ROUNDTABLE "The Premium Lecture"

Creating a New Age and an Environment Conducive to Collaborative Research

Nagoya University Graduate School of Medicine

begun "The Premium Lecture" hosted by young researchers in 2017. Outstanding research from the Graduate School of Medicine is presented and researchers and students are able to engage in active discussion of the findings. These are held 6 times a year and provides a setting for researchers to exchange ideas and information. Young Researchers volunteer in an executive committee to plan and organize these lectures. We asked them to discuss the significance of these interactions and their expectations of cooperative research.

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Profile M.2018

Aiming for a place on the international stage to promote collaborative research by young researchers and enhance their research capabilities.

Creating a researcher network to share cutting-edge research at Nagoya University

Can you provide a brief overview of this lecture series including the advantages of this initiative?

HAMAUCHI: All speakers are researchers at Nagoya University. They are the young researchers who lead research projects here. The speaker is provided with an opportunity to present his research, while participants get to know about recent trends being studied at Nagoya University in a timely fashion, a notable advancement opportunity.

SATOH: This graduate school reports many exciting findings, but until now, opportunities to exchange ideas and information were limited for both young and established researchers. It's wonderful to have a forum where we can hear directly from the outstanding young researchers at our own institution.

SHINJO: To promote research efficiently despite limited research funding, collaboration with researchers in other fields is indispensable. To do this, the first step is to learn what kind of cutting-edge research in medicine is taking place inside Nagoya University. The executive committee began by bringing together all the scientists who had published papers over the past 1 to 2 years. The most important objective of these lectures is to enhance the research capabilities of Nagoya University.

SHINJO: Cooperative research is recognized as vital to improving R&D.
efficiency at around the world. I believe these lectures are creating an opportunity to expand the network in our graduate school.

SATO | This is particularly important since only researchers at Nagoya University participate in these lectures. Many speakers share stories about their efforts for those interested, showing how they come up with ideas, and other background information, all of which I find extremely useful. As many as 260 people participate at times and it is a very popular initiative.

SHINDO | Scientists from diverse backgrounds gather for these lectures. Graduate students audit these lectures, so speakers cover the basics of each field to make them widely accessible. Participants can learn about cutting-edge research in a broad range of different fields, starting from the very basic concepts because they are all held inside Nagoya University Graduate School of Medicine.

Technology and methods from vastly different fields advance our own research

How have these lectures affected your own studies?

SATO | As a scientist, I have found them extremely stimulating. My own area of specialization is virology, and I am also interested in studying the phenomena observed when cells with different characteristics are placed beside each other. Virus-infected cells are surrounded by normal cells, quite similar to what is seen with tumor cells. Every time I hear diagnostic methods for cancer and hope to use next-generation sequencers to analyze cancer DNA that has been released into the blood, Serendipitously, a speaker at one of the lectures happened to be very knowledgeable about this technology. After consulting that person, we started a collaborative project. I received advice on how to choose the conditions and methods for detection and have found this partnership extremely helpful.

HARAGUCHI | Of course, in some cases, in order to acquire experimental techniques, you must build on hands-on practice which calls for face-to-face interactions to learn these methods. I feel both working in the same team and presenting my research in the laboratory allows new guidance for my research.

SATO | My research involves RNA and Parkinson’s disease, and I found presentations by other scientists on screening methods and developing research to be very valuable for my purpose.

IUCHI | As a neurologist, I am focusing on neurodegenerative diseases, particularly amyotrophic lateral sclerosis. While my research is not directly linked to these lectures so far, accumulating knowledge in a broad range of sciences can contribute to progress in my own area of research.

SHINDO | I study brain tumors, but understanding the normal neurons in the brain is essential to developing new treatments. These lectures are important since they provide opportunities for me to deepen my understanding of nerves.

The camaraderie born from exchange provides motivation for the future

How are these exchanges opportunities significant and what issues remain?

IUCHI | As everyone has already mentioned, if we can complement each other in terms of technology, environment, and experience, the impact of the resulting collaborative research really knows no bounds. In the future, we hope to further enhance the usefulness of these lectures, connecting them to more cooperate, and improve research.

Diverse and evocative ideas bolster the capabilities of young researchers

Fostering a motivated research environment allows growth of many joint projects

Please tell us what sort of future you envision for these lectures.

SHINDO | Fewer medical school graduates are becoming researchers, but still, the executive committee has graduated from medical schools. We hope to install the value of medical research through these lectures, not only by the graduate students, but also by undergraduate medical students as well. Women scientists are particularly scarce and so we hope to encourage more women to join our ranks by appealing to how fascinating medical research can be.

HARAGUCHI | The objective of these lectures is to provide a setting where collaboration can actually begin, starting with active exchange of ideas between researchers. Even if cooperative research is not necessarily the goal, these opportunities for the free exchange of opinions freely are valuable for the insight and suggestions they provide from many different sciences and should be allowed to develop.

SATO | Once new interactions take root between researchers, the whole campus atmosphere becomes more active and engaged. We hope that this fosters an environment conducive to active and engaged research and discussion.

IUCHI | As far as I know, in North America, there are few walls or barriers separating departments. An open culture is spreading where laboratories can share freely in the use of equipment in any of the laboratories from that perspective, Japan is unfortunately still lacking in exchange opportunities, and we hope these lectures will contribute to lowering those walls.

New encounters lead to the next collaborative research project.