



THURSDAY

17 SEPTEMBER

Aula Magna

14:00–14:15

Institutional welcome

14:15–15:00 Prof. Bruno Grassi

KEYNOTE

“Exercise physiology applied to metabolic myopathies as an example of translational medicine. A role for muscle NIRS”

15:00–15:20 Prof. Rogerio Soares

INVITED LECTURE

“NIRS Assessment of Reactive Hyperemia: From Fitness to Vascular Health”

15:00–15:20 Dr. Alessandro Colosio

INVITED LECTURE

“Interpreting muscle NIRS across exercise intensities: physiological and methodological considerations”

15:45–16:15 Coffee Break · Giardino delle Magnolie

NIRS: FROM THE MANUFACTURER TO THE FINAL USER 16:20–18:00

Aula Magna

16:20 NIRX Katharina Stute & Prof. Goulding

16:40 MOXY Roger Schmitz & Dr. Feldmann

17:00 Train.RED Wout Kregting & Prof. Buzzachera

17:20 PIONIRS Michele Lacerenza & Dr. Colosio

17:40 COSMED Gianpietro Ferrario & Dr. Neri

18:15 Welcome Reception · Giardino delle Magnolie



FRIDAY

18 SEPTEMBER

8:30–9:45

PRACTICAL WORKSHOP

Applications of NIRS on the field

Group 1 NIRx & Train.RED

Group 3 PIONIRS & MOXY

Group 2 Train.RED & NIRx

Group 4 MOXY & PIONIRS

HIPE Lab & Aula B, via Forlanini 6

HIP Lab & Aula Sem, via Forlanini 2

10:00–10:30 Coffee Break · Giardino delle Magnolie

Aula Magna

10:30–11:15 Prof. Stephan Perrey

KEYNOTE

“Muscle NIRS: a powerful signal with complex physiology”

11:15–11:35 Prof. Rebecca Re

INVITED LECTURE

“mNIRS: Technological challenges, signal interpretation and new fortienrs”

11:35–11:55 Prof. Chris McManus

INVITED LECTURE

“MCMITO: a semi-automated platform for the assessment of skeletal muscle mitochondrial oxidative capacity”

12:00–13:00 FLASH POSTER PRESENTATIONS

13:00–13:30 Lunch · Giardino delle Magnolie

13:30–14:30 POSTER SESSION

Aula Magna

14:30–15:15 Prof. Richie Goulding

KEYNOTE

“Opening the NIRS BlackBox: Using Invasive Methods to Better Understand NIRS Signals”

15:15–15:35 Dr. Andrea Pilotto

INVITED LECTURE

“Muscle O₂ Diffusion Resistance and Intramuscular O₂ Flow Limitations: Insights from NIRS”

15:35–15:55 Prof. Guillaume Costalat

INVITED LECTURE

“NIRS-Derived Muscle Oxidative Capacity: Slope Selection Matters”

16:00–16:30 Coffee Break · Giardino delle Magnolie

FREE ORAL COMMUNICATIONS

16:30–18:00

16:30 Dr. Thomas Monot

“Relationship between Ventilatory Thresholds and NIRS Breakpoints Assessed with FD, TD and CW NIRS Devices”

16:45 Dr. Elias Lehtonen

“Near infrared spectroscopy-derived muscle (de)oxygenation thresholds as estimates of the maximal metabolic steady state in competitive male cyclists”

17:00 Dr. Alyssia Bernabeu

Distinct profiles of vastus lateralis deoxygenation during maximal incremental cycling exercise: associations with metabolic thresholds and training background

17:15 Dr. Jem Arnold

“mnirs: An R Package for Reading, Processing, and Analysing Muscle Near-Infrared Spectroscopy Data”

17:30 Dr. Caterina Amendola

“Muscle Hemodynamics Assessment in Athletes Using TD-NIRS and DCS During Arterial Occlusion”

17:45 Dr. Alexandra Jamieson

“Reproducibility of exercise-induced changes in tissue saturation in the gastrocnemius and vastus lateralis”

18:00–18:20 Dr. Carlos Sendra Perez

INVITED

“Methodological Recommendations for Muscle Near-Infrared Spectroscopy in Sports Science: An International Delphi Consensus”

19:30 Social Dinner · Horti Bistro

SATURDAY

19 SEPTEMBER

8:30–9:45

PRACTICAL WORKSHOP

Applications of NIRS on the field

Group 1 NIRx & Train.RED

Group 3 PIONIRS & MOXY

Group 2 Train.RED & NIRx

Group 4 MOXY & PIONIRS

HIPE Lab & Aula B, via Forlanini 6

HIP Lab & Aula Sem, via Forlanini 2

10:00–10:30 Coffee Break · Giardino delle Magnolie

Aula Magna

10:30–11:15 Prof. Alessandra Adami

KEYNOTE

“mNIRS applications for inferring skeletal muscle function in people with chronic lung conditions”

11:15–11:35 Dr. Francesca Lanfranconi

INVITED LECTURE

“Oxidative Metabolism in Pediatric Cancer: A Physiological Challenge at the Crossroads with Oncology”

11:35–11:55 Dr. Carlo Vignati

INVITED LECTURE

“NIRS in Cardiovascular Exercise Physiology: From Hemodynamics to Muscle Oxygenation”

FREE ORAL COMMUNICATIONS

12:00–12:45

Aula Magna

12:00 Prof. Siana Jones

“Microvascular vasodilatory capacity is impaired following 10 days of bed rest in older adults with and without metabolic impairment”

12:15 Dr. Marco Nabacino

“Age-and Sex-Related Differences in Skeletal Muscle Oxygenation and Microvascular Perfusion Revealed by Combined TD NIRS and DCS”

12:30 Dr. Lorenzo Cortese

“Assessment of fluid therapy responsiveness through hybrid diffuse optical monitoring of peripheral muscle hemodynamics in intensive care patients”

12:45–13:15 ROUND TABLE DISCUSSION

13:15

CLOSING CEREMONY

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UNIVERSITÀ DI PAVIA



PIONIRS



MUSCLE OXYGEN MONITOR



fNIRS • Oximetry • EEG • HD-EMG



TRAIN.RED

COSMED
The Metabolic CompanyExperimental
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