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## Post-doctoral position in personalized cancer therapy in preclinical models guided by diffuse optics

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.

The successful candidate will join the **Medical Optics group led by Prof. Dr. Turgut Durduran** to work in a multi-disciplinary project that merges physics, biology and nanotechnology. The project aims to validate and demonstrate the theranostic utility of using diffuse optical monitoring combined with plasmonic photothermal therapy (PPTT) for the treatment of solid tumors, and provide a tool for personalised oncological treatments.

Research duties will include the validation in a preclinical mouse model of a comprehensive light-based theranostic platform, and obtain the physical and statistical models to develop the data-driven algorithms that will allow for dosimetry and therapy planning. Diffuse reflectance spectroscopy (DRS) and diffuse correlation spectroscopy (DCS) techniques will be used to monitor in vivo tumor physiology, nanoparticle accumulation and hemodynamics.

### Eligibility and Conditions

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:

- Biophotonics and optical spectroscopy
- Biomedical research.
- MATLAB and R programming, biostatistics, photon transport in tissue, optical instrumentation design, near-infrared spectroscopy

The accreditation as researcher in animal experimentation will be highly valued.

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.

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## Application procedure

The formal application should be submitted online via <https://jobs.icfo.eu/?detail=727>

Suitable 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.

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](mailto:jobs@icfo.eu) for formal enquiries regarding the application, as well as address scientific enquiries to [Turgut.Durduran@icfo.eu](mailto: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.