大学院特別講義

デンマーク・オーフス大学研究者による オンラインセミナーの御案内 BRI-DANDRITE online joint lecture

日 時:令和3年11月10日(水)18:00~19:00

開催方法:Zoom

Dissociating value computations from the memory of events and actions in mouse anterior cingulate cortex



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Reward foraging decisions in natural habitats have to combine often conflicting strategies. For example, animals foraging for fruits may strive to identify the tree with the most fruits. But the longer the forager consumes the fruits, the higher is the chance that unvisited trees have grown more fruits. Thus forager needs to visit from time to time the trees that initially provided the little amount of reward and balance two strategies that oppose each other: one that makes the forager stick to the high reward patches and the other that makes it switch to the other unexplored patches. The question that motivates our research is to ask how the brain and anterior cingulate cortex (ACC) resolves the conflicting strategies. To tackle this question in laboratory settings, we used simple decision-making task that mimicked natural foraging scenarios. Electrophysiological recordings of single units from ACC revealed that neurons maintain an ongoing active representation of time-separated events and actions but do not represent the behavioral strategies. These results agreed with the inactivation studies of ACC performed concurrently. I will discuss these results and their implications.

どうぞ奮ってご参加ください。

(司会:脳研究所 システム脳病態学分野 教授・上野 将紀)