

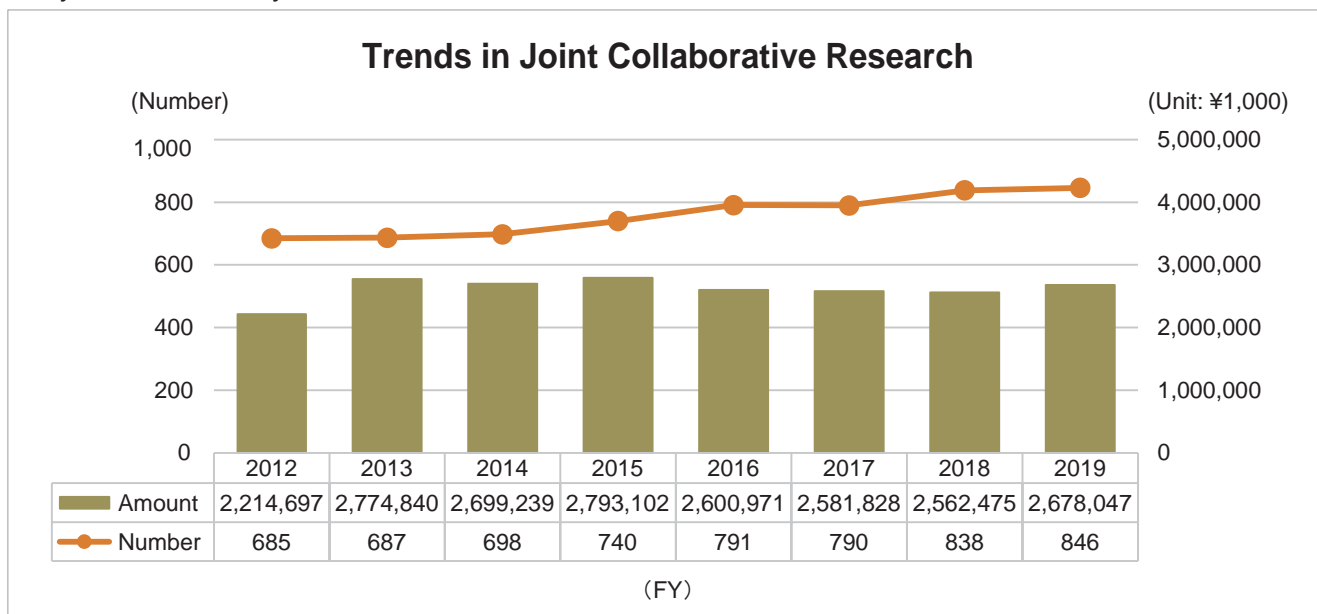
11. Industry-University-Government Collaboration

11-1. Joint Collaborative Research

11-1-1. Trends in Joint Collaborative Research

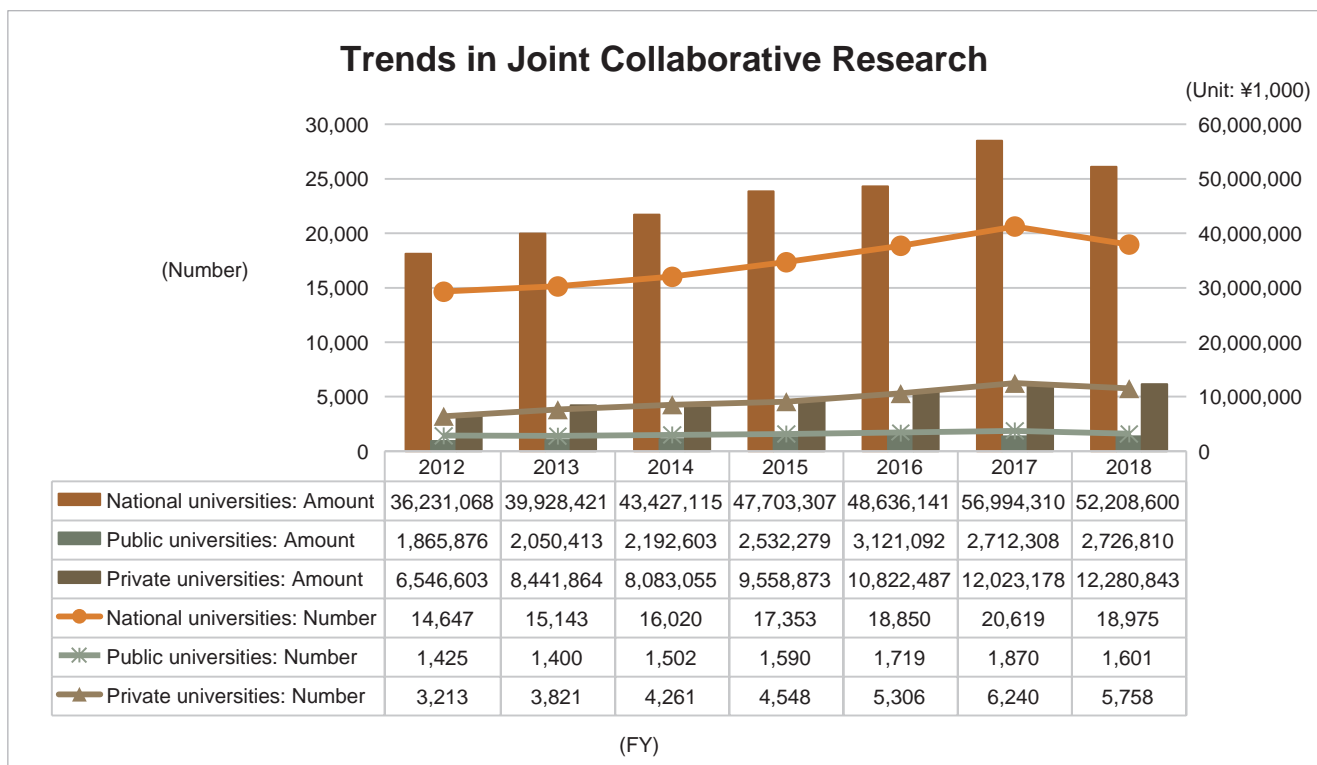
Nationwide, the grant amounts and number of joint collaborative research projects declined in FY 2018. In recent years, the trend for the University has been flat.

◆Kyushu University◆



*Source: *Kyushu University Information*

◆Nationwide◆



• The data does not include junior colleges, vocational schools, technical colleges or research institutions.

*Source: MEXT, *Industry-Academia Collaboration in Higher Education Joint Collaborative Research Outputs by Institution*, figures for each fiscal year.

11-1-1. Trends in Joint Collaborative Research (Continued)

◆Comparisons with Other Universities◆

Number of Joint Collaborative Research Projects with the Private Sector Nationwide: National, Public, and Private Universities

Income from Joint Collaborative Research with the Private Sector Nationwide: National, Public, and Private Universities

Income per Project from Joint Collaborative Research with the Private Sector Nationwide: National, Public, and Private Universities

Rank	University	Number
1	The University of Tokyo	1,797
2	Osaka University	1,243
3	Tohoku University	1,201
4	Kyoto University	1,098
5	Kyushu University	739
6	Tokyo Institute of Technology	679
7	Nagoya University	666
8	Keio University	652
9	Hokkaido University	644
10	Kobe University	518

(2018)

Rank	University	Amount
1	Osaka University	7,476,569
2	The University of Tokyo	7,218,749
3	Kyoto University	4,784,233
4	Tohoku University	4,114,448
5	Keio University	2,968,226
6	Nagoya University	2,875,910
7	Tokyo Institute of Technology	2,540,448
8	Kyushu University	2,076,935
9	Hokkaido University	1,914,997
10	University of Tsukuba	1,716,137

(Unit: ¥1,000)

Rank	University	Income per project	Number
1	St. Marianna University School of Medicine	10,526	19
2	International University of Health and Welfare	8,595	20
3	Osaka University	6,015	1,243
4	Fujita Health University	5,698	13
5	Juntendo University	5,667	120
6	Keio University	4,552	652
7	Kyoto University	4,357	1,098
8	Nagoya University	4,318	666
9	Nara Medical University	4,037	36
10	The University of Tokyo	4,017	1,797
⋮			
29	Kyushu University	2,810	739

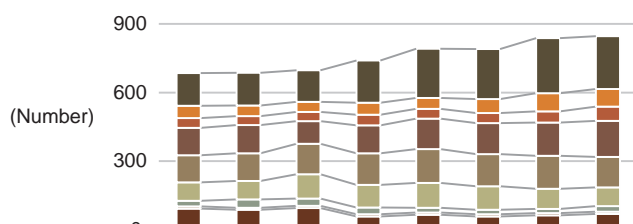
(Unit: ¥1,000)

(2018)

*Source: MEXT, *Industry and Public Organizations in Higher Education Institutions in FY2018*

11-1-2. Trends in Joint Collaborative Research (by Field)

Number of Joint Collaborative Research Projects with the Private Sector

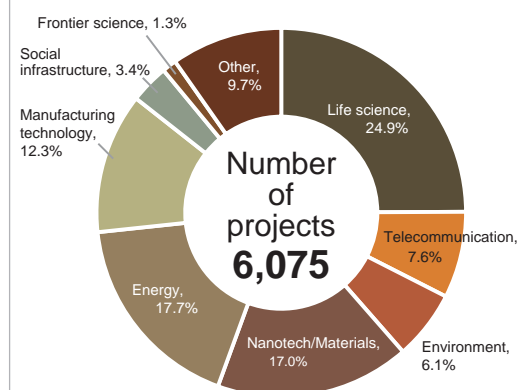


	2012	2013	2014	2015	2016	2017	2018	2019
Life science	143	143	139	184	214	219	241	231
Telecommunication	53	47	44	53	48	60	79	76
Environment	43	39	40	46	43	45	49	63
Nanotech/Materials	120	123	99	122	133	135	145	157
Energy	119	121	133	138	148	141	144	134
Manufacturing technology	80	81	106	99	109	102	89	81
Social infrastructure	25	36	32	30	20	20	18	25
Frontier science	9	9	10	9	10	10	9	10
Other	93	88	95	59	66	58	64	69
Total	685	687	698	740	791	790	838	846

(FY)

◆Kyushu University◆

Number and Percentage of Joint Collaborative Research Projects with the Private Sector (FY2012-FY2019 Total)



• In this study, joint collaborative research refers to research jointly by a university or similar institution and industry and private organizations, etc., in which necessary project expenses incurred by the university, etc. are covered by the private organization, etc.

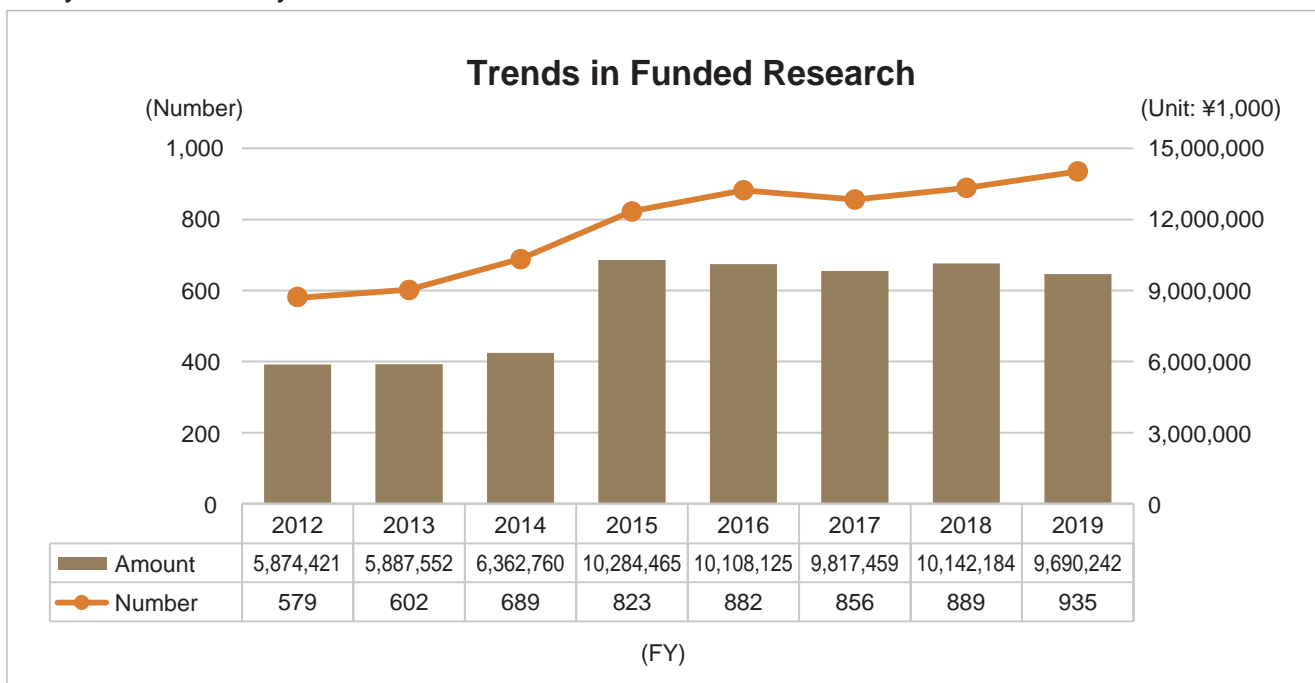
*Source: *Kyushu University Information*

11-2. Funded Research

11-2-1. Trends in Funded Research

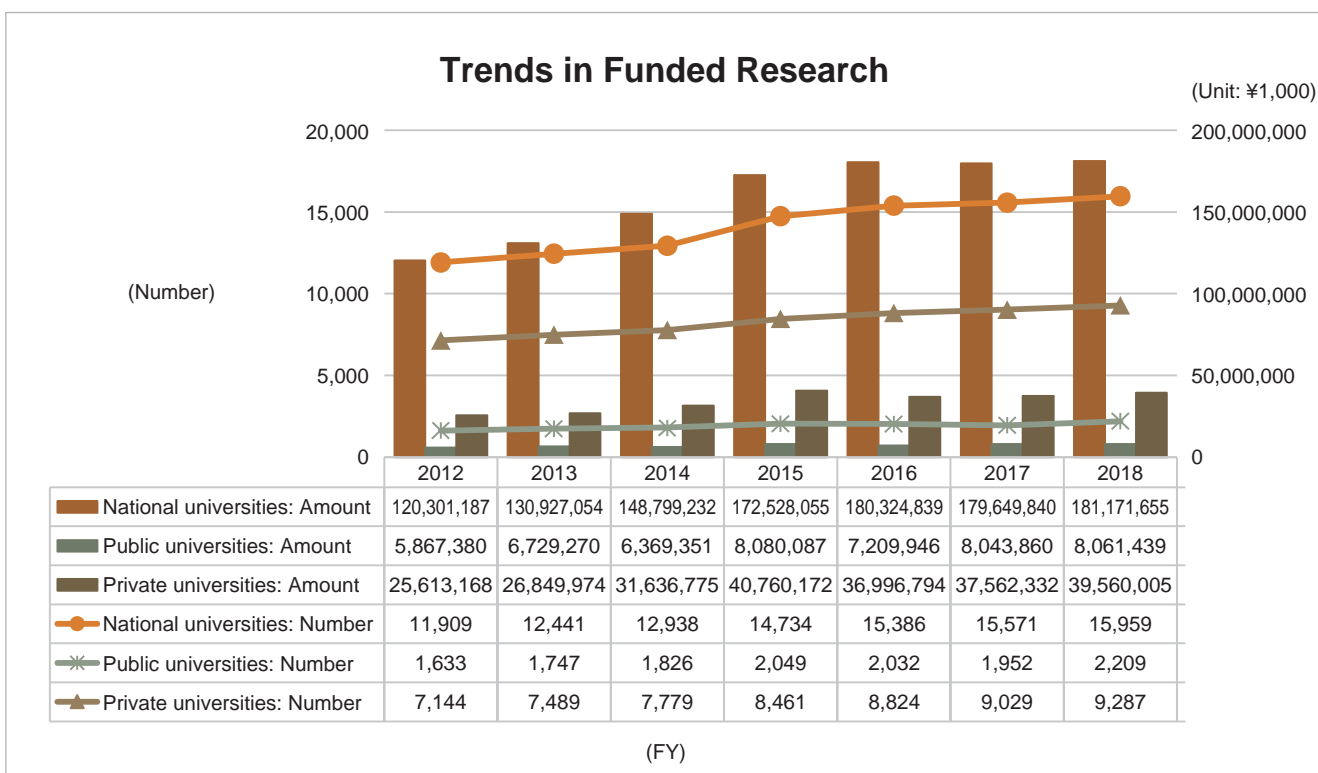
At Kyushu University, there has been an increase in the number of funded research projects.

◆Kyushu University◆



*Source: *Kyushu University Information*

◆Nationwide◆



• The data does not include junior colleges, vocational schools, technical colleges or research institutions.

*Source: MEXT, *Industry-Academia Collaboration in Higher Education Joint Collaborative Research Outputs by Institution*, figures for each fiscal year.

11-2-1. Trends in Funded Research (Continued)

◆Comparisons with Other Universities◆

Number of Research Projects Funded by the Private Sector Nationwide: National, Public, and Private Universities

Income from Research Funded by the Private Sector Nationwide: National, Public, and Private Universities

Income per Project from Research Funded by the Private Sector Nationwide: National, Public, and Private Universities

Rank	University	Number
1	Kindai University	353
2	Keio University	247
3	Ritsumeikan University	236
4	Nihon University	207
5	Waseda University	199
6	Osaka University	164
7	Yamagata University	160
8	Takushoku University	160
9	The University of Tokyo	149
10	Tokyo City University	149
⋮		
12	Kyushu University	114

(2018)

Rank	University	Income
1	Keio University	805,284
2	Waseda University	606,029
3	The University of Tokyo	321,507
4	Kyushu University	320,588
5	Ritsumeikan University	283,165
6	Kyoto University	259,492
7	Osaka University	251,864
8	Tokyo Institute of Technology	247,906
9	Kindai University	236,189
10	Yokohama City University	190,735

(Unit: ¥1,000)

(2018)

Rank	University	Income per project	Number
1	Tohoku Medical and Pharmaceutical University	35,372	1
2	The Graduate School of Project Design	25,920	1
3	Toyota Technological Institute	20,647	9
4	National Graduate Institute for Policy Studies	19,084	1
5	International University of Japan	14,567	9
6	Hokkaido Information University	7,790	8
7	Chuo University	6,755	20
8	Aichi University of the Arts	6,385	1
9	Kansai Gakuin University	6,240	7
10	Kitasato University	5,816	49
⋮			
27	Kyushu University	3,545	114

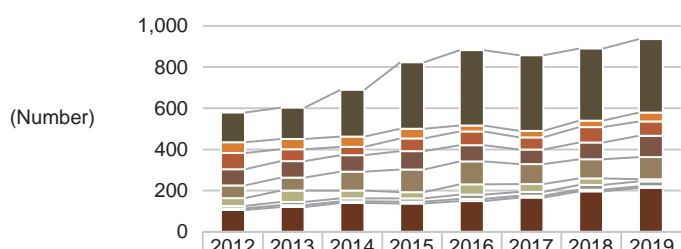
(Unit: ¥1,000)

(2018)

*Source: MEXT, *Industry and Public Organizations in Higher Education Institutions in FY2017*

11-2-2. Trends in Funded Research (by Field)

Number of Funded Research Projects

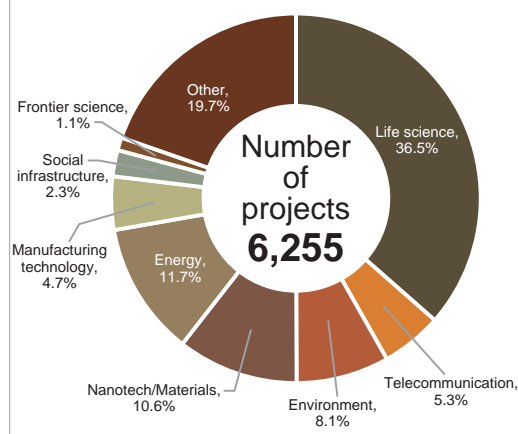


	2012	2013	2014	2015	2016	2017	2018	2019
Life science	144	151	227	322	366	366	349	356
Telecommunication	52	50	49	48	29	31	32	43
Environment	79	58	41	61	66	60	74	70
Nanotech/Materials	79	80	80	90	79	70	82	103
Energy	61	62	92	109	111	97	92	108
Manufacturing technology	38	56	38	30	50	38	32	10
Social infrastructure	12	15	14	16	21	19	23	24
Frontier science	8	10	8	10	10	8	9	7
Other	106	120	140	137	150	167	196	214
Total	579	602	689	823	882	856	889	935

(FY)

◆Kyushu University◆

Number and Percentage Breakdown of Funded Research Projects (FY2012-FY2019 Total)



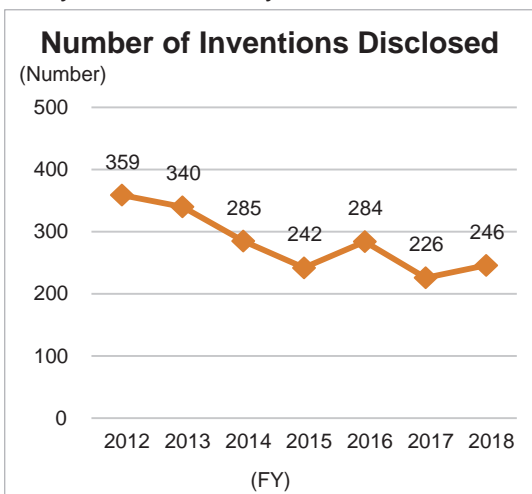
• In this study, funded research refers to research to a university by a private sector company, etc., in which, in most cases, the university, etc. alone conducts the research and development, with the expenses incurred being covered by the private organization, etc.

*Source: *Kyushu University Information*

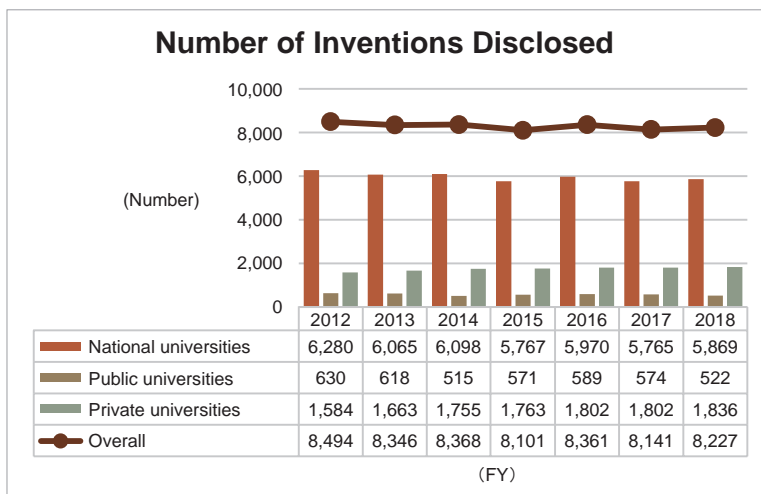
11-3. Intellectual Property

While the number of patent applications has been declining in recent years, Kyushu University saw a slight increase in FY 2018. The number of patents held by Kyushu University has been steadily rising.

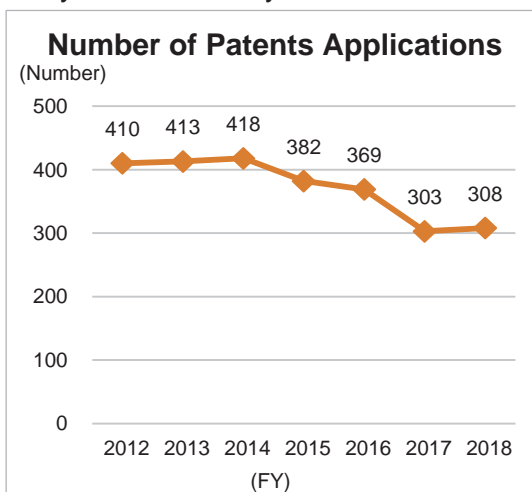
◆Kyushu University◆



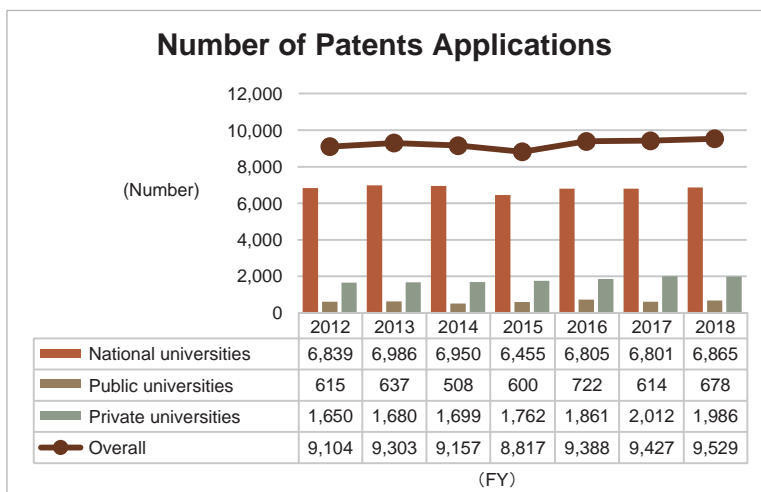
◆Nationwide◆



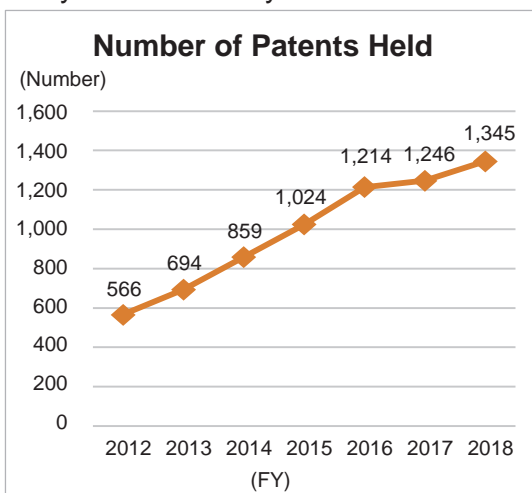
◆Kyushu University◆



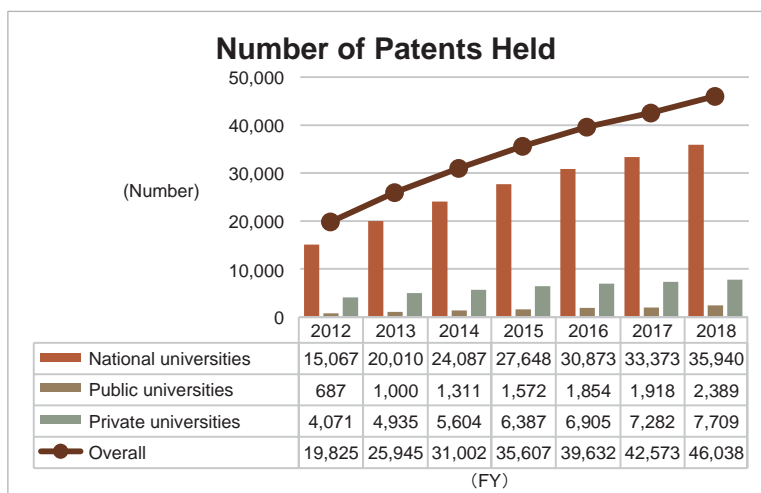
◆Nationwide◆



◆Kyushu University◆



◆Nationwide◆

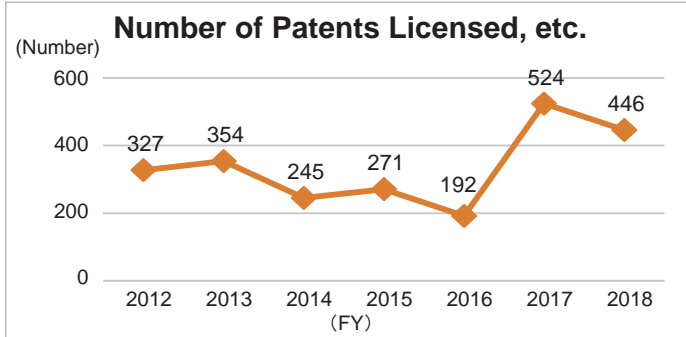


*Source: MEXT, *Industry-Academia Collaboration in Higher Education Institutions Joint Collaborative Research Outputs by Institution*, figures for each fiscal year. (Number of Inventions Disclosed: Kyushu University Website > AiRiMaQ Academic Research / Industry-University Collaboration Headquarters homepage > Performance, Regulations, Forms > Industry-University-Government Collaboration Performance)

11-3. Intellectual Property (Continued)

Nationwide, recent years have seen an upward trend in the number of patents licensed, the amount of income from licensing patents, and the number of university venture business created. At Kyushu University, income from licensing patents, etc. rose sharply in FY2015, and the number of patents licensed, etc. rose sharply in FY2017.

◆Kyushu University◆

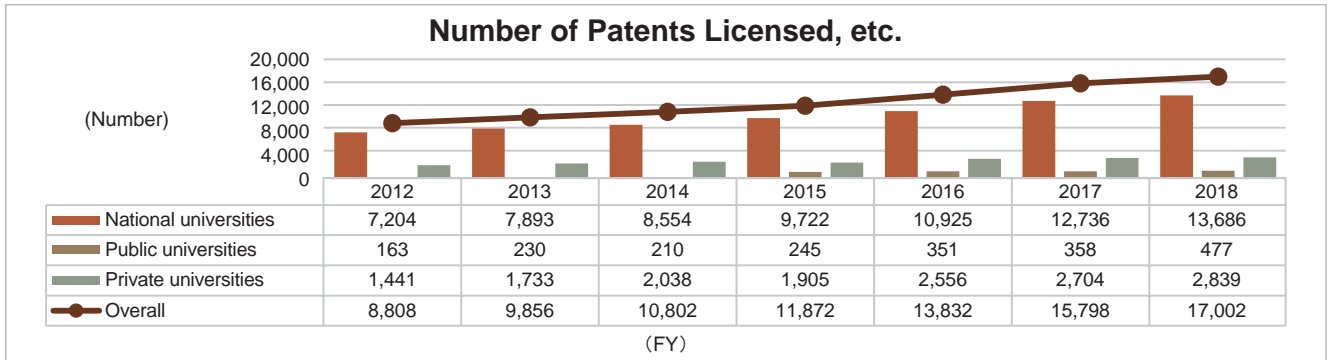


Number of Patents Licensed ,etc. (including overseas)

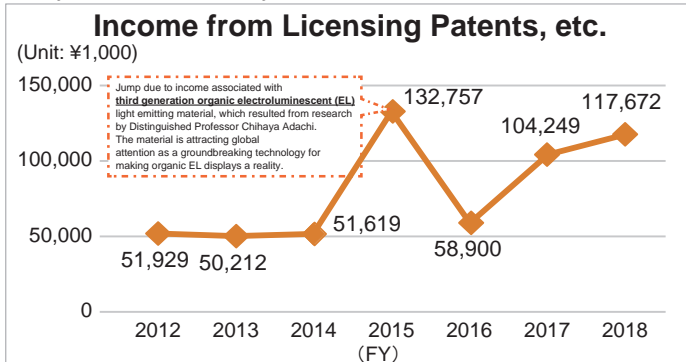
Rank	University	Number
1	The University of Tokyo	3,725
2	Kyoto University	1,695
3	Kanto Gakuin University	1,084
4	Osaka University	852
5	Hokkaido University	754
6	Tokyo Institute of Technology	649
7	Nagoya University	615
8	Tohoku University	573
9	Kyushu University	446
10	Shinshu University	346

(2018)

◆Nationwide◆



◆Kyushu University◆

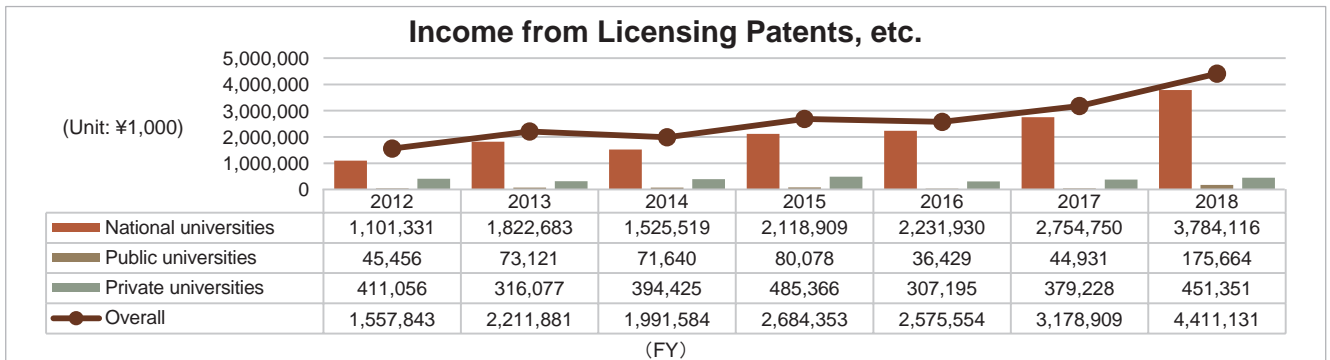


Income from Licensing Patents, etc. (including overseas) (Unit: ¥1,000)

Rank	University	Income
1	The University of Tokyo	1,107,467
2	Kyoto University	617,243
3	Osaka University	392,559
4	Nagoya University	309,421
5	Tokyo Institute of Technology	220,407
6	Shinshu University	139,908
7	Yokohama City University	119,658
8	Kyushu University	117,672
9	Mie University	109,046
10	Tohoku University	99,257

(2018)

◆Nationwide◆

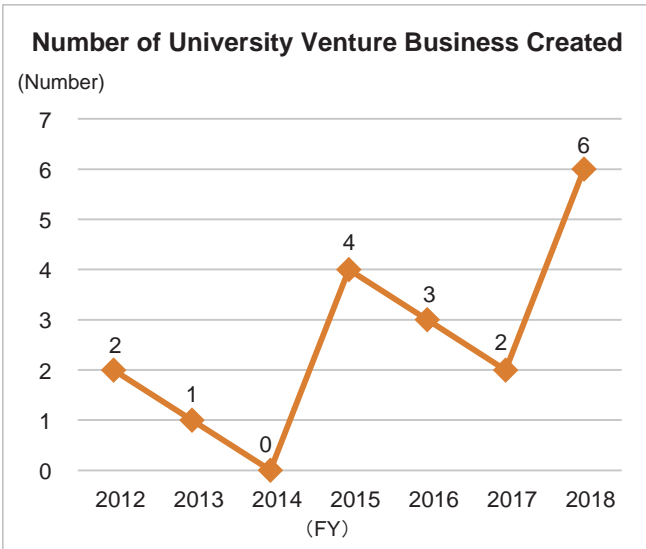


• In this survey, "number of patents licensed,etc." and "amount of income from licensing patents,etc." refers to the number of patent rights licensed or assigned (including at the "right to obtain a patent" stage) and the amount of income received as a result.

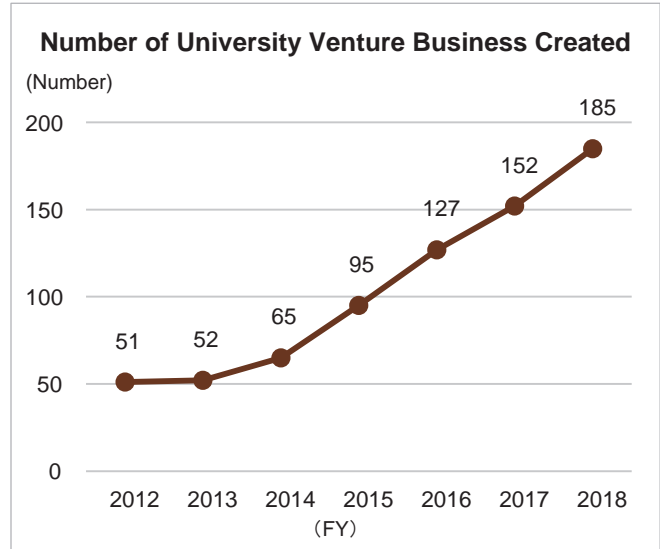
*Source: MEXT, *Industry-Academia Collaboration in Higher Education Joint Collaborative Research Outputs by Institution*, figures for each fiscal year.

11-3. Intellectual Property (Continued)

◆Kyushu University◆



◆Nationwide◆



*Source:

Kyushu University: *Kyushu University Research Strategy Data Collection, 2020*

Nationwide: MEXT, "Joint Research Outputs by Institution" *Status of Industry-Academia Collaboration in Higher Education*