

# Masahiro Kanai

## Curriculum Vitae

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## Education

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**Harvard University** **Boston, USA**  
Bioinformatics and Integrative Genomics PhD Program, Harvard Medical School Aug. 2017–present

**Keio University** **Yokohama, Japan**  
B.S. in Bioinformatics, Department of Biosciences and Informatics Apr. 2013–Mar. 2017

## Research Experience

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**Massachusetts General Hospital & Broad Institute of MIT and Harvard** **Boston, USA**  
Graduate Student, Analytic and Translational Genetics Unit Jan. 2018–present

**Advisors:** Drs. Mark Daly & Hilary Finucane

**Research theme:** Cross-population analysis of complex human diseases and traits.

**Osaka University Graduate School of Medicine** **Osaka, Japan**  
Research Student, Department of Statistical Genetics Apr. 2017–present

**Advisor:** Dr. Yukinori Okada

**Research themes:**

- Genetic analysis of complex human diseases and traits in the Japanese population.
- Efficient visualization of high-dimensional multi-omics data.

**RIKEN Center for Integrative Medical Sciences** **Yokohama, Japan**  
Research Assistant, Laboratory for Statistical Analysis May 2015–Jul. 2019

**Advisors:** Drs. Yoichiro Kamatani & Yukinori Okada

**Research themes:**

- Genome-wide association study (GWAS) of ~200,000 individuals in the BioBank Japan Project.
- Interpretation of GWAS polygenic signals using epigenomic data.
- Population genetics analysis of 1,037 Japanese whole-genome sequences.

**Keio University** **Yokohama, Japan**  
Undergraduate Researcher, Laboratory for Bioinformatics Apr. 2016–Mar. 2017

**Advisor:** Dr. Yasubumi Sakakibara

**Bachelor thesis:** Integrative multi-omics analysis of renal cell carcinoma.

**Tokyo Medical and Dental University** **Tokyo, Japan**  
Technical Assistant, Department of Human Genetics and Disease Diversity Apr. 2014–Mar. 2016

**Advisors:** Drs. Yukinori Okada & Toshihiro Tanaka

**Research themes:**

- Empirical estimation of genome-wide significance thresholds based on GWAS simulations.
- HLA imputation analysis using the Japanese-specific reference panel.

## Certification

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**The Certification for Bioinformatics Engineers**  
certificated by the Japanese Society of Bioinformatics

2015

## Awards and Fellowships

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|--|---------------------------|
| <b>Reviewers' Choice Abstract Award</b>  | <b>USA</b>                |
| <i>The American Society of Human Genetics 2021 Virtual Meeting</i>                         | 2021                      |
| <b>Charles J. Epstein Trainee Awards for Excellence in Human Genetics Research</b>         | <b>USA</b>                |
| Finalist (Predoctoral), <i>The American Society of Human Genetics 2020 Virtual Meeting</i> | 2020                      |
| <b>Reviewers' Choice Abstract Award</b>  | <b>Houston, USA</b>       |
| <i>The American Society of Human Genetics 2019 Annual Meeting</i>                          | 2019                      |
| <b>Masason Foundation Fellowship</b>   | <b>Tokyo, Japan</b>       |
| Research grant for cross-population analysis of complex human diseases and traits.         | 2018–2022+                |
| <b>Nakajima Foundation Fellowship</b>  | <b>Tokyo, Japan</b>       |
| Predoctoral fellowship which covers up to ~\$50,000/year for tuition and stipend.          | 2017–2022                 |
| <b>The 3rd place, Worldwide Finals</b>   | <b>New York, USA</b>      |
| <i>Microsoft Imagine Cup 2011 Windows 7 Touch Challenge</i>                                | 2011                      |
| <b>The 1st place, National Finals &amp; Worldwide Finalist</b>                             | <b>Japan &amp; Poland</b> |
| <i>Microsoft Imagine Cup 2010 Software Design Competition</i>                              | 2010                      |

## Publications

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## Presentations

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Last updated: November 17, 2021.