



NEWSLETTER  
December 2014

targear

## About TARGEAR

# Targeting challenges of active ageing

TARGEAR project will develop a stronger biomedical research in hearing loss for a better future for the deaf people.

Worldwide, 278 million people are estimated to have moderate to profound hearing loss. Age-related hearing loss, also known as presbycusis, affects approximately half of the population over 60 years old, making it the second most common cause of disability in older people. There is no restorative treatment for deafness but functional replacement by means of prosthesis. Therefore, prevention and treatment of hearing loss is an unmet medical need.

The TARGEAR project is an **Industry-Academia Partnerships and Pathways (IAPP)-Marie Curie Action** constituted by experienced research groups in complementary fields ranging from the molecular to the clinical aspects of age-related hearing loss. The general objective is to develop a collaborative strategy

between public research institutes and private companies, based in transfer of knowledge, to design and implement preclinical studies for presbycusis. A second general objective is to contribute to the formation of early-stage researchers in the experimental design, transfer and translation of knowledge in the field of hearing loss.

It is essential for Europe future aged population to have well-trained people available to understand hearing loss from a general perspective. According to this, the foreseen secondments and training activities will involve a total of 15 experienced and early-stage researchers.

[→ Know more](#)

Innovative integrated strategies for the healing of age-related hearing loss

## We recommend

**AFHELO Project**  
[afhelo.eu](http://afhelo.eu)

**Bioethics at the Council of Europe**  
[coe.int/t/dg3/healthbioethic](http://coe.int/t/dg3/healthbioethic)

**European Bioeconomy Observatory**  
[biobs.jrc.ec.europa.eu](http://biobs.jrc.ec.europa.eu)

**European Innovation Partnership**  
[ec.europa.eu](http://ec.europa.eu)

**FRAILOMIC Project**  
[frailomic.org](http://frailomic.org)

## Contact us

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Seventh Framework Programme (FP7) - PEOPLE Industry-Academia Partnerships and Pathways (IAPP) - Marie Curie Actions.  
Call: FP7-PEOPLE-2013-IAPP.

## Follow us

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## 2nd Executive Committee Meeting

The ExCom meeting took place at the Halifax Hall, Sheffield (UK), on August 31th, 2014.



## Secondments

Miguel Díaz has been our first secondee. Secondment took place from MED-EL to BIOMED (Prague) from August 1st to September 30.

The aim of this stay was to participate in a real study of hearing using electrophysiological measurements that also are used in humans for evaluating hearing problems. During the stay knowledge about experimental work with animals and work with patients implanted has been shared. The experience I have got with electrophysiological measurements will be used with patients, candidates or already implanted. I have tried to give my



[→ Download report](#)

experience with patients, and daily work with cochlear and other kind of hearing implants. The main handicap has been to adapt my experience and knowledge from a work not very related with investigation (including animals). In my opinion the objectives of the stay have been fully accomplished.

## 51st Inner Ear Biology Workshop

Sheffield (UK), Aug 30–Sep 2, 2014

Meeting for auditory and vestibular researchers in Europe, including topics as cochlear implantation: genetics of deafness; stem cells and regeneration; cell physiology; drug delivery and otoprotection.

**Dr. Isabel Varela-Nieto** (CSIC) presented her group's work in two posters and participated as member of the International Scientific Committee and the Spoendlin Jr. Award Committee.

**Dr. Jiri Popelar** (BIOMED) presented the oral communication 'BDNF-dependent auditory fibers set brains baseline for sound'.



**Dr. Ricardo Romero** (UNIFI's recruited) presented the preliminary data on the effect of IGF1 and FGF2 in the differentiation and growth of VOT33 cells and currently the involvement of the sphingosine 1-phosphate signalling axis is being examined.

## Forthcoming activities

### 3rd executive meeting

Prague, May 13th, 2015.  
Organized by Prof. J. Syka (BIOMED).

### Neuroscience School

Prague, May 13–16th, 2015.  
BIOMED is planning the organization.

### Training in clinical practice

Madrid, September 2015.  
It will be carried out at the IdiPAZ for the network personnel and secondees.

### 4th executive meeting

Rome, September 11th, 2015.  
Organised by Prof. P. Bruni (UNIFI).

### Inner Ear Biology 52nd Workshop

Rome, September 12–15th, 2015.

## Biographical sketch

**Dr. Ricardo Romero**  
Early stage researcher  
recruited at UNIFI.



The driving force of my work is to contribute to the development of new therapeutic approaches to treat hearing loss. In particular, I am interested in the use of in vitro models that allows us to understand the biology of inner ear sensory cells and investigate the factors that could prevent or restore hearing loss. The goal of our project is to study more in detail the function of sphingosine-1-phosphate (S1P) in the biology of the inner ear cells. For that purpose we will use several celllines that reflect some aspects of inner ear development. One of these celllines, VOT33, is derived from the mouse otocyst and will be used to understand the role of S1P during the formation and survival of auditory neuroblast.

[→ Download presentation](#)

## Researcher's Night

Madrid, September 26, 2014

The European Researcher's Night takes place every year all over Europe. Each city organizes events focused to popularize science and to support learning. These events are opportunities for citizens to meet researchers, talk to them and to find out what their work

contributes to society in an interactive and engaging way. This year TARGEAR has participated in the Organization of the activity 'La biotecnología en tus manos' [Biotechnology in your hands] that included a conference and a hands-on workshop. Dr. Isabel Varela-Nieto as co-organizer and she participated explaining to attendants what a Marie Curie action is helped by a quick-screen showing the Spanish actions.



## Science Week

Madrid, November 3-16, 2014

The Science Week aims to spread the results of scientific researches by opening the scientific spaces normally closed to visitors. Its main aim is to stimulate the knowledge of science and technology among citizens. It offers more than 500 free activities addressed to all citizens. The National Museum of Natural Sciences (CSIC) organized the activity with the participation of the Spanish Society of Biochemistry & Molecular Biology (SEBBM), Or es Clave, MED-EL, Phonak and TARGEAR.

## Marie Skłodowska-Curie Actions 2014

Trento, November 18-19, 2014

Dr. Paola Bruni from UNIFI, attended to the conference on 'The Empowerment of the Next Generation of Researchers: Promoting talents, spreading excellence'. (EN-GRes2014) organized by the Italian Ministry of Education, University and Research, in collaboration with the Autonomous Province of Trento, under the auspices of the Italian Presidency of the Council of the European Union. The overall theme of the conference was to discuss and reflect on the Marie

Skłodowska-Curie Actions with a special focus on the concept of 'Empowerment' of the next generation of researchers by addressing relevant issues such as training, mobility and career development. To promote common initiatives and to share best practices that ensure excellent and innovative research training as well as attractive career and knowledge-exchange opportunities through cross-border and cross-sector mobility of researchers, to better prepare the next generation of researchers for current and future societal challenges.

