

University Reform toward Sustainability: Issue-Driven Approaches to **Trans**disciplinary Education



Johan Lauwereyns

Professor

Senior Vice President



**KYUSHU
UNIVERSITY**



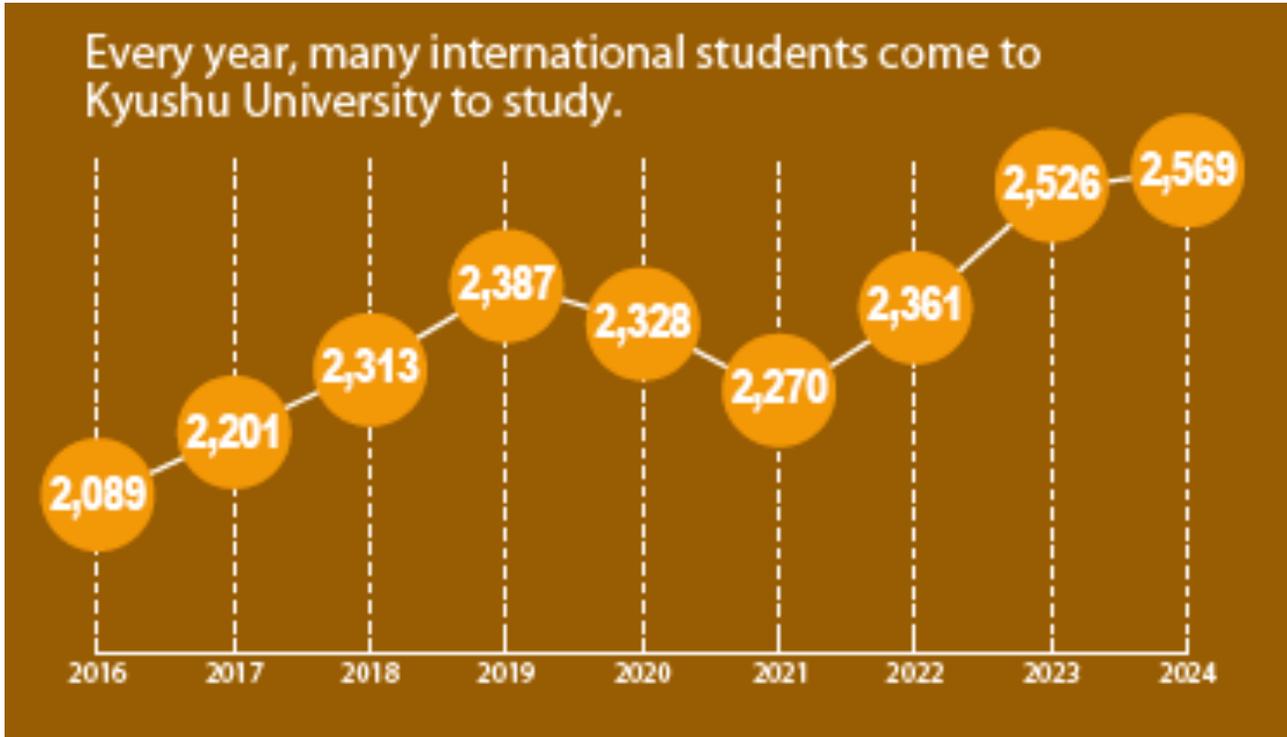
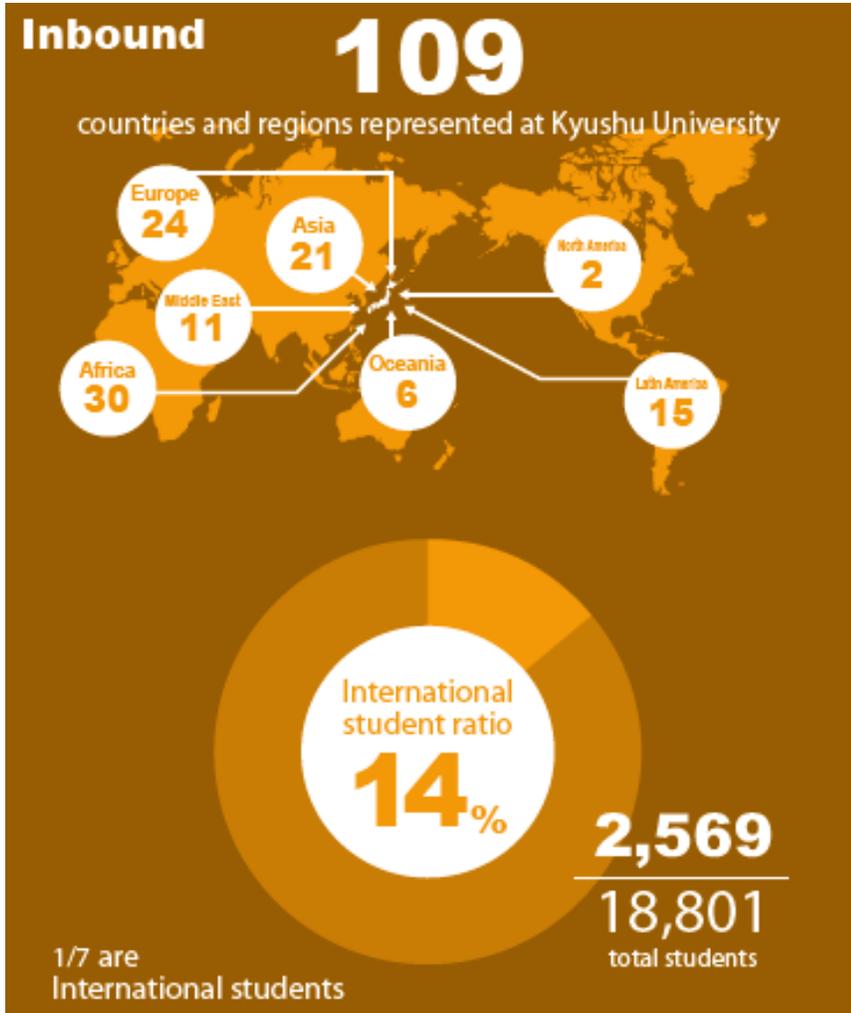
School of Interdisciplinary
Science and Innovation



Fast Facts – Kyushu University

(As of 2024 May)

18,801
 Undergraduate **11,710**
 Graduate **7,091**



Kyushu's Location

New Delhi



Ito Campus

(2,717,130 m²)



Ohashi Campus



Hospital Campus

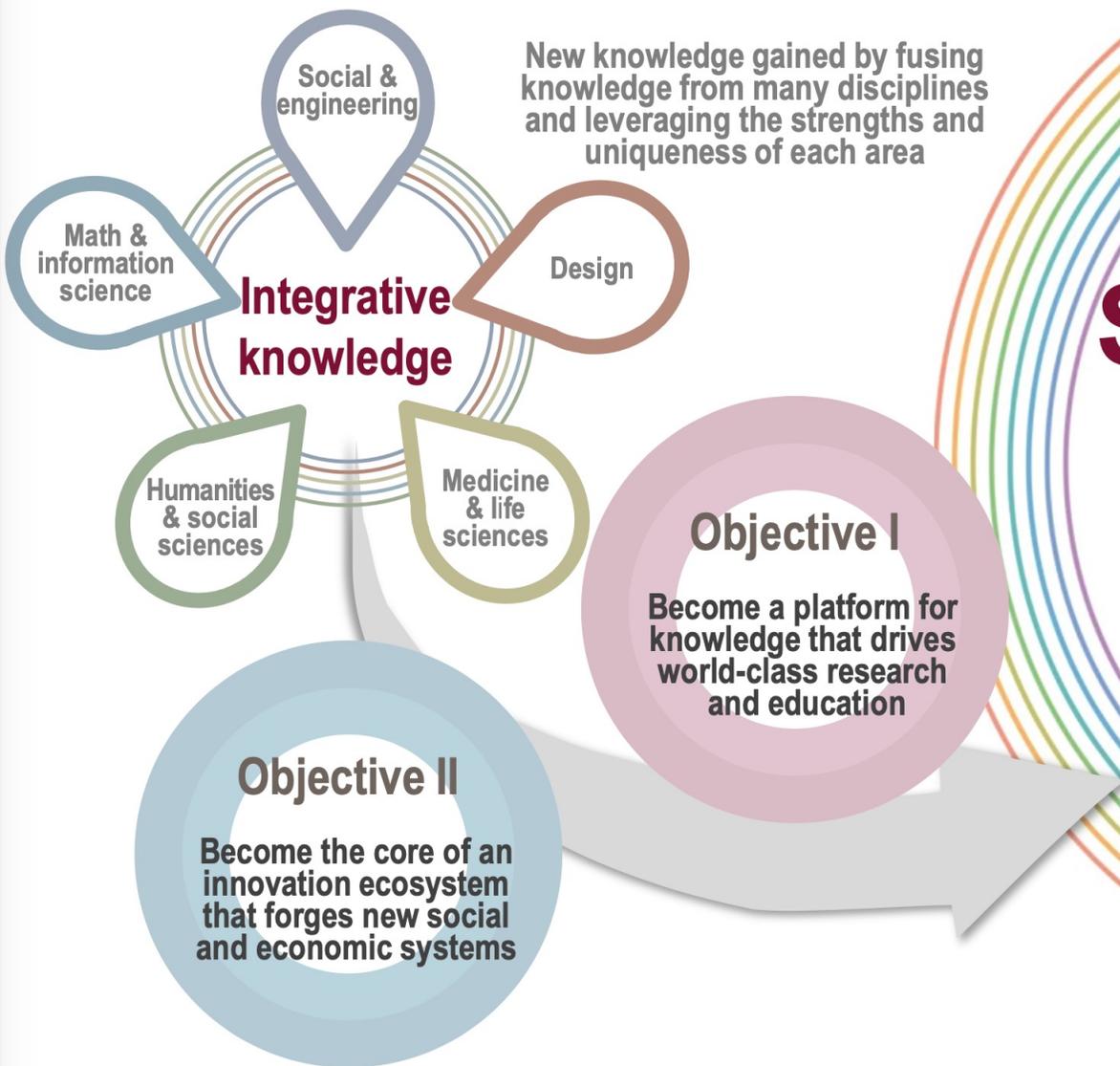


Chikushi Campus





VISION 2030



Driving Social change with Integrative knowledge

8 Visions

toward realization

- VISION 1** Governance
- VISION 2** Digital Transformation
- VISION 3** Education
- VISION 4** Research
- VISION 5** Co-Creation with Society
- VISION 6** International Collaboration
- VISION 7** Medicine
- VISION 8** Finance



VISION6

International Collaboration

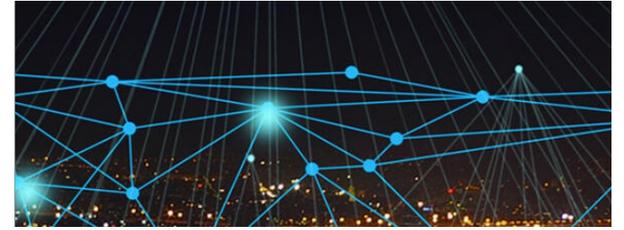
Become a hub for international talent circulation through institution-level international collaborations to tackle global issues and foster future leaders

Expand and deepen strategic international partnerships

Establish a robust collaboration network for early-career researchers

Build a global environment





Promoting student exchange

REAL & ONLINE

Hub for young researchers



International environment ON CAMPUS

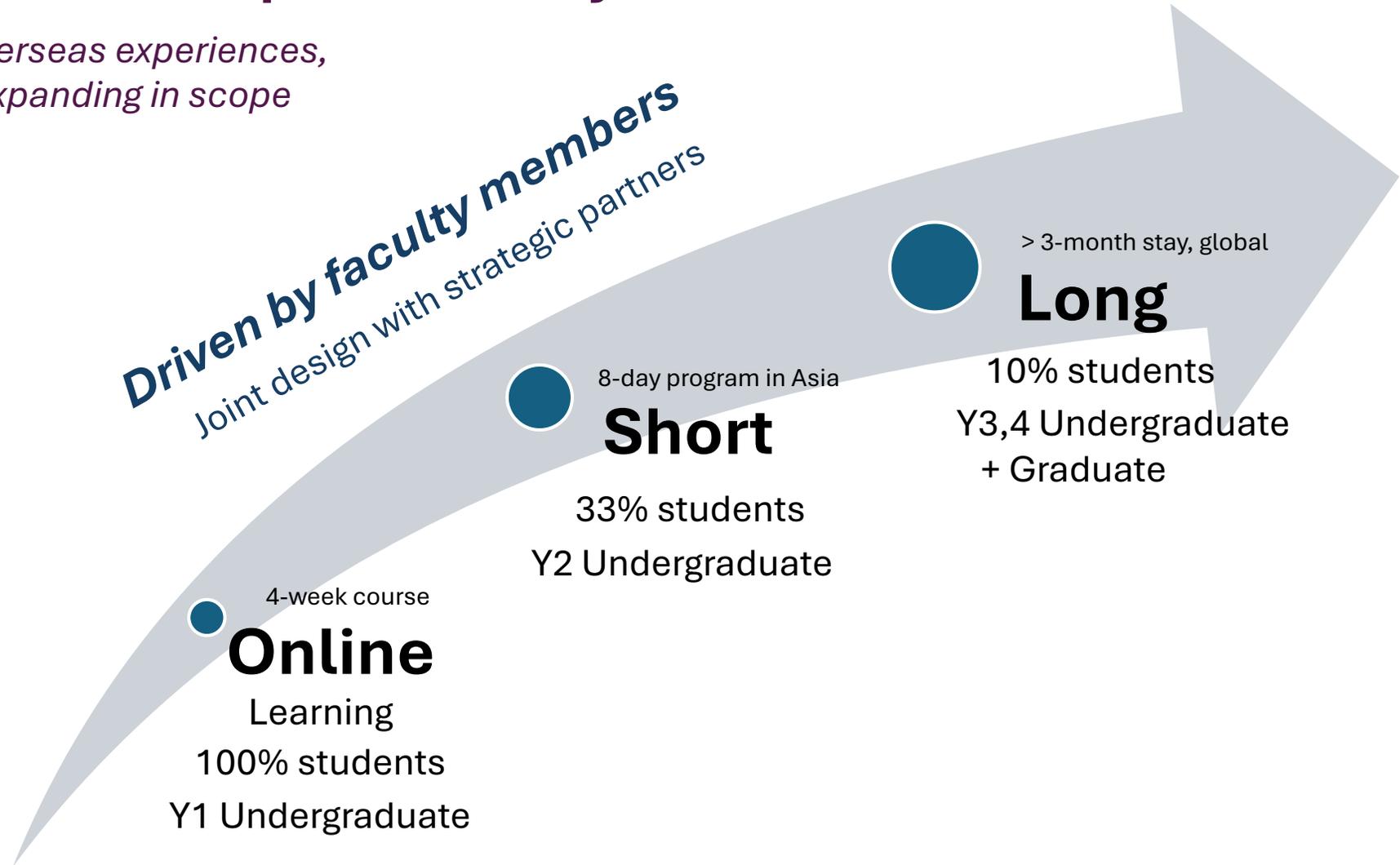


Expansion of overseas network

Kyushu University has more than 100 university-wide overseas exchange partners.

Cascade Model of Impact Mobility

*with multiple overseas experiences,
incrementally expanding in scope*



Background & issues

- Overseas studies are potentially an immense boost to learning
- MEXT, VISION2030, strategic thinking wants a lot more overseas studies
- But Japanese students generally don't engage
 - Too costly
 - No credits
 - Risk of delayed graduation
 - No obvious relevance for career
 - In short: *more demerits than merits*
- Overseas studies are typically separate from curriculum
- Students have to self-initiate
 - Choose from a bewildering number of options
 - Without knowing the purpose
- Students are often *actively discouraged* by their supervisors
 - Perception that overseas studies interfere with lab work or progress on research

Key concept

- **Design *curriculum-relevant* options for overseas studies**
via strategic partnerships, with activities that gradually expand in scope (*online; short in Asia; long, globally*)
- From students' perspective
 - Affordable
 - Credit-bearing
 - Within normal curriculum, graduating on time
- From faculty members' perspective
 - Meaningful
 - No extra workload
- From admin perspective
 - Manageable
 - Efficient at all levels (risk management, reporting...)



School of Interdisciplinary
Science and Innovation
KYUSHU UNIVERSITY

Before 2018

- Specialist education opposite to “Generalist”
- Sciences versus humanities
- Comprehensive University
- Separate programs for international students
- Interdisciplinary = very advanced, for very few



Leadership at Kyushu University realized:
This is not enough.
Losing touch with the changing world.



Concept

New education

共創学部

- Interdisciplinary education
- Not specialist, not generalist, but *connectionist*
- Interactive, collaborative combining specific perspectives
- Integrative knowledge
- Sciences with humanities
- Joint program with international students
- Issue-based, at the forefront of the changing world

Start in April 2018

共創学部

Strategy

1. Issue-Based Approach
2. Global Outlook, Local Projects
3. Interdisciplinary Education
4. Input from all of Kyushu University

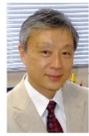


Faculty

Member



Professor-Ikan
ARAYA
Kunio
[Area of Expertise]
International Studies,
Sociocultural Science



Professor-Vice Dean
MIKI
Yoichiro
[Area of Expertise]
Medical Education



Professor-Vice Dean
ONIMARU
Takeshi
[Area of Expertise]
Comparative Law Studies,
Public History



Professor
DRUMMOND
Douglas
[Area of Expertise]
Creative Arts, Planning,
Workshop Studies



Professor
GUO
Junhai
[Area of Expertise]
General Language Learning,
Reading, Japanese as a
Foreign Language,
International Language
Policy



Associate Professor
NAKANO
Nobuhiko
[Area of Expertise]
Literology



Associate Professor
OGA
Toru
[Area of Expertise]
International Politics,
International Relations,
Human Rights Governance,
East Asian International
Law



Associate Professor
OKADA
Masaya
[Area of Expertise]
Information,
Business International
Processes,
Multi-cultural Learning



Associate Professor
SAKAGUCHI
Hidetsugu
[Area of Expertise]
Physics,
Soft Matter Physics



Associate Professor
SENDA
Ryoko
[Area of Expertise]
Geoinformatics,
Archaeology Science



Professor
HAZARIKA
Hemanta
[Area of Expertise]
International Relations,
Security Studies,
East Asian Studies,
East Asian International
Law



Professor
INABA
Miyuki
[Area of Expertise]
International Social Welfare,
Social Welfare,
Development Policy,
Security



Professor
IRAMINA
Keiji
[Area of Expertise]
Asian International Science,
Neuroscience,
Biomedical Engineering



Professor
KABURAGI
Masahiko
[Area of Expertise]
History of Political
Thought



Professor
KAN
Hironobu
[Area of Expertise]
Physics, Geographic
Information Science



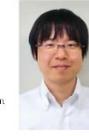
Associate Professor
SEVILLA-LIU
Anton
[Area of Expertise]
Philosophy,
Critical Studies of
Education



Associate Professor
SURCHOWDHURY
Vishwajit
[Area of Expertise]
World International
Politics



Associate Professor
TOKUHISA
Satoru
[Area of Expertise]
Senior Lecturer,
Human Resource Education,
Innovation Management



Associate Professor
UCHIDA
Satoru
[Area of Expertise]
English Linguistics



Associate Professor
WAKI
Hayato
[Area of Expertise]
Optical Information
Technology



Professor
KONOMI
Shin'ichi
[Area of Expertise]
Economics



Professor
LAUWEREYNS
Johan
[Area of Expertise]
Cognitive Science,
Business



Professor
MASUO
Chisako T.
[Area of Expertise]
Chinese Foreign Policy,
East Asian International
Relations



Professor
MIZOGUCHI
Koji
[Area of Expertise]
Archaeology



Professor
NAGASHIMA
Hiroki
[Area of Expertise]
East Asian History,
International History,
History of Japanese
Politics



Associate Professor
YAMAGATA
Yukihiko
[Area of Expertise]
Power Systems and
Engineering



Associate Professor
YAMAO
Dai
[Area of Expertise]
Local Politics,
Middle East, Public
Administration



Lecturer
KURITA
Kenichi
[Area of Expertise]
Applied Economics



Lecturer
MATSUO
Kazunori
[Area of Expertise]
Entomology, Agriculture



Lecturer
WEISS
David
[Area of Expertise]
Japanese and East
Asian Studies,
History



Professor
NAKAMURA
Mako
[Area of Expertise]
Music and Society,
Sociocultural Studies



Professor
OHGA
Chiharu
[Area of Expertise]
Chinese Foreign
Relations



Professor
OOKOUCHI
Yutaka
[Area of Expertise]
Early Modern,
United States



Professor
SE
Teruhisa
[Area of Expertise]
Political Philosophy



Professor
TAJIRI
Yoshinori
[Area of Expertise]
Archaeology,
East Asia Archaeology



Lecturer
YAMAMOTO
Asuka
[Area of Expertise]
Development Economics,
Urban Economy



Assistant Professor
ADACHI
Tatsuro
[Area of Expertise]
Geology, Petrology,
Archaeology



Professor
YOSHIDA
Kentaro
[Area of Expertise]
Environmental
Economics and
Policy Studies



Associate Professor
ARIGA
Tomoko
[Area of Expertise]
Experimental Particle
Physics



Associate Professor
BREZINA
Jan
[Area of Expertise]
Political Philosophy



Associate Professor
FUJIOKA
Yuichiro
[Area of Expertise]
Economic Ecology,
Area Study in Africa



Associate Professor
FUNAHASHI
Kyoko
[Area of Expertise]
Dokushology

Adjunct Member



Professor
CAAVEIRO Jose
[Area of Expertise]
Plant Engineering,
Structural Biology



Professor
HYAKUMURA Kimihiko
[Area of Expertise]
Natural Resource Management



Professor
ITO Koji
[Area of Expertise]
Japanese Medieval History



Professor
KUSUMI Junko
[Area of Expertise]
Volcanic Ecology



Professor
KUWAHARA Yoshihiro
[Area of Expertise]
Mineralogy



Professor
MATSUNAGA Noriko
[Area of Expertise]
Molecular Biology, Systemic
Genetics



Professor
NAMIGATA Tsuyoshi
[Area of Expertise]
Comparative Literature



Associate Professor
FURUKAWA
Fukachi
[Area of Expertise]
Cultural Anthropology,
Human Science



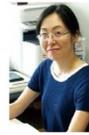
Associate Professor
GDE Pandhe
Wisnu
Suyantara
[Area of Expertise]
Literary Research



Associate Professor
HALL
Andrew
[Area of Expertise]
Modern Japanese and
East Asian History



Associate Professor
HASWELL,
Christopher
Gareth
[Area of Expertise]
English as a Foreign
Language



Associate Professor
INAGAKI
Shio
[Area of Expertise]
Nonlinear and
Nonequilibrium Physics,
Gravitational Physics



Professor
OTSU Takahiro
[Area of Expertise]
English Linguistics



Professor
TOYA Koichi
[Area of Expertise]
Clinical Psychology



Professor
UCHIDA Seiichi
[Area of Expertise]
Pattern Recognition



Professor
YAMASHITA Jun
[Area of Expertise]
Environmental Geography



Associate Professor
ABE Yasuhisa
[Area of Expertise]
Human Geography



Associate Professor
AUGUSTINE Matthew
Ho, Hsin-Ni
[Area of Expertise]
Historical Linguistics



Associate Professor
KANEKO Kosuke
[Area of Expertise]
Multi-media Information
Technology



Associate Professor
KANAYAMA
Koji
[Area of Expertise]
Sociocultural Theory



Associate Professor
KANG Ikjoon
[Area of Expertise]
Psychology,
Behavioral Psychology



Associate Professor
KITSUKI
Akinori
[Area of Expertise]
Development Economics,
Microeconomics,
Policy Evaluation



Associate Professor
LI
Xiaoyan
[Area of Expertise]
Second Language
Acquisition



Associate Professor
NAGATANI
Chiyoko
[Area of Expertise]
Cultural Anthropology



Associate Professor
KASAHARA Tamao
[Area of Expertise]
Stream Hydrology and
Geomorphology



Associate Professor
KIDA Shinichiro
[Area of Expertise]
Physical Geography



Associate Professor
KITAZAWA Mitsuru
[Area of Expertise]
Economic History



Associate Professor
KOBAYASHI Toshiya
[Area of Expertise]
Science, Technology and Society



Associate Professor
OGINO Yukiko
[Area of Expertise]
Electronics



Associate Professor
OKAMOTO Tsuyoshi
[Area of Expertise]
Systems Neuroscience



Associate Professor
SEINO Satoquo
[Area of Expertise]
Ecological Engineering



Associate Professor
WATANABE Satoshi
[Area of Expertise]
Hydrology



Lecturer
MATSUEDA Kana
[Area of Expertise]
Comparative Literature and Culture



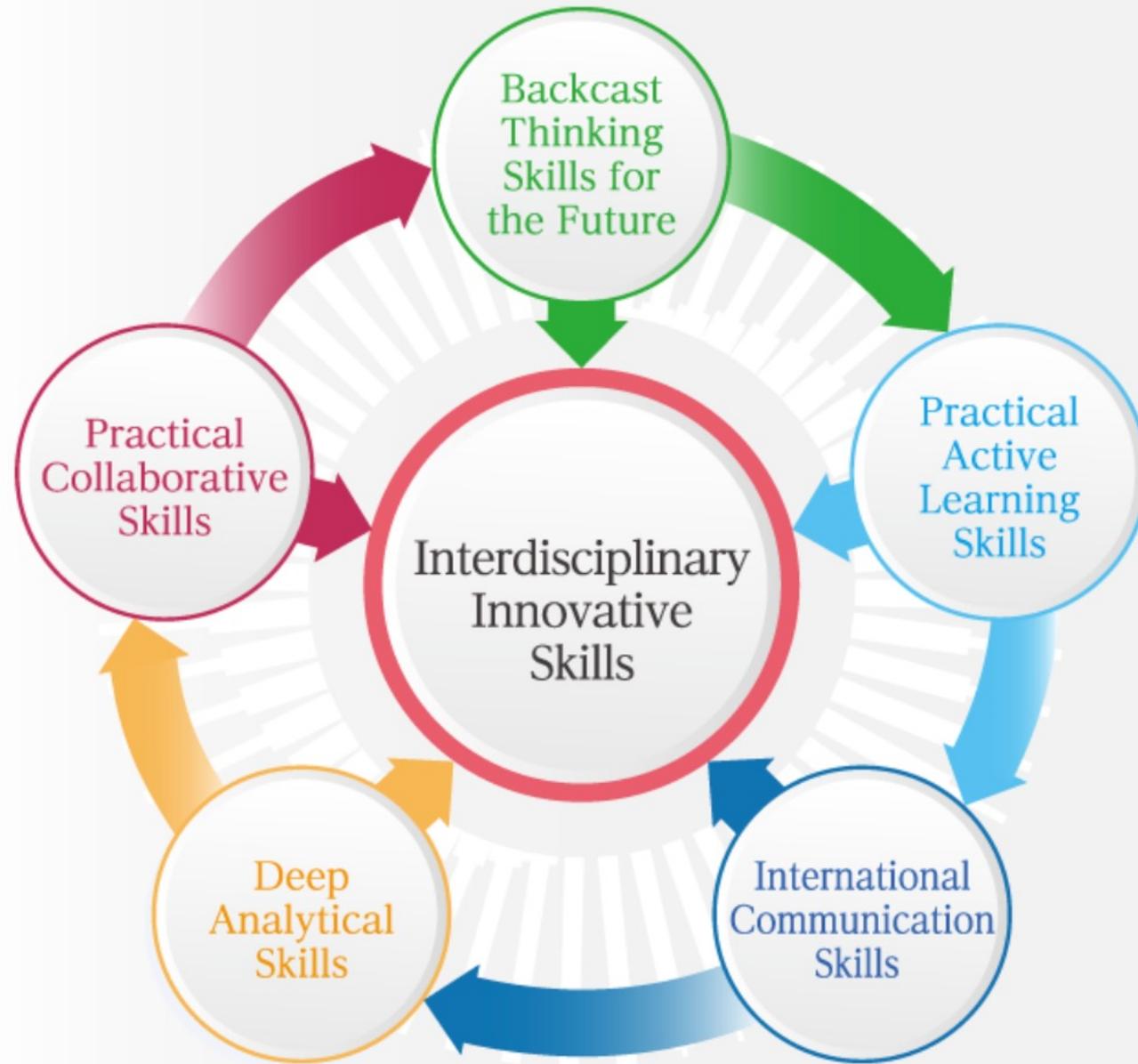
Lecturer
TAKITA Masahiro
[Area of Expertise]
Comparative Literature



Assistant Professor
INAMURA Tokushu
[Area of Expertise]
Innovation



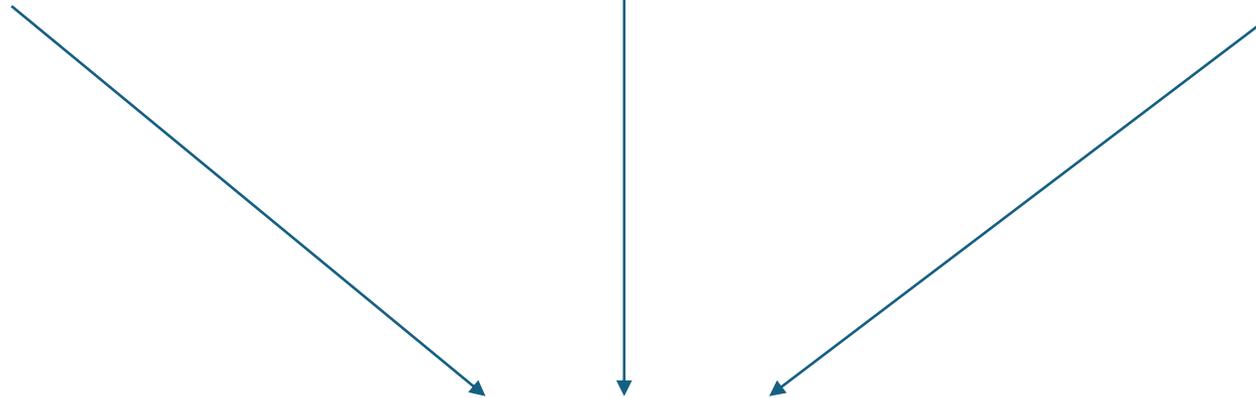
Assistant Professor
MA Boxuan
[Area of Expertise]
Advanced Information Technology



Human Health

Animal Welfare

**Sustainable
Environment**



Less is more

Using fewer animals, taking better care of them



The End of Meat Is Here

If you care about the working poor, about racial justice, and about climate change, you have to stop eating animals.

The Vegetarians Who Turned Into Butchers

How several former vegans and vegetarians across the country came to see meat as their calling.



Ms. Kavanaugh holding rib steaks she just butchered. The well-marbled meat is a signature of her shop, which specializes in 100-percent-grass-fed and -finished beef. Ryan Dearth for The New York Times

palgrave▶pivot

**RETHINKING
THE THREE R'S IN
ANIMAL RESEARCH**

Replacement,
Reduction, Refinement

Jan Lauwereyns





<https://doi.org/10.1038/s41684-024-01476-2>

Toward a common interpretation of the 3Rs principles in animal research

Jan Lauwereyns, Jeffrey Bajramovic, Bettina Bert, Samuel Camenzind, Joery De Kock, Alisa Elezović, Sevilay Erden, Fernando Gonzalez-Uarquin, Yesim Isil Ulman, Orsolya Ivett Hoffmann, Maria Kitsara, Nikolaos Kostomitsopoulos, Winfried Neuhaus, Benoit Petit-Demouliere, Simone Pollo, Brígida Riso, Sophie Schober, Athanassia Sotiropoulos, Aurélie Thomas, Augusto Vitale, Doris Wilflingseder & Arti Ahluwalia



Check for updates

Ethics of controlled human infection to address COVID-19

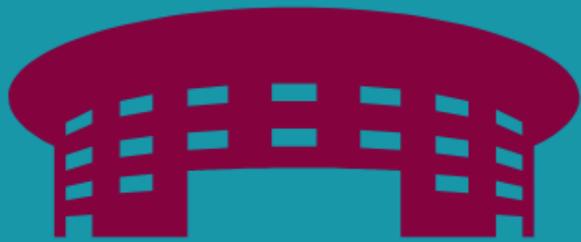
High social value is fundamental to justifying these studies



Elisa Granato was the first volunteer to be injected

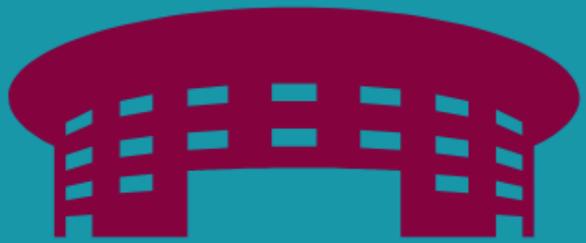
- ***Targeting achievable absolutes***
 - ***Setting categorical boundaries with clear no-go's***
 - ***Setting numerical targets***

- ***Engaging stakeholders***
 - ***General public, education, awareness***
 - ***Not antagonizing, but collaborating with the industries toward better practices***



OPEN
MIND
CREATIVE
SPIRIT

- *Strategic International Advisory Group (SIAG) is an initiative by Kyushu U to involve international faculty members in governance*
- *SIAG operates as a thinktank formulating action proposals to promote internationalization and works directly with the University Leadership to move from proposals to implementation through project-based cooperation.*
- *SIAG also organizes Faculty Development sessions in English on a broad range of topics relating to work at Kyushu U and life in Japan.*



OPEN
MIND
CREATIVE
SPIRIT



- *SIAG has been able to work directly with the Department of International Affairs and with the University Leadership to move from proposals to implementation through project-based cooperation.*
- *The University Leadership further facilitates this process by appointing international faculty members to senior management roles.*
- *Thus, Kyushu University leads the way toward internationalization by applying **a unique model of integration in governance.***