# Doctoral Program in Microbiology and Immunology at Osaka University in Japan

## Application Guidelines for Admission in October 2025/April 2026 For Applicants with recommendation from Mahidol University

**Outline**

These guidelines are intended for students who plan to apply to the Doctoral Program in Microbiology and Immunology at Osaka University in Japan on the recommendation of Mahidol University. Please carefully read the Admission Policy together with these guidelines to understand the outline and objectives of the program, as well as the personal qualifications and qualities required before applying.

Those admitted to this program will be affiliated with the Graduate School of Medicine at Osaka University. They will complete coursework offered by the graduate school and conduct dissertation research under the supervision of any one of the principal investigators listed in the Appendix. These principal investigators are affiliated with the Immunology Frontier Research Center (IFReC), the Research Institute for Microbial Diseases (RIMD), the Center for Infectious Disease Education and Research (CiDER), or the Center for Advanced Modalities and DDS (CAMaD) at Osaka University, and they also hold positions at the Graduate School of Medicine at Osaka University. Upon completion of the prescribed number of credits and fulfillment of the requirements, a doctoral degree will be awarded.

See references below:

**Doctoral Program in Microbiology and Immunology:**
https://www.ifrec.osaka-u.ac.jp/lp/dp_ou/index.htm
**Immunology Frontier Research Center (IFReC), Osaka University:**
https://www.ifrec.osaka-u.ac.jp/en/
**Research Institute for Microbial Diseases (RIMD), Osaka University:**
http://www.biken.osaka-u.ac.jp/en/
**Center for Infectious Disease Education and Research (CiDER), Osaka University:**
https://www.cider.osaka-u.ac.jp/en/index.html
**Center for Advanced Modalities and DDS (CAMaD), Osaka University:**
https://www.camad.osaka-u.ac.jp/en/
**Graduate School of Medicine, Osaka University:**
https://www.med.osaka-u.ac.jp/eng/

**1. Applicant Eligibility**

**University admission dates differ depending on whether the applicant meets the eligibility requirements of 1-A or 1-B.**

***1-A: Admission in October 2025**
****1-B: Admission in April 2026**

**Admission dates are determined by the regulations of the Osaka University Graduate School of Medicine. Therefore, applicants should be aware of the difference in admission dates for application qualifications 1-A and 1-B below.**

Applicants for this program must be non-Japanese nationals residing outside of Japan at the time of application and possess the qualifications in (1-A or 1-B) and (2), and the qualities listed in (3) below.

***(1-A)** Applicants who meet any of the following qualifications **between April 1st and September 30th of 2025** can apply for admission in **October 2025**:
***Excluding** applicants who meet the qualifications by March 31st of 2025

a) Individuals who expect to complete eighteen (18) years of schooling in a country other than Japan between April 1st and September 30th of 2025.
b) Individuals who expect to receive the equivalent of a bachelor's degree through the completion of coursework which requires five (5) or more years of study at an overseas university or school (limited to schools evaluated by organizations that are certified by overseas governments, or relevant agencies, on the comprehensive progress of their education and research, or schools which are designated separately by the Minister of MEXT) between April 1st and September 30th of 2025.

****(1-B)** Applicants who meet any of the following qualifications **by March 31st of 2026** can apply for **April 2026 enrolment**:
****Including** applicants who meet the qualifications by March 31st of 2025

a) Individuals who have completed or expect to complete eighteen (18) years of schooling in a country other than Japan by March 31st of 2026.
b) Individuals who have received or expect to receive the equivalent of a bachelor's degree through the completion of coursework which requires five (5) or more years of study at an overseas university or school (limited to schools evaluated by organizations that are certified by overseas governments, or relevant agencies, on the comprehensive progress of their education and research, or schools which are designated separately by the Minister of MEXT) by March 31st of 2026.
c) Individuals who are at least twenty-four (24) years of age at the time of March 31, 2026, and who are recognized by the Graduate School of Medicine as having academic capabilities equal to or exceeding those of an individual who has completed a course in medicine, dentistry, veterinary medicine, or pharmacy, based on a separate admission qualification evaluation.

(2) Applicants must have sufficient English language proficiency with **TOEFL-iBT 80 or higher (taken after December 2023)**
(Japanese language proficiency is not required.)

(3) Applicants must have the following qualities:
- Strong interest in life sciences
- Curiosity to explore the unknown world
- Dedication to work on tasks until completion
- Communication skills that transcend the boundaries of academia
- Flexibility to incorporate knowledge from other fields without being limited to one's own field of expertise
- International mindset for a global tomorrow
- Determination to overcome difficulties
- Spirit of pioneering new research fields and changing the world
- Leadership to lead a team to achieve capabilities that transcend the individual

## 2. Application

Applicants should submit their application documents to the local selection committee at Mahidol University by sending an e-mail to the following address with attaching the required application documents.

The International Relations Division of Mahidol University (MUIR), Thailand
Ms. Peungjai Tinsulanonda
E-mail address: peungjai.tin@mahidol.edu
The subject title of the e-mail should be “Application to Doctoral Program at Osaka University”.

Application deadline is **February 28, 2025**.
Applications submitted after the deadline will not be accepted.
Applicants are not required to pay for the application and the review for the selection.

## 3. Selection

The following two rounds of selection will be conducted. Applicants will be notified of the results of each selection.

(1) First round selection
The local selection committee at Mahidol University will conduct their initial selection by screening the submitted application documents. The selection will be conducted around **March 2025**.
Only successful applicants will be recommended by the local selection committee for the second round selection.
(2) Second round selection
The Osaka University Selection Committee will conduct the second round selection through interviews from **April to May 2025** at Mahidol University and/or online.
(3) Final confirmation
Only successful applicants can submit their documents to the Graduate School of Medicine, Osaka University for final confirmation.

***Successful applicants who meet the **qualification (1-A)** will be admitted to Osaka University from **October 2025** after final confirmation.
****Successful applicants who meet the **qualification (1-B)** will be admitted to Osaka University from **April 2026** after final confirmation.

## 4. Selection of Academic Advisor (laboratory)

Students in this program will be assigned to a laboratory headed by any one of IFReC, RIMD, CiDER, or CAMaD principal investigators affiliated with the Graduate School of Medicine at Osaka University, where they will conduct research in advanced biomedical fields, mainly microbiology and immunology, under the guidance of the principal investigator. The laboratory to which the student belongs to will determine their future research field and research theme. Therefore, applicants are asked to consult with the IFReC, RIMD, CiDER, or CAMaD principal investigator by whom they wish to be supervised before applying.

Please follow the procedure below.

(1) Check the list of principal investigators and their laboratories at the Appendix or at the website of the program or research institutes.

(2) Send an e-mail to the principal investigator of the laboratory of your choice, informing them of your academic background, research plan, and desired dissertation topic (required information may differ from laboratory to laboratory). At that time, be sure to inform them that you wish to apply to the "Doctoral Program in Microbiology and Immunology at Osaka University" based on a recommendation of Mahidol University.

## 5. Application Documents

The following documents must be prepared in English and submitted.

**(1) Application form**
**(2) Letter of recommendation**
**(3) Official academic transcripts**
**(4) Copy of official TOEFL-iBT score (Test Taker Score Report)**

### (1) Application form

Please fill out the application form, which is available for download from this program's website. Please describe a Statement of Purpose that includes your motivation, competence, and potential, educational objectives and research interests in joining the Doctoral Program in Microbiology and Immunology.

**Notes on the selection of academic advisor (laboratory)**

- If you have already obtained the consent of a potential academic advisor at IFReC, RIMD, CiDER, or CAMaD at the time of application, please enter the name of the potential academic advisor as your first choice on the section "Laboratory choice" of the application form (you may leave the second and third choices blank).
- If you are in the process of selecting a laboratory and have not yet obtained the consent of your preferred academic advisor, please indicate the name of your first, second, and third choice of academic advisor the section "Laboratory choice".

### (2) Recommendation letter

The recommendation letter should be written in English and should include the following information:

- Name, current position, and current organization of the reference
- Applicant's name
- Relationship between the applicant and the reference
- Signature of the reference and date
- The letter should preferably include the applicant's qualifications, academic record, and skills relevant to the program, the applicant's eligibility for doctoral study and comments on the applicant's qualifications as a researcher.

### (3) Academic transcripts from university undergraduate and above

Please submit academic transcripts from all educational programs from university undergraduate and above. For transcripts written in languages other than English, please submit an English translation with the translator's seal or signature.

### (4) Copy of official TOEFL-iBT score (Test Taker Score Report)

As proof of English proficiency, please submit a copy of your TOEFL-iBT score (Test Taker Score Report) by the time of the second round selection. Applicants must have a minimum English proficiency of **TOEFL-iBT 80 or higher (taken after December 2023)**

## 6. Notification of Results

Acceptance or rejection will be notified in **May 2025**. Successful applicants to the program will later be informed of the admission procedures to the Graduate School of Medicine at Osaka University for final confirmation.

## 7. Precautions Upon Application

- Incomplete applications will not be accepted. Changes to application materials after submission will not be accepted.
- Submitted documents will not be returned. Please keep copies of all originals for your own records.
- If you provide false information in your application, you will be denied admission or, if you are already admitted, you will be expelled from the school.
- If there are any changes to the application process, the changes will be immediately announced on our website.

## 8. Handling of personal information

1. Names, addresses, and other personal information provided on the application form and other submitted documents will be used only for the purpose of processing the application. For admitted students, the personal information will be used for academic and student support purposes.
2. Personal information may be used for monitoring the selection process and for statistical purposes.
3. If the above-mentioned operations are entrusted to a third party, a contract for the protection of personal information will be concluded with the entrusted party.

## 9. Financial support

Students in this program are eligible for tuition fees waiver, and will receive a scholarship to be provided by the Research Foundation for Microbial Diseases of Osaka University (BIKEN Foundation). Further details are available at the program website.

## 10. Contact information

For inquiries regarding the preliminary screening, please contact the local selection committee.

For general inquiries, please contact the Immunology Frontier Research Center (IFReC) at Osaka University.
recruit@ifrec.osaka-u.ac.jp

**Appendix**

## List of Principal Investigators of IFReC, RIMD, CiDER, and CAMaD

**(Laboratory List of the Program)**

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| **AKIRA Shizuo** | **Host Defense:** Exploration of the relationship between immune responses and mechanisms that ensure mRNA stability |
| **KUMANOGOH Atsushi** | **Immunopathology:** Research on the molecular mechanisms underlying regulation of immune responses by immune semaphorins |
| **ARASE Hisashi** | **Immunochemistry:** Research on the mechanism of immune disorders as well as new therapies for immune diseases based on new findings on MHC |
| **KISHIMOTO Tadamitsu / Sujin KANG** | **Immune regulation:** Research on the mechanisms of autoimmune disease and related cytokine signaling pathways |
| **TAKEDA Kiyoshi** | **Mucosal Immunology:** Research on the mechanisms for the maintenance of intestinal homeostasis to reveal the pathogenesis of inflammatory bowel diseases (IBD) |
| **SAKAGUCHI Shimon** | **Experimental Immunology:** Research on the mechanisms of immunological self-tolerance by T cell-mediated dominant control of self-reactive lymphocytes |
| **YAMAMOTO Masahiro** | **Immunoparasitology:** Exploration of host defense systems and pathogenesis using the apicomplexan protozoan parasite Toxoplasma gondii as a model |
| **NAGATA Shigekazu** | **Biochemistry & Immunology:** Research on the molecular mechanism of apoptosis |
| **YAMASHITA Toshihide** | **Molecular Neuroscience:** Research on the mechanism to regulate rewiring of neural network after central nervous system injury |
| **YAMASAKI Sho** | **Molecular Immunology:** Research on the mechanism for regulation of immune responses through C-type lectin receptors in physiological and pathological settings |
| **NAGASAWA Takashi** | **Stem Cell Biology and Developmental Immunology:** Research on spatiotemporal regulation of lymphohematopoiesis by environmental factors within bone marrow |
| **HARA Eiji** | **Aging Biology:** Research on the mechanisms of cellular senescence in vivo, with a focus on its positive and negative roles throughout our life course |
| **MATSUOKA-NAKAMURA Yumi** | **Cutaneous Allergy and Host Defense:** Research on the relationship between the indigenous bacterial flora in chronic inflammatory skin diseases such as atopic dermatitis and the pathogenic bacteria that cause inflammation |
| **TAKAKURA Nobuyuki** | **Signal Transduction**: Research on cellular and molecular mechanisms underlying vascular formation |
| **FUJIMOTO Manabu** | **Cutaneous Immunology:** Research on skin homeostasis for new clinical treatments |
| **MORO Kazuyo** | **Innate Immune Systems:** Research on the mechanisms for differentiation, signaling and activation of ILC2 and also partner cell types |

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| **James Badger WING** | **Human Single Cell Immunology:** Exploration of the diversity of Tregs and consequences of Treg impairment in a variety of settings such as autoimmunity and cancer |
| **OKUZAKI Daisuke** | **Human Immunology (Single Cell Genomics):** Construction of single immune cell database |
| **OKABE Yasutaka** | **Immune Homeostasis:** Research on the mechanisms of tissue homeostasis and immune homeostasis |
| **HOSEN Naoki** | **Cellular Immunotherapy:** Development of CAR-T cell therapy targeting antigens in various types of cancers |
| **KAMADA Nobuhiko** | **Microbiology and Immunology:** Research on the mechanisms by which commensal microbiota cause/exacerbate disease |
| **ISHII Masaru** | **Immunology and Cell Biology:** Elucidation of the complex system for bone homeostasis in vivo and other biological phenomena by bio-imaging |
| **SUZUKI Kazuhiro** | **Immune Response Dynamics:** Research on the interactions between the nervous and immune systems through immune cell trafficking controlled by neural inputs |
| **Daron STANDLEY** | **Systems Immunology:** Analysis of immune repertoire sequence data and post-transcriptional regulation of immune responses |
| **ISE Wataru** | **Regulation of Host Defense:** Research on the mechanisms of immune memory in human and underlying long-term survival of plasma cells |
| **MATSUURA Yoshiharu** | **Virus Control:** Research on virus-host interactions involved in viral infection and pathogenicity |
| **ITAKA Keiji** | **Clinical Biotechnology:** Development of innovative medical technologies based on the science of biomaterials, DDS, and molecular biology |
| **KOBAYASHI Takeshi** | **Virology:** Research on the molecular mechanisms underlying Reoviridae virus replication and pathogenesis, and developing novel vaccine vectors |
| **IIDA Tetsuya** | **Bacterial Infections:** Research on the mechanism underlying bacterial infection and pathogenesis |
| **IKAWA Masahiro** | **Experimental Genome Research:** Research on the mechanisms underlying mammalian reproductive systems through genetic manipulation of animal models |
| **ISHITANI Tohru** | **Homeostatic Regulation:** Research on cell-cell communication and behavior supporting tissue homeostasis and molecular systems controlling embryonic development, organogenesis, regeneration, aging, and disease |
| **IWANAGA Shiroh** | **Molecular Protozoology:** Research on stage-specific gene expression regulated by parasites |
| **IWASAKI Masaharu** | **Emerging Viral Diseases:** Research on molecular and cellular biology of mammarenaviruses to facilitate the development of novel antivirals and vaccines |
| **NAKAMURA Shota** | **Pathogen Detection and Identificatio**n: Development of new methodologies for the detection of all types of pathogens using NGS based technologies |

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| **WATANABE Tokiko** | **Molecular Virology:** Research on the mechanisms of host adaptation, replication, and pathogenicity of viruses |
| **KOTANI Ai** | **Cellular and Molecular Biology:** Development of novel therapies for refractory infectious and hematopoietic tumors |
| **TSUKAMOTO Kentaro** | **Bacterial Zoonoses:** Understanding the mechanism of Bartonella infection and pathogenesis, and angiogenic factor produced by Bartonella |

References:

**(1) Immunology Frontier Research Center (IFReC), Osaka University**
https://www.ifrec.osaka-u.ac.jp/en/laboratory/

**(2) Research Institute of Microbial Diseases (RIMD), Osaka University**
http://www.biken.osaka-u.ac.jp/en/laboratories/

**(3) Center for Infectious Diseases Education and Research (CiDER), Osaka University**
https://www.cider.osaka-u.ac.jp/en/researchers/index.html

**(4) Center for Advanced Modalities and DDS (CAMaD), Osaka University**
https://www.camad.osaka-u.ac.jp/en/members/