
Post-doctoral position in neuromonitoring of premature born infants within the Horizon Europe project Prometheus

ICFO is offering a postdoctoral position to a well-qualified, highly motivated and dynamic young scientist who wishes to enhance his/her scientific career in a friendly and stimulating environment.

ICFO Medical Optics group led by ICREA professor Turgut Durduran is a partner in Horizon Europe project "Preterm Brain-Oxygenation and Metabolic EU-Sensing: Feed the Brain" (Prometheus). Prometheus will develop a metabolic model of the interaction between the three key brain fuels and their effect on regional cerebral blood flow (CBF), oxygen saturation (StO₂) and metabolism (CMRO₂). The model will serve to individualize brain nutrition targeting "brain health" according to the inputs derived from novel minimally invasive metabolic sensing systems. ICFO will participate in all core tasks related to neuromonitoring of cerebral oxygen metabolism such as technology development, data acquisition, analysis and interpretation.

The postdoctoral fellow will be responsible for developing SCOS modules, their integration with other modules, data acquisition, analysis and interpretation. They will also represent ICFO in the consortium and participate in secondments with academia and industry.

Eligibility and Conditions

Post-doctoral candidates must hold, at the time of contract initiation, an internationally-recognized Ph.D.-equivalent degree (or evidence of its completion in the nearest future) in Physics, Engineering or Biomedical Sciences.

The candidates should have demonstrated experience in:

- Diffuse optics, light propagation in tissues, laser speckle statistics.
- Optical instrumentation.
- Neuroimaging and/or neuromonitoring.
- Software such as Matlab, R and Python.

ICFO is an equal opportunity employer. Candidates are selected exclusively on merit and potential on the basis of submitted application material. No restrictions related to disabilities, citizenship or gender apply to ICFO positions. ICFO abides by the principles of openness, efficiency, transparency, supportiveness, and international comparability as stated in the European Charter for Researchers and the European Code of Conduct for the Recruitment of Researchers.

Salary is offered according to the institutional salary scales.

The contract is offered for a period of 3 years.

Additionally, a family allowance is also available on request and after corresponding approval for people with family charges in the terms described in the corresponding policy.

Application procedure

The formal application should be submitted online via <https://jobs.icfo.eu/?detail=726>

Suitable Post-doctoral candidates are requested to submit:

- Presentation letter with a declaration of interest,
- Curriculum Vitae, including contact details,
- The contact e-mail of two potential referees.

Note: Ph.D. candidates should follow ICFO's general Ph.D. admission process as described at <https://jobs.icfo.eu/?detail=650>. Please also contact Turgut.Durduran@icfo.eu.

Candidates will be assessed as they apply and the call will remain open until the suitable candidate is identified.

Candidates may contact jobs@icfo.eu for formal enquiries regarding the application, as well as address scientific enquiries to Turgut.Durduran@icfo.eu.

For update information about the hosting group, please visit <https://www.icfo.eu/research-group/16/medical/home/437>.

For updated information about ICFO, please visit <https://www.icfo.eu>.

Deadlines

The call will remain open until 04/03/2023.