University of Basel
Department of Biomedical Engineering

Seminar Series:
Latest Breakthroughs in Biomedical Engineering Research

Location: DBE Science Lounge, Hegenheimermattweg 167C, 4123 Allschwil
Date & Time: Thursday 22.05.2025 | 16:30 – 17:30
Host: PD Dr. Christof Stieger

Vestibular Implants in humans, steps towards a clinical application

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Abstract

Vestibular implants are implantable devices that attempt to partially restore vestibular function to patients with severe bilateral vestibulopathy of peripheral origin, using electrical currents. Our group developed an original concept based on a modified cochlear implant in in close collaboration with MED-EL (Innsbruck, Austria. We started implantations in humans in 2007 and, to date, 25 patients with severe bilateral vestibulopathy were implanted with these prototype devices. In this talk, we will cover the main results obtained so far in humans which are very encouraging. We will also discuss the main steps that we have undertaken to achieve a clinical application, hopefully soon.

Biosketch

Angélica holds a M.S. in biomedical engineering from the Universidad Iberoamericana (Mexico) and a PhD in neuroscience from the University of Geneva. She is the head of engineering of the Western Switzerland University Cochlear Implants Center and of the laboratory of Audiology of the Geneva University Hospitals. Angelica has >80 publications in the field of sensory neuroprostheses and participates in pre- and post-graduate teaching in medicine, bioengineering, speech therapy, and audiology.