

Innovative Medicine CHIBA Doctoral WISE Program

(MEXT Doctoral Program for World-learning Innovative & Smart Education)



What is iMec-WISE program?

iMeC-WISE aims to foster the next generation of world-class researchers and innovators con-tributing to medical sciences, novel therapies, drugs, and sustainable healthcare systems. This program is an innovative and comprehensive multidisciplinary training, closely mentored by internationally renowned academia and industries. Students are required to study in two out of the six specialized fields, to acquire advanced research abilities and broader perspectives globally.



In "Rotation Training", we visited various laboratories for a few days. We learned characteristic experimental technics of each laboratory, for example, the *in vivo (utero)* electroporation technique in Department of Developmental Biology and analysis methods of next-generation sequencing data in Department of Molecular Oncology. In addition, we also learned about their research and were amazed at the variety of research being conducted in our university. It helped us to choose double- majors and gave opportunities to start the collaborative research.

In "Advanced General Education", prominent professors gave us great lectures. The lectures on different fields from our own major expanded our knowledge. For example, a distinguished professor Fujita from Tokyo University, who previously graduated from the Faculty of Engineering at Chiba University, gave us a lecture about X-ray structure analysis by the crystalline sponge method. In addition to that, we made strong connections with those professors. These connections gave us a chance to visit NejiLaw Inc. (see below).

English is an essential skill for us to be the global leaders the iMeC-WISE program aims to foster. In "Practical English", we learned tips and methods for English presentation and discussion. In "Retreat", we gave presentations about our business plan and research in English.



A tour to NejiLaw, Inc. was realized by the connections made in "Advanced General Education" with Hiroshi Michiwaki, the CEO of NejiLaw, Inc. The company developed a new type of screw that never loosens. We visited their show room and saw a lot of their inventions. We also heard valuable stories of how their products were developed. At the end, they kindly took time to discuss about our research. We really appreciate the wonderful opportunity they gave us. Thank you very much! (written by Katsuyuki Chida)

2nd Year Students

A total of 11 students, 4 in the Master's Program and 7 in the 4-year Doctoral Program.

Four-year doctoral program



Yusuke Kashiwagi

①Nephrology (Medicine) ②Machine learning medicine (theme : searching for risk factor of Diabetic Macular Edema by using machine learning)

- ③Tokyo
- 4 Shogi, swimming, programming ⑤No pain, No gain

Yuki Hayashi

peripheral helper Cell

3Kanagawa
 4Fishing, Skiing

⁽⁶⁾Taking for class for machine learning

①Allergy and Clinical Immunology (Medicine)

2 Identification of Transcriptional Regulation of T



Katsuyuki Chida

①Pharmaceutics

- (Pharmaceutical sciences) Extracellular vesicles, Cell strains
- ③Chiba
- Cooking, Reading, Working out
 Learn all that stuff and then forget it.
- 6 can learn about Interdisciplinary study and
- interact with researchers in several fields.

Kiwamu Motoyoshi

- ①Medical Immunology (Medicine)
- 2 Developing the efficient proliferation method of invariant Natural Killer T cells ③Chiba
- ④Tennis
- 5 from the journey of a thousand miles an inch 6Because the supports from i-MEC Wise are very attractive and I have bit confidence in speaking, writing in English.



Yamao Yasuo

overseas study were attractive.

①Emergency and Critical Care (Medicine) ②Al-based prognosis prediction algorithms for ICU

- ④Astronomical observation
- 5 Heaven knows, Earth knows, I know, People know. 6 To conduct research that links medicine and computer science (AI).



Masaki Yoshioka

- Deurosurgery (Medicine)
 Expression of stem cell-related proteins in glioblastoma stem cells. Two-photon optogenetic control of the brain neural network
- ③Chiba
- Sports watching, gaming
 Continuity is the father of success.
- 6 Generous research support, including research funding and RA. To get an opportunity to improve my English skills



Kaho Yamasaki

- ①Nephrology (Medicine) ②The mechanism of Podocyte injury
- Tokyo
- 5Where there is a will, there is a way
- ⑥Podocyte is highly differentiated and maintain the intact intercellular connection in glomerulus. It's very important role in the kidney. In my research, I would like to elucidate the mechanism of podocyte injury for therapeutic strategies.
- (1) Affiliation
- (2) Research theme
- ③ Hometown
- (4) Hobby
- (5) Personal motto
- 6 Why did you join the WISE program?

Master's program



Tohgo Kanoh

- DBiochemistory (Pharmaceutical sciences) [©]The relationship between breast cancer maligmancy and E3 ubiquitin ligase MIB1 3)Chiba
- ④Badminton
- ⑤It's important to do even common tasks well.
- ⁶To acquire the skills such as communication skills, the ability to take action etc., in addition to doing my research.



Yugo Mori

- 1 Medical Mycology Research Center Division of
- @Revelation of the frequency of terbinafine- resistant
 Trichophyton clinical isolates and the mechanism of resistance
 - Saitama
 - Juggling
- (B)Ikyoyamazu (A Japanese word that means to keep working hard every day)
 (C) become a researcher who is able to contribute to society and medicine by acquiring a broad perspective.



Yasuomi Miyashita

- ①Biostructural Chemistry (Faculty of science)
 ②Cryo-EM single particle analysis of voltage-gated potassium channels in biological environment ③Chiba ④Golf
- ©Small things add up to make a big difference ©I thought that I would be able to gain new insights into my own research by interacting with people from other academic fields beyond the boundaries of science.

Hayato Yoshikawa

- ①Medical Physiology (Medicine)
- ②The role of KATP channel in thermoregulation. ③Mivazaki
- ④Camping
- Be comfortable, being uncomfortable. 6As I belong to member of iMac WISE program, I aim for both establishment and implementation of novel science-based solutions for metabolic disorders

- ④Cooking
- String, outmin, outmin, only when you live for someone else.
 The opportunity to learn not only medicine but also a wide range of other fields, various exchanges inside and outside the university, and support for
- ③Tokyo

Student's Achievements

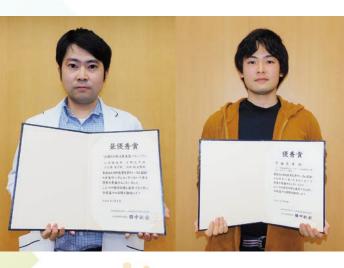
☆Forum for Graduate School Educational Reform 2021

[Student Workshop]

Grand Prize: Team 11 Kaho Yamasaki (iMeC-WISE student, Chiba Univ.) Ryouhei Ono (iMeC-WISE student, Chiba Univ.) (2 more students from other universities)

[Poster Session]

Excellent Award Katsuyuki Chida (iMeC-WISE student, Chiba Univ.)





☆Awards for Team Astackle

Theme: Alpha Radiation Therapy Drug Development Platform Business Yuta Kaizuka (iMeC-WISE student, Chiba Univ.), Norie Hamaguchi, (iMeC-WISE student, Chiba Univ.) (1 more student from Graduate School of Medical and Pharmaceutical Sciences)

Nanohana Award Grand Award

at 19th Nanohana Competition 2021

Grand Award

at 1st Nanohana Com<mark>petition (</mark>Advanced Course) 2021

[Presented by Chiba University Academic Research & Innovation Management Organization (IMO)]

Grand Award

at 19th Student Business Plan Contest [Presented by Ippan Zaidan Houjin Student Support Center]







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