



With a budget of €2,896,175, 3D Tune-In is funded under Horizon 2020, the Framework Programme for Research and Innovation of the European Union. The project is coordinated by Dr. Lorenzo Picinali from Imperial College London and has a duration of 36 months, until May 2018.

Imperial College London

















3D Tune-In (3D-games for TUNing and IEarnINg about hearing aids) brings together relevant stakeholders from traditional gaming industries, academic institutes, a large European hearing aid manufacturer and hearing communities to produce digital games in the field of hearing aid technologies and hearing loss in children and older adults, addressing social inclusion, generating new markets and creating job opportunities.

Scientific Dissemination & Research

Picinali, L., D'Cruz, M. & Simone, L. (2015). 3D-Tune-In: 3D sound, visuals and gamification to facilitate the use of hearing aids. In Proceedings of the EuroVR 2015, 15-16 October, Lecco, Italy.

Eastgate, R., Picinali, L., Patel, H., & D´Cruz, M. (2016). 3D Games for Tuning and Learning About Hearing Aids. The Hearing Journal, 69 (4), 30-32

Levtov, Y., Picinali, L., D'Cruz, M. & Simeone, L. (2016). 3D Tune-In: The Use of 3D Sound and Gamification to Aid Better Adoption of Hearing Aid Technologies. In Proceedings of the 140th Audio Engineering Society Convention, 4-7 June, Paris, France.

Patel, H., Cobb, S., Hallewell, M., D'Cruz, M., Eastgate, R., Picinali, L. and Tamascelli, S. (2016). 3D Tune-In: 3D-games for TUNing and IEarnINg about hearing aids. In Proceedings of the 12th International Conference on Intelligent Environments - IE'16, 12-16 September, London, United Kingdom.

Patel, H., Cobb, S., Hallewell, M., D'Cruz, M., Eastgate, R., Picinali, L. and Tamascelli, S. (2016). User involvement in design and application of virtual reality gamification to facilitate the use of hearing aids. In Proceedings of the ITAG Interactive Technologies and Games Conference. 26 October. Nottingham. United Kingdom

Conference posters

Patel, H., Cobb, S., Hallewell, M., D'Cruz, M., Eastgate, R., Picinali, L. (2016). Participatory design of gaming applications to facilitate the use of appropriate hearing aid functionalities in different acoustic contexts. In Proceedings of the British Academy for Audiologists Conference, 9-11 November, London, United Kingdom.

Picinali, L., Eastgate, R., Reyes, A. and Molina, L. (2016). 3D Tune-In: interactive gaming and VR prototypes to facilitate the use of hearing aids. In Proceedings of the EuroVR Conference 2016, 22-24 November, Athens, Greece.

If you are interested in reading any of these publications, please email the project coordinator:

I.picinali@imperial.ac.uk



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PROJECT AIMS AND STRUCTURE





d-tune-in.eu

Hearing loss and deafness can lead to barriers to inclusion and feelings of isolation, and can result in a more than doubled risk of depression in older people. People with mild hearing loss also have nearly double the chance of developing dementia and this risk increases significantly for those with moderate and severe hearing loss. An impaired communication can easily result in exclusion and marginalization. In particular, hearing loss in children is under-identified and under-served with direct consequences on speech and language development, communication and learning. Children with severe to profound hearing losses often report feelings of isolation, no friends, and that are unhappy in school, particularly when their socialization with other children with hearing loss is limited.

The main idea of 3D Tune-In is to address the issues of hearing aids and hearing loss by linking the traditional gaming industry, with the fast growing game-based learning market and hearing device market. Innovative scientific methodologies and 3D technologies will be applied to create a new set of non-leisure applications which will have real benefits for European citizens.

Over 90 million people in Europe currently suffer from hearing loss, and due to an ageing population this number is likely to continue to increase.

While hearing aid technologies have dramatically advanced in the last 25 years, people's perception and use of these devices have changed very little.

Contact information

PhD. Lorenzo Picinali - Project Coordinator, Imperial College London

I.picinali@imperial.ac.uk

PhD. Marta Archanco - Project Manager, Imperial College London

m. archanco@imperial.ac.uk

Our objectives are to:

- Enable end users to explore, review and customize hearing aid devices for different usage scenarios
- Enable individuals with no hearing impairment to understand how hearing loss can compromise everyday activities, and how a hearing aid can improve this situation
- Enable gaming SMEs to explore new non-leisure applications in the area of hearing loss and hearing aid technology
 with support from the scientific community
- Enable hearing aid providers to evaluate and demonstrate the various functionalities of their products to improve their services and increase sales

