

Communiqué

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HORAO honors its promise

After crowdfunding is before crowdsourcing: After the Department of Neurosurgery at Inselspital, Bern University Hospital had great success with its crowdfunding for the project HORAO in autumn 2017, it is now launching a global crowdsourcing competition. The aim is for research and development teams to find a solution that enables neurosurgeons to visualize brain tumors even better.

Neurosurgeon Prof. Dr. med. Philippe Schucht, Head Physician at the Department of Neurosurgery at Inselspital, Bern University Hospital, and his team keep their word. When the project [HORAO](#) (Greek for “seeing with the mind”) was launched in August 2017, it had already been announced that two phases for HORAO would be planned. If Phase I were to succeed with crowdfunding, then the donations collected would be used to launch Phase II: a worldwide crowdsourcing competition.

Intelligence of the masses should bring solution

In the last few months, the HORAO team have worked hard on all the necessary preparations. On the [crowdsourcing platform herox.com](#) researchers and developers have until September 2018 to take on the challenge and submit proposals for a solution to the HORAO project. A selected jury of renowned experts will judge the project submissions by the end of the year. They will nominate up to five projects and invite their innovators to present their proposed solutions to them and the public at the HORAO Conference, held in conjunction with [Brainweek Bern 2019](#). The final decision on the winning project will only be made at this conference, and the money collected in the crowdfunding campaign will be awarded as prize money.

Rendering brain tumors more visible during surgery

Brain tumor operations are high risk. However, for most brain tumor patients, the surgical removal of the brain tumor is the crucial treatment step in the therapy, which is why it is all the more important that tumors are resected completely. Although the neurosurgeons at Inselspital, Bern University Hospital already operate with the best microscope available, it is still difficult for them to precisely distinguish the healthy surrounding brain tissue from the tumor during surgery. Although research has been conducted for some time now on how to improve the distinction between the tumor and brain tissue during surgery, it is still not successful for many tumors.

With HORAO, the Department of Neurosurgery aims to establish new paths: Instead of mapping the tumor directly, HORAO focusses on visualizing the microstructure of the tissue, the crucial difference between tumor and brain tissue. By rendering this microstructure visible, it should be possible to distinguish the erratic tumor tissue from the highly organized brain tissue during the operation, also non-invasively.

Crowdfunding as the foundation for crowdsourcing

The [Department of Neurosurgery at Inselspital, Bern University Hospital](#) is establishing new ground with HORAO. The [crowdfunding campaign](#) was a complete novelty, not only for the clinic but for Insel Gruppe. Over 200 donors supported this unconventional approach. They donated

69,109 CHF within 45 days, thereby significantly exceeding the target amount of 50,000 CHF. This money can now be used for the project in the hope of one day being able to identify brain tumors even better and thus render brain tumor surgery even safer.

Teaser video about HORA0 crowdsourcing: <https://youtu.be/f-rIO0ynC7k>

Short film presenting the HORA0 problem: <https://youtu.be/rVlulyBOL0c>

HORA0 crowdsourcing on herox.com: <https://www.herox.com/HORA0>

HORA0 website: <https://www.horao.eu>

Photo:

[Neurosurgeons operate under the microscope.](#) (Photo: Tanja Läser for Insel Gruppe AG)

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Information: Tuesday, June 12, 2018, from 2–5 p.m. via Kommunikation Insel Gruppe AG, kommunikation@insel.ch, +41 (0)31 632 79 25.