



富山大学  
UNIVERSITY OF TOYAMA

Institute of Natural Medicine

Laboratory of Cancer Biology and Immunology,  
Section of Host Defences, Institute of Natural Medicine, University of Toyama

## **Master student project**

### **Our Lab**

Our research focuses on understanding the biological defence system including immune response, inflammation, and cellular metabolism, and its role in pathological diseases. We mainly study the role of the biological defence system in the protection or progression of diseases, and the effects of natural medicines including Japanese traditional (Kampo) medicines on the biological defence system.

### **The project**

Our research unit studies the control of immunological diseases (cancer, inflammation, allergy) focusing on innate immune cells, which are important for the biological defense system. In particular, we study the biology of natural killer (NK) cells and their importance in the control of immunological diseases. Furthermore, we study the role of the immune response in cancer progression using animal models and in vivo imaging, and the effects of traditional medicines on the control of immunological diseases. The list of potential master student projects are below.

- Elucidation of the regulatory mechanism of NK cell homeostasis and its application for drug discovery
- Drug discovery study by targeting NK cell differentiation/maturation
- Understanding of the mechanism of cancer cell immune evasion and its application for drug discovery
- Elucidation of immune-modulatory effect of Kampo medicine

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## Further Information of Toyama

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