

ESTABLISHING A BIO2Q NETWORK OF RESEARCHERS

The 3rd WPI-Bio2Q Retreat was held on May 28 and 29 in Chiba. The goal of the Retreat this year was integrating biology, microbiome, and quantum computing for healthy longevity. Sixty-five scientists and staff members participated in the retreat. Three participants share their reflections.



Bio2Q 2026 Retreat 1. Group photo, 2. Recreation, 3. LEAD50 lectureship, 4. Quiz, 5. Group discussion. © Bio2Q

This year was my second time attending the Bio2Q retreat, and it was once again one of the highlights of my year. As a STaMP student, it was a wonderful opportunity not only to step outside the lab environment but also to strengthen friendships and connect with researchers from many different backgrounds. I was especially happy to see so many new participants joining us at the beautiful venue in Chiba Prefecture.

I particularly appreciated that feedback from last year, including suggestions from STAMP students, had been implemented. The group activities were engaging and thoughtfully organized, allowing us to interact with different people throughout the retreat and learn from a variety of perspectives. Prof. Moran Yassour's lecture was especially inspiring. As a female PhD student, I found her reflections on balancing research, personal life, and future family aspirations both encouraging and motivating.

The quiz competition, BBQ, and recreational activities made the experience even more enjoyable. We even got to know a very friendly cat, who became the mascot of our table. Overall, the retreat left me feeling inspired, relaxed, and already looking forward to next year! Thanks to all the organization team, who did a wonderful job, to the postdoc and PI for the interesting point of exchange on my research.

(Mariateresa Merante, WPI RA (STaMP))

It was my pleasure to participate in this year's Bio2Q retreat in Chiba. As I joined the institute a couple of months ago, I was eager to discover more about all the people and ongoing projects of Bio2Q. The two days were very rich in discussion to the point it became almost overwhelming. So many interesting things ongoing, so many different fields of expertise and maybe twice as many possibilities to collaborate.

I was particularly delighted to hear the keynote talk from Prof. Moran Yassour about computational metagenomics, early life and IBD microbiome but also here career advice for young scientists. It was particularly relevant considering the number of students present. The retreat also had its dose of fun, games, quiz, drinks and interesting scientific and non-scientific discussions. I am looking forward to next year.

(Leonard Dubois, Postdoc)

A key takeaway from this year's retreat was learning how our existing technologies and expertise can inspire new research questions. Starting from the tools and approaches available within Bio2Q helped us develop ideas from a concrete foundation and explore new research possibilities.

At the same time, the discussions made me realize how important it is to keep a wide range of interests and curiosities. New ideas often emerge from unexpected connections, and I felt that having many different "drawers" of knowledge and experience can help us recognize opportunities when they appear.

While we did not always discuss whether every idea was immediately feasible, the retreat created opportunities for new conversations. It made me think, "Who could we ask about this?" or "What would an expert think of this idea?" I hope the discussions we started during the retreat will continue to grow into future collaborations and new research directions.

(Keiko Matsuda, Jr. PI)

WELCOME ON BOARD!

In this issue, we are delighted to introduce four new members who joined Bio2Q in June.

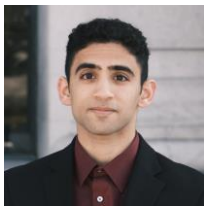


BUSE NUR KIRAL
BIO-2 CORE RESEARCH INTERN

Buse Nur Kiral
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Hello everyone! My name is Buse Nur Kiral, and I am bursting with absolute joy to join WPI-Bio2Q as a research intern this summer! As a recent Molecular Biology and Genetics graduate, getting to dive into the science here feels like a dream come true. I am incredibly honored to be co-supervised by Profs. Juntaro Matsuzaki and Michisuke Yuzaki.

I can't wait to explore such diverse horizons, from Dr. Matsuzaki's fascinating work on cancer biomarkers to Prof. Yuzaki's beautiful studies in neuroscience. I've packed my bags with endless curiosity, positive energy, and yes, a little bit of authentic Turkish Delight for my new lab mates! I am so ready to absorb the brilliant energy of Tokyo and look forward to meeting you all very, very soon!



ESHAAN MISTRY
Q CORE RESEARCH INTERN

Eshaan Mistry
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I'm thrilled to join Bio2Q as an upcoming intern in Prof. Koyama's group. I'm a third-year at UC Berkeley studying physics, computer science, and chemistry, though I've been drawn to biology since early on, especially the challenge of asking the right questions about complex systems. My research has frequently shifted focus: at NASA Ames, I automated single-cell RNA-seq analysis pipelines and worked with high-dimensional data to extract biological signals. I've also worked on NLP and machine-learning projects that turn scientific text into usable chemical information, and I'm motivated by how computation can make research faster and more interpretable. At Lawrence Berkeley National Laboratory, I explored ML for optimizing solid-state physics instrumentation; building surrogate models to improve performance through automated evaluation.

At Bio2Q, I'm excited to bring this mix of algorithmic thinking and life-science curiosity to metabolite prediction and quantum-inspired computation, all while learning from a passionately interdisciplinary team!



OMAR MOUSTAFA HASSAN ELATAL

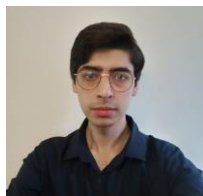
BIO-2 CORE RESEARCH INTERN

Omar Moustafa Hassan Elatal
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Hello! My name is Omar Moustafa Hassan Elatal, an undergraduate biology student from Morocco, and I am delighted to be joining Bio2Q as a research intern.

Through my studies and internships at Hassan II University and the Institut Pasteur du Maroc, I developed a keen interest in structural biology and the roles that RNA and epigenetics play in the context of cancer. To further pursue these interests, I will have the pleasure of working in the laboratories of Prof. Juntaro Matsuzaki and Prof. Nadinath Nillegoda, where I look forward to exploring the functions of extracellular microRNAs and the mechanisms that underlie proteostasis in primates.

Ultimately, I hope this internship will help pave the way toward graduate studies at Keio University, and I would like to thank my host labs and Bio2Q for this incredibly valuable opportunity. I am very excited to meet everyone and be part of this vibrant community.



SYED ALI RAZA NAQVI

Q CORE RESEARCH INTERN

Syed Ali Raza Naqvi
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Hi everyone! It is a pleasure to be joining Bio2Q as a research intern in the lab of Dr. Takahiko Koyama. I completed my Bachelor's degree in Bioinformatics from COMSATS University Islamabad and I am currently pursuing my Master's degree in Artificial Intelligence at the National University of Sciences and Technology, Islamabad. I was awarded the Mitacs Globalink Research Internship at Lakehead University, Canada, where I worked on glaucoma detection using deep learning and explainable AI. My research interests include cancer genomics, multi-modal AI for imaging and genomics, computational pathology, and single cell RNA sequence analysis.

At Bio2Q, I am excited to work at the intersection of AI, genomics, and quantum computing. I look forward to contributing to the team and growing as a researcher!



THE3RD LEAD50 LECTURESHIP

Poster © Bio2Q

Hosted by Keio University

WPI-Bio2Q, the 3rd

LEAD50 Lectureship Series will be held on July 1 at 16:00 at Kitasato-Hall, Shinanomachi Campus, featuring Yukako Uchinaga, CEO of Globalization Research Institute (GRI). Titled "Diversity Management as a Business Strategy," she will discuss how inclusion and female empowerment drive innovation.

The event features a 45-minute lecture and a 15-minute Q&A session. AI simultaneous translation (Japanese to English) is provided for international researchers. Bio2Q aims to nurture female scientific leaders. We look forward to your participation!

(Miyuki Ogino, Admin. Staff)

UPCOMING EVENTS

Jul.1 (Wed) 16:00-17:00

The 3rd LEAD50 Lectureship by Yukako Uchinaga (GRI)

@Shinanomachi

Jul.15 (Wed) 17:00-18:00

Seminar by Juergen Knoblich (IMBA, Austria) @Shinanomachi

Host: Keio Organoid Consortium

Co-host: Bio2Q

Jul.29 (Wed), Jul.30 (Thu)

WPI-Bio2Q Exhibit at MEXT

Kasumigaseki Open Day for Children

@MEXT, Kasumigaseki

Sep.14 (Mon)

WPI-Bio2Q Open Seminar

By Nicolas Manel (Institut Curie, France) @Shinanomachi

Science Meeting Series

@Shinanomachi

Jul.29 (Wed) 14:00-15:00

#42 Naoko Irie, Affiliated PI

Sep.30 (Wed) 14:00-15:00

#43 Yuki Kagoya, Affiliated PI

Structural Analysis Workshop Series

@Shinanomachi

Jul.3 (Fri) 14:00-15:00

#2 Yikuan Yu

Single-Crystal X-ray Crystallography

Jul.17 (Fri) 14:00-15:00

#3 Takanori Yokoo

Antibody Screening, Structural

Analysis, and Design

Sep.18 (Fri) 14:00-15:00

#4 Kenji Murakami

MicroED

The next "Bio2Q Connect" will be issued on July 29, 2026.

