The Approach of Expanding Access to Research and Scholarship for Graduate Students: Based on the Experience of Xiamen University

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Xiamen University offers 166 doctorial programs and 237 master programs. There are more than 2,900 doctoral candidates, over 150 of which are from overseas, and 17,000 master candidates, over 320 of which are foreign students.

In order to improve postgraduate students' ability to do scholarly research, Xiamen University reformed its scholarship system in 2008, and established a new scholarship system of well-covered grants that benefits all postgraduate students. The grants—cover full-time postgraduate students' tuition or a portion of their tuition and living expenses. The grants are mainly from government funds, university funds, mentor-supporting funds, social donations, and students' individual payment. The grants can be divided into four main regions: graduate fellowship, '3-A fund' (Teaching Assistant, Tutor Assistant, Research Assistant), job subsidy, and innovation fund. As a financial safeguard against lack of tuition fees and living expenses, the graduate fellowship successfully supports postgraduate students to allow them to concentrate on their individual research and development.

Striking achievements have been made since the new scholarship system was established. The postgraduate students' abilities to do research have been increased significantly. The obvious effects are listed below.

Statistics of Academic Contribution of Postgraduates at Xiamen University 2011-2012

Year	Total No. of SCI papers	No. of SCI Papers (Postgraduates as First author or Corresponding author)	Contribution rate of first author or corresponding author	Remark
2011	1002	550	54.89%	2012.12 Statistical data
2012	1263	649	51.39%	2013.06 Statistical data

Note: Contribution rates of first author and corresponding author exceed 50% in both 2011 and 2012.

Rate of SCI Contribution of Science, Engineering and Medical Postgraduates 2011 (Top 3)

			No. of SCI	
			Papers	Contribution rate of
No.	College Name	No. of SCI	(Postgraduates as	first author or
No.	College Name	Papers	First author or	corresponding
			Corresponding	author
			author)	
1	School of Life Science	102	81	79.41%
2	College of Chemistry and	306	239	78.10%
2	Chemical Engineering	300	239	/0.10%
3	College of Materials	96	52	54.17%

Rate of SCI Contribution of Science, Engineering and Medical Postgraduates 2012 (Top 3)

No.	College Name	No. of SCI Papers	No. of SCI Papers (Postgraduates as First author or Corresponding author)	Contribution rate of first author or corresponding author
1	Pen-Tung Sah Institute of Micro-Nano Science and Techonology	10	8	80.00%
2	School of Life Science	107	82	76.64%
3	College of Chemistry and Chemical Engineering	339	258	76.11%

Statistics of Academic Papers of Doctoral Students at Xiamen University 2009-2012

Academic	SCI	EI	Core Journals	Core Journals
Year			First Class	General Class
2009	446	161	161	744
2010	501	163	173	690
2011	734	297	132	777
2012	702	278	116	647

High Level Research Papers of Doctoral Students at Xiamen University 2009-2012

Year	2009	2010	2011	2012		
Impact Factor>5 or JCR-1	21	57	96	97		
Core Journals First Class	126	150	114	95		

Note: High level research papers refer to papers with Impact Factor over 5 or in JCR-1; Humanities (including Economic Management) on Xiamen University Fist Class Core Journals.

470 students received doctorates in 2009, including 178 in science and engineering programs, and 292 in humanities and social science programs. The science and engineering students published 445 papers on SCI, 2.5 papers on average, and 156 papers on EI, 0.88 papers on average. The humanities and social science students published 140 papers in first-class core journals, 0.48 papers on average.

478 students received doctorates in the year 2010, including 186 in science and engineering programs, and 292 in humanities and social science programs. Thescience and engineering students published 499 papers in SCI, 2.68 papers on average, and 147 papers in EI, 0.79 papers on average. The humanities and social science students published 166 papers in first-class core journals, 0.57 papers on average.

553 students received doctorates in the year 2011, including 244 in science and engineering programs, and 309 in humanities and social science programs. The science and engineering students published 730 papers in SCI, 2.99 papers on average, and 264 papers in EI, 1.08 papers on average. The humanities and social science students published 131 papers in first-class core journals, 0.42 papers on average.

470 students received doctorates in the year 2012, including 240 in science and engineering programs, and 280 in humanities and social science programs. The science and engineering students published 692 papers in SCI, 2.88 papers on average, and 237 papers in EI, 0.99 papers on average. The humanities and social science students published 111 papers in 1st-class core journals, 0.40 papers on average.

Statistics of University Graduate Scholarships 2011-2013 (Unit: Ten Thousand RMB)

(Table continued on next page)

	Year 2011-2012		Year 2012-2013			
Туре	Rank	No. of	Amount	Rank	No. of	Amount
	Kalik	People	Amount	Kalik	People	Amount
	Special	20	06	Special	22	70.4
	Scholarship	30 96	Scholarship	22	70.4	
	First Grade	483	1545.6	First Grade	640	2048
	Scholarship	403		Scholarship	040	
	Second Grade	862	2155	Second Grade	994	2485
Doctoral	Ooctoral Scholarship			Scholarship		
Students	Third Grade	107 246	246.1	Third Grade	,	2.3
	Scholarship	107	240.1	Scholarship	1	
	Fourth Grade	1		Fourth Grade	0	0
	Scholarship	1	1	Scholarship	U	
	Minority Students	38	20	Minority Students	15	18
	Scholarship	30	38	Scholarship	13	

	Year 2011-2012		Year 2012-2013			
Туре	Rank	No. of People	Amount	Rank	No. of People	Amount
	Special Scholarship	77	130.9	Special Scholarship	40	68
	First Grade Scholarship	1510	2567	First Grade Scholarship	2104	3576.8
Master	Second Grade Scholarship	2234	3351	Second Grade Scholarship	2464	3696
Students	Third Grade Scholarship	2664	1065.6	Third Grade Scholarship	2798	1119.2
	Minority Students Scholarship	73	29.2	Minority Students Scholarship	85	34
	Professional Scholarship	1115 446		Professional Scholarship	/	/
Total		9194	11671.4		9163	13117.7

Statistics of Mentor-supporting Funds 2009-2012 (Unit: Ten Thousand RMB)

Academic Year	2009	2010	2011	2012
Amount	392.6	586.4	746.6	834.4

Xiamen University subsidized 107 doctoral students during 2009-2012 to participate in short-term academic exchange at top universities overseas, in locations including the US, Germany, France, Singapore, Belgium, etc. The distinguished universities they attended included Harvard University, Duke University, Oxford University, Cambridge University, and Cornell University. Remarkable results were achieved.

Statistics of Research Achievements by Funded Doctoral Students 2009-2012

Science, Engineering and Medical			Humanities and	Social Sciences			
JCR-1	JCR-2	Other	Patent	Core Journals First Class Second Class Monograph			
15	50	207	18	18	79	12	91

As an incentive mechanism, the scholarship system in Xiamen University has greatly mobilized postgraduate students' enthusiasm, developed their scholarly potential, stimulated their innovative consciousness, increased their ability to do research, and thus guaranteed the output of high-quality research achievements.