



Marco NIELLO



Finishing year: 2019

Supervisor: Harald Sitte,
Medical University of Vienna

Co-Supervisor: Margot Ernst,
Medical University of Vienna

Thesis title: Pharmacological characterization and selectivity profile of different synthetic cathinones among monoamine transporters.

Current Position and

Employer: PostDoc at the
Institute of Pharmacology,
Medical University of Vienna

MolTag alumni page:

[Marco Niello \(univie.ac.at\)](https://univie.ac.at)

Social networks:

[Marco Niello | LinkedIn](#)

[Marco Niello \(@MarcoNiello\) /
Twitter](#)

How would you summarize your thesis results in 3 sentences?

I have studied the chemical determinants of monoamine transporter substrate-selectivity. Substrates of monoamine transporters, such as MDMA ('ecstasy') and fenfluramine are becoming always more popular as innovative medical strategy for the treatment of neuropsychiatric disorders. I have worked in close contact with the Mihovilovic group (organic chemistry) and the Ecker group (docking, in silico prediction of compounds) to develop new monoamine transporter substrates. I have found that specific chemical substitution of the DAT-selective substrate methcathinone could lead to partial substrates of SERT and that the partial efficacy could be explained by the interaction with the allosteric site of SERT.

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

The interdisciplinary nature of MolTag pushed me in improving my communication skills. Having the need to explain what you are doing to people with a completely different background forces you to better understand what you are doing in the first place. Moreover, the numerous meetings with other groups, largely broadened my knowledge in different fields of science. **Being able to properly convey and collect information to and from different audiences is a crucial point in every career and in daily life.**

Did you keep connections with some former colleagues?

Yes, we are still in touch and we meet from time to time to get a beer in Vienna with those that are still here and exchange some messages/emails with those who left Vienna already.

What did you particularly like about the MolTag program?

I have really enjoyed the will of participating in the program that was present in most of the students and the **highly international environment.**

