



PhD Students Wanted

We are looking to recruit six PhD Students for the Horizon Europe Doctoral Network project EASYLI ("Easy Listening: optimizing the consequences of effortful listening in occupational settings).

About the project

Noise, hearing loss and listening difficulties at the workplace can require high levels of (listening) effort in order to maintain performance. This can lead to increased levels of stress and fatigue, which can result in productivity loss and increased sick leave. However, applying effort to listening leads to positive consequences as well (good work performance, pleasure, safety, societal participation).

In the Horizon Europe Doctoral Network project "EASYLI" (Easy Listening: optimizing the consequences of effortful listening in occupational settings), our objective is to optimize the ratio between the costs and benefits of effortful listening.

EASYLI will train 6 doctoral candidates to develop and apply a toolbox of ambulatory and laboratory measures to assess listening effort in occupational settings in normal hearing people and people with different degrees of hearing loss.

EASYLI consists of 5 academic partners and 4 non-academic partners representing hearing-aid and communication systems industries, audiology, and occupational sectors with challenging acoustic environments.

About the PhD positions

PhD student 1 will work on the development of (ambulatory) subjective and physiological measures to assess auditory task demand and resulting listening effort in real-life (occupational) settings. These will be applied to evaluate hearing-aid benefit. The student will work at VU University Amsterdam as well as at Eriksholm Research Centre, Snekkersten, Denmark. More info: <u>PhD position in stress</u> research | Working At VU

PhD student 2 will research and develop machine learning-based technologies for acoustical scene analysis and improvement of the acoustical signal in the context of occupational communication in safety-critical conditions. The student will work at Fraunhofer IDMT in Oldenburg, Germany, as well as at CeoTronics AG, Rödermark, Germany. More info: <u>PhD stipend position in the field of audio</u> <u>scene analysis and speech enhancement (fraunhofer.de)</u>

PhD student 3 will assess new ways to manipulate auditory task demand and motivation to investigate their impact on listening effort and fatigue as measured with functional near-infrared spectroscopy (fNIRS) and pupillometry. The student will apply the new tests to investigate the impact of (work-related) acoustical conditions and hearing aid settings. The student will work at Eriksholm

Research Centre, Snekkersten, Denmark, as well as Amsterdam UMC, location VUmc, The Netherlands. <u>Vacatures - PhD The physiological and subjective signature of listening effort - Amsterdam UMC</u>

PhD student 4 will work on the identification of individual differences that modify susceptibility to occupational listening-related fatigue (Phase 1) and then apply the information learned to drive development and evaluation of personalized hearing interventions (Phase 2) using quantitative and qualitative data collection. The student will work at Eriksholm Research Centre, Snekkersten, Denmark. Part of the work will be performed at the Technical University of Denmark (DTU) near Copenhagen, and during secondments to the University of Manchester, UK. More info: <u>PhD position in hearing-related effort and fatigue research: individual differences and hearing aid (demant.com)</u>

PhD student 5 will use virtual acoustic scenarios to create laboratory-based listening tests with higher ecological validity than traditional tests. These tests will be evaluated using measures of physiological activity, stress and (subjective) fatigue. The student will work at Hörzentrum Oldenburg, and will perform part of the work during secondments to Liverpool John Moores University (UK). More info: <u>PhD 5: From real-life to lab and back – easy listening</u>

PhD student 6 will assess the factors influencing the (auditory) workload of aircraft pilots associated with communication tasks, auditory alerts and flight operation. Scenarios will be developed to manipulate and assess the listening effort and workload during aircraft operation. The student will work at Hinfact, Toulouse, France as well as Amsterdam UMC, location VUmc, The Netherlands. More info: Vacatures - PhD Listening effort characterization during aircraft operations - Amsterdam UMC

Requirements

Please note that **EU mobility rules** apply - this means that the candidate must not have resided or carried out their main activity (work, studies, etc.) in the country of the first appointment (see specific advertisements) for more than 12 months in the past 3 years.

Our offer

- A full-time PhD position in a MSCA project, which implies involvement in a European research project with high international visibility.
- A thorough training in the context of an industrial doctorate training program, while spending at least 18-months at a non-academic partner.
- The possibility to participate in local as well as international courses, workshops and conferences.

How to apply

The application deadline is March 17, and the expected starting date for each of the positions is around 1 August 2024.

More detailed information about the project, the researchers involved, and each of the positions can be found at <u>www.easyli.eu</u>