Three-dimensional diagrams showing the mean time spent by the two groups of animals at each location of the Starmaze at the beginning (day 1) and at the end (day 13) of training.

The white stars indicate the departure positions. Spatial locations were sampled by means of a grid of resolution 50 x 50 (each grid cell is 4 x 4 cm). The value associated to each grid cell was obtained by normalizing the time spent in the cell region with respect to the duration of each trial, and subsequently averaging over all day trials and over all the animals of a group.

On day 1, both groups of mice visited the different alleys of the maze regardless of the starting position (top left and top right). No direct trajectory from the departure point to the platform was observed. After 13 days of training, control mice learned to swim directly from each of the departure points to the platform (bottom left). Similarly, L7-PKCI mice learned to find the location of the platform through direct pathways from each of the four departure points (bottom right).

These plots confirmed that control and mutant mice had a comparable behavior when solving the Starmaze task.