Chemical tools to modulate endocannabinoid biosynthesis

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Propositions (Stellingen)

Accompanying the thesis

Chemical Tools to Modulate Endocannabinoid Biosynthesis

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1. The promiscuous high affinity of ABHD6 for activated ureas makes achieving selectivity over this off-target a challenge.
   This thesis, *Chapter 2 & 3*.

2. Structurally related control compounds are fundamental tools to account for (potential) side effects.
   This thesis, *Chapter 3 & 4.*

3. Modulating brain 2-AG production provides a therapeutic opportunity to treat obesity and other disorders while minimizing untoward neurological outcomes.
   This thesis, *Chapter 3*.

4. DH376 and DO34 will play a pivotal role in the deconvolution of the 2-AG mediated physiology in the brain.
   This thesis, *Chapter 3*.

5. The choice of fluorophore is like a box of chocolates, you never know what you're going to get.
   This thesis, *Chapter 7*.

6. The combination of activity-based protein profiling and lipidomics is essential for the study the physiological roles of proteins involved in lipid signaling.
   This thesis, *Chapter 3* & *Hsu, K.L., et al., Nat. Chem. Biol.* **2012**, 8, 999-1007.

7. Irreversible inhibitors are ideal tools to study the function of proteins like DAGL or MAGL, whereas reversible inhibitors have potential therapeutic utilities.
   Kohnz, R.A., et al., *Chem. Soc. Rev.* **2014**, 43, 6859-6869.

8. Inactivation of 2-AG biosynthesis enzyme DAGL results in not only reduction of 2-AG levels but also AEA in the brain.

9. What we think, or what we know, or what we believe is, in the end, of little consequence. The only consequence is what we do.

   – John Ruskin

10. Being social and performing experiments are not mutually exclusive but are both essential for a successful PhD.