

Life Environment Research Center Ostrava (LERCO) Meeting Invitation

Meeting Details

Dates

March 18: Wednesday

Location: University of Ostrava

City Campus Černá louka, 3397 Moravská Ostrava
702 00

March 19 – 20: Thursday to Friday

**Location: Wellness Resort
Energetic******

Rekreační 1037, Rožnov p. Radhoštěm

Dear colleagues,

I would like to inform you that the LERCO 4HAIE Meeting will take place from March 19th to March 20th. You are all invited to join us to discuss the outcomes of the LERCO 4HAIE project. Below you will find a preliminary schedule and organizational information.

Best regards,

Daniel Jandacka

Organizational Matters

Travel, Accommodation, and Meals

Each participant is responsible for their own travel, accommodation, and meal expenses.

Coffee Breaks

Coffee breaks will be provided during the program.

Hotel Booking

We can arrange hotel booking upon prior agreement.



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March 18 – Wednesday

PhD Board Meeting & Presentation of Doctoral Students

Working language: English

Location: City Campus

- **11:00 – 12:00 | PhD Board Meeting**
Link: <https://cesnet.zoom.us/j/94776075878> Meeting ID: 947 7607 5878
- **12:00 – 13:00 | Presentation of doctoral students**
- Chair: Roman Farana
- Link: <https://cesnet.zoom.us/j/99679133707> Meeting ID: 996 7913 3707

Franc, M. Cognitive Function, Brain Structure and Gait Biomechanics in the Prevention of Musculoskeletal Injuries: A Cross-Sectional and Longitudinal Study within LERCO 4HAIE

Murin, R. Use of NIRS for Monitoring Muscle Oxygen Saturation During Exercise.

Sevcik, S. Biomechanics, Coordination, and Movement Variability in Floorball Shooting

HAS–Motion x LERCO 4HAIE Workshop

Working language: English

Location: City Campus

14:00 – 16:00 | Using Visual3D and Sift to Analyse Large–Scale Biomechanical Data for the LERCO HAIE Project

Chair: Jiri Skypala

Scott Selbie and Richard Moulton will present how Visual3D and Sift are used for modelling, quality assurance, and analysis of large-scale biomechanical data within the LERCO 4HAIE project. The workshop will focus on:

- Visual3D modelling for the LERCO 4HAIE Project
- Querying data in Sift for the LERCO 4HAIE Project

16:30 – 17:30 | Individual Meetings of Lab Teams

March 19 – Thursday

Link: <https://cesnet.zoom.us/j/93065263377> Meeting ID: 930 6526 3377

Coffee Break

Presentation of New LERCO 4HAIE Studies

Working language: English

10:00 – 11:30 | Cross-sectional studies 4HAIE (first wave)

Chairs: Kristyna Jandackova a David Zahradnik

- Jandacka et al. Obesity, Running, And Region-specific Biomechanical Associations With MRI-detected Knee Cartilage Damage
- Slovak et al. - Knee Cartilage Composition, Morphology, and Function in Asymptomatic Recreational Runners, Non-Runners, and Obese Adults: A Matched 4HAIE MRI Study
- Nowakowska-Lipiec K., et al. Age, Sex and Physical Activity Differences in Knee Joint Loading During Walking: A Cross-Sectional Musculoskeletal Modelling Study.

Lunch

12:30 – 14:30 | One-year prospective studies 4HAIE (first wave + one-year follow-up)

Chair: Steriani Elavsky

- Jandacka D. et al. Evolution of the Hallux: Why Ankle Control, Not Foot-Strike, Predicts Running Injuries
- Urbaczka J. et al. Running style and the onset of running-related injuries: a 1-year prospective cohort 4HAIE study
- Zahradnik D. et al. KOOS questionnaire as a predictor of objectively confirmed injury in the knee joint in healthy active and non active people
- Elavsky et al. The temporal dynamics of the association between daily physical activity and life satisfaction
- Elavsky et al. Analysis of Participant-Level Characteristics Predicting Adherence to Long-Term EMA and Fitbit Monitoring in the 4HAIE Prospective Cohort Study

Five-year Prospective Studies & Gait Assistant

14:30 – 15:15 | Five-year prospective studies 4HAIE (first and second wave – pilot study from the unfinished second wave)

Chair: Daniel Jandačka

Working language: Czech/English

- Kutac P. Changes in body composition in runners and inactive participants after 5 years (comparison of the first and second waves) in the younger and older middle-age categories (indicating the direction of research).
- Elavsky et al. Changes in physical self-worth / quality of life parameters across 5 years
- Jandacka et al. Five-Year Changes in Achilles Tendon VIMATS Score and Their Prediction from Baseline Running Biomechanics (n=300)
- Zahradnik, Slovak et al. Five-Year Changes in T2 Relaxation Time of ACL (n=200)
- Sustkova, L. Overview of trends in five-year data

Coffee Break

Gait Assistant & Active +

Working language: Czech/English

15:30 – 16:30 | Subsection Gait Assistant

Chair: Alena Dembickaja

Introductory presentation of the project

Overview of what we already have and two development directions:

1. Program (software)
2. Mobile application + smartwatch

Plesek J. a Jandacka D.:

Prediction equation for running injuries, function for Gait Assistant

Urbaczka J.:

Running style and injury prediction based on watch data, Gait Assistant

Stybar, V.:

Will prepare the application diagram

Inputs / Data processing / Outputs

At the end, will open a discussion: What exactly should the application be able to do? Which features will be the priority?

Nechiporuk, A.:

Will prepare an injury prediction model

Skypala, J.:

Demo of the running model.

Demonstration of what a person obtains during laboratory measurement. Connection with the prediction model

Slovak, L.:

Healthy Articular Integrity in Exercise: OA risk calculator. Methodology.

Karayegen, G.:

MRI prediction. Presentation of results and data

Zahradnik, D.:

Presentation of the use of the KOOS questionnaire. Options for integration into the application

16:30 – 17:00 | Subsection Active Plus

- Cipryan, L et al.: Creating new things on the spot

17:00 – 17:30 | Data

- Database completeness (P. Silva) and discussion on co-authorship (D. Jandacka and lab manager)

March 20 – Friday

10:00 – 12:00 | Subsection Prepared projects

Working language: Czech

- HORIZON project – BRIDGE stage 2
- Discussion on co-authorship – rules and conventions
- Discussion regarding the editor's comments on the article by P. Kutac

Lunch



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Project: Life Environment Research Center Ostrava LERCO
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