

# EADC Resident and Research Fellow Section (RRFS)

## Exchange through internship programs

### Name and location EADC hosting center

**Geneva Memory Center, hosted at the Geneva University Hospitals (HUG)**

### Link to center's website

<https://www.fondationhug.org/en/memory-center>

### PI of the EADC hosting center

Prof. Dr. Giovanni B. Frisoni

### Contact person of the EADC hosting center

- Federica RIBALDI [Federica.Ribaldi@unige.ch](mailto:Federica.Ribaldi@unige.ch)

- Augusto MENDES [augusto.martinsmendes@unige.ch](mailto:augusto.martinsmendes@unige.ch)

### Description of the center

The Geneva Memory Center, hosted at the Geneva University Hospitals (HUG), is both a clinical facility and a research group of the University of Geneva, led by Prof. Giovanni B Frisoni. The Center manages a research program with over 15 ongoing academic and industrial trials. A part of the Geriatric and Rehabilitation Department at Geneva University Hospitals, the Center was established in early 2018 and has since grown to occupy a 500 m<sup>2</sup> facility. It houses physicians, psychologists, neuropsychologists, and a research team that includes four post-docs, eight research assistants, and administrative support staff. The Center features clinical examination rooms, a lumbar puncture room, a perfusion room, an internal laboratory, and research-dedicated offices. It is equipped with all the necessary resources for conducting clinical trials and data analysis at the pharmaceutical company level. In addition to its internal capabilities, the memory Center collaborates closely with various HUG departments, including radiology, nuclear medicine, neurology, and others. The Center has actively participated in numerous research projects, resulting in a rich research program with five distinct research areas: (1) Pre-clinical, (2) Pathophysiology, (3) Prevention and Treatment, (4) Clinical trials, and (5) Infrastructures. This diverse program is supported by various funding sources, including the EU, Swiss National Fund, pharmaceutical industry, foundations, and private donors. The memory Center also fulfils an educational role by providing opportunities for doctoral and post-doctoral positions. Prof. Frisoni is also responsible for the annual UNIGE course on cognitive disorders.

### Internship program

#### **For physicians**

For medical candidates, the Geneva Memory Center offers a 2 to 4-week program in a multidisciplinary environment. Participants will follow the clinical workup, which includes several key components:

- First patient visit: Candidates will be part of the initial clinical process.
- In-Depth Neuropsychological Assessment: Candidates will assist in conducting detailed neuropsychological assessments.
- MRI, PET scan and lumbar puncture: They will observe in MRI and PET scanning procedures as well as lumbar puncture.
- Restitution Visit: Candidates will be present during the visit in which diagnostic results are communicated to patients.

Additionally, candidates will have the chance to observe and engage in our clinical research activities. This exposure will provide insights into how research workups complement clinical assessments and how patients with or without cognitive impairment are managed.

### **For researchers**

The Geneva Memory Center database is a multidimensional repository comprising data from more than 3500 patients who have sought consultation at the Memory Clinic since 2014 and consented to share their data for research. The patient cohort spans a spectrum from cognitively unimpaired individuals, including those with Subjective Cognitive Decline (SCD) and volunteers, to those diagnosed with Mild Cognitive Impairment (MCI) and dementia. The Memory Center cohort continues to grow with over 800 new patients per year.

All individuals undergo comprehensive clinical and neuropsychological assessments, with approximately 70% receiving an MRI scan, and a subset of patients also undergo PET (amyloid and/or tau and/or FDG) scans, blood and stool sample collection, cerebrospinal fluid analysis, and EEG.

During the 2-4 week program, candidates will gain a comprehensive understanding of the available data and develop research hypotheses within the interests of the affiliated Center and the Geneva Memory Center. Topics of interest include the validation of plasma biomarkers, the study of subjective cognitive decline and its biomarker correlates, PET scan analysis, and the exploration of associations between gut microbiota and biomarkers.