

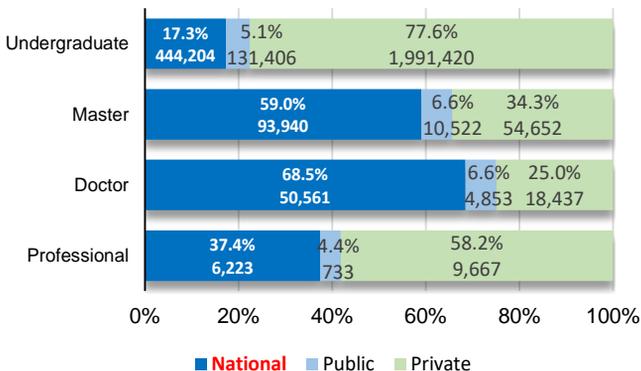
## Current Situation of National Universities in Japan

### Constituent Members

#### Students

By course

(Unit: Persons)



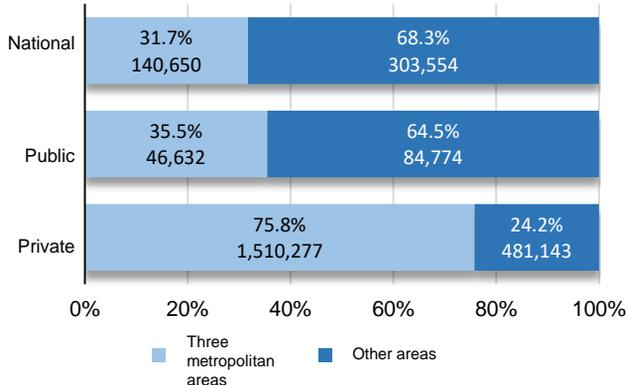
Note: Total may not add up to 100% due to rounding.

Source: Created by the Secretariat of JANU based on "School Basics Survey 2016" issued by MEXT

**Master course and doctor course students at national universities account for approx. 60% and approx. 70% of the total respectively.**

By area (Undergraduate)

(Unit: Persons)



Note: The three metropolitan areas here include Saitama Prefecture, Chiba Prefecture, Tokyo, Kanagawa Prefecture, Aichi Prefecture, Kyoto, Osaka, and Hyogo Prefecture.

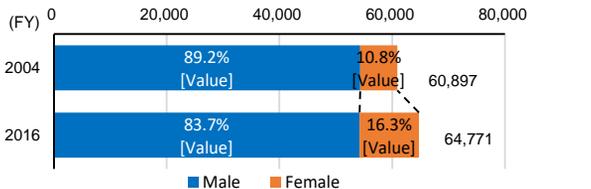
Source: Created by the Secretariat of JANU based on "School Basics Survey 2016" issued by MEXT

**National universities provide university education across the nation.**

#### Faculty

Number of faculty at national universities (by gender)

(Unit: Persons)



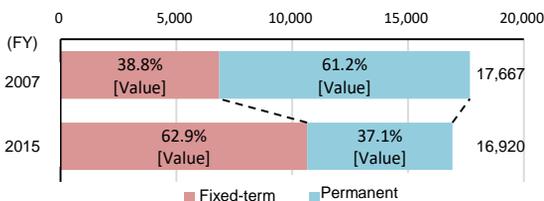
Note: Faculty numbers include only full-time faculty members.

Source: Created by the Secretariat of JANU based on "School Basics Survey" (each year version) issued by MEXT

**Increase in the female headcount and rate**

Employment of faculty members under age 40 at national universities

(Unit: Persons)



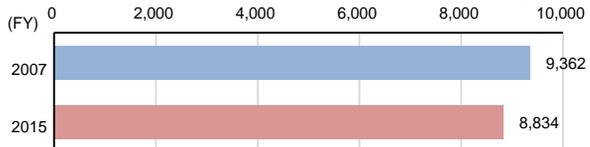
Source: Created by the Secretariat of JANU based on MEXT surveys.

**Decrease in the young faculty headcount and increase in the fixed-term faculty rate**

#### Labor Cost of Managers and Staff

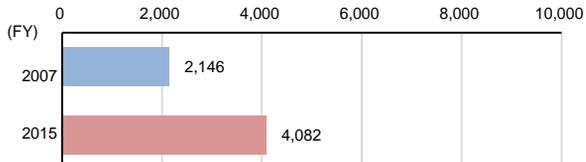
Total of salaries, compensations, etc.

(Unit: 100M yen)



Salaries paid to part-time managers, staff, etc.

(Unit: 100M yen)



Note 1: National university corporations and Inter-University Research Institute Corporation

Note 2: "Total of salaries, compensations, etc." shows the total of compensations, salaries, bonuses, and allowances paid to full-time managers and staff.

Note 3: "Salaries paid to part-time managers, staff, etc." shows the total of salaries, allowances and retirement allowances paid to part-time managers and staff, temporary workers, etc.

Note 4: Welfare expenses (total of legal welfare expenses and non-statutory welfare expenses) are not included.

Source: Created by the Secretariat of JANU based on "Compensation levels of managers and staff at national university corporations, etc." (each year) issued by MEXT

**Decrease in labor cost for full-time managers and staff, increase in labor cost for part-time managers, staff, etc.**



# Research

## No. 1 Local National University in Each Field that Has Been Awarded the Largest Number of Grants-in-Aid for Scientific Research

University	Field	University	Field
Ibaraki University	(Former) Agricultural engineering / Rural planning	Nara Women's University	(Former) Human life Clothing life/ Dwelling life
University of Tsukuba	Web informatics/ Service informatics	Wakayama University	Tourism
	Library and information science / Humanistic social informatics		
	Modeling and technologies for environmental conservation and remediation	Okayama University	(Former) Phytopathology
	Sports science		Respiratory surgery
	Developmental mechanisms and the body works	Hiroshima University	Education
	Applied health science		Sociology of education
	Human geography		Education on school subjects and activities
	Economic statistics		Surgical dentistry
Special needs education	Properties in chemical engineering process/ Transfer operation/ Unit operation		
Nagaoka University of Technology	Environmental technology / Environmental load reduction		(Former) Carcinogens
Shinshu University	(Former) Human life	Yamaguchi University	Pathological inspection
Kanazawa University	(Former) Carcinogens	Kagawa University	Embryonic/ Neonatal medicine
University of Fukui	Childhood science (childhood environment science)	Ehime University	Environmental risk control and evaluation
Shizuoka University	Domestic science / Human life	Nagasaki University	Parasitology (including sanitary zoology)
Hamamatsu University School of Medicine	Psychiatric science		Infectious disease medicine

Note: Local national universities here refer to national universities, other than the former seven imperial universities (Hokkaido University, Tohoku University, The University of Tokyo, Nagoya University, Kyoto University, Osaka University, and Kyushu University), and universities located in the three metropolitan areas (Saitama Prefecture, Chiba Prefecture, Tokyo, Kanagawa Prefecture, Osaka, Hyogo Prefecture, and Kyoto).

Note 2: Universities sharing the No. 1 position with the same number of research fields are also included.

Note 3: Total number of new projects in the past five years

Source: Created by the Secretariat of JANU based on "FY2016 Allocation of Grants-in-Aid for Scientific Research Projects" (October 2016) issued by MEXT

Using each university's strong points and distinctive features to promote various research projects across the country

## Nobel Laureates

Year	Name	Field	Educational Background	Affiliation at the Time of the Award
1949	Hideki Yukawa	Physics	Kyoto University	Kyoto University / Columbia University
1965	Shin-Itiro Tomonaga	Physics	Kyoto University	Tokyo University of Education
1968	Yasunari Kawabata	Literature	The University of Tokyo	—
1973	Leo Esaki	Physics	The University of Tokyo	IBM Thomas J. Watson Research Center
1974	Eisaku Sato	Peace	The University of Tokyo	—
1981	Kenichi Fukui	Chemistry	Kyoto University	Kyoto University
1987	Susumu Tonegawa	Physiology or Medicine	Kyoto University	Massachusetts Institute of Technology
1994	Kenzaburo Oe	Literature	The University of Tokyo	—
2000	Hideki Shirakawa	Chemistry	Tokyo Institute of Technology	University of Tsukuba
2001	Ryoji Noyori	Chemistry	Kyoto University	Nagoya University
2002	Masatoshi Koshihba	Physics	The University of Tokyo	The University of Tokyo
	Koichi Tanaka	Chemistry	Tohoku University	Shimadzu Corporation
2008	Makoto Kobayashi	Physics	Nagoya University	High Energy Accelerator Research Organization
	Toshihide Maskawa	Physics	Nagoya University	Kyoto Sangyo University
	Yoichiro Nambu	Physics	The University of Tokyo	Chicago University
2010	Osamu Shimomura	Chemistry	Nagasaki University	Boston University
	Akira Suzuki	Chemistry	Hokkaido University	Hokkaido University
2012	Ei-ichi Negishi	Chemistry	The University of Tokyo	Purdue University
	Shinya Yamanaka	Physiology or Medicine	Kobe University	Kyoto University
2014	Isamu Akasaki	Physics	Kyoto University	Meijo University
	Hiroshi Amano	Physics	Nagoya University	Nagoya University
2015	Shuji Nakamura	Physics	Tokushima University	University of California, Santa Barbara
	Takaaki Kajita	Physics	Saitama University	The University of Tokyo
2016	Satoshi Ōmura	Physiology or Medicine	University of Yamagashi	Kitasato University
	Yoshinori Osumi	Physiology or Medicine	The University of Tokyo	Tokyo Institute of Technology

Source: Created by the Secretariat of JANU based on NobelPrize.org website

All Nobel laureates graduated from national universities.

## Allocation of Grants-in-Aid for Scientific Research (for newly adopted projects)

(Unit: 1,000 yen)

	No. of Applications	No. of Adopted Projects	Adoption Rate	Amount Subscribed	Allocation Amount (Total)	Direct Expenditure	Indirect Expenditure	Allocation Amount Rate
<b>National</b>	<b>49,769</b>	<b>14,610</b>	<b>29.4%</b>	<b>240,895,669</b>	<b>53,326,390</b>	<b>41,020,300</b>	<b>12,306,090</b>	<b>63.2%</b>
Public	7,735	1,959	25.3%	23,684,098	4,796,870	3,689,900	1,106,970	5.7%
Private	31,361	7,037	22.4%	86,725,154	15,631,590	12,024,300	3,607,290	18.5%
Other	12,369	3,070	24.8%	54,356,421	10,583,040	8,140,800	2,442,240	12.5%
Total	101,234	26,676	26.4%	405,661,342	84,337,890	64,875,300	19,462,590	—

Note 1: The FY2016 Grants-in-Aid for Scientific Research are for research projects (newly adopted) (excluding "Scientific Research on Innovative Areas (research in a proposed research area): Formation of Academic Research Support Infrastructure", "Special Field Research" and "Encouragement Research") and research projects (newly adopted) of the "Fund for the Promotion of Joint International Research (International Group)".

Note 2: Total may not add up to 100% due to rounding.

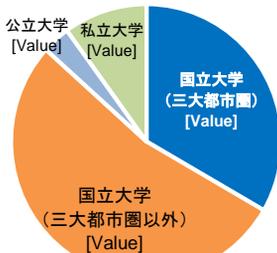
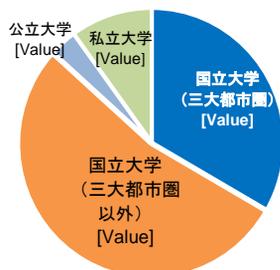
Source: Created by the Secretariat of JANU based on "FY2016 Allocation of Grants-in-Aid for Scientific Research Projects" (October 2016) issued by Research Promotion Bureau, MEXT

## Promotion of joint research with local companies, etc.

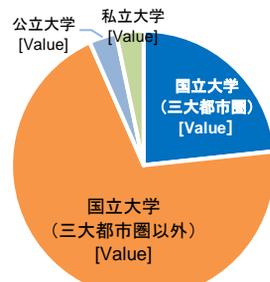
### Top 30 universities in terms of joint research with private companies

No. of research projects

Research grant amount



### Top 30 universities in terms of number of joint research projects with SMEs in the same prefecture



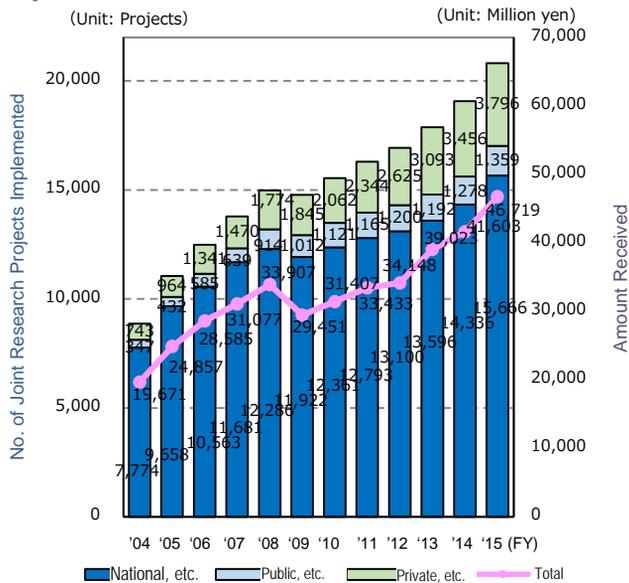
(Unit: universities)

The three metropolitan areas here include Saitama Prefecture, Chiba Prefecture, Tokyo, Kanagawa Prefecture, Aichi Prefecture, Kyoto, Osaka, and Hyogo Prefecture.

Source: Created by the Secretariat of JANU based on "FY2015 Universities, etc. Industry-Academia Collaboration Situation" issued by MEXT

# Industry-Academia Collaboration

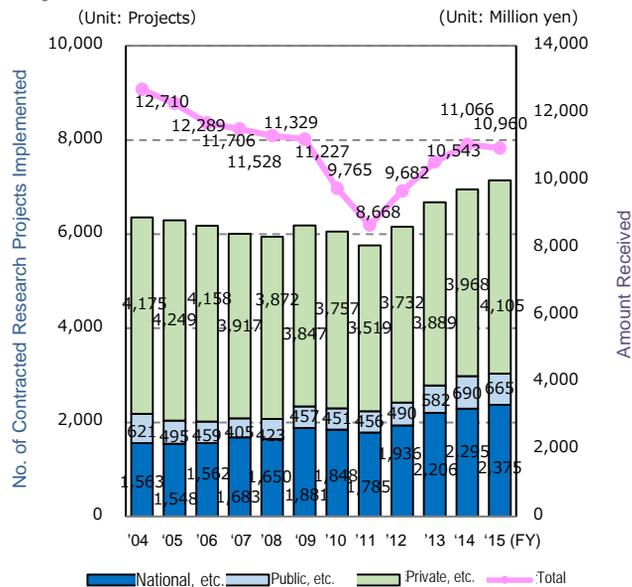
## No. of Joint Research Projects Implemented and Amount Received



Source: Created by the Secretariat of JANU based on "Universities, etc. Industry-Academia Collaboration Situation" (each FY version) issued by the Science and Technology Policy Bureau, MEXT

The number of joint research projects implemented and the amount received are **increasing**.

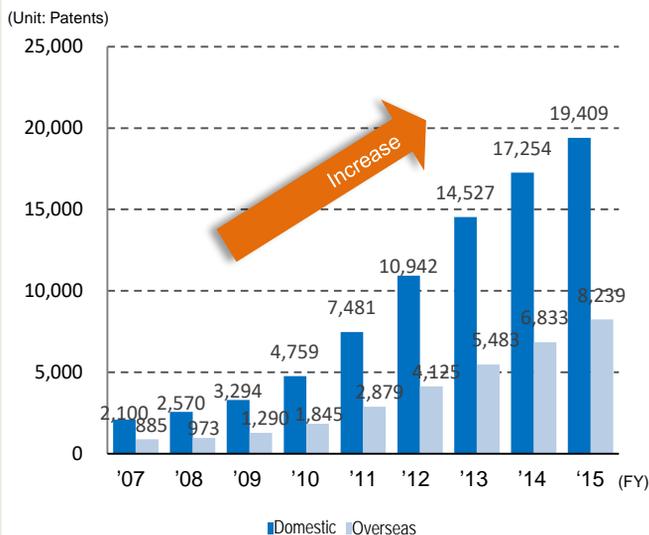
## No. of Contracted Research Projects Implemented and Amount Received



Source: Created by the Secretariat of JANU based on "Universities, etc. Industry-Academia Collaboration Situation" (each FY version) issued by the Science and Technology Policy Bureau, MEXT

The amount received has been **stagnant** in recent years.

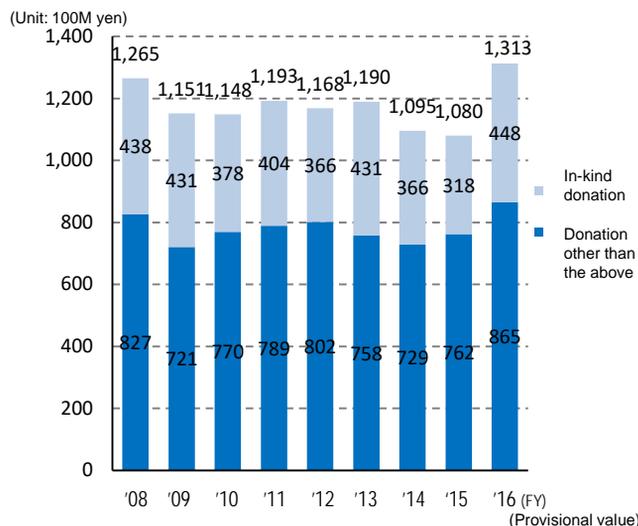
## No. of Patents Held by National Universities, etc.



Source: Created by the Secretariat of JANU based on "Universities, etc. Industry-Academia Collaboration Situation" (each FY version) issued by the Science and Technology Policy Bureau, MEXT

The number of patents held in Japan and abroad is **increasing** every year.

## Donations Received by National Universities, etc.



Note 1: The amount for FY2016 is a provisional value.

Note 2: Figures may not add up to the totals due to rounding down.

Source: Created by the Secretariat of JANU based on materials provided by MEXT ("Financial Statements of National Universities," etc.)

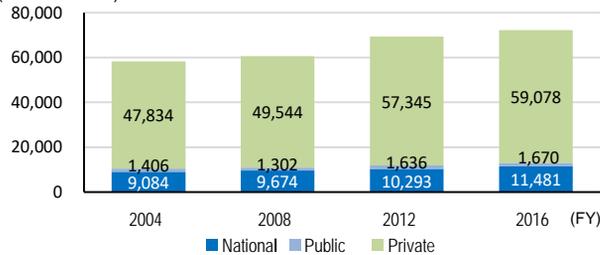
The amount of donations received shows a sign of **increase**, despite recent stagnant growth, as a result of active efforts, etc. of each university.

# Internationalization

## No. of International Students

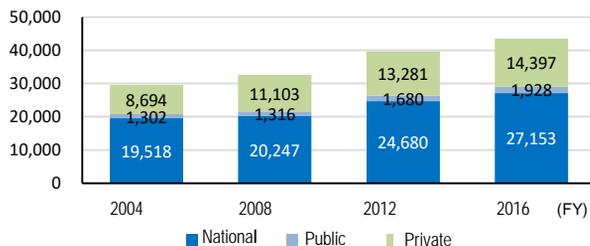
### Undergraduate

(Unit: Persons)



### Graduate

(Unit: Persons)

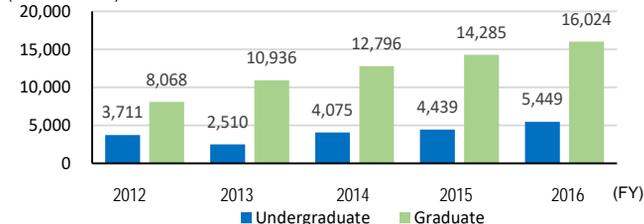


Source: Created by the Secretariat of JANU based on "International Student Enrollment Survey Results" (each year) issued by the Japan Student Services Organization (JASSO)

**International graduate students at national universities account for over 60% of the total.**

## No. of Courses Given in English

(Unit: Course)

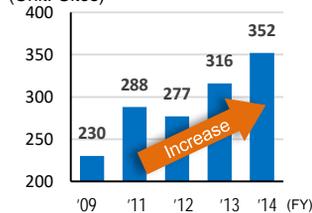


Note: The number of FY2012 courses includes a part of language courses.  
Source: Created by the Secretariat of JANU based on "Follow-up Survey Results on the Further Promotion of Educational Internationalization at National Universities" (each year) issued by JANU

**The number of courses given in English is increasing both at undergraduate and graduate levels.**

## No. of Overseas Sites

(Unit: Sites)



## No. of International Exchange Agreements

(Unit: Agreements)

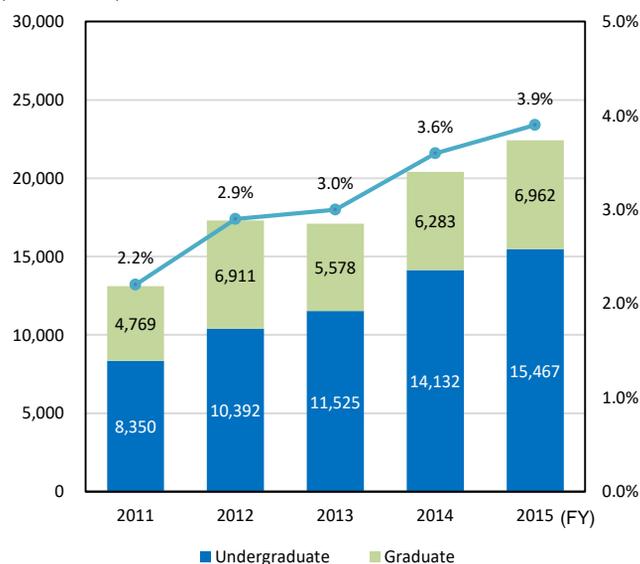


Note: Only for national universities  
Source: Created by the Secretariat of JANU based on "Survey Results on Inter-university Exchange Agreements with International Universities and Overseas Sites" (each year) issued by MEXT

**Various activities for internationalization are increasing.**

## No. and Rate of Japanese Students Studying Abroad

(Unit: Persons)



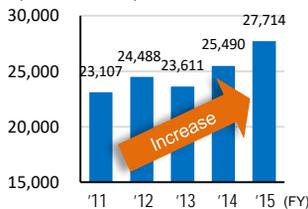
Note: Figures for FY2011 and FY2012 show the share of students studying abroad (not limited to Japanese students). The denominator is the total number of students as of May 1 of the year. Figures for FY2013 and subsequent years show the share of students studying abroad (limited to Japanese students). The denominator is [No. of students as of May 1 of the year - No. of non-Japanese students]

Source: Created by the Secretariat of JANU based on "The 4th Follow-up Survey Results on the Further Promotion of Educational Internationalization at National Universities" (2016) issued by JANU

**The number and rate of both undergraduate and graduate students studying abroad is increasing.**

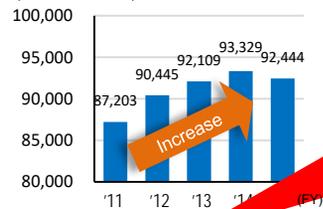
## No. of Non-Japanese Researchers Accepted

(Unit: Persons)



## No. of Japanese Researchers Sent Abroad

(Unit: Persons)

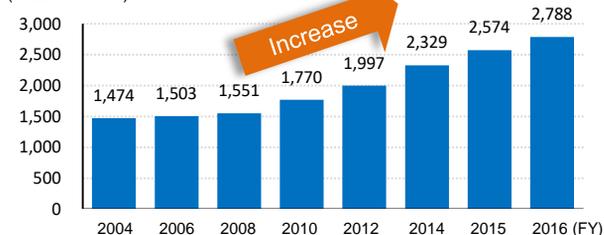


Note: Only national universities  
Source: Created by the Secretariat of JANU based on "Overview of International Research Exchange" (FY2015) issued by MEXT

**The number of researchers both accepted and sent is increasing.**

## No. of Non-Japanese Teachers

(Unit: Persons)



Note 1: Only national universities  
Note 2: The figures here are for full-time teachers in "Basic School Survey"  
Source: Created by the Secretariat of JANU based on "School Basics Survey" (each year) issued by MEXT

**The number of non-Japanese teachers is increasing every year.**

# World University Rankings

## 1. Overall

### THE (Times Higher Education), UK

2016-2017	University	Country, etc.
1	University of Oxford	United Kingdom
2	California Institute of Technology	United States
3	Stanford University	United States
4	University of Cambridge	United Kingdom
5	Massachusetts Institute of Technology	United States
6	Harvard University	United States
7	Princeton University	United States
8	Imperial College London	United Kingdom
9	ETH Zurich – Swiss Federal Institute of Technology Zurich	Switzerland
10	University of California, Berkeley	United States
10	University of Chicago	United States
24	National University of Singapore	Singapore
29	Peking University	China
39	The University of Tokyo	Japan
43	The University of Hong Kong	Hong Kong
72	Seoul National University	South Korea
91	Kyoto University	Japan
201-250	Tohoku University	Japan
251-300	Osaka University	Japan
251-300	Tokyo Institute of Technology	Japan

Source: Created by the Secretariat of JANU based on "Times Higher Education World University Rankings 2016-17"

**Two Japanese universities** ranked in the world top 100.

## 2. Overall

### Shanghai Jiao Tong University, China

2016-2017	University	Country, etc.
1	Harvard University	United States
2	Stanford University	United States
3	University of California, Berkeley	United States
4	University of Cambridge	United Kingdom
5	Massachusetts Institute of Technology	United States
6	Princeton University	United States
7	University of Oxford	United Kingdom
8	California Institute of Technology	United States
9	Columbia University	United States
10	University of Chicago	United States
20	The University of Tokyo	Japan
32	Kyoto University	Japan
40	The University of Melbourne	Australia
58	Tsinghua University	China
71	Peking University	China
72	Nagoya University	Japan
96	Osaka University	Japan
101-150	Seoul National University	South Korea
101-150	Shanghai Jiao Tong University	China
101-150	Tohoku University	Japan

Source: Created by the Secretariat of JANU based on "Academic Ranking of World Universities 2016"

**Four Japanese universities** ranked in the world top 100.

## 3. By Subject

### QS (Quacquarelli Symonds Limited), UK

#### Chemistry

2017	University	Country, etc.
1	Massachusetts Institute of Technology	US
2	University of California, Berkeley	US
3	University of Cambridge	UK
8	California Institute of Technology	US
10	The University of Tokyo	Japan
12	Peking University	China
15	Kyoto University	Japan
17	Tsinghua University	China
26	Osaka University	Japan
32	Tokyo Institute of Technology	Japan
33	National Taiwan University	Taiwan
45	Tohoku University	Japan

#### Physics & Astronomy

2017	University	Country, etc.
1	Massachusetts Institute of Technology	US
2	Harvard University	US
3	Stanford University	US
9	The University of Tokyo	Japan
16	Kyoto University	Japan
29	Tokyo Institute of Technology	Japan
31	Tohoku University	Japan
33	Osaka University	Japan
49	Nagoya University	Japan

#### Biological Science

2017	University	Country, etc.
1	Harvard University	US
2	Massachusetts Institute of Technology	US
3	University of Cambridge	UK
12	The University of Tokyo	Japan
15	Kyoto University	Japan
47	Osaka University	Japan

#### Social Policy / Public Administration

2017	University	Country, etc.
1	Harvard University	US
2	University of Oxford	UK
3	London School of Economics and Political Science	UK
9	The University of Tokyo	Japan
10	The University of Hong Kong	Hong Kong
19	Peking University	China

Source: Created by the Secretariat of JANU based on QS World University Rankings by Subject 2017.

**Japanese universities are leading the world in natural science subjects and social science subjects.**

## 4. Japanese Universities

### THE (Times Higher Education)

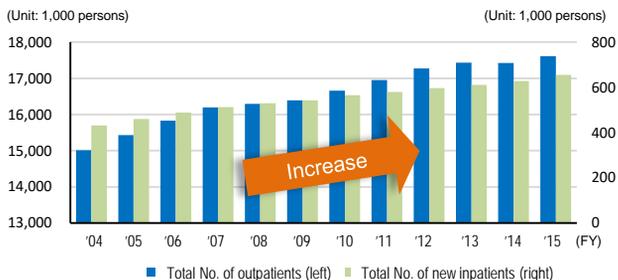
2017	University	Category
1	The University of Tokyo	National
2	Tohoku University	National
3	Kyoto University	National
4	Nagoya University	National
5	Tokyo Institute of Technology	National
6	Osaka University	National
7	Kyushu University	National
8	Hokkaido University	National
9	University of Tsukuba	National
10	Waseda University	Private
11	Keio University	Private
12	Hiroshima University	National
13	Kobe University	National
14	Hitotsubashi University	National
15	International Christian University	Private
16	Chiba University	National
17	Nagaoka University of Technology	National
18	Sophia University	Private
19	Kanazawa University	National
20	Akita International University	Public

Source: Created by the Secretariat of JANU based on THE World University Ranking - Japanese Universities 2017

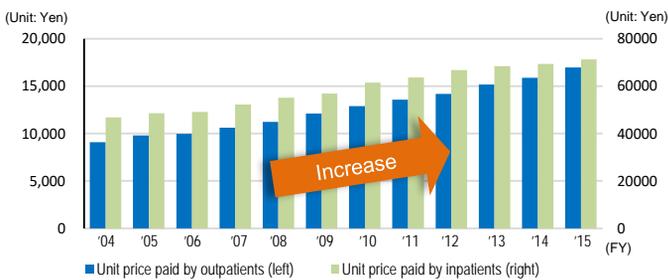
**Of the top 20 universities, 15 are national universities.**

# National University Hospitals

## Total No. of Outpatients and New Inpatients



## Unit Price Paid by Outpatients and Inpatients

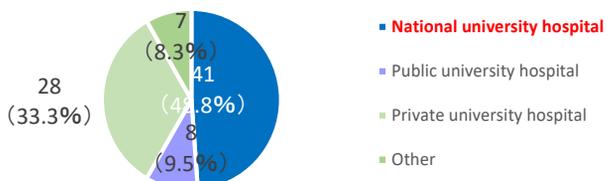


Source: Created by the Secretariat of JANU based on JANU's workshop documents

The total number of both outpatients and new inpatients is **increasing**. The unit price paid by outpatients is also **increasing** as a result of decreased average days spent in hospital, etc.

## Response to Medical Policies

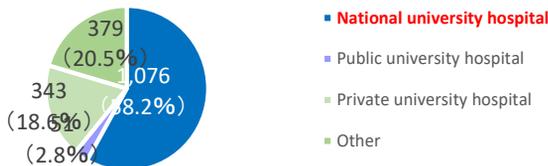
### Approval of Specific Function Hospitals



Note: Based on the survey conducted by the Medical Education Division, MEXT (as of September 2016)  
Source: Created by the Secretariat of JANU based on JANU's workshop documents

National universities account for **approx. 50%** of approved specific function hospitals.

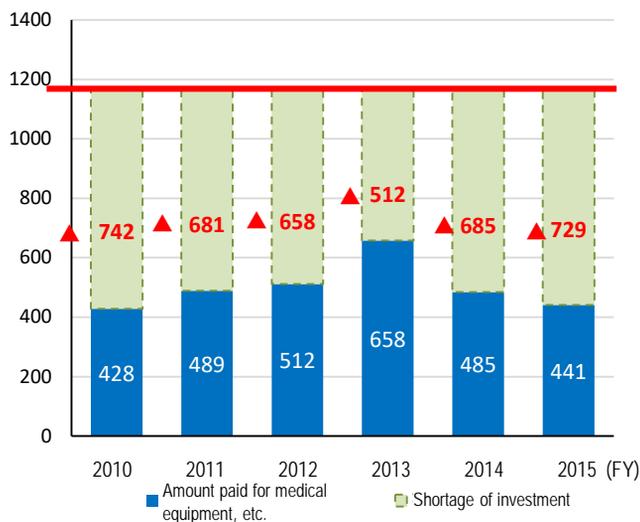
### No. of Organ Transplants



Note 1: Based on the survey by the Japan Organ Transplant Network (total between Feb. 28, 1999 and Dec. 29, 2016)  
Note 2: Total may not add up to 100% due to rounding.  
Source: Created by the Secretariat of JANU based on JANU's workshop documents

National universities carry out **approx. 60%** of organ transplants.

## Shortage of Investment in Medical Equipment, etc.



Note 1: The amount paid for medical equipment, etc. shows the amount paid in each fiscal year. The amount is the total of medical equipment, administrative equipment, etc. that cost more than 500,000 yen and is used in the activities of university hospitals.

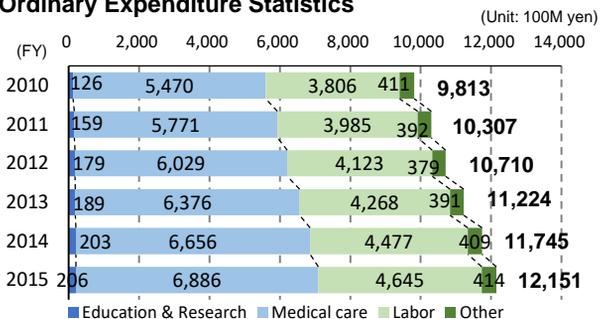
Note 2: Assuming medical equipment is replaced after six years, approx. 117 billion yen needs to be invested every fiscal year.

Source: Created by the Secretariat of JANU based on the financial statements of national university corporations (JANU's workshop documents)

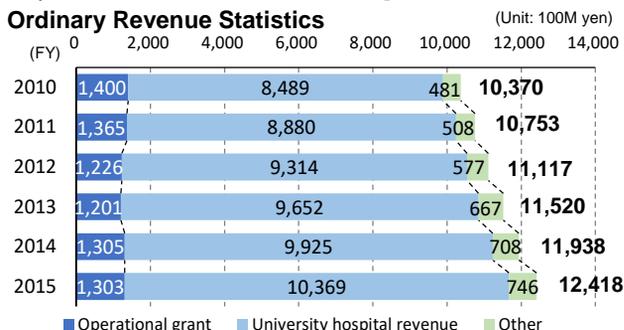
The function of university hospitals is **decreasing** due to 50 to 75 billion-yen **underinvestment** per fiscal year and postponement of replacing necessary medical equipment, etc.

## Financial Situation of National University Hospitals [except medical and dental schools]

### Ordinary Expenditure Statistics



### Ordinary Revenue Statistics



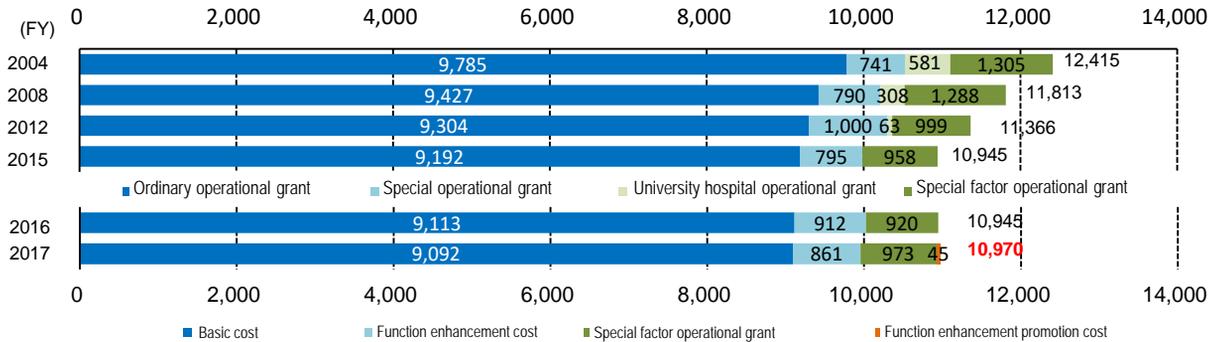
Source: Created by the Secretariat of JANU based on "FY2015 Financial Results of National University Corporations, etc." issued by MEXT

Medical care expenditure has an **increasing** share of total ordinary expenditure in response to increasing needs for medical care, etc. National university hospital revenue has an **increasing** share of total ordinary revenue.

# Financial Situation

## Budgets (National University Corporation Operational Grants, etc.)

(Unit: 100M yen)



Note 1: The figures above do not include special account budgets for disaster restoration. (Special account budgets for disaster restoration: 5.7B yen for FY2012, 1.1B yen for FY2013, 700M yen for FY2014, and 400M yen for FY2015)

Note 2: The university hospital operational grant is nil since FY2013.

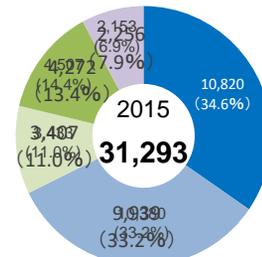
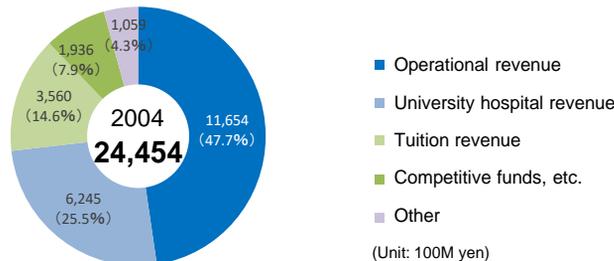
Note 3: The budget for FY2015 shows figures after budget revision.

Note 4: The budget for beyond FY2016 is for a three-term budget, which is shown here by dividing the basic operational grant into the basic cost and the function enhancement cost.

Note 5: Function enhancement promotion cost is included for FY2017.

Source: Created by the Secretariat of JANU based on "National University Corporation Operational Grant Plan (90 Corporations Including Inter-University Research Institute Corporations" (each FY version) issued by MEXT

## Financial Results (Ordinary Revenue)



Note 1: Operational grants, etc. are recorded as a liability upon receipt, then sequentially transferred to a revenue account with the assumed progress of education, research, and other activities.

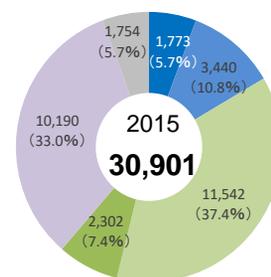
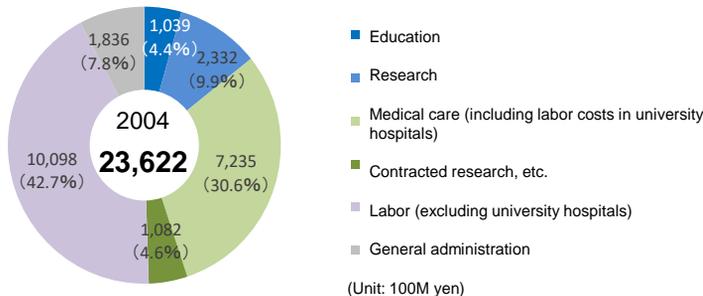
Note 2: Competitive funds, etc. for FY2004 show the total amount of subsidies, contracted research revenue, donations, research institution revenue, and other revenues. Competitive funds etc. for FY2015 show the total amount of subsidies, contracted research revenue, donations, and research-related revenue.

Note 3: Total may not add up to 100% due to rounding.

Source: Created by the Secretariat of JANU based on "FY2004 Financial Statements of National University Corporations" and "FY2015 Financial Results, etc. of National University Corporations, etc." issued by MEXT

**Operational grant and tuition revenue have decreasing shares of total ordinary revenue. University hospital revenue from medical fees, etc. has increased (but the earning rate has decreased due to the consumption tax hike). The share of competitive funds, etc. has also increased.**

## Financial Results (Ordinary Expenditure)



Source: Created by the Secretariat of JANU based on "FY2004 Financial Statements of National University Corporations" and "FY2015 Financial Results, etc. of National University Corporations, etc." issued by MEXT

**Medical care costs account for an increasing share of total ordinary expenditure in response to increasing needs for medical care at university hospitals, but the share of labor cost is decreasing. Administrative cost has been reduced by energy saving, etc.**



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