

HealthMeeting 2019 - Personalized Medicine for Health in European Research  
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# Neuroacoustics Laboratory



Director & contact

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[www.i2a2.upm.es/lab-neuroacustica](http://www.i2a2.upm.es/lab-neuroacustica)

Speaker

Gerardo Gálvez, Postdoc researcher  
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*AIM: "Development of technological solutions to improve the lives of those affected by neurodegenerative diseases with special interest on those technologies related to sound and vibrations"*

## Projects:

- **Acoustic Neurostimulation for the Rehabilitation of Patients with Parkinson's Disease** (part of the coordinated project "TECA-PARK"). PI: Guillermo de Arcas Castro. 2018-2019. 33,300 €.
- **TECA-PARK: Capacitating Technologies for the Assistance, Follow-up and Rehabilitation of Patients with Parkinson's Disease**. PI: Guillermo de Arcas Castro. Funded by FGCSIC Fundación General del CSIC. International Centre on Ageing, CENIE (code 0348\_CIE\_6\_E) Interreg V-A Spain-Portugal (POCTEP). International competitive. Public. 100,000€.



**Most relevant scientific article:** Gerardo Gálvez; et al. 2018. **Short-term effects of binaural beats on eeg power, functional connectivity, cognition, gait and anxiety in parkinson's disease**. International Journal of Neural Systems. Vol. 28, no. 5, pp. 16

**Last publication (book chapter):** Gerardo Gálvez ; et al. 2019. **Neuroacoustical Stimulation of Parkinson's Disease Patients: A case Study. From bioinspired Systems and Biomedical Applications to machine Learning**. pp. 329 - 339. Springer, DOI: 10,1007/978-3-030-19651-6\_32



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## Call (s) of interest:

- **SC1-DTHT-02-2020**: Personalized early risk prediction, prevention and intervention based on AI and Big Data technologies
- **SC-1-BHC-06-2020**: Digital diagnostics developing tools for supporting clinical decisions by integrating various diagnostic data
- **SC-1-DTH-12-2020**: Use of Real World Data to advance research on the management of complex chronic conditions

## Expertise offered:

- Multidisciplinary team (neuropsychologists, MD, engineers, physicist, etc. ) >10 years of experience
- Design of acoustics paradigms for neuroscience / psychoacoustics
- Analysis of: Neurological activity (EEG – MEG - fMRI), cognition, psychological parameters.
- Acoustical analysis (including Voice, sound for therapeutical purposes)
- Contact with Parkinson's Associations.

**Keywords:** Acoustic Stimulation, neurostimulation, binaural beats, voice monitoring, neurodegenerative diseases



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THANKS FOR  
YOUR INTEREST



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