It is necessary to have accurate gravitational wave (GW) models for use in GW searches and parameter estimation. I will present the first precessing model where the precession has been tuned to numerical relativity (NR). This model is based on a set of 40 new NR waveforms covering previously unexplored regions of the parameter space. I will show how we produced a physically motivated functional form to describe the precession angles (which describe the evolution of the orbital plane) across the parameter space. I will demonstrate how this has enabled us to produce a more accurate representation of the precession angles near merger than the PN expressions used in some current precessing models. This has enabled us to capture the change in turnover frequency for each of the multipole moments incorporated in the model as well as significantly decreasing the mismatch between the model and the NR waveforms for the more extreme cases.