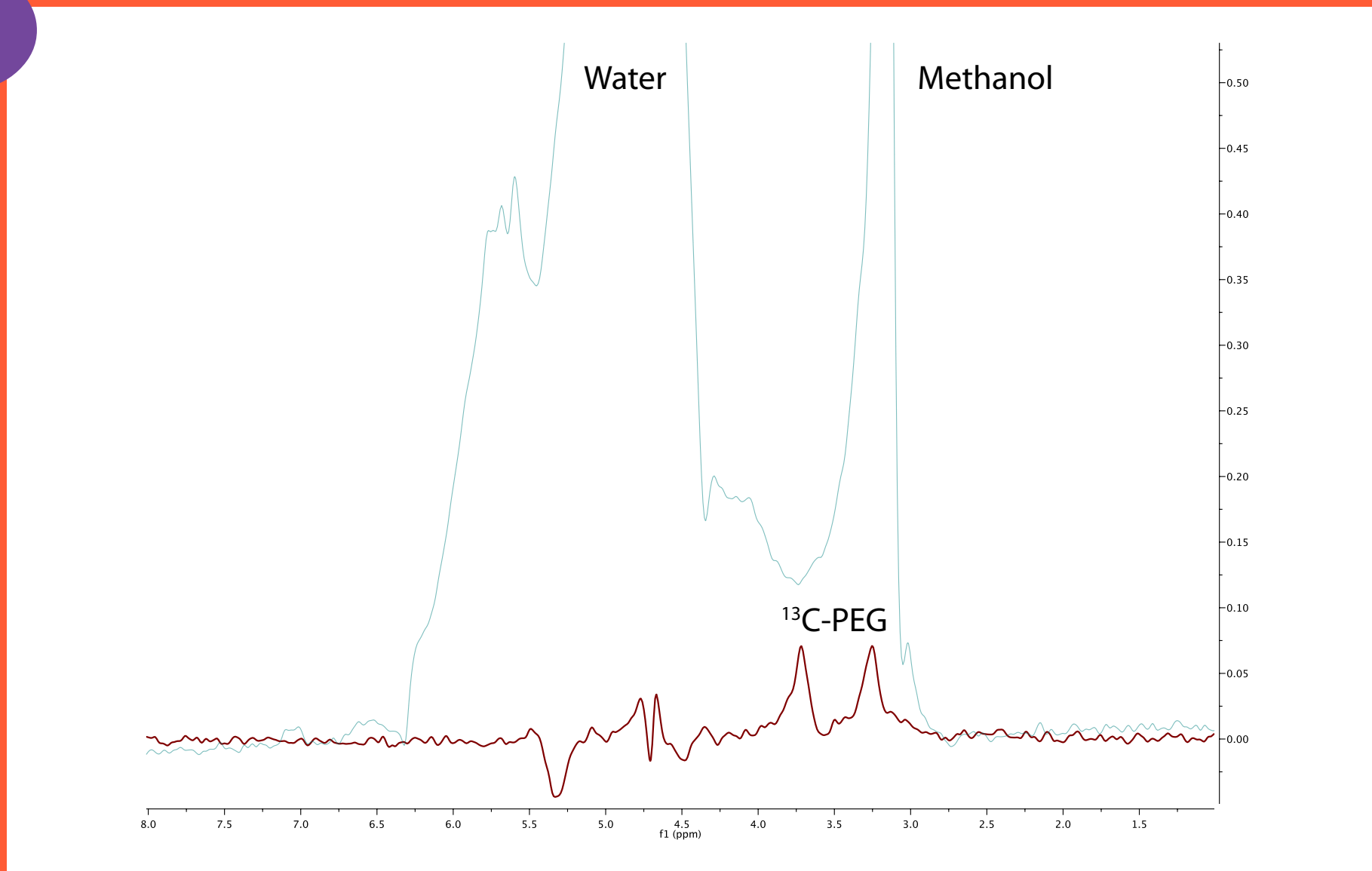




# nmr is science



*$^{13}\text{C}$ -PEG and methanol in water*

**Justin Lau, 2012**

Medical Biophysics Department | University of Toronto

**Field strength:** 300 MHz

**Why is this your favorite spectrum?**

This spectrum was the beginning of a rogue collaboration that was expected to last a few weeks but ended up being a 3-year adventure incorporating an HMQC filter into an imaging sequence. There was a steep learning curve for both of us. It was my first time programming a Bruker scanner. It was his first time appreciating the linewidths on an imaging magnet. It took quite a few weeks to realize that the phase cycle was not cycling. It was a relief that early Saturday morning to finally see the  $^{13}\text{C}$ -PEG doublet once the water and methanol signals were phase cancelled away correctly. The manuscript was rejected by 7 journals before it was accepted.

Comments: Research is like a pulse sequence: you prepare, you get excited, then you acquire lots of data!