The 11th GCB Winter School for Medical Physics
The 7th GCB Winter School for Molecular Biomedical Science and Diagnosis
Survey Results Report

26 Feb 2025
Global Center for Biomedical Science and Engineering

The 11th GCB Winter School for Medial Physics and the 7th GCB Winter School for Molecular Biomedical Science and Diagnosis were organized in collaboration with Stanford University from 17 to 21 February 2025. Following the summer schools in 2023, the winter schools were held onsite, bringing together participants from abroad and the Graduate School of Biomedical Science and Engineering. Unlike the online event, the number of participants that can be accommodated onsite is rather limited, making the screening process more competitive and difficult. Of those who passed the highly competitive screening process, this year's winter school welcomed 5 participants in Medical Physics and 14 participants in Molecular Biomedical Science and Diagnosis from 8 countries (namely, Poland, Indonesia, Egypt, Philippines, South Korea, Germany, USA, and Japan) with diverse backgrounds.

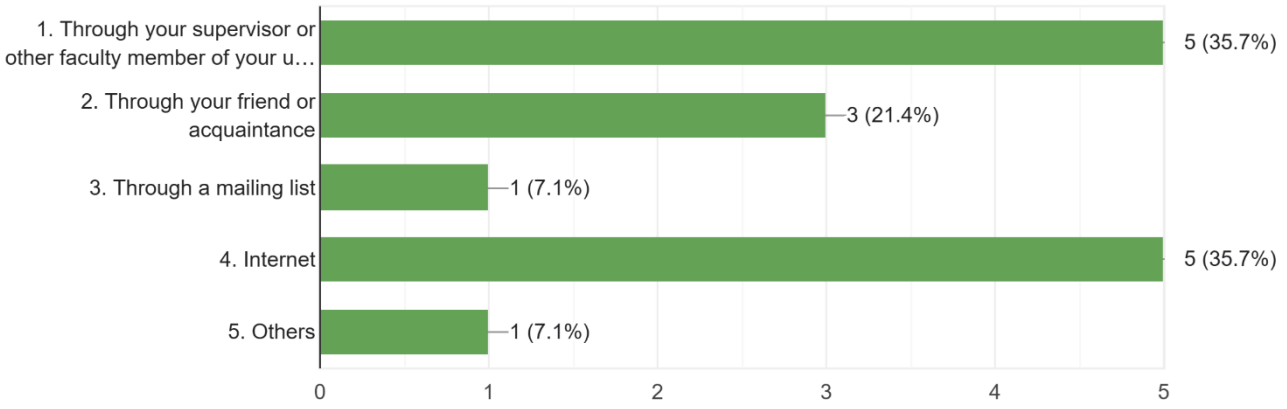
During the five-day intensive programs, lectures on a wide range of topics were given not only by lecturers from Hokkaido University, but also by world renowned researchers invited from home and abroad including Stanford University, Arizona State University, National Institutes for Quantum Science and Technology, Kyoto University, the Institute of Statistical Mathematics, and Hitachi, Ltd. There were lively question and answer sessions in all lectures. The lecturers were more approachable and attentive, allowing participants to take the initiative in deepening their understanding of the topics and exchanging ideas.

A survey was conducted during the final chapter of the programs. Overall, positive feedback was received, with 92.9% of participants very satisfied and 100% satisfied with the winter school. The quality of the lectures and that they were well organized. In terms of content, the hands-on practical training, which has always been well received, was no exception this time, with many requesting more hands-on sessions. For more details, please see the graphs and comments below. We would like to thank once again all the participants and all those who provided constructive feedback and we will use the feedback received for the next edition of the summer school.

INFORMATION RESOURCE

1. How did you know that the GCB Winter School was recruiting participants?

14 件の回答



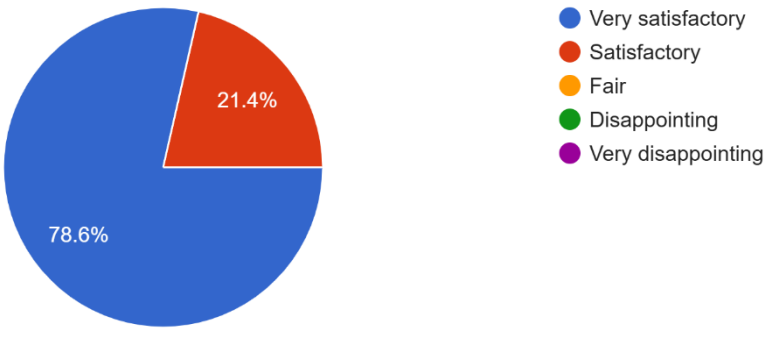
2. If your answer to the above questions is either 3,4 or 5, please give us some details.

- I have been checking for potential options for PhD and found the GCB website, which fit ideally my interests. Then, I've noticed the Winter School invitation and was amazed with the possibility.
- From my friends who's participated to the previous Summer School in Hokkaido University
- I am in a Medical Physics Email group in USA and information is shared by members about opportunities for development. The email group is MEDPHYUSA.
- Google "medical imaging winter school" and find the GCB winter school
- Google Search
- I found it on the GCB website

LECTURES & MATERIALS

1. How did you feel about the quality of lectures?

14 件の回答



2. How challenging did you find the level of the lectures?

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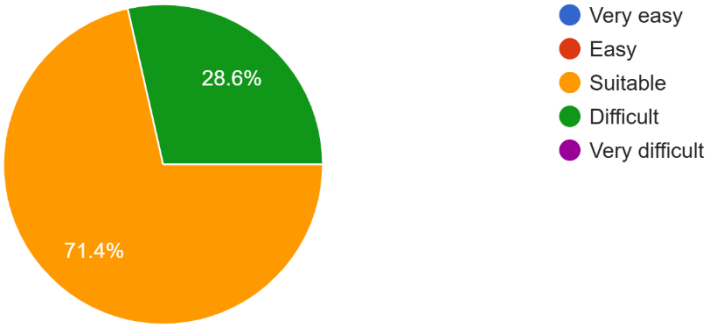

3. How did you feel about the lecture materials distributed via USB or by printing?

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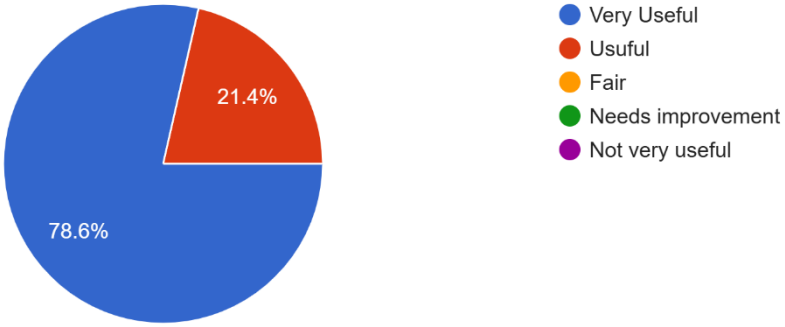


4. Please tell us about the lecture that was most impressive to you and explain why.

- Dr Gensheimer’s lecture because it is clinical and practical. Also, Dr Nam's lecture because she explained well.
- I was most impressed by how Dr. Khin Khin Tha was able to deliver such a challenging presentation, so that everybody understood and was amazed. It was also very inspirational to me as a young computer scientist and medical student.
- Proton Therapy, RTRT, and also radiation biology
- Hands-on practical training because it is very fun to learn
- A lot actually. If I can list a few that were eye openers, Prof Aoyama lectures on therapeutic ratio, Dr Yang lectures on AI-auto planning, Prof Xing lectures on Medical Physics an precision oncology, Dr Kobashi lectures on NTCP models.
- Introduction to proton therapy systems (that was the first lecture that talked about the proton and so that I can follow the next lecture)
- Recent advances in cancer radiotherapy using molecular imaging and radioisotopes, it's new topic to me and I have no knowledge for this, from the talk I could understand the detect

hypoxia and I want check literatures and find dataset if anything is available. I got good new topic!

- AI in diagnostics Imaging, because it included very interesting topics.
- Introduction to AI with Keras (GANs) Dr. Kenneth Lee Sutherland prepared the lecture very carefully, and it is easy to understand what GANs is and the application of it. I hope to try this method in my future study and hope to learn more about it.
- MP_15_Dr. Nomura, in his lecture, the concept of deep learning was shown by a easy way.
- Medical physics and Imaging for precision oncology. This lesson made me learn more new techniques about AI. Broaden my horizons.
- About AI combining with medical imaging.
- Molecular radiation biology because it was a new topic for me.
- The lecture about BCNT was completely new to me and extremely interesting

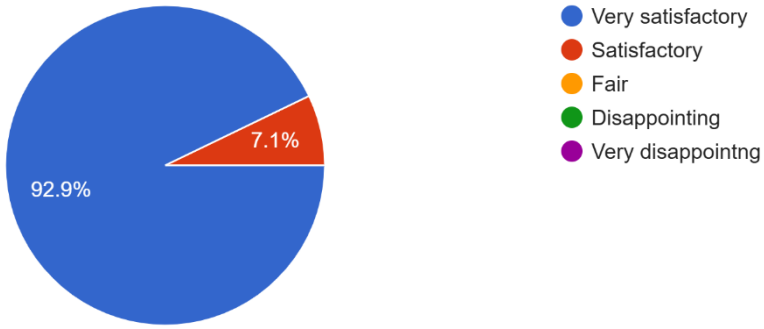
5. Please tell us about the practical training/tour that was most impressive to you and explain why.

- Radiation biology lab. It was hands on and interesting for my line of work.
- MRI as it is my main interest, and the demonstration has really deepen my understanding of the subject.
- RTRT and hands on treatment planning for proton
- biology because this microscope is hard to be used in China
- RTRT and Proton Therapy Tour
- Hands-on Practical Training : 4DRT (Because this is my first time learning about RTRT and that is really good)
- Hands-on Practical Training: MRI & Nuclear Medicine, all explanation with demonstrating scanner makes me understand better and now I knew MR and PET better than before
- I liked all of them, as they were pretty detailed
- Nuclear Medicine. Dr. Mizuno is very kind and humorous. According to his lecture, I learned a lot about nuclear medicine and animal exercises.
- 23_Facility Tour, This showed us the cyclotron and proton treatment system, which is impressive.
- Hands on practical training: nuclear medicine. Because it was my first time to learn the experiments about nuclear medicine. I know how to take safe actions and the difficulty finding the mouse tail vein for injection.
- Learned about other types of fluorescence imaging.
- Proton therapy because it was my first time to see it.
- The practical training with the treatment planning Software was the most interesting for me. Since I have never done a treatment plan and want to work in a clinic.

SUMMARY

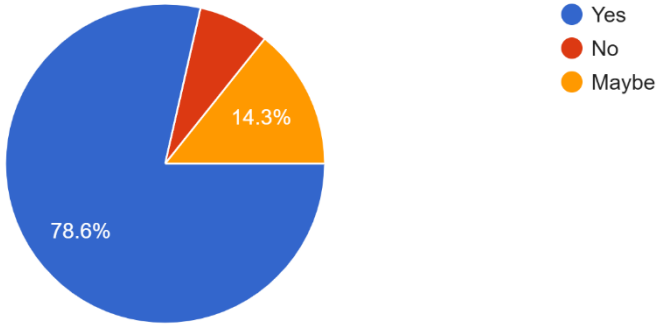
1. How do you rate the winter school overall?

14 件の回答



2. We plan to organize the GCB Summer School in August 2025. Would you be interested in participating?

14 件の回答



3. Please write your comment below. (Requests, Advice to improve the winter school, complaints, etc.,)

- Very good and very organized. Staff are very helpful. Professors are experts in their fields.
- I would like to thank you for the opportunity and the wonderful organisation. It will be my pleasure to join future lectures organised by the university.
- Thank you very much for this opportunity and I learned a lot about new things especially in advanced radiotherapy
- perfect
- This program is amazing. I will be sharing this with everyone everywhere I go as I progress with my career. Having lecture notes is also great for learning after the program.
- The program is so good, maybe the duration should be expanded
- I sincerely thank all of the professors, doctors, and students (supporters) and also I want to emphasize the coordinators really helping lot for us. I really enjoyed the winter school, and I

appreciate it.

- All good, no complaints
- There is no requests or others
- I hope the video included in the lecture slides can be appended to the lecture materials, as it cannot be played in the PDF format. Additionally, I would appreciate it if more time could be allocated for the hands-on practice. It would also be helpful if the example code practice from MP_15_Dr. Nomura's lecture could be included as part of the hands-on session
- Very nice experience. I will participate again.
- GCB is really a good chance for me to learn a lot of knowledge, thank you so much.
- No comment, it was perfect.
- I would love to see even more hands-on experience :) But in general it was a very nice winter school! Thank you!