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Research themes

❶ Autobiographical memory

❷ Future thinking

❸ Neuroimaging (fMRI)

Key words

Memory, Aging, Dementia, Neuroimaging

Research

❶ Autobiographical memory

My research is focused on identifying the role of the medial temporal lobe, specifically the hippocampus, in the recollection of episodic autobiographical memories, especially those encoded in the far past, in order to test the memory consolidation theories (Viard et al., 2007, 2010, 2013, 2021, 2024).

❷ Future thinking

Another facet of episodic memory is the ability to project ourselves into the future, in order to plan and pre-experience future projects. I am interested in understanding similarities and differences between past and future mental time travel (Viard et al., 2011, 2012, 2014).

❸ Methods and participants

My work is based on neuroimaging studies (structural MRI, resting state functional MRI, task-based functional MRI) and neuropsychological data from neurodegenerative patients (semantic dementia: Viard et al., 2014, 2013, Fiati et al., 2026; Alzheimer's disease: Platel et al., 2021, Duclos et al., 2017, Béjanin et al., 2012), and psychiatric populations (PTSD: Viard et al., 2019, Postel et al., 2019, Dégeilh et al., 2017; OCD: Viard et al., 2005).

Experience

- **2008-now**: Associate professor, INSERM-EPHE-UNICAEN U1077 (Caen, FR).
- **2006-2008**: Research fellow, Institute of Cognitive Neuroscience, UCL (London, UK).
- **2005-2006**: Assistant professor, University of Franche-Comté (Besançon, FR).
- **2002-2005**: PhD Neurosciences, INSERM E0218 (Caen, FR).

Diplomas

- **2025**: HDR Habilitation (Ecole Pratique des Hautes Etudes, Paris, FR).
- **2005**: Doctor in Neurosciences (University Pierre and Marie Curie, Paris, FR).
- **2001**: MSc Neurosciences (University Pierre and Marie Curie, Paris, FR).
- **1999**: BSc Cell Biology and Physiology (University Denis Diderot, Paris, FR).

Grants and awards

- **2022-2023:** ERASMUS+ Intra-European Mobility Grant (A. Viard).
- **2022-2023**: PHC Ulysses Franco-Irish funding (PIs: R. Roche, A. Viard).
- **2022-2026**: French regional research council, Functional neuroanatomy of Borderline personality and PTSD (PIs: B. Guillery, F. Guénolé, A. Viard).
- **2019-2021**: French biomedical research council, Neuroimaging of Borderline personality (PIs: F. Eustache, B. Guillery, B. Giffard).
- **2019-2020**: PHC Ulysses Franco-Irish funding (PIs: R. Roche, A. Viard).
- **2013-2019**: French biomedical research council, Social cognition in aging and fronto-temporal dementias (PI: B. Desgranges).
- **2011-2013**: French biomedical research council, Stress and emotional memory (PIs: B. Guillery, J. Dayan, A. Viard).
- **2011-2012**: French regional research council, Functional neuroanatomy of PTSD (PI: B. Guillery).

- **2004-2005**: French Alzheimer's Association award (A. Viard).
- **2002-2003**: French Alzheimer's Association award (A. Viard).

Teaching

- Neuroimaging (MSc Life Sciences-SVT EPHE)
- Scientific English (MSc Life Sciences-SVT EPHE)
- Memory systems and aging (MSc Life Sciences-SVT EPHE)
- Nosology of neurodegenerative and neurological diseases (MSc Life Sciences-SVT EPHE)
- Amnesia and memory: neuropsychology and neuroimaging (MSc Sorbonne University)

Supervision

- Master's students: since 2008
- PhD students: since 2010

Collaborations

- Pr. Richard Roche (Maynooth University, Ireland)
- Pr. Olivier Martinaud (Neurology service, Caen University Hospital)
- Pr. Bérengère Guillery (EPHE)

Main publications

- Fiati M, Eustache F, Belliard S, de La Sayette V, Desgranges B, **Viard A**. (2026) Alterations in default mode network functional connectivity in semantic dementia. Neuroimage Rep. 6:100421. doi:10.1016/j.ynirp.2026.100421
- **Viard A**, Allen AP, Doyle CM, Naveau M, Bokde ALW, Platel H, Eustache F, Commins S, Roche RAP. (2024) Autobiographical Cerebral Network Activation in Older Adults Before and After Reminiscence Therapy: A Preliminary Report. Biol Res Nurs 26:257-269. doi: 10.1177/10998004231210982
- **Viard A**, Eustache F, Segobin S. (2021) History of Magnetic Resonance Imaging: a trip down memory lane. Neuroscience:S0306-4522(21)00337-7. doi:10.1016/j.neuroscience.2021.06.038.
- **Viard A**, Mutlu J, Chanraud S, Guenolé F, Egler PJ, Gérardin P, Baleyte JM, Dayan J, Eustache F, Guillery-Girard B (2019) Altered default mode network connectivity in adolescents with post-traumatic stress disorder. Neuroimage: Clin 22:101731. doi: 10.1016/j.nicl.2019.101731
- Eustache F, **Viard A,** Desgranges B (2016) The MNESIS model: memory systems and processes, identity and future thinking. Neuropsychologia 87:96-109. doi: 10.1016/j.neuropsychologia.2016.05.006
- **Viard A**, Piolino P, Belliard S, de La Sayette V, Desgranges B, Eustache F (2014) Episodic future thinking in semantic dementia: a cognitive and fMRI study. PLoS One 9: e111046. doi: 10.1371/journal.pone.0111046
- **Viard A**, Desgranges B, Matuszewski V, Lebreton K, Belliard S, de La Sayette V, Eustache F, Piolino P (2013) Autobiographical memory in semantic dementia: new insights from two patients using fMRI. Neuropsychologia 51: 2620-2632. doi: 10.1016/j.neuropsychologia.2013.08.007
- **Viard A**, Desgranges B, Eustache F, Piolino P (2012) Factors affecting medial temporal lobe engagement for past and future episodic events: an ALE meta-analysis of neuroimaging studies. Brain Cogn 80: 111-125. doi: 10.1016/j.bandc.2012.05.004
- **Viard A**, Doeller CF, Hartley T, Bird CM, Burgess N (2011) Anterior hippocampus and goal-directed spatial decision making. J Neurosci 31: 4613-4621. doi: 10.1523/JNEUROSCI.4640-10.2011
- **Viard A,** Chételat G, Lebreton K, Desgranges B, Landeau B, de La Sayette V, Eustache F, Piolino P (2011) Mental time travel into the past and the future in healthy aged adults: an fMRI study. Brain Cogn 75: 1-9. doi: 10.1016/j.bandc.2010.10.009
- **Viard A**, Lebreton K, Chételat G, Desgranges B, Landeau B, Young A, de La Sayette V, Eustache F, Piolino P (2010) Patterns of hippocampal-neocortical interactions in the retrieval of episodic autobiographical memories across the entire life-span of aged adults. Hippocampus 20: 153-165. doi: 10.1002/hipo.20601
- **Viard A**, Piolino P, Desgranges B, Chételat G, Lebreton K, Landeau B, Young A, De La Sayette V, Eustache F (2007) Hippocampal activation for autobiographical memories over the entire lifetime in healthy aged subjects: an fMRI study. Cereb Cortex 17:2453-2467. doi.org/10.1093/cercor/bhl153
- **Viard A**, Flament MF, Artiges E, Dehaene S, Naccache L, Cohen D, Mazet P, Mouren MC, Martinot JL (2005) Cognitive control in childhood-onset obsessive-compulsive disorder: a functional MRI study. Psychol Med 35:1007-1017. doi.org/10.1017/S0033291704004295

Full list of publications here: https://pubmed.ncbi.nlm.nih.gov/?term=viard+a&sort=date&size=100
Google Scholar citations: https://scholar.google.com/citations?user=CZSXjU8AAAAJ&hl=fr