

Preface

From June 29 to July 2, 2010, the 26th International Summer School of Brain Research was held at the Royal Academy's Trippenhuis in Amsterdam. The summer school of the Netherlands Institute for Neuroscience (NIN) has a long tradition. This year it was organized for the first time in cooperation with the VU University Amsterdam, the University of Amsterdam, the VU University Medical Center, and the Leiden University Medical Center. The financial support of the main sponsor UCB Pharma and 14 other sponsors allowed the organizers to invite 30 internationally renowned scientists to teach, exchange, and discuss their ideas and latest findings on the topic of Slow Brain Oscillations of Sleep, Resting State, and Vigilance.

Important functions have been identified for the spontaneous oscillations in brain activity that occur during sleep (slow EEG oscillations), rest (MRI default mode and other resting state networks), and task performance (EEG and performance modulation). Disentangling the roles of these slow oscillations is essential for a fundamental understanding of brain function. Never before, however, had an international meeting taken place that integrated these three fields of study, to promote cross-fertilization. As organizer Van Someren (NIN) outlined in his opening lecture, the seemingly segregated research areas turn out to have many themes in common, notably the involvement of these oscillations in memory, vigilance, consciousness and responsiveness to input; their interaction with hippocampus functioning; and their enhanced expression along the major connectional backbone formed by the midline cerebral cortical areas. The 30 excellent lecturers dissected all aspects of the slow oscillations, from the molecular to the systems level.

The lecture series was crowned with a keynote by Marcus Raichle. He received the prestigious C.U. Ariëns Kappers Award for his outstanding contribution in the field of cognitive neuroscience through the development and use of functional brain imaging techniques. Dr. Raichle rounded up the summer school with the same quote of William James that Van Someren had used to start the opening lecture: "Whilst part of what we perceive comes through our senses from the object before us, another part (and it may be the larger part) always comes out of our own head."

The blend of topics appeared attractive and timely; with about 170 participants from 24 different countries, it was the best-visited Summer School of Brain Research since many years and a resounding success as well; one heard nothing but praise from both the eminent speakers and the enthusiastic participants, for the level of the lectures, for the social events, and for the impeccable organization of the program—for which the enormous action potential of the secretarial support staff, Tini Eikelboom and Wilma Verweij, cannot be overestimated. This dedicated issue of *Progress in Brain Research* documents this inspiring and memorable international meeting.

Eus J.W. Van Someren
Ysbrand D. Van der Werf
Pieter R. Roelfsema
Huibert D. Mansvelder
Fernando H. Lopes da Silva