPET data in Pediatrics (interpretation sessions)* | *Marco van Brussel & Tim Takken, (Utrecht)* |
| *17:20* |  | *SOCIAL DINNER IN UTRECHT*  |  |

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| **Friday, 23-8-2024 Lecture room: HVDB 2.41**.**Final day** |  |
| **Time** | **Activity** | **Description** |  |
| *9:00-10:30* | *Assignment* | *Preparations for assignment* | *WKZ* |
| *10:30-11:00* | *Break* |  |  |
| *11:00-12:30* | *Session* | *Presentations assignment* | *Marco van Brussel, Erik Hulzebos & Tim Takken, (Utrecht)* |
| *12:30-13:00* | *Lecture* | *Closing and group picture of the summerschool* | *Marco van Brussel, Erik Hulzebos & Tim Takken, (Utrecht)* |
| *13:00-14:40* | *Lunch* |  | *WKZ* |

This summerschool is supported by **Dynamics of Youth** & **Child Health**.

Dynamics of Youth is one of Utrecht University's four strategic themes. [www.uu.nl/doy](http://www.uu.nl/doy)

This summerschool is supported by **Child Health**.



**About the research program ‘Child Health’**

The UMC Utrecht is a center of excellence and has the formal position to deliver specialized care (so-called ‘topreferente zorg’). Continuous improvement of high quality of care can only be achieved by high standards of scientific research and a clear focus on specific disease areas.

All diseases in focus of the Child Health program are characterized by their influence on the individuals’ entire lifespan. These disorders often start at the beginning of life, or even before birth, and can have consequences far into adulthood. Within the Child Health program the ‘Cycle of Life’ approach is strongly intertwined with the so called ‘Cycle of Innovation’. In this ‘Cycle of Innovation’ ambitious interdisciplinary teams of patients, clinicians and investigators – from bench to bedside to society - strive to develop and implement novel approaches for treatment, (early) diagnosis, prognosis and monitoring of maternal health and children with chronic diseases to fulfill unmet medical and psychosocial needs, to improve the lives of these women, (unborn) chronically ill children and their relatives. Both cycles interact at any moment in our hospital.

The Child Health program links top referent care for pediatric and maternal patient groups to interdisciplinary research from fundamental to translational to longitudinal applied medical research. All maternal and pediatric chronic diseases in focus of the Child Health program share that they start in early beginning of life and can have consequences far into adulthood. These patient-focus areas are: periconceptional, ante- and perinatal damage, congenital and hereditary disorders, severe inflammatory disorders and oncology.