



## 2010 Competition Statistics Discovery Grants Program

This report includes tables and figures that provide summary information on the 2010 Discovery Grants competition, as well as a few comparisons to previous competitions.

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## SECTION 1 – GENERAL STATISTICS

While the overall Discovery Grants program budget for 2010 remained at the same level as in 2009 (Note: Decisions on the allocation of the new funds received in Budget 2010 will be made in the summer of 2010), the composition of the applicant cohorts is not equal, and competition budgets vary from year to year. The number of applications was higher, relative to 2009, by almost 150, reflecting an increasing number of returning unfunded applicants. The combination of this cohort fluctuation and the larger number of applicants has resulted in a reduced success rate and a slightly smaller average grant for successful applicants.

The percentage of applicants receiving a grant in 2010 has declined to 58 percent from 64 percent in 2009. Going into the competition, there were 1,902 renewal applicants who held grants of, on average, \$29,992; after the competition, there are 1,940 funded researchers at an average grant level of \$33,129.

NSERC continued to put a strong emphasis on giving early-career researchers a chance to demonstrate their potential and exceeded the minimum target success rate of fifty percent recommended in the [International Review](#) of the NSERC Discovery Grants Program.

**Table 1. Overall Comparative Statistics – 2010 Discovery Grants Competition**

<b>Data</b>	<b>Number of Applications</b>	<b>Number of Awards</b>	<b>Amount Awarded</b>	<b>Success rate (%)</b>	<b>Average Grant</b>
Early-career researchers (ECR)	532	310	\$7,418,449	58	\$23,930
Established researchers (ER)					
applicants who held a grant	1,902	1,360	\$49,412,777	72	\$36,333
applicants not previously holding a grant <sup>1</sup>	921	270	\$7,439,050	29	\$27,552
Overall <sup>2</sup>	3,355	1,940	\$64,270,276	58	\$33,129
Overall <sup>3</sup>	3,374	1,959	\$68,724,276	58	\$35,143

1. Includes returning unfunded applicants and experienced researchers submitting a first application.

2. Includes Discovery and Subatomic Physics (Individual and Team) grants.

3. Also includes Subatomic Physics Projects.

**Table 2. Discovery Grants<sup>1</sup> Competition Results<sup>2</sup> by University – 2010 Competition**

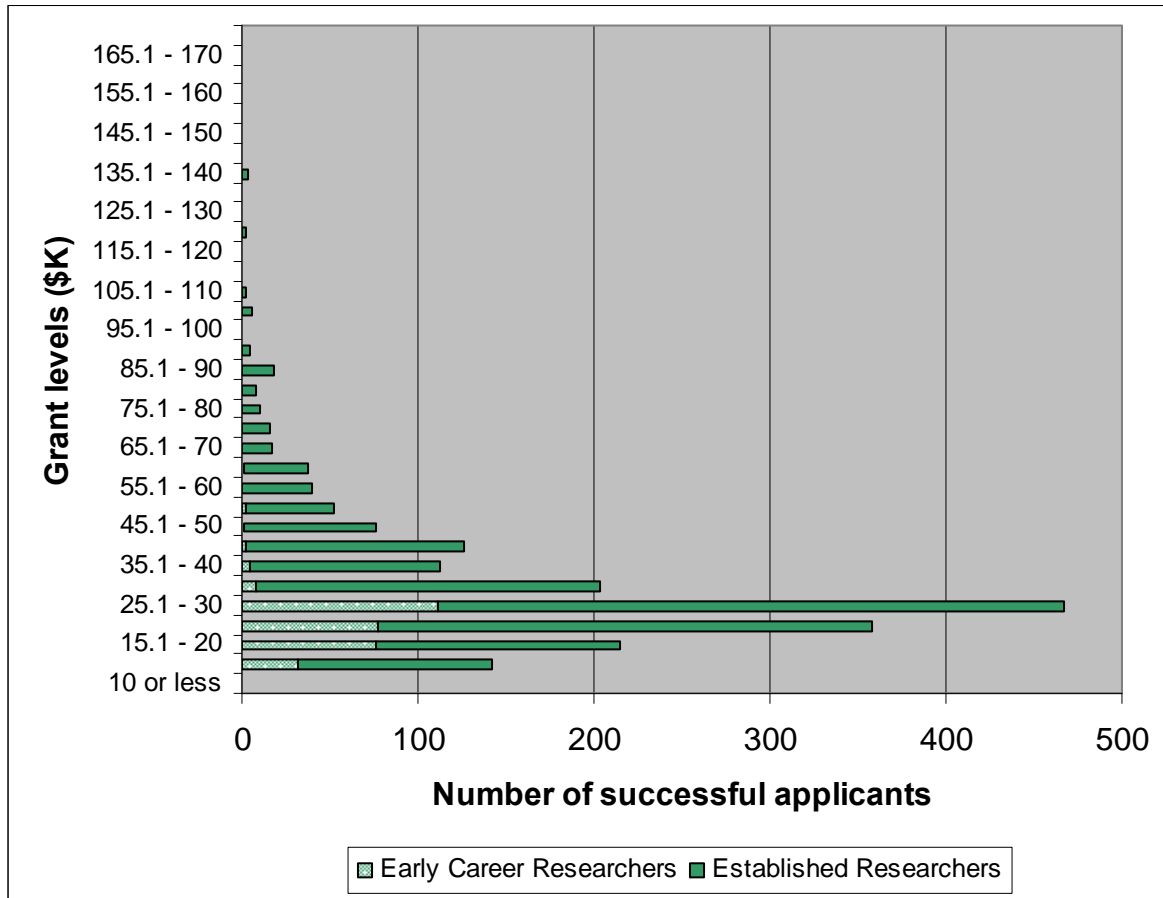
<b>University</b>	<b>No of Applications</b>	<b>No of Awards</b>	<b>Success Rate (%)</b>	<b>Total Amount Awarded</b>	<b>Average Grant</b>
Acadia	20	8	40	\$157,000	\$19,625
Alberta	187	120	64	\$4,180,053	\$34,834
Athabasca	7	1	14	\$18,000	\$18,000
Brandon	7	1	14	\$20,000	\$20,000
British Columbia	194	129	66	\$4,875,307	\$37,793
Brock	29	15	52	\$508,988	\$33,933
Calgary	133	80	60	\$2,809,915	\$35,124
Carleton	76	39	51	\$978,000	\$25,077
Centre de recherche informatique de Montréal	5	0	0	\$0	\$0
Concordia	77	46	60	\$1,287,925	\$27,998
Dalhousie	79	45	57	\$1,403,189	\$31,182
École de technologie supérieure	27	12	44	\$331,000	\$27,583
École Polytechnique	55	43	78	\$1,450,000	\$33,721
Fraser Valley	5	1	20	\$15,000	\$15,000
Guelph	104	56	54	\$2,075,757	\$37,067
HEC Montréal	5	4	80	\$163,000	\$40,750
INRS	20	9	45	\$314,000	\$34,889
Lakehead	36	12	33	\$329,000	\$27,417
Laurentian	33	7	21	\$144,000	\$20,571
Laval	126	78	62	\$2,867,150	\$36,758
Lethbridge	26	14	54	\$524,000	\$37,429
Manitoba	91	53	58	\$1,531,000	\$28,887
McGill	163	105	64	\$3,510,000	\$33,429
McMaster	91	64	70	\$2,373,000	\$37,078
Memorial Univ. of Newfoundland	60	30	50	\$708,000	\$23,600
Moncton	23	5	22	\$123,059	\$24,612
Montréal	123	81	66	\$2,991,853	\$36,936
Mount Allison	7	3	43	\$75,000	\$25,000
Mount Saint Vincent	5	0	0	\$0	\$0
New Brunswick	62	32	52	\$917,000	\$28,656
Nipissing	5	0	0	\$0	\$0
Northern British Columbia	5	2	40	\$44,000	\$22,000
Ontario Institute of Technology	28	16	57	\$396,000	\$24,750
Ottawa	94	52	55	\$1,643,972	\$31,615
Prince Edward Island	6	1	17	\$24,000	\$24,000
Québec à Chicoutimi	11	5	45	\$126,000	\$25,200
Québec à Montréal	46	28	61	\$753,000	\$26,893
Québec à Rimouski	11	7	64	\$178,000	\$25,429
Québec à Trois-Rivières	28	9	32	\$196,000	\$21,778
Québec en Outaouais	5	1	20	\$23,000	\$23,000
Queen's	82	60	73	\$2,101,279	\$35,021
Regina	32	11	34	\$269,000	\$24,455
Royal Military College of Canada	28	10	36	\$232,000	\$23,200

<b>University</b>	<b>No of Applications</b>	<b>No of Awards</b>	<b>Success Rate (%)</b>	<b>Total Amount Awarded</b>	<b>Average Grant</b>
Ryerson	64	22	34	\$545,000	\$24,773
Saint Mary's	15	8	53	\$304,000	\$38,000
Saskatchewan	106	56	53	\$1,713,338	\$30,595
Sherbrooke	75	39	52	\$1,210,200	\$31,031
Simon Fraser	81	54	67	\$2,042,400	\$37,822
St. Francis Xavier	16	8	50	\$170,000	\$21,250
Thompson Rivers	8	0	0	\$0	\$0
Toronto	207	147	71	\$5,852,309	\$39,812
Trent	13	5	38	\$131,000	\$26,200
Victoria	61	39	64	\$1,221,545	\$31,322
Waterloo	156	114	73	\$3,793,795	\$33,279
Western Ontario	119	70	59	\$2,311,972	\$33,028
Wilfrid Laurier	29	14	48	\$326,000	\$23,286
Windsor	46	23	50	\$640,000	\$27,826
Winnipeg	21	9	43	\$194,000	\$21,556
York	55	25	45	\$825,270	\$33,011
Universities < 5 applications	26	12	46	\$323,000	\$26,917
<b>Total</b>	<b>3,355</b>	<b>1,940</b>	<b>58</b>	<b>\$64,270,276</b>	<b>\$33,129</b>

1. Includes Discovery and Subatomic Physics Individual and Team grants, but excludes Subatomic Physics Discovery Grants Projects.

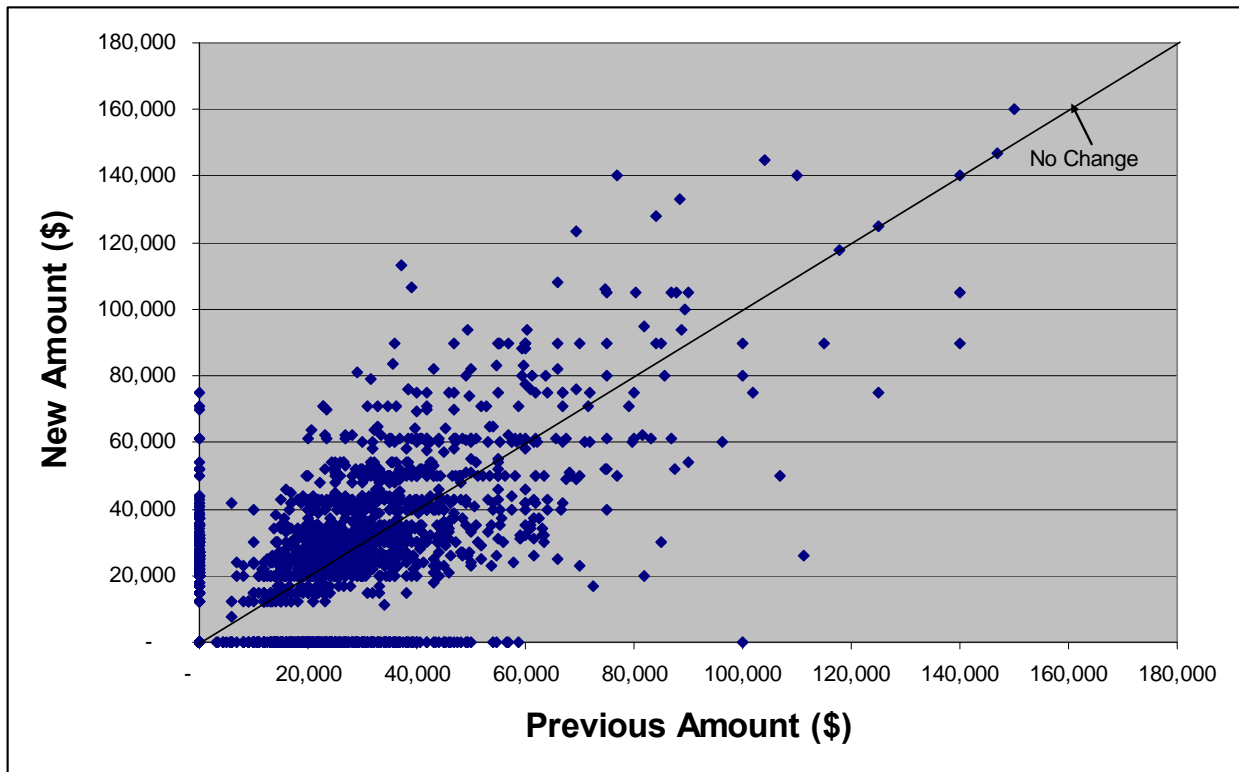
2. As of April 9, 2010

**Figure 1. Distribution of Grant Levels to Successful Applicants – 2010 Competition**



## Renewal Applicants

**Figure 2. Change in Grant Level for All Established Researchers – 2010 Competition**



**Figure 3. Change in Grant Level for Established Researchers 1<sup>st</sup> Renewal – 2010 Competition**

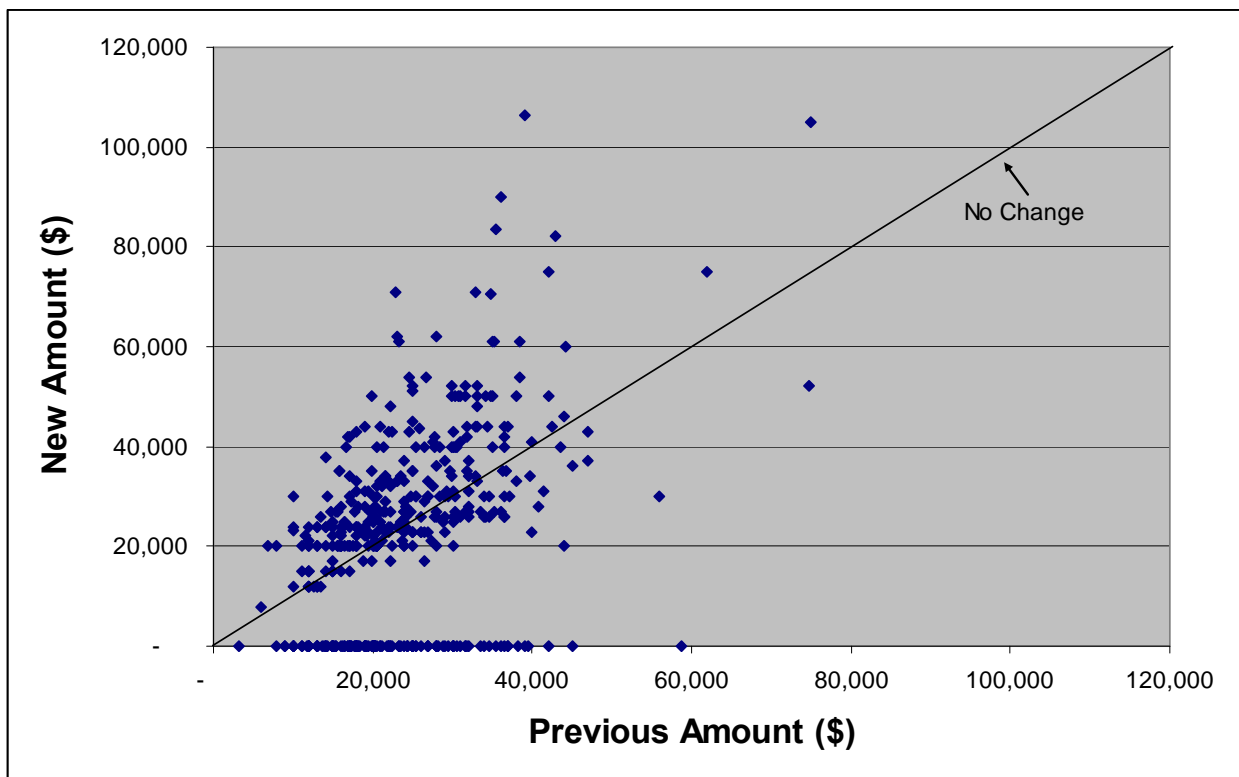


Figure 3 presents the changes in grant level for the subset of established researchers who submitted an application for the 1<sup>st</sup> renewal of their Discovery Grant.

## Renewal Applicants

Figure 4. Percentage Change in Grant Level – 2010 Competition

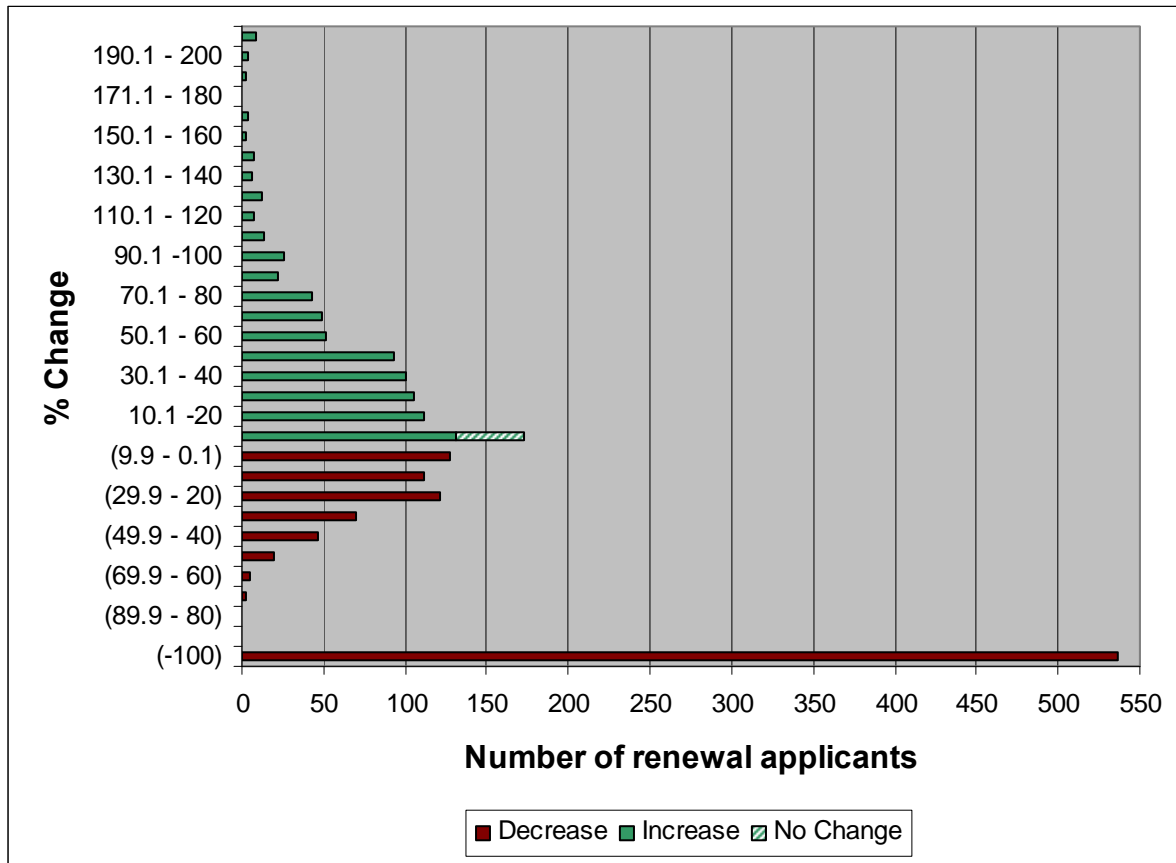


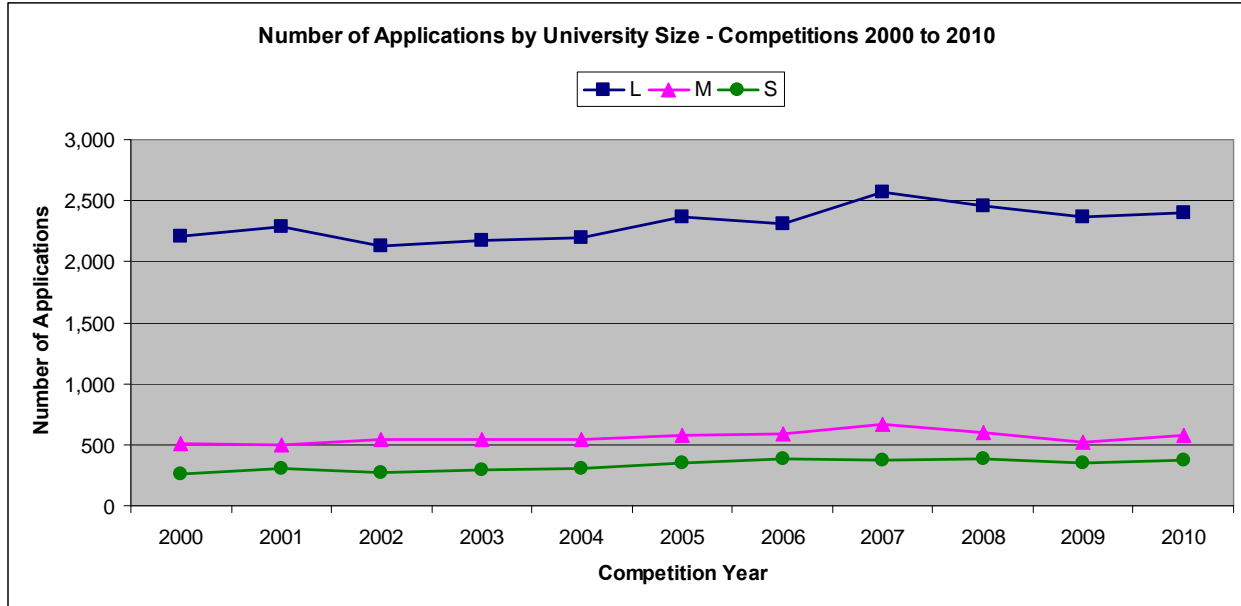
Figure 4 shows the dynamic distribution of funds in 2010.

In 2010, 72 percent of renewal applicants received a grant. Among renewal applicants, 542 (Established Researchers) were not successful.



## Statistics by Size of University

**Figure 5. Number of Applications by University Size\* – Competitions 2000 to 2010**



\*University size is based on NSERC Grants and Scholarships expenditures in 2007-2008:

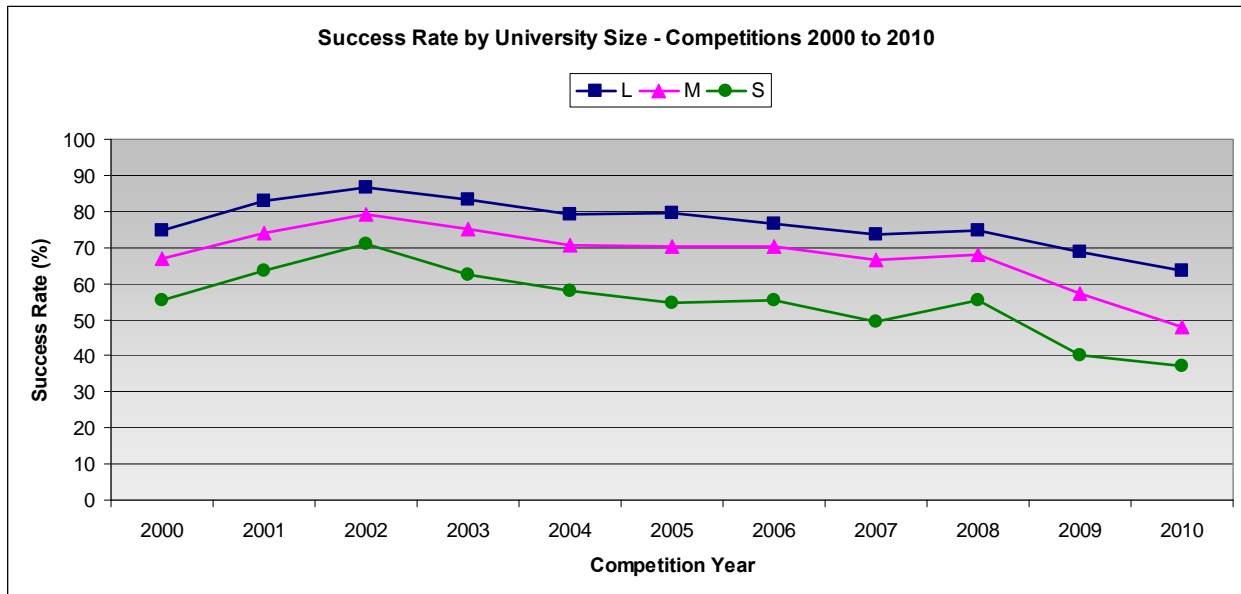
L (Large U.) = received > \$12 million in NSERC funding per year;

M (Medium U.) = received between \$3 and \$12 million in NSERC funding per year;

S (Small U.) = received < \$3 million in NSERC funding per year.

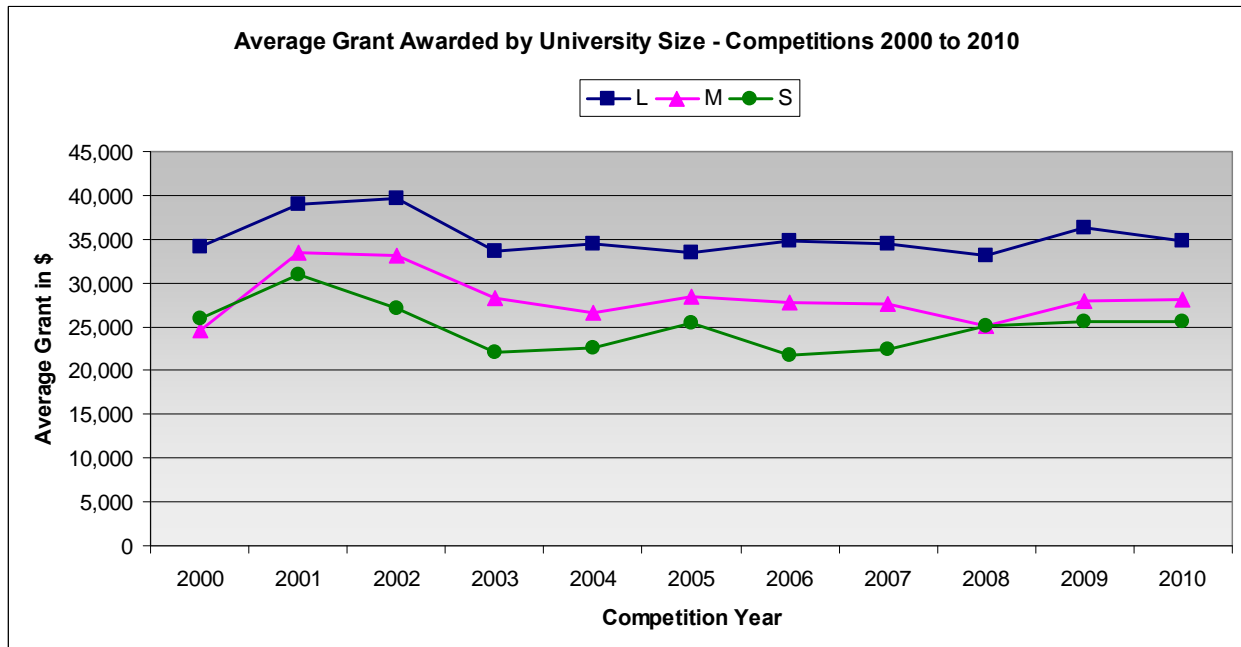
Large universities have the greatest number of professors applying to the program.

**Figure 6. Success Rate by University Size\* – Competitions 2000 to 2010**



Note: In the 2001, 2002 and 2003 Competitions, new funds were injected into the program. This translated into both higher success rates and larger average grants during this period.

**Figure 7. Average Grant Awarded by University Size\* – Competitions 2000 to 2010**



\*University size is based on NSERC Grants and Scholarships expenditures in 2007-2008:  
 L (Large U.) = received > \$12 million in NSERC funding per year;  
 M (Medium U.) = received between \$3 and \$12 million in NSERC funding per year;  
 S (Small U.) = received < \$3 million in NSERC funding per year.

## SECTION 2 – STATISTICS BY EVALUATION GROUP (EG)

**Table 3. Evaluation Group Statistics – 2010 Competition**

<b>Genes, Cells &amp; Molecules (1501)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	98	172	184	454
<b>Number of Awards</b>	61	108	68	237
<b>Amount Awarded</b>	\$1,745,000	\$4,046,629	\$2,174,000	\$7,965,629
<b>Success Rate</b>	62.2%	62.8%	37.0%	52.2%
<b>Average Grant</b>	\$28,607	\$37,469	\$31,971	\$33,610

Data in the above table was revised June 29, 2010 to correct statistical errors.

<b>Biological Systems &amp; Functions (1502)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	93	247	154	494
<b>Number of Awards</b>	36	177	41	254
<b>Amount Awarded</b>	\$929,449	\$7,631,052	\$1,341,695	\$9,902,196
<b>Success Rate</b>	38.7%	71.7%	26.6%	51.4%
<b>Average Grant</b>	\$25,818	\$43,113	\$32,724	\$38,985

Data in the above table was revised June 29, 2010 to correct statistical errors.

<b>Evolution &amp; Ecology (1503)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	29	116	51	196
<b>Number of Awards</b>	20	84	14	118
<b>Amount Awarded</b>	\$448,000	\$3,073,651	\$348,455	\$3,870,106
<b>Success Rate</b>	69.0%	72.4%	27.5%	60.2%
<b>Average Grant</b>	\$22,400	\$36,591	\$24,890	\$32,798

<b>Chemistry (1504)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	30	175	57	262
<b>Number of Awards</b>	18	116	7	141
<b>Amount Awarded</b>	\$539,000	\$6,944,000	\$285,000	\$7,768,000
<b>Success Rate</b>	60.0%	66.3%	12.3%	53.8%
<b>Average Grant</b>	\$29,944	\$59,862	\$40,714	\$55,092

<b>Physics (1505; includes SAP Individual and Team)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	20	150	53	223
<b>Number of Awards</b>	16	101	22	139
<b>Amount Awarded</b>	\$551,000	\$4,370,105	\$754,000	\$5,675,105
<b>Success Rate</b>	80.0%	67.3%	41.5%	62.3%
<b>Average Grant</b>	\$34,438	\$43,268	\$34,273	\$40,828

<b>Geosciences (1506)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	31	113	64	208
<b>Number of Awards</b>	15	83	15	113
<b>Amount Awarded</b>	\$293,000	\$2,736,700	\$388,000	\$3,417,700
<b>Success Rate</b>	48.4%	73.5%	23.4%	54.3%
<b>Average Grant</b>	\$20,000	\$33,093	\$25,867	\$30,245

<b>Computer Science (1507)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	28	213	66	307
<b>Number of Awards</b>	23	152	22	197
<b>Amount Awarded</b>	\$528,000	\$4,365,000	\$434,700	\$5,327,700
<b>Success Rate</b>	82.1%	71.4%	33.3%	64.2%
<b>Average Grant</b>	\$22,957	\$28,717	\$19,759	\$27,044

<b>Mathematics &amp; Statistics (1508)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	41	192	57	290
<b>Number of Awards</b>	30	134	16	180
<b>Amount Awarded</b>	\$432,000	\$2,880,150	\$226,000	\$3,538,150
<b>Success Rate</b>	73.2%	69.8%	28.1%	62.1%
<b>Average Grant</b>	\$14,400	\$21,494	\$14,125	\$19,656

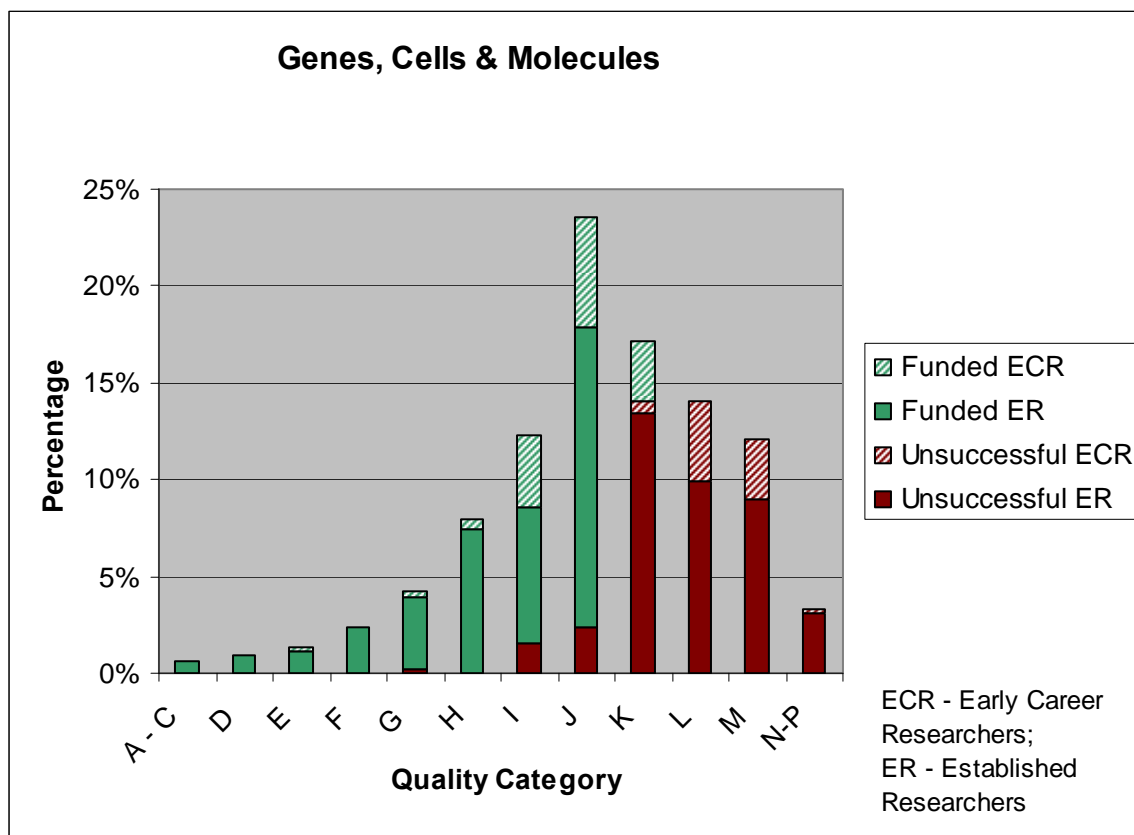
<b>Civil, Industrial, Systems Engineering (1509)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	61	135	69	265
<b>Number of Awards</b>	31	101	7	139
<b>Amount Awarded</b>	\$653,000	\$3,377,270	\$158,000	\$4,188,270
<b>Success Rate</b>	50.8%	74.8%	10.1%	52.5%
<b>Average Grant</b>	\$21,065	\$33,438	\$22,571	\$30,131

<b>Electrical and Computer Engineering (1510)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	31	159	66	256
<b>Number of Awards</b>	22	121	19	162
<b>Amount Awarded</b>	\$522,000	\$3,966,925	\$436,000	\$4,924,925
<b>Success Rate</b>	71.0%	76.1%	28.8%	63.3%
<b>Average Grant</b>	\$23,727	\$32,785	\$22,947	\$30,401

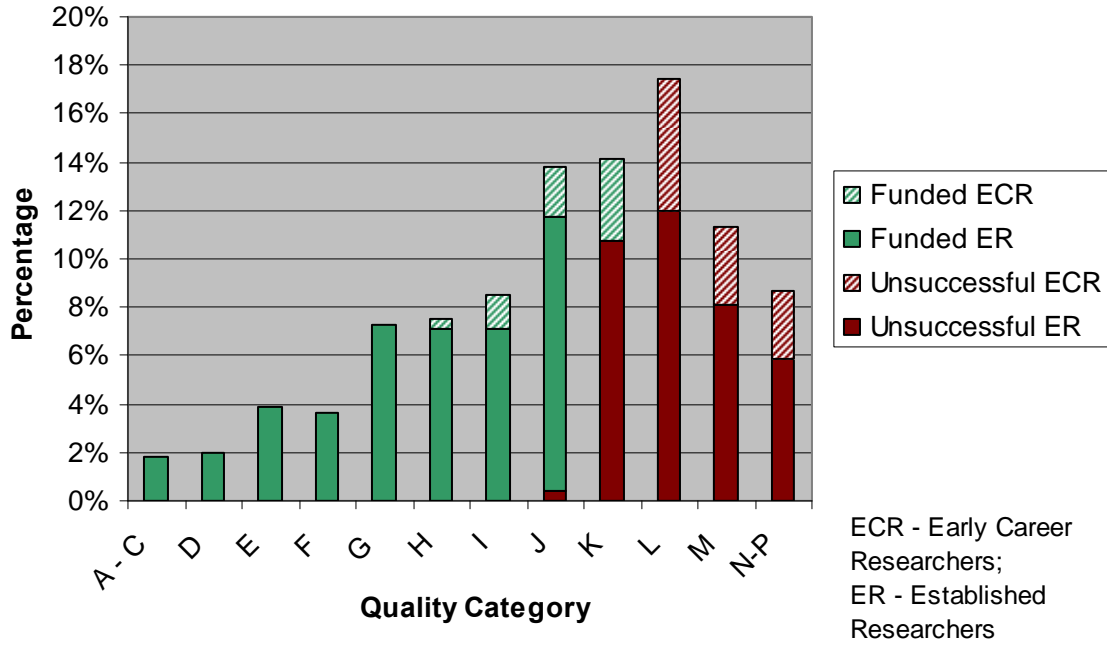
<b>Materials and Chemical Engineering (1511)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	26	109	50	185
<b>Number of Awards</b>	17	91	15	123
<b>Amount Awarded</b>	\$342,000	\$3,291,295	\$336,000	\$3,969,295
<b>Success Rate</b>	65.4%	83.5%	30.0%	66.5%
<b>Average Grant</b>	\$20,118	\$36,168	\$22,400	\$32,271

<b>Mechanical Engineering (1512)</b>	<b>Early Career Researchers</b>	<b>Established Researchers</b>		<b>Overall</b>
		<b>Renewals</b>	<b>Others</b>	
<b>Number of Applications</b>	35	121	59	215
<b>Number of Awards</b>	22	92	23	137
<b>Amount Awarded</b>	\$461,000	\$2,731,000	\$534,200	\$3,726,200
<b>Success Rate</b>	62.9%	76.0%	39.0%	63.7%
<b>Average Grant</b>	\$20,955	\$29,685	\$23,226	\$27,199

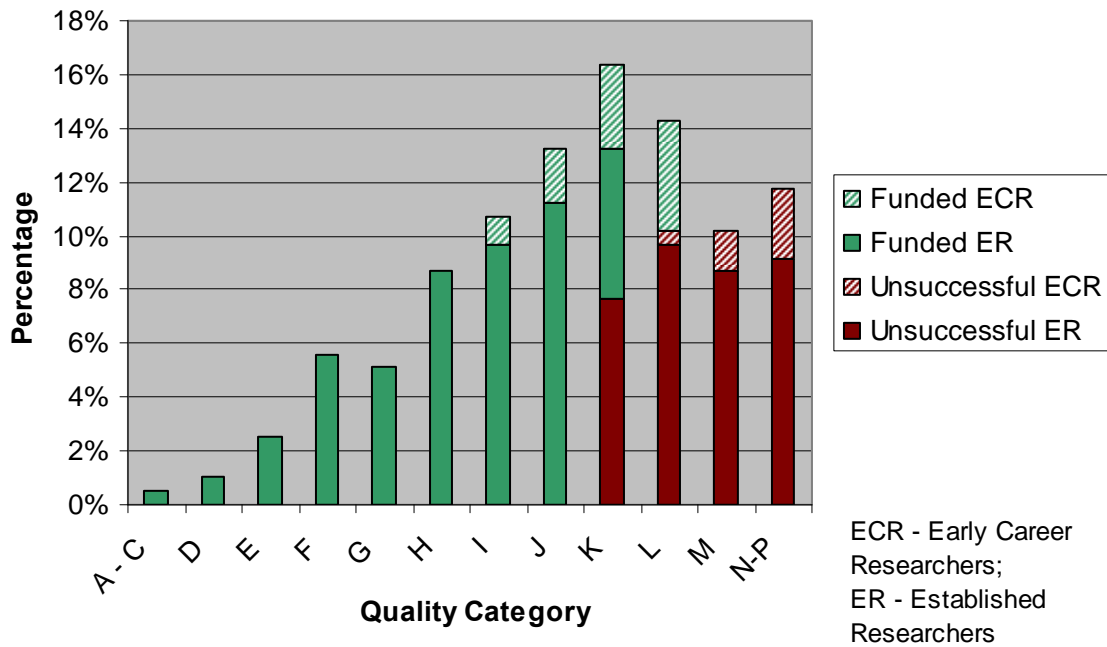
**Figures 8. Distribution of Applications by Quality Categories for each Evaluation Group – 2010 Competition**

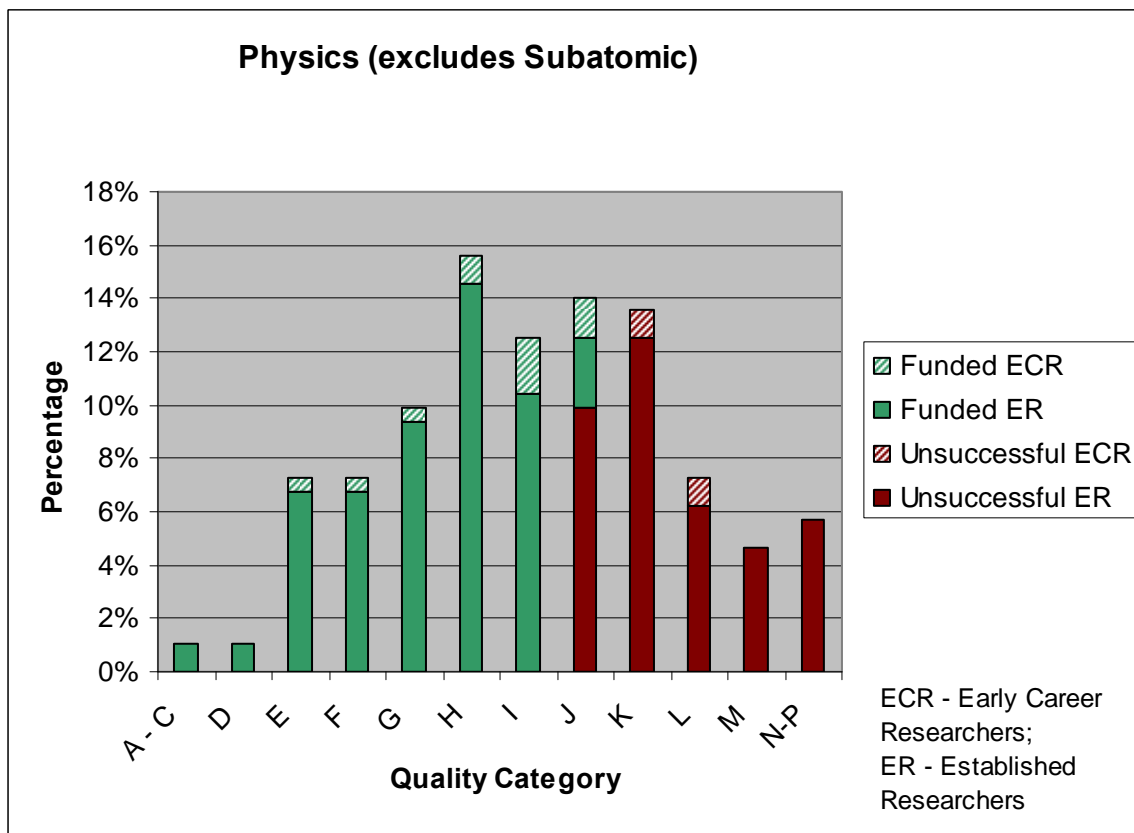
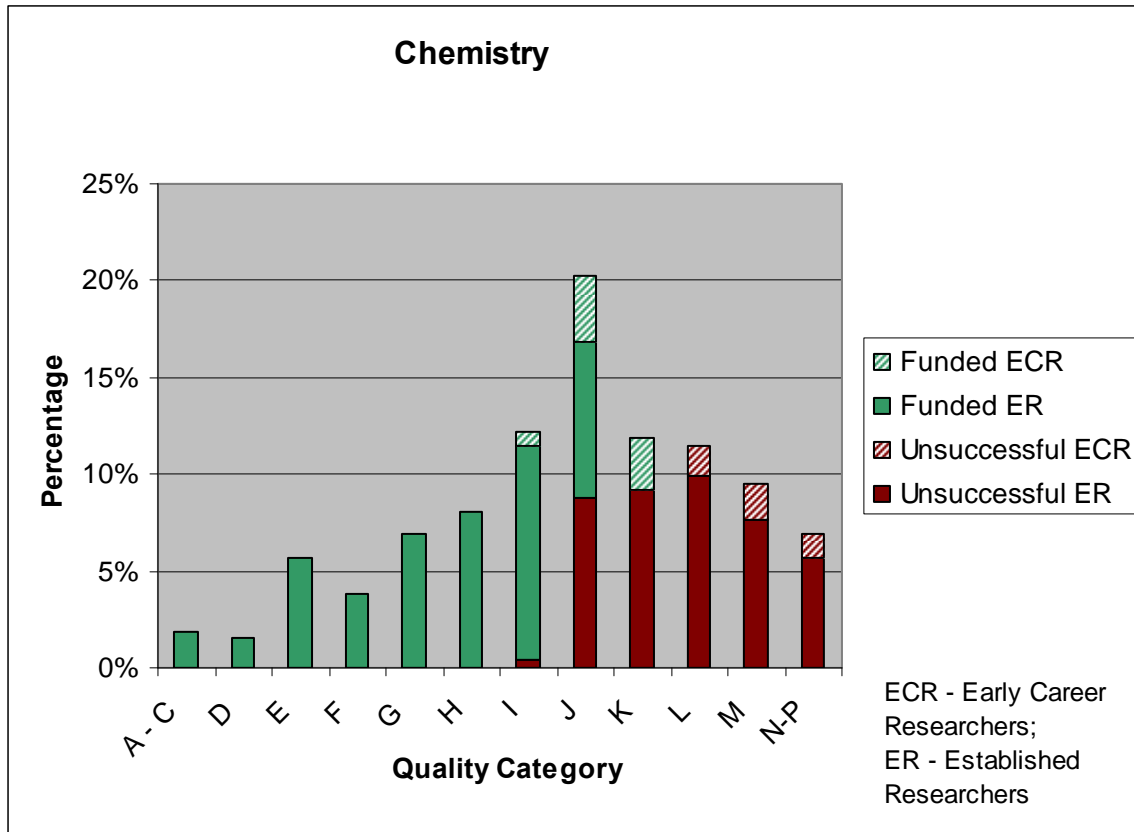


### Biological Systems & Functions

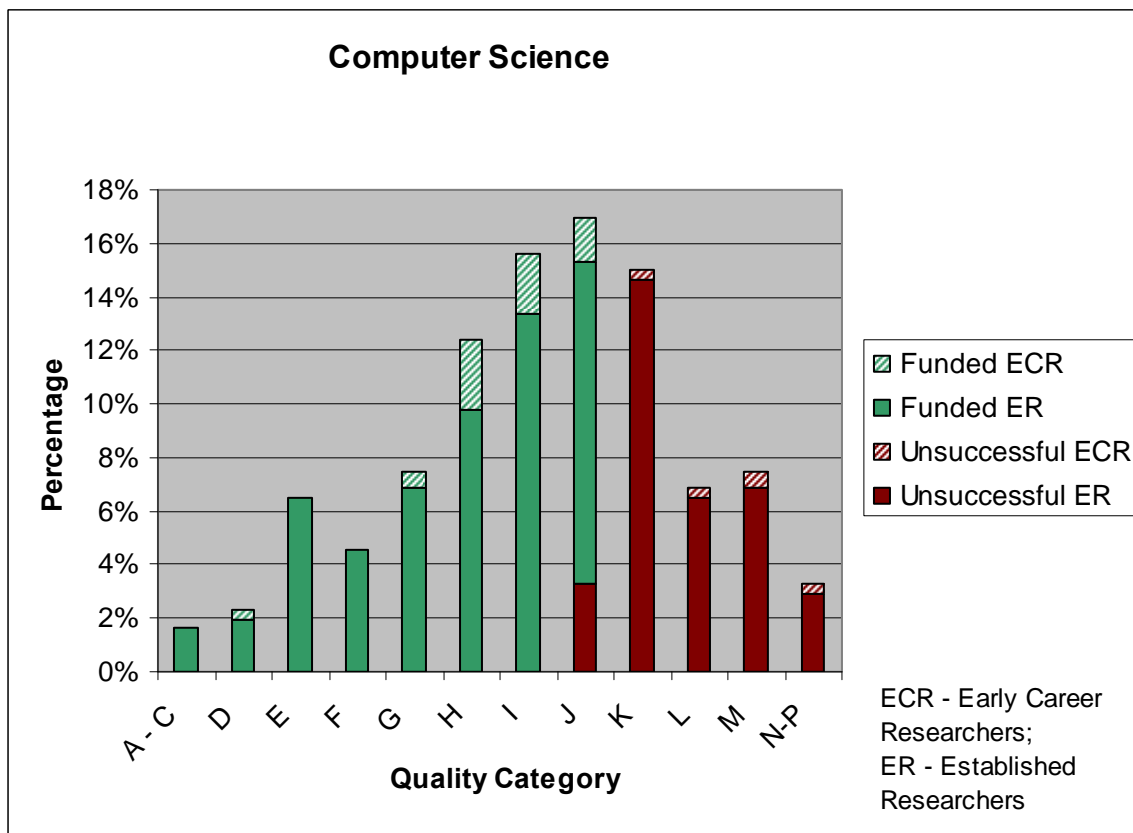
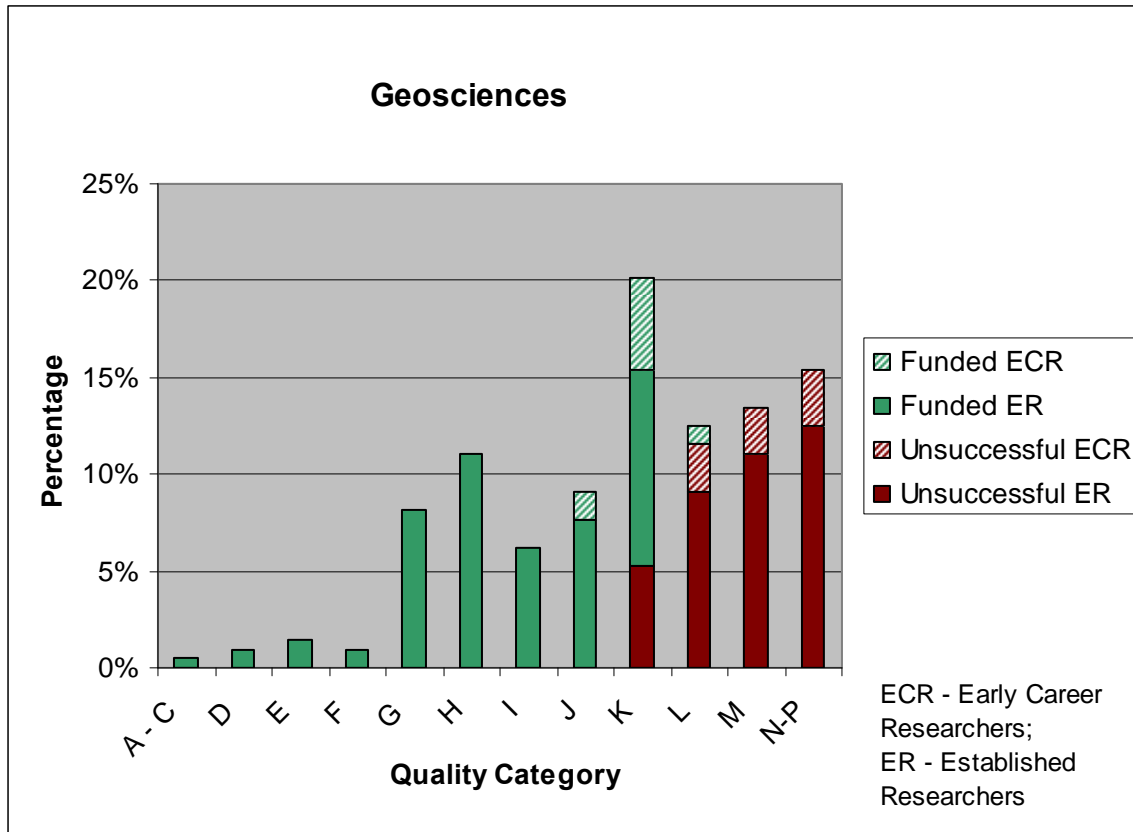


### Evolution & Ecology

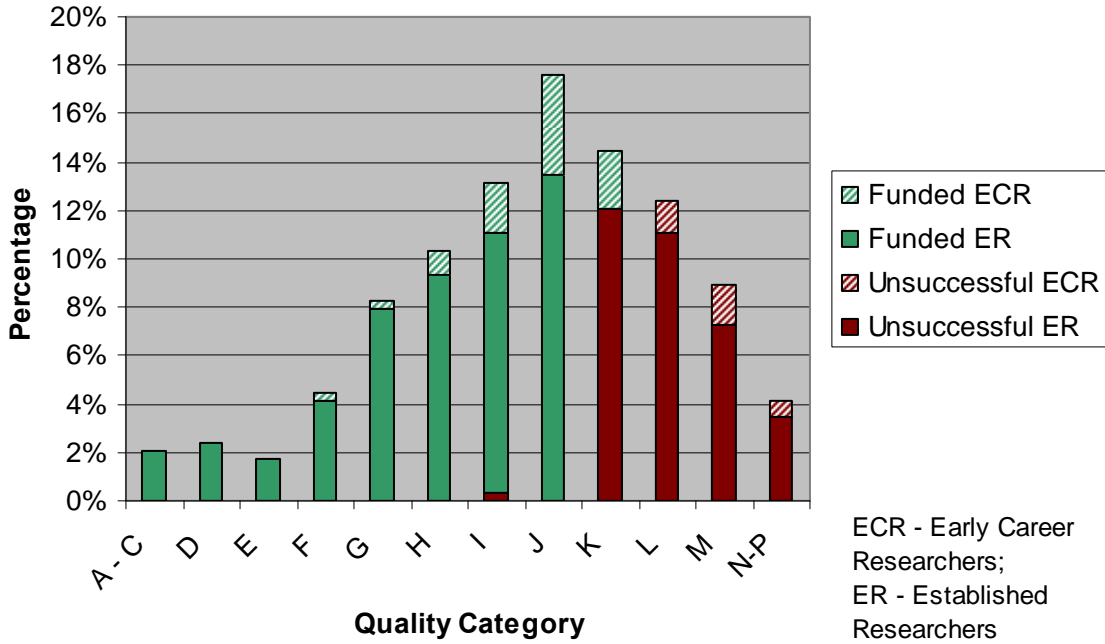




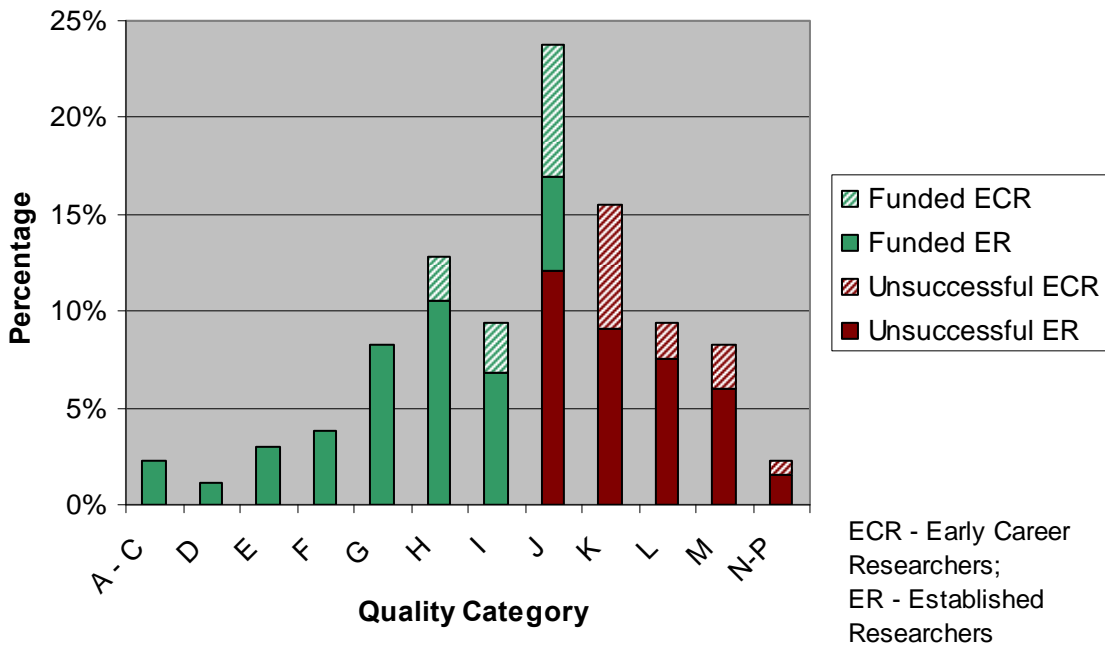




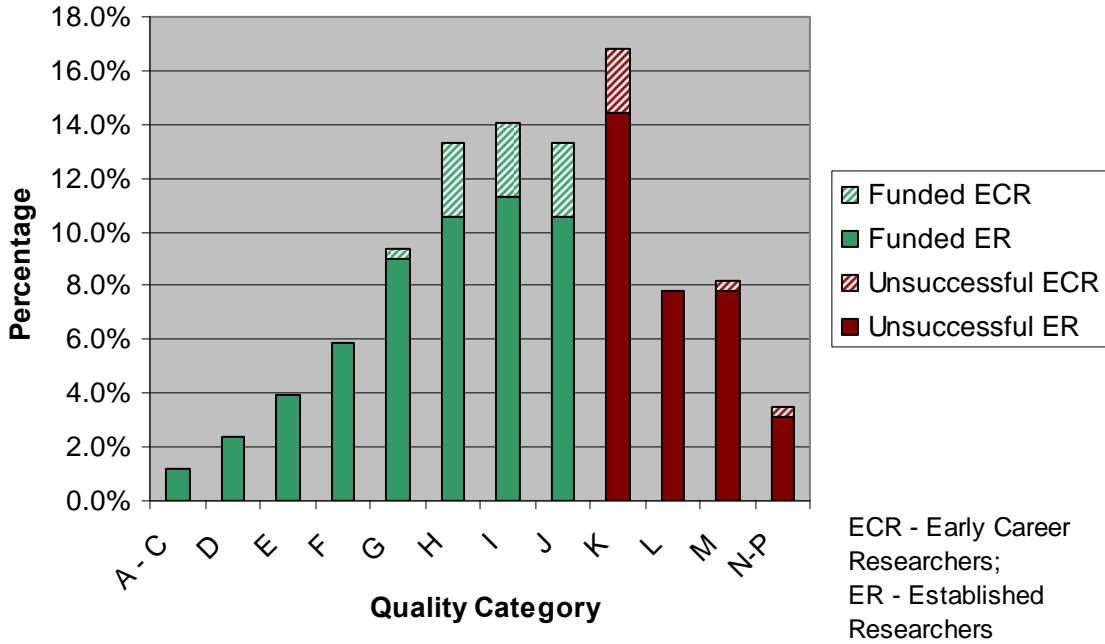
### Mathematics & Statistics



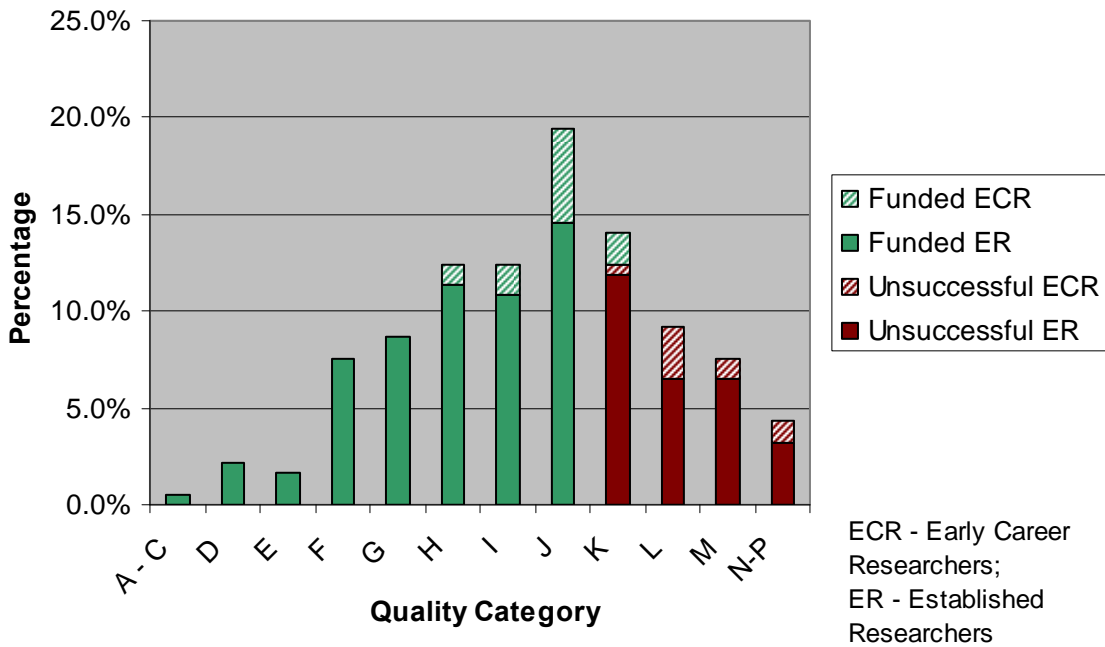
### Civil, Industrial, and Systems Eng.



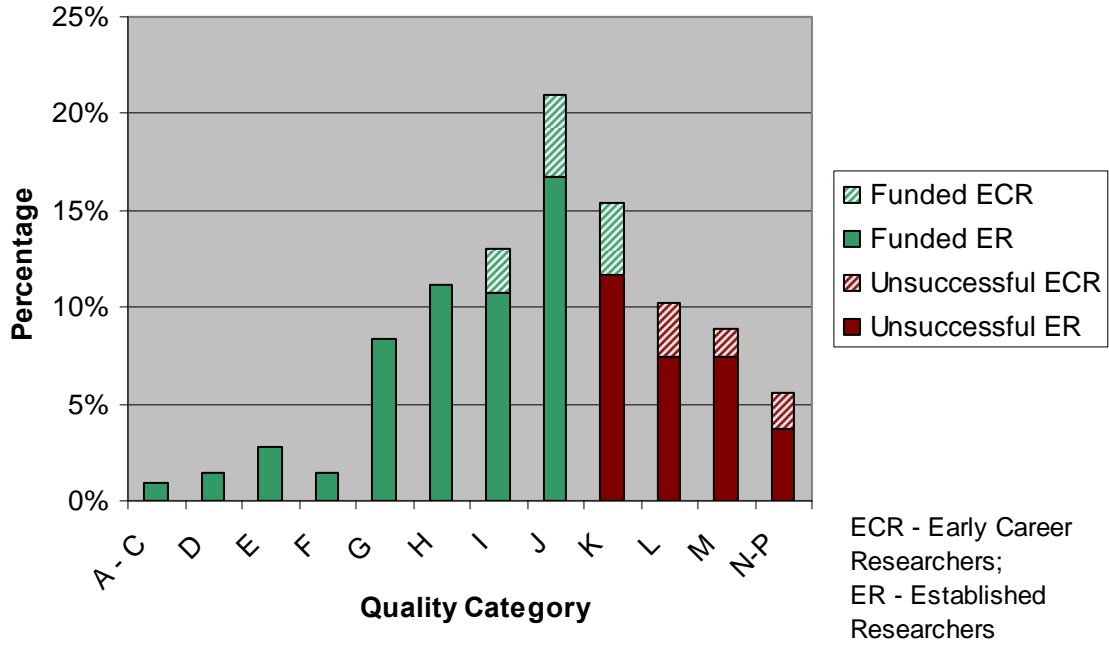
### Electrical and Computer Engineering



### Materials and Chemical Engineering



### Mechanical Engineering



**Table 4. Amounts <sup>1</sup> Assigned to the Quality Categories by Evaluation Group – 2010 Competition**

	Genes, Cells & Molecules	Biological Systems & Functions	Evolution & Ecology <sup>3</sup>	Chemistry	Physics <sup>2</sup>	Geosciences <sup>3</sup>	Computer Science	Mathematics & Statistics	Civil, Industrial & Systems Eng. <sup>4</sup>	Electrical & Computer Eng.	Materials & Chemical Eng. <sup>3</sup>	Mechanical Eng.
A	\$128,000	\$128,000	\$150,000	\$155,000	\$140,000	\$145,000	\$85,000	\$53,000	\$100,000	\$100,000	\$100,000	\$95,000
B	\$113,000	\$113,000	\$130,000	\$140,000	\$118,000	\$128,000	\$74,000	\$48,000	\$90,000	\$88,000	\$95,000	\$82,000
C	\$94,000	\$94,000	\$105,000	\$125,000	\$98,000	\$100,000	\$60,000	\$44,000	\$75,000	\$76,000	\$90,000	\$69,000
D	\$76,000	\$71,000	\$82,000	\$105,000	\$71,000	\$85,000	\$51,000	\$40,000	\$62,000	\$60,000	\$80,000	\$58,000
E	\$62,000	\$61,000	\$61,000	\$90,000	\$60,000	\$65,000	\$43,000	\$35,000	\$52,000	\$50,000	\$70,000	\$48,000
F	\$52,000	\$50,000	\$50,000	\$75,000	\$52,000	\$53,000	\$34,000	\$30,000	\$42,000	\$43,000	\$54,000	\$39,000
G	\$44,000	\$42,000	\$40,000	\$61,000	\$41,000	\$43,000	\$31,000	\$24,000	\$33,000	\$33,000	\$40,000	\$32,000
H	\$37,000	\$35,000	\$34,000	\$50,000	\$32,000	\$35,000	\$25,000	\$20,000	\$24,000	\$26,000	\$30,000	\$28,000
I	\$31,000	\$30,000	\$29,000	\$40,000	\$27,000	\$25,000	\$20,000	\$15,000	\$22,000 (\$21,000)	\$23,000	\$23,000	\$24,000
J	\$26,000	\$27,000	\$25,000 (\$24,000)	\$30,000	\$20,000	\$20,000 (\$22,000)	\$15,000	\$12,000	\$20,000	\$20,000	\$20,000 (\$18,000)	\$21,000
K <sup>4</sup>	\$26,000	\$23,000	\$22,000	\$27,000		\$17,000 (\$20,000)		\$12,000			\$17,000	\$19,000
L <sup>5</sup>			\$20,000			\$17,000						
M												
N												
O												
P												

1. Value shown is the amount for normal cost of research; some Evaluation Groups used low and high costs of research; unless indicated the same amount applies for Established Researchers and Early Career Researchers.

2. Excludes Subatomic Physics.

3. The first amount is for Established Researchers; the amount in brackets is for Early Career Researchers.

4. For most Evaluation Groups, this applies only to Early Career Researchers.

5. Only for Early Career Researchers.