# **Young Scientists Fund**

The Young Scientists Fund is an important funding scheme under NSFC's talent funding program series. It supports young scientists to choose freely research topics within the funding scope of NSFC to conduct basic research, fosters the ability of young scientists to independently undertake research projects and do creative research, stimulates creative thinking of young scientists and trains backup talents of basic research.

In order to be eligible for this program, applicants should:

(1) Have experience of doing basic research;

(2) Have senior professional position (title) or Ph.D. degree, or be recommended by 2 researchers in the same research area with senior professional position (title);

(3) Be less than 35 by January 1 of the year of application (born on or after January 1, 1975).

Full time Ph.D. students that satisfy the above criteria may apply through their host institutions with the consent of their supervisors, but full time master degree students may not apply. Those who are the PIs of ongoing NSFC projects or have undertaken projects of Young Scientists Fund (including one-year small fund for exploratory studies, and terminated or withdrawn projects) may not apply again.

The Young Scientists Fund adopts the same application, evaluation and management mechanism as the General Program. The creative potential of the applicant is mainly evaluated. Applicants should follow the outlines for writing the proposals for the Young Scientists Fund when making application. They may only have up to 2 collaborating units, and the research period is 3 years in general.

In 2009, 6,079 projects of the Young Scientists Fund were supported. The total funding was 1.20304 billion yuan and the average funding was 197,900 yuan per project, which is about the same as that of 2008. Due to large increase of the number of applications, the average success rate was 21.31%, which is 1.2% lower than that of 2008 (please see table below for details). In 2010, NSFC shall continue to control the funding intensity (200 thousand yuan per project) and try to increase the funding rate.

					U	nit: 10,000 yuan	
			Ар	proved funding		Funding rate	
Scientific department	Applications	Projects	Funding	Percentage of the total (%)	Average per project	(%)	
Mathematical and Physical Sciences	2, 178	606	12, 176	10. 12	20.09	27.82	
Chemical Sciences	2, 737	652	12, 568	10.45	19.28	23.82	
Life Sciences	10, 542	2,020	40, 395	33. 58	20	19.16	
Earth Sciences	2, 422	682	13, 662	11.36	20.03	28.16	
Engineering and Materials Sciences	5, 057	1, 152	23, 114	19. 21	20.06	22. 78	
Information Sciences	3, 958	727	14, 253	11.85	19.61	18.37	
Management Sciences	1,633	240	4, 136	3.44	17.23	14.70	
Total	28, 527	6,079	120, 304	100	19.79	21. 31	

#### Statistics of Funding for Young Scientists Fund in 2009

Please see sections in each department for funding scope, funding statistics in recent years and relevant requirement.

# Department of Mathematical and Physical Sciences

The development of young scientists is particularly important for the development of mathematical and physical sciences. The Department has always been paying attention to fostering and supporting young scientists, and the funding rate has always been higher than that of General Program projects. In 2010, the Department will maintain a higher funding rate for the Young Scientists Fund so as to give more young people the opportunity to do independent research, and to foster outstanding talents for basic research.

#### Funding for Projects of the Young Scientists Fund in the Department of Mathematical and Physical Sciences in the Last Two Years

		2008		2009			
Divisions	Projects Funding		Funding rate (%)	Projects	Funding	Funding rate (%)	
Mathematics	140	2, 304	32.56	170	2, 721	27.46	
Mechanics	106	2, 346	30.11	130	2, 873	26.42	
Astronomy	23	529	33.33	33	755	29.46	
Physics I	132	2, 763	30.07	178	3, 827	28.80	
Physics II	82	1,722	32.16	95	2,000	28.19	
Total	483	9,664	31.26	606	12, 176	27.82	
Average funding per project	20. 01 20. 09						

Unit: 10,000 yuan

## **Department of Chemical Sciences**

The Department of Chemical Sciences upholds the principle of people first and fostering innovative talents, brings into full play the maintaining and fostering role of the Young Scientists Fund, and steadily increases the funding scope according to the idea of controlling a proper funding level and further raising the funding intensity to young scientists. The Young Scientists Fund stresses on supporting research projects with innovative ideas and giving less weight to research accumulation and the quality of the relevant research teams, so as to facilitate the growth of young scientists.

#### Funding for Projects of the Young Scientists Fund in the Department of Chemical Sciences in the Last Two Years

Unit: 10,000 yuan

Divisions			2008		2009			
		Projects	Funding	Funding rate <sup>++</sup> (%)	Projects	Funding	Funding rate <sup>++</sup> (%)	
	Inorganic chemistry	58+4*	1,179	24.41	82+4*	1,654	24.09	
Division I	Analytical chemistry	55+5*	1, 132	25.42	77+3*	1, 541	24. 17	
Division II	Organic chemistry	90+5*	1, 717	24.42	109+5*	2, 187	24.46	
Division III	Physical chemistry	93+5*	1, 787	25.26	117+6*	2, 358	24.40	

	Polymers	57+3*	1, 118	26.20	63+3*	1, 275	25.00
Division VI	Environmental chemistry	55+4*	1, 087	23.79	73+3*	1, 463	23.90
Division V Chemical engineering		91+5*	1, 743	23.88	104+3*	2, 090	21.53
Total		499+31*	9, 763	24.70	625+27*	12, 568	23.82
Average funding per project			18.42			19.28	

Notes: \* Projects of Small Fund for Exploratory Studies.

++ Including projects of Small Fund for Exploratory Studies.

## **Department of Life Sciences**

In 2009, the Department of Life Sciences received 10,542 applications for the Young Scientists Fund in total (10,164 accepted), which was 2,678 more (an increase of 34.05%) than that in 2008. The Young Scientists Fund supported 2,020 projects (compared with 1,560 projects in 2008), with a funding rate of 19.16% and an average funding of 200,000 yuan per project (compared with 200,010 yuan per project in 2008). In the future, the Department will continue to follow the principle of NSFC Young Scientists Fund to stabilize young research teams, foster backbone talents, stimulate innovative thinking, support independent research and give steady support to young scientists. For application details, please refer to the section of General Program of the Department in this guide. In 2010, the funding per project for Young Scientists Fund will be 210,000 yuan in the Department.

In the application and evaluation of the Young Scientists Fund, in addition to the common problems mentioned in General Program projects, there exist problems in the following two aspects.

Brief introduction of the applicants is not written according to the requirement of application outlines. Some bios of the applicants provided are not in sufficient detail, from which reviewers can not tell whether the applicant is still doing Ph.D. study, the time of graduation or the time to obtain diploma.

Some applicants did not list, as required by the writing outlines, all authors of the papers published, the names of the journals and the year of publication, volume and pages, and the reviewer can not tell the relation between the applicant and other members of the research group.

Funding for Projects of the Young Scientists Fund in the Department of Life
Sciences in the Last Two Years

Unit: 10,000 yuan

			2008			2009	
	Divisions		Funding	Funding rate <sup>++</sup> (%)	Projects	Funding	Funding rate <sup>++</sup> (%)
D	Microbiology	53	1,058	17.38	69	1, 387	16.31
Division I	Botany	40	809	20.73	60	1, 191	24.39
Division II	Ecology	51	1,015	17.47	66	1, 327	18.13
Division II	Forest science	26	526	18.31	35	691	16.59
	Biochemistry, biophysics and molecular biology	45	902	19. 23	59	1, 178	19.09
Division III	Cell biology	47	933	29.38	63	1, 253	29.44
	Genetics	69	1, 384	23.00	86	1,742	22.05
	Immunology	63	1, 251	23.33	81	1,612	26.21
Division IV	Neuroscience and psychology	79	1, 578	25.48	101	2,026	24.22
Division 1v	Biomedical engineering	81	1,626	24.92	106	2, 111	22.41
Division V	Agricultural science	114	2, 283	22.22	149	2, 987	18.28
Division VI	Animal husbandry, veterinary and aquatic sciences	89	1, 770	20. 27	116	2, 313	18.13
	Zoology	21	414	19.81	27	541	18.00
	Physiology and pathology	175	3, 496	23.49	227	4, 536	21.79
Division VII	Preventive medicine and hygienics	106	2, 114	29.36	137	2, 732	24.86
Division VIII	Basic clinical medicine I	163	3, 302	18.71	201	4, 027	15.39
Division IX	TCM and materia medica	67	1, 334	16.50	88	1, 751	16.39
DIVISIONIA	Pharmacology	104	2, 081	17.51	137	2, 740	15.62
Division X Basic clinical medicine II medicine II		167	3, 347	17.04	212	4, 250	16.72
	Total	1,560	31, 223	20.67	2 020	40, 395	19.16
Avera	ge funding per project		20.01			20.00	

Note: There was no Projects of Small Fund for Exploratory Studies in 2009 and 2009.

Starting from 2010, NSFC has divided the Department of Life Science into two departments: the Department of Life Sciences and the Department of Health Sciences.

Disciplinary setup has therefore been changed accordingly. Please read this guide carefully to select proper application code when making application.

## **Department of Earth Sciences**

In 2009, the Department of Earth Sciences received 2,422 applications for the Young Scientists Fund in total from 439 units, among which 56.6% (or 1,371 applications) were from universities, and 40.6% (983 applications) were from research institutes. The Department funded 682 projects, with a total funding of 136.63 million yuan, an average of 200,000 yuan per project and a funding rate of 28.1%. In 2009, among the funded projects of Young Scientists Fund, universities undertook 349, accounting for 51.2%, and research institutes undertook 316, accounting for 46.3%. Continuously fostering outstanding young scientists is one of the important goals of NSFC. The Department will further strengthen its funding to young and especially outstanding young talents. The Young Scientists Fund is mainly to foster young talents, provide more opportunities for young scholars in their early career, and support them to grow faster. The focus of the Young Scientists Fund will be on researchers with Ph.D. degrees who have just started to do basic research and need funding most.

Funding for Projects of the Young Scientists Fund in the Department of Earth Sciences in the Last Two Years

Unit:	10,000	vuan
onn.	10,000	yuun

			2008		2009			
Divisions		Projects	Funding	Funding rate (%)	Projects	Funding	Funding rate (%)	
Division I	Geography (including soil science and remote sensing)	236	4, 717	28.96	300	6, 019	28.12	
Division II	Geology	89	1, 778	30.38	100	1, 997	28.25	
Division II	Geophysics and space physics	39	780	29.10	52	1,032	28.42	
Division III	Geophysics and space physics	49	979	29.70	56	1, 117	28.28	
Division IV	Marine science	76	1,540	29.34	103	2,065	28.14	
Division V	Atmospheric science	63	1, 239	30.00	71	1, 432	27.95	
Total		552	11,033	29.42	682	1, 3662	28.12	
Average funding per project			19.98			20. 03		

# Department of Engineering and Materials Sciences

In order to encourage innovation, foster young research talents and ensure a high approval rate and funding intensity for the Young Scientists Fund, the Department, when drafting its annual plan, adopts the policy of "maintaining the funding scale for General Program and increasing its funding intensity, and expanding the funding scale of the Young Scientists Fund and raising its funding rate and maintaining its funding intensity". In 2009, the Department received 5,057 applications for the Young Scientists Fund, which is 41.18% more than that of 2008, representing a very high increase. The Department planned to fund 1,152 projects with a total funding of 230.4 million yuan, but finally funded 1,152 projects with a total funding of 231.14 million yuan, an average of 200,600 yuan per project and a funding rate of 22.78% (24.76% in 2008).

#### Funding for Projects of the Young Scientists Fund in the Department of Engineering and Materials Sciences in the Last Two Years

Unit: 10,000 yuan

			2008		2009			
Divisions		Projects	Funding	Funding rate <sup>++</sup> (%)	Projects	Funding	Funding rate <sup>++</sup> (%)	
Materials Sciences I	Metallic materials	70	1, 432	26.22	92	1,845	22.83	
Materials Sciences II	Inorganic non metallic materials	119	2, 368	25.48	151	3, 022	23.09	
Materials Sciences II	Organic polymer materials	70+4*	1, 481	24.75	96	1, 919	22.75	
Engineering Sciences I	Metallurgy and mining science	61	1, 263	25.63	83	1,665	21.73	
Engineering Sciences II	Mechanical engineering	150	3, 086	25.60	194	3, 870	22.64	
Engineering Sciences III	Engineering thermo physics and energy use	87	1,796	25.82	104	2, 078	25.62	
Engineering Sciences IV	Architecture, environment and structural engineering	189	3, 848	23.80	246	4, 984	22.63	
Engineering Spinners V	Hydrology and marine engineering	79	1, 578	22.70	110	2, 210	20.83	
Engineering Sciences V	Electrical science and engineering	58	1,192	23. 58	76	1, 521	23.90	
То	tal	883+4 <b>*</b>	18,044	24.76	1, 152	23, 114	22.78	
Average funding per project		20. 36 (20. 4**)				20.06		

Notes: \* Projects of Small Fund for Exploratory Studies.

\*\* Not including projects of Small Fund for Exploratory Studies.

++ Including projects of Small Fund for Exploratory Studies.

# **Department of Information Sciences**

In 2009, the Department of Information Sciences received 3,958 applications for the Young Scientists Fund, representing an increase of 34.81% from that of 2008. In 2009, it funded 727 projects, with an average funding rate of 18.39% (18.83% in 2008). The total funding was 142.53 million yuan and 196,100 yuan per project on average. In 2010, the Department will continue to pay attention to applications for the Young Scientist Fund, maintain the same funding level and increase properly the funding rate.

#### Funding for Projects of the Young Scientists Fund in the Department of Information Sciences in the Last Two Years

			2008			2009	
Divisions		Projects	Funding	Funding rate <sup>++</sup> (%)	Projects	Funding	Funding rate <sup>++</sup> (%)
	Electronics and technology	59	1, 173	30.26	55	1, 161	18.39
Division I	Information and communication system	33	634	16.26	67	1, 373	19.03
	Information acquisition and processing	57	1, 117	17.92	63	1, 296	18.05
	Theoretical computer science, computer software and hardware	46	894	17. 29	59	1,054	18.55
Division II	Computer application	62	1, 202	18.02	89	1, 584	17.98
	Network and information security	54	1,049	17.53	77	1, 369	18.83
	Control theory and control engineering	48	961	18.05	76	1,407	18.91
Division III	Systems science and system engineering	20	392	19.8	25	464	17.73
	AI and intelligent system	50	988	18.25	66	1, 223	18.64
	Semiconductor science and information devices	49+1*	1,060	18.66	58	1, 285	17.96
Division IV	Information optics and photoelectric devices	39	840	18.75	48	1,063	17.78
	Laser technology and technical optics	35	748	19.02	44	974	17.96
	Total	552+1*	11, 058	18.83	727	14, 253	18.39
	Average funding per project	19	. 99 (20. 03*	**)		19.61	

Unit: 10,000 yuan

Notes: \* Projects of Small Fund for Exploratory Studies.

\*\* Not including projects of Small Fund for Exploratory Studies.

++ Including projects of Small Fund for Exploratory Studies.

## **Department of Management Sciences**

In recent years, both the number of applications and the level of research quality of the Young Scientists Fund in the Department have been improved. Researchers have paid attention to the exploration in scientific frontier areas, and the researches, while being rigorous and reasonable, have made some high standard achievements. Along with the increase of the number of applications, some problems have emerged. A number of applications contain large topics, duplicate the work of Ph.D. thesis or post-doc research, lack originality, fail to provide information required by NSFC, or submit the same applications to other funding sources.

In 2009, the Department accepted 1,633 applications for the Young Scientists Fund, accounting for 31.57% of the three types of projects in General Program. While the number of applications for Young Scientists Fund increased 12% in 2008, it had a larger increase of 37.81% in 2009. After evaluation, 240 projects were funded, which is an increase of 25% compared with 192 projects in 2008, much higher than the increase of 13.21% for General Program. The funding was 172,300 yuan per project, which is slightly higher than 167,100 yuan per project in 2008. The number of approved Young Scientist Fund projects accounted for 33.61% of all the projects funded in General Program, Young Scientists Fund and the Fund for Less Developed Regions of the Department, which is 23.95% in 2007 and 31.84% in 2008. The funding was 25.98% of the total for the three project types in the Department, which is 1.03% more compared with 24.95% in 2008. The increase in the funding scope for the Young Scientists Fund in 2009 shows the emphasis of NSFC on improving talent fostering system, supporting young research forces and fostering outstanding talents in the Eleventh Five-Year Plan period.

The Division I of the Department received 521 applications for the Young Scientists Fund, which is an increase of 29.60% from that in 2008, accepted 505 and funded 80 projects (including 2 small fund for exploratory studies), with a funding rate of 15.36%. The Division II received 530 applications, which is an increase of 23.83% from 428 in 2008, accepted 512 and funded 80 projects, with a funding rate of 15.09%. The Division III received 582 applications, which is a large increase of 63.94% from 355 in 2008, accepted 541 and funded 80 projects (including 1 small fund for exploratory studies), with a funding rate of 13.75%. Please see the following table for the funding of the Young Scientists Fund in the last two years.

In 2010, the Department shall fund more projects through the Young Scientists Fund. It will continue to follow the principle of expanding the funding scope and limiting the funding intensity in managing the Young Scientists Fund.

The requirements given in the general description of the General Program in the Department of Management Sciences in this guide also apply here, so please read carefully before applying.

Funding for Projects of the Young Scientists Fund in the Department of
Management Sciences in the Last Two Years

Unit: 10,000 yuan

			2008		2009			
Divisions		Project	Funding	Funding rate <sup>++</sup> (%)	Project	Funding	Funding rate <sup>++</sup> (%)	
Division I	Management science and engineering	65+3*	1, 138. 7+24*	16.92	78+2*	1,365+14*	15.36	
Division II	Business administration	67	1, 113. 5	15.65	80	1,379	15.09	
Division III	Macro-management and policy	54+3*	912+21*	16.06	79+1*	1,370+8*	13. 75	
Total		186+6*	186+6* 3, 164. 2+45* 16. 20		237+3*	4,114+22*	14.70	
Average funding per project		16.71(17.01**)			17. 23 (17. 36**)			

Notes: \* Projects of Small Fund for Exploratory Studies.

\*\* Not including projects of Small Fund for Exploratory Studies.

++ Including projects of Small Fund for Exploratory Studies.

## **Department of Health Sciences**

In 2010, the Department of Health Sciences will receive applications for the first time. The Department supports mainly basic research and applied basic research in the form, structure and function of body cell, tissue, organ and systems and abnormal development and occurrence, development, transfer, diagnosis, therapy and prevention of disease. We welcome young scientists doing disease related basic research and applied basic research to submit proposals to the Department for funding. Applicants should have the ability to independently undertake and complete research project, and the ability to propose creative scientific problems and research schemes. Therefore, creativity and potential for innovation are the main criteria of evaluation. Please see sections in the Young Scientists Fund and General Program in this guide for detailed information.