



TOHOKU
UNIVERSITY

We nurture
future Principal Investigator

Future Principal Investigator Program

*Hello
Future
Principal
Investigator!*

Center for Professional Development
Institute for Excellence in Higher Education, Tohoku University



Contact:
Center for Professional Development
Institute for Excellence in Higher Education, Tohoku University
41 Kawauchi, Aobaku, Sendai 980-8576 Japan
Email: tu-fpip@grp.tohoku.ac.jp

Future Principal Investigator Program

FPIP



Message From Director

Professor, Graduate School of Agricultural Science
Director, Center for Professional Development
Institute for Excellence in Higher Education
Tohoku University

Tomonori NOCHI

Tohoku University is pleased to announce the launch of the first program in Japan for researchers who wish to become Principal Investigators (PIs) at research laboratories. The program aims to provide PI candidates with opportunities to improve various skills (other than research) required of PIs. Specifically, the program will cover topics such as mentoring graduate students in the laboratory, leadership as a PI, laboratory management, international mindset, and industry-academia collaboration. Throughout the program, participants will acquire multiple skills necessary to manage a productive laboratory and develop an active research environment that facilitates to attract outstanding students and young researchers.

Four Elements of the Program

- Lab Education **1**
- Leadership Lab Management **3**
- International Sensibility **2**
- Industry-Academia Collaboration **4**

Meetings	Theme / Goal	Dates	Title
1st	Kick Off	November 2023	
2nd	First Theme (Realization)	December 2023	Learning from active lab leaders ①
3rd		January 2024	Learning from active lab leaders ②
4th		February 2024	Learning from active lab leaders ③
5th	Second Theme (Changing Perspectives)	April 2024	Science lab and SoTL
6th		May 2024	STEM education in science labs and DBER
7th		June 2024	Mentoring in the science lab
8th		August 2024	Cultivating and Implementing International Sensibility for Principal Investigators (PIs)
9th		September 2024	Debating with the head of an overseas university's science lab
10th		October 2024	Observations from an overseas university
11th		December 2024	Principal Investigators as a Role Model
12th		January 2025	Research integrity of science lab leaders
13th		February 2025	Learn from leaders of science labs and research organizations
14th		April 2025	Social Implementation of research required of science lab leaders
15th	May 2025	Intellectual property strategies for science lab leaders	
16th	June 2025	Entrepreneurship for science lab leaders	
17th	Become Inspired	August 2025	Interact with top scientists ①
18th		September 2025	Interact with top scientists ②
19th	Results Debriefing	October 2025	

Mentors



Vice President for Public Relations and Promotion of Diversity
Professor of Developmental Neuroscience

Noriko OSUMI



Director and Professor, AIMR
(Concurrent Posts: Professor and Head of Section, Institute for Materials Research)

Shin-ichi ORIMO

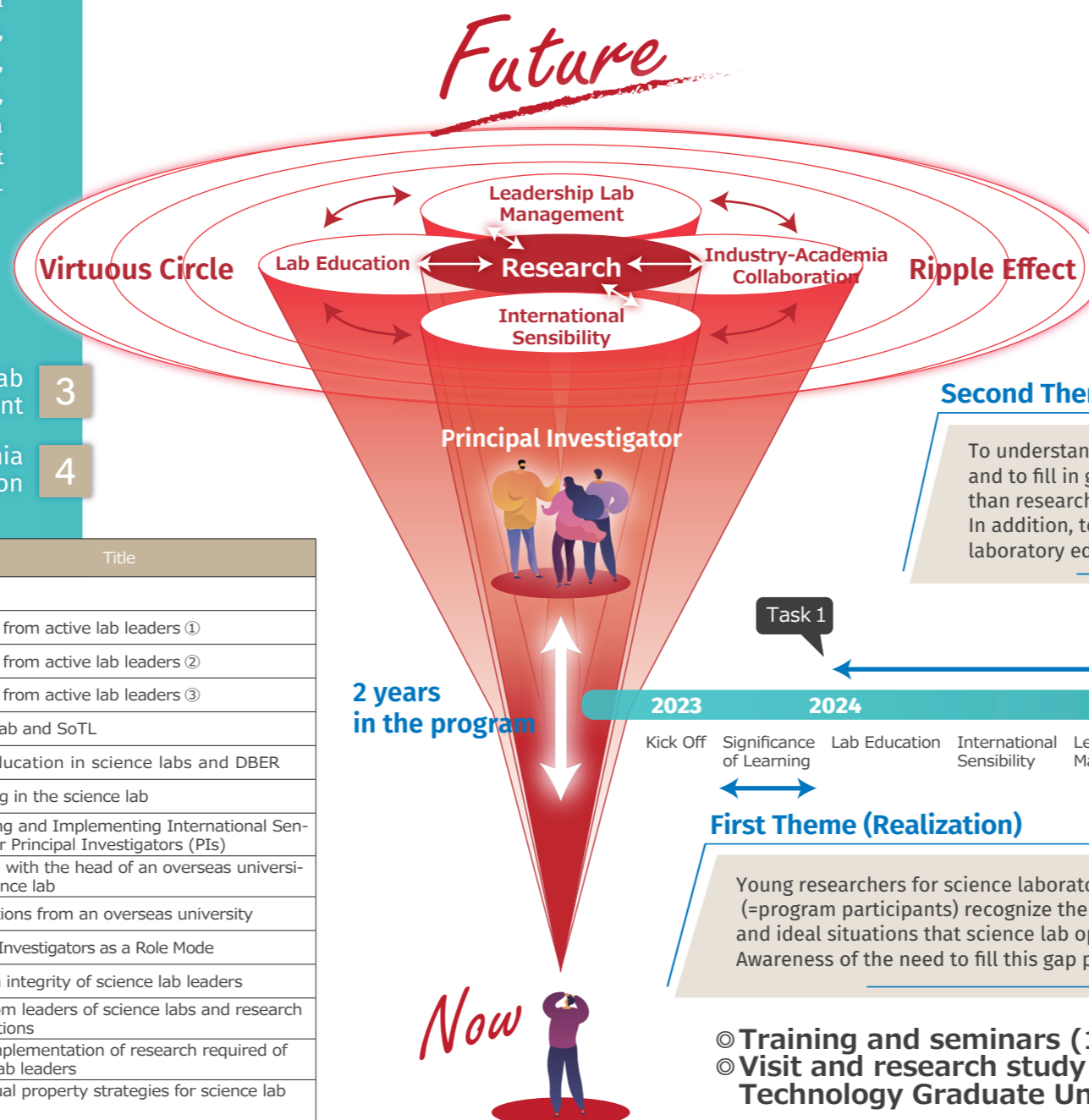


Professor, Laboratory of Organic Reaction Processes,
Graduate School of Science, Tohoku University

Masahiro TERADA

A total of 19 sessions (face-to-face/online) from November 2023 to October 2025 complete the preparations to become a science PI. The main lecturers in this program are from active science PIs (including executives) of Tohoku University. Other participating lecturers come from outside Tohoku University and are familiar with the use of intellectual property and the creation of new businesses and industries. Through the program, participants are required to submit 3 reports on: 1)

the significance of learning; 2) comparisons between other countries; and 3) the outcome of learning (deadlines: 1 March 2024, 2 November 2024, 3 July 2025). In addition, at the final meeting regarding outcomes to be held in September 2025, we will present our observations throughout the two-year program and suggest further changes that will be required to become a successful PI in the future.



Purpose: Developing outstanding researchers who are expected to be involved in the management of science labs
Targets: Research-oriented young university teachers who are interested in running science labs
Period: November 2023–October 2025 Learning method: online/face-to-face (hybrid) / 4 face-to-face seminars over 2 years

Second Theme (Changing Perspectives)

To understand the core elements of awareness from the first theme and to fill in gaps in knowledge by developing various abilities other than research required for the operation of science laboratories. In addition, to encourage improvement and innovation in laboratory education.

Future Outlook

Through this program, young faculty members, who aim to become science PIs, learn to promote innovation in laboratory education and improve their abilities outside of research, leading to a virtuous cycle of laboratory management.

First Theme (Realization)

Young researchers for science laboratory management (=program participants) recognize the gap between the current and ideal situations that science lab operators often feel. Awareness of the need to fill this gap prepares one to be a lab leader.

- ◎ Training and seminars (19 in total)
- ◎ Visit and research study at the Okinawa Institute of Science and Technology Graduate University (OIST)

Operating Structure

