



COLLABORATION OPPORTUNITY

Sports Medical Research Center

- ▶ Sports performance testing and training in elite & recreational athletes.
- ▶ Healthy lifestyle screening and evaluation (with focus on cardiometabolic health).
- ▶ Low to high intensity physical activity, body composition and nutrition are key to a long healthy lifestyle.
- ▶ Personalized test & evidence based healthy lifestyle programs

POSSIBLE APPLICATIONS

- Understand and improve sports performance: Exercise physiology and sports medicine related to (elite & amateur) sport performance, muscle contractile properties and energy metabolism in a wide range of sports activities ranging from low to supramaximal intensity.
- Curative Healthcare: Applying sport sciences and exercise physiological methods/principles (training, periodization, supplements, ...) to remediate/treat inactivity/sedentary behaviour & disuse associated with diabetes, obesity and a wide range of e.g. chronic diseases.
- Preventive Healthcare: Health & lifestyle screening preventing chronic diseases.



UHASSELT

KNOWLEDGE IN ACTION

RELATED AVAILABLE SERVICES

- Exercise testing (human, animal).
- Muscle strength testing/evaluation (human, animal incl. muscle biopsies and muscle fiber evaluations) and histology.
- Body composition testing (DEXA scan).
- Energy metabolism measurements (high-energy phosphates, glucose/glycogen, mitochondrial function & metabolic pathways).
- Range of exercise physiology related animal experiments (muscle & hind quarter perfusions, hind quarter suspension, muscle sampling, heart perfusions, OGTTs, rodent treadmill training ...).
- Elite sport testing (cardiovascular risk analysis, maximal graded exercise testing, isometric/isokinetic muscle strength testing, body composition testing including body fat and lean body mass analysis) with a focus on optimization of performance & rehabilitation.

EQUIPMENT

- DEXA scan (Hologic Horizon)
- Exercise testing (Cortex Metalyzer, Cosmos – Pulsar, Lode – Valiant, Cyclus2, POLAR)
- CARDIOflex ECG heart monitoring
- Muscle strength (BIODEX System 4)
- Bergström & Bard fine needle muscle biopsy procedure

COLLABORATION OPTIONS

- Fee-for-Service: performing the relevant experiments for you
- Consultancy: guiding your experimental set-up
- Research collaboration: open for joint grant applications when the project is complementary with our own research lines and goals



COORDINATION

Prof. dr. Bert Op 't Eijnde (bert.opteijnde@uhasselt.be)

STRATEGIC PARTNERS

- ADLON Sports Medical Research Center: experts in tailor-made and test & evidence based personalized healthy lifestyle coaching of elite and recreational athletes
- Limburg Clinical Research Center: a unique collaboration between Hasselt University, Jessa Hospital and the Ziekenhuis Oost-Limburg (ZOL) to improve healthcare, by combining both academic research and clinical practice.

RECENT PUBLICATIONS



BUSINESS DEVELOPER

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