



evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

Propojení výzkumu a vzdělávání v oblasti medicínální chemie
reg. číslo: CZ.1.07/2.3.00/30.0060

Zpráva ze zahraniční stáže/ Report from foreign intership

Účel cesty/Aim of travel: Foreign intership for project PropMedChem

Účastník/Participant: Claire McMaster, PhD

Doba trvání cesty/Duration of travel: From 15/03/2015 to 13/06/2015

Místo/Location: Jagiellonian University, Krakow, Poland

Zpráva/Report:

The main aims of the internship were the synthesis and characterisation of novel N9-sulfonylated 1,3-deazapurines, which will be tested as potential 5HT₆-antagonists. Similar compounds had previously been made within the group of Pawel Zajdel, and the biological activity these compounds was known to be good. However, there were problems with the synthetic route and also the stability of the final compounds.

I successfully developed purification and isolation techniques to remove BTPP from the compounds after the sulfonylation step, which had previously caused us many problems. Having developed this new procedure I went on to produce 6 final compounds in solution.

These compounds were made in solution on a relatively large scale (60 mg) to allow for biological testing to be carried out. After producing my final compounds, I then studied their stability in order to assess their viability in terms of potential drugs. The pH at which the compounds began to degrade was determined. The effects of electron donating and electron withdrawing groups on the stability of the compounds was assessed, by introducing these groups at R₂.

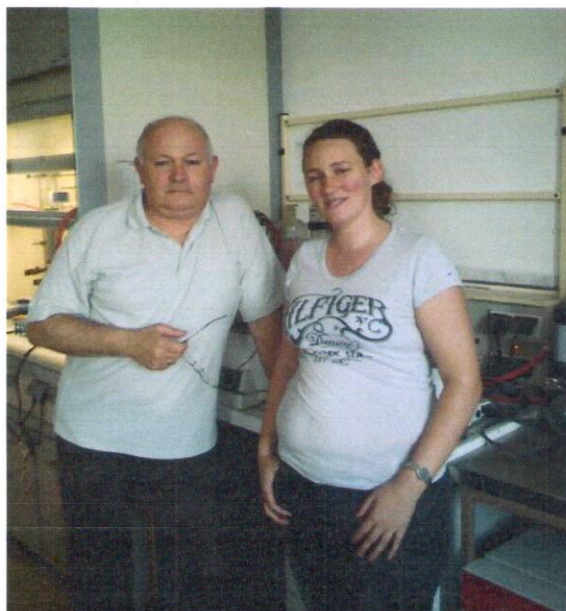
Throughout my work I routinely used NMR, hplc and LCMS to assess the identity and purity of my final products and intermediates.

V Praze/Olomouci dne
In Prague/Olomouc, date: 13/06/15

Jméno, podpis/
Name, signature 

Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem
České republiky.

Fotodokumentace/Photos:



Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.