AY2025 Waseda University Graduate School of Human Sciences
Research Guidance Information
(English-based Doctoral Program)

The following information is current **as of March 3, 2025**. Please note that the information may be subject to change. *Changes are shown in red.

<Attention>

In order to facilitate your application, before applying to the program we strongly recommend that you contact one of the following faculty members to share the details of your intended research and to request that they agree to serve as your academic advisor (although your application maybe accepted without following this process).

To contact your prospective academic advisor, please check their details in the research guidance section of this document and e-mail them at the address listed there.

Research Guidance Information

1. Regional and Global Environment Sciences

Research Domain	**Environmental Science on Water Area**	Subject Code	691
Supervisor's Name	**Kazuyoshi Yamada**	Degree	Ph.D. (Science) (Tokyo Metropolitan University)
Research Topics	Physical Geography, Environmental History		
Description	The research aim is to reconstruct climate change, disaster history, and the human impacts in Quaternary periods including the Anthropocene. It will be used both fieldwork all over the world and laboratory analyses as geoscientific methods.		
Web Page	https://www.yamada100.com/		
E-mail	kyamada■waseda.jp (Please change the "■" to "@" when sending an email)		

Research Domain	**Life Sciences for Extremophiles**	Subject Code	703
Supervisor's Name	**Satoshi Akanuma**	Degree	Ph.D. (Science) (Tokyo Institute of Technology)
Research Topics	Protein engineering, Biotechnology, Evolution, Origin of life, Astrobiology		
Description	Our research aims to utilize environmentally friendly biocatalysts, namely enzymes, for various applications such as environmental processes, food production, pharmaceutical synthesis, and others. This is achieved by developing technologies that modify enzyme functions and properties. In addition, we explore the origin and early evolution of life. By tracing the evolution of genes and proteins in current organisms, we aim to resurrect and analyze the genes and proteins of ancestral organisms, revealing insights into the appearance of the oldest life on Earth.		
Web Page	https://akanuma.w.waseda.jp/eng/index.html		
E-mail	akanuma■waseda.jp (Please change the "■" to "@" when sending an email)		

Research Domain	**Arable Land Environment**	Subject Code	713
Supervisor's Name	**Masayuki Yokosawa**	Degree	Ph.D. (The University of Tokyo)
Research Topics	Terrestrial ecosystem modeling		
Description	My research guidance is dedicated to exploring and forecasting diverse phenomena in terrestrial ecosystems, especially in terms of their interaction with the environment. I bring a breadth of expertise in ecosystem ecology, environmental biophysics and agricultural informatics. Beyond these fields, I integrate insights from multiple disciplines to tackle the complex systems. My methodological approach centers on mathematical modeling and statistical analysis, aimed at revealing the fundamental mechanisms and causal relationships within our data. The ultimate goal of my mentorship is to enhance understanding and facilitate the dissemination of our research findings through publication in international academic journals.		
Web Page	https://sites.google.com/site/yokozawalab/home		
E-mail	myokoz■waseda.jp (Please change the "■" to "@" when sending an email)		

2. Human Behavior and Environment Sciences

Research Domain	**Sociocultural Psychology**	Subject Code	785
Supervisor's Name	**Nobuhiro Furuyama**	Degree	Ph.D. (The University of Chicago)
Research Topics	Language, Embodied Communication, Interaction, Sociocultural Approach, Affordances		
Description	The student will propose and conduct empirical research from the perspective of sociocultural approaches and/or ecological approaches in cognitive science, and the related fields of study (psycholinguistics, sociolinguistics, pragmatics, semiotics, etc.), and write a dissertation.		
Web Page			
E-mail	furuyama■waseda.jp (Please change the "■" to "@" when sending an email)		

3. Cultural and Social Environment Sciences

No applications will be accepted for this research field in AY2025.

4. Health and Biomedical Sciences

Research Domain	**Food and Life Science**	Subject Code	818
Supervisor's Name	**Taichi Hara**	Degree	Ph.D. (Kyushu University)
Research Topics	Food Science, Autophagy, Cell Biology, Molecular Biology		
Description	Rapidly declining birth rates and an ageing population will make it more difficult to sustain society in the future due to rising healthcare costs and a shrinking workforce. In addressing these issues, the importance of increasing healthy life expectancy (the state in which a person is able to lead a normal life in society) has been emphasised. The key to increasing healthy life expectancy is to increase the number of people who can live a normal life. The approach of returning people to a healthy state from the pre-symptomatic stage is important for extending healthy life expectancy by using food function. By deciphering the functions of foods with health-promoting effects from a bioscientific perspective, we aim to elucidate unknown biological phenomena and poorly understood 'illnesses' from a biological perspective. We are also working to develop new health and beauty seeds based on autophagy that will contribute to extending healthy life expectancy. Through these efforts, we aim to develop highly qualified human resources who can contribute to the realisation of a society of health and longevity, equipped with skills in food science and life science.		
Web Page	https://w-rdb.waseda.jp/html/100001493_ja.html		
E-mail	harata1■waseda.jp (Please change the "■" to "@" when sending an email)		

Research Domain	**Cognitive Neuroscience**	Subject Code	823
Supervisor's Name	**Rieko Osu**	Degree	Ph.D. (Kyoto University)
Research Topics	cognitive neuroscience, psychology, brain imaging, neuromodulation, motor control/learning, plasticity, social interaction, neurorehabilitation, neuromarketing, neurodiversity		
Description	We investigate the 'mind' and 'body' by viewing the brain as an information-processing unit. Despite daily exposure to vast amounts of information, the brain selectively processes only what's essential, impacting our decisions and emotions subconsciously. This understanding is pivotal in addressing mental and physical health issues. Our methods, focusing on humans, include behavioral experiments, non-invasive brain imaging, non-invasive brain stimulations, and computational modeling. In addition to basic research, studies aimed at clinical and social applications are also welcome.		
Web Page	https://www.osu-lab.com https://researchmap.jp/osu https://www.researchgate.net/lab/Rieko-Osu-Lab		
E-mail	r.osu■waseda.jp (Please change the "■" to "@" when sending an email)		

5. Social Welfare and Health Sciences

Research Domain	**Bioethics and Philosophy of Life**	Subject Code	850
Supervisor's Name	**Masahiro Morioka**	Degree	Ph.D. (Osaka Prefecture University)
Research Topics	Philosophy of the meaning of life, philosophy of education, phenomenology, and bioethics		
Description	The discipline of the philosophy of the meaning of life is an emerging field of research in the 21st century. I will encourage graduate students to study not only an analytical approach to the topic, but also educational, phenomenological, and cross-cultural approaches. I have studied philosophical issues related to this topic from the perspective of an affirmation-based approach and a critique of contemporary civilization (painless civilization), so students can broaden their scope through philosophical discussion with me and fellow researchers.		
Web Page			
E-mail	morioka■waseda.jp (Please change the "■" to "@" when sending an email)		

Research Domain	**Systems Neuroscience & Preventive Medicine**	Subject Code	843
Supervisor's Name	**Masaki Kakeyama**	Degree	Ph.D. (Waseda University)
Research Topics	Systems Neuroscience, Preventive Medicine		
Description	Laboratory of Environmental Brain Science aims to elucidate the biological basis of the relationship between social stress, chemical exposure, and the development and aging of the brain and mind. Focusing on developmental disorders particularly ASD as well as dementia and depression in the elderly, we strive to understand their pathophysiology and work toward the development of prevention and treatment methods.		
Web Page			
E-mail	kake■waseda.jp (Please change the "■" to "@" when sending an email)		

Research Domain	**Assistive Technology**	Subject Code	855
Supervisor's Name	**Mamoru Iwabuchi**	Degree	Ph.D. (Engineering) (Osaka University)
Research Topics	Assistive Technology, Augmentative and Alternative Communication		
Description	In our laboratory, we explore the next generation of welfare and special education using technology in the AI and DX (Digital Transformation) era. Our research and development focus on proposing innovative living support solutions that utilize everyday ICT tools, such as smartphones, tablets, and generative AI-powered services. With the aim of fostering an inclusive society, we develop applications to support communication, daily living, education, and employment for individuals facing various challenges, including people with disabilities and older adults. By focusing on engineering solutions, interdisciplinary research is conducted in collaboration with schools, welfare institutions, and hospitals.		
Web Page	https://iwalab.jp/		
E-mail	miwabuchi■waseda.jp (Please change the "■" to "@" when sending an email)		

6. Clinical Psychology

No applications will be accepted for this research field in AY2025.

7. Sensibility, Cognition and Information Systems

Research Domain	**Psychology of Memory in The Real World**	Subject Code	917
Supervisor's Name	**Eriko Sugimori**	Degree	Ph.D. (Pedagogy) (Kyoto University)
Research Topics	Psychology of Everyday Memory (Cognitive Psychology)		
Description	Our perceptions and cognition are always strongly influenced by our past experiences. In other words, we do not perceive or understand reality as it is, like a sensor or a photograph or a video, but our past experiences are always involved in the process of perception and understanding, creating biases. In my laboratory, we are conducting research focusing on these biases and individual differences in biases. Specifically, we are conducting research that extends from autobiographical memory, such as how past experiences create identity and lead to the future, cross-modal research such as how impressions of color and impressions of stories affect taste evaluation, and research on how people in a depressed state create facial expressions.		
Web Page			
E-mail	sugimori■waseda.jp (Please change the "■" to "@" when sending an email)		

Research Domain	**Cognitive Science of Theatre**	Subject Code	918
Supervisor's Name	**Ryota Nomura**	Degree	Ph.D. (Psychology) (Kyushu University), Ph.D. (Engineering) (Tokyo University of Science)
Research Topics	Performing arts, theatre interactions, expertise of stage artists, Rakugo, nonlinear time series analysis		
Description	The objective of research in the cognitive science of theatre is to elucidate the human intelligence of *entertaining* and *enjoying* that is exhibited in theatre. Our objective is to conduct research at an international level, taking the interests and concerns of students as our starting point. To this end, we will pursue research using a variety of approaches, without being bound by existing frameworks. For example, we study the process of performing artists' mastery using psychological experiments and quantitative indicators, such as audience body movements and blinks. Additionally, with regard to audience interaction, we will construct and study mathematical models of the propagation and synchronisation of audience reactions through numerical experiments.		
Web Page	https://nomuraryota.w.waseda.jp/index-e.html		
E-mail	nomuraryota■waseda.jp (Please change the "■" to "@" when sending an email)		

Research Domain	**Knowledge Information Sciences**	Subject Code	925
Supervisor's Name	**Tatsunori Matsui**	Degree	Doctor of Science (Waseda University)
Research Topics	KANSEI Information Science, Artificial Intelligence, Skill Science, Education and Learning Support Systems		
Description	The theme is "scientific approach to deep human knowledge (sensitivity(KANSEI), tacit knowledge)" and research will be conducted from multiple perspectives. The research methodology will be selected flexibly and in a multifaceted manner according to the theme, such as development of mathematical foundations, modeling, psychological experiments, bioinstrumentation, system development, social surveys, and literature research. Specifically, the following research themes can be considered. 1) Information science approach to "sensitivity(KANSEI)" and "tacit knowledge" (human interface, brain function modeling, skill science (education, art, sports, traditional performing arts, medicine, etc.) 2) Research on symbiosis and interaction with agents and robots 3) Symbiotic interaction between "AI" and humans 4) Construction of artificial sensibility by "AI 5) Content-oriented approach to mental processes (ontology construction) and development of quantitative and qualitative methods for measurement and evaluation 6) Development of methods for estimating learners' mental states and their implementation in learning support systems (intelligent mentoring systems) 7) Simulation of life and social phenomena 8) Development of e-learning systems and learning materials that stimulate the senses		
Web Page	http://www-mtlab.human.waseda.ac.jp http://w-mtlab.info		
E-mail	matsui-t■waseda.jp (Please change the "■" to "@" when sending an email)		

8. Education, Communication and Information Science

Research Domain	**Internet Science**	Subject Code	938
Supervisor's Name	**Shoji Nishimura**	Degree	Ph.D. (Human Sciences) (Osaka University)
Research Topics	Information Science/Internet Science, Media Science, Educational Technology		
Description	I conduct scientific analysis of Internet data to design and develop applications that improve everyday activities. For instance, we examine a vast amount of text online to create programs that help users efficiently find the information they seek. These applications extend to sectors such as education and finance, among others.		
Web Page	https://w-rdb.waseda.jp/html/100000547_en.html		
E-mail	kickaha■waseda.jp (Please change the "■" to "@" when sending an email)		

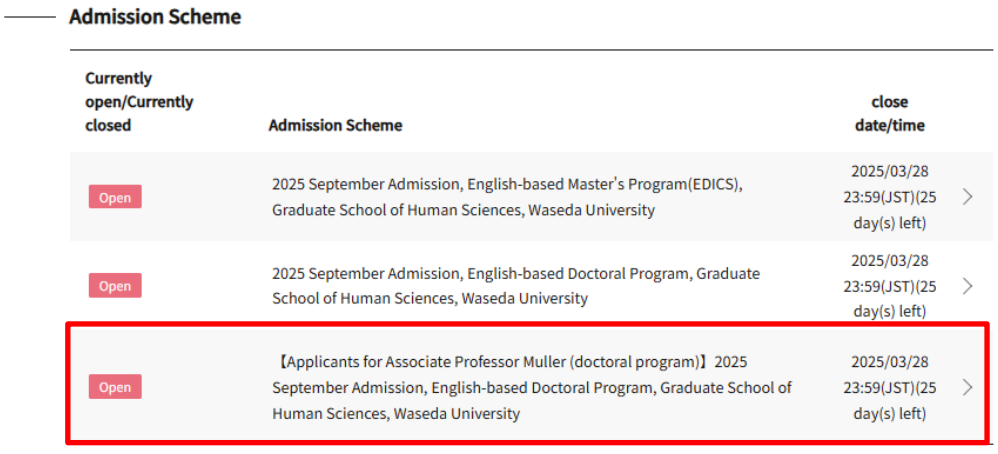
Research Domain	**Educational System Development**	Subject Code	943
Supervisor's Name	**Noriyuki Inoue**	Degree	Ph.D. (Columbia University)
Research Topics	Educational psychology, educational innovation, teacher agency, action research, lesson study, cultural epistemology and other relevant topics		
Description	You will be advised to design and conduct your own research projects based on your interests as you consider key theoretical and methodological frameworks for completing your research projects and publishing your work in education or psychology-related journals. Throughout the process, you will be advised to critically examine theoretical and methodological frameworks of your research, ways to overcome the theory-and-practice gap, your assumptions and educational epistemology associated with the research topic.		
Web Page	https://ninouehomepage.wixsite.com/main/english		
E-mail	n.inoue■waseda.jp (Please change the "■" to "@" when sending an email)		

Added on March 3, 2025

Research Domain	**Sociolinguistics of Education and Communication**	Subject Code	961
Supervisor's Name	**Theron Muller**	Degree	Ph.D. in Applied Linguistics from The Open University, MA in TEFL/TESL from the University of Birmingham
Research Topics	Sociolinguistics, Applied Linguistics, TESOL, Language Teaching and Learning, Language and Society, Academic Literacies, Translanguaging, Writing for Publication, Intercultural Communication		
Description	I am interested in supervising projects that explore the intersection of language and society through a variety of empirical means. These can include classroom-based language teaching or learning investigations as well as broader investigations into how language is embedded in and interacts within situated social contexts. TESOL themes for possible exploration include issues of motivation, identity, and autonomy as well as more traditional TESOL research into, for example, writing instruction. Sociolinguistic themes can include academic literacies, literacy histories, and examination of the language of public discourse, such as job advertisements.		
Web Page	https://theronmuller.w.waseda.jp/		
E-mail	muller■waseda.jp (Please change the "■" to "@" when sending an email)		

*For applicants who wish to have Associate Professor Muller as a research advisor

Applicants for Associate Professor Muller should be aware that they will need to enter the Web Application System (TAO) using a different form than usual.



Research Domain	**Networked Information Systems**	Subject Code	965
Supervisor's Name	**Qun Jin**	Degree	Ph.D. (Nihon University)
Research Topics	AI, generative AI, LLM, machine learning, multimodal models, big data, causal analytics, health analytics, learning analytics, blockchain, metaverse, CPS, HCI, smart services, etc.		
Description	With the basic research concept of creating and innovating "technology for the common good" and "computing for human well-being", we pursue to understand and support humans through convergent research across multiple academic disciplines. Our approach emphasizes solving real-world problems through interdisciplinary collaboration. Under this research supervising, students will conceive and conduct their own research for a master's or doctoral degree in the extensively related areas of computer science, information systems, and human informatics. Research themes include, but are not limited to, comprehensive data analytics, trustworthy platforms for data federation, sharing, and utilization, cyber-physical-social systems, and applications in healthcare, learning support, etc. to respond to real-world problems by convergence knowledge, the merging of approaches, insights, and technologies from widely diverse fields.		
Web Page	https://researchmap.jp/jinqun?lang=en		
E-mail	jin■waseda.jp (Please change the "■" to "@" when sending an email)		