



# Overview of Research in NU

## Nagoya: A Global Industrial Powerhouse





As the leading university of this area, **Nagoya University** provides an outstanding environment for academia-industry collaborative research and open innovation

#### **Outline**

- Located at the center of the main island, in the heart of business and industry
- 1.5h from Tokyo, 50min from Osaka/Kyoto
- 2.3 million population in Nagoya (4th in Japan)

#### Industry

- Best known as a global industrial powerhouse
- Over 100 international enterprises have headquarters in the Nagoya area
- The production of the "Greater Nagoya" area is ranked 20th within the GDP ranking of world nations.



























## Nagoya: A Global Industrial Powerhouse









HONDA



Head quarters and technical centers of leading automobile manufactures

## History, Culture, Trading, Agriculture & Science







Nagoya Castle



Ise Jingu



Agriculture



Nagoya Port

#### Ports in Japan: Cargo volume

1.	Nagoya	168M t
2.	Tokyo	80M
3.	Yokohama	93M
4.	Osaka	79M
5.	Kobe	82M



Nagoya University

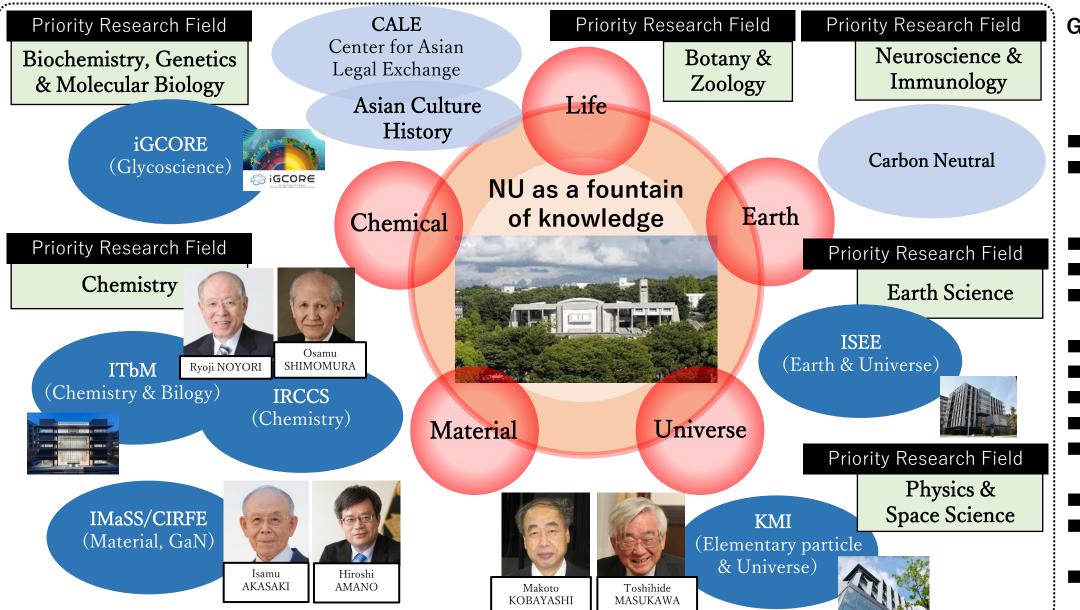


World Cosplay Summit 2003∼

## Overview of NU Research







#### **Graduate Schools**



- Humanities
- Education & Human Development
- Law
- Economics
- International Development
- Informatics
- Science
- Medicine
- Engineering
- Bioagricultural Sciences
- Mathematics
- Environmental Studies
- Pharmaceutical Sciences

## **Science and Engineering**







#### **IMaSS**



Institute of Materials and Systems for Sustainability

Joint Usage/Research Center supported by MEXT

From Materials and Device
Development to System Technology



#### **CIRFE**

Center for Integrated Research of Future Electronics



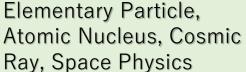
Hiroshi AMANO Director of CIRFE





#### KMI

Kobayashi-Maskawa Institute for the Origin of Particles and the Universe







Makoto KOBAYASHI



Toshihide MASUKAWA







# RCMS Research Center for Materials Science



Ryoji NOYORI

Chemical Science, Molecular Catalysis, Materials Chemistry





## **Science and Engineering**







#### ISEE Institute for Space-Earth Environmental Research

Joint Usage/Research Center supported by MEXT



To clarify the relations between Earth, Sun and cosmic space, treating them as a seamless system, and to solve the global environment issues.







## DMRC Disaster Mitigation Research Center

Interdisciplinary collaborative research on disaster mitigation for community safety.







#### GREMO

Green Mobility Collaborative Research Center



https://www.gremo.mirai.nagoyau.ac.jp/library/latest.html

Comprehensive research on advanced vehicles, mobility services and social impacts, for future mobility society.

NUSIP (Summer Intensive Program at NU) International summer program on automobile technology. Period: 12 Jun-19 Jul, 2024









## Sustainability & Environmental Studies







#### **GSES**

#### Graduate School of Environmental Studies



Interdisciplinary postgraduate course for environmental studies and research "Sustainability" and "Safety and Security" since 2001.



#### **NUGELP**

NU Global Environmental Leaders Program





To foster future environmental leaders who can propose concrete solutions to various environmental problems around the world.



Research Center for Net Zero Carbon Society

To address the "crisis of the Earth" by achieving carbon neutrality and establishing a decarbonized society, our center will engage in cutting-edge research at the world's highest level and solve problems through a fusion of arts and sciences and interdisciplinary research.





## Secure and Ubiquitous Resource and Energy Co-creation Project



Aim for a resource- and energy-independent, co-creating society that finds value in and utilizes unused resources and energy for sustainability.



### **Life & Medical Sciences**







#### ITbM

#### Institute of Transformative Bio-Molecules

WPI (World Premier International Research Initiative) supported by JSPS





Collaboration of cuttingedge synthetic chemistry, animal/plant biology, and theoretical science.

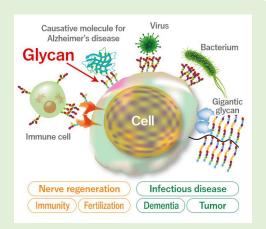


#### **iGCORE**

Institute for Glyco-core Research

Joint Usage/Research Center supported by MEXT

Top-notch interdisciplinary glycoscience research







#### BBC Bioscience and Biotechnology Center

From basic plant science to crop science

for world food security

Advanced research for sustainable food production and CO<sub>2</sub> reduction by improving crop Plant growth Stress response resilience.





## CIBoG WISE Program

Convolution of Informatics and Biomedical Sciences on Glocal Alliances

Graduate education program designed to develop outstanding PhD supported by MEXT

Aiming to develop human resources who can lead the way from medical Al development to social implementation and exit strategies.



## **Humanities & Social Sciences**







#### CALE

Center for Asian Legal Exchange



CALE assists countries in Asia to build up legal systems suitable for the process of nation building.





#### CHT

Research Center for Cultural Heritage and Texts

Interdisciplinary research platform for the humanities, covering all cultural heritage left by mankind, consisting of Divisions of Archives, Material Culture, Visual Culture, and Cultural Anthropology.





#### **TCS**

Center for Transregional Culture and Society

Interdisciplinary research and education platform whose aim is to explore history, artistic imagination and cultural practices. The Centre offers a cinema study PhD program in collaboration with the University of Warwick.



## Institute for Advanced Research (IAR)









Established in 2002 under the leadership of the first director, Dr. Ryoji Noyori, as a research promotion organization to enhance world-class research activities and cross-departmental collaboration for the advancement of science.

#### Mission:

- 1. To showcase the excellent research at Nagoya University
- 2. To provide substantial support for outstanding research, especially interdisciplinary research
- 3. To foster young researchers [Young Leaders Cultivation (YLC) program] [T-GEx program]
- 4. To carry out international activities as a UBIAS member



YLC is a program to recruit and train outstanding young researchers as assistant professors, regardless of their research field, in order to ensure the continued development of education and research at Nagoya University in the future.

**T-GEx** is a program that provides various opportunities for young researchers to expand their network and collaboration, aiming to create a positive cycle of young researchers in the Tokai region. A consortium has been stablished in cooperation with academic institutions and companies in the Tokai region.

Progam's Website: https://www.t-gex.nagoya-u.ac.jp/en/overview/?id=anchor-outline