



BIOPHYSICAL EVALUATION AND TRAINING OPTIMIZATION OF TOP-LEVEL SWIMMERS

International Seminar aiming knowledge transfer and strengthening of a theory and practice join community

The International Seminar will take place at the Faculty of Sport of the University of Porto, in the 4th October 2014, from 9:00h to 20:00h. Graduation and post-graduation coaching students, coaches in continuous education, swimming science researchers and Sports Science and Physical Education professionals will be welcome. The Seminar will be credited through the FPN/IPDJ as a certified continuous education action.

Registrations should be send to info@labiomep.up.pt

- Graduation students and coaches Level I and II – 5.00€
- APTN affiliated coaches – 5.00€
- Post-graduation (PG) students, Clubs directors and coaches Level III and IV – 10.00€
- FADEUP students, Invited Speaker's PG students, and FPN invited coaches – Free
- QUALISYS invited personalities – Free

PROGRAM

9:00h

Opening (FADEUP, CIFI2D, LABIOMEPE, FPN, APTN, QUALISYS). Also a video communication from Tiago Barbosa (NIE, Singapore)

9:15h

Honouring Conference : Dan Daly (KUL, Belgium) & J. Paulo Vilas-Boas (FADEUP, CIFI2D, LABIOMEPE, COP, Portugal):

Honouring Ulrik Persyn scientific production and knowledge transfer in Swimming

10:00h

Conference 1– Gunnar Westman (Chalmers University of Technology, Sweden):

Efforts to make a coach adapted video analysis system

10:30h

Conference 2 - Daniel Marinho (UBI, CIDESD, FPN, Portugal):

Computational fluid dynamics in sports: an example of practical implications to swimming performance

11:00h *Coffee-break*

11:30h

Conference 3 – Armin Kibele (University of Kassel, Germany):

Analysis and Variations of Individual Swim Start Positions on the OSB11

12:00h

Conference 4 – Susana Soares (FADEUP, CIFI2D, Portugal):

Can we define the alactic to lactic transition duration?

12:30h

Conference 5 – Pedro Morouço (IPL, 2014 ISBS Hans Gross Young Researcher Award, Portugal):

Strength & Technique: strategies to minimize their imbalance

13:00h *Lunch time (lunch not included)*

14:30h

Conference 7 – Francisco Alves (FMHUL, Portugal):

MLSS velocity prediction and aerobic power training zone for swimmers

15:00h

Conference 8 – Raúl Arellano (University of Granada, Spain):

Swimming 50m events: Ways for improvement based on Biomechanics and Training

15:30h

Conference 9 – Flávio Castro (UFRGS, Brazil):

Physiological and biomechanical responses to swimming training series performed at intensities based in the 400m speed

16:00h *Coffee-break*

16:30h

Conference 10 – Luís Rama (FCDEFUC, Portugal):

Innate and adaptive immune response of well trained swimmers along the winter season. Implications for training

17:00h

Conference 11 – Ricardo Fernandes (FADEUP, CIFI2D, LABIOMEF, Portugal):

Using 7x200 Int: 30s for swimmers evaluation and advice

17:30h *Coffee-break*

18:00h Young Scientists panel:

- Mário Costa (IPG, CIDESD, Portugal):
Hierarchical Linear Modelling as a tool to assess longitudinal energetic and biomechanical contributions for swimming performance
- Joana Reis (FMHUL, Portugal):
Oxygen uptake kinetics and middle distance swimming

- Ana Silva (FADEUP, CIFI2D, LABIOMEPE, Portugal):
Front crawl swimming coordination in age-group swimmers
- Ana Sousa (FADEUP, CIFI2D, LABIOMEPE, Portugal):
Swimming, Rowing, Running and Cycling - The Interplay between Oxygen Uptake Kinetics and Bioenergetic Characterization around VO₂max intensity
- Jailton Pelarigo (FADEUP, CIFI2D, LABIOMEPE, Portugal):
Maximal lactate steady state: scientific research, evaluation and training advice in swimming
- João Ribeiro (FADEUP, CIFI2D, LABIOMEPE, Portugal):
Optimizing the 100-m front crawl swimming performance: a biophysical approach
- Karla de Jesus (FADEUP, CIFI2D, LABIOMEPE, Portugal):
A review of the main scientific findings applied to the backstroke start performance
- Kelly de Jesus (FADEUP, CIFI2D, LABIOMEPE, Portugal):
Is the butterfly technique modified at submaximal and maximal intensities?
- Luís Mourão (ESEG-IPP, FADEUP, CIFI2D, LABIOMEPE, Portugal):
Angle of lean measurement - a force measurement contribution

19:30h

Closing (FADEUP, CIFI2D, LABIOMEPE, FPN, APTN, QUALISYS)