Call for Applications: Program-specific Assistant Professor /Program-Specific Researcher (Postdoctoral scholar)
Kyoto University, Graduate School of Medicine, Department of Drug Discovery Medicine (Ohtsuki Lab)

1 October 2025

Job Description

We are investigating the impact of neuroinflammatory stress on dementia and psychiatric disorders, aiming to elucidate the underlying mechanisms and explore potential methods for recovery. Specifically, we study neurodegenerative diseases such as ALS and Alzheimer's disease using mammalian models and human brain samples. In parallel, we seek to comprehensively understand the mechanisms by which inflammatory stress during prenatal and developmental periods leads to psychiatric symptoms, focusing on the roles of immune cells. Our goal is to integrate knowledge from the molecular to the organismal level to develop strategies for recovery. To date, our research has explored microglia-induced mechanisms of neuronal plasticity across various brain regions and cell types, as well as the pathophysiology of psychiatric disorders using a two-hit mouse model. We have investigated behavioral abnormalities, neuronal morphological changes, and neurophysiological disruptions—including synaptic transmission, neuronal excitability, synaptic and excitatory plasticity, and in vivo whole-brain functional connectivity—by leveraging advanced methodologies such as electrophysiology, brain functional analysis, ultra-multiplex antibody staining, and multi-omics approaches. Based on insights into the mechanisms of neurodegenerative and psychiatric disorders, we are attempting to restore or prevent disorder-like symptoms and learning disabilities by modulating immune cell function. Moving forward, we are committed to actively incorporating novel technologies, ideas, and innovations to develop new treatments and pharmaceuticals for cognitive impairments and psychiatric disorders from an original and creative perspective.

For this position, we are seeking candidates with experience in fields such as multi-omics (spatial transcriptomics and proteomics), molecular and cellular biology, behavioral psychology, electrophysiology, anatomy, and physiological data analysis using artificial intelligence, among others.

As for my background, during my time as a specially appointed assistant professor and postdoctoral researcher, I elucidated dendritic excitatory plasticity in cerebellar neurons (Ohtsuki et al., 2012b, Neuron) and functional synchrony in cortical clonal cell populations (Ohtsuki et al., 2012a, Neuron). Since establishing my independent lab, my team—including collaborators, colleagues, and graduate students—has conducted research on microglia-induced plasticity, dendrite-specific synaptic transmission, and functional recovery from inflammation-induced pathologies (Yamamoto et al., 2019, Cell Reports; Ohtsuki, 2020, Journal of Neuroscience; Yamawaki et al., 2022, Current Research in Neurobiology; Kawatake-Kuno et al.,

2024, Neuron; Hikosaka et al., 2025, Communications Biology; Hikosaka et al., under review).

We are looking for individuals who are eager to take on the challenge of advancing research aimed at overcoming dementia and psychiatric disorders, and who are committed to building a hopeful future with us.

Job title
Program-Specific Assistant Professor or Program-Specific Researcher (Postdoctoral scholar)

Location

Department of Neurobiology, Graduate School of Medicine
Kyoto University
(53 Kawahara-cho, Shogoin, Sakyo-ku, Kyoto 606-8507, Japan)

Job Description
We are seeking a motivated researcher who is eager to work independently and collaboratively with lab members.

- The work environment allows you to focus on research with minimal duties outside of research.
- We provide support for career development, opportunities to present at academic conferences, and international collaborations.
- While the lab is small, it offers flexibility and ample opportunities to learn various skills.
- International candidates are welcome.
- Experience with programming for data analysis, such as R, MATLAB and Python, is highly desirable.

Working Conditions
The Discretionary Labor System for Specialized Staff applies, with a work schedule equivalent to 38 hours and 45 minutes per week, or 7 hours and 45 minutes per day.
When the Discretionary Labor System is not applied, the standard work hours are 8:30 AM to 5:15 PM, with a break from 12:00 PM to 1:00 PM, five days a week.
Overtime work may be required upon necessity.
Holidays: Saturdays, Sundays, public holidays, New Year's holidays and the university's founding anniversary (June 18)

Starting Date
At the earliest possible date (adjustable according to individual requirements)

Term
At From the day you take the position (negotiable) to March 31, 2028.
The contract may be renewed for Until the project is completed. The renewal of the contract will be determined based on factors such as workload at the end of the

contract period, job performance, working attitudes, abilities, progress of the work being undertaken and the status of external funding, among other considerations.

probationary employment period
Six (6) months

Number of Positions
1 position

Qualifications

- Ph.D. (or expected to obtain one)
- Ability to work proactively and collaboratively with lab members to drive research forward. Experience in neuroscience research using mice and a track record commensurate with your career level is desirable. We are also looking for candidates who are proficient in omics analysis, have knowledge of behavioral psychology, are interested in developing AI-based analytical systems, or aim to apply their research to human therapy.
- We also welcome individuals with a background in immunology or stem cell research, who are interested in taking on challenges in the fields of dementia and mental disorders, even if their expertise lies outside of neuroscience.
- Applicants from overseas must be able to communicate in English.

Salary
Paid annually in compliance with the rules of Kyoto University.

Allowance
No allowance (such as for commuting, housing, bonuses, etc.) will be provided.

Social Insurance
National Public Service Mutual Aid
Association health policy
Employee’s pension insurance
Employment insurance
Worker’s accident insurance

Application Deadline
Must arrive by Wednesday, December 31, 2025

- Please note that the recruitment may close as soon as a suitable candidate is found.
- We also welcome inquiries before preparing application documents.

Application Documents
[Application Documents (free format)]

- Resume: Please use the Gregorian calendar for dates.

- List of achievements: Peer-reviewed original articles (please specify your contribution), reviews, major conference presentations, records of competitive research funding (if any), etc.
- PDF of major papers
- Summary of past research: A4, 1-2 pages
- Aspirations if appointed, future goals, self-promotion, etc.: A4, approximately 1 page
  *We will provide as much support as possible for career advancement.
- Contact details for at least two referees: Name, affiliation, phone number, email address, etc.

***Please ensure that all information provided is accurate and truthful.**
If any falsehoods, misrepresentations, or discrepancies are discovered at a later date, your employment may be subject to cancellation, anytime.

Submission Method

- Please send the application documents as an email attachment to Ohtsuki (ohtsuki.gen.7w@kyoto-u.ac.jp). The email subject line should be "Specially Appointed Assistant Professor Application (Applicant's Name)."
- Personal information related to the application will be appropriately managed under the Personal Information Protection Law and internal regulations and will not be used for purposes other than selection and hiring.

Kyoto University strives to create a work environment that ensures the safety and health of its staff, including measures to prevent passive smoking.

Selection Process & Notification of Results

- After a document review, we will contact you regarding an interview date if necessary.
- You may be asked to give a seminar.
- Interviews and seminars may be conducted online, depending on circumstances.
- After the decision is made, the candidate will be promptly notified via email or other means.

Contact Information
Department of Neurobiology, Graduate School of Medicine
Kyoto University
Professor Gen Ohtsuki (Moonshot Project-specific)
53 Kawahara-cho, Shogoin, Sakyo-ku, Kyoto 606-8507, Japan
Email: ohtsuki.gen.7w@kyoto-u.ac.jp

Others
Submitted documents are used only for the purpose of applicant screening and hiring.

Personal information will not be disclosed, transferred or loaned to a third party under any circumstances without just cause.

Kyoto University promotes gender equality. We encourage applications from a large number of female researchers.

To prevent passive smoking, Kyoto University prohibits smoking at indoors and outdoors at all campuses except for the designated smoking areas.