

Targeted deletion of the RNA-binding protein *Caprin1* leads to progressive hearing loss and impairs recovery from noise exposure in mice

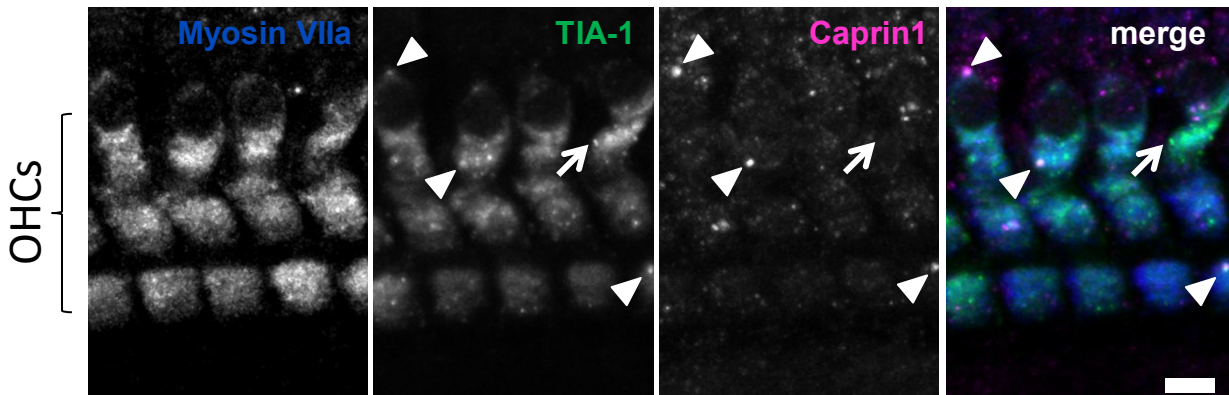
Lisa S. Nolan^{1,2}, Jing Chen², Ana-Claudia Goncalves¹, Anwen Bullen¹, Emily R. Towers¹, Karen P. Steel², Sally J. Dawson^{1*} and Jonathan E. Gale^{1*}

¹UCL Ear Institute, 332 Gray's Inn Road, London. WC1X 8EE

²Wolfson Centre for Age-Related Diseases, King's College London, Guy's Campus, London. SE1 1UL.

SUPPLEMENTARY FIGURE 1

SUPPLEMENTARY FIGURE 1



Supplementary Figure 1. Noise exposure induced stress granule formation in outer hair cells *in vivo*. P18-20 C57/BL6 mice subjected to noise (100dbSPL, 2 hours). Vibratome cochlear slices (from cochlea fixed at the end of the noise exposure) were immunolabelled with myosinVIIa (blue), TIA-1 (green), Caprin1 (red). Stress granules were identified in the OHC region of the organ of Corti. Arrowheads indicate stress granules positive for both TIA-1, and Caprin1 or in some cases Caprin1-negative stress granules (arrow). Scale bar, 5 μ m.