Since all measurements from a DNA microarray are dependent on the probes used, a good choice of probes is of vital importance when designing custom micro-arrays. This chapter describes how to design expression arrays using the "OligoWiz" software suite. The general desired features of good probes and the issues which probe design must address are introduced and a conceptual (rather than mathematical) description of how OligoWiz scores the quality of the potential probes is presented. This is followed by a detailed step-by-step guide to designing expression arrays with OligoWiz.