

## **1 PhD Position (e.g. Physicists) available on “Next Generation Optical Glioma Treatment”**

Within a multidisciplinary international EU project funded by the European Union, the LFL / LIFE Center at the Hospital of Munich University offers a PhD position in Laser medicine and Biophotonics. The project strives to develop a novel concept for the light-based treatment of brain tumors.

Within the 3-years period Jan 2024 – Dec 2026, the following goals shall be pursued:

- Understand the mechanisms of action and effects of light on glioma and the brain
- Develop and test a light delivery and monitoring system
- Contribute to the demonstration of the therapeutic benefits of the novel light treatment modality in vivo

Main tasks to be performed by the PhD candidate:

- Measurement of optical properties of tissue
- Investigation of spectral online monitoring (SOM) in brain-tissue-mimicking optical phantoms
- Modeling of SOM signal changes expectable due to changes of optical tissue parameters
- Examination of the performance of fibers and fiber-optical light applicators for the intended clinical application
- Establishing a simulation model to examine light distribution and heating in inhomogeneous tissue for the investigated treatment modalities
- Collaboration with other project partners

Your qualification:

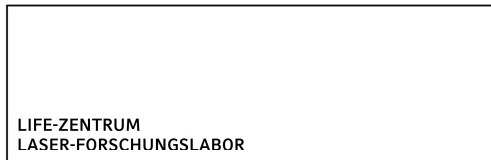
- Master of Science (Physics, Medical Physics, Biomedical engineering, Photonics, or similar)

Your skills and interest:

- Knowledge in optical technologies and imaging methods
- Experimental and technical skills and interest in optical set-ups and instrumentation
- Affinity to theoretical concepts and programming / simulations (e.g. using Matlab, LightTools, FullMonte)
- Interest in interdisciplinary work and scientific ambition

We offer:

- Attractive research environment with friendly colleagues.
- Interdisciplinary cooperation within an international consortium.
- Participation in the Advanced Structured Training (AST) Program for PhDs and MDs at Department of Urology and LIFE Center at LMU Klinikum, designed to broaden the scientific and professional horizon and personal skills.
- Dedicated scientific and personal support.



Disabled candidates are preferentially considered in case of equal qualification. Applications from women are encouraged.

If you are interested in this opportunity, please apply **IMMEDIATELY (preferably until Nov 3, 2023)**. To apply for the position, please send your electronic application (**letter of motivation, curriculum vitae, last school certificate and university degree, publication list, other qualification certificates like TOEFL, two references and ideally one recommendation letter**), preferably in PDF format, by e-mail to

[Ronald.Sroka@med.uni-muenchen.de](mailto:Ronald.Sroka@med.uni-muenchen.de)

For further information about the project, please contact:

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