



Postdoc Position

Center for Intelligent Optics

Department of Biomedical Engineering, University of Basel, Switzerland



University
of Basel

Department of
Biomedical Engineering

The Center for Intelligent Optics (**CIO**) develops advanced optical technologies, including imaging, spectroscopy, and laser ablation methods. Our goal is to bridge these cutting-edge laser technologies with clinical practice, developing solutions that enable accurate and real-time diagnosis and therapies.

Job description:

In this collaborative project between the University of Basel, University of Bern, EPFL, and clinical partners, the postdoctoral candidates will be responsible for developing an advanced swept-source optical coherence tomography (OCT) system to explore novel research problems during the laser surgery. Developed OCT will be used as a visualization tool for the optical processes induced by ultrashort laser pulses.

Your profile:

- PhD degree in Physics, optical engineering, biomedical engineering, electrical engineering, or closely related fields
- Excellent skills in development of complex optical systems
- Experience in optical simulation skills (preferably in Zemax)
- Strong programming skills (preferably in Python)
- Ability to work in a highly international team and interdisciplinary project
- applicants are expected to have excellent language skills in English

Apply for this project through the application platform with the following documents (**application will remain open until the position is filled**). Expected starting date is Jul-Aug 2026. Please contact Dr. Arsham Hamidi (arsham.hamidi[at]unibas.ch) if you have further questions:

- CV including publication list
- Diplomas
- Motivation letter (max 2 pages)

What we offer

- Opportunity to work on a highly innovative project within a highly interdisciplinary environment
- Fixed contract (up to 2.5 years, with a potential extension based on additional funding)
- The salary is very competitive by international standards and will be according to the guidelines of the University of Basel. Five weeks of holidays per year, 42 working hours per week.

 **Want to know more about us?** check out www.cio.dbe.unibas.ch.