

ROUNDTABLE "The Premium Lecture"

# Creating a New Age and an Environment Conducive to Collaborative Research

Nagoya University Graduate School of Medicine began "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.



Premium Lecture Executive Committee

**SATO Yoshitaka,**  
Assistant Professor

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Assistant Professor

PhD in Medicine from Nagoya University Graduate School of Medicine. After practicing as a staff physician at Nagoya University Hospital, currently an assistant professor at Nagoya University Hospital. Field of specialization: neurology

**SHINJO Keiko,**  
Assistant Professor

PhD in Medicine from Nagoya University Graduate School of Medicine. After research at Aichi Cancer Center, currently an assistant professor at Nagoya University Graduate School of Medicine. Field of specialization: tumor biology

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PhD in Medicine from Nagoya University Graduate School of Medicine. After practicing medicine at Ogaki Municipal Hospital, currently assistant professor of the Nagoya University Graduate School of Medicine. Field of specialization: neurogenetics

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Creating a New Age and an Environment Conducive to Collaborative Research



“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?**

**HAMAGUCHI** | 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 not-to-be-missed opportunity.

**SATO** | 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.

**IGUCHI** | 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 listing up 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



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Research

efficiency all 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 those efforts that led to results, how they came up with ideas, and other background information, all of which I find extremely useful. As many as 200 people participate at times and it is a very popular initiative.

**SHINJO** | Scientists from diverse backgrounds gather for these lectures. Graduate students audit these lectures, so speakers cover the basics of each field to making 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

presentations from other fields, I wonder if there might be a project that we could do together as I gather new information and ideas.

**SHINJO** | I am currently developing new

institution, it is easier to exchange knowledge on techniques and to help heighten each other's abilities. So, it is a very valuable initiative to encourage collaboration within Nagoya University.



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 enormously helpful.

**HAMAGUCHI** | 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 those methods. If we are both working inside the same

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 purposes.

**IGUCHI** | 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.

**SHINJO** | I agree. I study brain tumors, but an understanding of 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?

**IGUCHI** | As everyone has already mentioned, if we can complement each other in technology, equipment, and experience, the impact of the resulting cooperative research really knows no bounds. Most speakers are in the same generation as ourselves which also helps

to spark motivation amongst the participants. I am personally motivated to conduct research that I can someday present at one of these lectures.

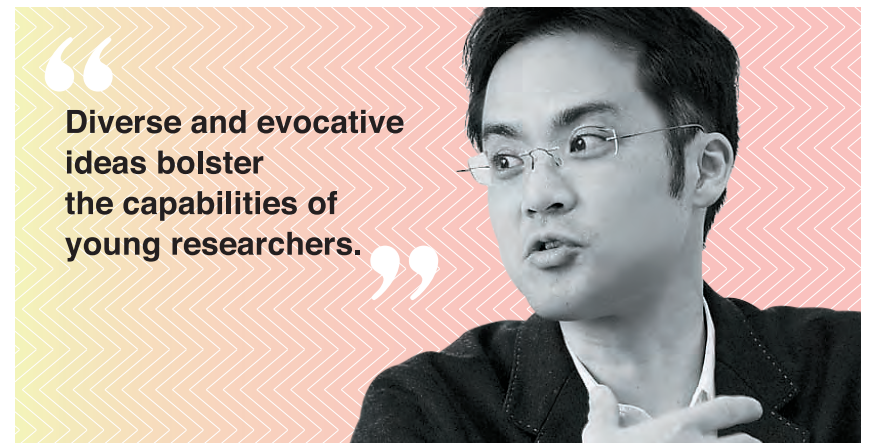
**SATO** | I agree. All researchers have hopes and ambitions for the future, and one of the roles of these lectures is to provide an opportunity to realize those goals. The executive committee hopes to choose speakers who have technology that can become the core of joint research projects or lead to outstanding findings.

**HAMAGUCHI** | These speakers will answer the types of questions that you ordinarily would not be able to ask people outside your own university, and there is always a great deal of active discussion during each lecture. Even the most seasoned scientists with outstanding skills will share stories of the difficult path to results, stories that you would never encounter at an academic conference. Hearing these stories makes it easy to empathize with such difficulties, making them valuable.

**SHINJO** | After the lectures, we have a reception where attendees that include graduate students can chat with the lecturers and share in the interaction. I can see how others in similar situations to mine are working hard on their projects, and this inspires me.

**IGUCHI** | One thing we would like to see, is for more clinical researchers to join us. Most of the presentations are not directly linked to medical practice and it is difficult for busy clinicians to find enough time and interest to attend our events. So, this is an issue we must address.

**HAMAGUCHI** | Our speakers currently span a broad range of research fields



and topics. In addition to neurology and cancer, we are expanding to include stem cells and genetic diseases. We would really like to see more clinicians attend these lectures and join in our discussions.

**SATO** | Two women have already joined our executive committee for this very purpose, fortifying our management. We now have equal numbers of clinical and basic scientists and men and women, so we expect our operations and content creation to become even richer.

Fostering a motivated research environment allows growth of many joint projects

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

**SHINJO** | Fewer medical school graduates are becoming researchers,

but all members of this executive committee have graduated from medical schools. We hope to instill the value of medical research through these lectures, not only in the graduate students, but also the undergraduate medical students as well. Women scientists are particularly scarce and so we hope to encourage more women to join our ranks by appealing how fascinating medical research can be.

**HAMAGUCHI** | 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 entire campus atmosphere becomes more active and engaged. We hope that this fosters an environment conducive to active and engaged research and discussion.

**IGUCHI** | As far as I know, in North America, there are few walls or barriers separating departments. An open culture is spreading where all 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 between laboratories. In the future, we hope to further enhance the usefulness of these lectures, connecting them to cooperative and improved research.

