



**ANNUAL REPORT 2022–2023**  
Research Institute for Biomedical Sciences  
Tokyo University of Science

Research Institute for Biomedical Sciences  
Tokyo University of Science  
2669 Yamazaki, Noda city, Chiba 278-0022, Japan  
Phone: 81-4-7121-4033  
FAX: 81-4-7121-4039  
e-mail: seimei@admin.tus.ac.jp  
<http://www.ribs.tus.ac.jp/>

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# Director's Introduction

The Research Institute for Biological Sciences was established in 1989 at the Tokyo University of Science to facilitate research and education in biomedical sciences. Unique innovative projects, especially in the field of biomaterial science, were conducted in our institute. In 1995, the research institute developed as a well-known international research center in immunology by the 2<sup>nd</sup> director Professor Tomio Tada, the founder of immunology in Japan. Rapid progress in biomedical sciences, genetics of higher animals, analytical methods, and molecular biology has facilitated cross-border sciences in various fields. Institute's research field has also expanded to medical and translational sciences, as reflected in its new name, the Research Institute for Biomedical Sciences (RIBS) in 2012, and in the formation of the Center for Animal Disease Models in 2013. In addition to research of immunology, we aimed to promote basic research, including embryology, neurology, and inflammation, and to conduct a wide range of medical research for cancer and intractable diseases. Thus, our collaboration has expanded with other faculties in and out of our university by using a cross appointment system. To enhance our research activities with government and private funding, we invited a research group with significant achievements in translational research to work with us in April 2018. To promote the interdisciplinary collaborative research, furthermore, a large laboratory space was set up and started to use in October 2020. From this year, to integrate and use large amount of data from the omics analyses as genomics, epigenomics, transcriptome, proteome, and metabolome with clinical information of the clinical trials of hematological cancer treatment in National Cancer Center, a new research technology of mathematical biology has introduced in the Division of Integrated Research to understand carcinogenesis pathway and drug resistant systems by mathematical model in 2022. These are obviously new challenges for our institute. Through such efforts, we published 58 high-quality research papers (average IF 12.249) in total, including 23 international collaborations (40% of published papers) in 2022.

The RIBS plays a role as the life-science research core for high-quality research in and out of Tokyo University of Science. We must continuously change and develop as a hub for biomedical research, in our university and beyond.

Atsushi Ochiai, M.D., Ph.D.





## Members (2022–2023)

### Director

Atsushi Ochiai, M.D., Ph.D.

### Faculty members

#### Professors

Atsuo Yasumori, Ph.D.  
Daisuke Kitamura, M.D., D.M.S.  
Hiroshi Takemura, Ph.D.  
Kohei Soga, Ph.D.  
Kouji Matsushima, M.D., Ph.D.  
Masanori Hayase, Ph.D.  
Masato Kubo, D.M.S.  
Ryo Goitsuka, Ph.D., D.V.M.  
Takeshi Nakamura, D. Sc.  
Tomokatsu Ikawa, Ph.D.  
Yoichiro Iwakura, D. Sc.  
Yoshikazu Higami, M.D., Ph.D.

#### Associate Professors

Haruo Kozono, Ph.D.  
Satoshi Ueha, Ph.D.  
Shunsuke Kon, Ph.D.  
Masayuki Sakurai, Ph.D.  
Hiroshi Haeno, Ph.D.

#### Junior Associate Professors

Shuhei Ogawa, Ph.D.  
Yuya Terashima, Ph.D.

#### Assistant Professors

Chandrasekar Balachandran, Ph.D.  
Doan Thi Kim Dung, Ph.D.  
Masamitsu Konno, Ph.D.  
Mari Tenno, Ph.D.  
Mayumi Hirakawa, Ph.D.  
Shingo Koinuma, D. Sc.  
Shogo Okazaki, Ph.D.  
Shigeyuki Shichino, Ph.D.  
Soo-Hyun Chung, Ph.D.  
Toshihiro Takamatsu, Ph.D.  
Tsukasa Shigehiro, Ph.D.  
Yuhei Mizunoe, Ph.D.  
Hsi-Hua Chi, Ph.D.

#### Postdoctoral Fellows

Chang-Yu Chen, Ph.D.  
Ryushin Mizuta, M.D., Ph.D.  
Kaori Motomura, Ph.D.  
Naoko Nakano, Ph.D.

Haru Ogiwara, Ph.D.

Xiaoqi Ye, M.D.

Gong Yu, Ph.D.

Wei Han, Ph.D.

Makusheva Yulia, Ph.D.

Jumana Khalil

#### Administrative office

Yasushi Hara  
Shunsuke Korenaga  
Yukio Mashimo  
Tomoharu Mori  
Masako Saita  
Chikako Shinano  
Noriko Nakada