

Basel

Publications

- [Silk Vista Baby for the treatment of distal anterior cerebral artery aneurysms](#)
- [Bi-allelic loss-of-function variants in POC5 cause a syndromic retinal, endocrine and neuromuscular ciliopathy](#)
- [Collaboration on the optimal timing of anticoagulation after ischaemic stroke and atrial fibrillation: a systematic review and prospective individual participant data meta-analysis of randomised controlled trials \(CATALYST\)](#)
- [Impact of Hemorrhage Extent on External Ventricular Drain-Associated Infections in Aneurysmal Subarachnoid Hemorrhage](#)
- [Thrombectomy Versus Medical Management for Pediatric Arterial Ischemic Stroke With Large Baseline Infarct](#)
- [A sex- and gender-informed future for Parkinson's disease care](#)
- [Patient-Derived Glioblastoma Explants Empower Rapid and Personalized Drug Assessment: Harnessing the Potential of 3D Perfusion Bioreactors in Glioblastoma Drug Discovery](#)
- [Pituitary incidentaloma: a Pituitary Society international consensus guideline statement](#)

Tim Jonas Hallenberger

In 1934 at the University of [Basel](#) under Eugen Ludwig, [Josef Klingler](#) developed a new method of dissection based on a freezing technique for brain tissue that eloquently revealed the [white matter tracts](#). Klingler worked with anatomists, surgeons, and other scientists, and his models and dissections of white matter tracts remain arguably the most elegant ever created. He stressed 3-dimensional anatomic relationships and laid the foundation for defining mesial temporal, limbic, insular, and thalamic fiber and functional relationships and contributed to the potential of [stereotactic neurosurgery](#). Around 1947, Klingler was part of a Swiss-German group that independently performed the first stereotactic thalamotomies, basing their targeting and logic on Klingler's white matter studies, describing various applications of stereotaxy and showing Klingler's work integrated into a craniocerebral topographic system for targeting with external localization of eloquent brain structures and stimulation of deep thalamic nuclei. Klingler's work has received renewed interest because it is applicable for correlating the results of the fiber-mapping paradigms from diffusion tensor imaging to actual anatomic evidence. Although others have described white matter tracts, none have had as much practical impact on neuroscience as Klingler's work. More importantly, Josef Klingler was an encouraging mentor, influencing neurosurgeons, neuroscientists, and brain imaging for more than three quarters of a century ¹⁾.

¹⁾

Agrawal A, Kapfhammer JP, Kress A, Wichers H, Deep A, Feindel W, Sonntag VK, Spetzler RF, Preul MC. Josef Klingler's models of white matter tracts: influences on neuroanatomy, neurosurgery, and neuroimaging. *Neurosurgery*. 2011 Aug;69(2):238-52; discussion 252-4. doi: 10.1227/NEU.0b013e318214ab79. PubMed PMID: 21368687.

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