Abstract: The hippocampus, in addition to its role in learning and memory is implicated in mood and anxiety related behavior. In this talk, I will discuss our recent efforts aimed at understanding how distinct hippocampal cell types may differentially contribute to behavior. I will focus on 1) our studies dissecting the relative contribution of populations of ventral hippocampal neurons to behavior 2) the contribution of adult neurogenesis in the dentate gyrus to behavior. These studies will begin to elucidate the rich heterogeneity of cell types within the hippocampus and provide novel targets for neuromodulation to improve hippocampal function.