

# Auditory Neuroscience

## SUMMER SCHOOL 2016

6-8  
JULY  
2016

School of Medicine of Universidad Autónoma de Madrid  
(Calle del Arzobispo Morcillo, 4. 28029 Madrid)

### PROGRAMME

06/07/2016

- 10:00 **Welcome and Opening remarks**  
10:15 The Organizers
- 10:15 **Inner Ear Development**  
11:15 Carlos Avendaño (UAM)
- 11:45 **Regulation of the inner ear development. Cellular markers and mechanisms**  
12:30 Marta Magariños (UAM-CIBERER)
- 12:30 **Computational analysis of gene expression I**  
13:15 Marta Milo (University of Sheffield, UK)
- 14:45 **Brief introduction to chicken's otocyst dissection and culture techniques**  
15:15 Yolanda León (UAM)
- 15:15 **Sample processing and analysis of gene expression and proteins. Immunohistochemistry**  
15:45 Laura Frago (UAM)
- 15:45 **Lab practice I: Dissection of chicken otocyst. Otic vesicles processing, labeling and microscopy**  
17:15 Yolanda León, Laura Frago (UAM), Sara Pulido and Lourdes Rodríguez de la Rosa (CSIC-CIBERER)

07/07/2016

- 09:00 **Computational analysis of gene expression II**  
10:15 Marta Milo (University of Sheffield, UK) and Sara Pulido (CSIC-CIBERER)
- 10:15 **Introduction to the cochlear anatomy and central auditory processing pathways**  
11:15 Carlos Avendaño (UAM)
- 11:45 **Introduction to electrophysiology and cell biology of the inner ear**  
12:30 Veronica Fuentes (UCLM)
- 12:30 **Biomarkers, histology, cytoarchitecture, sections analyses and cell counting**  
13:15 Juan Carlos Alvarado (UCLM)
- 14:45 **Introduction to the dissection of the rat cochlea**  
15:15 Esperanza Bas (University of Miami, USA)
- 15:15 **Brief introduction and demonstration of cochlear tissue processing**  
15:45 Julio Contreras (UCM-CIBERER)
- 15:45 **Lab practice II: Dissection and processing of the cochlea. Spiral ganglion dissection and Organ of Corti whole mount preparation. Samples labeling and microscopy**  
17:15 Esperanza Bas (University of Miami, USA), Verónica Fuentes and Juan Carlos Alvarado (UCLM), Julio Contreras (UCM-CIBERER), Blanca Cervantes and Adelaida M. Celaya (CSIC-CIBERER)

08/07/2016

- 09:00 **Analysis of cochlear samples**  
10:15 Esperanza Bas (University of Miami, USA)
- 10:15 **What you should know about hearing loss in 2016**  
11:15 Luis Lassaletta (UAM)
- 11:45 **Surgical demonstration of current auditory implants**  
13:30 Luis Lassaletta and José Manuel Morales (UAM-La Paz University Hospital)
- 14:45 **Experimental models for the study of cochlear injury**  
15:15 Isabel Varela-Nieto (CSIC-CIBERER)
- 15:15 **Brief introduction to different routes of administration**  
15:45 Silvia Murillo-Cuesta (CSIC-CIBERER)
- 15:45 **Lab practice III: Systemic and topical drug administration to the cochlea. Electrophysiological recordings for longitudinal experiments**  
17:00 Silvia Murillo-Cuesta (CSIC-CIBERER), Esperanza Bas (University of Miami, USA), Adelaida M. Celaya (CSIC-CIBERER) and Nestor Vallecillo (CSIC)
- 17:00 **Closing remarks**  
Carlos Avendaño and Esperanza Bas
- 20:30 **Dinner**

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