



VIENNA  
April 9-10 **2026**

8th European Symposium On Focused Ultrasound Therapy  
1st Vienna Clinical Brain-FUS Symposium

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**VIENNA, Frankgasse 8**  
**Billrothhaus**  
**APRIL 9-10**  
**2026**

**8th European  
Symposium  
of EUFUS**



**Focused  
Ultrasound  
of the  
Brain**

**PROGRAM**

# Contents

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# Welcome

Vienna—renowned for its elegance, culture, and scientific heritage—hosts our congress in the historic Billrothhaus, home of the venerable Society of Physicians in Vienna. This landmark venue, where generations of physicians advanced medical knowledge, provides an inspiring background for the advancement of therapeutic ultrasound of the brain.

This year's program will bring together clinicians, scientists, engineers, and industry partners from around the world to share the latest advances, exchange ideas, and shape the future of patient care. Topics will include:

- **Clinical Ultrasound Neuromodulation:** Dementia, Parkinson's disease, depression, pain, epilepsy, psychiatric disorders, and more
- **Clinical Ultrasound Blood–Brain Barrier Opening:** Brain gene and cell therapy, brain tumors, Alzheimer's disease, and related applications
- **Clinical Ultrasound Ablation:** Essential tremor, Parkinson's disease, and other neurological conditions
- **Novel Focused Ultrasound Approaches:** Emerging preclinical and clinical research and innovative applications

Whether you seek state-of-the-art research, practical insights, or new collaborations, the congress offers a focused international platform to connect and drive innovation.

We look forward to welcoming all participants to Vienna and to an engaging and stimulating meeting at the Billrothhaus.



**Roland Beisteiner**

Foto: © feelimage/Felicitas Matern



**Michael Mitterwallner**

Foto: © feelimage/Felicitas Matern



**Andreas Melzer**

Foto: © University of Dundee



**Christine Melzer**

# Program

THURSDAY, APRIL 9<sup>th</sup>, 2026

**9:00–9:30**

**Opening 8th EUFUS Symposium**

Andreas Melzer (Leipzig, DE),  
Roland Beisteiner (Vienna, AT)

**9:30–10:50**

**Clinical Ultrasound Neuromodulation**

Chair: Roland Beisteiner (Vienna, AT),  
Jan Kubanek (St. Louis, US)

Overview, Advances and Demands in  
Clinical Ultrasound Neuromodulation  
Eva Matt, Roland Beisteiner (Vienna, AT)

Clinical Ultrasound Neuromodulation in  
Movement Disorders  
Robert Chen (Toronto, CA)

Clinical Ultrasound Neuromodulation in  
Psychiatric Disorders  
Jan Kubanek (St. Louis, US)

Confounds in Clinical Ultrasound  
Neuromodulation  
Michael Mitterwallner (Vienna, AT)

**10:50–11:10 Coffee Break**

**11:10–12:30**

**Safety in Clinical Focused Ultrasound**

Chair: Daniel Razansky (Zurich, CH)

Clinical safety in relation to different  
ultrasound technologies  
Daniel Razansky (Zurich, CH)

Biophysical Safety of Ultrasound  
Neuromodulation  
Elly Martin (London, UK)

Regulatory Issues with Focused Ultrasound  
Steffen Tretbar (Sulzbach, DE)

Questions / Answers Safety in Clinical  
Focused Ultrasound

**12:30–13:30 Local Lunch (Poster / Exhibit  
Presentations)**

**13:30–14:50**

**Ultrasound Neuromodulation:  
Cellular, Imaging and Physical Markers**

Chair: Robert Chen (Toronto, CA)  
Cellular Mechanisms of  
ultrasound neuromodulation  
Ivan Suarez, Apoutou N'Djin (Lyon, FR)

Transcranial ultrasound neuromodulation:  
Insights from  
non-human primates imaging studies  
Jerome Sallet (Lyon, FR | Oxford, UK)

Quantification of acoustic  
pressure in the brain  
Elly Martin (London, UK)

Low-intensity focused ultrasound of the  
human amygdala reveals a causal role in  
emotional processing  
Miruna Rascu, Miriam Klein-Flügge (Oxford,  
UK)

**14:50–15:10 Coffee Break**

**15:10–15:45**

**Sonodynamic Therapy**

Chair: Richard Wakefield (London, UK)

Developing Sonodynamic Therapy Trials for  
Glioblastoma  
Richard Wakefield (London, UK)

Need for consensus sonication parameters  
for treatment of glioblastoma with  
sonodynamic therapy  
Kismet Hossain-Ibrahim (Dundee, UK)

Questions / Answers Sonodynamic Therapy  
Kismet Hossain-Ibrahim (Dundee, UK)

**15:45–16:30**

**Mixed Oral Contributions**

Chair: Eva Matt (Vienna, AT)

Electrophysiological effects of Transcranial  
Ultrasound Stimulation (TUS) of the motor  
cortex in epilepsy  
Lara Hogeveen (Gent, BE)

Focused Ultrasound For Blood-Brain Barrier  
Opening In Brain Tumor Patients: Technical  
Nuances  
Massimiliano Del Bene (Milan, IT)

Towards Repeated, Image-Guided  
FUS-Enhanced Chemoradiotherapy for  
Glioblastoma: Preclinical Evidence  
Sebastien Rigollet (Grenoble, FR)

Cranial sonolucent prosthesis:  
a window of opportunity for  
neuro-oncology (and neuro-surgery)  
Massimiliano Del Bene (Milan, IT)

Simultaneous bilateral transcranial MR-  
guided focused ultrasound thalamotomy in  
Parkinson's disease: Case report  
Armen Simonyan (Moscow, RU)

Transcranial MR-guided focused  
ultrasound pallidothalamic tractotomy  
in the treatment of levodopa-induced  
dyskinesias in Parkinson's disease  
Armen Simonyan (Moscow, RU)

Patients Undergoing MR-guided Focused  
Ultrasound Thalamotomy for Essential  
Tremor show Variable Risk Attitudes  
Pejman Ghanouni (Stanford, US)

Reducing Gene Therapy Dose Delivery  
Across the Blood-Nerve Barrier into  
Peripheral Nerves using Focused  
Ultrasound  
Kyriakos Michail (Nicosia, CY)

MRI-guided transurethral ultrasound  
ablation (TULSA) for localized prostate  
cancer: technology and early outcomes of  
randomized trial versus robotic rostatectomy  
Pejman Ghanouni (Stanford, US)

Advances towards achieving transcranial  
acoustic radiation force imaging (ARFI)  
within strict (FDA) limits for diagnostic  
ultrasound  
Till Handel (Leipzig, DE)

Homology between 3T FGATIR images  
and Klüver-Barrera stained human brain  
sections in the thalamus  
Takefumi Higashijima (Yokohama, JP)

**19:00–22:00**

**Traditional Viennese Dinner  
and Schrammel-Music**

Heurigenabend, Pfarrplatz 2, 1190 Wien,  
Buffet opens at 7 pm

Posters will be presented from April 9th, 8am to April 10th 5pm.  
Poster/Exhibit presentations during lunch time. Individual discussions are  
possible throughout the complete Symposium time.

# Program

FRIDAY, APRIL 10<sup>th</sup>, 2026

**9:00–10:30**

## **State and Clinical Future of FUS Ablation / Blood Brain Barrier Opening**

Chair: Andres Lozano (Toronto, CA)

Overview and advances in HIFU Ablation  
Andres Lozano (Toronto, CA)

Overview and advances in BBBO  
Nir Lipsman (Toronto, CA)

HIFU for movement Disorders  
Raul Martinez (Barcelona, ES)

HIFU for psychiatric disorders  
Guillem Lera–Calatayud (Valencia, ES)

**10:30–10:50 Coffee Break**

**10:50–12:00**

## **Challenges and Opportunities in Establishing a HIFU Program in an Academic European Center**

Chair: Gregor Kasprian (Vienna, AT)

"Starting to Walk" – initial steps and challenges in guiding a HIFU center  
Neurology: Christoph Brücke (Vienna, AT)  
Radiology: Philipp Moser (Vienna, AT)  
Neurosurgery: Klaus Novak (Vienna, AT)

"Starting to Run" – implementing HIFU as a routine tool in clinics  
Lennart Stieglitz (Zurich, CH)

Questions / Answers

**12:00–13:00 Local Lunch (Poster / Exhibit Presentations)**

**13:00–14:00**

## **Novel Focused Ultrasound Approaches**

Chair: Kullervo Hynynen (Toronto, CA)

Fully electronically steered ultrasound transmit receive array for clinical brain

treatments  
Kullervo Hynynen (Toronto, CA)

Miniaturized Focused Ultrasound Microchips for Minimally–Invasive Treatments of Brain Disorders  
Tiago L. Costa (Delft, NL)

Non–invasive Histotripsy Brain treatment  
Zhen Xu (Ann Arbor, US)

**14:00–14:20 Coffee Break**

**14:20–16:00**

## **Mixed Oral Contributions**

Chair: Nir Lipsman (Toronto, CA)

Neural Correlates of Symptom Improvement in Essential Tremor: A Longitudinal Study of Spontaneous Motor Activity Post–MRgFUS Thalamotomy  
Letizia Clementi (Milan, IT)

Neurotransmitter functional reorganization after MRgFUS thalamotomy in essential tremor  
Mario Stanziano (Milan, IT)

Longitudinal Changes in Myelin Content Within Lesion (Zone II) After MRgFUS Treatment in Essential Tremor: A Quantitative Analysis Using Myelin Imaging  
Toshio Yamaguchi (JP)

Austrian Experience with Sonovein HD  
Ferdinand Steinbacher (Melk, AT)

Focused ultrasound neuromodulation of mediodorsal thalamus disrupts decision flexibility during reward learning  
Isla Barnard (Dundee, UK)

Advancing a translational pipeline for ultrasound neuromodulation in 3MP–FUS: EEG confound control, reward–circuit targeting and concurrent MRI–TUS readiness  
Niklas Kroner–Weigl (Munich, DE)

Blood–brain barrier opening does not increase plasma extracellular vesicle concentration in glioblastoma patients Integrating safety mechanisms into sonodynamic therapy for glioblastoma  
Massimiliano Del Bene (Milan, IT)

Spatially Programmable Piezoelectric Micromachined Ultrasonic Transducer (PMUT) Arrays for Micro–Localized Mechanotransduction and Stem Cell Differentiation  
Rashmi Ramesh (Leuven, BE)

A new transcranial FUS–System with navigated targeting using volumetric beam steering capabilities  
Steffen Tretbar (Sulzbach, DE)

Farewell  
Andreas Melzer (Leipzig, DE)

**16:00–17:00**  
**General Assembly EUFUS**

The program is also available online at [eufus.org](http://eufus.org).



# Contact



## Organizers and Carrier of the scientific program

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The Focused Ultrasound Foundation  
1230 Cedars Court Suite  
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USA



**Venue**  
Billrothhaus Vienna  
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**Website**  
More detailed information is available on the  
website: [eufus.org](http://eufus.org)

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