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Bio: Tadashi Isa graduated from the University of Tokyo, Faculty of Medicine in 1985 and obtained PhD from the Graduate School of Medical Science in University of Tokyo in 1989. He performed postdoctoral research in the laboratory of Anders Lundberg in the University of Göteborg in Sweden (1988-1990), worked as an assistant professor in the University of Tokyo (1990-1993), as a lecturer and associate professor in Gunma University (1993-1995), and started his laboratory in the National Institute for Physiological Sciences in Okazaki as a professor in 1996. In 2015, he moved to Kyoto University Graduate School of Medicine. He has been working on the neural circuits controlling the dexterous hand movements and saccadic eye movements, and their functional recovery after the brain and spinal cord injuries in nonhuman primate models. To conduct these studies, he developed a novel, state-of-art technology for pathway-selective intersectional manipulation using viral vectors which are effective in nonhuman primates (Kinoshita et al. *Nature*, 2012). More recently, he clarified the function of meso-cortical dopamine pathways in the control of risk-based decision making by pathway-selective manipulation with optogenetics (Sasaki et al. *Science*, 2024). Thus, he is a pioneer in the field of causal neuroscience in this nonhuman primates.

Selected publications

1. Sasaki R, Ohta Y, Onoe H, Yamaguchi R, Miyamoto T, Tokuda T, Tamaki Y, Isa K, Takahashi J, Kobayashi K, Ohta J, **Isa T** (2024) Balancing risk-return decisions by manipulating the mesofrontal circuits in primates. **Science**, 383:55-61.
2. Kinoshita M, Kato R, Isa K, Kobayashi K, Kobayashi K, Onoe H, **Isa T** (2019) Dissecting the circuit for blindsight to reveal the critical role of the pulvinar and superior colliculus. **Nat Comm**, 10(1):135.
3. Sawada M, Kato K, Kunieda T, Mikuni N, Miyamoto S, Onoe H, **Isa T**, Nishimura Y (2015) Function of nucleus accumbens in motor control during recovery after spinal cord injury. **Science**, 350: 98-101.
4. Kinoshita M, Matsui R, Kato S, Hasegawa T, Kasahara H, Isa K, Watakabe A, Yamamori T, Nishimura Y, Alstermark B., Watanabe D, Kobayashi K, **Isa T** (2012) Genetic dissection of the circuit for hand dexterity in primates. **Nature**, 487: 235-238.
5. Nishimura Y, Onoe T, Morichika Y, Perfiliev S, Tsukada H, **Isa T** (2007) Time-dependent central compensatory mechanism of finger dexterity after spinal cord injury. **Science**, 318: 1150-1155.