## **SCIENTIFIC SEMINAR**



Asier Erramuzpe

Ikerbasque Research Fellow Biobizkaia

## Aging, from Computational Neuroscience to a multi-scale interdisciplinary approach

Aging is a dynamic process encompassing a systemic time-dependent decline on multiple scales from biological to psychological and social levels. Individuals with the same chronological age might exhibit different trajectories of age-related biological deterioration, as measured by biomarkers of functional performance, tissue integrity, and metabolic health. My main research line focuses on understanding and analyzing these trajectories, and their alterations in both healthy and ill subjects and relating the aberrant predictions to other factors. Age-related alterations have been reported in all body organs, such as the liver, kidneys, heart, lungs, skin, and brain. My main research line is centered on this last organ, but such methodology could be applied to any biomedical data. I will discuss how this methodology could be used to provide a multi-scale quantitative approach to assess the impact of therapies on biological aging, diseases, and other factors shaping lifestyle.

CIC bio GUNE

ikerbasque Basque Foundation for Science Thursday January 11 <u>Atrio 800</u> <u>12.00H</u>

