第6回　埼玉大学脳科学セミナー

主催:埼玉大学 脳科学融合研究センター

Representation of object images in monkey inferior temporal (IT) cortex revealed by optical imaging technology

What we learned about object vision and potentials of the optical technology for future cognitive studies and for clinical fields

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場 所:　大学会館 ２階 小集会室

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セミナー要旨

Optical intrinsic signal imaging revealed that object images were represented by combinations of activity spots distributed over the cortical surface. In this scheme, each spot represents a visual feature included in object images, and a combination of these visual features is used to specifically represent an object image (ref. 1, 2).
Direct sources of the optical intrinsic signals are absorption changes of hemoglobin and light scattering changes. These changes are induced by changes in neural activity. OCT is known as the technique to visualize images along the depth axis, and the signals detected by OCT (reflectivity from the tissue) are sensitive to light scattering. These properties made us possible to visualize neural activity along depth axis (ref. 3, 4, 5).

References

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