

April 15, 2026

CURRICULUM VITAE

Kentaro Kawamura, M.D., Ph.D

PERSONAL INFORMATION

Date of Birth: January 01, 1976

Place of Birth: Fukuoka

Citizenship: Japan

Professional address: Department of Rehabilitation and Physical Medicine,
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Personal statement:

After working as a neurosurgeon for about ten years, I joined my current institution to study rehabilitation treatments for neurological disorders. Currently, I am conducting research under Dr. Etoh. My primary interests lie in the treatment of paralysis, spasticity, and sensory disturbances (including disorder of sensorimotor integration and neuropathic pain), associated with stroke, neurological diseases, and spinal disorders.

I aspire to contribute to the development of effective treatment methods by leveraging neuromodulation and neuroplasticity. To achieve this, I aim to gain expertise in MRI imaging and mapping techniques for evaluating brain activity and neural networks and to apply these techniques to both clinical practice and rehabilitation research.

Education:

Year	Degree	Institution
2002	M.D.	The University of Ryukyus School of Medicine, Okinawa, Japan
2023	Ph.D.	Kagoshima University Graduate School of Medicine, Kagoshima, Japan

Hospital or Affiliated Institution Appointments:

May 1, 2002: Fukuoka Tokushukai Hospital as a Resident

May 1, 2004: Department of Neurosurgery at Fukuoka Tokushukai Hospital as a Senior Resident

May 1, 2011: Department of Neurosurgery at Chubu Tokushukai Hospital as a Medical Staff

September 1, 2015: Department of Rehabilitation Medicine at Kagoshima University Hospital, Faculty of Medicine and Dentistry as a Medical Staff

April 1, 2019: Kagoshima University Graduate School of Medical and Dental Sciences, Department of Motor Function Rehabilitation as an Assistant Professor

Licensure and Certification:

2002 Medical License (Japan), No. 430385

2008 Board-Certified Specialist in Neurosurgery - The Japan Neurosurgical Society (No. 6881)

2016 Completed Training Program for Prosthetics and Orthotics Compatibility Evaluation

2017 Certified Para Sports Doctor – Japanese Para Sports Association (No. D472)

2018 Certificate of Completion for Swallowing Function Evaluation Training Program (No. 04844)

2018 Board-Certified Specialist in Stroke - The Japan Stroke Society (No. 20180033)

2019 Board-Certified Specialist in Rehabilitation Medicine - The Japanese Society of Rehabilitation Medicine (No. 02823)

2019 Certified Sports Doctor - Japan Sports Association (No. 0439010)

2023 Supervising Physician, The Japanese Society of Rehabilitation Medicine (No. 91684)

2023 Supervising Physician, The Japan Stroke Society

Academic and Professional Affiliations:

Member of The Japanese Association of Rehabilitation Medicine (No. 002327)

Member of The Japan Neurosurgical Society (No. 104020)

Member of The Japanese Society for Regenerative Medicine and Rehabilitation

Member of The Japanese Society of Clinical Neurophysiology (No. 7109016139)

Member of The Japan Stroke Society (No. 110885)

Member of The Japanese Clinical Sports Medicine Association (No. 008167)

Member of the Young Working Group Committee, Japanese Society for Regenerative Medicine and Rehabilitation

Member of the Examination Committee, The Japanese Society of Rehabilitation Medicine

Honors and Awards:

2023 Kagoshima University Graduate School of Medical and Dental Sciences Encouragement Award.

Grant and Fundings:

Principal Investigator

2020: Impact of Vibration Stimulation on Cortical Activity in the Upper Limb: A Magnetoencephalography Study

Funding: Grants-in-Aid for Scientific Research

Description: This ongoing research explores the effects of vibration stimulation on cortical activity in the upper limb using magnetoencephalography.

2025: Development and Clinical Feasibility of a Self-Training Device for Lower Limb Functional Recovery in Hemiplegia

Funding: Grants-in-Aid for Scientific Research Description: This study focuses on the development of a self-training device for lower limb recovery in hemiplegia. The clinical feasibility of the device will be evaluated in terms of usability, safety, and potential effects on motor function.

Collaborating Researcher

2021: Development of Objective Diagnostic Methods for Effective Treatment of Neuropathic Pain

Funding: Grants-in-Aid for Scientific Research

Description: This project aims to develop objective diagnostic methods to enable effective treatment for neuropathic pain.

2022: Development of Treatment Methods and Recovery Indicators for Severe Upper Limb Paralysis Using Transcranial Magnetic Stimulation, Peripheral Stimulation, and Robotics
Funding: Grants-in-Aid for Scientific Research

Description: This research investigates treatment methods for severe upper limb paralysis using transcranial magnetic stimulation, peripheral stimulation, and robotics to improve recovery indicators.

2023: Development of a Variable-Difficulty Rehabilitation Training System to Induce Volitional Electromyographic Activity for Clinical Trials

Funding: Grants-in-Aid for Scientific Research

Description: This project focuses on developing a rehabilitation system that promotes the generation of volitional electromyographic activity for clinical trials.

2025: Evaluation of Central Nervous System Function and Development of Therapeutic Approaches for Paralysis and Ataxia Using a Forearm Pronation–Supination Training Device.

Funding: Grants-in-Aid for Scientific Research

Description: This study aims to develop effective treatments for upper limb paresis and ataxia using a forearm pronation–supination training device. In healthy participants, we will assess time-dependent changes in corticospinal excitability and sensorimotor integration, and explore combined neuromodulation approaches.

Publications:

Kawamura K*, Etoh S, Ueno M, Ohama R, Hoei T, Hagihara S, Shimodozono M. Immediate changes during dysesthesia-matched transcutaneous electrical nerve stimulation in refractory neuropathic pain: a retrospective observational case series. *J Neuroeng Rehabil.* **Under review**

Kawamura K*, Etoh S, Noma T, Hayashi R, Jonoshita Y, Natsume K, Niidome S, Yu Y, Shimodozono M. Quantitative measurement of resistance force and subsequent attenuation during passive isokinetic extension of the wrist in patients with mild to moderate spasticity after stroke. *J Neuroeng Rehabil.* 2022;19(1):110.

Kawamura K*, Etoh S, Shimodozono M. Transcranial magnetic stimulation for diplopia in a patient with spinocerebellar ataxia type 6: a case report. *Cerebellum & Ataxias.* 2018; 5: 1-7.

Etoh S*, **Kawamura K**, Tomonaga K, Miura S, Harada S, Noma T, Kikuno S, Ueno M, Miyata R, Shimodozono M. Effects of concomitant neuromuscular electrical stimulation during repetitive transcranial magnetic stimulation before repetitive facilitation exercise on the hemiparetic hand. *NeuroRehabilitation.* 2019;45(3):323-329.

Ueno M*, **Kawamura K**, Ohama R, Shigenobu K, Ogura T, Shimodozono M. Carnitine

deficiency in rehabilitation ward patients and its association with activities of daily living: a pilot retrospective observational study. *Arch Rehabil Res.* 2025;100493.

Miyara K, **Kawamura K**, Matsumoto S, Ohwatashi A, Itashiki Y, Uema T, Noma T, Ikeda K, Shimodozono M*. Acute changes in cortical activation during active ankle movement after whole-body vibration for spasticity in hemiplegic legs of stroke patients: a functional near-infrared spectroscopy study. *Top Stroke Rehabil.* 2020;27(1):67-74.

Miyara K*, Etoh S, **Kawamura K**, ..., Shimodozono M. Effects of lower limb segmental muscle vibration on primary motor cortex short-latency intracortical inhibition and spinal excitability in healthy humans. *Exp Brain Res.* 2022;240(1):311-320.

Amano Y, Noma T, Etoh S, Miyata R, **Kawamura K**, Shimodozono M*. Reaching exercise for chronic paretic upper extremity after stroke using a novel rehabilitation robot with arm-weight support and concomitant electrical stimulation and vibration: before-and-after feasibility trial. *Biomed Eng Online.* 2020;19(1):28.

Natsume K, Yoshida A*, Sakakima H, Yonezawa H, **Kawamura K**, Shimodozono M. Age-independent benefits of postoperative rehabilitation during chemoradiotherapy on functional outcomes and survival in patients with glioblastoma. *J Neurooncol.* 2024;170:129-137.

Natsume K, Sakakima H, **Kawamura K**, Yoshida A, Akihiro S, Yonezawa H, Yoshimoto K, Shimodozono M.

Factors influencing the improvement of activities of daily living during inpatient rehabilitation in newly diagnosed patients with glioblastoma multiforme. *J Clin Med.* 2022;11(2):417.