



## **2-year research fellowship position in advanced neuroimaging (M.D.)**

At the Support Center for Advanced Neuroimaging (SCAN), our goal is to investigate advanced neuroimaging technologies and to develop innovations for the future. We are passionate about transforming methodological developments into clinical practice.

Within the framework of the Swiss personalized health project IMAGINE (<https://www.sphn.ch/de/projekte/driver-projects.html>) we aim to build a Swiss-wide infrastructure for image-based radiomic biomarker research & analysis. Your role within the project will encompass quality assurance, data standardization and harmonization in an interdisciplinary team of engineers, physicians, physicists and statisticians.

We are offering a position as a research fellow (24 months) in one of the largest Neuroradiology Departments in Europe. The position is based at the Support Center for Advanced Neuroimaging, Inselspital Bern, Switzerland. We are looking for a MD person with basic knowledge in imaging interpretation (ideally in the field of neuro-oncology or neuroimaging), basic experience in radiomic data is appreciated but not conditional. You will work in an interdisciplinary team to advance our scientific understanding of imaging biomarkers in brain tumors. You will be hosted and mentored by a senior SCAN scientist, who will guide you through your research and provide you with the needed work infrastructure and collaborative network.

The preferred start date of the internship is IV/ 2019 or upon availability. We embrace diversity and equal opportunity. Researchers will be offered the advantage to participate in the postgraduate certificate of advanced studies program “AI in medical imaging” at a reduced fee and to learn methods of AI application and advanced neuroimaging at 1.5 -7 T MRI.

The official language at the Lab is English. Applicants who acquire German Language skills level C1 during their stay may join the training program in neuroradiology after termination of the fellowship program.

During the fellowship, your tasks will include:

- Quality assurance with phantom measurements
- Data curation and provision of ground truth reference data from glioma imaging datasets
- Investigation of the accuracy and dependency of automated image segmentation software solutions
- Investigation of the influence of scanner quality on longitudinal quantification of manual and automated segmentations in a random sample of glioma images
- Testing of optimized glioma imaging protocols on different MRI scanners
- Data processing and close collaboration with biostatisticians and engineers to interpret data.

Summarize your work with the aim to publish findings.

For further information, please contact

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