Jun Inamo, M.D., Ph.D.

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PERSONAL STATEMENT

Computational biologist with experience in clinical medicine as a rheumatologist.

EDUCATION

2021   **Keio University School of Medicine**

Ph.D. in Rheumatology and Immunology

- Thesis title: Identification of novel genes associated with dysregulation of B cells in patients with primary Sjögren's syndrome.
- Advisor: Prof. Tsutomu Takeuchi.

2014   **Keio University School of Medicine**

M.D. in Medicine

- Participated in undergraduate research focusing on cancer stem cells under the guidance of Prof. Hideyuki Saya.

RESEARCH EXPERIENCE

Since 2022   **University of Colorado School of Medicine**

Post-doctoral Research Fellow

Advisor: Dr. Fan Zhang

- My research focuses on the pathogenesis of autoimmune diseases during the pre-clinical stage
- Currently working on large-scale multi-omics datasets obtained from individuals with pre-clinical rheumatoid arthritis. This project is collaborative research with many institutions and Accelerating Medicines Partnership® Rheumatoid Arthritis and Systemic Lupus Erythematosus (AMP® RA/SLE) Program.

2021-2022   **Tokyo Medical and Dental University**

JSPS Postdoctoral Fellowship

Advisor: Prof. Yuta Kochi

- Generated comprehensive full-length isoform atlas using long-read RNA sequencing datasets obtained from 29 immune cell subsets.

- Using this atlas, we revealed 1) characteristics of new isoforms including condition-specific expression, functional domain motif, repetitive elements, etc. 2) effect of common variants on isoform expression, 3) association with immune-disordered diseases.

2017-2022 **Keio University School of Medicine**

Clinical Assistant Professor

Advisor: Prof. Tsutomu Takeuchi

- Identified dysregulated genes and co-expressed gene network using blood specimens from patients with primary Sjögren's syndrome.
- Identified dysregulated pathways according to types of auto-antibody using skin specimens from patients with systemic sclerosis
- Identified remission signature genes in $CD4^+$ and $CD8^+$ T cells applying a partial least-squares regression to transcriptome data of blood specimens from patients with rheumatoid arthritis.
- Collaborated with industry researchers (Takeda Pharmaceutical Company Limited) to explore drug targets for auto-immune diseases.

AWARDS

2024 – 2025 Grant-in-Aid for JSPS Overseas Research Fellows (accepted)

2023 – 2024 the Uehara Memorial Foundation Postdoctoral Fellowship

2023 – 2025 Grant-in-Aid for Early-Career Scientists, JSPS

2022 Mochida Memorial Foundation for Medical and Pharmaceutical Research

2021 – 2024 Grant-in-Aid for JSPS Fellows, JSPS

2019 Travel Award, the 19th International Vasculitis & ANCA Workshop

2017-2019 Keio University Graduate School Scholarship

TEACHING EXPERIENCE

2022 **University of Colorado School of Medicine**

- Supervising projects of Ph.D. students

2018 **Keio University School of Medicine**

- Teaching clinical medicine to the undergraduate medical students

Jun Inamo

MEDICAL LICENSURE

2014   Full Medical License (Japan) #467556

CLINICAL TRAINING

2017-2021   **Fellow in Rheumatology,** Keio University School of Medicine, Japan

2016-2017   **Internal Medicine**, Kawasaki Municipal Hospital, Japan

2014-2016   **Residency**, Yokohama Municipal Citizen's Hospital, Japan

BOARD CERTIFICATION

2023   Board Certified Trainer of the Japan College of Rheumatology

2020   Board Certified Member of the Japan College of Rheumatology

2017   Board Certified Member of the Japanese Society of Internal Medicine

BIBLIOGRAPHY

Conferences (Lead Author)

1. **Inamo J**, Kikuchi J, Kaneko Y, Takeuchi T. Predictive biomarker for remission achievement with abatacept in patients with seropositive rheumatoid arthritis. Poster presentation at EULAR 2019

2. **Inamo J**, Suzuki K, Takeshita M, Kassai Y, Takiguchi M, Kurisu R, Okuzono Y, Tasaki S, Takeuchi T. Identification of novel genes associated with dysregulation of B cells in patients with primary Sjögren's syndrome. Poster presentation at ACR 2019

3. **Inamo J**, Kaneko Y, Ota Y, Takeuchi T. Rheumatoid Factor Titer Is Inversely Correlated with ANCA Titer and Relates to Characteristic Manifestations in Patients with Eosinophilic Granulomatosis with Polyangiitis. Poster presentation at the 19th International Vasculitis & ANCA Workshop

Publications (selected)

1. Yuichi Mitsui, Tatsuya Suzuki, Kanako Kuniyoshi, **Jun Inamo**, Kensuke Yamaguchi, Mariko Komuro, Junya Watanabe, Mio Edamoto, Songling Li, Tsukasa Kouno, Seiya Oba, Tadashi Hosoya, Kentaro Masuhiro, Yujiro Naito, Shohei Koyama, Nobuo Sakaguchi, Daron M. Standley, Jay W. Shin, Shizuo Akira, Shinsuke Yasuda, Yasunari Miyazaki, Yuta Kochi, Atsushi Kumanogoh, Toru Okamoto, Takashi Satoh. Expression of the readthrough transcript CiDRE in alveolar macrophages boosts SARS-CoV-2 susceptibility and promotes COVID-19 severity. Immunity. 2023:S1074-7613(23)00271-6.

2. **Inamo J,** Suzuki K, Takeshita M, Kondo Y, Okuzono Y, Koga K, Kassai Y, Takiguchi

M, Kurisu R, Yoshimura A, Takeuchi T. Molecular remission at T cell level in patients with rheumatoid arthritis. Sci Rep. 2021;11:16691.

3. Nakazawa M, Suzuki K, Takeshita M, **Inamo J**, Kamata H, Ishii M, Oyamada Y, Oshima H, Takeuchi T. Distinct Expression of Coinhibitory Molecules on Alveolar T Cells in Patients With Rheumatoid Arthritis-Associated and Idiopathic Inflammatory Myopathy-Associated Interstitial Lung Disease. Arthritis Rheumatol. 2021;73:576-586.

4. **Inamo J**. Association of differentially expressed genes and autoantibody type in patients with systemic sclerosis. Rheumatology (Oxford). 2021;60:929-939.

5. **Inamo J,** Suzuki K, Takeshita M, Kassai Y, Takiguchi M, Kurisu R, Okuzono Y, Tasaki S, Yoshimura A, Takeuchi T. Identification of novel genes associated with dysregulation of B cells in patients with primary Sjögren's syndrome. Arthritis Res Ther. 2020;22:153.

6. **Inamo J**. Non-causal association of gut microbiome on the risk of rheumatoid arthritis: a Mendelian randomization study. Ann Rheum Dis. 2019. DOI: 10.1136/annrheumdis-2019-216565. PMID: 31744823.

Skills   Language: Japanese and English
Computer: R, bash, and Python

References
Assistant Prof. Fan Zhang
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