



Thomas STEINKELLNER



Finishing year: 2013

Supervisors: Harald Sitte,
Medical University of Vienna

Thesis title: Amphetamine
action at dopamine and
serotonin transporters is
modulated by aCaMKII.

Current Position and Employer:
Assistant Prof. at Institute of
Pharmacology, Med. University
of Vienna (after a PostDoc at
Hnasko-Lab, Neurosciences,
UCSD, San Diego, USA)

MolTag alumni page:
[Thomas Steinkellner \(univie.ac.at\)](https://www.univie.ac.at)

Social networks:
[Thomas Steinkellner | LinkedIn](#)
[Thomas Steinkellner \(@TomSteinkellner\) / Twitter](#)

How would you summarize your thesis results in 3 sentences?

The psychostimulant properties of amphetamines require CamKII-dependent interaction and modulation of monoamine transporters to exert their full-fledged effects. Pharmacological inhibition or genetic deletion of CaMKII abolish transporter-mediated substrate release and result in behavioral alterations in mice. While the addictive properties of amphetamines are preserved, the motor-stimulating effects are diminished suggesting that these effects are mediated partly by different molecular processes.

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

MolTag enabled me to train in theoretical and practical skills related to drug development and pharmacology through ample interactions with experts in different disciplines and helped informing me about different ways of tackling down a research question from both an academic- as well as industry-point of view.

What did you particularly like about the MolTag program?

MolTag offered **many occasions that allowed me to interact with both, my student fellows as well as the individual PIs. Our frequent seminars covered many exciting topics and offered insights into both, academic science as well as industry.** Finally, the multidisciplinary science branches participating in the program offered valuable insights in the various processes involved in drug development.

What is your recommendation for current MolTag PhD students?

Use the frequent opportunities to attend seminars and interact with you colleagues. **The lab rotations are particularly exciting to learn new techniques and look at research questions from different angles.** They are also good ways to start new collaborations, and get a feeling of how science is done in other labs. Most importantly, use the opportunity to go abroad and **experience some outside-the-box thinking outside your comfort zone.**

