

Message from the scholar

TITLE: Pursuing Excellence in Radiation Oncology at Gunma University,  
A World-Leading Environment for Carbon Ion Radiotherapy

Name: Fahmi Radityamurti  
Previous Institution:  
University of Indonesia / Dr. Cipto Mangunkusumo  
National General Hospital Jakarta  
Department/Program:  
Radiation Oncology (Doctoral Program)



### 1 Reason for choosing Gunma University

I chose Gunma University because it is one of the premier institutions in Japan and the world for advanced training in radiation oncology, particularly in the field of carbon ion radiotherapy.

Gunma University Heavy Ion Medical Center (GMHC) is a pioneering facility, being the first university hospital in Japan to establish a dedicated heavy ion treatment center. With decades of clinical and biomedical expertise, it offers unparalleled opportunities to study cutting-edge particle therapy that provides superior dose conformity and effectiveness against radio-resistant tumors while minimizing damage to surrounding healthy tissues.

Coming from a busy clinical background in Indonesia, I was drawn to Gunma's strong integration of clinical practice, translational research, and innovative technology. This environment perfectly aligns with my goal of deepening both my clinical knowledge and research skills in modern radiation oncology.

### 2 Research Plans and Focus and Activities in GU Doctoral program

In the doctoral program, my research focuses on radiation oncology and tumor immunology. My daily activities center on laboratory-based work, including in vitro studies using cancer cell lines, immunoblotting, quantitative PCR, and immunofluorescence microscopy. I also benefit from regular consultations and close supervision by experienced faculty members.

This hands-on approach allows me to explore how carbon ion irradiation interacts with the immune system, aiming to contribute to more effective combined therapies in the future. The program provides an excellent balance between rigorous basic research and its potential clinical translation.

### 3 Impact of Financial Support from GU

The financial support I received from Gunma University has been essential in making this study abroad possible. By relieving the burden of living expenses, it allowed me to leave my clinical position in Indonesia and fully dedicate myself to full-time research and study without financial stress. This grant has truly enabled me to focus on academic

growth and immerse myself in the research environment here in Maebashi.

#### 4 Future Plans

My immediate goal is to complete the doctoral project as efficiently as possible and produce meaningful research outcomes. In the longer term, I plan to return to my home institution (Dr. Cipto Mangunkusumo National General Hospital / University of Indonesia) and apply the advanced knowledge and skills I have gained to improve cancer care in Indonesia. I hope to contribute to building stronger radiation oncology capabilities and international collaborations upon my return.

#### 5 Message for perspective applicants for the Financial Support

If you are considering advanced study in radiation oncology or related fields, Gunma University offers an outstanding opportunity that is truly hard to match.

This is your chance to study at one of Japan's leading institutions in particle therapy, surrounded by state-of-the-art facilities, dedicated supervisors, and an international research environment. The financial support makes it feasible to focus entirely on your academic and research goals.

I highly encourage you to apply—taking this step has been one of the best decisions in my career. The experience, knowledge, and networks you will build here will shape your future as a radiation oncologist and researcher in meaningful ways.