

Report on Results of the Second
Questionnaire on the World Premier International
Research Center Initiative

(Summary Edition)

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Additional Data

Totals for Leading Scientists Only: Awareness and Knowledge

1 Survey Objectives and Overview

1-1 Survey Objectives

Research scientists in related fields of study were surveyed regarding the research centers in the World Premier International Research Center Initiative (WPI), for the purpose of determining whether each Center is becoming a “globally visible center” based on their awareness of it and other factors, and so that analysis of the survey results may help increase the visibility of the Centers.

This is the second such survey to be conducted, following on the one administered in 2009 (hereinafter “the first survey”).

1-2 Survey Implementation

1-2-1 How the survey was administered

Period: April 20, 2011, to July 8, 2011

Methods: Web-based questionnaire (in English)
Requesting participation by postal mail and e-mail

Table 1-1 Response Rate

	AIMR	IPMU	iCeMS	IFReC	MANA	Total	Overall
Survey requests	1,034	1,025	1,495	1,418	1,028	6,000	5,998
Valid responses	271	313	290	278	288	1,440	1,440
Response rate	26.2%	30.5%	19.4%	19.6%	28.0%	24.0%	24.0%

1-2-2 Selection of survey participants

1-2-2-1 Survey participants

Scientists in research areas related to the five Centers below selected for the 2007 fiscal year

- (1) Tohoku University Advanced Institute for Materials Research (AIMR)
- (2) The University of Tokyo Institute for the Physics and Mathematics of the Universe (IPMU)
- (3) Kyoto University Institute for Integrated Cell-Material Sciences (iCeMS)
- (4) Osaka University Immunology Frontier Research Center (IFReC)
- (5) National Institute for Materials Science, International Center for Materials Nanoarchitectonics (MANA)

1-2-2-2 Selection process

Subjects for the survey were chosen based on their status as leading scientists or on their authorship of papers.

(1) Leading scientists

Scientists were selected by the program officers based on lists of researchers highly experienced in operations at research centers and recommended by working group members (around 30 persons per Center).

(2) Authors of papers

Authors of papers published by internationally known journals in Center-related areas were selected based on the following criteria:

- Around 1,000 to 1,500 persons per Center (The numbers were set to achieve a similar number of responses as in the first survey, based on the response rate in that survey.)
- Based on a list of journals recommended by working group members, the program officers decided the list of journals from which to select authors (survey subjects) and the number of authors to be selected from each journal, in consultation with each Center.
- With some exceptions, general audience journals such as Nature and Science were excluded from the list of journals from which to select survey subjects.

(3) Exclusion from selection list

In the interests of conducting an impartial survey, the following were excluded from the above selection process.

- Scientists belonging to host institutions of the five Centers (only for those falling under (2) above)
- Principal investigators at the five Centers
- WPI program committee members
- WPI program director and program officers
- WPI program committee working group members
- Stakeholders of the five Centers (advisory board members, etc.)

Note that only survey subjects chosen as leading scientists were asked to respond regarding more than one Center. Subjects selected based on paper authorship responded only for one Center each.

1-2-2-3 Lists of international journals from which selection was made and numbers selected

In drawing up a list of survey subjects, the numbers selected from each journal for each of the Centers are indicated in Table 1-2 to Table 1-6.

(1) Tohoku University Advanced Institute for Materials Research (AIMR)

Table 1-2 Numbers Selected per Journal (AIMR)

Journal Name	ISSN	Section	Selected (A)	Of A, sent in 2009	Of A, in Japan	Reference	
						Papers (2010)	IF (2010)
Acta Materialia	1359-6454		40	4	0	653	3.78
Advanced Functional Materials	1616-301X		30	3	2	481	8.49
Advanced Materials	0935-9648		30	8	0	777	10.86
ANGEWANDTE CHEMIE	0570-0833		40	7	1	1652	12.73
Applied Physics Express	1882-0778		30	2	20	345	2.75
Applied Physics Letters	0003-6951	ELECTRONIC TRANSPORT AND SEMICONDUCTORS	10	1	1	4459	3.82
		LASERS, OPTICS, AND OPTOELECTRONICS	10	2	1		
		MAGNETISM AND SUPERCONDUCTIVITY	9	1	0		
		NANOSCALE SCIENCE AND DESIGN	10	1	0		
		ORGANIC ELECTRONICS AND PHOTONICS	10	2	0		
		STRUCTURAL, MECHANICAL, THERMODYNAMIC, AND OPTICAL PROPERTIES OF CONDENSED MATTER	11	0	0		
Chemical Communications	1359-7345		30	4	3	2416	5.79
Chemistry of Materials	0897-4756		30	6	1	833	6.40
EPL	0295-5075	Condensed Matter: Electronic Structure, Electrical, Magnetic and Optical Properties	12	2	1	824	2.75
		Condensed Matter: Structural, Mechanical and Thermal Properties	12	0	0		
		Electromagnetism, Optics, Acoustics, Heat Transfer, Classical Mechanics, and Fluid Dynamics	12	0	0		
		Interdisciplinary Physics and Related Areas of Science and Technology	12	0	0		
Intermetallics	0966-9795		30	2	1	384	2.33
Japanese Journal of Applied Physics	0021-4922	Nanoscale science and technology	10	1	7		
		Photonics, quantum electronics, optics, and spectroscopy	10	0	9		
		Semiconductors, dielectrics, and organic materials	8	0	4		
		Spintronics, superconductivity, and strongly correlated materials	8	1	4		
Journal of Alloys and Compounds	0925-8388		30	0	0	2441	2.13
Journal of Applied Physics	0021-8979	Electronic Structure and Transport	10	0	0	3892	2.06
		Magnetism and Superconductivity	10	1	0		
		Nanoscale Science and Design	10	0	0		
		Structural, Mechanical, Thermodynamic, and Optical Properties of Condensed Matter	9	2	0		
Journal of Magnetism and Magnetic Materials	0304-8853		30	2	1	739	1.69
Journal of Materials Chemistry	0959-9428		30	5	1	1352	5.10
Journal of Materials Research	0884-2914		40	1	2	309	1.40
Journal of Physical Chemistry B	1520-6106	Biophysical Chemistry	10	1	0	2012	3.60
		Macromolecules, Soft Matter	10	2	0		
		Surfactants, Membranes	10	1	0		
Journal of Physical Chemistry C	1932-7447	Electron Transport, Optical and Electronic Devices, Hard Matter	9	3	1	3074	4.52
		Nanoparticles and Nanostructures	10	2	1		
		Surfaces, Interfaces, Catalysis	10	0	1		
Journal of the American Chemical Society	0002-7863		50	6	5	3139	9.02
Journal of the Physical Society of Japan	0031-9015	Condensed matter: electronic structure and electrical, magnetic, and optical properties	11	0	9	497	2.91
		Condensed matter: structure and mechanical and thermal properties	11	2	9		
		Electromagnetism, optics, acoustics, heat transfer, classical mechanics, and fluid mechanics	9	2	6		
Langmuir	0743-7463		30	6	1	2664	4.27
Macromolecules	0024-9297		30	3	0	1365	4.84
Nano Letters	1530-6984		30	2	0	855	12.19
Nature Materials	1476-1122		30	11	3	137	29.90
Organic Letters	1523-7060		30	1	2	1473	5.25
Physical Review B	1098-0121		30	8	0	5991	3.77
Physical Review Letters	0031-9007	Atomic, Molecular, and Optical Physics	9	0	0	3118	7.62
		Condensed Matter: Structure, etc.	9	2	0		
		Condensed Matter: Electronic Properties, etc.	18	2	0		
		Soft Matter, Biological, and Interdisciplinary Physics	10	0	1		
Scripta Materialia	1359-6462		30	2	2	540	2.81
Surface Science	0039-6028		30	5	1	331	2.01
Subtotals			999	119	101		
Leading Scientists			35				
Total subjects			1,034				

(2) The University of Tokyo Institute for the Physics and Mathematics of the Universe (IPMU)

Table 1-3 Numbers Selected per Journal (IPMU)

Journal Name	ISSN	Section	Selected (A)	Of A, sent in 2009	Of A, in Japan	Reference	
						Papers (2010)	IF (2010)
Annali di Matematica Pura ed Applicata	0373-3114		40	12	2	36	0.90
Annals of Mathematics	0003-486X		50	6	1	103	3.18
Astronomical Journal	0004-6256		30	1	0	388	4.55
Astronomy and Astrophysics	0004-6361		30	2	0	1916	4.41
Astroparticle Physics	0927-6505		50	1	1	84	3.81
Astrophysical Journal	0004-637X		60	2	0	2501	7.44
Astrophysical Journal Letters	2041-8205		60	13	0	756	1.02
Communications in Mathematical Physics	0010-3616		50	7	0	231	2.00
Inventiones mathematicae	0020-9910		50	4	1	59	2.44
Journal of Cosmology and Astroparticle Physics	1475-7516		50	4	1	394	6.50
Journal of Geometry and Physics	0393-0440		30	4	1	151	0.65
Journal of High Energy Physics	1126-6708		60	7	2	1412	6.05
Journal of Mathematical Physics	0022-2488		30	4	1	561	1.29
Journal of Physics A	1751-8121		30	7	1	959	1.64
Journal of the American Mathematical Society	0894-0347		50	13	0	35	3.41
Monthly Notices of the Royal Astronomical Society	0035-8711		30	2	0		
Nuclear Physics B	0550-3213		60	13	2	328	4.64
Physical Review D	1550-7998		60	6	2	2809	4.96
Physical Review Letters	0031-9007	Elementary Particles and Fields	55	5	4	3118	7.62
		Gravitation and Astrophysics	59	5	0		
Physics Letters B	0370-2693		60	11	2	769	5.26
Subtotals			994				
Leading Scientists			32				
Total subjects			1,026				

(3) Kyoto University Institute for Integrated Cell-Material Sciences (iCeMS)

Table 1-4 Numbers Selected per Journal (iCeMS)

Journal Name	ISSN	Section	Selected (A)	Of A, sent in 2009	Of A, in Japan	Reference	
						Papers (2010)	IF (2010)
ANGEWANDTE CHEMIE	0570-0833		73	13	2	1,652	12.73
Biomaterials	0142-9612		36	3	0	1,013	7.88
Biophysical Journal	0006-3495		36	6	0	826	4.22
Cell	0092-8674		73	18	1	319	32.40
Cell Stem Cell	1934-5909		73	30	4	104	25.94
Chemical Communications	1359-7345		73	7	3	2,416	5.79
Chemistry & Biology	1074-5521		36	5	0	123	5.84
Development	0950-1991		73	3	6	410	6.90
EMBO Journal	0261-4189		72	7	4	329	10.12
Journal of Biological chemistry	0021-9258		73	5	2	4,208	5.33
Journal of Cell Biology	0021-9525		73	12	1	334	9.92
Journal of Controlled Release	0168-3659		36	8	1	369	7.16
Journal of The American Chemical Society	0002-7863		73	10	2	3,139	9.02
Nature Biotechnology	1087-0156		72	15	3	117	31.09
Nature Cell Biology	1465-7392		72	18	4	130	19.41
Nature Chemical Biology	1552-4450		73	21	0	125	15.81
Nature Chemistry	1755-4330		73	11	4	143	17.93
Nature Materials	1476-1122		73	22	0	137	29.90
Nature Photonics	1749-4885		36	3	5	105	26.44
PLoS one	1932-6203	Cell biology	37	3	0	6,714	4.41
PLoS one	1932-6203	Developmental Biology	35	3	0		
Proceedings of the national academy of sciences of the united states of america	0027-8424	Biochemistry	16	1	0	3,764	9.77
		Biophysics and Computational Biology	14	2	0		
		Cellular Biology	15	3	0		
		Chemistry	15	2	0		
		Developmental Biology	15	1	0		
Small	1613-6810		36	11	2	388	7.33
Stem Cells	1066-5099		73	11	0	209	7.87
Subtotals			1,455				
Leading Scientists			39				
Total subjects			1,494				

(4) Osaka University Immunology Frontier Research Center (IFReC)

Table 1-5 Numbers Selected per Journal (IFReC)

Journal Name	ISSN	Section	Selected (A)	Of A. sent in 2009	Of A. in Japan	Reference	
						Papers (2010)	IF (2010)
ACCOUNTS OF CHEMICAL RESEARCH	0001-4842		6	1	0	149	21.84
ACS CHEMICAL BIOLOGY	1554-8929		6	0	0	103	5.70
ADVANCED DRUG DELIVERY REVIEWS	0169-409X		6	2	0	113	13.58
ANGEWANDTE CHEMIE	1433-7851		6	1	0	1,652	12.73
Biochemical Journal	0264-6021		6	0	0	406	5.02
Bioconjugate Chemistry	1043-1802		6	2	0	288	5.00
Blood	0006-4971		57	11	1	1,280	10.56
Cancer Research	0008-5472		6	0	0	1,052	8.23
Cell	0092-8674		11	4	0	319	32.40
Cell Calcium	0143-4160		6	0	0	98	3.55
CELL HOST & MICROBE	1931-3128		6	2	0	89	13.73
CELLULAR SIGNALLING	0898-6568		6	0	1	201	4.24
Chemical Communications	1359-7345		6	1	1	2,416	5.79
Chemical Reviews	0009-2665		6	2	0	188	33.03
ChemPhysChem	1439-4235		6	0	0	484	3.34
Clinical Cancer Research	1078-0432		6	0	0	629	7.34
Contrast Media & Molecular Imaging	1555-4309		6	0	0	37	4.02
Current Biology	0960-9822		6	1	0	366	10.03
DEVELOPMENTAL BIOLOGY	0012-1606		6	1	0	435	4.09
Developmental Cell	1534-5807		6	1	0	155	13.95
EMBO Journal	0261-4189		6	0	0	329	10.12
EMBO REPORTS	1469-221X		6	1	0	95	7.82
European Journal of Cell Biology	0171-9335		6	0	0	110	3.63
European Journal of Immunology	0014-2980		6	4	0	331	4.94
Experimental Cell Research	0014-4827		6	2	0	321	3.61
Immunity	0019-2805		113	34	2	139	24.22
Journal of Biomedical Optics	1083-3668		6	0	1	421	3.19
Journal of Cell Biology	0021-9525		57	8	3	334	9.92
Journal of Cell Science	0021-9533		6	3	0	424	6.29
Journal of Clinical Investigation	0021-9738		57	12	1	366	14.15
Journal of Experimental Medicine	0022-1007		102	21	1	242	14.78
Journal of Immunology	0022-1767		113	18	7	1,603	5.75
Journal of Magnetic Resonance Imaging	1053-1807		6	1	0	355	2.75
JOURNAL OF MICROSCOPY-OXFORD	0022-2720		6	1	0	163	1.87
Journal of Neuroscience	0270-6474		6	0	0	1,661	7.27
Journal of Nuclear Medicine	0161-5505		6	0	0	267	7.02
Journal of the American Chemical Society	0002-7863		24	2	0	3,139	9.02
Magnetic Resonance Imaging	0730-725X		23	5	0	176	2.04
Magnetic Resonance in Medicine	0740-3194		17	3	0	407	3.27
Molecular and Cellular Biology	0270-7306		57	9	1	455	6.19
Molecular Biology of the Cell	1059-1524		56	5	5	408	5.86
Molecular Cell	1097-2765		6	3	0	304	14.19
Nano Letters	1530-6984		17	1	1	855	12.19
Nanomedicine	1743-5889		6	0	0	107	6.20
Nature Biotechnology	1087-0156		17	4	1	117	31.09
Nature Cell Biology	1465-7392		112	31	5	130	19.41
Nature Immunology	1529-2908		113	30	1	129	25.67
Nature Medicine	1078-8956		56	18	0	151	25.43
Nature Methods	1548-7091		6	0	0	127	20.72
Nature Photonics	1749-4885		6	0	1	105	26.44
Nature Reviews Immunology	1474-1733		57	22	0	70	35.20
Neuron	0896-6273		6	1	0	302	14.03
NMR in Biomedicine	0952-3480		17	4	0	123	3.06
Optics Letters	0146-9592		6	0	0	1,407	3.32
Physical Review Letters	0031-9007	Soft Matter, Biological, and Interdisciplinary Physics	7	0	0	3,118	7.62
PLoS Biology	1544-9173		6	1	0	214	12.47
Proceedings of the National Academy of Sciences of the United States of America	0027-8424	Immunology	17	6	1	3,764	9.77
		Medical Sciences	23	1	2		
Radiology	0033-8419		6	0	0	390	6.07
Science Translational Medicine	1946-6234		6	0	0	187	3.51
Trends in Immunology	1471-4906		6	1	0	61	9.53
Ultramicroscopy	0304-3991		6	0	1	196	2.06
Subtotals			1,363				
Leading Scientists			55				
Total subjects			1,418				

(5) National Institute for Materials Science International Center for Materials Nanoarchitectonics (MANA)

Table 1-6 Numbers Selected per Journal (MANA)

Journal Name	ISSN	Section	Selected (A)	Of A, sent in 2009	Of A, in Japan	Reference	
						Papers (2010)	IF (2010)
ACS Nano	1936-0851		20	11	0	986	9.86
Advanced Functional Materials	1616-301X		10	2	0	481	8.49
Advanced Materials	0935-9648		20	6	1	777	10.86
ANGEWANDTE CHEMIE	0570-0833		30	2	2	1,652	12.73
Applied Physics Express (APEX)	1882-0778		20	1	15	345	2.75
Applied Physics Letters	0003-6951	Biophysics and Bioinspired Systems	7	0	0	4,459	3.82
		Electronic Transport and Semiconductors	8	1	0		
		Magnetism and Superconductivity	8	1	0		
		Nanoscale Science and Design	6	0	0		
Applied Surface Science	0169-4332		10	0	0	1,339	1.79
Bulletin of the Chemical Society of Japan	0009-2673		15	0	9	197	1.57
Chemical Communication			10	1	1	2,416	5.79
Chemical Physics Letters	0009-2614		20	0	1	1,012	2.28
Chemistry Letters	0366-7022		15	3	10	536	1.40
Chemistry of Materials			20	2	0	833	6.40
Environmental Science & Technology	0013-936X		20	1	0	1,400	4.83
EPL	0295-5075	Condensed Matter: Electronic Structure, Electrical, Magnetic and Optical Properties	3	0	0	824	2.75
		Condensed Matter: Structural, Mechanical and Thermal Properties	3	0	0		
		Interdisciplinary Physics and Related Areas of Science and Technology	3	0	0		
Green Chemistry	1463-9262		20	2	2	315	5.47
Inorganic Chemistry	0020-1669		30	2	0	1,416	4.33
Japanese Journal of Applied Physics	0021-4922	Applied Bioscience	2	2	2		
		Electrical Properties of Condensed Matter	2	0	1		
		Instrumentation, Measurement, and Fabrication Technology	2	0	2		
		Magnetism	1	0	1		
		Nano Science and Technologies	3	0	3		
		Optics and Quantum Electronics	3	0	1		
		Superconductors	3	2	3		
		Surfaces, Interfaces, and Films	2	0	2		
Journal of Applied Physics	0021-8979	Electronic Structure and Transport	4	2	0	3,892	2.06
		Magnetism and Superconductivity	3	1	0		
		Nanoscale Science and Design	3	1	1		
Journal of Chemical Physics	0021-9606		10	0	0	2,136	2.92
Journal of Crystal Growth	0022-0248		20	4	5	629	1.74
Journal of Magnetism and Magnetic Materials	0304-8853		21	0	0	739	1.69
Journal of Materials Chemistry	0959-9428		30	3	1	1,352	5.10
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY	1533-4880		10	1	1	1,414	1.35
Journal of Physical Chemistry B	1520-6106	Biophysical Chemistry	15	0	0	2,012	3.60
		Macromolecules, Soft Matter	15	2	1		
Journal of Physical Chemistry C	1932-7447		30	7	2	3,074	4.52
Journal of Physics and Chemistry of Solids	0022-3697		20	1	1	327	1.38
JOURNAL OF PHYSICS-CONDENSED MATTER	0953-8984		31	3	0	1,174	2.33
Journal of the American Ceramic Society	0002-7820		10	0	0	727	2.17
Journal of The American Chemical Society	0002-7863		40	8	3	3,139	9.02
Journal of the Electrochemical Society	0013-4651		21	1	2	1,137	2.42
Journal of the Physical Society of Japan	0031-9015	Condensed matter: electronic structure and electrical, magnetic, and optical properties	6	0	5	497	2.91
		Condensed matter: structure and mechanical and thermal properties	5	0	3		
		Cross-disciplinary physics and related areas of science and technology	7	2	5		
JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A	0734-2101		10	1	0	235	1.29
Journal of Vacuum Science and Technology B	1071-1023		13	0	0	526	1.27
Langmuir	0743-7463		40	5	1	2,664	4.27
Macromolecules	0024-9297		40	6	4	1,365	4.84
Nano Letters	1530-6984		41	7	1	855	12.19
Nanotechnology	0957-4484		40	3	0	1,139	3.64
Nature Materials	1476-1122		20	9	0	137	29.90
Nature Nanotechnology	1748-3387		20	10	0	130	30.31
Physica Status Solidi C	1610-1634		20	3	2		
Physical Review B	1098-0121		40	6	1	5,991	3.77
Physical Review Letters	0031-9007	Condensed Matter: Electronic Properties, etc.	19	2	2	3,118	7.62
		Condensed Matter: Structure, etc.	10	1	0		
		Soft Matter, Biological, and Interdisciplinary Physics	10	0	0		
Scripta Materialia	1359-6462		10	1	1	540	2.81
Small	1613-6810		10	1	0	388	7.33
Solid State Communications	0038-1098		10	5	0	543	1.98
Surface Science	0039-6028		21	3	0	331	2.01
Subtotals			991				
Leading Scientists			37				
Total subjects			1,028				

2 Survey Results

Aggregate results of the survey are shown below. Although in principle the questions were asked about each Center, questions for Respondent Attributes (2-1), About the WPI (2-7), and Science and Technology in General (2-8) were asked of each respondent only one time, even those who were asked about multiple Centers; accordingly, only the overall answers are indicated.

2-1 Respondent Attributes

The attributes of respondents are as indicated below. While the trends for IPMU differ somewhat from the other Centers, most commonly a respondent was a “principal investigator or group leader”; there were few post-doctoral or student respondents.

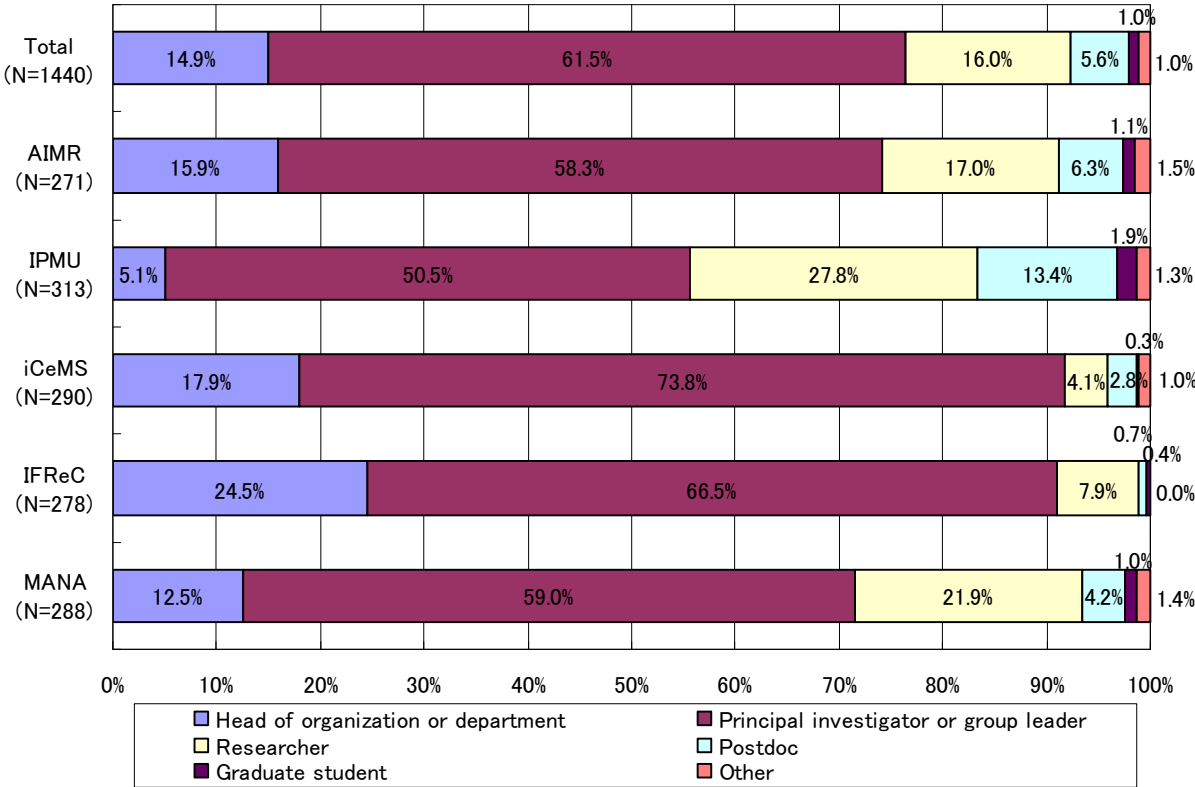


Figure 2-1 Your Position

Most (three-fourths) of the respondents were affiliated with a university, followed by public research institutes. Very few worked in private-sector corporations.

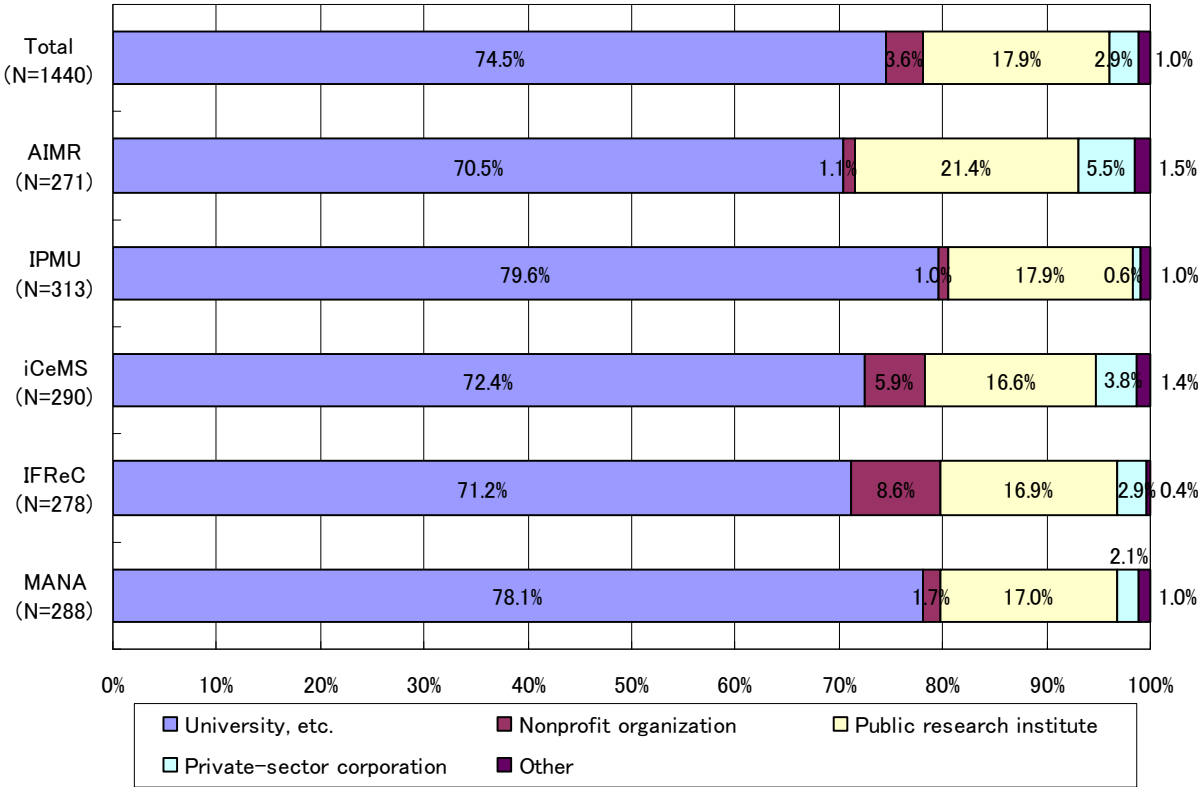


Figure 2-2 Your Affiliation

Among their main research areas, the most common were material science, chemistry, nanoscience, immunology, molecular and cellular biology, and theoretical particle/nuclear physics.

N=1440

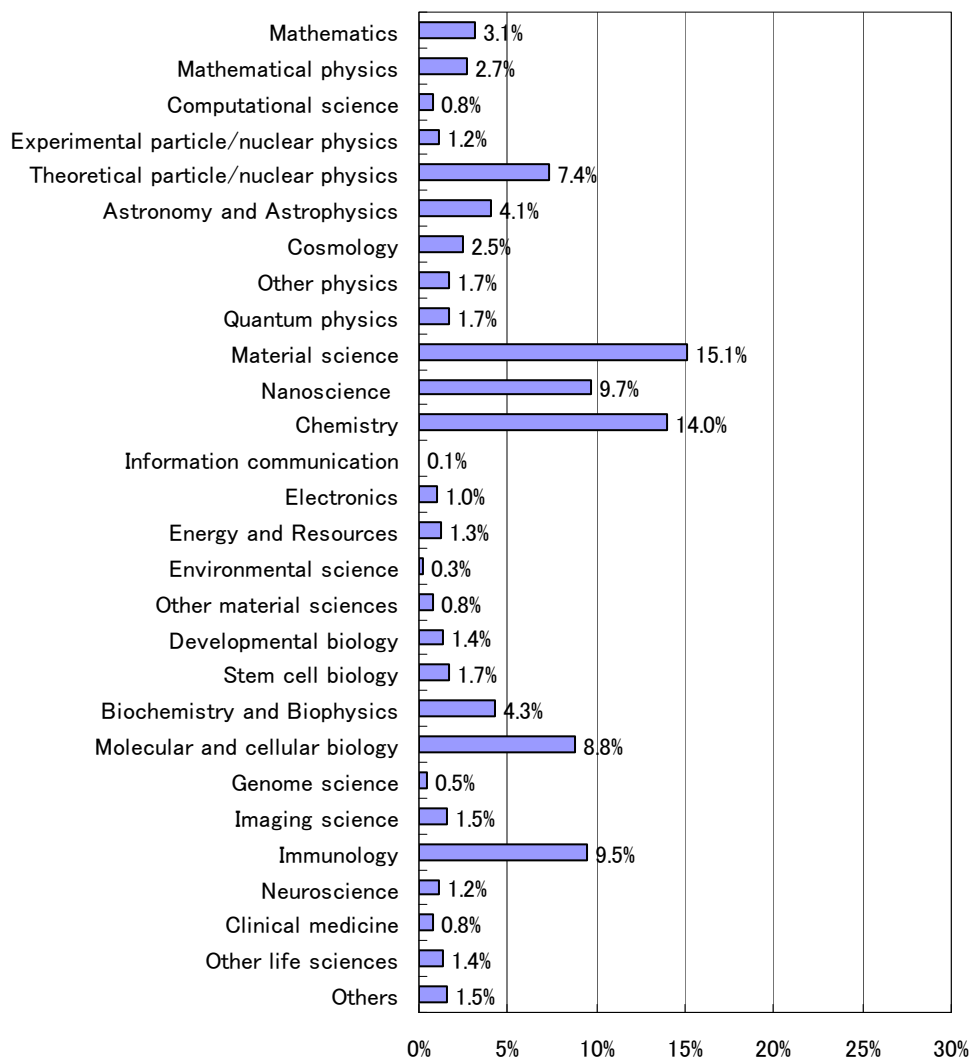


Figure 2-3 Your Main Research Area

Among nationalities (multiple responses), American was most common at more than a fourth. Around 10 percent were Japanese.

Of the other responses, German and Chinese were common, while the British, Italian, French, Canadian, and Australian were also among the represented nationalities.

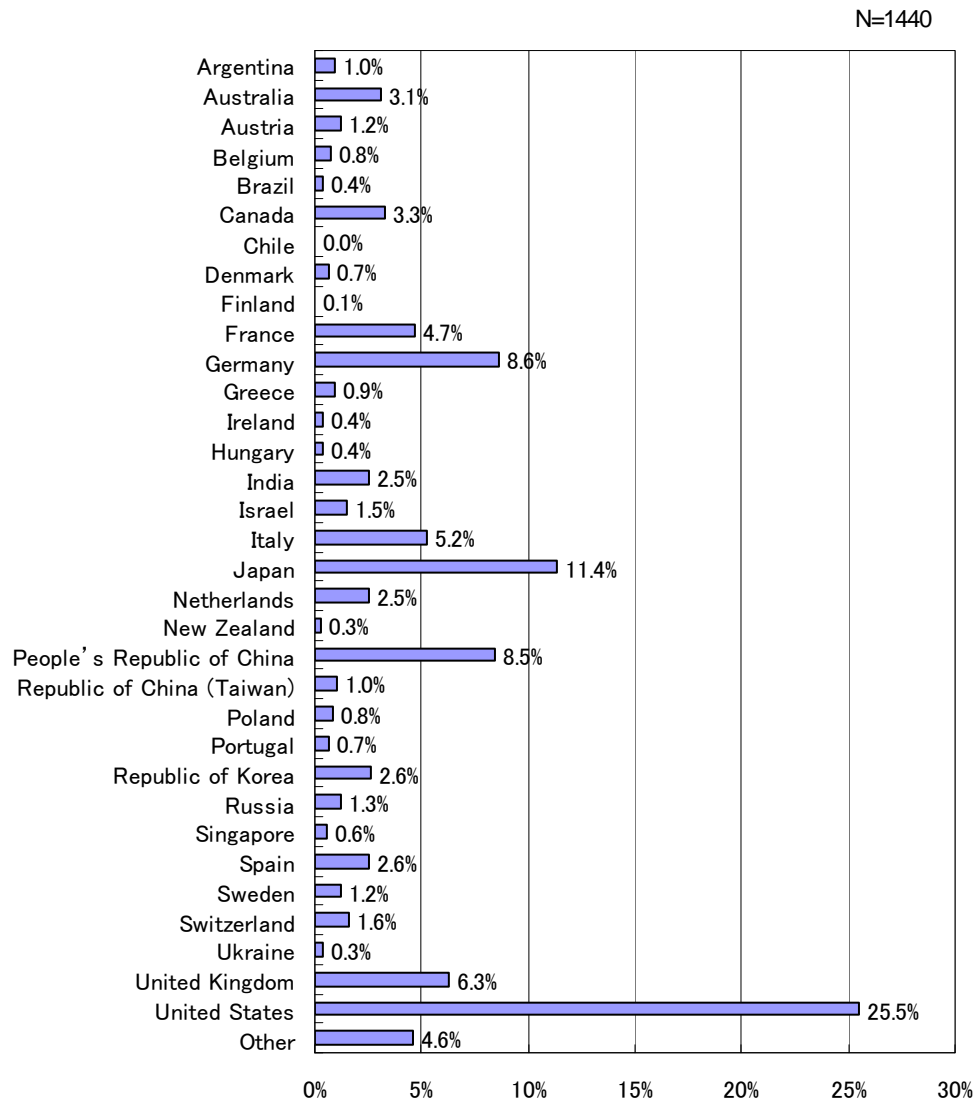


Figure 2-4 Your Nationality

Of the countries where respondents performed research work (multiple responses), again the United States was most common at around two-thirds, followed by Germany, the United Kingdom, Japan, and France. More than 20 percent indicated experience in Japan.

It should be noted, however, that these figures include the country of origin and countries where the scientist holds nationality.

Among other countries, Switzerland, Italy, China, and Canada had the most mentions, while the Netherlands, Spain, Australia, Israel, South Korea, and Sweden were also among the countries cited.

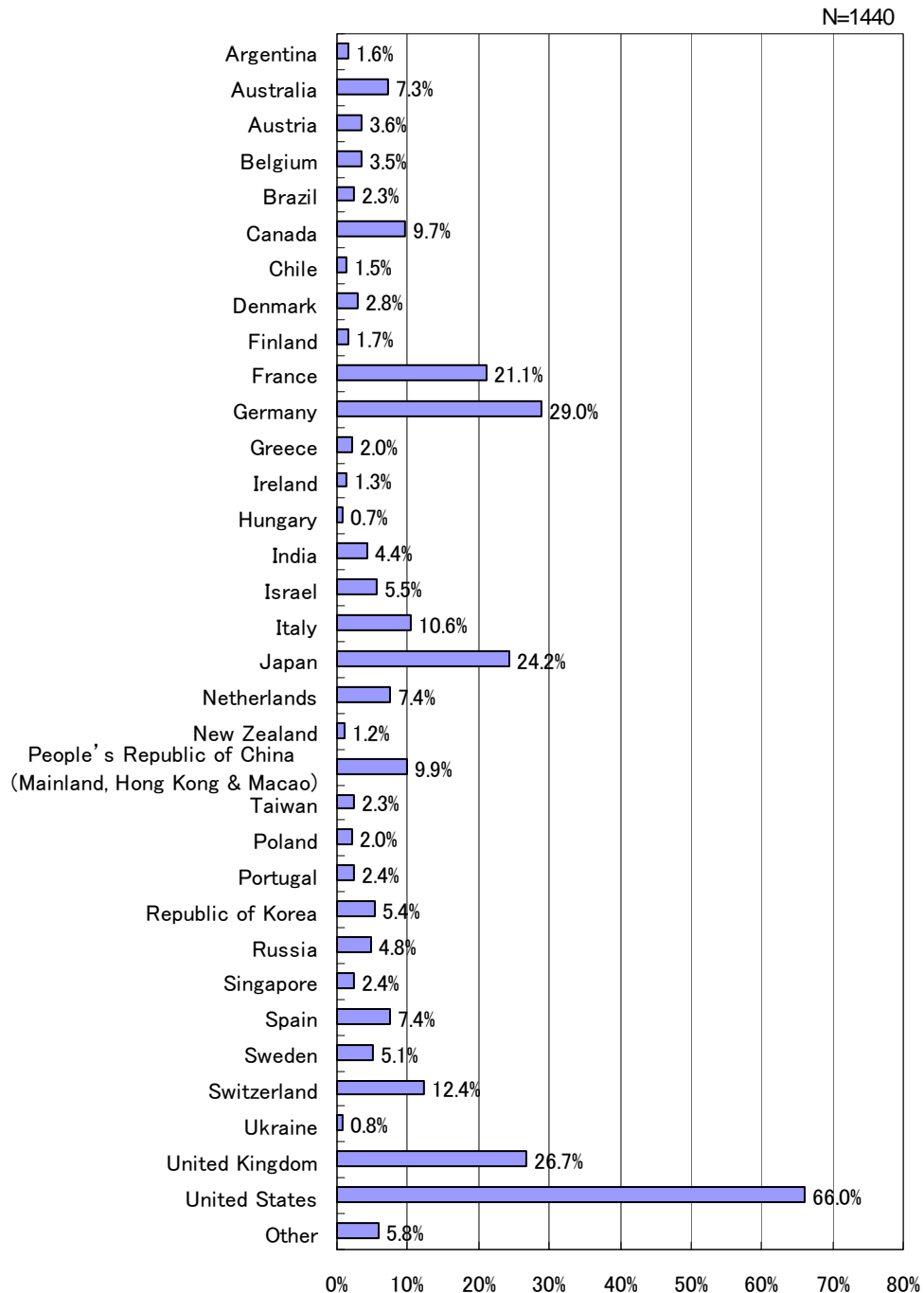


Figure 2-5 Countries Where You Have Performed Research

 2-2 Advanced Institute for Materials Research (AIMR)

2-2-1 Main research area, nationality, and research countries of respondents

The main research areas of respondents, their nationalities, and countries where they have performed research are as indicated below.

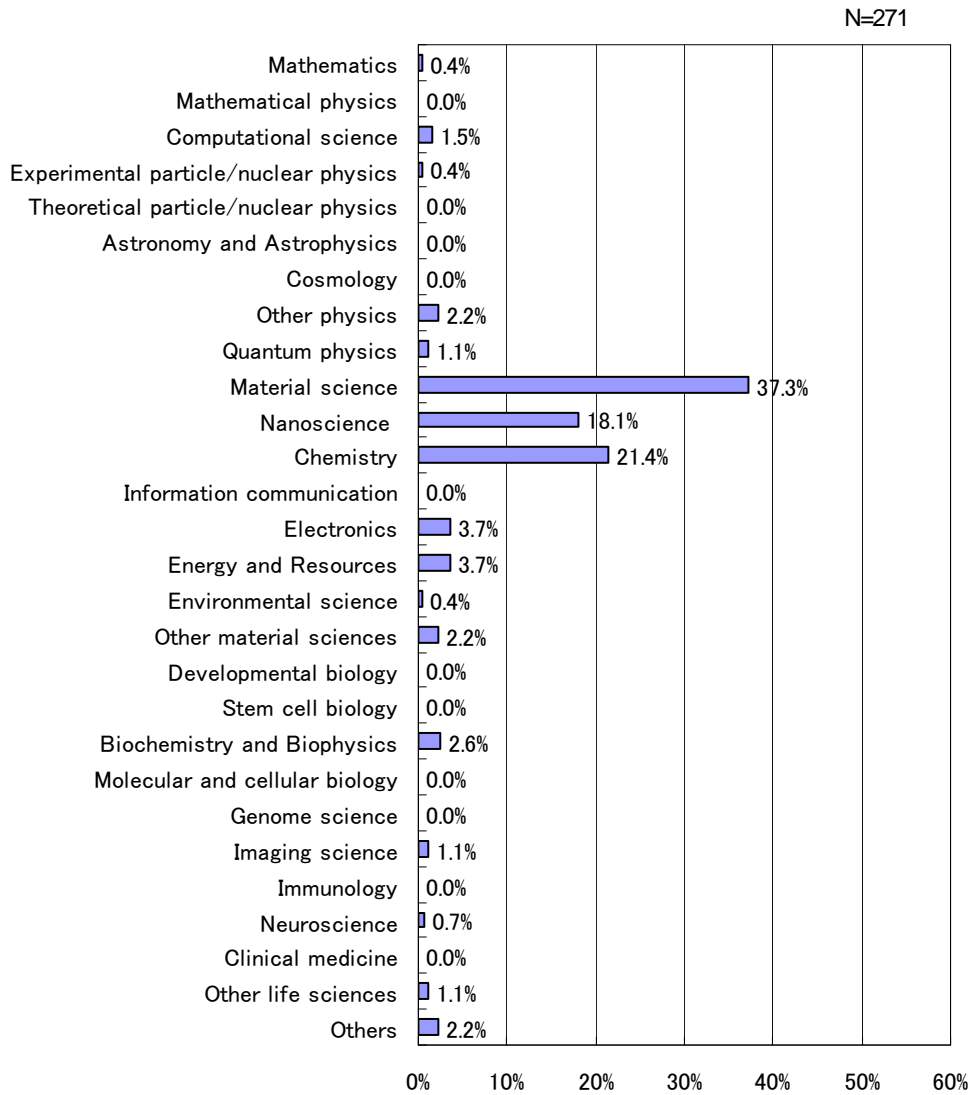


Figure 2-6 Your Main Research Area

N=271

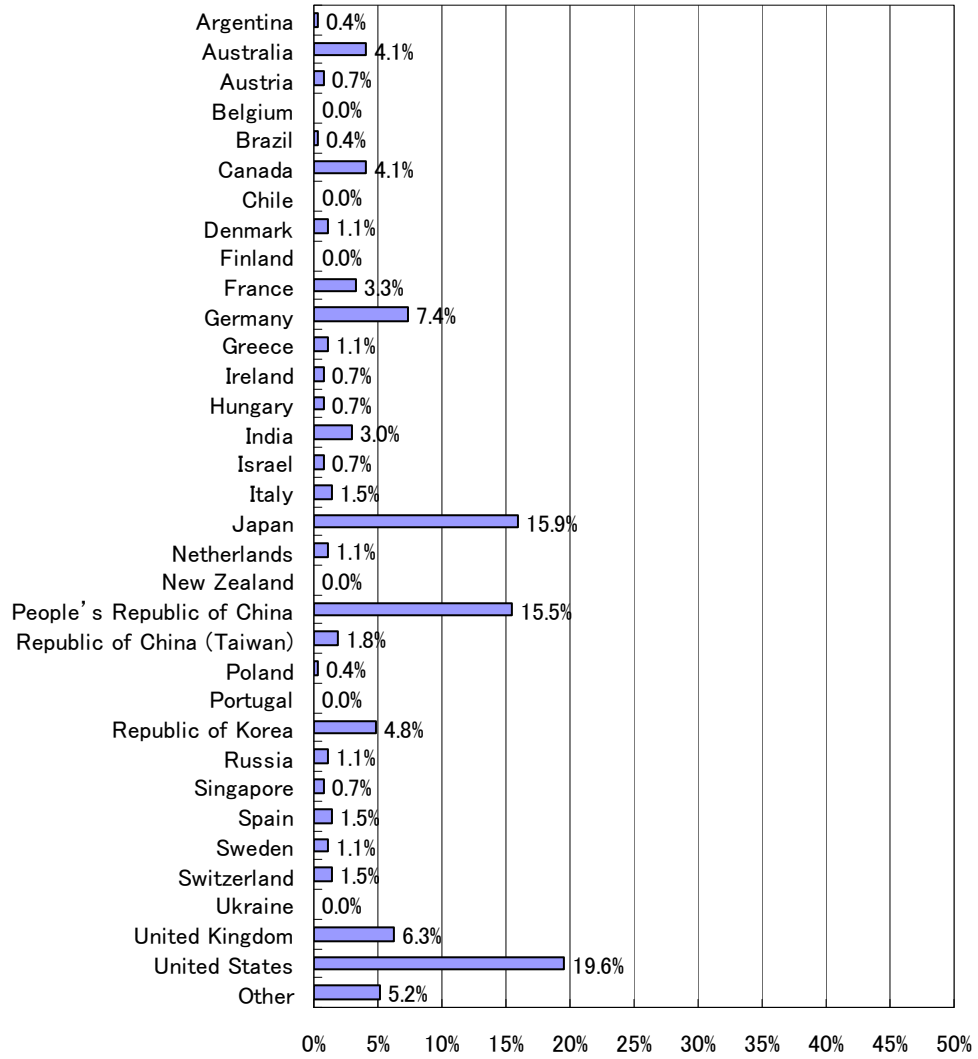


Figure 2-7 Your Nationality

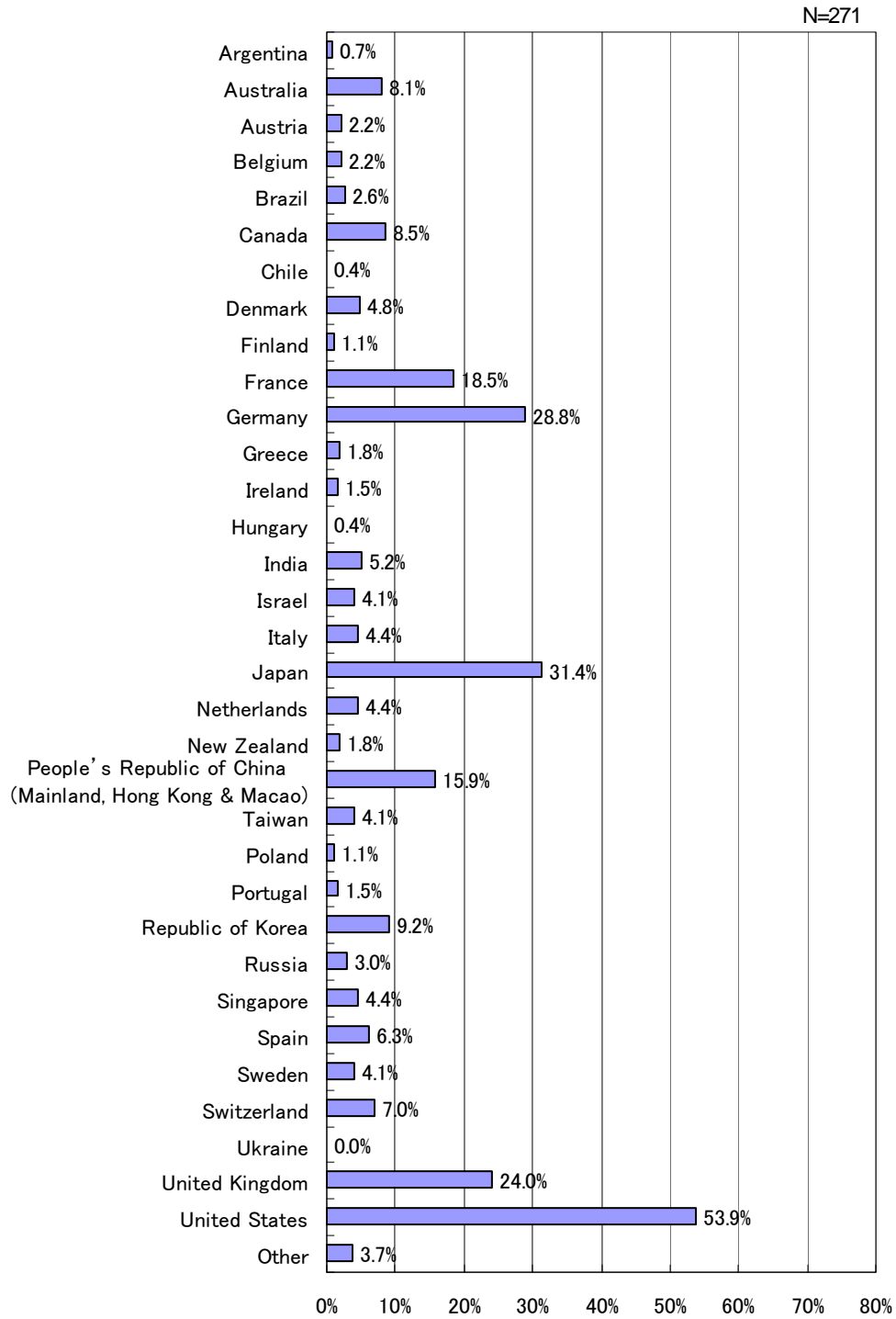


Figure 2-8 Countries Where You Have Performed Research

2-2-2 Awareness and knowledge of the WPI Center

Nearly half of the respondents said they did not know about the Center. The most common items known were, in order, the name of the Center, the WPI, and the nature of the research. The director's name was the least commonly known item.

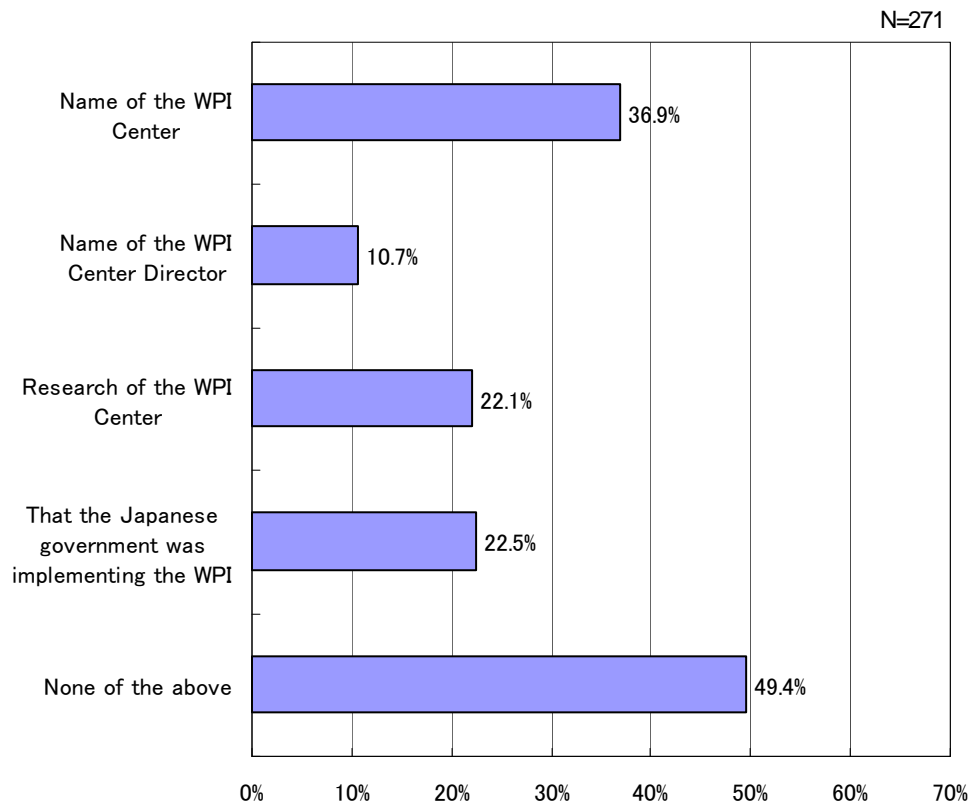


Figure 2-9 Before receiving this questionnaire, which of the following did you know about the WPI Center?

Responses by research areas for which there were 40 or more respondents were as follows.

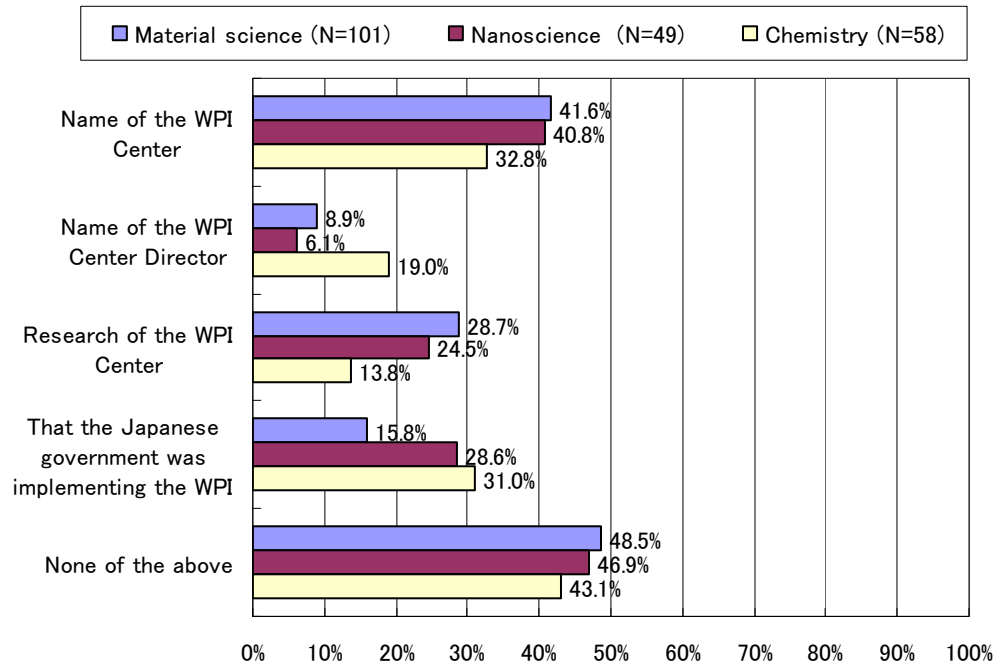


Figure 2-10 Before receiving this questionnaire, which of the following did you know about the WPI Center? (by main research area)

When those that knew about the Center were asked about the initial source of their knowledge, the results were as follows.

The most frequent response was “mentioned in academic paper or other publication; profiled in scientific journal.”

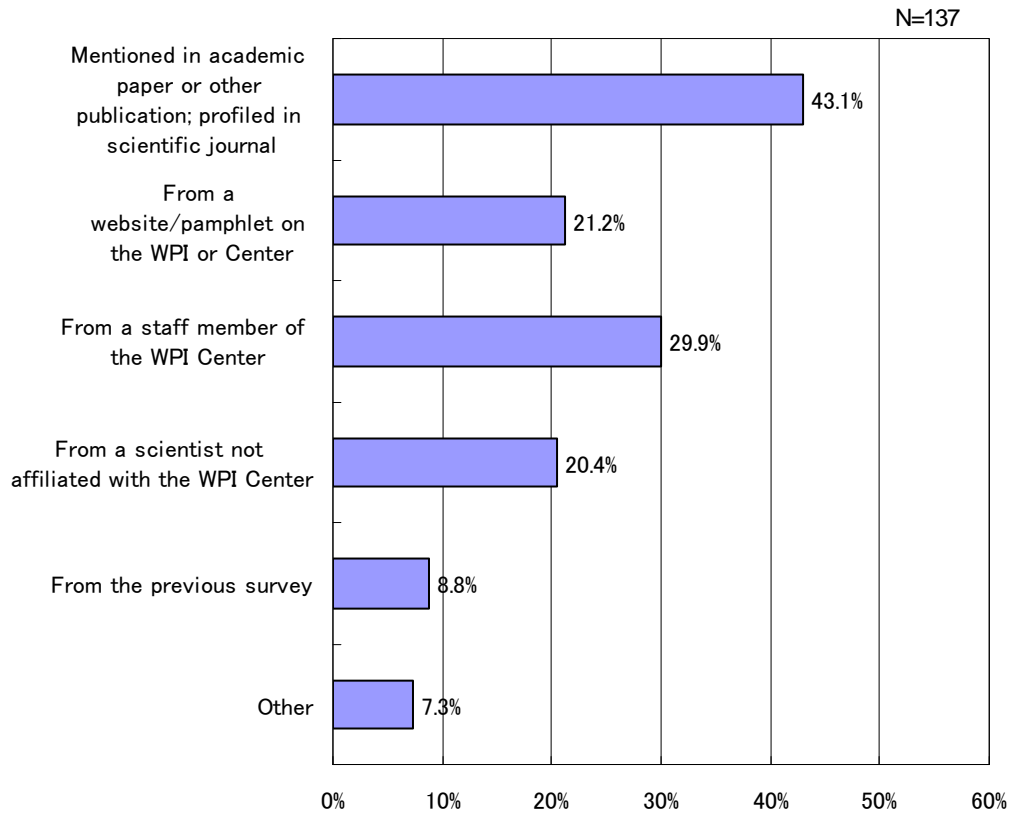


Figure 2-11 How did you first learn about the WPI Center?

Those that knew about the Center were asked about their involvement in the Center research, etc., with the following results.

Most said they had not had any involvement, even if they knew about the Center.

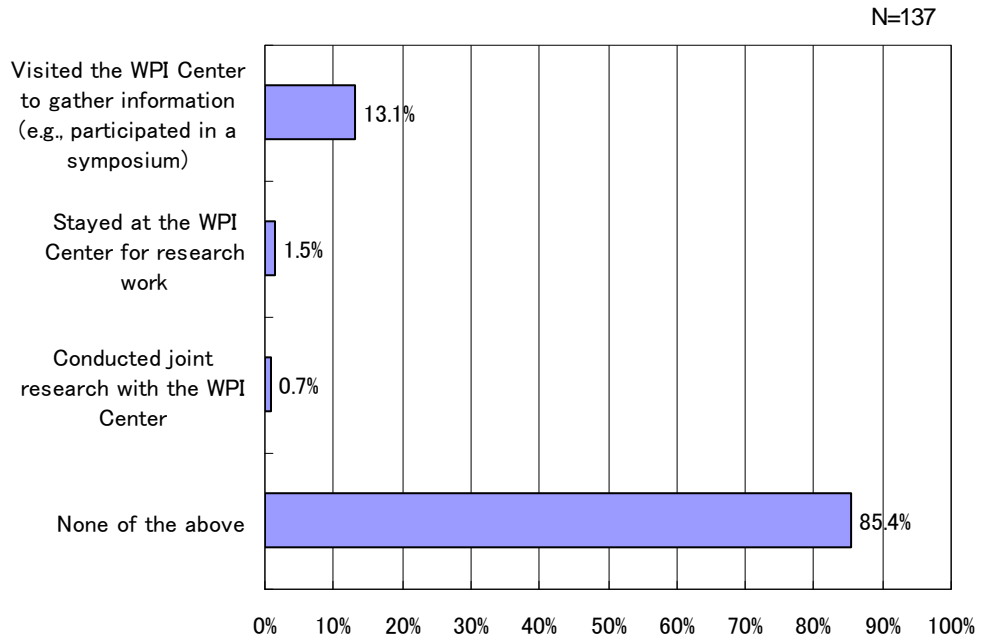


Figure 2-12 What has been your involvement in the WPI Center?

2-2-3 Evaluation of the WPI Center

As overall trends in evaluations of this WPI Center, “outstanding” and “don’t know” were the two frequent responses while “average” and “poor” responses were relatively few.

“Level of research” and “research facilities and equipment” received many “outstanding” responses, while “international character and environment” received slightly more “average” than “outstanding” responses.

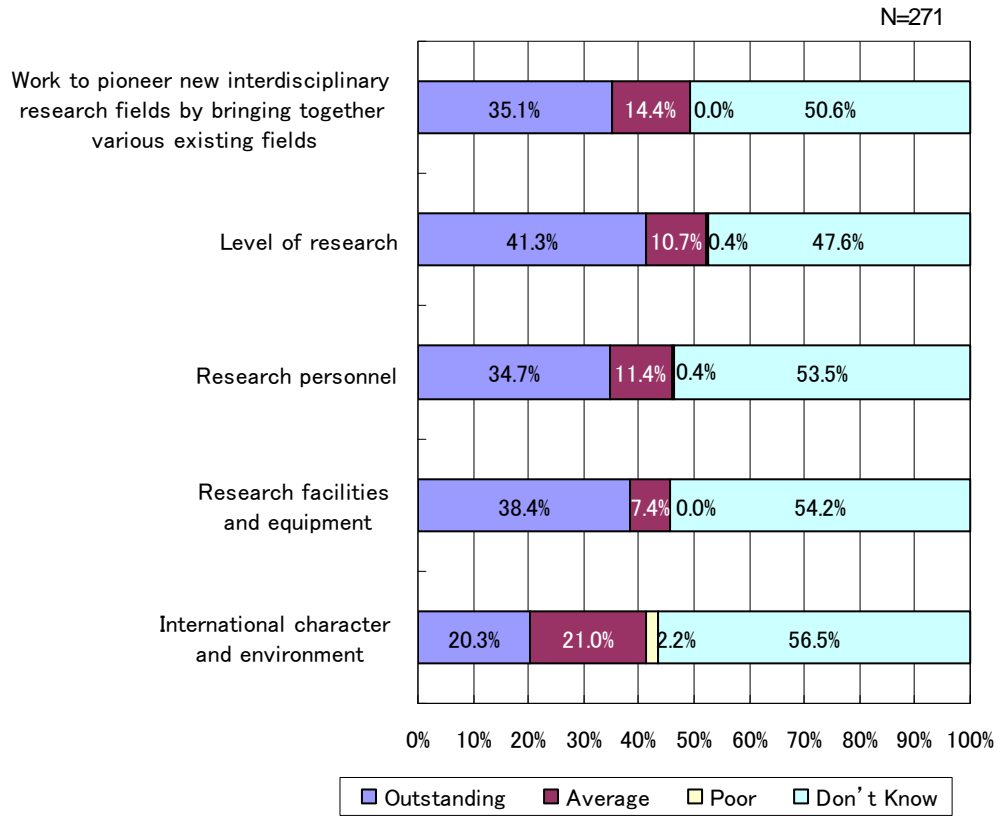


Figure 2-13 Please evaluate the WPI Center in the following areas, as able. Please select one answer for each area

2-2-4 Joint research with and participation in the WPI Center

“Sounds appealing” was the most frequent response to the question about joint research with the WPI Center, at around 30 percent of the total responses. This was followed by “strongly interested” at just under 30 percent. Adding “interested” to these two responses accounts for around 80 percent of the total.

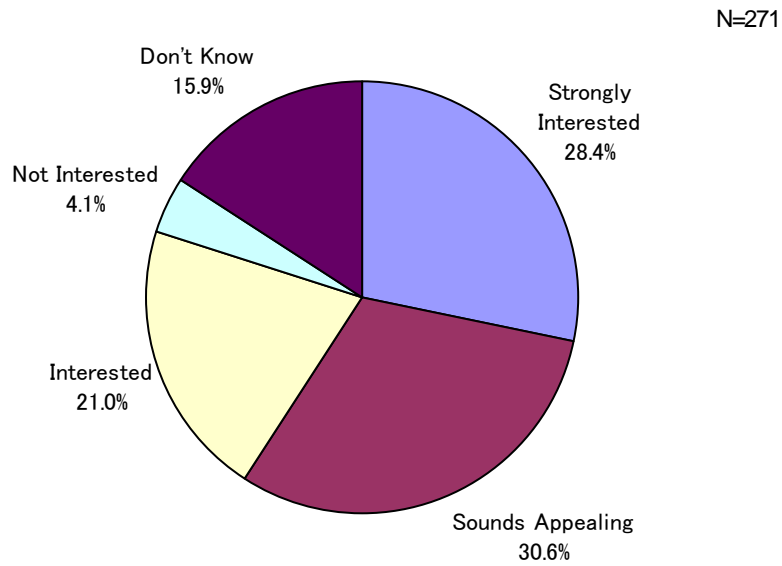


Figure 2-14 How do you view the WPI Center as a potential partner in joint research?
 Responses by research areas for which there were 40 or more respondents were as follows.

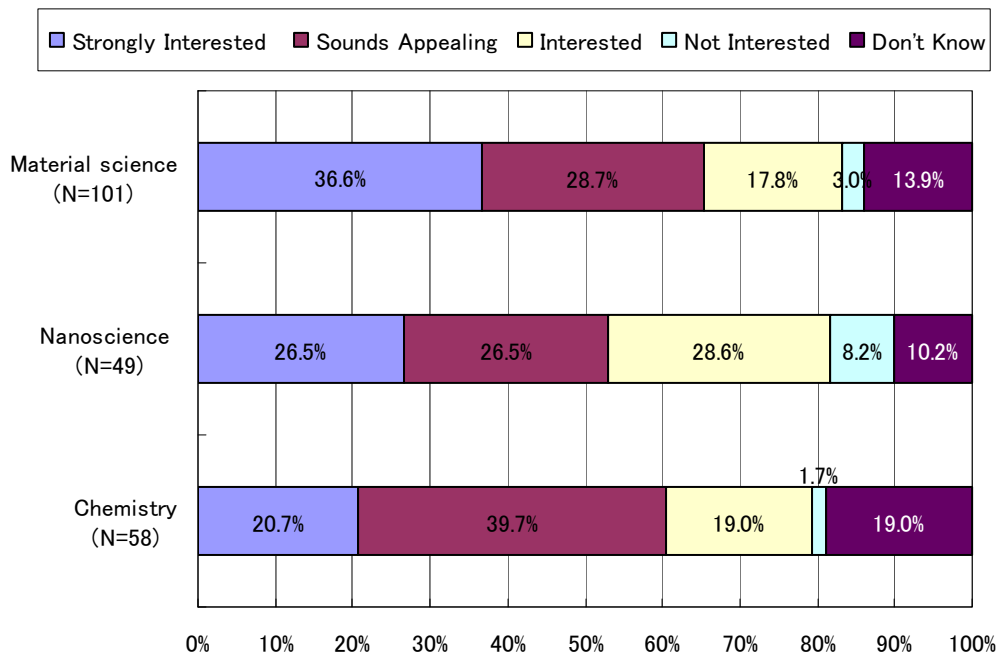


Figure 2-15 How do you view the WPI Center as a potential partner in joint research? (by main research area)

More than 60 percent responded either “strongly interested,” “sounds appealing,” or “interested” when asked about participation in WPI Center activities.

“Visit to collect information (e.g., participate in symposium)” was the most common activity the respondents desired for themselves or would recommend to others (students, colleagues, scientist acquaintances), followed by “stay at the Center for research work” and “be a member of the Center, including dual appointment.”

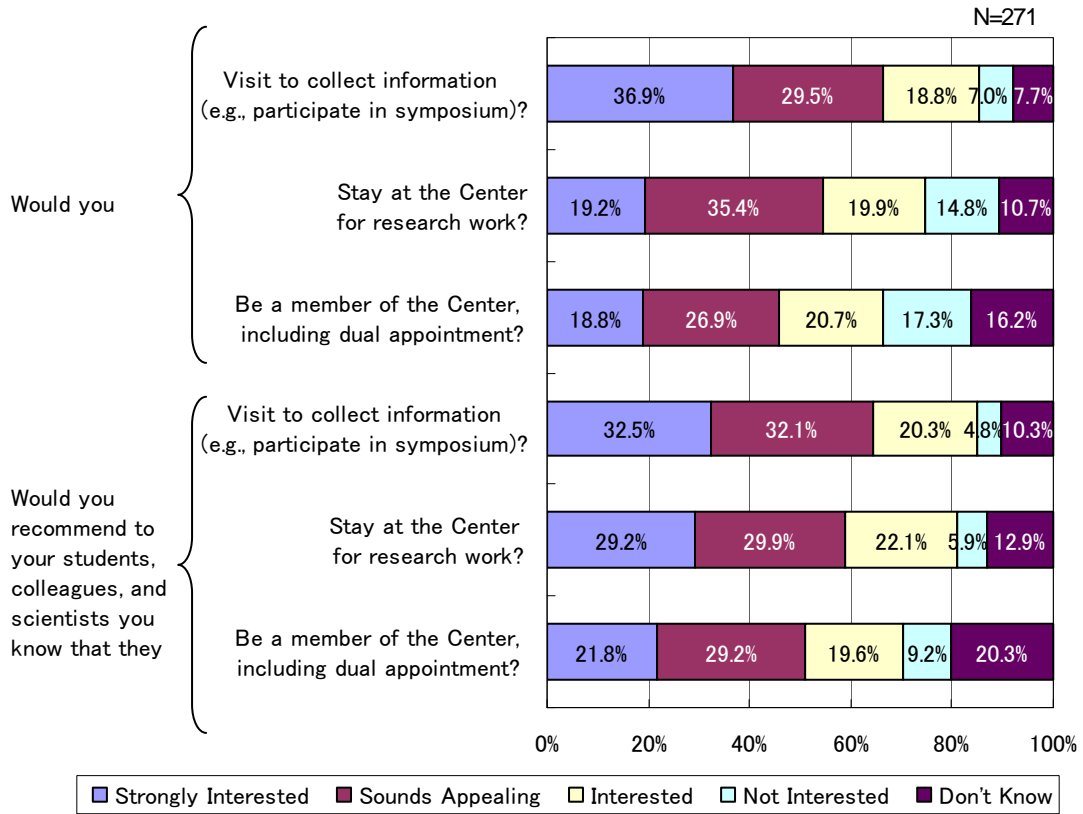


Figure 2-16 How do you view participating in the activities of the WPI Center?

Respondents who chose “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment,” as activities either for their own participation in WPI Center activities or for recommending to students, colleagues, or scientist acquaintances, were asked the reason for their choice, with the following results.

“Because the Center’s research is attractive,” “because the Center has excellent research facilities and equipment,” and “because the level of the Center’s research is outstanding” were the most common reasons given.

Research content and level were also given as write-in answers for “other.”

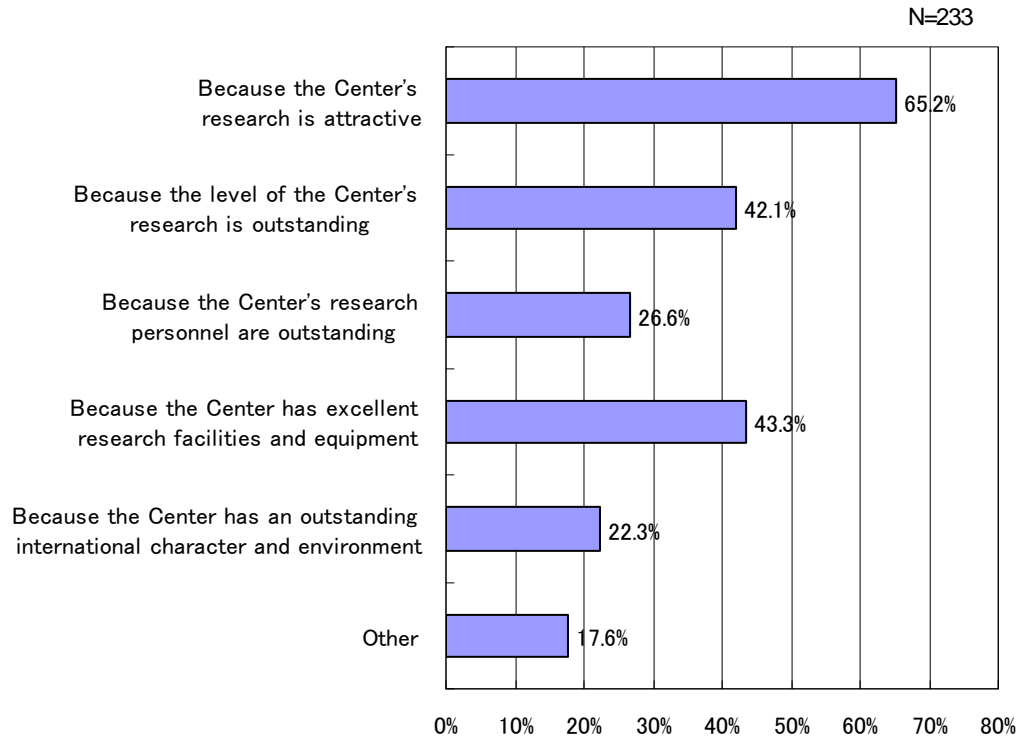


Figure 2-17 Why did you answer “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment”?

Asked to give reasons standing in the way of involvement in Center activities, respondents indicated matters such as the following.¹

- Time constraints
- Current job demands (difficult to hold two positions; have teaching responsibilities, etc.)
- Family
- Language barrier (Japanese)
- Travel costs and time issues due to distance from current address
- Financial issues
- Unfamiliarity with details of research at the Center

¹ This is a sampling of different views, drawn mainly from those given by multiple respondents.

2-2-5 Advice for the WPI Center

In response to a request for advice on how to make the WPI Center a global research center, the main suggestions were along the following lines.²

- Plan symposiums and similar events.
- Strengthen publicity, advertising, and information dissemination.
- Promote globalization (e.g.: hold international conferences, invite/accept more foreign scientists, send Japanese researchers overseas, conduct international exchanges, conduct international joint research, issue information in English).
- Support, train, and make use of outstanding young scientists.
- Excellent results must be achieved and the specific details need to be announced.

² This is a sampling of different ideas, drawn mainly from those given by multiple respondents.

2-3 Institute for the Physics and Mathematics of the Universe (IPMU)

2-3-1 Main research area, nationality, and research countries of respondents

The main research areas of respondents, their nationalities, and countries where they have performed research are as indicated below.

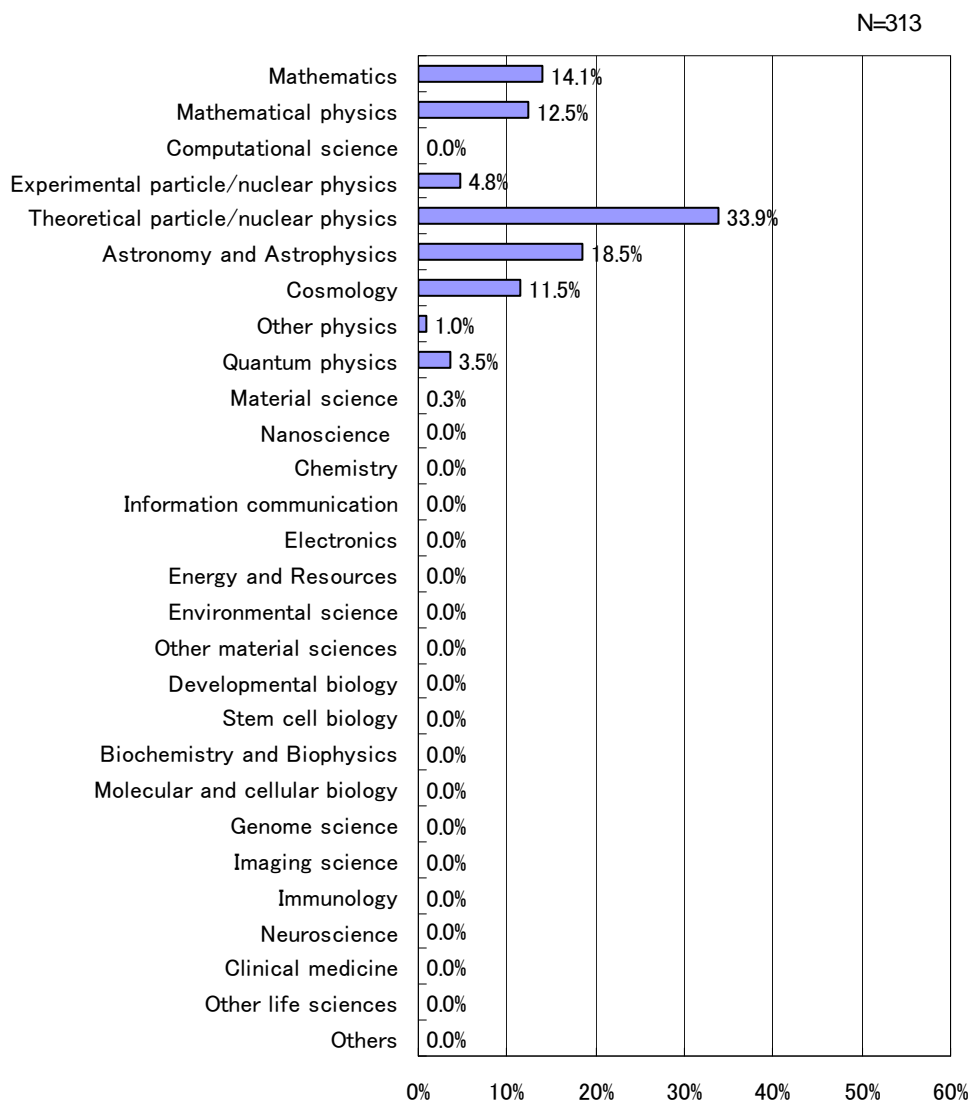


Figure 2-18 Your Main Research Area

N=313

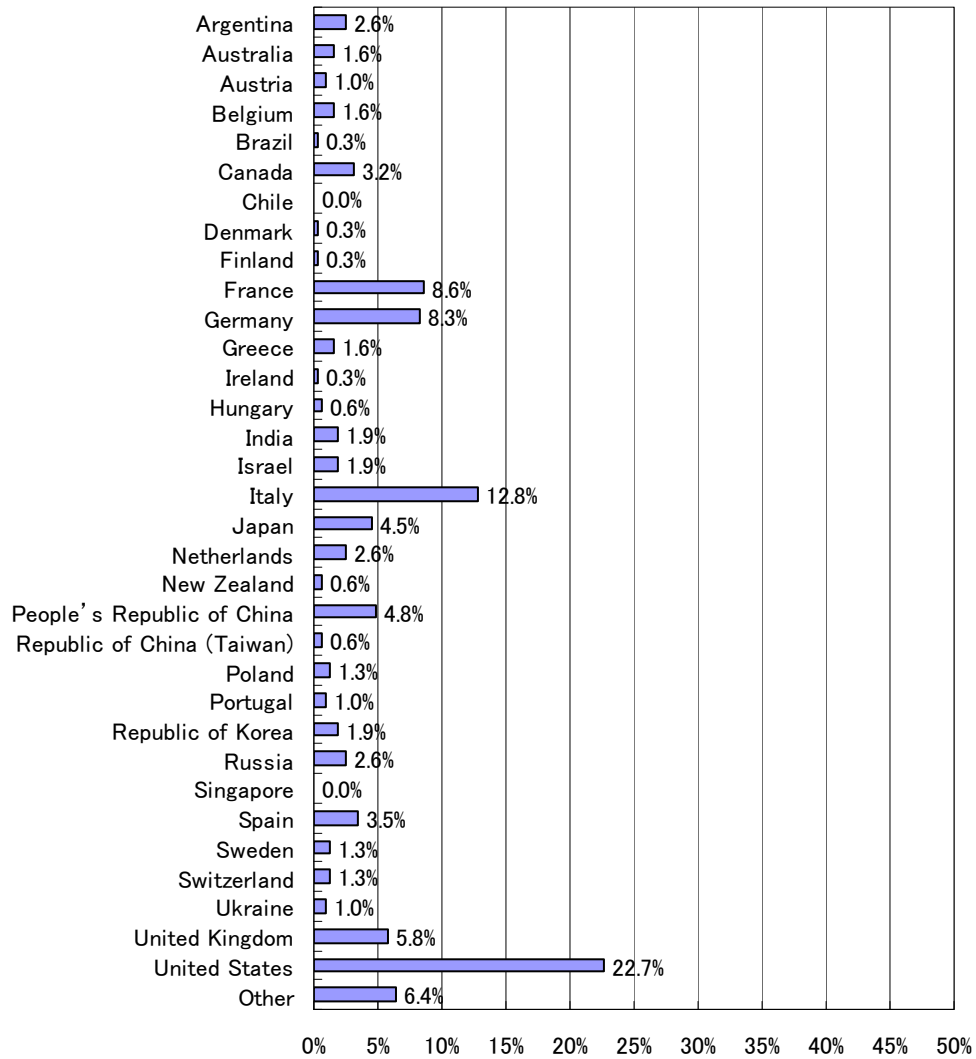


Figure 2-19 Your Nationality

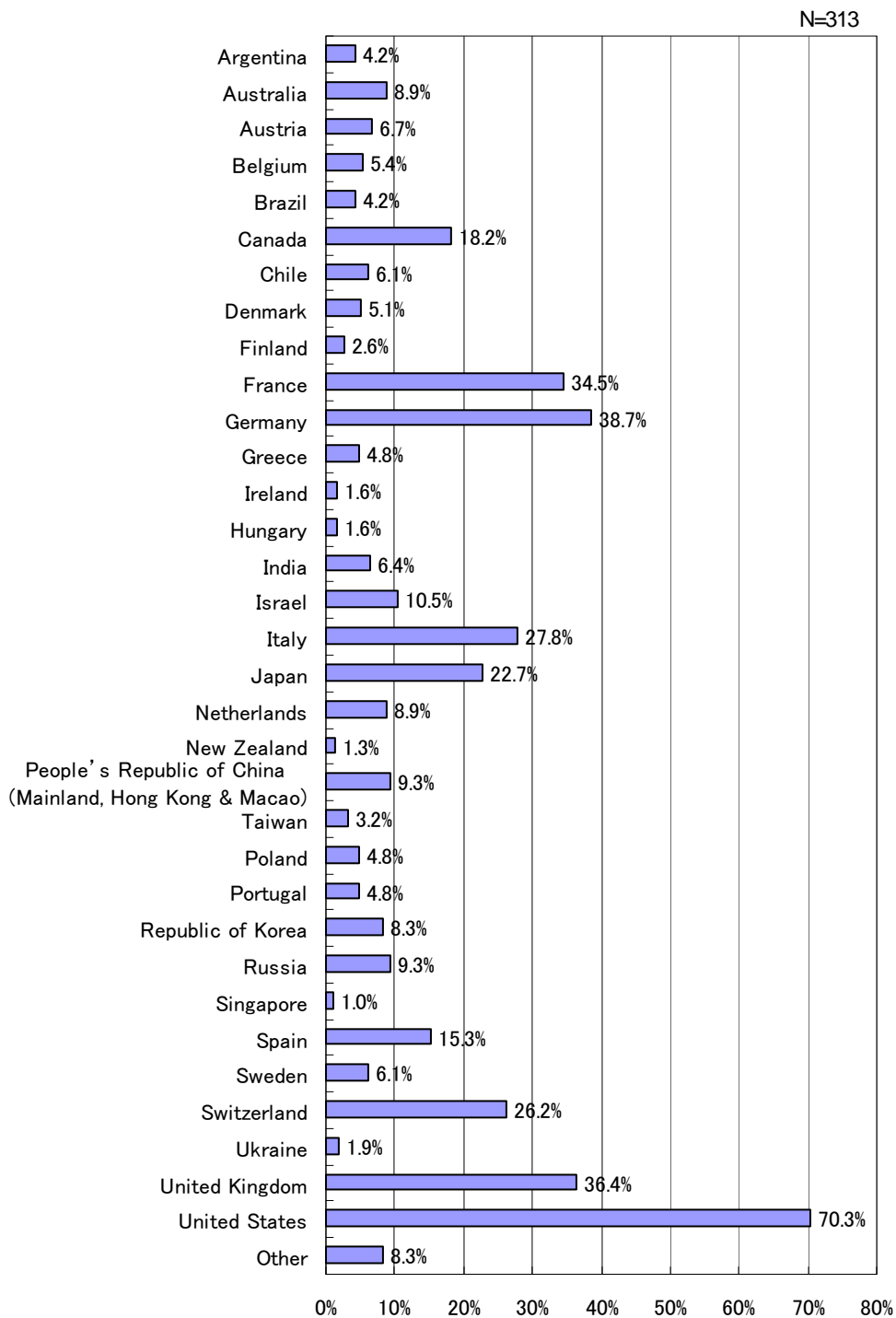


Figure 2-20 Countries Where You Have Performed Research

2-3-2 Awareness and knowledge of the WPI Center

Slightly fewer than 30 percent of respondents said they did not know about the Center. Around two-thirds said they knew the name of the Center and half said they knew the nature of the research, while 40 percent or so knew about the WPI and the name of the Center director.

The degree of familiarity was seen to vary depending on the main research area of respondents.

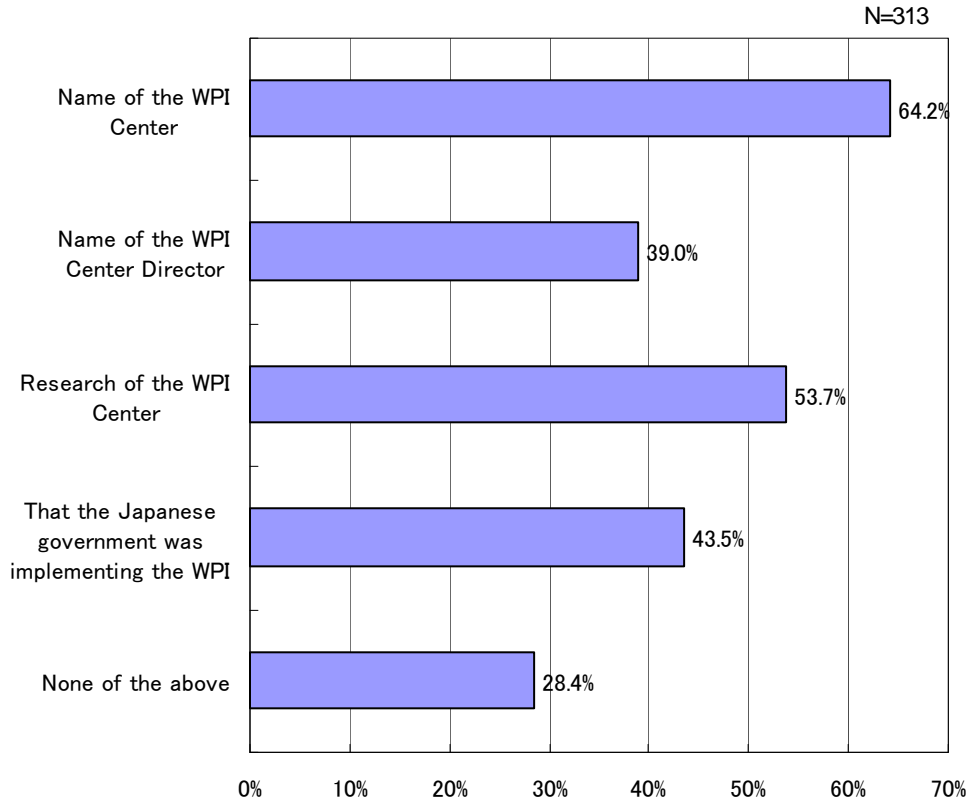


Figure 2-21 Before receiving this questionnaire, which of the following did you know about the WPI Center?

Responses by research areas for which there were 40 or more respondents were as follows.

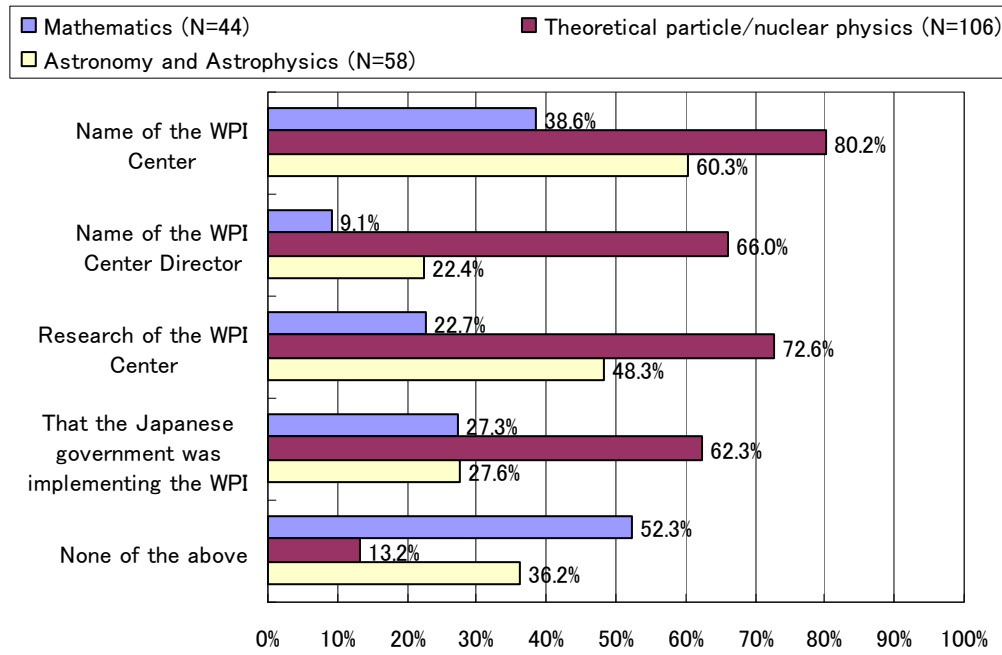


Figure 2-22 Before receiving this questionnaire, which of the following did you know about the WPI Center? (by main research area)

When those that knew about the Center were asked about the initial source of their knowledge, the results were as follows.

The most frequent responses were “from a scientist not affiliated with the WPI Center” and “from a staff member of the WPI Center.” This result is unique to IPMU.

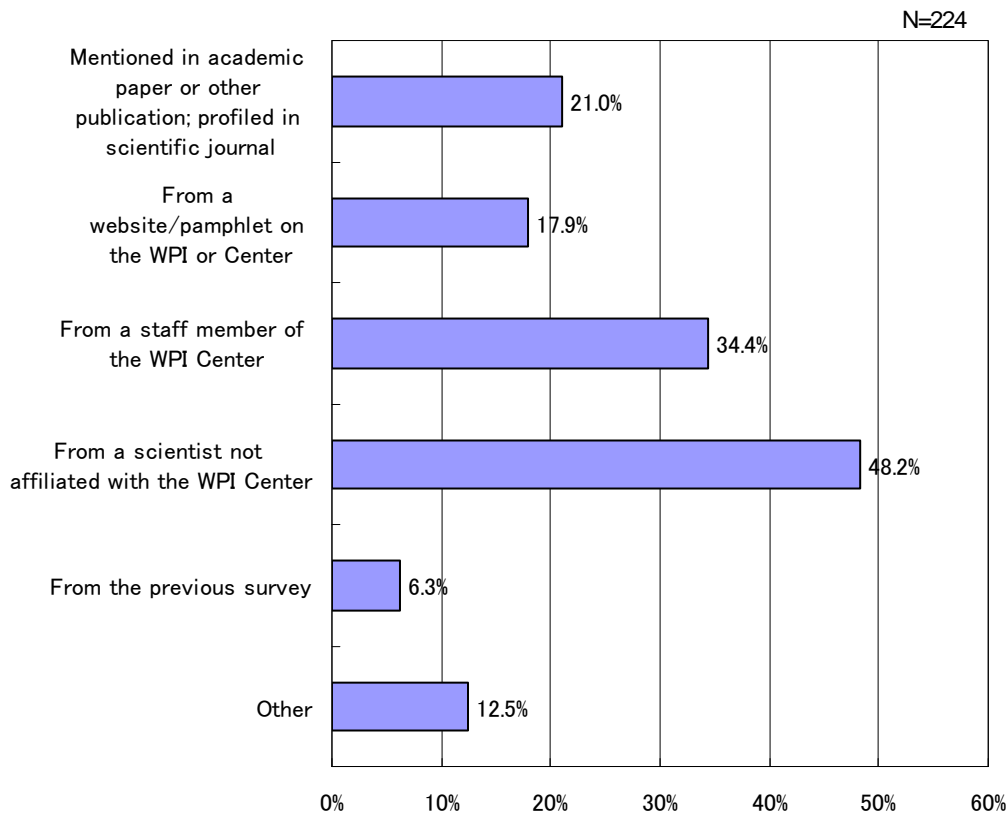


Figure 2-23 How did you first learn about the WPI Center?

Those that knew about the Center were asked about their involvement in the Center research, etc., with the following results.

Around three-quarters of respondents said they had not had any involvement, even if they knew about the Center.

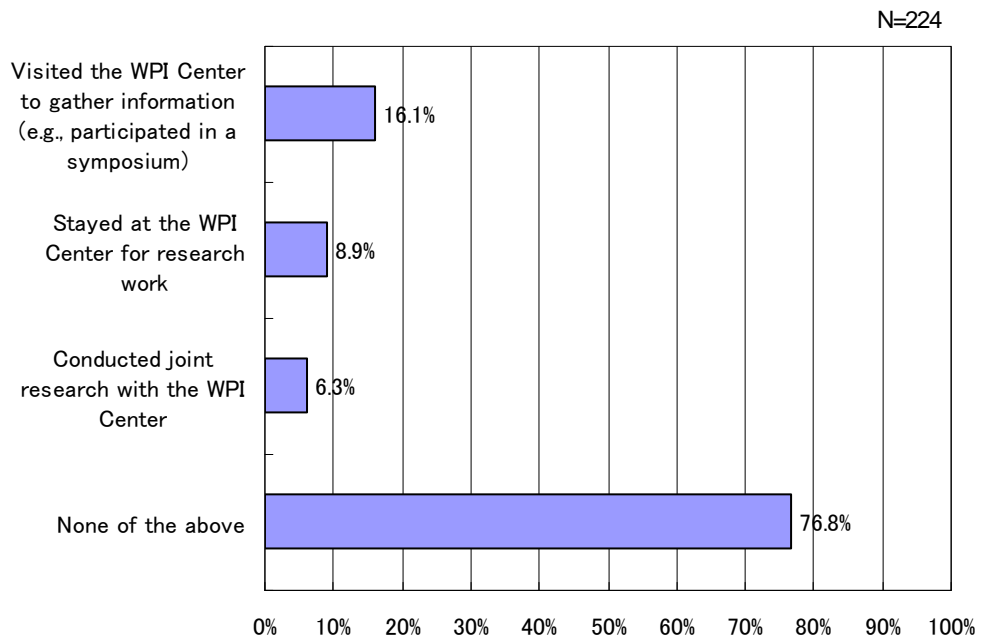


Figure 2-24 What has been your involvement in the WPI Center?

2-3-3 Evaluation of the WPI Center

As overall trends in evaluations of this WPI Center, “outstanding” and “don’t know” were the two frequent responses while “average” and “poor” responses were relatively few.

“Research personnel” and “level of research” received relatively many “outstanding” responses.

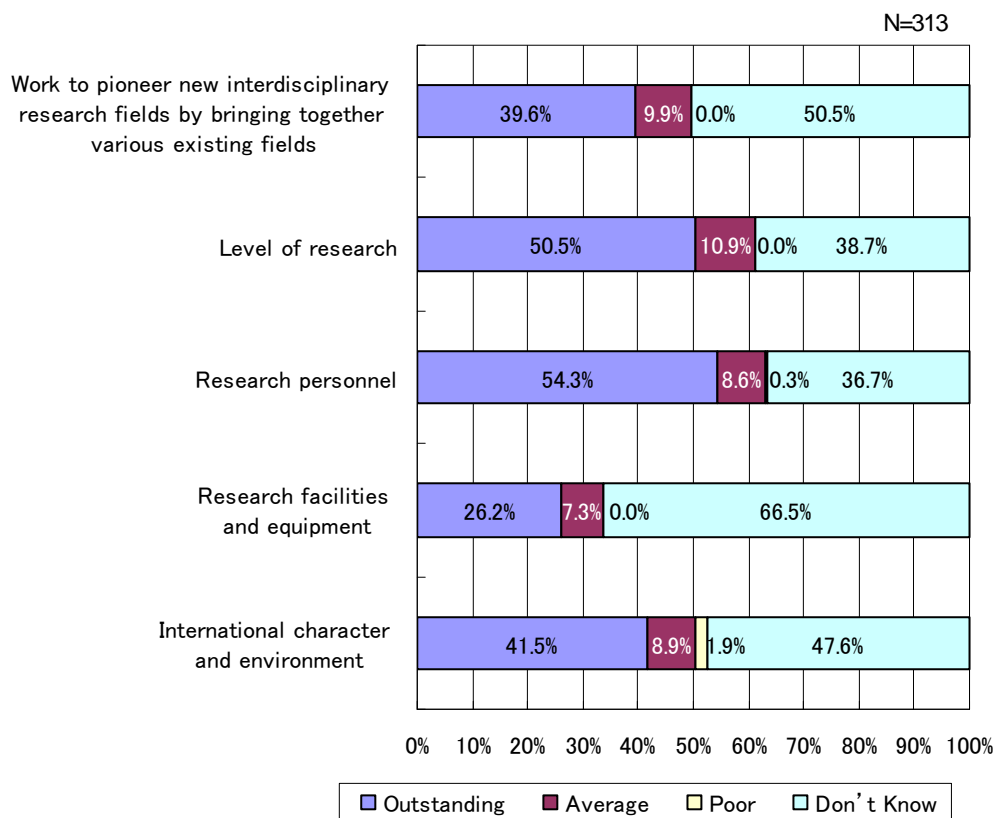


Figure 2-25 Please evaluate the WPI Center in the following areas, as able. Please select one answer for each area

2-3-4 Joint research with and participation in the WPI Center

The largest number of respondents chose “strongly interested” concerning joint research with the WPI Center, with this response and “sounds appealing” together making up about 70 percent of the responses.

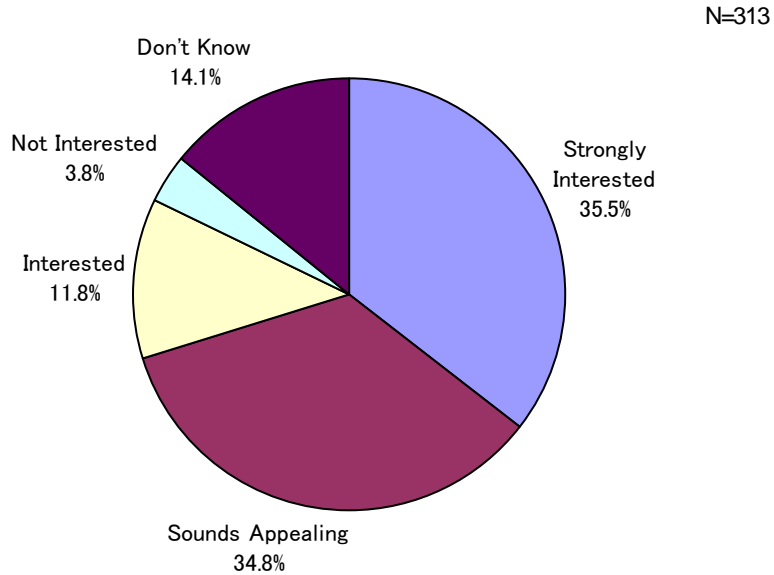


Figure 2-26 How do you view the WPI Center as a potential partner in joint research? Responses by research areas for which there were 40 or more respondents were as follows.

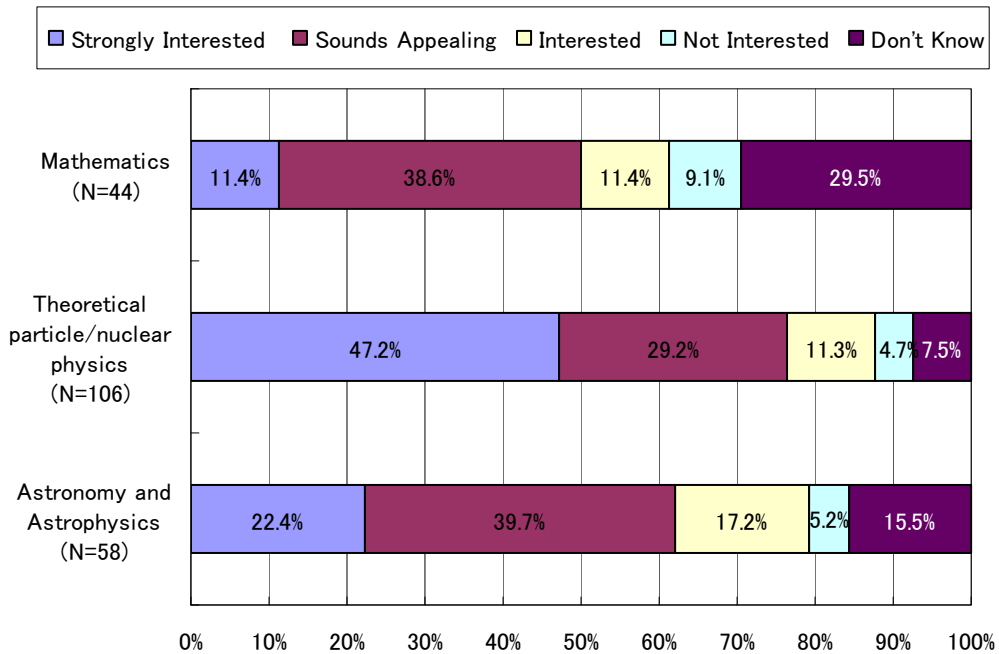


Figure 2-27 How do you view the WPI Center as a potential partner in joint research? (by main research area)

More than 60 percent responded either “strongly interested,” “sounds appealing,” or “interested” when asked about participation in WPI Center activities.

“Visit to collect information (e.g., participate in symposium)” was the most common activity the respondents desired for themselves or would recommend to others (students, colleagues, scientist acquaintances), followed by “stay at the Center for research work” and “be a member of the Center, including dual appointment.”

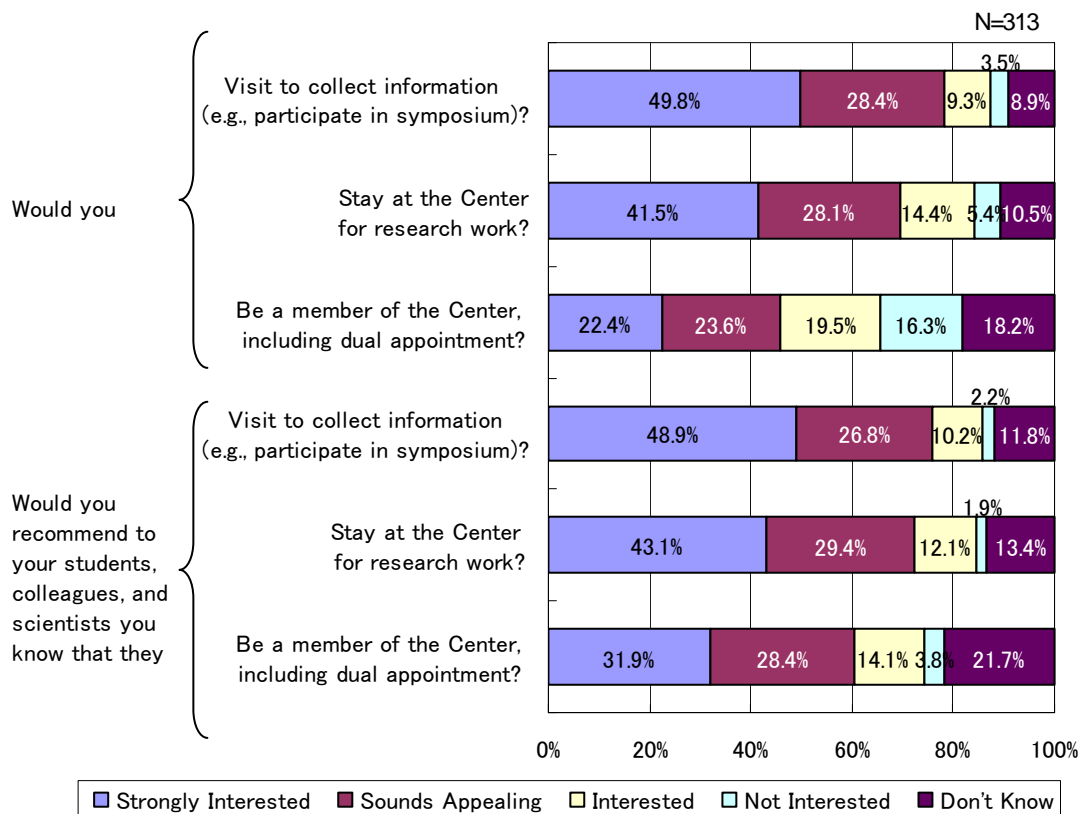


Figure 2-28 How do you view participating in the activities of the WPI Center?

Respondents who chose “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment,” as activities either for their own participation in WPI Center activities or for recommending to students, colleagues, or scientist acquaintances, were asked the reason for their choice, with the following results.

“Because the Center’s research is attractive,” “because the Center’s research personnel are outstanding,” and “because the level of the Center’s research is outstanding” were the most common reasons given.

Interest in new research fields, and research personnel were also given as write-in answers for “other.”

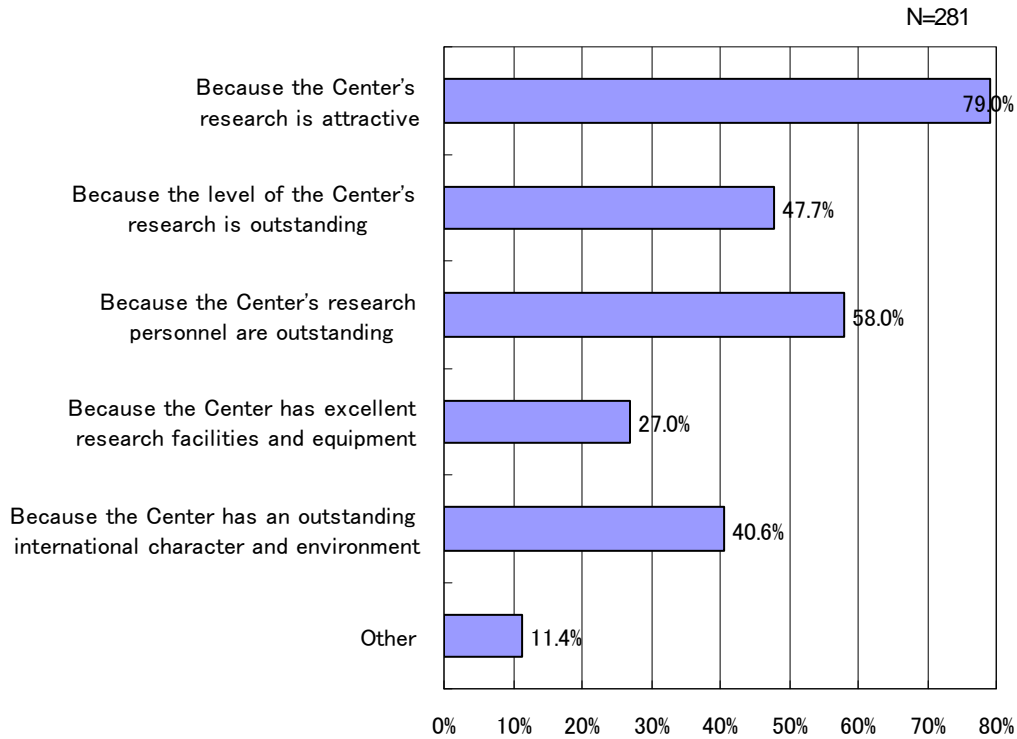


Figure 2-29 Why did you answer “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment”?

Asked to give reasons standing in the way of involvement in Center activities, respondents indicated matters such as the following.³

- Time constraints
- Family
- Current job demands (difficult to hold two positions; have teaching responsibilities, etc.)
- Issues with living in Japan and language barrier
- Travel costs and time issues due to distance from current address

³ This is a sampling of different views, drawn mainly from those given by multiple respondents.

2-3-5 Advice for the WPI Center

In response to a request for advice on how to make the WPI Center a global research center, the main suggestions were along the following lines.⁴

- Plan symposiums and similar events.
- Strengthen publicity, advertising, and information dissemination.
- Implement programs from a medium- to long-range standpoint.
- Boost ties with overseas research organizations.
- Take a broader view of the research area, including pure mathematics.
- Narrow down the research areas.
- Increase the number of outstanding foreign scientists accepted (short/long-term, tenured).

⁴ This is a sampling of different ideas, drawn mainly from those given by multiple respondents.

 2-4 Institute for Integrated Cell-Material Sciences (iCeMS)

2-4-1 Main research area, nationality, and research countries of respondents

The main research areas of respondents, their nationalities, and countries where they have performed research are as indicated below.

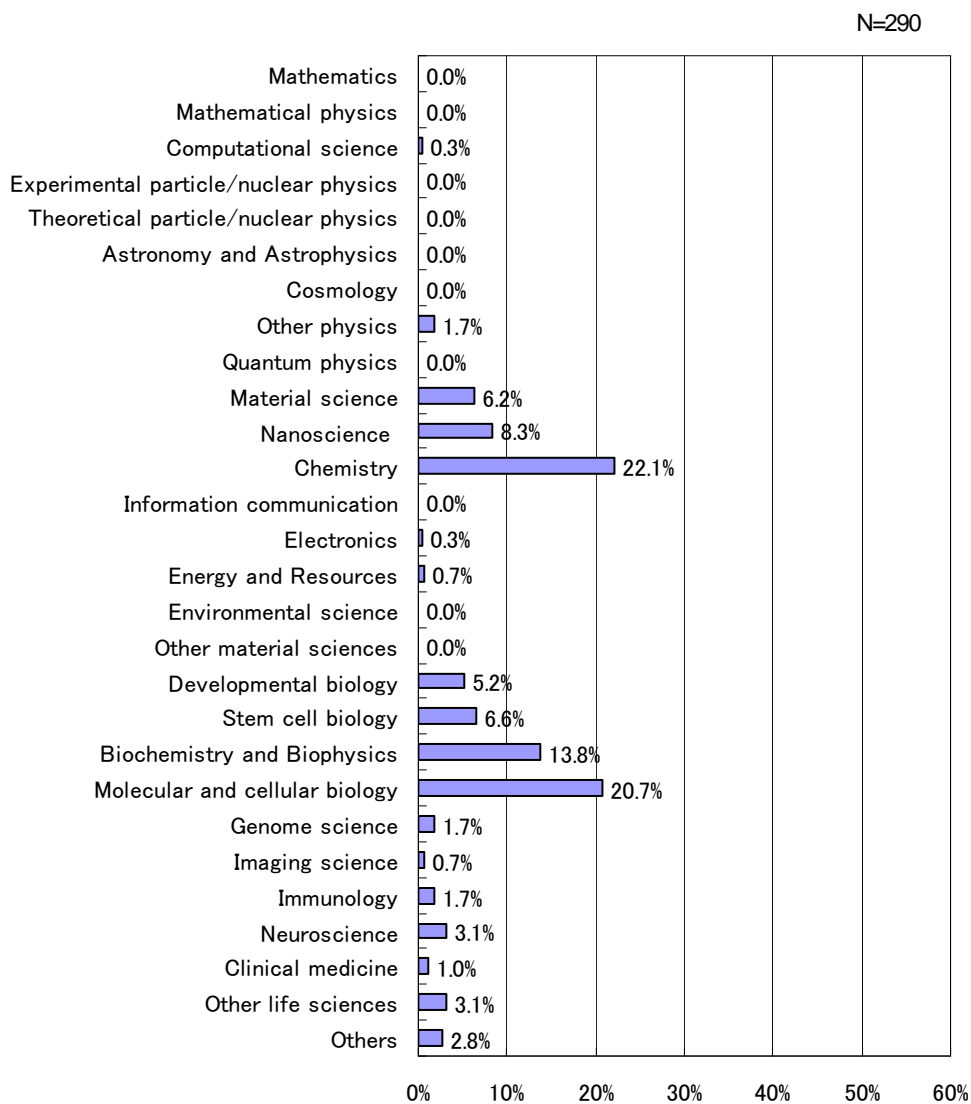


Figure 2-30 Your Main Research Area

N=290

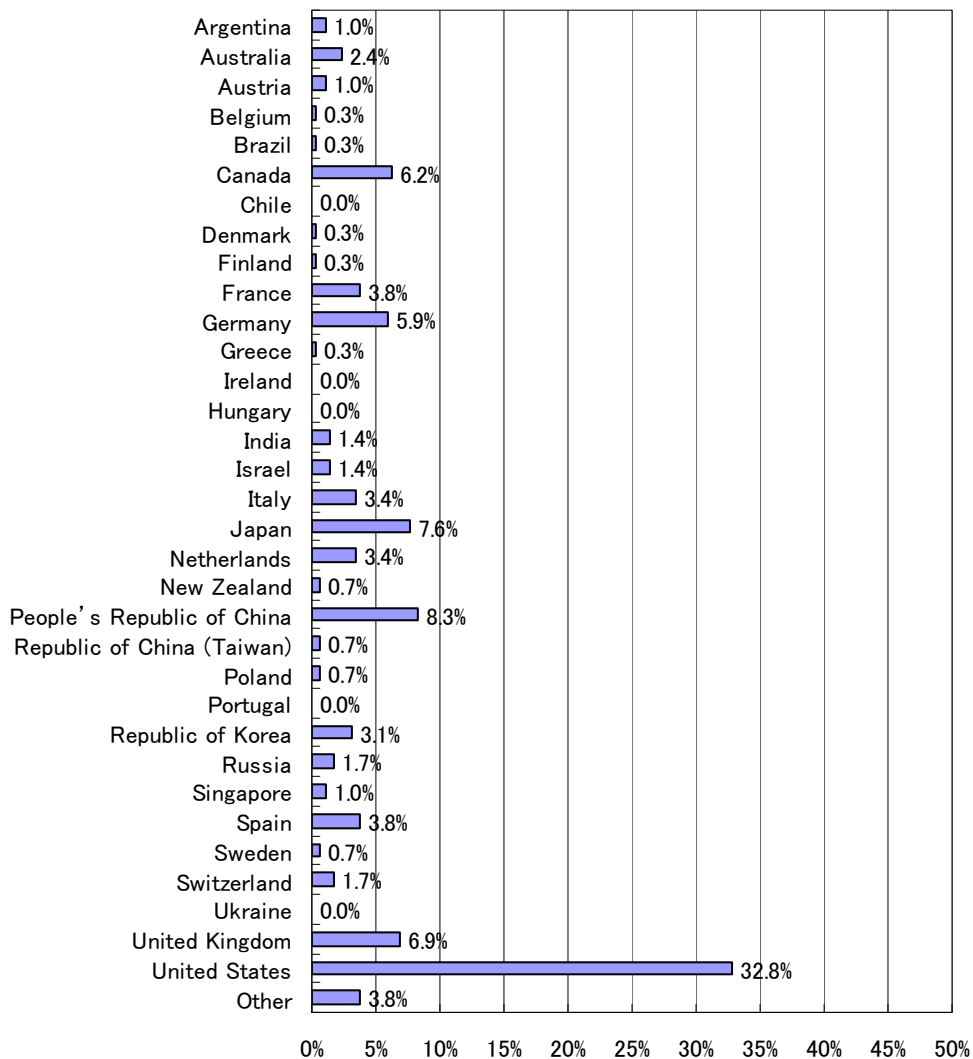


Figure 2-31 Your Nationality

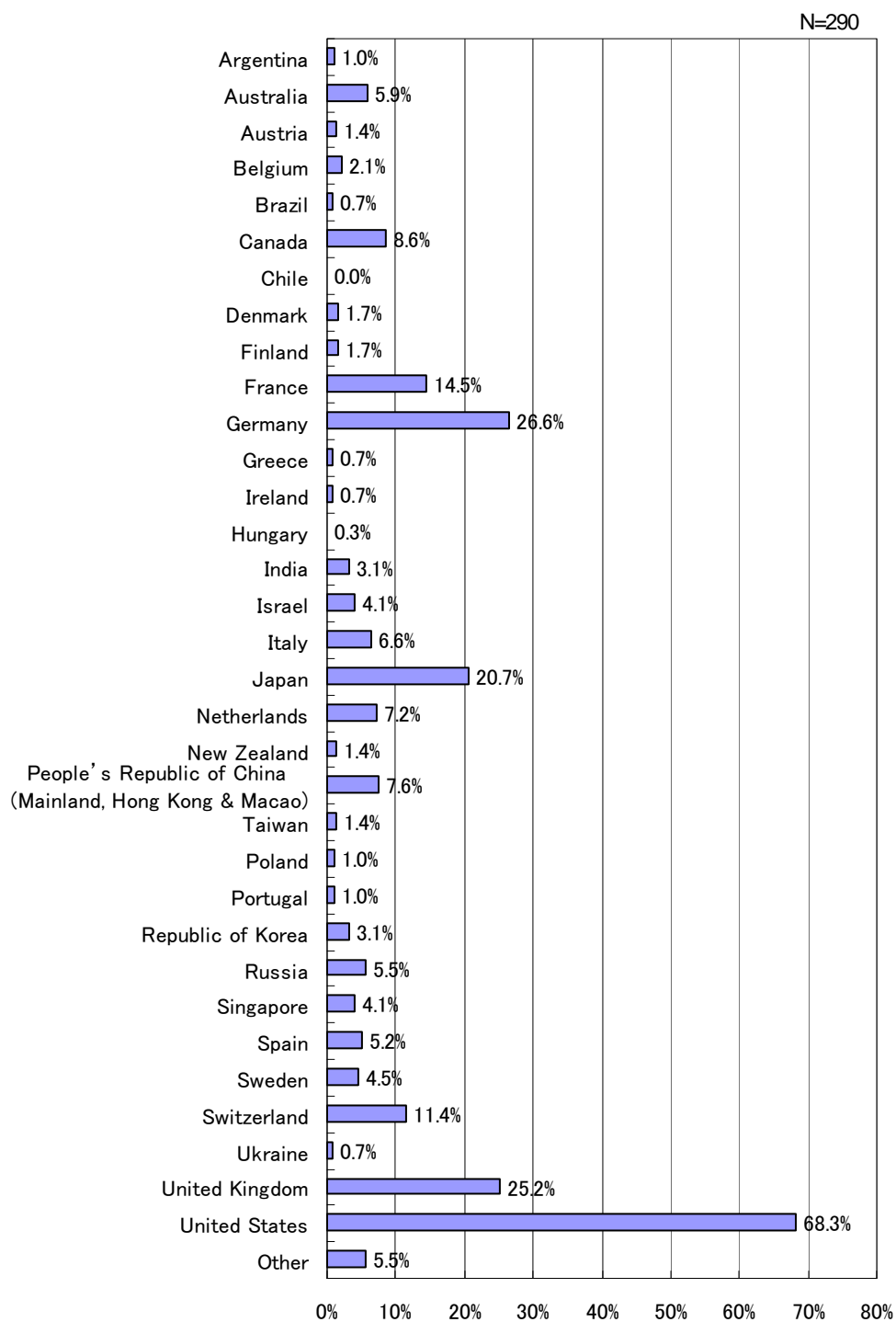


Figure 2-32 Countries Where You Have Performed Research

2-4-2 Awareness and knowledge of the WPI Center

About half of the respondents said they did not know about the Center. The items known in order of familiarity were the name of the Center, nature of the research, the WPI, and the name of the director; but the numbers in each case were fewer than a third of the respondents.

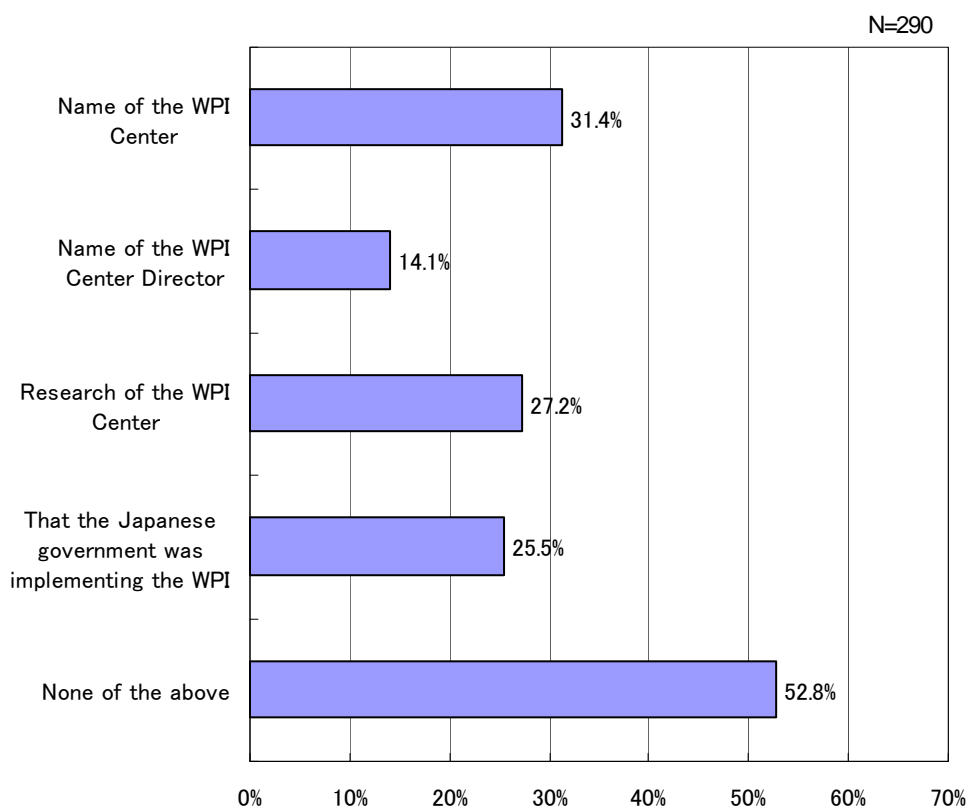


Figure 2-33 Before receiving this questionnaire, which of the following did you know about the WPI Center?

Responses by research areas for which there were 40 or more respondents were as follows.

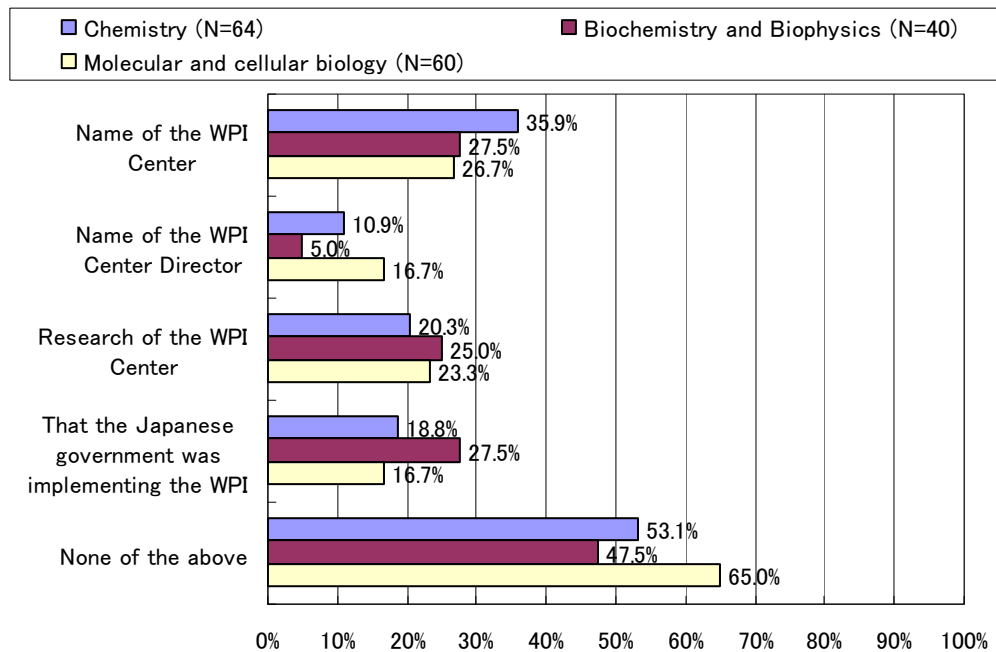


Figure 2-34 Before receiving this questionnaire, which of the following did you know about the WPI Center? (by main research area)

When those that knew about the Center were asked about the initial source of their knowledge, the results were as follows.

The most frequent response was “mentioned in academic paper or other publication; profiled in scientific journal.”

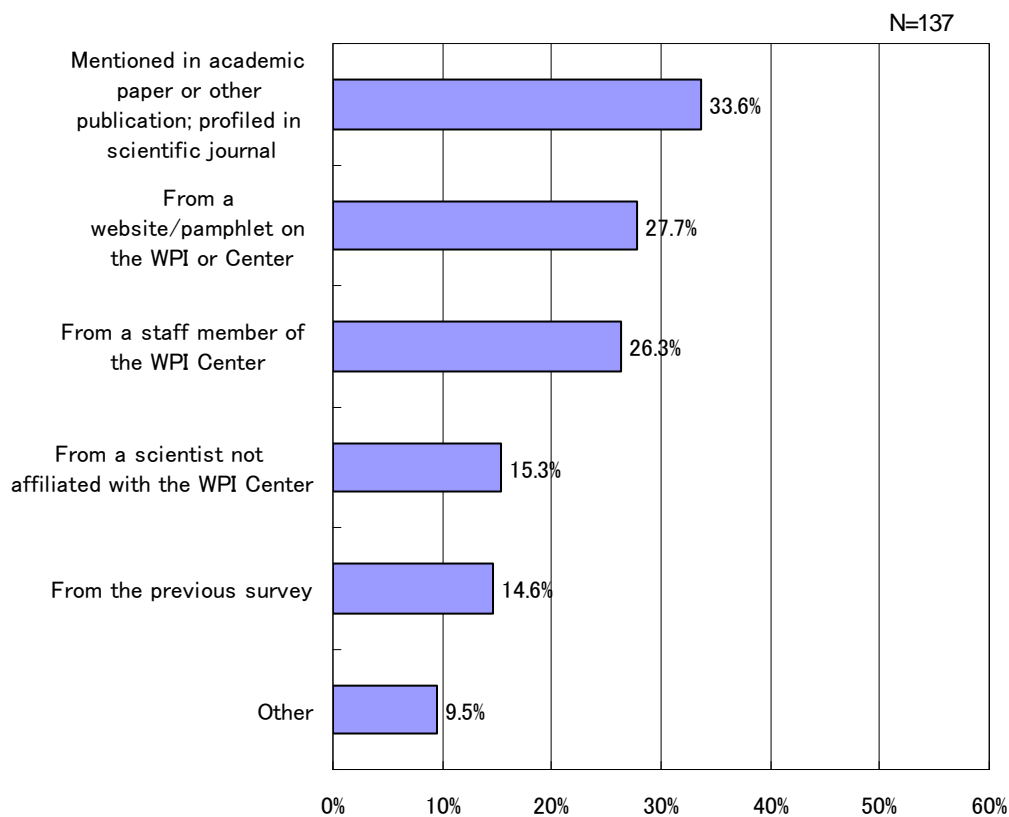


Figure 2-35 How did you first learn about the WPI Center?

Those that knew about the Center were asked about their involvement in the Center research, etc., with the following results.

Most said they had not had any involvement, even if they knew about the Center.

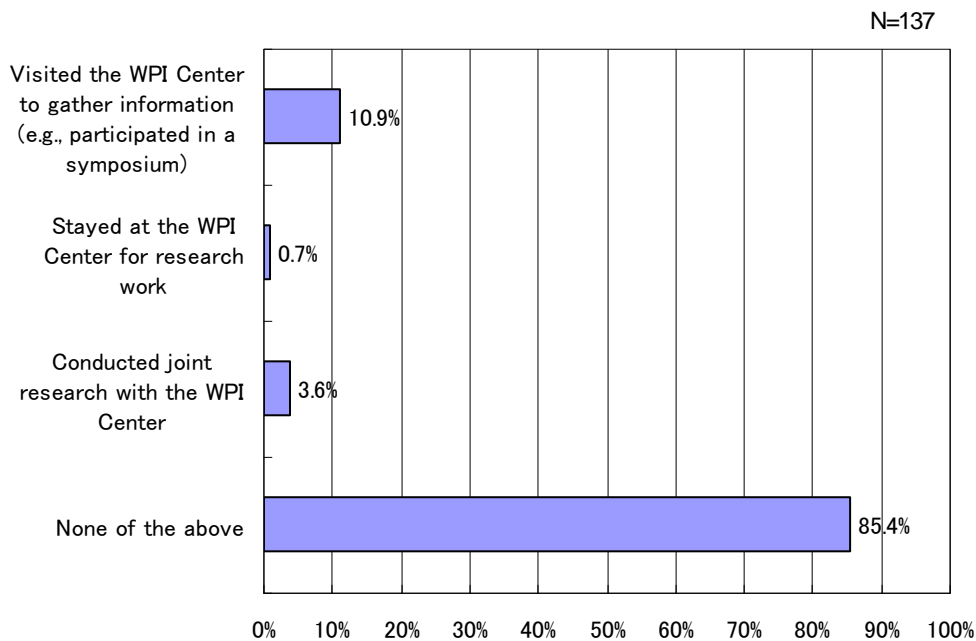


Figure 2-36 What has been your involvement in the WPI Center?

2-4-3 Evaluation of the WPI Center

As overall trends in evaluations of this WPI Center, “outstanding” and “don’t know” were the two frequent responses while “average” and “poor” responses were relatively few.

“Level of research,” “work to pioneer new interdisciplinary research fields by bringing together various existing fields,” and “research personnel” received relatively many “outstanding” responses. For “international character and environment” the “outstanding” responses only slightly outnumbered “average.”

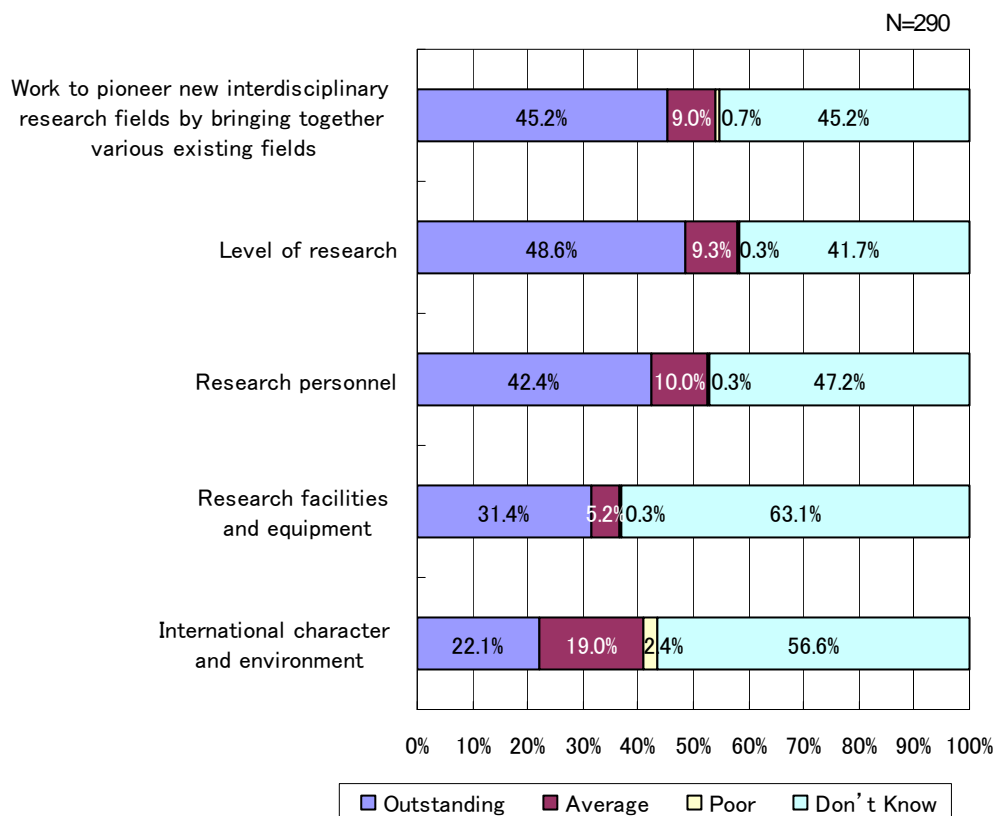


Figure 2-37 Please evaluate the WPI Center in the following areas, as able. Please select one answer for each area

2-4-4 Joint research with and participation in the WPI Center

“Sounds appealing” was the most frequent response to the question about joint research with the WPI Center, at nearly a third of the total responses. This was followed by “strongly interested” at around 30 percent. Adding “interested” to these two responses accounts for around 80 percent of the total.

About a quarter of the respondents indicated “don’t know.”

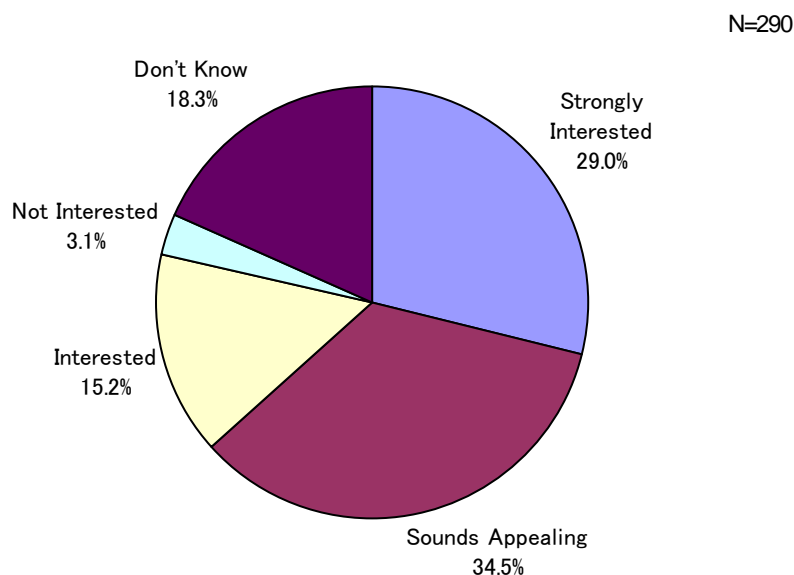


Figure 2-38 How do you view the WPI Center as a potential partner in joint research?

Responses by research areas for which there were 40 or more respondents were as follows.

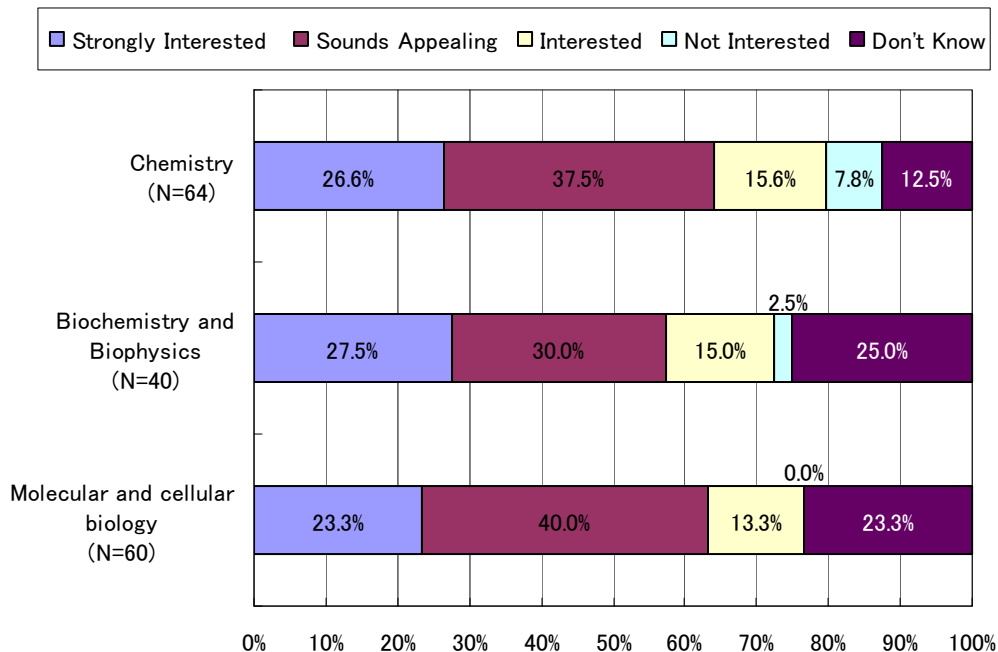


Figure 2-39 How do you view the WPI Center as a potential partner in joint research? (by main research area)

More than 60 percent responded either “strongly interested,” “sounds appealing,” or “interested” when asked about participation in WPI Center activities.

“Visit to collect information (e.g., participate in symposium)” was the most common activity the respondents desired for themselves or would recommend to others (students, colleagues, scientist acquaintances), followed by “stay at the Center for research work” and “be a member of the Center, including dual appointment.” Among activities desired by the respondents themselves, there was little difference between “stay at the Center for research work” and “be a member of the Center, including dual appointment.”

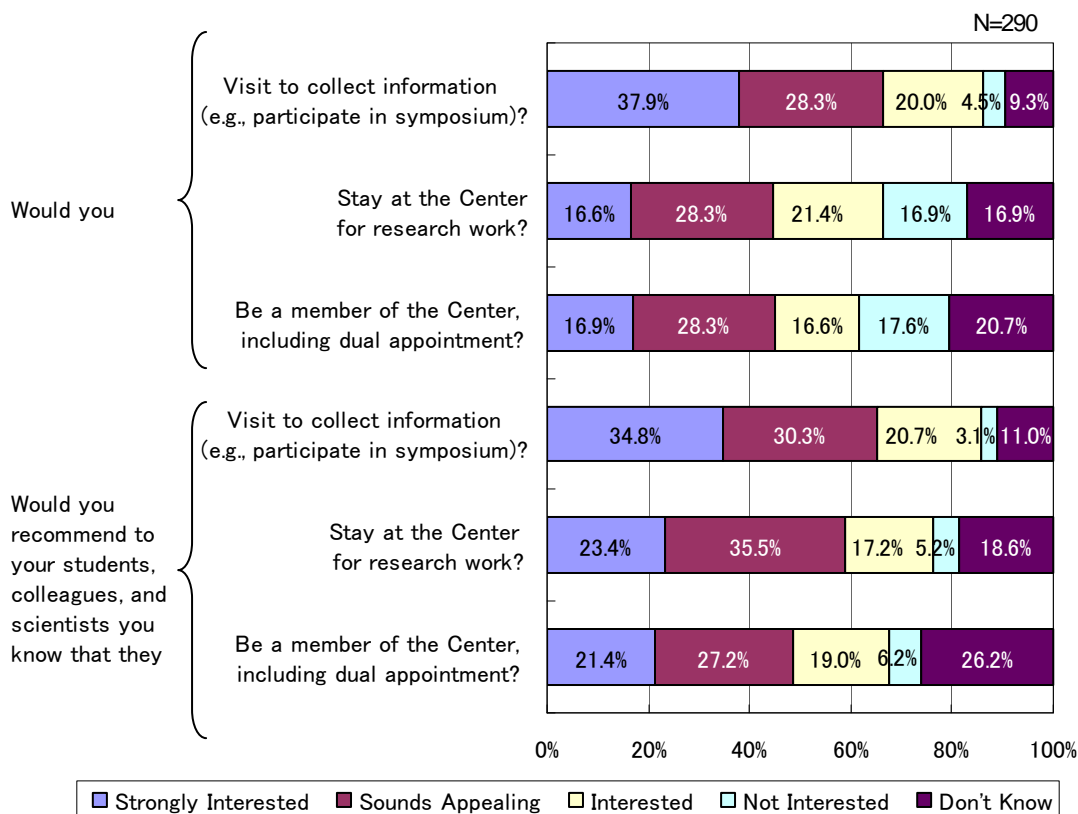


Figure 2-40 How do you view participating in the activities of the WPI Center?

Respondents who chose “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment,” as activities either for their own participation in WPI Center activities or for recommending to students, colleagues, or scientist acquaintances, were asked the reason for their choice, with the following results.

“Because the Center’s research is attractive,” “because the level of the Center’s research is outstanding,” “because the Center’s research personnel are outstanding,” and “because the Center has excellent research facilities and equipment” were the most common reasons given.

Interest in new research fields, and research level were also given as write-in answers for “other.”

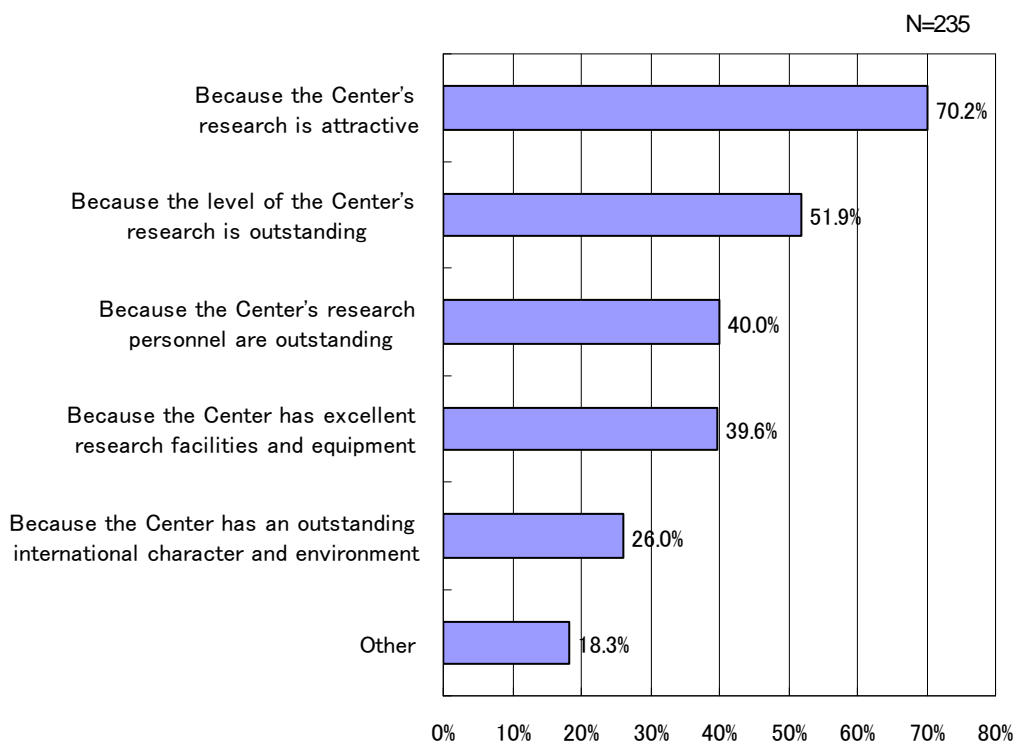


Figure 2-41 Why did you answer “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment”?

Asked to give reasons standing in the way of involvement in Center activities, respondents indicated matters such as the following.⁵

- Time constraints
- Current job demands (difficult to hold two positions, etc.)
- Family
- Language barrier (Japanese)
- Financial issues (including travel and lodging expenses)
- Travel costs and time issues due to distance from current address

⁵ This is a sampling of different views, drawn mainly from those given by multiple respondents.

2-4-5 Advice for the WPI Center

In response to a request for advice on how to make the WPI Center a global research center, the main suggestions were along the following lines.⁶

- Plan symposiums and similar events.
- Strengthen publicity, advertising, and information dissemination.
- Hire more young scientists and overseas scientists.
- Enhance and expand programs such as those for exchange of scientists.
- Set a clear vision and present it in readily understood terms.
- Boost ties with overseas research organizations.

⁶ This is a sampling of different ideas, drawn mainly from those given by multiple respondents.

2-5 Immunology Frontier Research Center (IFReC)

2-5-1 Main research area, nationality, and research countries of respondents

The main research areas of respondents, their nationalities, and countries where they have performed research are as indicated below.

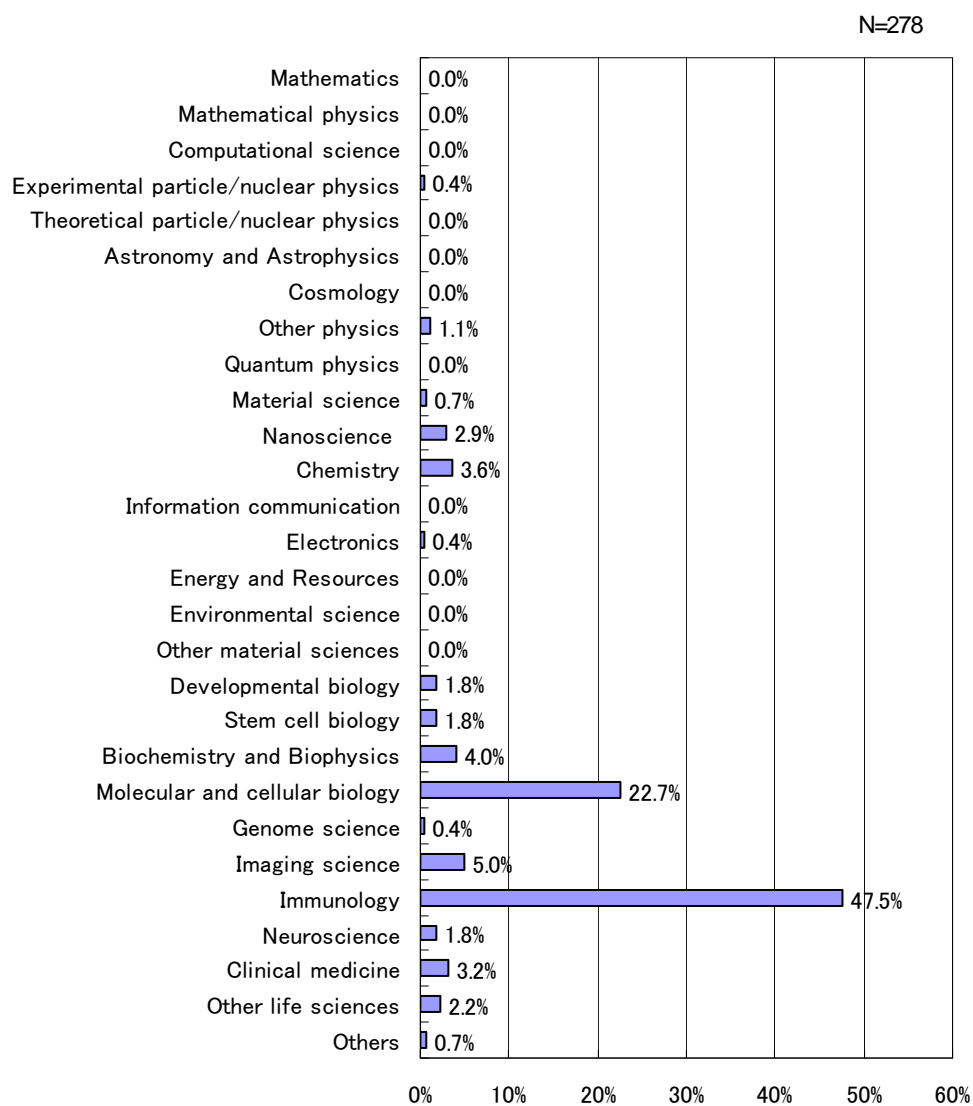


Figure 2-42 Your Main Research Area

N=278

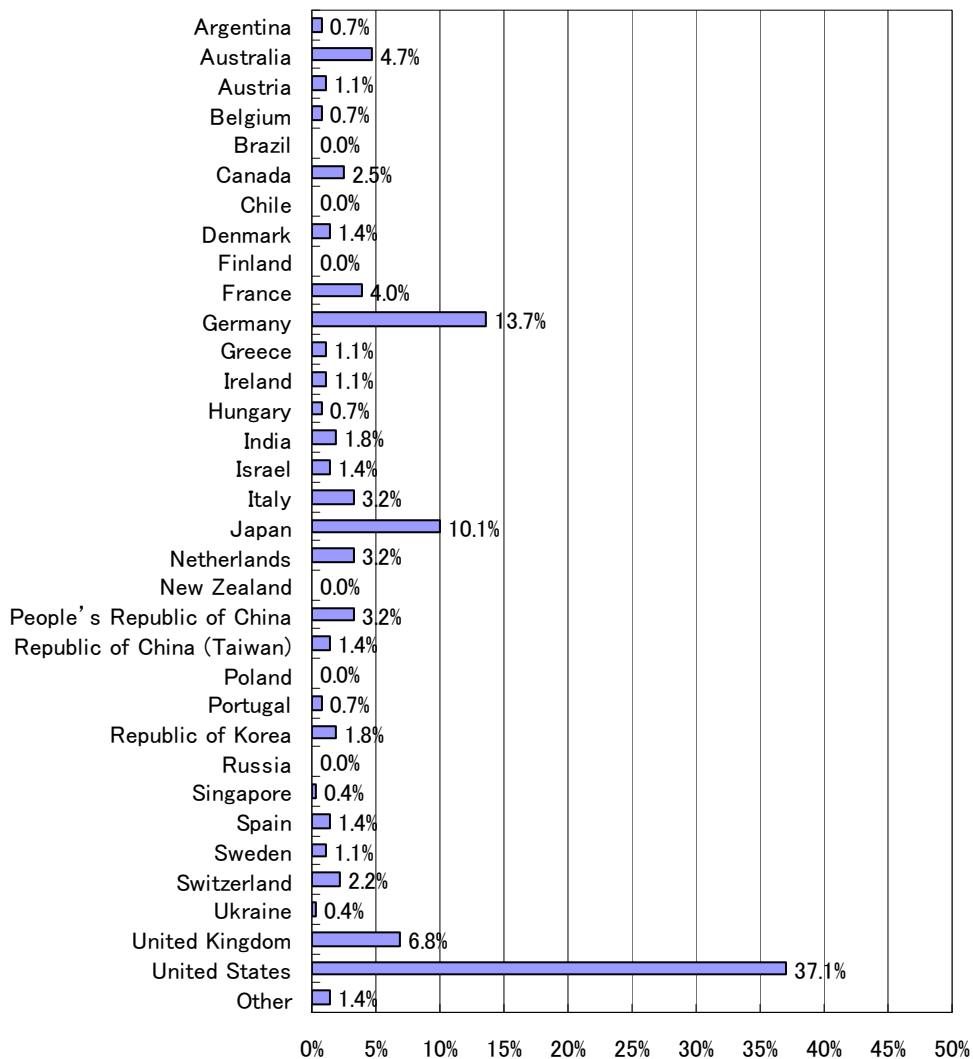


Figure 2-43 Your Nationality

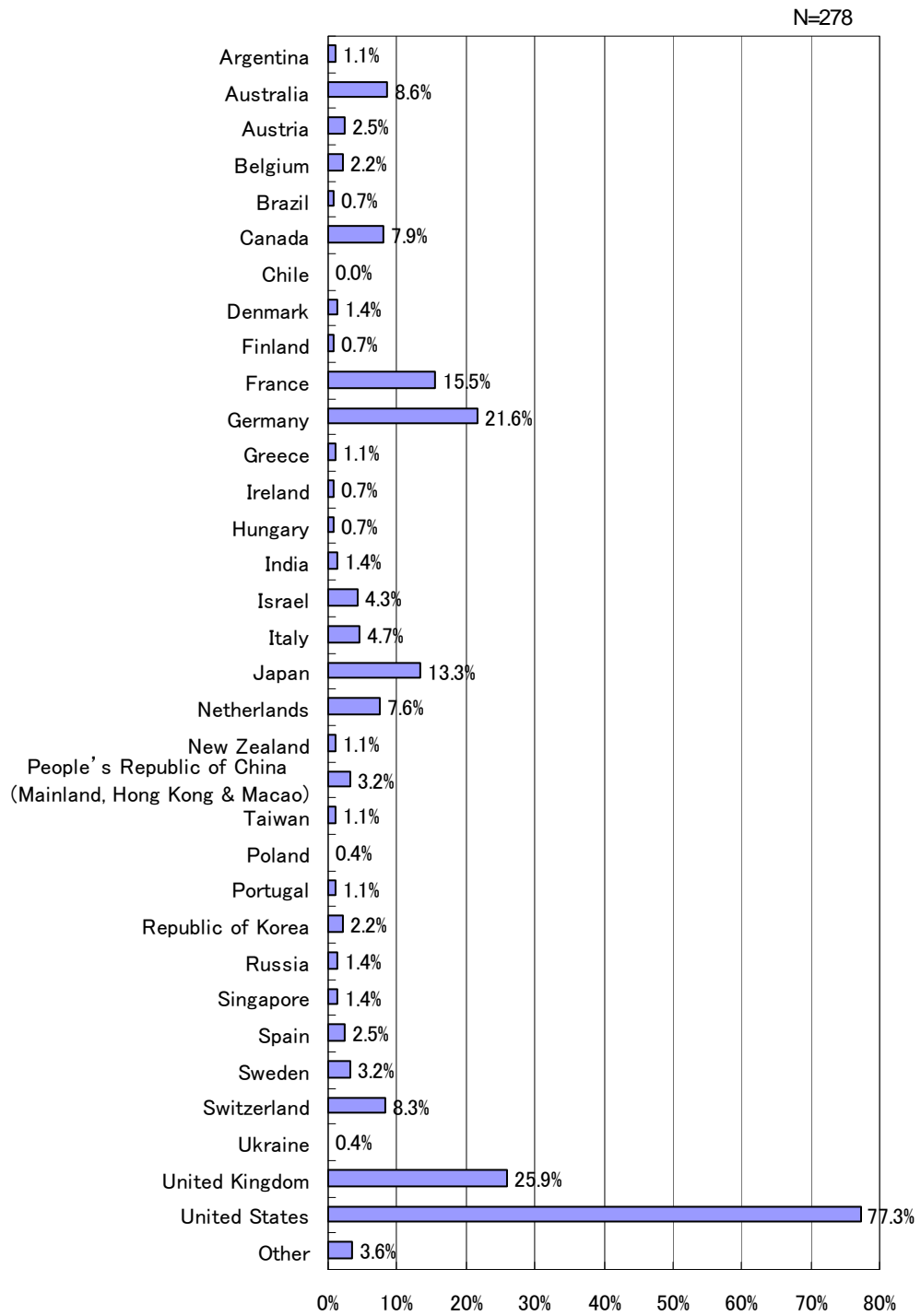


Figure 2-44 Countries Where You Have Performed Research

2-5-2 Awareness and knowledge of the WPI Center

About half of the respondents said they did not know about the Center. The items known in order of familiarity were the director's name, nature of the research, the name of the Center, and the WPI.

The degree of familiarity varied largely depending on the main research area of respondents.

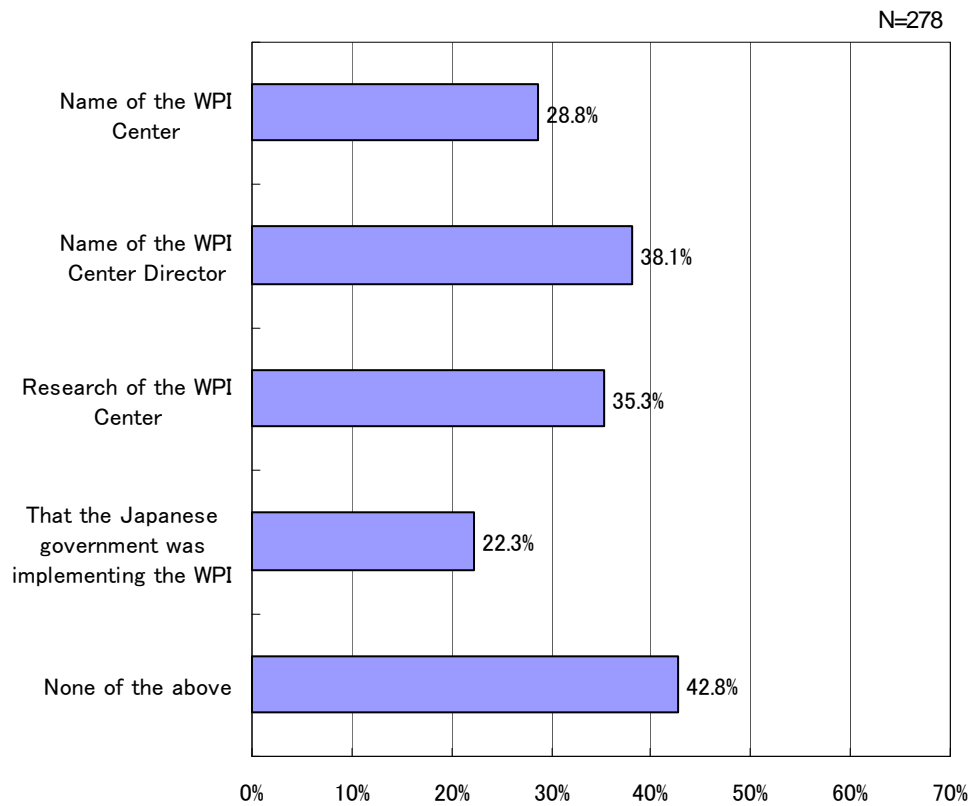


Figure 2-45 Before receiving this questionnaire, which of the following did you know about the WPI Center?

Responses by research areas for which there were 40 or more respondents were as follows.

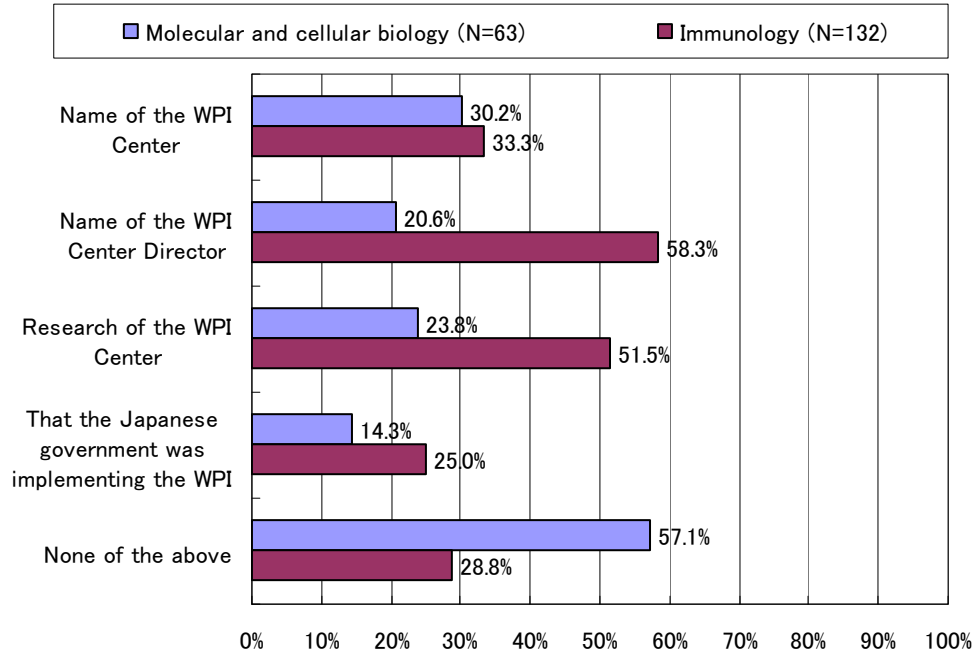


Figure 2-46 Before receiving this questionnaire, which of the following did you know about the WPI Center? (by main research area)

When those that knew about the Center were asked about the initial source of their knowledge, the results were as follows.

The most frequent response was “mentioned in academic paper or other publication; profiled in scientific journal.”

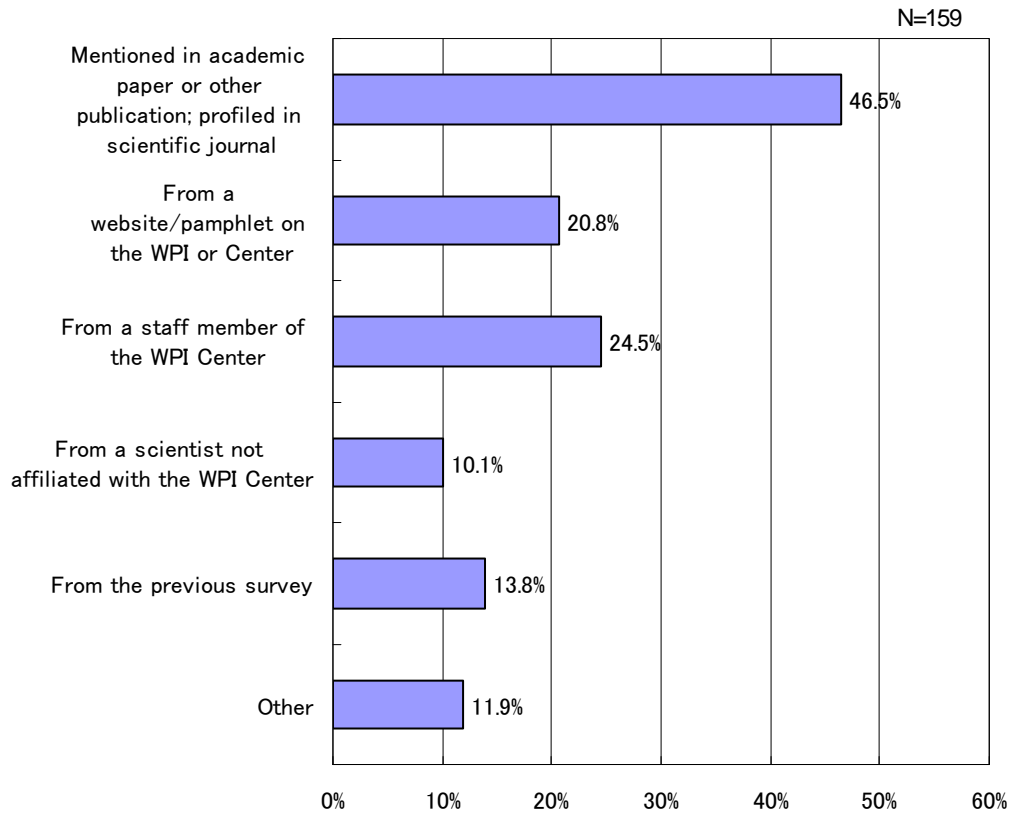


Figure 2-47 How did you first learn about the WPI Center?

Those that knew about the Center were asked about their involvement in the Center research, etc., with the following results.

Most said they had not had any involvement, even if they knew about the Center.

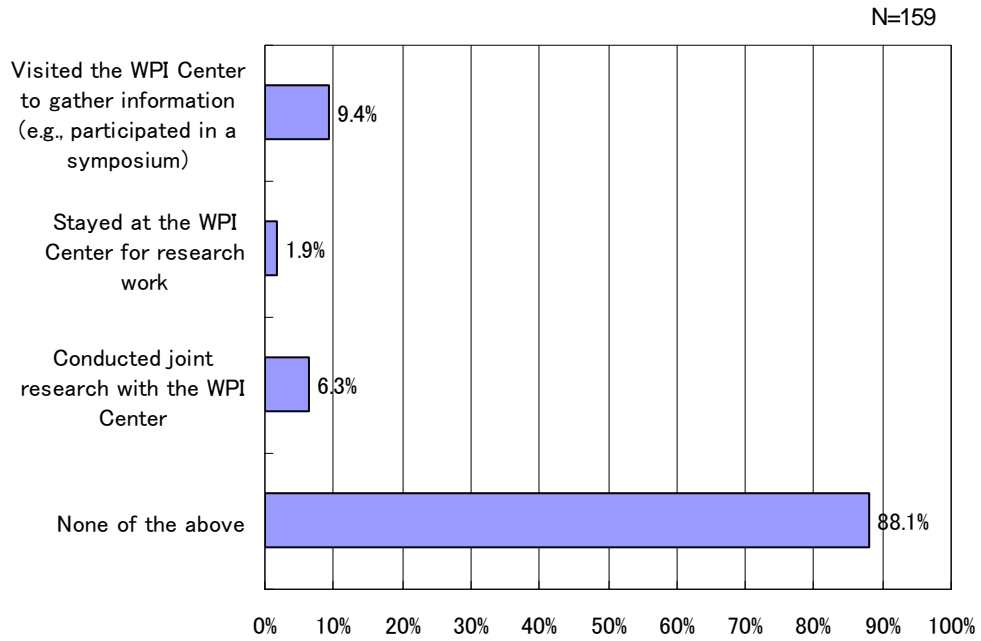


Figure 2-48 What has been your involvement in the WPI Center?

2-5-3 Evaluation of the WPI Center

As overall trends in evaluations of this WPI Center, “outstanding” and “don’t know” were the two frequent responses while “average” and “poor” responses were relatively few.

“Level of research” and “research personnel” received many “outstanding” responses.

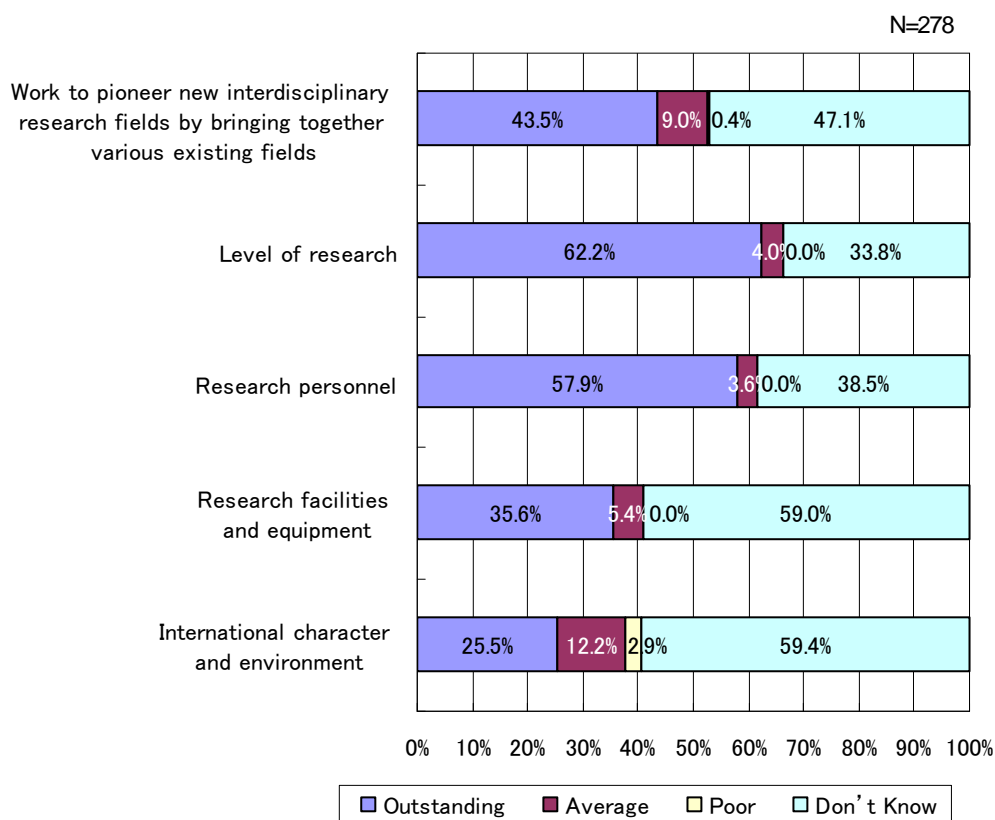


Figure 2-49 Please evaluate the WPI Center in the following areas, as able. Please select one answer for each area

2-5-4 Joint research with and participation in the WPI Center

“Strongly interested” was the most frequent response to the question about joint research with the WPI Center, with that and “sounds appealing” accounting for two-thirds of the responses.

Around 20 percent of respondents indicated “don’t know.” Variation by major area of research of respondents was large.

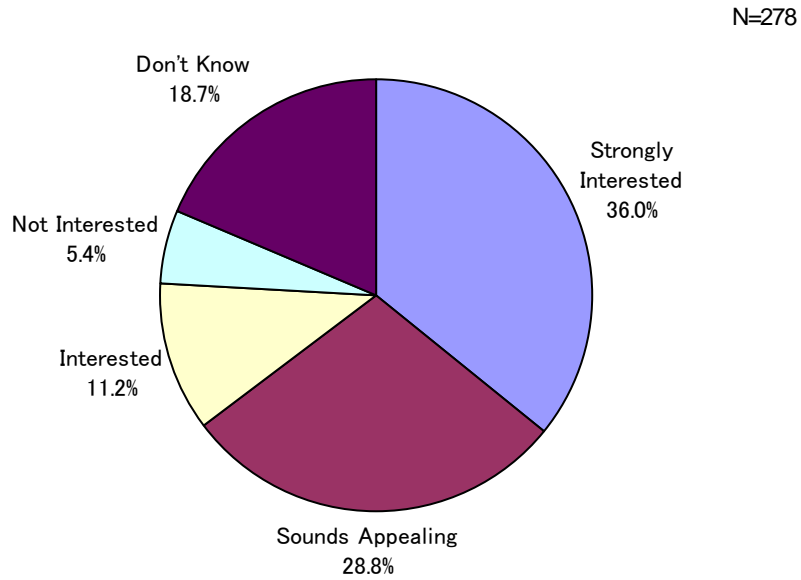


Figure 2-50 How do you view the WPI Center as a potential partner in joint research? Responses by research areas for which there were 40 or more respondents were as follows.

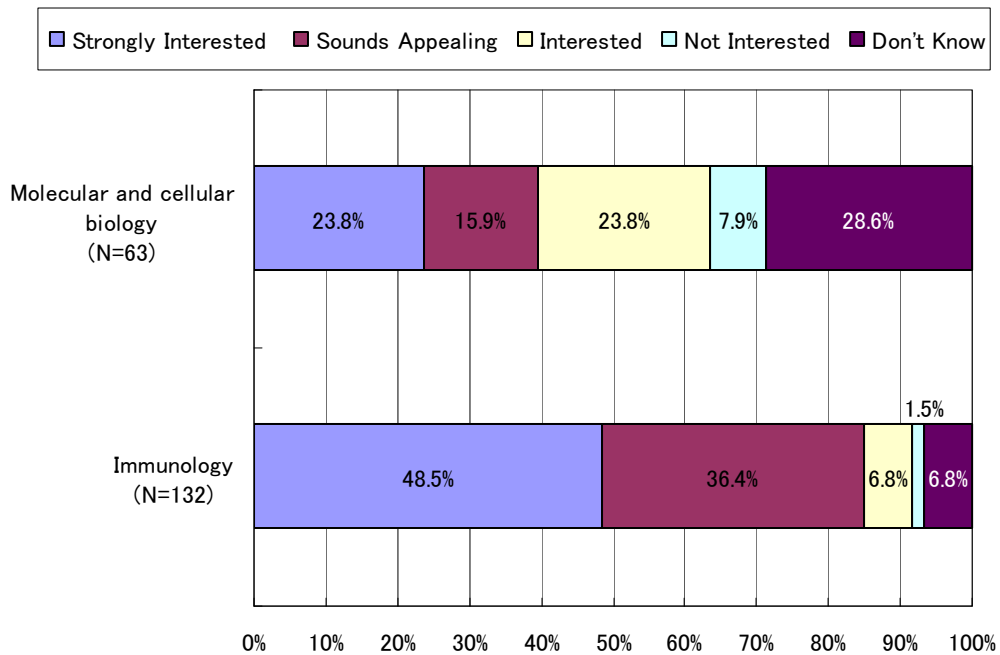


Figure 2-51 How do you view the WPI Center as a potential partner in joint research? (by main research area)

More than half responded either “strongly interested,” “sounds appealing,” or “interested” when asked about participation in WPI Center activities.

“Visit to collect information (e.g., participate in symposium)” was the most common activity the respondents would recommend to others (students, colleagues, scientist acquaintances), followed by “stay at the Center for research work” and “be a member of the Center, including dual appointment.” “Visit to collect information (e.g., participate in symposium)” was likewise the most common activity desired by the respondents themselves, while the results for “stay at the Center for research work” and “be a member of the Center, including dual appointment” were mostly similar.

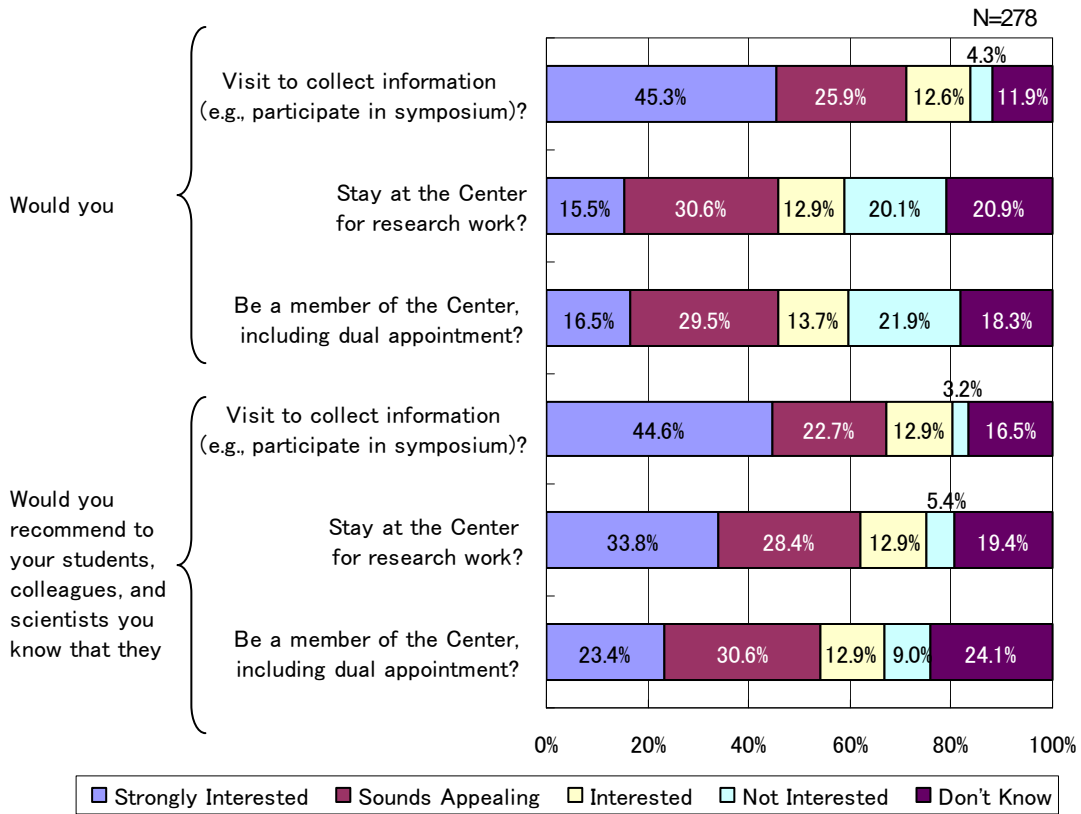


Figure 2-52 How do you view participating in the activities of the WPI Center?

Respondents who chose “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment,” as activities either for their own participation in WPI Center activities or for recommending to students, colleagues, or scientist acquaintances, were asked the reason for their choice, with the following results.

“Because the level of the Center’s research is outstanding,” “because the Center’s research is attractive,” and “because the Center’s research personnel are outstanding” were the most common reasons given.

Interest in new research fields, research level, and research personnel were also given as write-in answers for “other.”

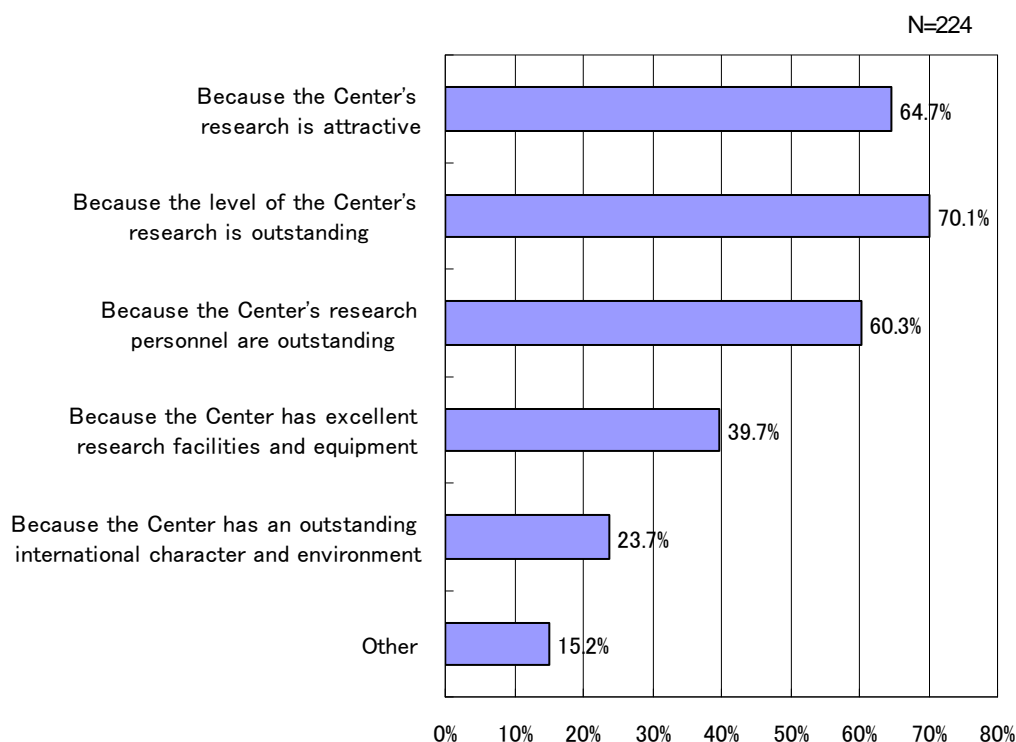


Figure 2-53 Why did you answer “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment”?

Asked to give reasons standing in the way of involvement in Center activities, respondents indicated matters such as the following.⁷

- Current job demands (difficult to hold two positions, etc.)
- Time constraints
- Family
- Language (Japanese) and culture issues
- Financial issues (including travel and lodging expenses)
- Travel costs and time issues due to distance from current address

⁷ This is a sampling of different views, drawn mainly from those given by multiple respondents.

2-5-5 Advice for the WPI Center

In response to a request for advice on how to make the WPI Center a global research center, the main suggestions were along the following lines.⁸

- Plan symposiums and similar events.
- Strengthen publicity, advertising, and information dissemination (including website improvements).
- Hire more young scientists and overseas scientists.
- Increase exchanges and ties with overseas research organizations and scientists.
- Be active in giving presentations at international conferences and in publishing papers.
- Make the research environment more global, such as by everyday use of English.

⁸ This is a sampling of different ideas, drawn mainly from those given by multiple respondents.

 2-6 International Center for Materials Nanoarchitectonics (MANA)

2-6-1 Main research area, nationality, and research countries of respondents

The main research areas of respondents, their nationalities, and countries where they have performed research are as indicated below.

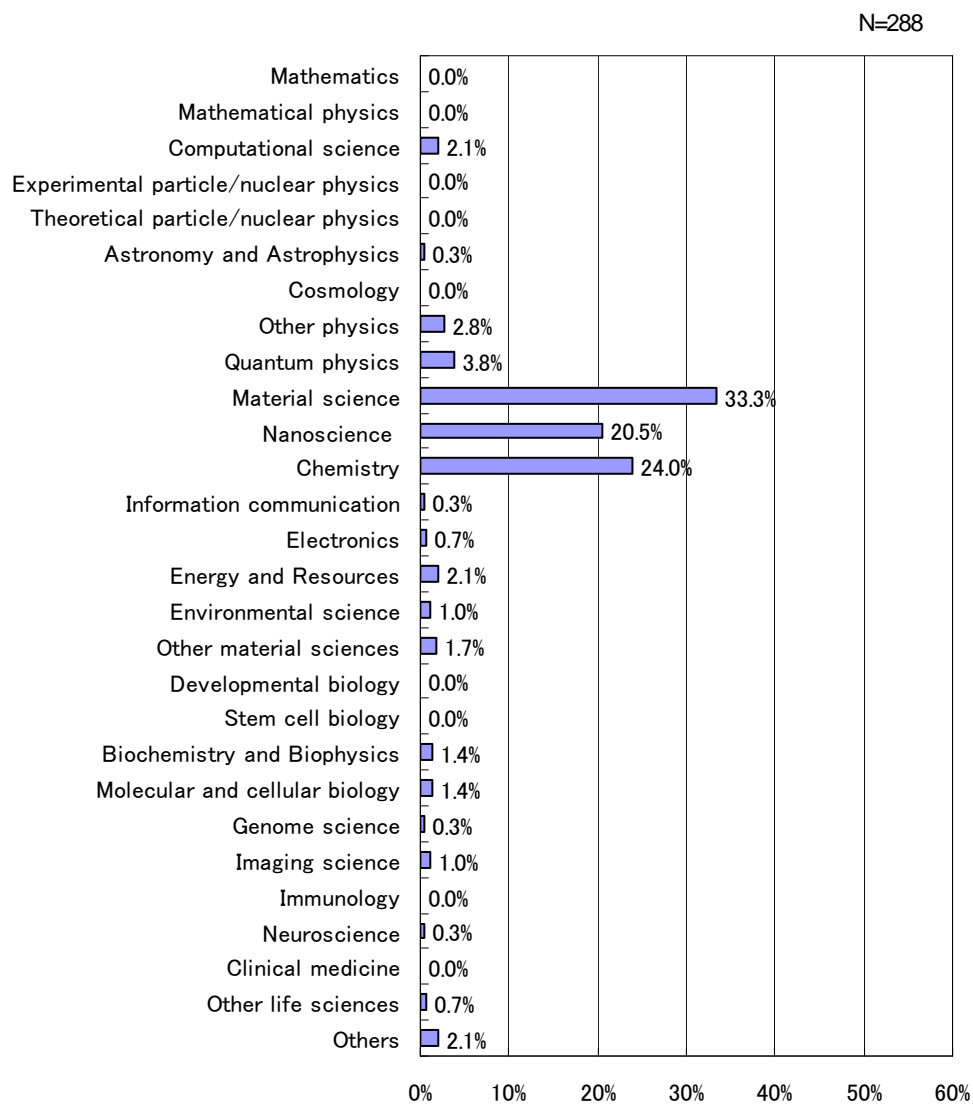


Figure 2-54 Your Main Research Area

N=288

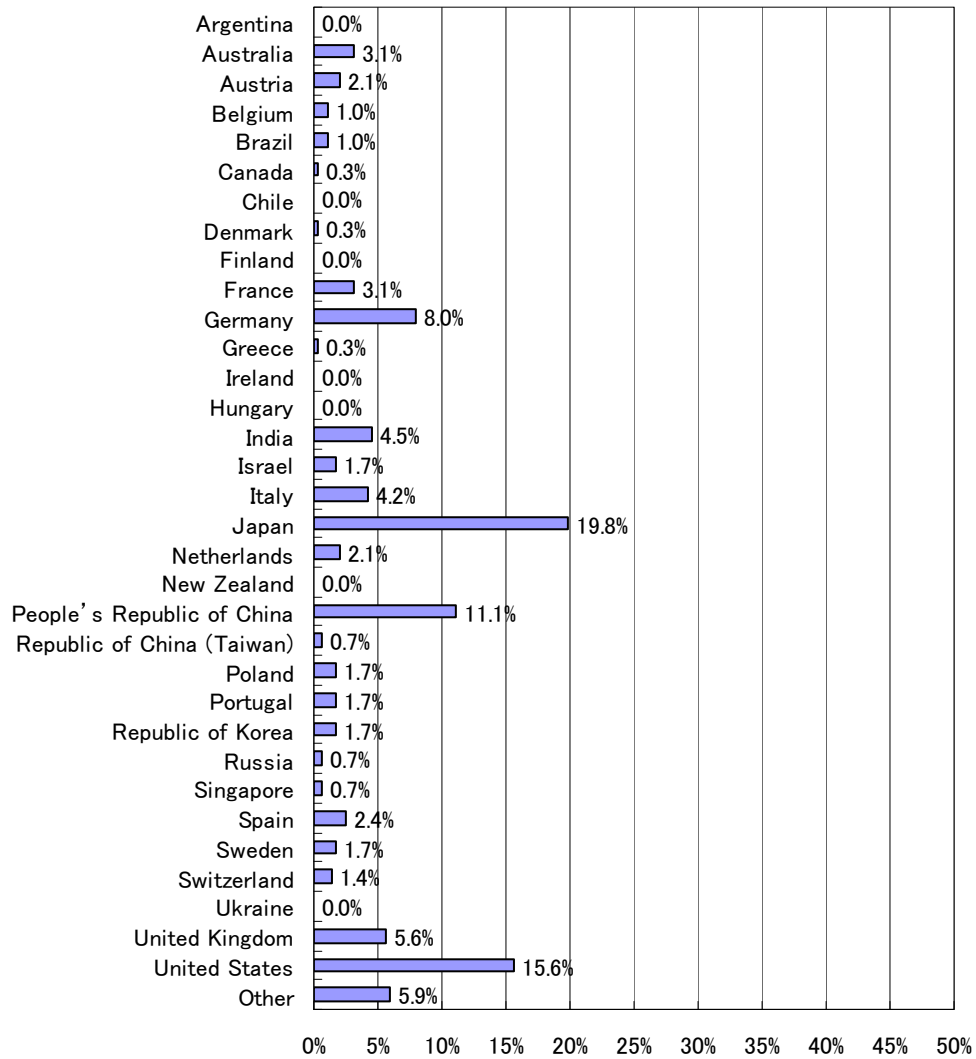


Figure 2-55 Your Nationality

N=288

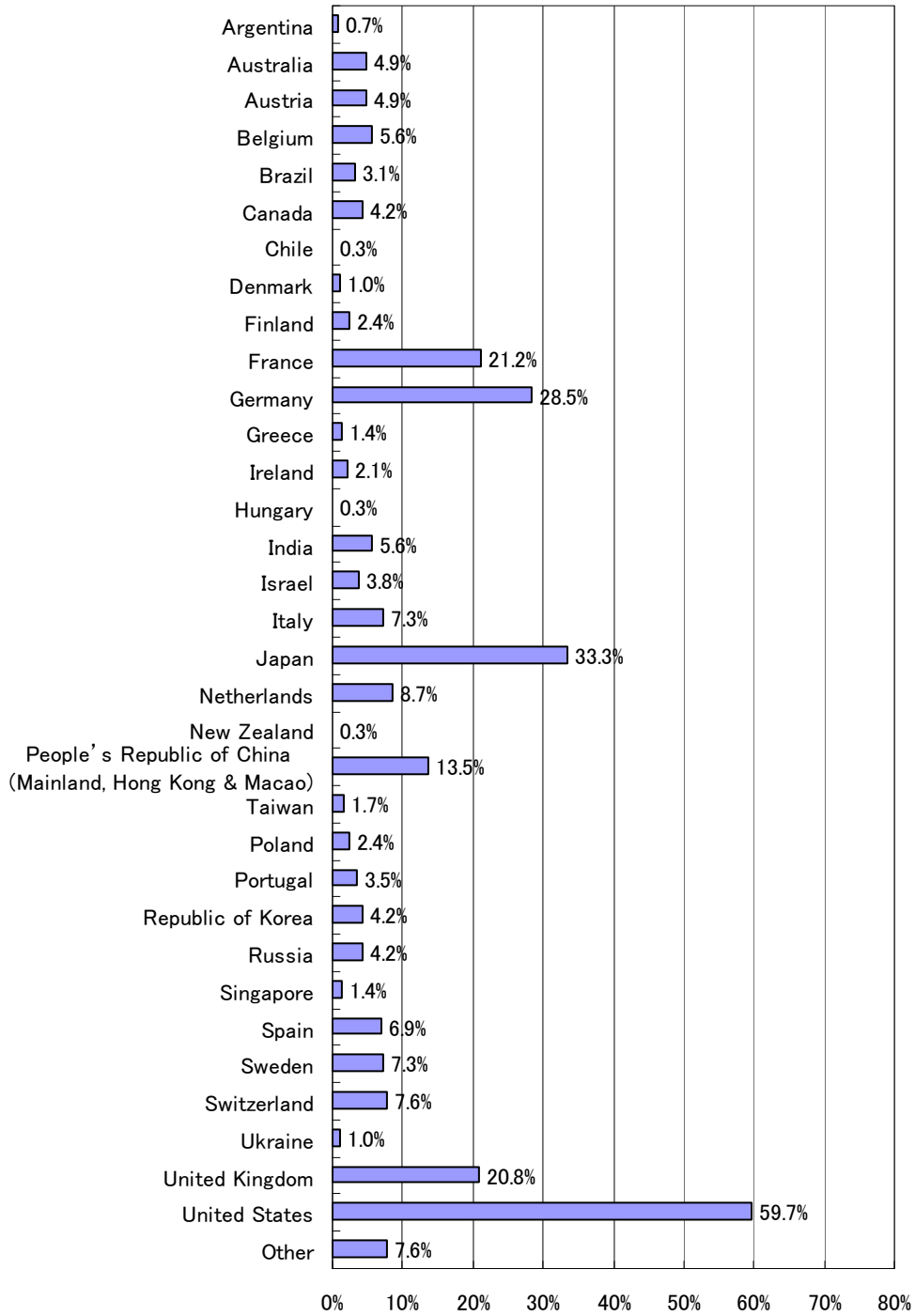


Figure 2-56 Countries Where You Have Performed Research

2-6-2 Awareness and knowledge of the WPI Center

Around half of the respondents said they did not know about the Center. The most common items known were, in order, the name of the Center, the WPI, and the nature of the research. The director's name was the least commonly known item.

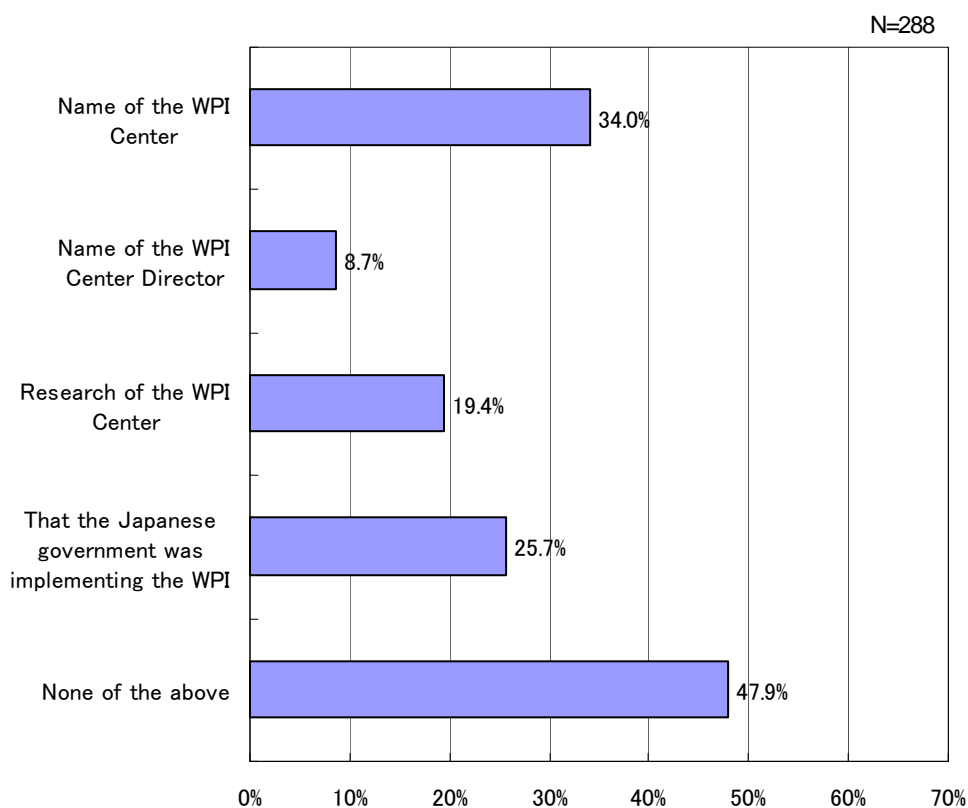


Figure 2-57 Before receiving this questionnaire, which of the following did you know about the WPI Center?

Responses by research areas for which there were 40 or more respondents were as follows.

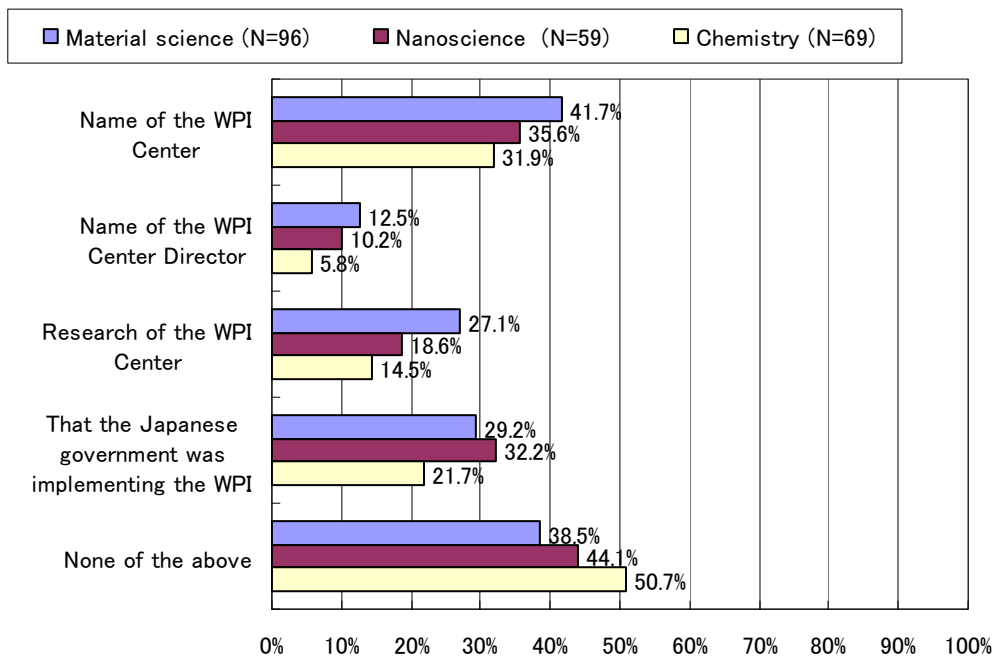


Figure 2-58 Before receiving this questionnaire, which of the following did you know about the WPI Center? (by main research area)

When those that knew about the Center were asked about the initial source of their knowledge, the results were as follows.

The most frequent response was “mentioned in academic paper or other publication; profiled in scientific journal.”

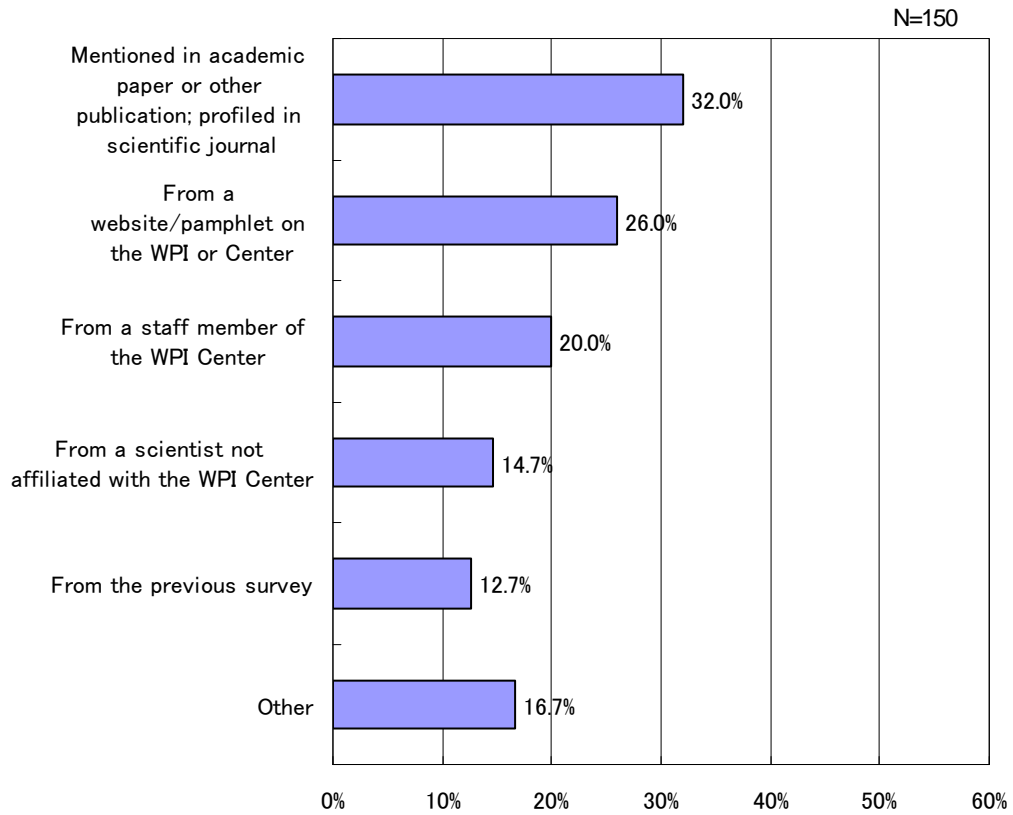


Figure 2-59 How did you first learn about the WPI Center?

Those that knew about the Center were asked about their involvement in the Center research, etc., with the following results.

Most said they had not had any involvement, even if they knew about the Center.

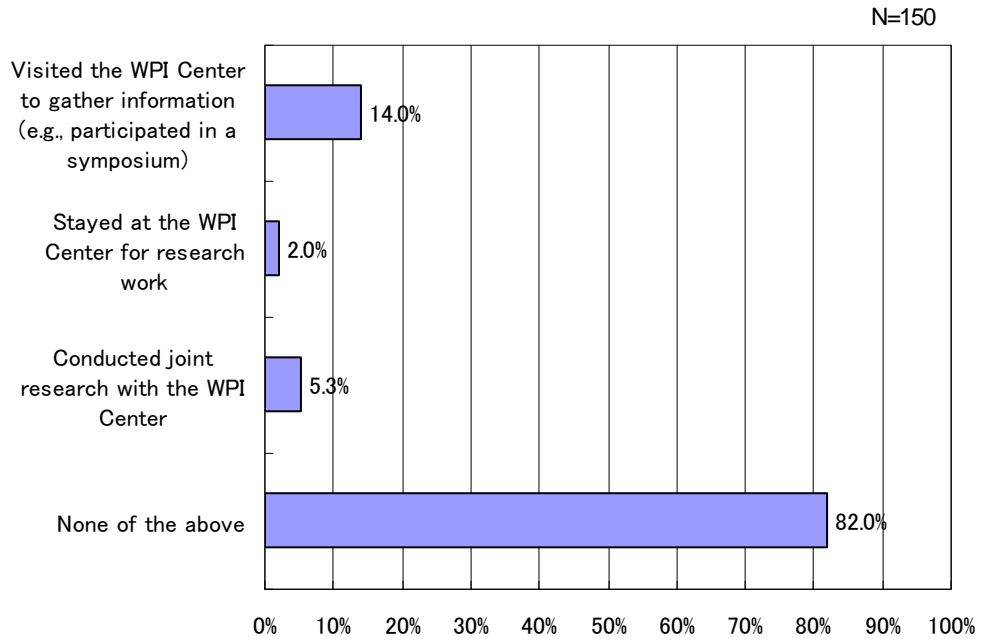


Figure 2-60 What has been your involvement in the WPI Center?

2-6-3 Evaluation of the WPI Center

As overall trends in evaluations of this WPI Center, “outstanding” and “don’t know” were the two frequent responses while “average” and “poor” responses were relatively few.

“Level of research” and “research facilities and equipment” received the most “outstanding” responses.

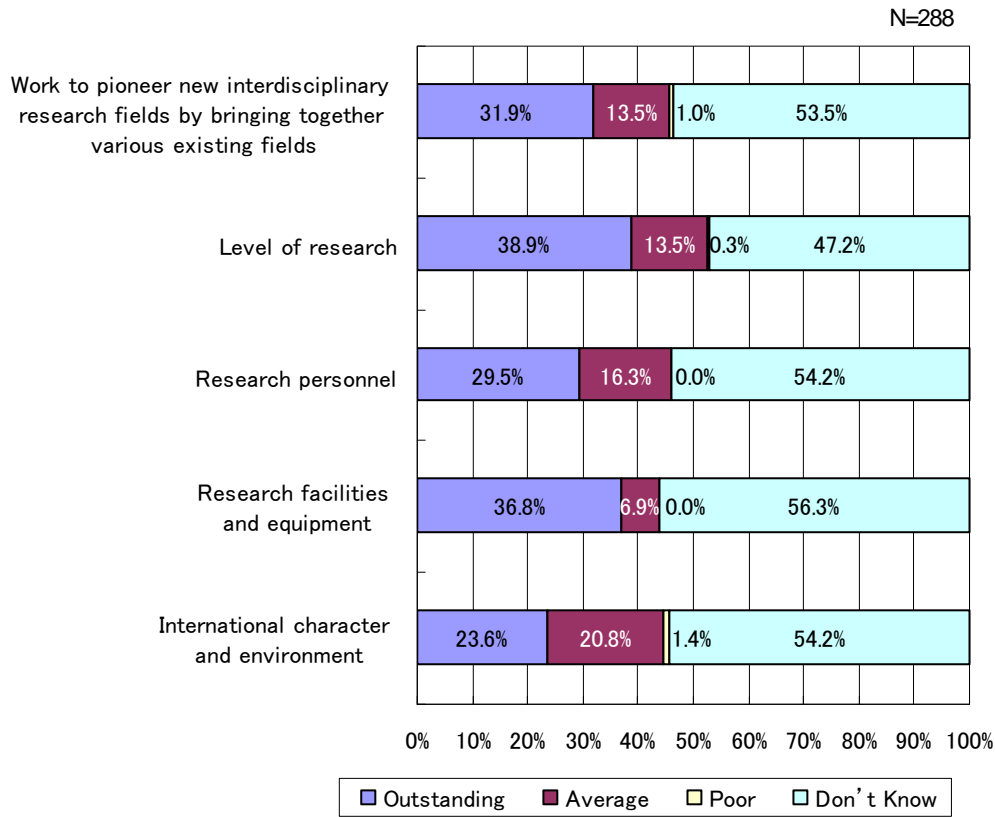


Figure 2-61 Please evaluate the WPI Center in the following areas, as able. Please select one answer for each area

2-6-4 Joint research with and participation in the WPI Center

“Sounds appealing” was the most frequent response to the question about joint research with the WPI Center, with that and “strongly interested” accounting for around two-thirds of the responses.

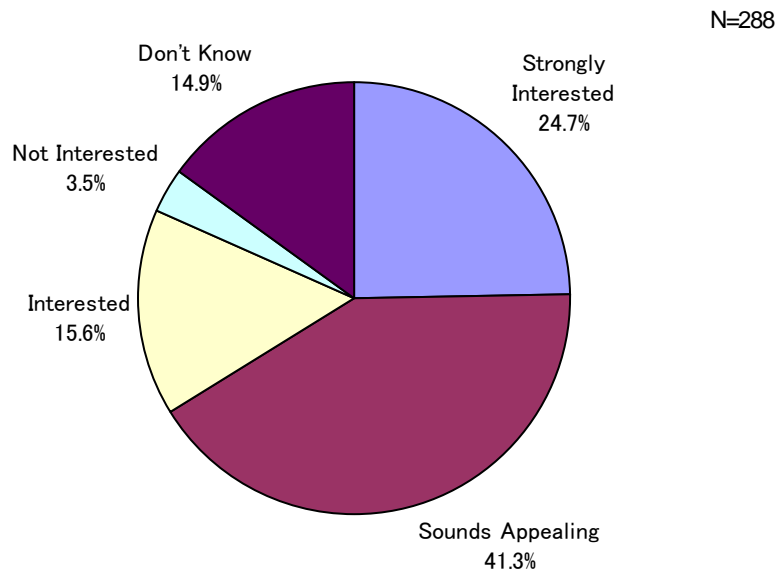


Figure 2-62 How do you view the WPI Center as a potential partner in joint research? Responses by research areas for which there were 40 or more respondents were as follows.

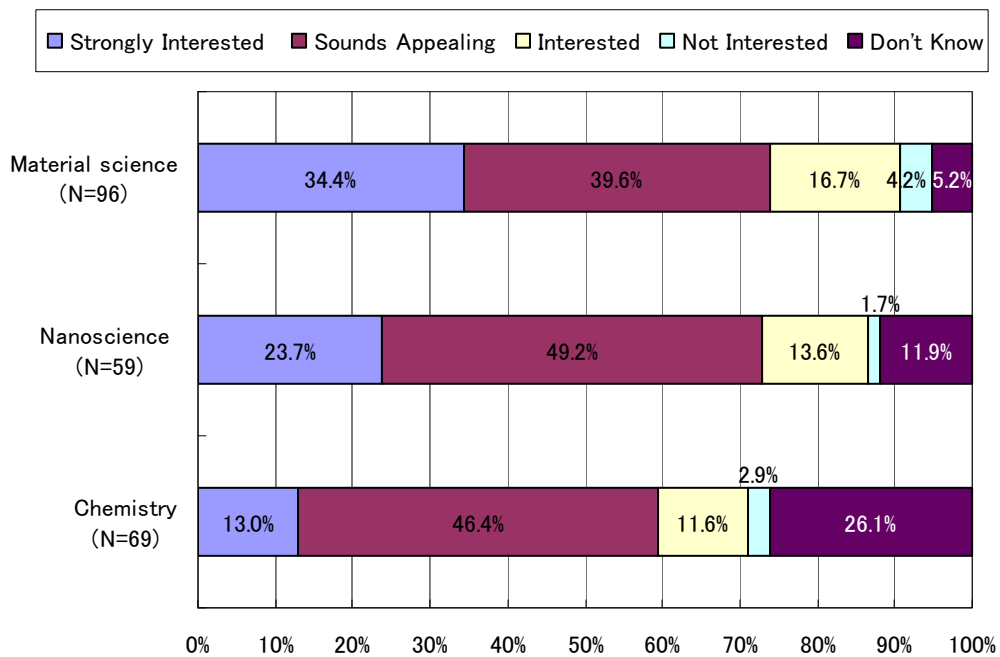


Figure 2-63 How do you view the WPI Center as a potential partner in joint research? (by main research area)

More than 60 percent responded either “strongly interested,” “sounds appealing,” or “interested” when asked about participation in WPI Center activities.

“Visit to collect information (e.g., participate in symposium)” was the most common activity the respondents desired for themselves or would recommend to others (students, colleagues, scientist acquaintances), followed by “stay at the Center for research work” and “be a member of the Center, including dual appointment.” Among activities desired by the respondents themselves, there was little difference between “stay at the Center for research work” and “be a member of the Center, including dual appointment.”

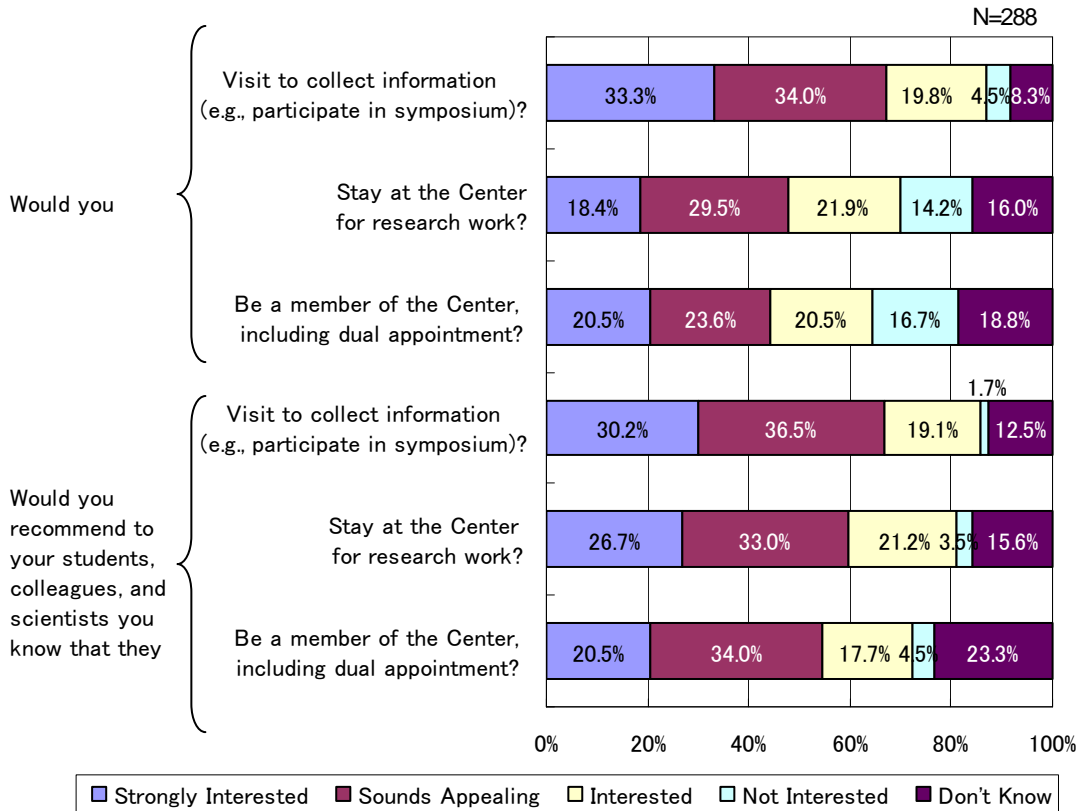


Figure 2-64 How do you view participating in the activities of the WPI Center?

Respondents who chose “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment,” as activities either for their own participation in WPI Center activities or for recommending to students, colleagues, or scientist acquaintances, were asked the reason for their choice, with the following results.

“Because the Center’s research is attractive,” “because the Center has excellent research facilities and equipment,” and “because the level of the Center’s research is outstanding” were the most common reasons given.

Interest in new research fields was also indicated among the write-in answers for “other.”

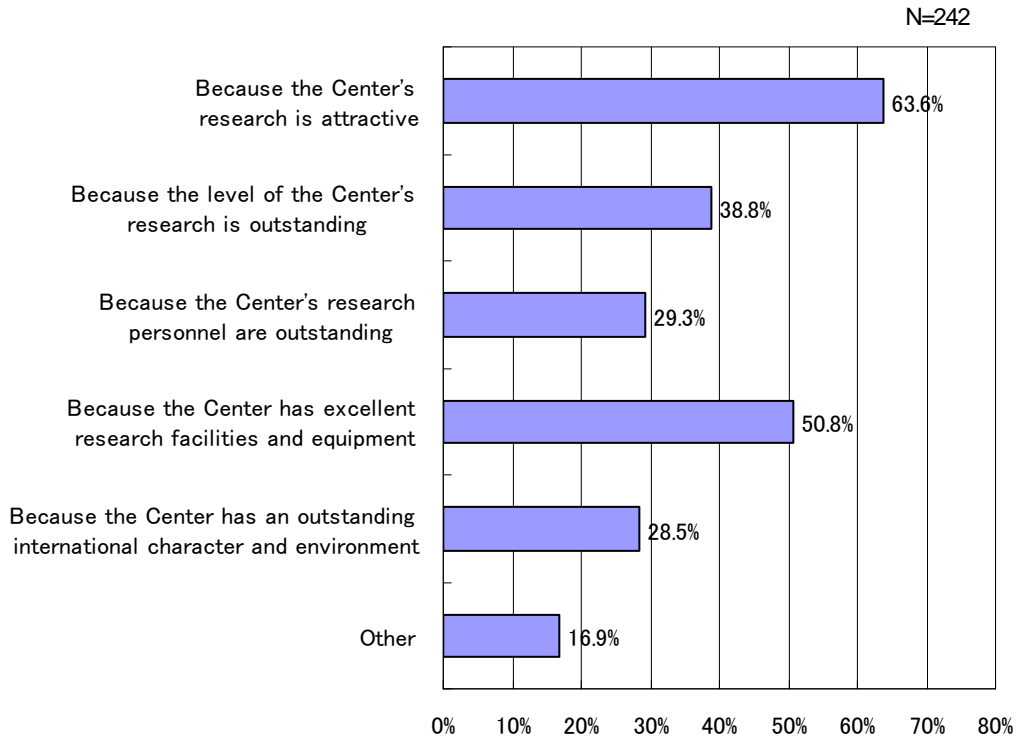


Figure 2-65 Why did you answer “strongly interested,” “sounds appealing,” or “interested” for “stay at the Center for research work” or “be a member of the Center, including dual appointment”?

Asked to give reasons standing in the way of involvement in Center activities, respondents indicated matters such as the following.⁹

- Time constraints
- Current job demands (difficult to hold two positions, etc.)
- Family
- Language barrier (Japanese)
- Financial issues (including travel and lodging expenses)
- Travel costs and time issues due to distance from current address
- Unfamiliarity with the Center and its scientists

⁹ This is a sampling of different views, drawn mainly from those given by multiple respondents.

2-6-5 Advice for the WPI Center

In response to a request for advice on how to make the WPI Center a global research center, the main suggestions were along the following lines.¹⁰

- Plan symposiums and similar events.
- Strengthen publicity, advertising, and information dissemination.
- Hire more young scientists and overseas scientists.
- Actively participate in and give presentations at international conferences, and actively publish papers.
- Increase exchanges and ties with overseas research organizations.
- Support and develop researchers by granting science awards, fellowships, etc.
- Introduce uniqueness and originality into research content and directions.

¹⁰ This is a sampling of different ideas, drawn mainly from those given by multiple respondents.

2-7 About the WPI

2-7-1 Views of and advice for the WPI

As another optional question, respondents were asked to give their views of the WPI and any advice they might have. The main opinions were as follows.¹¹

- Did not know much about the WPI. Learned about it for the first time through this questionnaire.
- Excellent program.
- Serves an important role in the collaboration between Japan and other countries.
- Further enhancements needed, especially in such areas as systems to facilitate research.
- Compared to institutions and scientists participating in the WPI, the WPI itself is not well known or readily understood.
- More aggressive PR may be necessary.
- Spending should be distributed to a wide range of institutions and research talent rather than being concentrated on a few programs.
- Exchanges and ties with overseas institutions and scientists need to be expanded.
- Make use of and develop young talent.
- More diversity of research talent (use of female and foreign scientists, etc.) is needed.
- Proper, strict, and objective evaluation is needed.
- A long-term vision is required.
- Make more global, such as by using English and improving information dissemination.

¹¹ Different views were extracted from those given by multiple respondents.

2-8 Science and Technology in General

2-8-1 Views concerning research themes to be emphasized

As an optional question, respondents were asked to give their views concerning which research themes should be emphasized in their field of study.

The respondents offered various views based on the fields they specialize in. While no distinctive tendencies were observed, their comments included reference to specific research themes, the importance of interdisciplinary studies and elucidation of principles, and application of research results to such fields as translational research, simulation, energy and environment issues.

2-8-2 Views on and advice for Japan's approach to science and technology policy

(About the research environment in Japan)

- Problems include the seniority-based, closed, and conservative nature of research organizations.
- The environment should be more conducive to contributions by young, female, and foreign scientists.
- Scientists in Japan have to spend too much time on matters other than research. An environment in which they can concentrate on research activities is needed.
- Exchanges and cooperation between Japanese and overseas scientists are important.
- Scientists tend to converge on a few limited areas. More diversity in research themes is necessary.
- Posts and research environments that are attractive to foreigners and young Japanese scientists with experience abroad are needed.

(About funding)

- It is important to distribute small amounts of research funds to many different scientists.
- Young scientists should receive more of the funding.
- The means by which funds are allocated should be more practical and easier to make use of.

(Other)

- Fundamental research must not be slighted.
- Some research fields are not geared to a top-down approach.
- It is important for science policies to be formulated from a long-term viewpoint.
- JSPS fellowships are a worthy program.

3 Conclusions

3-1 Awareness and Knowledge of the WPI Center

The number of “don’t know” responses about the WPI Centers varied from one Center to another, but was in the range of 28.4 to 52.8%. For most Centers, the name of the Center and nature of the research were better known than the director’s name, while the reverse was true for one Center.

Knowledge of a Center was in many cases due to its being mentioned in an academic paper or other publication, or profiled in a scientific journal. For one Center, however, the respondents more often heard about it from a staff member of the Center or from a scientist not affiliated with the Center. Between 6.3 and 14.6% of the respondents said they knew of a Center from having been selected for the first survey.

3-2 Evaluation of the WPI Center

For many of the WPI Centers, around half the respondents were unable to give an evaluation due to their lack of familiarity with the Center itself.

Those who did give evaluations in many cases gave “outstanding” ratings. For some Centers, however, there were as many “average” as “outstanding” ratings for international character and environment.

3-3 Joint Research with and Participation in the WPI Center

Regarding the desire for joint research with the WPI Center, “strongly interested” and “sounds appealing” were the most frequent responses, together making up from 59.0 to 70.3% of the total.

As for participation in WPI Center activities, “visit to collect information (e.g., participate in symposium)” was the most common activity the respondents desired for themselves or would recommend to others (students, colleagues, scientist acquaintances), followed by “stay at the Center for research work” and “be a member of the Center, including dual appointment.”

Of the activities the respondents themselves expressed a desire to participate in, the combined percentages for “strongly interested,” “sounds appealing,” and “interested” were 83.8 to 87.5% for “visit to collect information (e.g., participate in symposium),” 59.0 to 84.0% for “stay at the Center for research work,” and 59.7 to 66.4% for “be a member of the Center, including dual appointment.”

Among activities the respondents would recommend to others (students, colleagues, scientist acquaintances), the combined percentages for “strongly interested,” “sounds appealing,” and “interested” were 80.2 to 85.9% for “visit to collect information (e.g., participate in symposium),” 75.2 to 84.7% for “stay at the Center for research work,” and 66.9 to 74.4% for “be a member of the Center, including dual appointment.”

Of the reasons cited for choosing “strongly interested,” “sounds appealing,” or “interested,” the nature of the research was the most common reason for some Centers, while research level was the most common for other Centers. Among the factors standing in the way of involvement, some respondents cited the inability to leave a current position and time constraints, some noted the distance from their current address and financial issues, some gave family, language, and cultural reasons, and others cited their unfamiliarity with the Center research and its scientists.

3-4 Advice for the WPI Center

The following were most often given as advice on making the WPI Center a more global research center. Nearly the same kind of advice was given for all the Centers, pointing to the importance not only of research activities but of actively creating opportunities for outside exchange, disseminating information outside the Center, and developing the talents of outstanding young researchers.

- Plan symposiums and similar events.
- Strengthen publicity, advertising, and information dissemination.
- Promote globalization (e.g.: hold international conferences, invite and accept foreign scientists, dispatch Japanese scientists overseas, promote international exchanges and international joint research projects, issue information in English).

- Support, develop, and make use of outstanding young research talent.
- Increase exchanges and ties with outside research organizations and scientists, including those overseas.

3-5 Views of and Advice for the WPI

When asked to give their views of the WPI and advice, many respondents said they had not been aware of the program in the first place, while others praised the outstanding work being undertaken. In addition, much of the advice was similar to that offered for individual Centers, such as the need for more aggressive PR and for exchanges and ties with overseas institutions and scientists, and the importance of developing young research talent.

Another view offered was that research funds should be distributed to a wide range of institutions and research talent rather than being concentrated on a few programs.

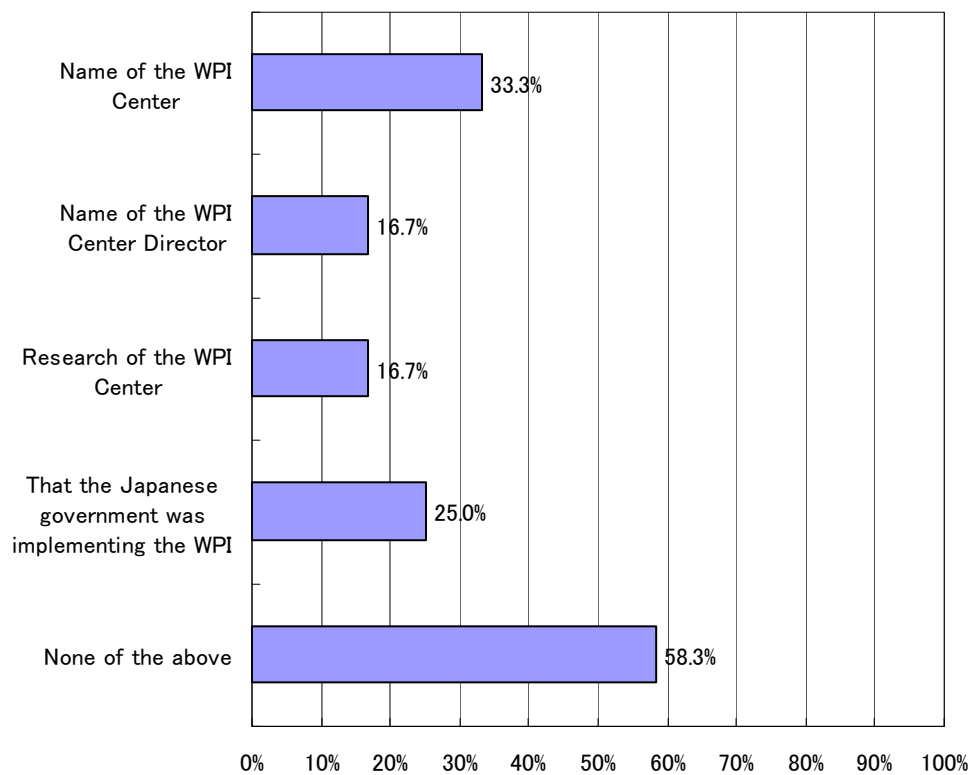
3-6 Views and Advice Regarding Science and Technology Policy in Japan

The respondents offered a number of ideas regarding science and technology policy in Japan. Problem areas pointed to include the seniority-based, closed and conservative nature of research organizations, and a research environment that requires scientists to spend too much time on matters other than research. Many respondents called for improvements allowing more contributions by young, female, and foreign scientists, and urged greater emphasis on exchanges and cooperation between Japanese and overseas scientists.

Other suggestions were to devise science policies from a long-term perspective and not always take a top-down approach, emphasis on fundamental research, distribution of small amounts of research funds to many different scientists, and the importance of allocating research funds to young scientists.

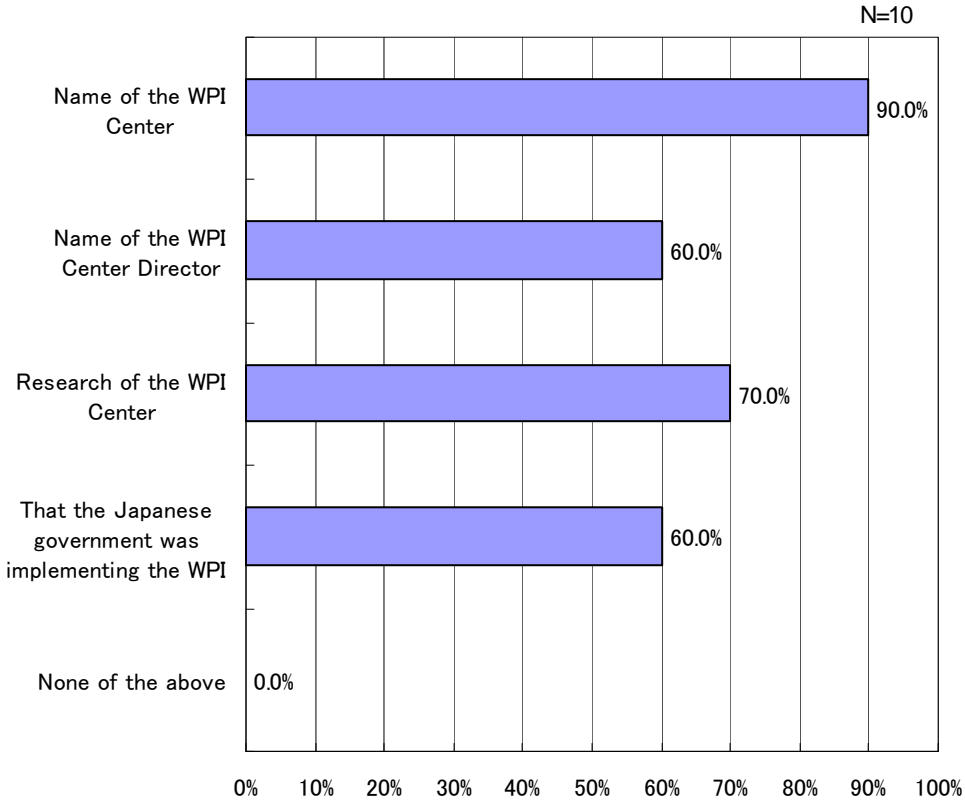
Additional Data

Totals for Leading Scientists Only: Awareness and Knowledge



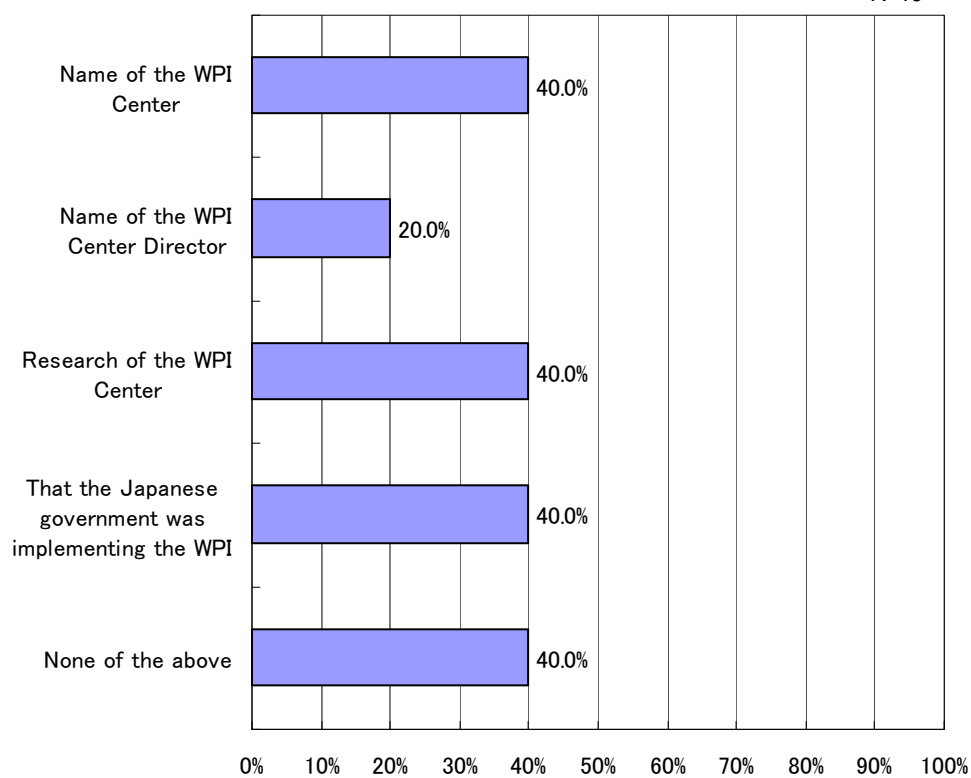
Before receiving this questionnaire, which of the following did you know about the WPI Center?

Institute for the Physics and Mathematics of the Universe, IPMU



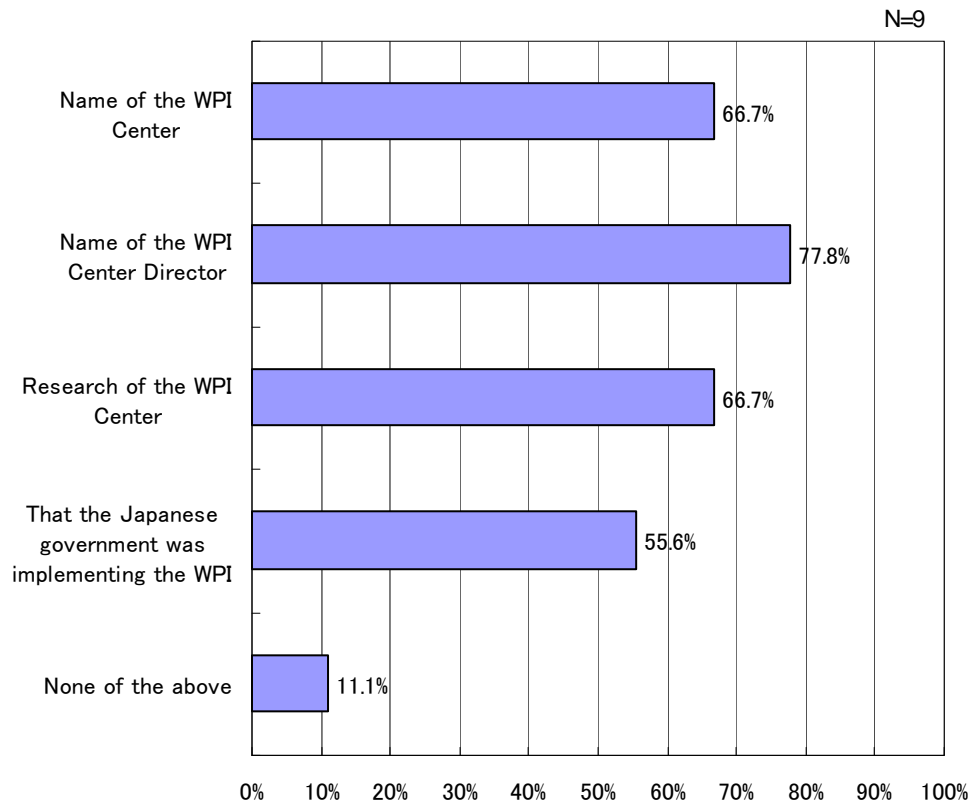
Before receiving this questionnaire, which of the following did you know about the WPI Center?

N=10



Before receiving this questionnaire, which of the following did you know about the WPI Center?

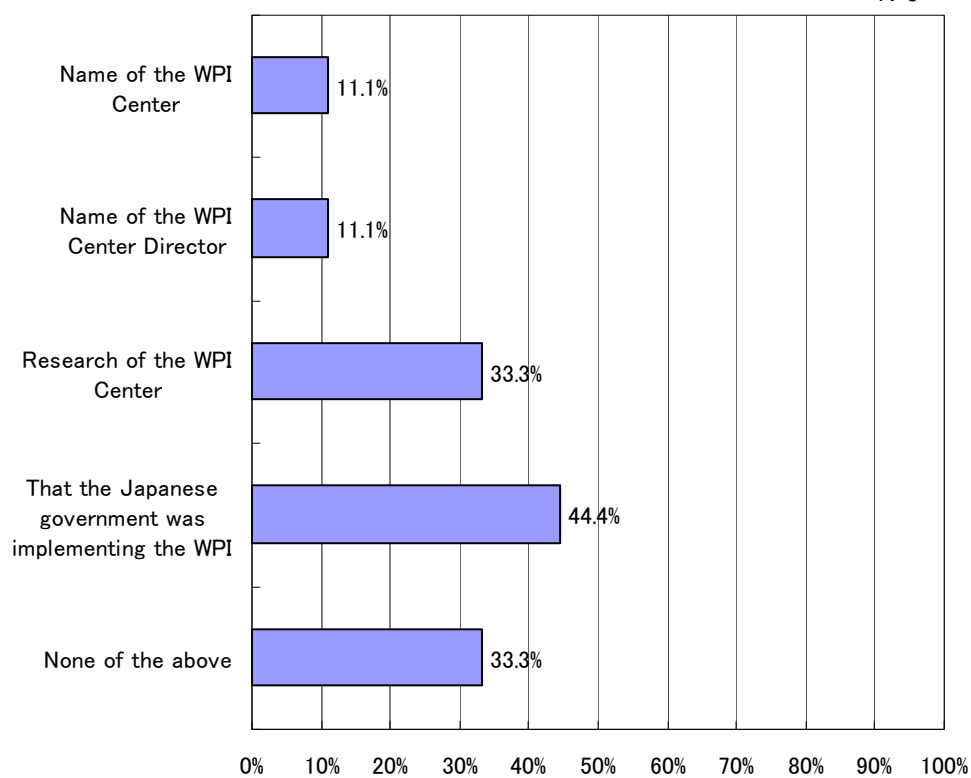
Immunology Frontier Research Center, IFRcC



Before receiving this questionnaire, which of the following did you know about the WPI Center?

International Center for Materials Nanoarchitectonics, MANA

N=9



Before receiving this questionnaire, which of the following did you know about the WPI Center?