



## Catherine McKENZIE

**Finishing year:** 2018

**Supervisor:** Harald Janovjak, IST Austria

**Thesis title:** Design and characterization of methods and biological components to realize synthetic neurotransmission.

**Position after PhD:** Post-doctoral fellow in the group of Prof. Olivier Thoumine; Interdisciplinary Institute for Neuroscience (IINS), Bordeaux, France

**MolTag alumni page:**

[Catherine McKenzie \(univie.ac.at\)](#)

**Social network:**

[Catherine McKenzie](#) | [LinkedIn](#)

### How would you summarize your thesis results in 3 sentences?

My PhD thesis was highly interdisciplinary in terms of components and experimental approach. I employed molecular biology, chemogenetics, electrophysiology and imaging throughout my thesis. I focus and result was on building biological methods to specifically address how tangible elements of the mammalian brain (ie synaptic communication) translate to cognitive processes and behavioral output.

### What are you doing now?

I am in my second year as a post-doctoral fellow at IINS, where I focus on employing 3D super-resolution microscopy, optogenetics, and electrophysiology to understand the role of adhesion proteins in real-time by optical recruitment and reassembly of these proteins at synapses.

### What was the impact of the MolTag program on your further career?

I gained a lot of support from the faculty throughout my PhD research as well as how to proceed into a post-doctoral fellow.

### Did you keep connections with some former colleagues?

Yes! **and it is so nice to share what the next steps after finishing PhD are like and what are the similarities and difference are for each of us.**

### What did you particularly like about the MolTag program?

The interdisciplinary approach was the most impactful on my PhD research. **I was exposed, through MolTag, to experimental approaches and expertise that was not available at my host institution.** This exposure created creative avenues in which to think about next steps in my PhD work.

### What is your recommendation for current MolTag PhD students?

MolTag gives you the incredibly unique opportunity to refine and extend your scientific network, don't let that pass!

