
Nobuyoshi Koiwa

Ph.D. in Neurophysiology from Department of Physiology,

Showa University School of Medicine

Born July 10 1969, Aomori, Japan

Nationality: Japanese

Language: Japanese, English



Current administrative address

University of Human Arts and Sciences,

1288 Magome, Iwatsuki-ku, Saitama-shi, Saitama 339-8539

Japan

Phone +81 48 749 6111

Fax +81 48 749 6110

E-mail address koiwa@human.ac.jp

CURRICULUM VITAE

WORK EXPERIENCE

2011 - Present Associate Professor

University of Human Arts and Sciences, Graduate Division of Human Arts and Sciences, Saitama, Japan (Dir. Dr. Kiyoshi Aoki)

Senior Director

Health Sciences of Mind and Body Research Center, Saitama, Japan (Dir. Dr. Takeshi Kusumi)

2013 – 2014 Visiting Associate Professor

The University of British Columbia, Department of Psychiatry, Vancouver, Canada (Dir. Anthony G. Phillips)

2011 – 2013 Part-time Lecturer

Showa University School of Medicine, Department of Physiology Tokyo, Japan (Dir. Dr. Ikuo Homma)

Teaching

Physiology and Neuroscience for Medical Profession (Nurses, Physical therapists, Occupational therapists).

Laboratory in Physiology for Medical Profession.

Research instructor for Ph.D., M.A. and B.A. students of University of Human Arts and Sciences

Research

Eye Gaze Perception and Spatial Attention for Sound Localization.

Auditory/ Olfactory/ Visual/ Somatosensory Event-Related Potentials (ERP).

Electroencephalogram Source Localization Using the Inverse Problem methods (Dipole Tracing Method, Low Resolution Brain Electromagnetic Tomography).

Emotion and Autonomic function.

2007 - 2011

Lecturer

University of Human Arts and Sciences, Graduate Division of Human Arts and Sciences, Saitama, Japan (Dir. Dr. Kiyoshi Aoki)

Research Fellow

Health Sciences of Mind and Body Research Center, Saitama, Japan (Dir. Dr. Jun Fukuda)

Teaching

Physiology for Medical Profession.

Laboratory in Physiology for Medical Profession.

Research instructor for M.A. and B.S. students of University of Human Arts and Sciences

Research

Auditory ERPs related to Sound localization.

Muscle Sensory and Somatosensory-ERPs.

Brain Mapping of ERP using Electroencephalogram Dipole Tracing Method.

1999 - 2007

Lecturer

Waseda College of Medical Arts and Sciences, Department of Oriental Medicine, Acupuncture and Moxibustion, Tokyo, Japan

(Dir Dr. Mari Kusumi)

Teaching

Physiology and Anatomy for Acupuncture and Moxibustion Practitioners.

Research

Auditory Evoked Potentials and Emotion.

Brain Mapping of ERP using electroencephalogram Dipole Tracing Method.

Equilibrium Function and Motor Control.

EDUCATION

2010 Ph.D. in Physiology and Neurophysiology

Showa University School of Medicine, Tokyo, Japan

1998 Diploma in Medical Care and Licensed Acupuncturist

Waseda College of Medical Arts and Sciences, Tokyo, Japan

1992 B.A. in Law

Chuo University, Tokyo, Japan

RESEARCH TOPICS AND TECHNICAL SKILLS

Autonomic Functions and Emotional Response

- Measure heart rate, perspiration, skin blood flow and respiration using a Power Lab
- Analysis of relation between psychological scales and autonomic functions.
- Analysis of emotional responses using physiological responses, such as respiration, skin conductance responses, cardiac responses, electromyography and electroencephalography
- Heart rate variability (HRV) analysis and computation of High frequency (HF) component and low frequency (LF) component using LabChart.

EEG measuring and analysis of dipole tracing method

- EEG Dipole Brain Mapping from auditory related potentials, inspiration-related olfactory Potential, movement-related potentials, visual related potentials and somatosensory potentials.

Recoding Action Potentials

- Recording of action potentials from somatic sensory afferent fibers using needle or surface electrodes in human.

MEMBER OF SOCIETIES

Japan Physiological Society
Japanese Clinical Neurophysiology
Japan Human Brain Mapping Society
The Japan Society of Acupuncture and Moxibustion
The Japan Society of Health Sciences of Mind and Body

AWARD

The JHSMB Research Encouragement Award (2011, Japan Society of Health Sciences of Mind and Body)

The JHSMB Research Encouragement Award (2014, Japan Society of Health Sciences of Mind and Body)

PUBLICATIONS

Koiwa N, Kusumi T, Kusumi M (2011) Relationship between meridian patterns and location of source generators of mid-latency somatosensory evoked potentials elicited by electroacupuncture to acupoints

The Collection of the Theses / International Academic Seminar Acupuncture and Moxibustion:251-260.

Koiwa N (2010) Discussion about relationship between Health Sciences of Mind-Body and Bruce McEwen's researches – From the perspective of brain science.(in Japanese)
HAS Vol. 6:69~73

Koiwa N, Masaoka Y, Kusumi T, Homma I (2010) Sound localization difficulty affects early and late processing of auditory spatial information: Investigation using the dipole tracing method
Clinical Neurophysiology, Vol. 121(9):1526-1539.

Matsumoto S, Koiwa N, Kusumi T(2010) Investigation of emotional intelligence quotient (EQ) of nursing student. (in Japanese)
Journal of Health Sciences of Mind and Body, Vol6(1):39~45

Koiwa N (2009) Health Sciences of Mind-Body and science of mind. (in Japanese)
Human Arts and Sciences Vol. 17:71~77

Masaoka Y, Nobuyoshi K, Homma I (2005) Inspiratory phase-locked alpha oscillation
in human olfaction: source generators estimated by a dipole tracing method.
Journal of Physiology, Vol.566(3): 979-997.

*Other 12 research articles The Japan Society of Acupuncture and Moxibustion, The
Japan Society of Health Sciences of Mind and Body, The journal of Oriental Medicine
College Association.*

BOOKS

Arai Y, Koiwa N(2012) Brain Development and Growth, In Kusumi M(Eds), Health
Sciences of Mind and Body. U-HAS Press.

Kusumi T, Koiwa N(2012) The Brain and Mental Health, In Kusumi M(Eds), Health
Sciences of Mind and Body. U-HAS Press.

Kusumi T, Koiwa N(2012) Empathic Communication with the Infant's Mind and Body,
In Kusumi M(Eds), Health Sciences of Mind and Body. U-HAS Press.

Homma I, Koiwa N(2011) Comfort Touch. (translation in Japanese of "Comfort Touch"
by Rose MK) ID-NO-NIPPON-SHA.

Koiwa N(2010) The Quest for Mechanisms of protection against Mental and Physical
Stress. (in Japanese) In Kusumi M(Eds), HAS. U-HAS Press.

Fukuda J, Kusumi T, Koiwa N(2008) Stress and Brain. (in Japanese) In Kusumi M(Eds),
Stress and Health. U-HAS Press.

Kusumi T, Koiwa N(2008) Measuring of Stress Responses. (in Japanese) In Kusumi
M(Eds), Stress and Health. U-HAS Press.

INTERNATIONAL CONFERENCES

Koiwa N, Kusumi T, Kusumi M. Relationship between meridian patterns and location of source generators of mid-latency somatosensory evoked potentials elicited by electroacupuncture to acupoints. 11th International Academic Exchange Congress of Acupuncture and Moxibustion, September 10th-22th, 2011, Tianjin, China.

Koiwa, N, Masaoka, Y, Kusumi, T, Homma, I. Sound localization difficulty affects early and late processing of auditory spatial information: Investigating using the dipole tracing method. *Clinical Neurophysiology*, Vol.121 Supplement 1, October, P19-5, (Kobe, 2010)

Masaoka, Y, Koiwa, N, Kasai, H, Kuroda, T, Akai, L, Homma, I. Olfaction, respiration and cortical rhythm. *Clinical Neurophysiology*, Vol.121 Supplement 1, October, P32-6, (Kobe, 2010)

Koiwa, N, Masaoka, Y, Homma, I. Sound Localization Difficulty Affect Early and Late Processing of Auditory Spatial Information - Investigation using the dipole tracing method, International dipole tracing method seminar, March, 2008, Tokyo, Japan

Koiwa, N, Masaoka, Y, Homma, I. Non-Painful and Painful Stimulation of Skin and Muscle -Comparison of SEPs and Source Localization by SSB/DT Method-, International dipole tracing method seminar, March, 2006, Tokyo, Japan

Koiwa, N, Masaoka, Y, Homma, I. The Location of Source Generator for Auditory Evoked Potentials obtained during Sound Localization Trials-Estimation by Dipole Tracing (DT) Method-, International dipole tracing method seminar, March, 2005, Tokyo, Japan

Koiwa, N, Masaoka, Y, Homma, I. Location of Source Generator of SVR (Slow Vertex Response) -Estimated by SSB/DT Method-, International dipole tracing method seminar, March, 2004, Tokyo, Japan

Other 76 posters including oral presentation in Japanese Clinical Neurophysiology, Japan Human Brain Mapping Society, Japan Physiological Society, The Japan Society of Acupuncture and Moxibustion, The Japan Society of Health Sciences of Mind and Body, Japan Society for Equilibrium Research.