**Dr. Lynette Nejabet**

**February 15th, 2024, 5PM (Berlin time, CET)**

**Registration link:**

<https://us06web.zoom.us/webinar/register/WN_Wxt0NKQ-Q6K9FZOPwBRk5A#/registration>

**Novel, Potent and Selective 5-HT2c Receptor Agonists for the Treatment of Neurological Disorders**

5-HT2c has been indicated in a number of different neurological diseases such as schizophrenia, bipolar disorder and depression and has the potential to be useful in the symptomatic treatment of Alzheimer’s and Parkinson’s Disease. As part of our 5-HT2c agonist program, HTS and dedicated design led to the discovery of five main chemical series. Herein we will focus on one of these series, the “oxo-series”. Investigation of ring-size, stereochemistry and substitution patterns allowed us to identify a number of promising compounds with single digit nanomolar activity. We were able to design compounds with very high functional selectivity and considerably lower clearance and metabolism compared to known 5-HT2c agonists. Additionally, these optimised compounds showed improved PK across various species with high oral bioavailability and brain penetration leading to good efficacy in our in vivo models.