

**Prof. Hannah Monyer** EASA Member of Class III Lecture 30-06-2023 Colloquium 'Art meets Medicine'

## Title: Underlying mechanismus for memory formation and retrieval: neuroscientific explanations and literary examples from Marcel Proust's "Recherche"

The research in my lab focuses on mechanisms underlying the encoding and recall of episodic memory, that is that type of memory related to "what" happens "where" and "when". I will present basic research data to exemplify how this complex topic can be studied in mice and why we believe that similar processes support memory in humans as well. We use state-of-the-art techniques to study episodic memory at the molecular, cellular, network and behavioural level. I will also address a much-discussed topic in the context of episodic memory, namely how accurate are our memories? Finally, I will take recourse to Marcel Proust's "A la recherche du temps perdu" and use a passage from the novel to illustrate that the author arrived at a good judgement regarding the inaccuracy of our memories. A century later, neuroscientists provide experimental evidence corroborating Proust's view that was based on sheer observation and introspection.