Artificial Intelligence and Data Driven Medicine 2025

Data science has become an indispensable tool for analyzing high-dimensional data, such as clinical data and omics data. At the same time, the development of data science has given rise to a new interdisciplinary field called "Al for Science". As Sir Demis Hassabis said in his Nobel Prize lecture, Al and data science will accelerate discoveries in the natural sciences when there is a huge combinatorial space of objects to be observed, a clear objective function can be set, and there are large amounts of data. In this seminar, eight researchers at the forefront of data science will present on the current state of the field and its future prospects.

Date: March 4th (Tuesday), 2025

Main Office Building Hall (Koryuto-Hall),

Venue: RIKEN Yokohama Campus XOn-site only

https://www.yokohama.riken.jp/english/access/

Language: English

Kazuhiro Sakurada

Organizers: (Advanced Data Science Project, RIKEN Information

R&D and Strategy Headquarters)

Participation

Fee: Free

Registration

Deadline Feburuary 26 (Wed.), 13:00

Poster: https://adsp.riken.jp/news/pdf/250304_International_Symposium_Flyer.pdf

| Time | Speakers |
|---------------|--|
| | Opening Remarks |
| 10:00~10:05 | Kazuhiro Sakurada, Ph.D. Team Leader, Open Systems Information Science Team, Advanced Data Science Project, RIKEN Information R&D and Strategy Headquarters |
| | Miles C. Andrews, M.D., Ph.D. |
| 10:05~10:45 | Medical Oncologist, Senior Research Fellow, Monash University, Australi The Tumor, the Patient and the Microbiome: Taking a Wide-Angle View on Cancer Immunotherapy |
| 10:45~11:25 | A. Gordon Robertson, Ph.D. Staff Scientist, BC Cancer Genome Sciences Centre (fmr), Dxige Research Inc., Canada What is TCGA and the GDAN? |
| | Scott E. Woodman, M.D., Ph.D. |
| 11:25~12:05 | Associate Professor, MD Anderson Cancer Center, USA Learning to Make Biomedical Data More Intelligible for Artificial Intelligence |
| 12:05~12:35 | Hiroshi Kawasaki, M.D., Ph.D. |
| | Senior Scientist, Laboratory for Developmental Genetics, RIKEN Center for Integrative Medical Sciences |
| | Toward Data-Driven Precision Medicine in Atopic Dermatitis |
| 12:35 - 13:45 | Lunch break |
| 13:45 - 14:15 | Eiryo Kawakami, M.D., Ph.D. Team Leader, Medical Data Mathematical Reasoning Team, Advanced Data Science Project, RIKEN Information R&D and Strategy Headquarters Frontiers in Prediction for Medical Sciences |
| 14:15~14:45 | Jun Seita, M.D, Ph.D. |
| | Team Leader, Medical Data Deep Learning Team, Advanced Data Science |
| | Project, RIKEN Information R&D and Strategy Headquarters Lightning-fast Evolving Deep Learning and Medical Sciences |
| 14:45 - 15:00 | Coffee break |
| 15:00~15:30 | Kazuyoshi Ishigaki, M.D., Ph.D. Team Leader, Laboratory for Human Immunogenetics, RIKEN Center for Integrative Medical Sciences Autoimmunity pathology elucidated by large-scale genetics studies |
| | Kazuhiro Sakurada, Ph.D. |
| 15:30~16:00 | Team Leader, Open Systems Information Science Team, Advanced Data |
| | Science Project, RIKEN Information R&D and Strategy Headquarters Life Course Modelling and Patient Bio-Digital Twin |
| 16:00~16:15 | Coffee break |
| 17:40 - 19:40 | Meal gathering Venue: Main Office Building 1F Lounge |

Registration

We ask all participants to make an advance registration.

To Register, click the "REGISTRATION" button to access the online registration form and enter the required information.

Registration deadline: Feburuary 26 (Wed.), 13:00

https://forms.gle/gFqYBEs4h6LLVGZU8

Speakers Guideline

Speaker 1-3, 40 minutes (Presentation time 30 minutes + Q&A 10 minutes)

Speaker 4-8, 30 minutes (Presentation time 25 minutes + Q&A 5 minutes)

We humbly ask for your cooperation in ensuring the smooth running of the sessions by strictly adhering to the time of presentation.

Direction

The symposium will take place at RIKEN Yokohama Campus. The venue is located approximately 15-minutes bus busride from JR Tsurumi Station and Keikyu Tsurumi Station or 15minutes walk from JR Tsurumi-Ono Station. The Main Office Building Hall (Koryuto-Hall) is located on the first floor of the RIKEN Yokohama Main OfficeBuilding.

Yokohama Campus
Main Office Building Hall (Koryuto-Hall)
1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama city, Kanagawa, 230-0045, Japan https://maps.app.goo.gl/rScGUyghauxWQpn89

Contact

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Acknowledgments

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This symposium will be held as a part of RIKEN SYMPOSIUM SERIES