

## Forschungspreis Schweizerische Tinnitus Liga (STL) 2022 Suyi Hu

Webseite ARTORG



**Tinnitus Research Award for Suyi Hu**

For his outstanding PhD thesis on “Bayesian Brain-Inspired Computational Modeling of Tinnitus and Residual Inhibition” Dr. phil. Suyi Hu has been awarded the research price 2022 of the Swiss Tinnitus League worth CHF 2'000 on 8 January 2022. Suyi Hu investigates the potential of computer modeling to develop new quantitative strategies in tinnitus research at the Hearing Research Lab, Insel Gruppe and ARTORG Center.

Details on the project...(page break)



*Swiss Tinnitus League president, PD Dr. med. Dr. h. c. Andreas Schapowal, awarding Suyi Hu the research award 2022 in Zurich (courtesy of STL)*

The effectiveness of clinical tinnitus treatments, including acoustic therapies, varies from person to person. It is therefore important to be able to identify patient-specific tinnitus pathologies and foresee treatment success for each patient. Current methods do not yet allow such an accurate diagnosis. To improve this, Dr. Hu of the Hearing Research Lab (PD Dr. Wilhelm Wimmer) is using artificial intelligence with the goal of developing a generative computational tinnitus model that simulates the perceptual responses of individual patients to therapeutic stimuli.

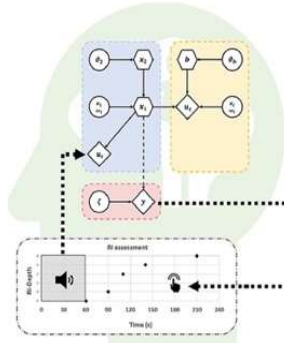
His dissertation demonstrated the potential of computer modeling to quantitatively link experimental observations with theoretical hypotheses, opening a potentially new tinnitus research direction in the sense of personalized medicine, allowing for more refined subtyping and patient-specific diagnosis and individual prediction of treatment outcomes. The project was initiated by ENT Department of the Inselspital (Prof. Dr. Marco Caversaccio), Bern University Hospital, and supported by Bernafon AG.

[Read the study](#)

Project description Swiss Tinnitus League (in German)

Hearing Research Lab

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<https://doi.org/10.1016/j.heares.2021.108338>



Tinnitus research has long been predominantly qualitative in nature. But technological advances such as computer modeling and artificial intelligence allow for a more quantitative evaluation of tinnitus phenotypes. Following this approach, Suyi Hu has developed a generative computer model based on the Bayesian brain theory. The model can identify patient-specific tinnitus subtypes and predict the outcome of therapeutic interventions – including acoustic therapies – on a patient-by-patient basis. His PhD thesis was performed at the Hearing Research Lab, Inselspital and University of Bern under the supervision of PD Dr. Wilhelm Wimmer and Prof. Dr. Marco Caversaccio. It has now received the 2022 research award of the Swiss Tinnitus League. Dr. Suyi Hu is a Senior researcher at the Hearing Research Lab, Inselspital and University of Bern.

#hearing #research #tinnitus #diagnosis #outcome #prediction #computermodeling  
#artificialintelligence @Insel Gruppe @University of Bern supported by @Bernafon

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### Suyi Hu erhält Tinnitus-Forschungspreis

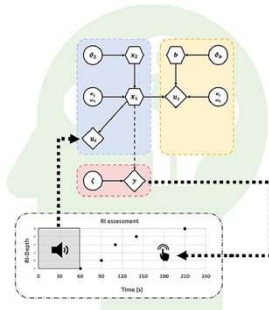
Keine zwei Tinnitus-Patienten sind gleich. Daher will Suyi Hu vom Hearing Research Lab, Inselspital und ARTORG Center Uni Bern, ein generatives Computermodell entwickeln, das mithilfe von künstlicher Intelligenz individualisierte Tinnitus-Diagnosen stellen und den Behandlungserfolg einzelner Therapien für jeden Patienten voraussagen kann. Für seine Forschung wurde er am 8. Januar mit dem Forschungspreis 2022 der Schweizerischen Tinnitus-Liga ausgezeichnet.

### Suyi Hu wins tinnitus research award

No two tinnitus patients are the same. Therefore, Suyi Hu from the Hearing Research Lab, Inselspital and ARTORG Center Uni Bern, wants to develop a generative computer model that can use artificial intelligence to make individualized tinnitus diagnoses and predict the treatment success of individual therapies for each patient. For his research, he was awarded the 2022 Research Prize of the Swiss Tinnitus League on January 8.

*(Link auf Newsdetail ARTORG Center)*

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Using AI to identify tinnitus subtypes and predict treatment outcomes: Suyi Hu, Hearing Research Lab, Inselspital and ARTORG Center, has received the research award 2022 of the Swiss Tinnitus League for this new generative computer modelling approach based on the Bayesian brain theory.

[Read the study](#)

#AIinMedicine #tinnitus #research #subtypes #diagnosis #prediction #treatmentoutcome  
#personalizedmedicine #bayesianbrain @Insel Gruppe @University of Bern