

EADC Resident and Research Fellow Section (RRFS)

Exchange through internship programs

Name and location EADC hosting center

Memory and Cognitive Disorders Center in Genoa

Link to center's website

<https://www.ospedalesanmartino.it/it/>

www.infn.it

PI of the EADC hosting center

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Description of the center

The Memory and Cognitive Disorders Center in Genoa is based at the University of Genoa and at the IRCCS Policlinico S. Martino together with the Genoa Section of the National Institute of Nuclear Physics.

The overall research theme of our center is to combine quantitative multi-modal imaging (multi-tracer molecular imaging, electrophysiological imaging, multi-parametric quantitative MRI) with fluid markers (core AD, neuroinflammatory and synaptic loss markers) to try to tease out the pathological and clinical heterogeneity of AD. To reach this aim we strive to include in all our research projects multiple competencies including clinical and pre-clinical fellows from different backgrounds including medicine, biology, neuropsychology, physics, mathematics, and statistics.

From the clinical point of view our center is a tertiary referral center for a catchment area of around 650.000 people, for an area (the Province of Genova), which presents one of the highest mean population age in Europe.

Internship program

The structure of the RRFS fellowship at our center will be tailored based on the background of the fellow but will include both clinical and research activities. The fellow will be assigned

a supervisor during the stay in Genoa and before the beginning of the fellowship a program of education activities will be agreed on.

From the clinical side the fellow will be offered the possibility to take part as an observer to the visits in the memory clinics, the interpretation of the molecular imaging studies and of the fluid biomarkers.

From the research side the fellow and the local mentor will agree on a research activity based on the length of the fellowship and the previous background of the fellow. The aim of the research activity will be to allow the fellow to conduct a supervised data analysis on the combination of multi-modal imaging and fluid markers data to allow the fellow to leverage the potential of the combination of these different approaches. Ideally the fellow will be able to complete the data analysis during the stay and if of interest to the fellow and to his/her home center, follow-up online meetings will be arranged after the end of the fellowship to prepare a collaborative scientific publication.

Optimal duration of the internship: 4 – 8 weeks