



Nurture of Creative Research Leaders  
in Immune System  
Regulation and Innovative Therapeutics

# NEWS LETTER



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**LGS**  
LEADING GRADUATE SCHOOL  
AT CHIBA UNIVERSITY

## Leading Forum 2018

LGS 5<sup>th</sup> year member Kensuke Kayamori

Leading Program Forum 2018 was held to review various programs with program graduates, business people, students, faculty and staff on Tuesday, December 4, 2018, at Hitotsubashi Hall. Program students and faculty discussed efforts to implement innovative value into society with the entrepreneurs and company researchers, who are active in various business fields. By strengthening the stakeholder network, The Forum 2018 encourages the graduates to share their knowledge and skills with current students so that they can enrich the Leading Graduate Programs in the future.

In an attempt to create an “Innovative Education for Society Created by Students”, the Forum 2018 offered two sessions for discussion: Session A “To implement innovative value into society”; and Session B “To use the Leading Program’s resources efficiently in the future”.

I joined Session A. It was exciting for me to discuss each idea extensively with other PhD students from all over the country. I found that the ideas came up from other students, especially in different fields from mine, were attractive. To brush up our ideas, we asked participants from enterprises for advice, which was a valuable experience for us. At last, I made a presentation on my idea how we can deliver new value to society. The Forum 2018 gave me an excellent opportunity to learn knowledge of other fields.



## The Oral Defense of a Dissertation

LGS 3<sup>rd</sup> year member Jin Kumagai

This January, I gave the oral defense of dissertation in English, which is one of the degree requirements of Leading Graduate School (LGS) Program. My committee consisted of four members: three Japanese faculties and one external committee member, Dr. Mark Bix who is Vice-President of Cosmo Bio USA, Inc. This oral defense in English is a culmination of LGS life, and a place where my skills and abilities were tested. Looking back on the experiences at LGS, I truly appreciate “Presentation Seminar” where we learned presentation skills in English. It definitely contributed to my defense. Furthermore, the discussion experience with young researchers from all over the world at RIKEN summer program or at the LGS overseas training gave me confidence in expressing my opinions in English. As these experiences got rid of my mental barriers and tension, I could express my research accomplishments in English with confidence. In addition to English presentation and communication skills, the oral defense requires abilities of logical thinking and explanation. I realized that I had acquired such skills through everyday conversation and discussion with LGS colleagues. During four years as a LGS student, I faced a lot of difficulties; however, I’ve solved problems one by one. These experiences led me to the great success with this oral defense. In addition, I believe that they enabled me to have the sufficient foundation to address various issues, which may occur in near future. The oral defense of a dissertation and preparation period for that were very meaningful opportunities for me to grow as a person and young scientist.



## Overseas Training 2018 in San Diego: Experiencing the Life in Biotech Hub

LGS 6<sup>th</sup> year member Maulana A. Empitu

What makes a successful scientist in the modern world? Often, we find that in-depth knowledge of the field and mastery of the scientific methods are no longer enough. Some qualities also required to meet the complex challenges of today's world, such as creative thinking, problem-solving, persistence, and collaborative aptitudes. Furthermore, the scientist also needs to be an avid long-life learner to adapt to and navigate through the contemporary problems of science and society.

The Overseas training in San Diego, California, USA is one of the endeavors of Chiba University-Leading Graduate School (LGS) to engage the students with a society where pharmaceutical companies devote their efforts to tackle the contemporary science problems. La Jolla is well known as one of the most vibrant biotech hubs in the world. During the five days of training, we visited three companies (Kyowa-Kirin Pharmaceutical Research Inc, Biogen Inc, and Tanabe Research Laboratory USA Inc.), La Jolla Institute for Allergy, and University of California, San Diego (UCSD). Each of those companies and institute is working with the latest technology in therapeutics and diagnostics.

This training features two key characteristics that propelled the students' learning experiences. First, this training covered wide ranges of topics that are relevant to the present and future challenges in science. We had serial lectures not only on the latest development and technology in biotech and pharmaceutical company, but also on business development, career, and personal development training to succeed as a professional scientist. The training introduced some application cases of the latest technology in therapeutics and diagnostics such as the development of agonistic antibodies and latest flowcytometry technology.

The second, this training gathered diverse expertise and gave us a vast amount of opportunities to learn from them. During this training, we had a lecture and lively discussion with Dr. Pascal Gagneux, a leading scientist in Glycan Biology at the UCSD. We also learned science from people in different types of job titles including CEOs, R&D managers, and entrepreneurs. During the visit to Biogen Inc, the founder of the company Mr. Gene Lay, welcomed us and shared his experience in founding and developing a company. Mr. Lay emphasized the importance of entrepreneurship in shaping the future of medicine and science.

Overall, this training was rich in both content and point-of-views. Participants of this training mentioned that this training had changed their perspectives on future career. Thus, it is giving the students not only a chance to gather more knowledge, but also one to gain a pearl of wisdom about living as a scientist. As a classical proverb says: "By learning, comes knowledge. By experiencing, comes wisdom."



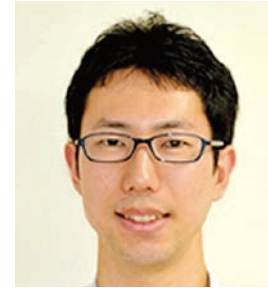
## Upon completion of Leading Graduate School Program



### Masanori Fujimoto

LGS 3<sup>rd</sup> Year Member

This program gave me a lot of precious experiences. I could meet some very gifted people through interaction with researchers on various fields and above all with LGS members. Remembering it as a model, I want to continue the effort to become a balanced physician-scientist and to cherish my best friends. I really appreciate the generous support from all organizers, office members and LGS members.



### Hiroyuki Amagai

LGS 3<sup>rd</sup> Year Member

I had a precious experience in the Leading graduate school program which cannot be obtained in the normal graduate school program. I could broaden my horizons, having the opportunity to meet excellent people in other fields. I'll continue challenging things, taking good care of the intelligence, energy and friendship cultivated in the LGS program. I thank all people in particular Dr. Motohashi and Dr. Yagi who supported me in the LGS program.



### Kokiladevi Alagarwamy

LGS 3<sup>rd</sup> Year Member

It's my pleasure to share my experience on the LGS program. It helped us for self-improvisation regarding clinical research. Therapeutic Training in USA is one of the great experiences which helped us to know the research methodology in USA. Lab rotation seminars widened our knowledge. Winter Camps, which are conducted every year, gave us a wonderful opportunity to prove our talents in designing products which are related to Medical field. It also helped us to learn the importance of Team Work. All the LGS Professors and LGS Office were very supportive and encouraging. Overall it's a great program which shapes students to become future leaders.



### Ryohei Ohtani

LGS 3<sup>rd</sup> Year Member

I really appreciate the LGS program giving me the opportunity to obtain various skills and experiences useful in international fields. This program expanded my horizons and helped me build relationships with researchers and LGS students in other fields. I believe that improving my English skills through presentations and discussions in this program will be useful not only for my future research but also for clinical practice. Finally, thanks to all the staff members of the LGS program.



### Toshio Kanno

LGS 3<sup>rd</sup> Year Member

Thanks to having the opportunity to contact the forefront research activities in academia and industry, and the opportunity to give a presentation in various places, I was able to think firmly about what I wanted to do. It was an environment that can touch a lot of research outside my field, so I was very thankful that I could objectively see my research thesis. As I am interested in drug discovery, from a standpoint of basic research, I would like to strive to make contribution to it.



### Jin Kumagai

LGS 3<sup>rd</sup> Year Member

I would never have developed such a strong friendship with other PhD students, if I had not participated in this program. I would say this friendship is my treasure, and I believe that it will evolve into different types of friendship in the near future: collaborative research or projects. In addition, thanks to a variety of opportunities that LGS provided us with, I could have a wider point of view and obtain various skills. I'll make use of all these experiences to develop myself further. I appreciate all the people who supported me in the LGS program.



## Takuya Nakagawa

LGS 3<sup>rd</sup> Year Member

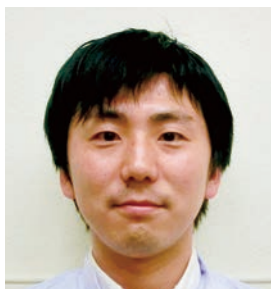
The LGS program had the remarkable training system to be a global leader. Overseas training has provided us with not only English proficiency but also the ability to achieve many problems from a multilateral perspective. I would like to give thanks for receiving great support from many people. I hope to make use of the skills cultivated in this course and to make efforts to be even more active in the next step.



## Mami Negawa

LGS 3<sup>rd</sup> Year Member

I really appreciate your giving me the opportunity to join in this leading program. I have been able to become more interested in a variety of studies than before through the experiences of the domestic and overseas trainings, lectures and seminars. It was also a valuable experience for me to have had the oral defense of doctoral dissertation with a native speaker of English. In the future, I would like to keep a broad perspective including English skills and continue to take on challenges to innovate new products and solutions globally.



## Masashi Fukuta

LGS 3<sup>rd</sup> Year Member

Through the LGS program, I recognized that the world is progressing to the next discoveries.

We are on the road past researchers made, and now it is our turn to continue making the road.

As for me, I want to work to the best of my ability without losing my sense of purpose. Finally, I thank the staffs of the LGS project, research funders, and the LGS members who worked together in competition.

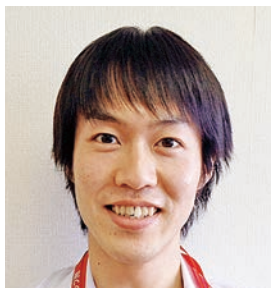


## Takeshi Susukida

LGS 3<sup>rd</sup> Year Member

In the last 4 years in this Leading Program (LGS), I have experienced many outstanding experiences and opportunities that have helped improve my skills and also provided me with professional growth. In particular, the internship in San Diego, USA in 2016 greatly helped me determine my future career plan, that has started with a post-doctoral placement at the University of Alberta, one of the top 4 universities in Canada.

My thanks to LGS for providing me with this wonderful opportunity to experience and realize the research environment in an overseas academic institution with my own eyes. Besides, I am very grateful to my colleagues in LGS for our friendly competitiveness, in an effort to encourage each other. It is my intention to capitalize upon this advanced research training in order to translate that knowledge towards a bright future research career, by making use of these excellent training experiences gained from this LGS initiative.



## Yusuke Isshiki

LGS 4<sup>th</sup> Year Member

The LGS program gave me an insight of "globalism". All of our presentations and discussion have been performed in English, which enabled me to improve my English skill. Besides, the overseas training gave me a great opportunity to learn the importance of the contribution to international societies.

Through my experience in LGS, I'm confident that I can become a more "globalized" person than before. I hope I can contribute to the development of medical science with an international view.



## Min Ma

LGS 4<sup>th</sup> Year Member

I was deeply attracted by the LGS program from the beginning, and also am honored to have been a member of it. The LGS program not only broadened my horizons in the knowledge of science but also let me have a positive attitude to do the research. The experience I got from the Program will play an important role in my career. I would like to continue my science exploration and be a professional leader with the international mind which I have learned from the LGS program.

## 5th LGS Winter Camp

LGS 5<sup>th</sup> year member Yuriko Yamazaki

On Feb 2 and 3, 2019, we held 5<sup>th</sup> Leading Graduate School (LGS) winter camp at Seaside Otsuka hotel in Kazusa Ichinomiya. As the main purpose of LGS program at Chiba University is to learn therapeutics, an academic field where we apply the knowledge of basic medicine into practical usage, this program encourages students to start their own venture company. That way, students can utilize their specialty to contribute to society.

The main theme of the 5<sup>th</sup> Winter Camp was "Challenging issues in modern medicine". The first and second year graduate students made three teams to build virtual business plans. Students spent a few months to prepare their own business plans. On the first day of the winter camp, each team made presentation on its' idea. After receiving advices from senior students and faculty, they discussed to reexamine their plans. Students made presentations on their modified business plan on the second day.

"FlySavior" team won the prize for best discussion skills and business idea. The team offered an AI assisted medical device to instruct flight attendants how to give first aid to the emergency during flights. They intended not to limit the usage of device only on airplanes; they also planned to extend its usage to all medical emergency cases that occur in the absence of doctors. The team aimed to diffuse this device as the "second AED" eventually. Their business model was highly valued for its practicality and great potential for wide application. At 5<sup>th</sup> winter camp, we also had an invited lecture by Dr. Sho Okiyama from Aillis Inc., which is a medical start-up company. His company invented innovative AI assisted medical devices to support novice clinicians with trained doctors' physical examination skills. Audience was deeply inspired by his talk: his personal experiences as an emergency doctor, which led to this business model; and lessons how AI can be applied to medical usage. His message had a strong impact on students. I personally think he is a good role model for LGS students who want to start their own business.

As one of our graduates has actually developed a startup company, current LGS students became more interested in startups. While the LGS offers many opportunities to learn about startup through lectures and domestic internship activities, this winter camp is the best opportunity for students to learn practical process, especially how to discuss or modify business plans. We hope this winter camp will continue to be a successful and fruitful event for LGS students.



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