

— 第1日 9月19日(金) 13:00~15:00 —

大講堂

## SL02 Neural mechanisms of the Mind's Eye: Attention, selection and translation

### マインズアイの神経メカニズム：注意、選択、および解釈

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#### 講演者の紹介

George R. Mangun 博士は、1987年、カリフォルニア大学サンディエゴ校にて博士号(Ph. D.)を取得し、ダートマス大学医学部、カリフォルニア大学デービス校、デューク大学を経て、現在カリフォルニア大学デービス校、心と脳センターのセンター長および心理学、神経学の教授として研究教育にあたっている。専門は認知神経科学で、特に、電気生理学および神経画像の手法を用いてヒトの注意の神経メカニズムについて研究を進めている。100本を超える論文を発表しており、Society for Psychophysiological Research, American Psychological Association, National Institute of Mental Health 等から数々の受賞歴がある。また、*Journal of Cognitive Neuroscience* の senior editor を努めている。

#### 講演の内容

The control of our momentary perceptions and awareness is a key cognitive ability that shapes human experience. We have investigated the neural mechanisms of visual attention. I will review this work with an emphasis on attentional control systems for top-down (voluntary) attention to stimulus locations and features, demonstrating that regions of the frontal and parietal cortex are specialized for the control of spatial as opposed to non-spatial attention, but that influences in identified regions of visual cortex in preparation for selective target processing may be similar across a range of spatial and non-spatial stimulus features. The overarching goal of the presentation will be to build a neural model of voluntary attention based on convergent physiological measures in healthy human volunteers.

#### 主な著書・論文

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- Giesbrecht, B., Woldorff, M. G., Song, A. W., & Mangun, G. R. (2003). Neural mechanisms of top-down control during spatial and feature attention. *NeuroImage*, 19(3): 496-512.