



## Felix P. MAYER



**Finishing year:** 2017

**Supervisor:** Harald Sitte,  
Medical University of Vienna

**Thesis title:** Unraveling the mechanism of action of new psychoactive substances and their phase 1 metabolites.

**Current Position and Employer:**  
PostDoc in the Lab of Randy D. Blakely, Brain Institute, Florida Atlantic University, Boca Raton, FL, USA (after a PostDoc period at MedUni)

**MolTag alumni page:**

[Felix Mayer \(univie.ac.at\)](http://FelixMayer.univie.ac.at)

**Social network:**

[@felixpmayer](https://twitter.com/felixpmayer) / [Twitter](#)

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

My project focused on the molecular mechanism of action of new psychoactive substances and d-amphetamine at monoamine transporters, i.e. the high-affinity transporters for dopamine (DAT), norepinephrine (NET) and serotonin (SERT) and the low-affinity/high-capacity transporter OCT3. We were able to show that the phase-1 metabolites of mephedrone exert bioactive effects and that stereochemistry dictates their mode of action at DAT, NET and SERT. The latter finding served as a starting point for a complex and promising project that should aid the discovery/characterization of a novel class of therapeutics.

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

Numerous interactions with students from other labs from different fields broadened my scientific background. Moreover, the program provided me with a solid basis of contacts for ongoing and future collaborations.

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

Yes. I am in close contact with my former supervisor and we are still working on unpublished projects from my PhD-thesis which will ultimately benefit from the techniques I learned during my postdoctoral training.

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

The social and scientific events enabled us to interact with PIs and the members of the SAB. These interactions did not only support the formation of potential collaborations but also **enabled us to discuss our projects from an academic and industrial perspective**. The financial support for traveling was excellent.

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

Going to conferences, networking, go abroad, **seek international collaborations (not only within the Moltag program)**.

