2022 Keio University Annual Report on Research Activities



Research funds at Keio University from national and local public institutions, private businesses, and university funding totaled approximately ¥265 hundred million in FY2022. The charts below show research fund totals classified in various ways.

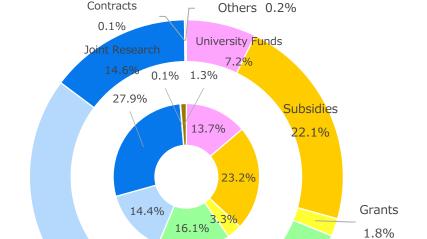
Amount <outer ring> and Number of Projects <inner ring>

Research Funds by Type

In thousands of yen

Types of Funds	Number of Projects	Amount
University Funds	731	1,908,939
Subsidies	1,232	5,864,786
Grants	174	484,144
Specified Contributions	855	1,705,714
Commissioned Research	764	12,634,009
Joint Research	1,485	3,865,362
Contracts	5	9,946
Others	68	40,483
Total	5,314	26,513,383

^{*}As of March 31, 2023



Commissione

d Research

47.6%

University Funds

Subsidies

Grants

Specified Contributions

Commissioned Research

Specified

Contributions

6.4%

Joint Research

Contracts

Others

Definition

Subsidies: Research funds provided mainly by government and public offices.

Grants: Research expenses provided mainly by foundations for the purpose of improvement or accomplishment of research.

Specified Contributions: Contributions earmarked for research activities.

Commissioned Research: Research commissioned by government and public offices, as well as private enterprises.

Joint Research: Research involving personnel exchanges and/or sharing technology/facilities under the joint research agreement, with or without payment of research funds.

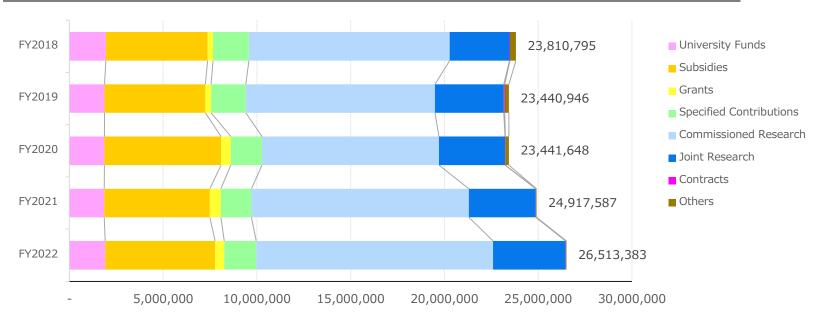
Contracts: Research under a contract agreement.

^{*}Discrepancies may arise in the total amount as totals are rounded to the thousand.

Research Funds by Type FY2018-2022

■ Research Funds by Type over the Past 5 Years

Type of Research Funds	FY2018	FY2019	FY2020	FY2021	FY2022
University Funds	1,942,130	1,872,464	1,869,698	1,853,915	1,908,939
Subsidies	5,424,611	5,375,974	6,215,436	5,634,966	5,864,786
Grants	297,581	311,603	518,482	590,527	484,144
Specified Contributions	1,903,497	1,851,529	1,663,903	1,632,669	1,705,714
Commissioned Research	10,713,472	10,081,073	9,439,647	11,589,559	12,634,009
Joint Research	3,188,151	3,672,466	3,530,078	3,570,030	3,865,362
Contracts	29,464	50,197	16,267	12,561	9,946
Others	311,889	225,640	188,137	33,360	40,483
Total	23,810,795	23,440,946	23,441,648	24,917,587	26,513,383



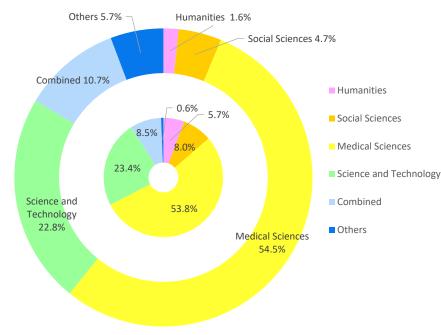
^{*} University funds were revalued in 2018, part of which were not counted as such in the previous years.

The data in this section are compiled with reference to classification of the field of research in other official reports such as the Survey of Research and Development by the Ministry of Internal Affairs and Communications, and various surveys on research expenses by the Japan Association of Private Universities and Colleges.

Research Funds by Field

Research Fullus by Field		In thousands of yen
Research Fields	Number of Projects	Amount
Humanities	302	436,196
Social Sciences	425	1,237,504
Medical Sciences	2,857	14,453,672
Science and Technology	1,246	6,041,161
Combined	451	2,822,546
Others	33	1,522,304
Total	5,314	26,513,383

Amount <outer ring> and Number of Projects <inner ring>



Humanities

History, Philosophy, Literature, Languages, and other humanities.

Social Sciences

Economics, Sociology, Business and Commerce, Political Science, Law, and other social sciences.

Medical Sciences

Medicine, Nursing, Pharmaceutical Science, and other health and medical sciences.

Science and Technology

Applied Chemistry, Chemistry, Mechanics and Shipbuilding, Engineering, Mathematics, Electrics, Communications, Physics, and other sciences and technology.

Combined

Interdisciplinary fields.

Others

Research Funds by Affiliation in FY2022

Classifying funds by affiliation of researcher (in principle, the representative researcher)

■ Research Funds by Affiliation of Researchers

In thousands of yen

Affiliation of Researchers	Number of Projects	Amount
Faculty / Graduate School of Letters	163	301,110
Faculty / Graduate School of Economics	133	368,837
Faculty / Graduate School of Law	98	179,212
Faculty / Graduate School of Business and Commerce	99	277,335
Faculty / Graduate School of Medicine	2,501	13,247,771
Faculty / Graduate School of Science and Technology	1,104	4,242,422
Faculty of Policy Management	151	384,131
Faculty of Environment and Information Studies	235	2,251,212
Faculty of Nursing and Medical Care	44	76,704
Faculty of Pharmacy / Graduate School of Pharmaceutical Sciences	228	937,036
Graduate School of Human Relations	0	0
Graduate School of Media and Governance	141	663,753
Graduate School of Health Management	14	23,526
Graduate School of Business Administration	34	33,734
Graduate School of System Design and Management	74	391,634
Graduate School of Media Design	23	416,501
Law School	35	68,922
Others	238	2,649,543
Total	5,314	26,513,383

^{*}Discrepancies may arise in the total amount as totals are rounded to the thousand.

■ Types of External Entities Contributing Research Funds

In thousands of ven

Research Funds by Type 2022

		in thousands of yen
Type of External Entities	Number of Projects	Amount
Government ※1	1,241	5,564,626
Local Public Entities	93	949,581
Independent Administrative Agencies, Semi-Governmental Corporations $\divideontimes 2$	663	11,151,093
Private Corporations **3	1,626	5,102,202
Other Universities	203	124,586
Non-profit Foundations, Charitable Organizations	298	598,246
Foreign Countries	78	653,063
Private Individuals	356	329,958
Others	25	131,090
Total	4,583	24,604,445

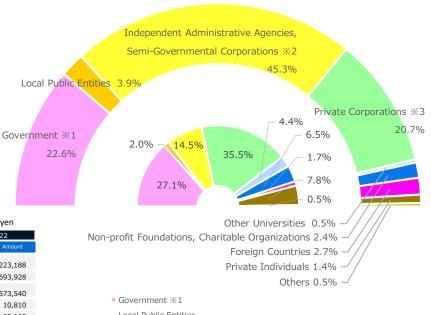
In thousands of yen

*1	Government	FY2018		F	FY2019		FY2020		FY2021		Y2022
	Funding sources	No. of Projects	Amount								
	Ministry of Internal Affairs and Communications	9	137,951	6	75,228	9	155,467	7	154,589	7	223,188
	Ministry of Education	1,152	4,173,521	1,211	3,964,900	1,282	4,531,800	1,180	4,208,803	1,113	4,693,928
	Ministry of Health, Labor and Welfare	74	224,517	92	479,067	111	696,285	103	582,271	103	573,540
	Ministry of Environment	3	13,097	3	71,129	8	209,857	2	94,433	1	10,810
	Others	21	520,353	20	559,043	17	340,530	15	369,813	17	63,160
	Total	1,259	5,069,439	1,332	5,149,367	1,427	5,933,939	1,307	5,409,909	1,241	5,564,626

2	Independent Administrative Agencies, Semi-Governmental Corporations	F	FY2018		FY2019		FY2020		FY2021		FY2022	
	Funding sources	No. of Projects	Amount	No. of Projects	Amount							
	NICT *a	12	80,888	14	61,536	23	86,793	19	99,028	23	706,928	
	JST *b	99	2,415,113	89	1,959,885	101	1,420,516	136	2,848,017	164	3,053,826	
	AMED *c	289	5,732,133	248	5,420,979	254	5,705,963	274	6,253,193	270	5,930,426	
	NEDO *d	22	406,503	20	424,577	22	309,866	25	384,515	24	435,923	
	Others	132	433,710	148	759,532	138	536,168	192	717,582	182	1,023,990	
	Total	554	9,068,347	519	8,626,509	538	8,059,306	646	10,302,335	663	11,151,09 3	

3	Private Corporations	F	Y2018	F	Y2019	F	Y2020	F	Y2021	F	Y2022
	Funding sources	No. of Projects	Amount								
	Specified Contributions	739	1,503,081	674	1,250,149	638	1,085,902	531	1,091,311	458	853,284
	Commissioned Research	253	982,609	153	418,786	130	411,277	166	547,987	149	770,059
	Joint Research	829	2,971,821	961	3,285,761	984	3,244,088	1,006	3,311,024	936	3,381,639
	Others	89	387,264	141	639,384	134	496,568	81	106,929	83	97,220
	Total	1,910	5,844,775	1,929	5,594,080	1,886	5,237,835	1,784	5,057,251	1,626	5,102,202

Contribution Share by External Entity Type Amount <outer ring> and Number of Projects <inner ring>



- Local Public Entities
- Independent Administrative Agencies, Semi-Governmental Corporations %2
- Private Corporations ※3
- Other Universities
- Non-profit Foundations, Charitable Organizations
- Foreign Countries
- Private Individuals
- Others

^{*}a National Institute of Information and Communications Technology

^{*}b Japan Science and Technology Agency

^{*}c Japan Agency for Medical Research and Development

^{*}d New Energy and Industrial Technology Development Organization

■ Types of External Entities Contributing Research Funds to Each Campus

In thousands of yen

Campuses		Government Organizations	Non-Government Public Organizations	Private Corporations	Others	Total
Mita Campus	No. of Projects	195	7	36	7	245
	Amount	881,011	15,398	205,013	140,098	1,241,520
Hiyoshi Campus	No. of Projects	146	18	76	5	245
	Amount	556,965	47,413	441,543	51,752	1,097,673
Shinanomachi Campus	No. of Projects	889	280	799	407	2,374
	Amount	9,150,583	368,047	2,584,370	731,429	12,834,429
Yagami Campus	No. of Projects	418	96	377	58	948
	Amount	3,357,230	209,233	892,561	35,982	4,495,006
Shonan Fujisawa Campus	No. of Projects	138	68	229	66	500
	Amount	1,588,544	156,801	637,773	192,877	2,575,995
Shiba-Kyoritsu Campus	No. of Projects	88	22	57	3	170
	Amount	700,802	64,627	101,611	4,029	871,069
Shin-Kawasaki Town Campus	No. of Projects	4	4	21	0	29
	Amount	174,339	6,541	79,440	0	260,320
Tsuruoka Town Campus	No. of Projects	24	8	25	1	58
	Amount	217,209	718,923	100,900	1,386	1,038,418
Tonomachi Town Campus	No. of Projects	3	4	7	1	15
	Amount	89,036	33,568	58,991	8,420	190,015
Total	No. of Projects	1,904	505	1,626	548	4,583
	Amount	16,715,719	1,620,551	5,102,202	1,165,973	24,604,445

^{*} Totals are compiled based on the home campuses (in principle, the affiliation of the research project leaders). The actual research, however, may take place at different campuses.

Direct and Indirect Research Expenses FY2018-2022

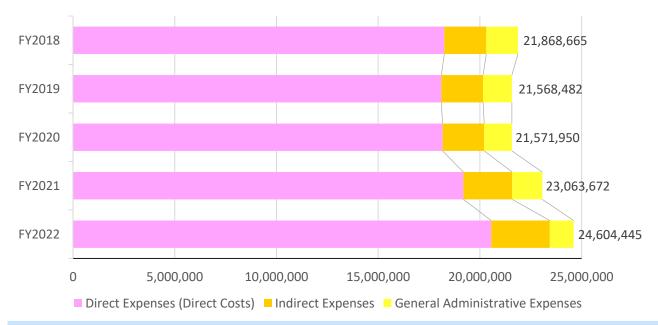
As of March 31, 2023

■ Direct and Indirect Research Expenses, and General Administrative Expenses over the Past 5 Years

In thousands of yen

Type of Research Funds	FY2018	FY2019	FY2020	FY2021	FY2022
Direct Expenses (Direct Costs)	18,252,533	18,099,719	18,164,535	19,187,949	20,554,169
Indirect Expenses	2,062,068	2,058,030	2,048,699	2,399,599	2,878,721
General Administrative Expenses	1,554,065	1,410,733	1,358,716	1,476,124	1,171,555
Total	21,868,665	21,568,482	21,571,950	23,063,672	24,604,445

^{*}Discrepancies may arise in the total amount as totals are rounded to the thousand.



Definition

Indirect Expenses: Expenses allocated equivalent to a certain percentage of the Competitive Research Funds in addition to the direct expenses for the research to supplement administrative and operational costs of the institution to which project leaders are affiliated.

General Administrative Expenses (Overhead Costs): Expenses allocated to supplement administrative costs for research other than direct expenses for the research, other than Indirect Expenses.

The Grants-in-Aid for Scientific Research (KAKENHI) Program

As of March 31, 2023

ctitution by Number of Droisets (EV2022)

Instit	ution by Number of Projects (FY2022	-	In millions of yen
Rank	Name of Organization	No. of Projects	Amount
1	The University of Tokyo	4,041	21,127
2	Kyoto University	3,025	14,143
3	Osaka University	2,592	10,098
4	Tohoku University	2,480	10,117
5	Kyushu University	2,062	6,949
6	Nagoya University	1,821	7,773
7	Hokkaido University	1,703	5,996
8	University of Tsukuba	1,379	4,337
9	Hiroshima University	1,280	2,982
10	Kobe University	1,148	2,989
11	Keio University	1,097	3,645
12	Waseda University	1,062	2,689
13	Okayama University	1,036	2,913
14	Kanazawa University	988	2,425
15	Chiba University	950	2,415
16	Tokyo Institute of Technology	913	4,330
17	RIKEN	833	5,076
18	Niigata University	786	1,792
19	Juntendo University	718	1,407
20	Tokyo Medical and Dental University	704	1,707
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	Amount Awarded to all organizations		221,187

Number of Projects and Total Funding at Keio University

(over the Past 5 y	years)		In millions of yen

Fiscal Year	Rank	Number of Projects	Allotted Amount	Total funds awarded to all organizations
2018	11	1,043	3,248	211,836
2019	11	1,110	3,300	215,411
2020	10	1,187	3,660	220,370
2021	11	1,152	3,726	221,293
2022	11	1,097	3,645	221,187



^{*}Source: MEXT website

https://www.mext.go.jp/a menu/shinkou/hojyo/1422129 00004.htm

^{*}Allotted amount includes direct and indirect expenses.

^{*}Discrepancies may arise in the total amount as totals are rounded to the million.

^{*}This classification by the affiliation of only the project leaders, and thereby does not necessarily show the actual status of all the project members in their own affiliations.

Number of Researchers at Keio University in FY2022

Number of Researchers

As of March 31, 2023

Campuses	Tenured/ Semi-tenured Researchers	Project Researchers (Non-tenured)	Researchers (Non-tenured)
Mita Campus	417	37	11
Hiyoshi Campus	332	24	27
Shinanomachi Campus	541	183	138
Yagami Campus	262	40	22
Shonan Fujisawa Campus	176	48	10
Shiba-Kyoritsu Campus	66	6	3
Total	1,794	338	211

■ Development of Future Researchers

	1	No. of Doctorates Conferred	No. of Students E	nrolled in Doctoral Courses
Graduate Schools	Course Doctorates	Dissertation Doctorates	Maximum Occupancy	No.of Students Enrolled
Graduate School of Letters	6	5	135	97
Graduate School of Economics	4	0	45	36
Graduate School of Law	5	4	90	55
Graduate School of Human Relations	4	2	33	45
Graduate School of Business and Commerce	2	1	60	13
Graduate School of Medicine	92	54	320	379
Graduate School of Science and Technology	70	0	450	266
Graduate School of Business Administration	0	0	24	7
Graduate School of Media and Governance	18	0	150	222
Graduate School of Health Management	7	1	30	50
Graduate School of System Design and Management	2	0	33	59
Graduate School of Media Design	8	0	30	69
Graduate School of Pharmaceutical Sciences	24	0	29	85
Subtotal	242	67	1,429	1,383
Total		309		

Research Fellows in FY2018-2022

Number of JSPS Research Fellows at Keio University

As of March 31, 2023

Research Fellows by Affiliation

Faculties, Graduate Schools, Research Institutions	FY2018	FY2019	FY2020	FY2021	FY2022
Faculty/Graduate School of Letters, Graduate School of Human Relations	18	20	24	23	26
Faculty/Graduate School of Economics	8	4	7	6	3
Faculty/Graduate School of Law	11	11	5	12	13
Faculty/Graduate School of Business and Commerce	4	3	2	1	0
Faculty/Graduate School of Medicine	30	30	27	32	39
Faculty/Graduate School of Science and Technology	56	63	57	49	48
Faculty of Policy Management, Faculty of Environment and Information Studies, Graduate School of Media and Governance	17	13	18	18	22
Faculty of Nursing and Medical Care, Graduate School of Health Management	0	0	0	0	0
Faculty of Pharmacy, Graduate School of Pharmaceutical Sciences	3	3	0	1	3
Graduate School of Business Administration	1	1	1	0	0
Graduate School of System Design and Management	0	1	1	1	0
Graduate School of Media Design	0	0	0	0	0
Law School	0	0	0	0	0
Affiliated Research Institutes	2	3	4	6	5
Total	150	152	146	149	159

■ Number of JSPS Research Fellow by Category

Category	FY2018	FY2019	FY2020	FY2021	FY2022
DC1	50	49	58	54	54
DC2	40	48	39	48	50
PD	41	36	32	34	35
SPD	1	1	1	-	-
RPD	3	3	4	4	11
CPD	-	1	2	1	1
Foreign Researchers	15	14	10	8	8
Total	150	152	146	149	159

*The "Research Fellowship for Young Researchers" program is divided into 5 categories, DC, PD, SPD, RPD, and CPD. Graduate and doctoral students are mainly accepted, with periods of acceptance differing according to category.

http://www.jsps.go.jp/english/e-pd/index.html

*The "Postdoctoral Fellowship for Foreign Researchers" program is also available for overseas young researchers for providing them an opportunity to work together under the guidance of Japanese researchers in Japanese universities, etc.

http://www.jsps.go.jp/english/e-fellow/index.html

Research

Researchers from Outside Keio in FY2022(1)

Researchers from Outside Keio

■ Number of Researchers Accepted — Breakdown by Job Title and Status

Transcr of Researchers Accepted Breakdow	11 57 305 1	
Job Titels, Status	Number of Researchers	Qualification
School of Medicine Researchers	469	Researchers employed by research, educational, or medical institutions other than the School of Medicine.
Research Associates of Faculty of Science and Technolog	y 15	Researchers participating in research without a contract for commissioned research.
Researchers of KLL, Keio Leadingedge Laboratory of Science and Technology	29	Researchers participating in research under a commissioned research contract.
Distinguished Researcher, Keio Research Institute at SFC	3	A Distinguished Researcher is one who is recognized to be beneficial to the progress of research activities of the Institute and whose Faculty Sponsor is the Executive Director of the Institute. A Distinguished Researcher must have outstanding research achievements and research management results both in the home country and abroad, and be internationally and widely active.
Senior Researchers, Keio Research Institute at SFC	425	Senior Researchers are regarded as researchers who are accepted by Keio Research Institute at SFC upon recommendation by a Faculty Sponsor and then participate in research activities. A 'Senior Researcher' must possess a Master's degree or equivalent/higher degree, and also be recognized as an experienced, distinguished, and self-sustained researcher.
Researchers, Keio Research Institute at SFC	168	Researchers are regarded as researchers who are accepted by Keio Research Institute at SFC upon recommendation by a Faculty Sponsor and then participate in research activities. A 'Researcher' must possess a Bachelor's degree or equivalent/higher degree, and be recognized as an experienced and distinguished researcher.
Research Associates, Faculty of Pharmacy	50	Researchers who work alongside faculty members of Keio University's Faculty of Pharmacy, using its facilities and/or equipment.
Guest Senior Project Researcher, Shin-Kawasaki Town Campus	6	Researchers who are accepted by Keio Frontier Research & Education Collaborative Square at Shin-Kawasaki Town Campus (K2) for the purpose of participating in research projects established in K2, who are employed outside of Keio University, and who have a career equivalent to that of a university professor.
Guest Project Researcher, Shin-Kawasaki Town Campus	7	Square at Shin-Kawasaki Town Campus (K2) for the purpose of participating in research projects established in K2, and who are employed outside of Keio University.
IAB Member researcher at the Institute for Advanced Biosciences	20	Researchers who are accepted by the IAB to participate in its research activities, at the request of either an institution outside of Keio or the individual themselves.
Researchers, Center for Wellbeing Research	1	Researchers invited from domestic or foreign companies, research and educational institutions, or similar enterprises for the purpose of participating in research and educational activities at the Center for Wellbeing Research. Or researchers who are enrolled in a Ph.D. program at a graduate school.
Visiting Professors and Researchers (See Table A) Others (See Table B)	555 1778	
Total	3,526	

■ Table A: Number of Visiting Professors and Researchers

Job Titles, Status	Mita/Hiyoshi	Shinanomachi	Yagami	Shonan Fujisawa	Shiba-Kyoritsu	Total
Visiting Professors	50	31	31	8	0	120
Visiting Associate Professors	30	19	21	8	0	78
Visiting Assistant Professors	14	4	7	11	0	36
Visiting Instructors	6	16	20	2	0	44
Visiting Research Fellows	101	75	69	8	0	253
Visiting Junior Research Fellows	20	2	2	0	0	24
Total	221	147	150	37	0	555

Table B: Others

Campuses	Research Institute	* No. of Researchers at Keio University	No. of Researchers from Outside Keio	Total
Mita	Keio University Art Center	27	25	52
	Teacher Training Center	38	42	80
	Global Security Research Institute	361	181	542
	Institute for Economic Studies	75	73	148
	The Keio Institute of Cultural and Linguistic Studies	28	100	128
	International Center	8	16	24
	Keio Economic Observatory	40	87	127
	Institute of Oriental Classics (Shido Bunko)	10	2	12
	Center for Japanese Studies	10	36	46
	Keio Institute of East Asian Studies	20	25	45
	Fukuzawa Memorial Center for Modern Japanese Studies	23	47	70
	Institute for Journalism, Media and Communications Studies	13	31	44
Hiyoshi	Research Institute for Digital Media and Content (DMC)	13	0	13
	Institute of Physical Education	19	1	20
	Health Center	18	0	18
	Keio Research Center for Foreign Language Education	40	3	43
	Sports Medicine Research Center	8	41	49
	Keio Research Center for the Liberal Arts	184	0	184
	Research and Education Center for Natural Sciences	67	66	133
Total		1002	776	1,778

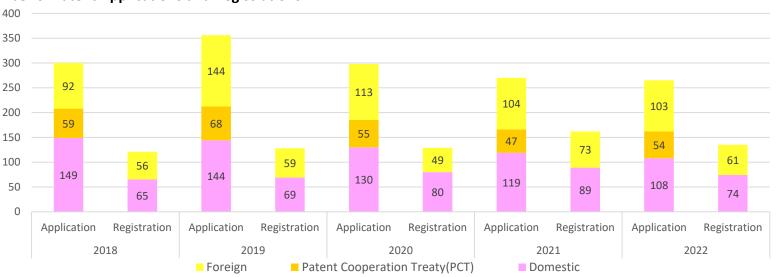
Researchers at Keio University: the figure indicates the total number of researchers including teachers in the affiliated elementary and secondary schools of Keio, in addition to tenured and non-tenured researchers of undergraduate faculties/graduate schools or research institutes.

A researcher affiliated to more than two institutions is counted as one researcher of each.

Intellectual Property Rights and Technology Transfer FY2018-2022

As of March 31, 2023

■ Number of Patent Applications and Registrations



^{*} The number of patent applications include national phase applications that have been transferred from PCT applications, but except applications that have been transferred to the priority country.

Number of Income-generating Licenses and Income Amounts, Number of New Licensing Agreements

