Baseball’s embrace of advanced statistics and data driven decisions has received an increasing amount of attention over the past decade. The World Champion Houston Astros are recognized as being on the cutting edge of using data to build and direct their team. Over the same time period, many industries are scrambling to find a way to generate novel insights from existing data and find new ways to gather data. Terms like ‘data scientist’ and ‘data engineer’ have become prevalent in job ads, but those terms are somewhat ill defined and the role of a data scientist in the context of an organization varies a great deal. Ryan (who is a psychologist, kinda) will use a brain metaphor to explain data’s role in the organization of the Houston Astros and give insight into how the Astros leverage data and technology to drive decisions and win championships. Ryan will also discuss the pitfalls and dangers of erroneous conclusions, and how integrating data experts with domain experts can hopefully reduce the prevalence of mistakes.