



## Posters

- 1. Caterina Amendola, Politecnico di Milano, Italy**  
Red blood cell transfusion effect on neonates cerebral haemodynamics
- 2. Denis Bragin, Lovelace Biomedical Research Institute, USA**  
Mechanisms of photo-stimulation of brain drainage system: role of singlet oxygen  
(Presented by Ed Nemoto)
- 3. Denis Bragin, Lovelace Biomedical Research Institute, USA**  
Changes in cerebral net water uptake at posttraumatic cerebral ischemia  
(Presented by Ed Nemoto)
- 4. Denis Bragin, Lovelace Biomedical Research Institute, USA**  
Relationship between cerebral arterial inflow and venous outflow at moderate-to-severe traumatic brain injury  
(Presented by Ed Nemoto)
- 5. Denis Bragin, Lovelace Biomedical Research Institute, USA**  
Sex-specific and dose-dependent effects of drag-reducing polymers on microcirculation and tissue oxygenation in rats after traumatic brain injury of different severity  
(Presented by Ed Nemoto)
- 6. Olga Bragina, Lovelace Biomedical Research Institute, USA**  
Dose-dependent cerebral perfusion and oxygenation modulation by transcranial alternating stimulation in awake and anesthetized mice  
(Presented by Ed Nemoto)
- 7. Gerolamo Cicco, University of Bari "Aldo Moro", Italy**  
Heme Oxygenase 1-High Mobility Group Box 1 -TIM3 expression in the Sézary Syndrome: a case Report
- 8. Oliver da Silva-Kress, University of Bern, Switzerland**  
The Jacobian as a Fitness Function for NIRS Sensor Design Optimization
- 9. Samaneh Davoudi, Ghent University, Belgium**  
Mechanism of oxygen "buffering" by caveolae

**10. Tim Hermans, KU Leuven, Belgium**

Measuring the hemodynamic response to spontaneous neural activity in neonates using NIRS and EEG

**11. Jingjing Jiang, University Hospital Zurich and University of Zurich, Switzerland**

Resolution in depth for a time domain near infrared optical tomography

**12. Kenji Karako, University of Tokyo, Japan**

Relationship between cognitive function, oral conditions and systemic metabolic function in the elderly

(presented by Kaoru Sakatani)

**13. Sung Chul Kim, Wonkwang University, South Korea**

observation of changes in the primo vascular system(pvs) as a drug delivery pathway in als animal model

**14. Joseph LaManna, Case Western Reserve University School of Medicine, USA**

Ventilatory pattern variability predicts survival following cardiac arrest and resuscitation in rats

**15. Sang-Suk Lee, Department of Digital Healthcare Engineering, Sangji University, South Korea**

Distribution of Fe element in spleen and changes of immune and biochemical markers in serum after acute administration of magnetite (Fe<sub>3</sub>O<sub>4</sub>) nanoparticles

**16. David Lopez, Universidad del Rosario, Colombia**

Decomposition of nonlinear influences of physiological variables using kernel based regression models

**17. Victor Ochoa-Gutierrez, University of Glasgow / IPN, UK / Mexico**

Eumelanin and pheomelanin modelling for oximetry using a Lambert Beer Law principle.

**18. Sally Pias, New Mexico Institute of Mining and Technology, USA**

Electron paramagnetic resonance imaging of tumor oxygen: a mini-review

**19. Rebecca Re, Politecnico di Milano, Italy**

Evaluation of muscle oxidative metabolism in a bedridden population pre- and post-rehabilitation

**20. Gennadi Saiko, Toronto Metropolitan University, Canada**

Observation of tissue oxygenation changes using rPPG

**21. Gennadi Saiko, Toronto Metropolitan University, Canada**

How skin color depends on tissue oxygenation

**22. Saeed Samaei**, *Nalecz Institute of Biocybernetics and Biomedical Engineering, Poland*  
Blood flow changes assessment during breathing exercises using time-domain diffuse correlation spectroscopy

**23. Felix Scholkmann**, *University of Zurich, Switzerland*

The significance of lipids and waxes for the absorption and release of oxygen in biological organisms

**24. Joon Young Shin**, *Wonkwang University, South Korea*

tissue concentrations of oxygen, sulfur, calcium, zinc in skin nodes after acupuncture

**25. Ilias Tachtsidis**, *University College London, UK*

Introducing the fNIRS haemodynamic phase correlation signal for functional activation inference.

**26. Shun Takagi**, *Biwako-Gakuin University, Japan*

Relationship between muscle deoxygenation and cardiac output in subjects without attenuation of deoxygenation hemoglobin concentration at vastus lateralis muscle near the end of ramp cycling exercise

**27. Hamoon Zohdi**, *University of Bern, Switzerland*

Changes in cerebral oxygenation and systemic physiology in good, moderate, and poor performers of a verbal fluency task under blue light exposure