Abstract: Computer algebra systems such as Macaulay2, CoCoa and Singular can determine the defining equations of a toric ideal in some instances (these programs are only limited by computing power and time). For this reason finding explicit descriptions for the defining equations of specific families of toric ideals is desirable. In this talk, we present examples of how exploiting the combinatorial structure of certain families of monomial ideals can help us produce Gröbner basis for the defining equations of toric ideals associated to them.