

## Curriculum Vitae

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### Affiliation

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### Professional Experience

1991-1993 Research assistant in Dokkyo Medical School

1993-1994 Research scientist in Japan Women's University

1994-2004 Research assistant in Toho University School of Medicine

2004-2010 Associate Professor in Tokyo Medical and Dental University

2010- Research specialist of Laboratory for Symbolic Cognitive Development, RIKEN BSI

### Membership in Professional Societies

The Japan Neuroscience Society

Society for Neuroscience

Physiological Society of Japan

The Japanese Society for Comparative Physiology and Biochemistry

### Publications

- 1) Iriki A, Taoka M. Triadic (ecological, neural, cognitive) niche construction: a scenario of human brain evolution extrapolating tool use and language from the control of reaching actions. *Philos Trans R Soc Lond B Biol Sci.* 2012 367(1585):10-23
- 2) Ojima H, Taoka M, Iriki A. Adaptive changes in firing of primary auditory cortical neurons following illumination shift from light to dark in freely moving guinea pigs. *Cereb Cortex.* 2010, 20:339-51.
- 3) Taoka M, Tanaka M, Ojima H, Iriki A. Electrophysiological study of neurons representing the hand and mouth in the secondary somatosensory cortex of the macaque monkey during a simple feeding task. *Dentistry in Japan.* 2007, 43:23-27.
- 4) Toda T, Taoka M. Postcentral neurons with covert receptive fields in conscious macaque

monkeys: their selective responsiveness to simultaneous two-point stimuli applied to discrete oral portions. *Exp Brain Res.* 2006, 168:303-6.

5) Toda T, Taoka M. Converging patterns of inputs from oral structures in the postcentral somatosensory cortex of conscious macaque monkeys. *Exp Brain Res.* 2004 Sep;158(1):43-9.

6) Toda T, Taoka M. Hierarchical somesthetic processing of tongue inputs in the postcentral somatosensory cortex of conscious macaque monkeys. *Exp Brain Res.* 2002. 147:243-51.

7) Iwamura Y, Tanaka M, Iriki A, Taoka M, Toda T. Processing of tactile and kinesthetic signals from bilateral sides of the body in the postcentral gyrus of awake monkeys. *Behav Brain Res.* 2002. 135:185-90.

8) Toda T, Taoka M. Integration of the upper and lower lips in the postcentral area 2 of conscious macaque monkeys (*Macaca fuscata*). *Arch Oral Biol.* 2002. 47:449-56.

9) Toda T, Taoka M. The complexity of receptive fields of periodontal mechanoreceptive neurons in the postcentral area 2 of conscious macaque monkey brains. *Arch Oral Biol.* 2001. 46:1079-84.

10) Iwamura Y, Taoka M, Iriki A. Bilateral activity and callosal connections in the somatosensory cortex. *Neuroscientist.* 2001 7:419-29.

11) Taoka M, Toda T, Iriki A, Tanaka M, Iwamura Y. Bilateral receptive field neurons in the hindlimb region of the postcentral somatosensory cortex in awake macaque monkeys. *Exp Brain Res.* 2000. 134:139-46.

12) Taoka M, Toda T, Iwamura Y. Representation of the midline trunk, bilateral arms, and shoulders in the monkey postcentral somatosensory cortex. *Exp Brain Res.* 1998. 123:315-22.