**Title:** Anterior cingulate cortex is necessary for adaptation of action plans

**Authors:** Adam T Brockett1,2, Stephen S. Tennyson1,2, Coreylyn A. deBettencourt1,2, Fatou Gaye1,2, Matthew R Roesch1,2

1. Department of Psychology

2. Program in Neuroscience and Cognitive Science

University of Maryland

College Park, MD 20742

**Correspondence:** Matthew R. Roesch (mroesch@umd.edu)

**Competing interests statement:** The authors declare no competing interests.

**Keywords:** ACC, response selection, dorsal medial striatum, action planning

**Figure Dimensions:**

Figure 1 – Medium (11 x11 cm)

Figure 2 – Medium (11 x 11 cm)

Figure 3 – Small (9 x 6 cm)

Figure 4 – Medium (11 x 11 cm)

**Materials and Data Availability**

 All analyses were conducted using the provided Matlab workspaces. Cells were cut using Offline Sorter (Plexon, Version 3.3) and processed in Neuroexplorer (Plexon; Version 4). Neuroexplorer files were then exported as “.mat” files, and all analyses were conducted in Matlab (Mathworks; Version 2018a). The excel document, Brockett\_2020\_variables\_and\_file\_names, contains lists of all cells from both control and lesioned animals used for the analyses of the data presented in the paper. File name (i.e., file\_name), time series data from the cell (i.e., sigxxxx), and which hemisphere was targeted (i.e., lesioned\_and\_recorded\_hemisphere) are provided for control and lesion animals, respectively. The ‘variables’ workbook provides the names of the relevant strobes within each Matlab workspace that were used to align and analyze the data. If you have questions about the data provided, please reach out to Matthew Roesch.