

EADC Resident and Research Fellow Section (RRFS)

Exchange through internship programs

Name and location EADC hosting center

Alzheimercenter, Amsterdam University Medical Centers

Link to center's website

<https://www.alzheimercentrum.nl>

PI of the EADC hosting center

Dr. Everard (Jort) Vijverberg, MD, PhD

Contact person of the EADC hosting center

Give full coordinates of the person that can be contacted by the RRFS member for additional information

Dr Colin Groot

Assistant Professor in Translational Neuroscience

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Description of the center

Give a full description of main clinical and research activities

The goal of Alzheimercenter Amsterdam is to prevent dementia, as early as possible. Through our active role in (inter)national research, we can immediately apply new insights to practice. This allows us to continuously provide the best care to our patients. Alzheimercentrum Amsterdam is part of Amsterdam UMC. The center now exists for 25 years employs more than 100 staff members. Each year, we treat thousands of patients from across the country. Alzheimercentrum Amsterdam is the diagnostic and treatment center for dementia, with a focus on young-onset dementia. Our mission is to make dementia a topic that can be discussed and treated, and ultimately to cure it.

Organizational Structure

Alzheimercenter Amsterdam is part of the Neurology Department of Amsterdam UMC. Our center comprises everyone directly involved in patient care and/or scientific research, housed within the physical environment of Alzheimercenter Amsterdam, and/or funded by Alzheimercenter Amsterdam. The research activities of Alzheimercenter Amsterdam focus on developing personalized treatments for brain diseases that cause dementia. Alzheimer's disease is the most common cause of dementia. Other brain diseases that cause dementia include dementia with Lewy bodies, frontotemporal dementia, and vascular dementia. Alzheimercenter Amsterdam primarily focuses on young-onset dementia. 2 Our research activities are centered around three research lines. 1. Searching for the Origins: Unraveling the mechanisms of disease development is essential for achieving accurate diagnostics and treatments for Alzheimer's disease and other brain diseases. Research within the first line focuses on risk factors and protective factors. In this line, we collaborate with fundamental researchers within our research institute, Amsterdam Neuroscience.

2. Diagnosis & Prognosis: To develop personalized treatments in the future, molecular diagnostics are essential. By identifying the specific disease processes present in an individual patient, future treatments can be seamlessly aligned with their needs. Through the development of increasingly advanced diagnostic tests, we can detect brain diseases at an early stage (before dementia manifests). In addition to diagnosis, prognosis is becoming increasingly important: a personalized prediction that answers the patients' question, "What can I expect?" 3. Intervention & Prevention: Activities within the third research line include both pharmacological and non-pharmacological (such as lifestyle, nutrition, exercise) interventions. In the future, effective treatments for Alzheimer's disease and other brain diseases will occur at an early stage, before dementia develops. In other words, prevention. For this research line, we work closely with the Brain Research Center (conducting drug trials) and the Industry Alliance Office of our research institute, Amsterdam Neuroscience.

Internship program

Give a description of the contents of an internship program at the hosting center. If desirable, give separate descriptions for clinicians and for researchers. Indicate the optimal duration of an internship program (preferably max 4 weeks)

Fellows can engage in a range of activities, including but not limited to:

- Weekly multidisciplinary diagnostic meetings;
- Assessment of MRI (by Prof. Frederik Barkhof), EEG (by Dr. Alida Gouw), and PET (by Dr. Elsmarieke vd Giessen) scans in preparation of the diagnostic meeting;
- Journal clubs and research meetings at the Alzheimercenter at large (range of topics) or in the group of Dr. Rik Ossenkoppele (Imaging/biomarker focused);
- Meet with our clinicians and/or our senior researchers to discuss a variety of topics;
- Talk with PhD students and post-docs about their research/projects; see an overview of ongoing studies: <https://www.alzheimercentrum.nl/wetenschap/lopend-onderzoek/>
- A tour on the campus to see our imaging and laboratory facilities; - Present your own research/clinical activities to the Alzheimercenter Amsterdam;
- Table football during the Friday afternoon drinks.

The duration of the fellowship can be anywhere in between 2-4 weeks.