

## List of publications Prof. Linda Simmler

H-index: 20, total citations: 2673 ([Google Scholar](#))

[Publications on PubMed](#)

### *Publications in peer-reviewed scientific journals*

26. Petrelli F, Zehnder T, Laugeray A, Mondoloni S, Cali C, Pucci L, Molinero Perez A, Bondiolotti BM, De Oliveira Figueiredo E, Dallerac G, Déglon N, Giros B, Magrassi L, Mothet JP, Mameli M, **Simmler L**, Bezzi P: Disruption of astrocyte-dependent dopamine control in the developing medial prefrontal cortex leads to excessive grooming in mice. *Biol Psychiatry*, doi: 10.1016/j.biopsych.2022.11.018, **article in press**. [Link to Petrelli et al.](#)
25. **Simmler LD**, Li Y, Hadjas LC, Hiver A, van Zessen R, Lüscher C: Dual action of ketamine confines addiction liability. *Nature*, **2022**, 608(7922): 368-373. [Link to Simmler et al. 2022](#)
24. Davis GL, Minderva AR, Lario A, **Simmler LD**, Rodriguez CI, Gunaydin LA: Ketamine increases activity of a fronto-striatal projection that regulates compulsive behavior in SAPAP3 knockout mice. *Nat Commun*, **2021**, 12(1): 6040. [Link to Davis et al. 2021](#)
23. Li Y, **Simmler LD**, Van Zessen R, Flakowski J, Wan JX, Deng F, Li YL, Nautiyal KM, Pascoli V, Lüscher C: Synaptic mechanism underlying serotonin modulation of transition to cocaine addiction. *Science* **2021**, 373(6560): 1252-1256. [Link to Li et al. 2021](#)
22. Hadjas LC, Schartner MM, Cand J, Creed MC, Pascoli V, Lüscher C, **Simmler LD**: Projection-specific deficits in synaptic transmission in adult Sapap3-knockout mice. *Neuropsychopharmacol* **2020**, 45(12): 2020-2029. [Link to Hadjas et al. 2020](#)
21. Hadjas LC, Lüscher C, **Simmler LD**: Aberrant habit formation in the Sapap3-knockout mouse model of obsessive-compulsive disorder. *Sci Rep* **2019**, 9(1): 12061. [Link to Hadjas et al. 2019](#)
20. **Simmler LD** and Ozawa T: Neural circuits in goal-directed and habitual behavior: implications for circuit dysfunction in obsessive-compulsive disorder. *Neurochem Int* **2019**, 129: 104464. [Link to Simmler and Ozawa 2019](#)
19. **Simmler LD** and Blakely RD: The SERT Met172 mouse: an engineered model to elucidate the contributions of serotonin signaling to cocaine action. *ACS Chem Neurosci* **2019**, 10(7): 3053-3060. [Link to Simmler and Blakely 2019](#)
18. **Simmler LD**, Anacker AMJ, Levin MH, Vaswani NM, Gresch PJ, Nackenoff AG, Anastasio NC, Stutz SJ, Cunningham KA, Wang J, Zhang B, Henry LK, Stewart A, Veenstra-VanderWeele J, Blakely RD: Serotonin transporter blockade contributes to the behavioral, neuronal, and molecular effects of cocaine. *Br J Pharmacol* **2017**, 174(16): 2716-2738. [Link to Simmler et al. 2017](#)
17. Nackenoff AG, **Simmler LD**, Baganz NL, Pehrson AL, Sánchez C, Blakely RD: Serotonin transporter-independent actions of the antidepressant vortioxetine as revealed using the SERT Met172 mouse. *ACS Chem Neurosci* **2017**, 8(5): 1092-1100. [Link to Nackenoff et al. 2017](#)
16. Vollbrecht PA, **Simmler LD**, Blakely RD, Deutch AY: Dopamine denervation of the prefrontal cortex increases expression of the astrocytic glutamate transporter GLT-1. *J Neurochem* **2014**, 130(1): 109-14. [Link to Vollbrecht et al. 2014](#)
15. **Simmler LD**, Buchy D, Chaboz S, Hoener MC, Liechti ME: *In Vitro* Characterization of Psychoactive Substances at Rat, Mouse, and Human Trace Amine-Associated Receptor 1. *J Pharmacol Exp Ther* **2016**, 357(1): 134-144. [Link to Simmler et al. 2016](#)

14. Schmid Y, Hysek CM, **Simmler LD**, Crockett MJ, Quednow BB, Liechti ME: Differential effects of MDMA and methylphenidate on social cognition. *J Psychopharmacol* **2014**, 28(9): 847-856. [Link to Schmid et al. 2014](#)
13. **Simmler LD**, Rickli A, Schramm Y, Hoener MC, Liechti ME: Pharmacological profiles of aminoindanes, piperazines, and pipradrol derivatives. *Biochem Pharmacol* **2014**, 88(2):237-244. [Link to Simmler et al. 2014](#)
12. Hysek CM, **Simmler LD**, Schillinger N, Meyer N, Schmid Y, Donzelli M, Grouzmann E, Liechti ME: Pharmacokinetic and pharmacodynamics effects of methylphenidate and MDMA administered alone or in combination. *Int J Neuropsychopharmacol* **2014**, 17(3): 371-381. [Link to Hysek et al. 2014](#)
11. **Simmler LD**, Rickli A, Hoener MC, Liechti ME: Monoamine transporter and receptor interaction profiles of a new series of designer cathinones. *Neuropharmacology* **2014**, 79: 152-160. [Link to Simmler et al. 2014](#)
10. Hysek CM, Schmid Y, **Simmler LD**, Domes G, Heinrichs M, Eisenegger C, Preller, KH, Quednow BB, Liechti ME: MDMA enhances emotional empathy and prosocial behavior. *Soc Cogn Affect Neurosci* **2014**, 9(11): 1645-1652. [Link to Hysek et al. 2014](#)
9. **Simmler LD**, Wandeler R, Liechti ME: Bupropion, methylphenidate, and 3,4-methylenedioxy-pyropiperazine antagonize methamphetamine-induced efflux of dopamine according to their potencies as dopamine uptake inhibitors: implications for the treatment of methamphetamine dependence. *BMC Res Notes* **2013**, 6: 220. [Link to Simmler et al. 2013](#)
8. Hysek CM, Fink A, **Simmler LD**, Donzelli M, Grouzmann E, Liechti ME: Alpha(1)-adrenergic receptors contribute to the acute effects of 3,4-methylenedioxymethamphetamine in humans. *J Clin Psychopharmacol* **2013**, 33(5): 658-666. [Link to Hysek et al. 2013](#)
7. **Simmler LD**, Buser TA, Donzelli M, Schramm Y, Dieu LH, Huwyler J, Chaboz S, Hoener MC, Liechti ME: Pharmacological characterization of designer cathinones in vitro. *Br J Pharmacol* **2013**, 168(2): 458-470. [Link to Simmler et al. 2013](#)
6. Hysek CM, **Simmler LD**, Nicola VG, Vischer N, Donzelli M, Krahenbuhl S, Grouzmann E, Huwyler J, Hoener MC, Liechti ME: Duloxetine Inhibits Effects of MDMA ("Ecstasy") in Vitro and in Humans in a Randomized Placebo-Controlled Laboratory Study. *PLoS One* **2012**, 7(5): e36476. [Link to Hysek and Simmler et al. 2012](#)
5. Hysek CM, Schmid Y, Rickli A, **Simmler LD**, Donzelli M, Grouzmann E, Liechti ME: Carvedilol inhibits the cardiostimulant and thermogenic effects of MDMA in humans. *Br J Pharmacol* **2012**, 166(8): 2277-2288. [Link to Hysek 2012](#)
4. Hysek CM, Brugger R, **Simmler LD**, Bruggisser M, Donzelli M, Grouzmann E, Hoener MC, Liechti ME: Effects of the alpha(2)-adrenergic agonist clonidine on the pharmacodynamics and pharmacokinetics of 3,4-methylenedioxy-methamphetamine in healthy volunteers. *J Pharmacol Exp Ther* **2012**, 340(2): 286-294. [Link to Hysek et al. 2012](#)
3. **Simmler LD**, Hysek CM, Liechti ME: Sex Differences in the Effects of MDMA (Ecstasy) on Plasma Copeptin in Healthy Subjects. *J Clin Endocrinol Metab* **2011**, 96(9): 2844-2850. [Link to Simmler et al. 2011](#)
2. Hysek CM, **Simmler LD**, Ineichen M, Grouzmann E, Hoener MC, Brenneisen R, Huwyler J, Liechti ME: The norepinephrine transporter inhibitor reboxetine reduces stimulant effects of MDMA ("ecstasy") in humans. *Clin Pharmacol Ther* **2011**, 90(2): 246-255. [Link to Hysek et al. 2011](#)
1. Vejnovic I, **Simmler L**, Betz G: Investigation of different formulations for drug delivery through the nail plate. *Int J Pharm* **2010**, 386(1-2): 185-194. [Link to Vejnovic et al. 2010](#)

*Book chapters*

4. Liechti ME, **Simmler LD**, Sitte HH, Luethi D: Pharmacological profiling of novel psychoactive substances. In: Dargatzis P, Wood D, Novel Psychoactive Substances Classification 2<sup>nd</sup> Edition, *Academic Press* **2021**, 109-130. [Link to Liechti et al. 2021](#)
3. **Simmler LD**: Monoamine Transporter and Receptor Interaction Profiles of Synthetic Cathinones. In: Zawilska J. (eds) Synthetic Cathinones, *Current Topics in Neurotoxicology* **2018**, DOI: 10.1007/978-3-319-78707-7\_6. [Link to Simmler 2018](#)
2. **Simmler LD** and Liechti ME: Pharmacology of MDMA- and amphetamine-like new psychoactive substances. In: Maurer H, Brandt S (eds) New Psychoactive Substances. *Handbook of Experimental Pharmacology* **2018**, 252: 143-164. [Link to Simmler and Liechti 2018](#)
1. **Simmler LD** and Liechti ME: Interactions of Cathinone NPS with Human Transporters and Receptors in Transfected Cells. In: Baumann M, Glennon R., Wiley J (eds) Neuropharmacology of New Psychoactive Substances (NPS), *Current Topics in Behavioral Neurosciences* **2016**. 32: 49-72. [Link to Simmler and Liechti 2016](#)

*Preprints*

1. Petrelli F, Zehnder T, Pucci L, Cali C, Bondiolotti BM, Molinero Perez A, Dallerac G, Deglon N, Giros B, Magara F, Magrassi L, Mothet J-P, **Simmler L**, Bezzi P: Astrocytic VMAT2 in the developing prefrontal cortex is required for normal grooming behavior in mice. *bioRxiv* **2021**. DOI: 10.1101/2021.01.27.428434. [Link to Petrelli et al. 2021](#)

*Others*

- 1b. **Simmler LD**, Lüscher C: Troubles obsessionnels compulsifs: lorsque les synapses font perdre le contrôle. *Forum Med Suisse* **2021**, 21(3738): 639-640. [Link to Simmler and Lüscher 2021 French](#)
- 1a. **Simmler LD**, Lüscher C: Zwangsstörungen: Wenn Synapsen zu Kontrollverlust führen. *Swiss Med Forum* **2021**, 21(3738): 639-640. [Link to Simmler and Lüscher 2021 German](#)