



About TARGEAR

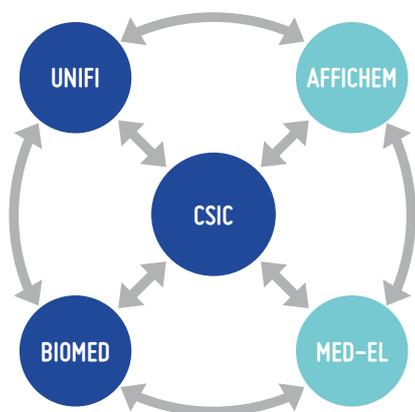
Working hand in hand to better understand the aetiology of ARHL

TARGEAR is a Marie Curie Industry-Academia Partnerships and Pathways action supported by the FP7-PEOPLE program (2014-2017). Academia and industrial researchers are working hand in hand in this project to better understand the aetiology of age-related hearing loss (ARHL) and find therapies which combine pharmaceuticals and hearing devices.

The project also provides an important educational dimension by promoting the training of early-stage-researchers in the field of ARHL. In December 2015's newsletter you will find an update on our latest activities, an agenda with upcoming events, a series of biographical sketches by TARGEAR members, and much more.

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

Project structure



- WP1**
Experimental design of animal preclinical studies
- WP2**
Transfer of technology to small and medium enterprises
- WP3**
Translation of knowledge to the clinical practice
- WP4**
Training sessions

We recommend

EIT Health
eit.europa.eu/eit-community/eit-health

European Network for Action on Ageing and Physical Activity
www.eunaapa.org

Health 2 Market
www.health2market.eu

Hear-it
www.hear-it.org

OTOSTEM
www.otostem.org

World Federation of the Deaf
www.wfdeaf.org

Contact us

IIB 'Alberto Sols', CSIC-UAM
Arturo Duperier 4, 28029 Madrid (Spain)
contact@targear.eu



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

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Mid-term Meeting and 4th Executive Committee Meeting

Florence (Italy), Sep 11, 2015



The Mid-term Meeting and the 4th ExCom Meeting were organised in parallel by Professor Paola Bruni's team (UNIFI) and took place in classroom 303 at the 'Complesso Didattico Morgagni', Università degli Studi di Firenze. It was attended by Professor Joel Eyer (EU expert).

The 52nd Inner Ear Biology Workshop

Rome (Italy), Sep 12-15, 2015

The Inner Ear Biology workshops are organized annually by European Academic Centers with the objective of a free exchange of scientific accomplishments in the area of inner ear biology and related disciplines. Prof. Josef Syka (BIOMED) and Prof. Isabel Varela-Nieto (CSIC) participated as members of the International Advisory board. Prof. Syka offered the lecture 'Presbycusis in experimental animals and in men' and Prof. Varela-Nieto was a moderator at the Session I on 'Developmental Biology and regeneration'. The event was sponsored by TARGEAR.



Upcoming activities

Symposium: 'Ageing, neurodegeneration and hearing loss: an IGF-1 signalling perspective'

Madrid (Spain), December 10, 2015
TARGEAR organizes the Symposium, to be held at La Pagoda, Facultad de Medicina, Universidad Autónoma de Madrid.

Workshop: 'Effective Translation of Research Results to the Clinical Practice'

Innsbruck (Austria), May 2016
Workshop organised by MED-EL.

HEAL: Hearing Across the Lifespan

Cernobbio (Italy), June 2-4, 2016
Key experts in hearing science and audiology and professionals across the care pathway will meet in Cernobbio, Lake Como, Italy.

Summer Workshop: 'Auditory Neuroscience'

Madrid (Spain), July 6-8, 2016
To be held at the Medical School, Universidad Autónoma de Madrid.

European Researchers' Night

Madrid (Spain) and Toulouse (France), 25 September, 2015

The European Researchers' Night takes place every year all over Europe. In 2015, these popular science events happened in around 300 cities located in 24 European and neighbouring countries. The activities scheduled were an opportunity to meet researchers, talk to them, and find out what they really do for society, in interactive and engaging ways. TARGEAR took part in these celebrations for the second time.

This year, Prof. Isabel Varela-Nieto (CSIC) organised the conference and workshop 'The human genome through time: in search of the DNA of Miguel de Cervantes' in Madrid, in collaboration with the Spanish Society for Biochemistry and Biochemical Biology (SEBBM). Dr. Emmanuel Noguer and Mrs Elodie Bacqué (AFFICHEM) shared their experience with the attendants in Toulouse.



Madrid's Science Week

Madrid (Spain), November 2-15, 2015

'Know, experience, discover' was the motto of the XV Science Week in Madrid, an event that aims to stimulate the knowledge of science and technology among citizens by opening the scientific spaces normally closed to visitors. TARGEAR joined this celebration with the Marie Curie Open Day 'Understanding and treating presbycusis', which took place on 5 November, 2015, at the Institute of Biomedical Research 'Alberto Sols' (CSIC-UAM). The event counted with the collaboration of IdiPAZ-Hospital Universitario La Paz, CIBERER, MED-EL and the Spanish Confederation of Families of Deaf People (FIAPAS). A guided tour was organised, during which participants could attend a hearing test. The visit was followed by the

round table 'What do we know about hearing disorders?', where the latest developments both in the field of scientific research and in practice clinic were presented. Speakers: Marta Bastarrica (Dept. Of Clinical Engineering, MED-EL), Dr. Luis Lassaletta (ENT, Hospital Universitario La Paz), Eva Ruiz (FIAPAS technical team, graduated in Psychology), Dr. Pedro Cobo (ITEFI, CSIC) and Prof. Isabel Varela-Nieto (CSIC) as moderator. TARGEAR also sponsored a program of activities centred on the International Year of Light and Light-Based Technologies at the National Museum of Natural Sciences in Madrid, in which workshops and lectures to audiences of different ages were programmed.



More on dissemination and outreach activities

One of TARGEAR's main objectives is to disseminate and publicize the research work being carried out in the field of presbycusis. We are enriching the information that exists on presbycusis in general dissemination channels such as Wikipedia, and we have recently created a TARGEAR channel on Youtube. As part of the

communication initiatives, we are currently re-designing our leaflet to make it more reader friendly, in laymen terms. The leaflet will soon be available on-line, at www.targear.eu, in English, French, Italian, German, Czech and Spanish. You can follow us in Spanish as well on Twitter, at [@nutretuoido](https://twitter.com/nutretuoido).



Blanca Cervantes

Recruited at CSIC

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Blanca Cervantes is a recruited postdoctoral researcher at the Neurobiology of Hearing Laboratory-Biomedical Research Institute 'Alberto Sols' CSIC-UAM (Madrid, Spain). She studied Chemical and Biological Science in the School of Chemistry of the Universidad Autónoma de Puebla (UAP), Mexico. In 2003, she collaborated with the Laboratory of Sensory Neurophysiology, at the Institute of Physiology of this university as a bachelor student and later in 2006, she formally joined this lab to carry

out her Master and Ph.D. thesis, which aim was to determine the expression of sodium-activated potassium channels in the vestibular afferent neurons (VANS) in rats. In TARGEAR, the specific goal of her work is to study the cellular models for testing the activity of new molecules with therapeutic potential in the treatment of ARHL. In particular, she will test molecules with curative potential in neural and otic cell lines (HEI-OC1) and in primary cultures of spiral ganglion neurons.



Leocadio Rodríguez-Mañas

Member of the Executive Advisory Board

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Leocadio Rodríguez Mañas, Head of the Department of Geriatrics at Hospital Universitario de Getafe (Madrid), President of the Research Committee at Hospital Universitario de Getafe and Professor of Geriatric Medicine (School of Medicine, Universidad Europea de Madrid). Coordinator of the Spanish Collaborative Research Network on Aging and Frailty RETICEF (Ministry of Science and Innovation), Co-director of the Toledo Study on Healthy Ageing, carried out on 2.895 community-dwelling older people. Principal Investigator

in 36 research projects both public agency and industry-sponsored. Among these research projects have to be remarked three of them funded by the EU 7th Framework Program (FOD-CC; MID-FRAIL; FP7-278803-2 and FRAILOMIC; FP7-305483-2) and two by DG-SANCO (FRAILCLINIC; Ares nº 527549 and FRAILTOOLS; Ares nº 662887) focused on the field of frailty and the prevention of disability in older adults. In addition he has recently been nominated as coordinator of the Joint Action on Frailty.

Ilaria Rizzo

UNIFI secondee at AFFICHEM

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Ilaria Rizzo obtained a Bachelor's Degree in Molecular Biology in 2010 and a Master's Degree in Molecular and Cellular Biology in 2012. In 2012 she obtained an Italian professional qualification called 'Esame di Stato' as Biologist. Since 2013 she has joined with Paola Bruni's group at the Department of Biomedical Experimental and Clinical Sciences 'Mario Serio', at University of Florence and has started her doctorate

study in Biochemistry and Molecular Biology. For a long time the topic of their research group has concerned the study of the actions of Sphingosine 1-Phosphate (S1P) in skeletal muscle. During the first months of her PhD, Ilaria has contributed to the study of S1P function in satellite cells biology, acquiring new biochemical skills and strengthening the knowledges in Molecular and Cellular biology field.



Pedro Cobo Parra

CSIC secondee at MED-EL

Pedro Cobo received a Master's degree in Physics in 1984 and a PhD degree in Physics in 1988, both from the Complutense University of Madrid, Spain. In 1987 he joined the Institute of Acoustics of Madrid, which belonged to the Superior Council for Scientific Research (CSIC), Spain. Since then, he has worked on various topics of Acoustics, such as Underwater Acoustics (propagation, noise, reverberation, sonar systems), Electroacoustics (loudspeakers, microphones, equalization), Hearing

(Auditory Brainstem Response, tinnitus, animal models of hearing) and Environmental Acoustics (noise assessment, noise effects, passive and active noise control). Currently he belongs to the Institute for Physics and Information Technologies (ITEFI), where he is involved in topics combining physical and signal processing aspects of Acoustics. He has authored or co-authored more than 200 scientific works, including papers in Journals and communications in Conferences.

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Giacomo Mandruzzato

MED-EL secondee at CSIC

Giacomo Mandruzzato's background is biomedical engineering, he is interested in biomedical signal/image processing and its application to clinical practice. After he achieved his Master's degree at the Dept. of Bioengineering in cooperation with the Dept. of Neurosciences at the University of Padua, Italy, and after some experiences in biomedical companies in Venice and Zurich area, he joined MED-EL HQ settled in Innsbruck, Austria, three years ago. Dr. Mandruzzato works in R&D-Electrophysiology Dept. His topics are pre, intra and post-

operative objective measurements such as electrically elicited ABR (Auditory Brainstem Response), Promontory Stimulation and related research studies. During his TARGEAR secondment, he collaborated with the Varela-Nieto's team (CSIC) in acquisition and analysis of ABR in noise-exposed BHMT (betaine homocysteine methyltransferase) null rodents. He also joined the ENT CI team at the University Hospital La Paz, supervised by Dr. Lassaletta, where hearing implant surgeries and fitting sessions are performed regularly.

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Jana Burianova

BIOMED secondee at AFFICHEM

Burianova attended the Faculty of Science of Charles University in Prague, where she specialized in Biochemistry and obtained a Master's degree. She then joined the Department of Auditory Neuroscience, headed by Professor Syka, and started to study the mechanisms of hearing in animal models. This work offered a truly great variety of methodological approaches, including electrophysiology, behavioural

studies and immunohistochemistry. For her PhD thesis, she chose to investigate the effects of aging on the central part of the auditory pathways in laboratory rodents. The rationale was that although it is well established that during aging there are apparent alterations in the cochlea, it was largely unknown whether they are also accompanied by alterations in the central nervous system.

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