



2009 Competition Statistics Discovery Grants Program

This report includes tables and figures that provide summary information on the 2009 Discovery Grants competition, as well as a few comparisons to previous competitions.

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SECTION 1 – GENERAL STATISTICS

The budget availability in the 2009 competition was slightly higher than in 2008. The percentage of applicants receiving a grant in 2009 declined to 63.8 per cent from 71.3 per cent last year. The average grant size increased by \$4,000. 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 per cent recommended in the International Review of the NSERC Discovery Grants Program.

Table 1 Overall Comparative Statistics

Data	2008 Competition	2009 Competition
No. of applications ¹	3,405	3,210
including first-time applicants 1	721	637
Budget availability (\$ available / # applications) 1	\$20,988	\$21,395
Average grant (\$) ²	\$29,818	\$34,311
Average Grant (\$) ³	\$31,142	\$38,416
Funding rate (%) (\$ awarded / \$ requested) ²	39.0%	38.3%
Success rate (%) (# awards / # applications) ²	71.3%	63.8%

- 1. Includes Individual and Team Grants, excluding those in Subatomic Physics.
- 2. Includes all Individual and Team Grants, including those in Subatomic Physics.
- 3. Also includes Subatomic Physics Project Grants.

Data	Success rate	Average Grant
Early-career researchers (ECR)	58.5%	\$24,417
Established researchers (ER)	64.5%	\$35,292
applicants who held a grant	78.6%	\$36,942
applicants previously unsuccessful	33.2%	\$25,784
		·

Table 2 Discovery Grants¹ Results² by University – 2009 Competition

	No. of	No. of	Success Rate	Dollars Requested	Dollars Awarded	Funding Rate	Average Grant
University	Requests	Awards	(%)	(\$K)	(\$K)	(%)	Orani
	11040000	7111414	(79)	(4)	(+)	(70)	
Acadia	11	3	27.3	451	54	12.0	18,000
Alberta	173	126	72.8	10,187	4,211	41.3	33,421
Athabasca	9	2	22.2	279	33	11.8	16,500
Brandon	6	2	33.3	224	43	19.2	21,500
British Columbia	214	165	77.1	14,379	6,196	43.1	37,552
Brock	30	16	53.3	1,418	382	26.9	23,875
Calgary	128	77	60.2	7,369	2,557	34.7	33,202
Carleton	69	42	60.9	3,383	1,424	42.1	33,915
Concordia	61	34	55.7	3,078	969	31.5	28,485
Dalhousie	79	57	72.2	4,835	1,823	37.7	31,981
École de technologie supérieure	24	19	79.2	1,039	455	43.8	23,947
École Polytechnique ³	54	40	74.1	3,086	1,253	40.6	31,335
Guelph	83	56	67.5	5,872	2,856	48.6	51,003 ⁴
HEC Montréal ³	8	7	87.5	326	193	59.2	27,571
INRS	30	23	76.7	2,125	884	41.6	38,435
Lakehead	21	8	38.1	910	209	22.9	26,063
Laurentian	38	15	39.5	1,612	435	27.0	29,029
Laval	111	64	57.7	5,906	2,158	36.5	33,721
Lethbridge	20	9	45.0	944	291	30.8	32,282
Manitoba	98	51	52.0	5,326	1,525	28.6	29,896
McGill	175	118	67.4	11,911	4,522	38.0	38,318
McMaster	100	75	75.0	5,985	2,609	43.6	34,782
Memorial Univ. of Nfld	57	33	57.9	2,520	893	35.4	27,055
Moncton	16	3	18.8	569	96	16.8	31,900
Montréal	104	70	67.3	7,316	2,960	40.5	42,291
Mount Saint Vincent	5	1	20.0	255	35	13.7	35,000
New Brunswick	56	29	51.8	2,335	726	31.1	25,033
Nipissing	6	2	33.3	262	34	13.0	17,000
Northern British Columbia	9	4	44.4	339	93	27.4	23,250
Ottawa	100	66	66.0	5,630	2,150	38.2	32,573
Prince Edward Island	9	5	55.6	341	98	28.8	19,600
Queen's	86	69	80.2	5,764	2,911	50.5	42,185
Regina	27	17	63.0	1,136	413	36.4	24,294
Royal Military College of Canada	27	7	25.9	971	170	17.5	24,286
Ryerson	68	32	47.1	3,179	735	23.1	22,963
Saint Mary's	14	8	57.1	686	225	32.7	28,063
Saskatchewan	83	38	45.8	4,391	1,047	23.8	27,539
Sherbrooke	64	42	65.6	4,390	1,723	39.2	41,017
Simon Fraser	91	67	73.6	5,439	2,208	40.6	32,961
St. Francis Xavier	17	6	35.3	753	215	28.5	35,802
Thompson Rivers	10	4	40.0	315	80	25.4	20,000

3

	No. of	No. of	Success Rate	Dollars	Dollars	Funding	Average Grant
University	No. of Requests	Awards	(%)	Requested (\$K)	Awarded (\$K)	Rate (%)	Grant
Toronto	225	175	77.8	14,907	7,423	49.8	42,420
Trent	16	13	81.3	848	344	40.6	26,462
U of Q at Abitibi-Témiscamingue	7	3	42.9	231	59	25.6	19,667
U of Q at Chicoutimi	11	8	72.7	676	174	25.7	21,750
U of Q at Montréal	30	17	56.7	1,331	473	35.5	27,824
U of Q at Rimouski	12	6	50.0	537	189	35.2	31,448
U of Q at Trois-Rivières	26	9	34.6	1,336	278	20.8	30,853
UOIT	27	15	55.6	1,096	346	31.6	23,067
Victoria	72	49	68.1	4,378	1,610	36.8	32,856
Waterloo	147	111	75.5	8,817	3,572	40.5	32,178
Western Ontario	100	62	62.0	5,677	2,024	35.6	32,641
Wilfrid Laurier	25	9	36.0	1,118	225	20.1	24,978
Windsor	55	27	49.1	2,337	710	30.4	26,306
Winnipeg	14	5	35.7	563	121	21.5	24,200
York	45	31	68.9	2,539	1,041	41.0	33,590
Universities < 5 applicants	33	14	42.4	1,472	406	27.6	29,000
Total	3,236	2,066	63.8	185,100	70,886	38.3	34,311

^{1.} Includes Discovery Grants (individual and team) and Subatomic Physics Discovery Grants (individual and team), but excludes EWR Steacie supplement, and Subatomic Physics Discovery Grants project.

^{2.} As of May 6, 2009.

École des H.É.C. and École Polytechnique are affiliated with the University of Montreal.
 The average grant for the University of Guelph includes a Subatomic Physics team grant of \$860,000. Excluding this award, the average grant for the University of Guelph is \$36,294.

Figure 1 Distribution of Grant Levels to Successful Applicants – 2009 Competition

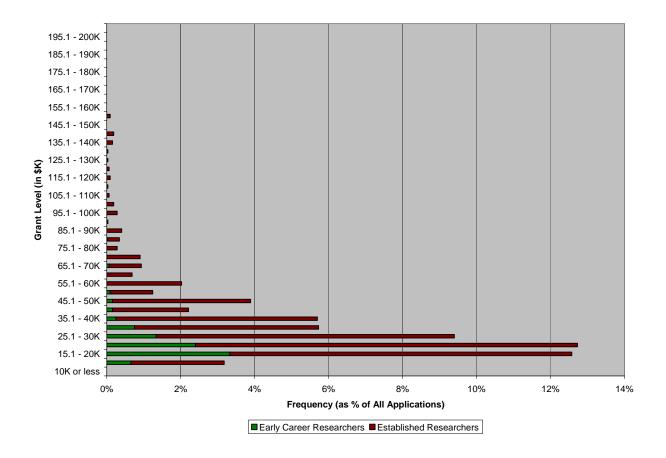
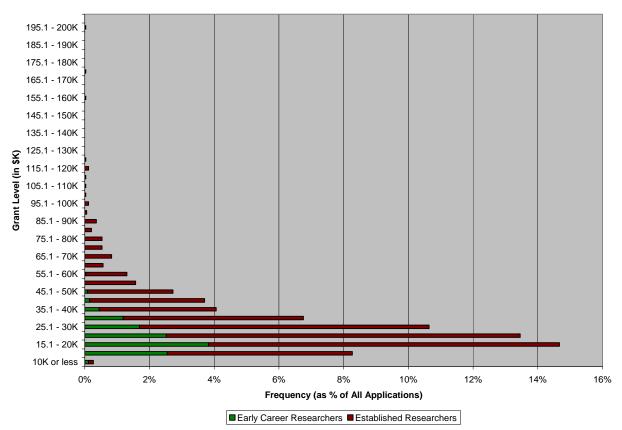


Figure 2 Distribution of Grant Levels to Successful Applicants – 2008 Competition



Renewal Applicants

Figure 3 Change in Grant Level – 2009 Competition

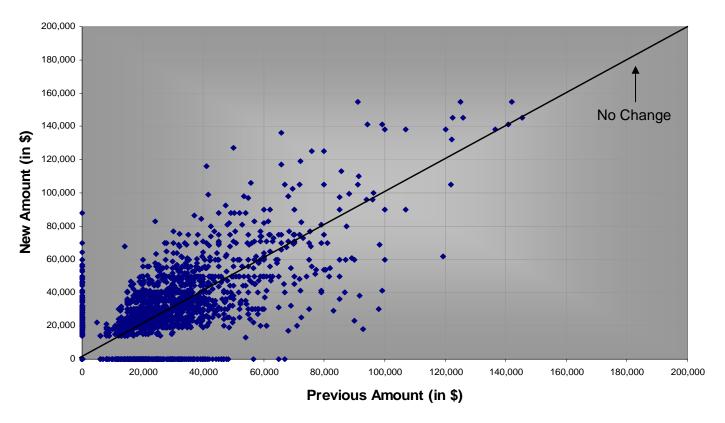
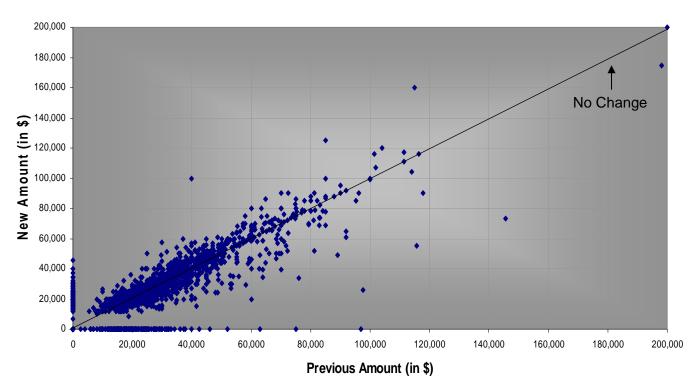


Figure 4 Change in Grant Level – 2008 Competition

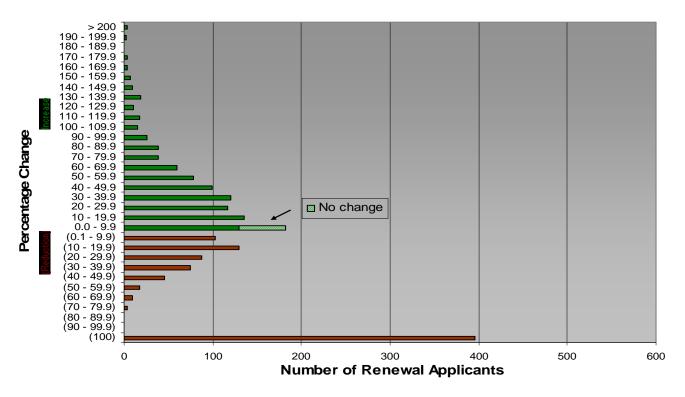


Renewal Applicants

The comparison of Figure 5 with Figure 6 shows the more dynamic distribution of funds in 2009. In 2008, most changes in grant levels for renewal applicants were within about 10 per cent of the previous grant. In 2009 much larger increases were awarded.

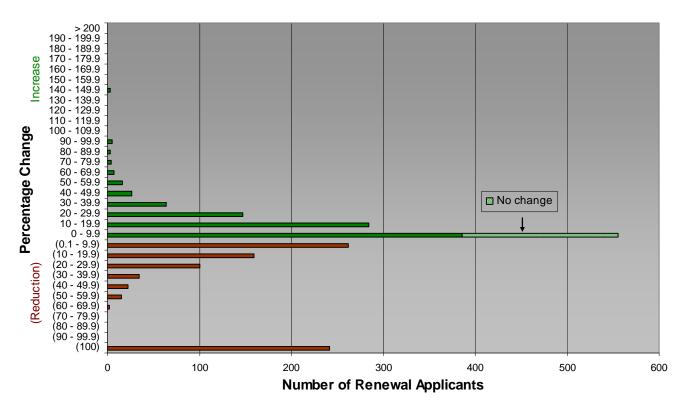
In 2009, the percentage of renewal applicants receiving a grant is 78.6 per cent. Among renewal applicants, 396 (Established Researchers) were not successful in the 2009 competition; in 2008, that figure was just under 243 (see Figure 6).

Figure 5 Percentage Change in Grant Level – 2009 Competition



Renewal Applicants

Figure 6 Percentage Change in Grant Level – 2008 Competition



Statistics by Size of University

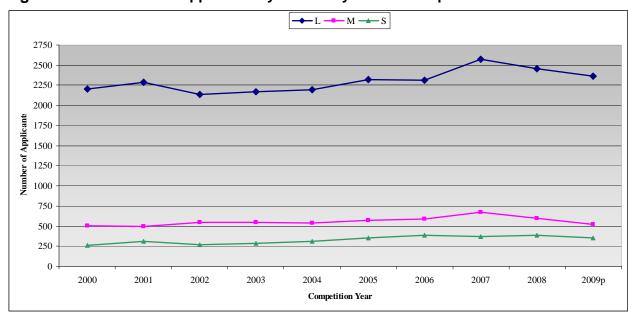


Figure 7 Number of Applicants by University Size⁵ – Competitions 2000 to 2009

2009p - Preliminary data as of May 6, 2009. Includes Discovery Grants (individual and team) and Subatomic Physics Discovery Grants (individual and team), but excludes Subatomic Physics Discovery Grants projects and EWR Steacie supplement.

Large and medium-size universities have the largest number of professors applying to the program.

The two major trends in the 2009 competition – an increase in average grant size and a decrease in success rate – are consistent across universities of all sizes. (Figures 8 and 9).

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.

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.

Figure 8 Success Rate by University Size⁶ – Competitions 2000 to 2009

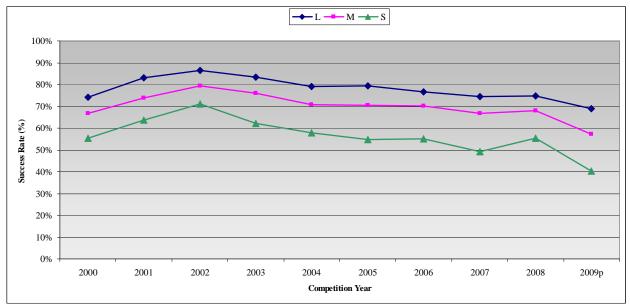
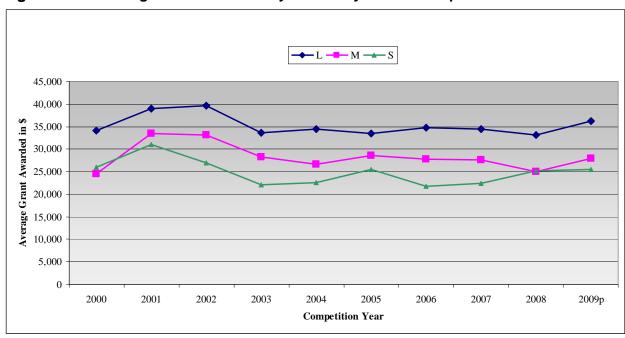


Figure 9 Average Grant Awarded by University Size⁷ – Competitions 2000 to 2009



2009p - Preliminary data as of May 6, 2009. Includes Discovery Grants (individual and team) and Subatomic Physics Discovery Grants (individual and team), but excludes Subatomic Physics Discovery Grants projects and EWR Steacie supplement.

⁶, 7 University size is based on NSERC Grants and Scholarships expenditures in 2007-2008:

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

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

SECTION 2 – STATISTICS BY GRANT SELECTION COMMITTEE (GSC)

Table 3 GSC Statistics – Competitions 2005-2009

	Average Grant	: (\$)	Success Rate (%)		
	2005 to 2008	2009	2005 to 2008	2009	
Grant Selection Committee ¹	Competition Range	Results	Competition Range	Results	
Integrative Animal Biology	32,480 - 36,551	35,047	52.7% - 60.3%	62.0%	
Cell Biology	35,099 - 38,619	35,539	52.7% - 61.6%	51.5%	
Molecular and Developmental Genetics	33,510 - 45,732	47,822	50.7% - 69.8%	49.2%	
Evolution and Ecology	26,510 - 29,386	33,351	70.4% - 74.1%	72.9%	
Plant Biology and Food Science Psychology: Brain, Behaviour and	35,259 - 40,058	43,947	56.2% - 72.4%	65.1%	
Cognitive Science	24,229 - 27,340	30,604	64.2% - 70.3%	59.5%	
Inorganic and Organic Chemistry	46,792 - 51,146		66.9% - 75.4%		
Analytical and Physical Chemistry	39,399 - 46,370		75.2% - 81.4%		
Chemistry		53,921		67.0%	
Solid Earth Sciences	29,716 - 36,783		77.2% - 85.6%		
Environmental Earth Sciences	23,526 - 26,595		65.9% - 75.8%		
Geosciences		38,439		61.0%	
Condensed Matter Physics	32,979 - 38,957	48,093	80.9% - 87.1%	73.4%	
General Physics	29,709 - 34,508	46,517	70.6% - 91.2%	61.7%	
Space and Astronomy	29,968 - 39,103	39,067	76.1% - 88.3%	75.0%	
Statistical Sciences	15,989 - 18,222	19,164	69.7% - 83.7%	67.0%	
Pure and Applied Mathematics	14,895 - 19,342	20,177	76% - 88.4%	63.8%	
Chemical and Metallurgical Engineering	27,095 - 32,418	31,805	78.5% - 92.7%	71.0%	
Civil Engineering	24,263 - 25,933	27,844	59.7% - 69.4%	58.4%	
Communications, Computers and Components Engineering Electromagnetics and Electrical	22,470 - 28,099		79.8% - 90.6%		
Systems Engineering	29,071 - 32,582		70.8% - 80%		
Electrical and Computer Engineering		33,174		67.4%	
Mechanical Engineering	23,417 - 25,666	28,048	68.9% - 75%	62.3%	
Industrial Engineering	21,107 - 25,130	25,404	55.7% - 68.2%	60.4%	
Computing and Information Sciences	23,397 - 25,540	26,985	71.9% - 85.9%	69.9%	
Interdisciplinary	24,375 - 29,918	23,778	60.5% - 79.5%	57.4%	

^{1.} Does not include Subatomic Physics. Includes Individual and Team Discovery Grants.

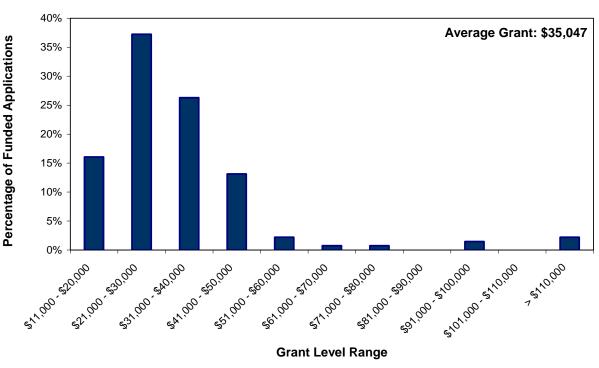
Results Summary¹ for the 2009 Competition – Discovery Grants² – by Table 4 **Grant Selection Committee**

Grant Selection Committee	No. of Reguests	No. of Awards	Success Rate (%)	Dollars Requested (\$K)	Dollars Awarded (\$K)	Funding Rate (%)	Average Grant ¹
			<u> </u>	Α, /		<u></u>	
Integrative Animal Biology	221	137	62.0	12,780	4,801	37.6	35,047
Cell Biology	237	122	51.5	14,895	4,336	29.1	35,539
Molec. & Develop. Genetics	122	60	49.2	8,293	2,869	34.6	47,822
Evolution & Ecology	188	137	72.9	10,475	4,569	43.6	33,351
Plant Biology & Food Science	106	69	65.1	7,318	3,032	41.4	43,947
Psychology	195	116	59.5	10,735	3,550	33.1	30,604
Chemistry	218	146	67.0	18,464	7,869	42.6	53,921
Geosciences	223	136	61.0	12,181	5,228	42.9	38,439
Condensed Matter Physics	64	47	73.4	5,161	2,260	43.8	48,093
General Physics	47	29	61.7	3,255	1,349	41.4	46,517
Subatomic Physics	26	24	92.3	3,640	2,093	57.5	87,208
Space & Astronomy	40	30	75.0	2,769	1,172	42.3	39,067
Statistical Sciences	109	73	67.0	3,919	1,399	35.7	19,164
Pure & Applied Maths	177	113	63.8	6,242	2,280	36.5	20,177
Chem. & Metallurgical Eng.	186	132	71.0	10,901	4,198	38.5	31,805
Civil Engineering	166	97	58.4	7,640	2,701	35.4	27,844
Electrical and Computer Engineering	258	174	67.4	14,125	5,772	40.9	33,174
Mechanical Engineering	223	139	62.3	10,595	3,899	36.8	28,048
Industrial Engineering	101	61	60.4	4,114	1,550	37.7	25,404
Computing & Information Sciences	282	197	69.9	14,673	5,316	36.2	26,985
Interdisciplinary	47	27	57.4	2,923	642	22.0	23,778
Total	3,236	2,066	63.8	185,100	70,886	38.3	34,311

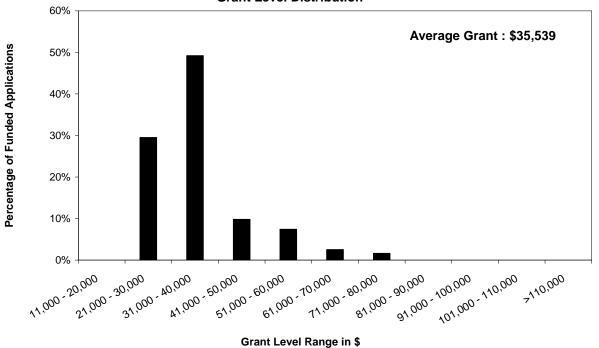
As of May 6, 2009.
 Includes Discovery Grants (individual and team) and Subatomic Physics Discovery Grants (individual and team), but excludes EWR Steacie supplement, and Subatomic Physics Discovery Grants project.

Figures 10 Distribution of Grant Levels by Percentage of Funded Applications – Discovery Grants – by Grant Selection Committee

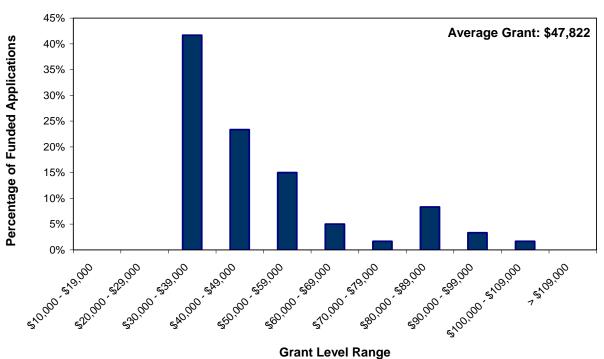




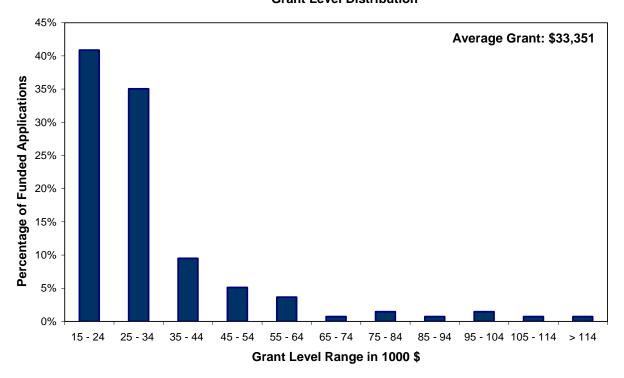
Cell Biology Grant Selection Committee (GSC 32) Discovery Grants Program, 2009 Competition Grant Level Distribution



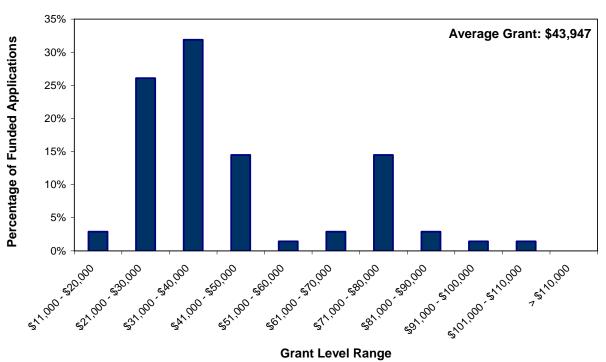
Molecular and Developmental Genetics Grant Selection Committee (GSC 33)
Discovery Grants Program, 2009 Competition
Grant Level Distribution



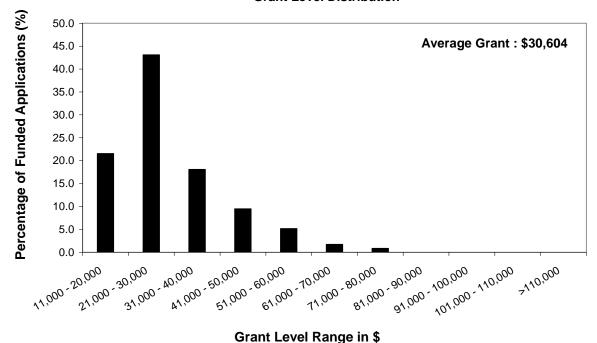
Evolution & Ecology Grant Selection Committee (GSC 18) Discovery Grants Program, 2009 Competition Grant Level Distribution



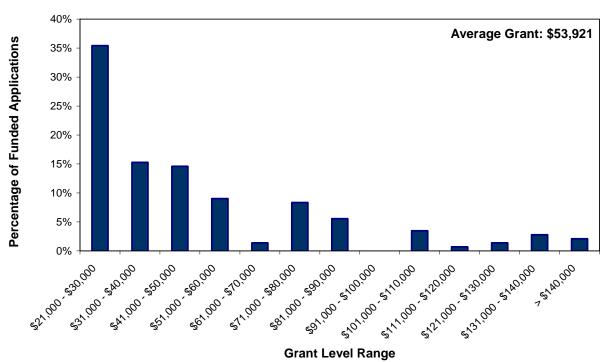
Plant Biology and Food Science Grant Selection Committee (GSC 03)
Discovery Grants Program, 2009 Competition
Grant Level Distribution



Psychology Grant Selection Committee (GSC 12) Discovery Grants Program, 2009 Competition Grant Level Distribution

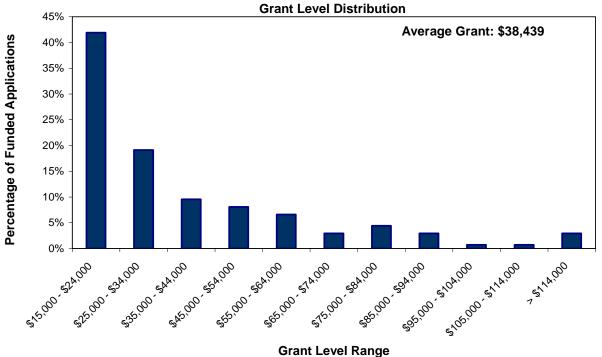


Chemistry Grant Selection Committees (GSCs 24-26) Discovery Grants Program, 2009 Competition Grant Level Distribution

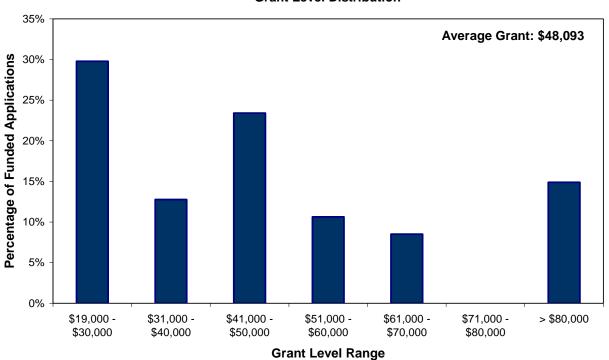


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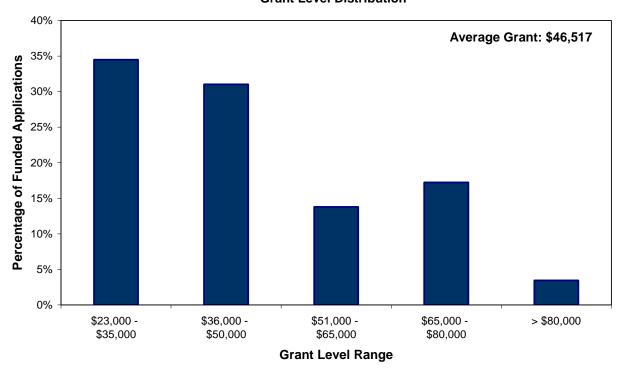
Solid Earth and Environmental Sciences Grant Selection Committees (GSC 08/09 Geosciences) Discovery Grants Program, 2009 Competition



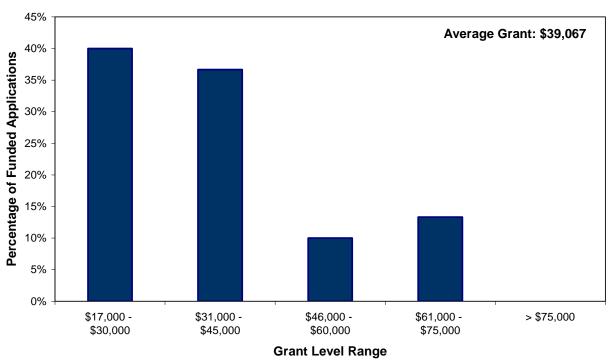
Condensed Matter Physics Grant Selection Committee (GSC 28) Discovery Grants Program, 2009 Competition Grant Level Distribution



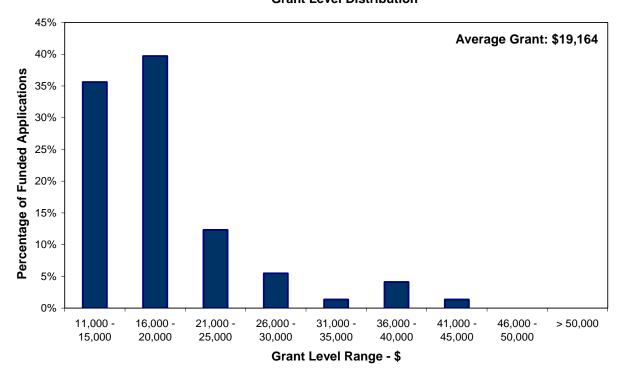
General Physics Grant Selection Committee (GSC 29) Discovery Grants Program, 2009 Competition Grant Level Distribution



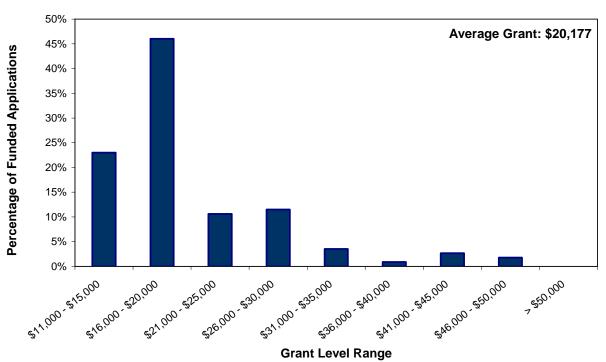
Space and Astronomy Grant Selection Committee (GSC 17)
Discovery Grants Program, 2009 Competition
Grant Level Distribution



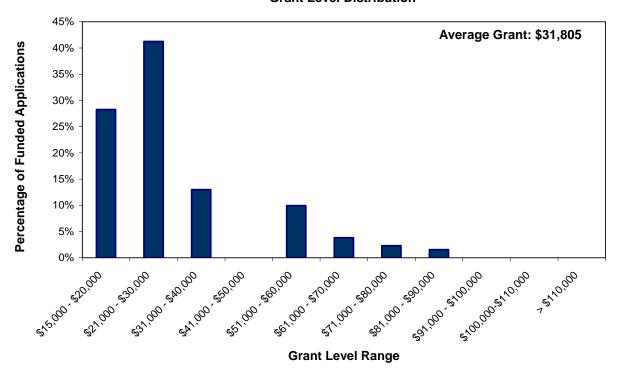
Statistical Science Grant Selection Committees (GSC-14) Discovery Grants Program, 2009 Competition Grant Level Distribution



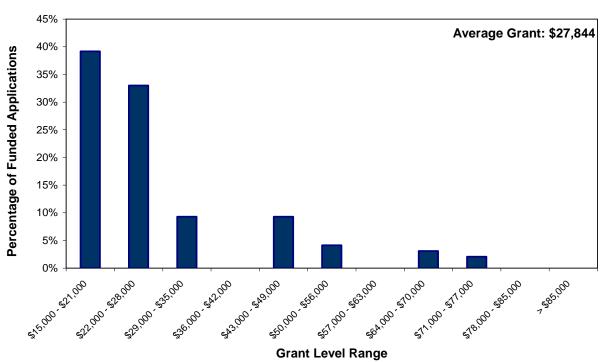
Mathematics Grant Selection Committees (GSCs 336-337)
Discovery Grants Program, 2009 Competition
Grant Level Distribution



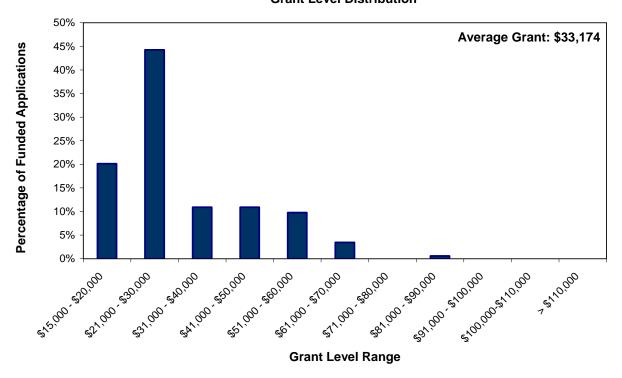
Chemical and Metallurgical Engineering Grant Selection Committee (GSC 04) Discovery Grants Program, 2009 Competition Grant Level Distribution



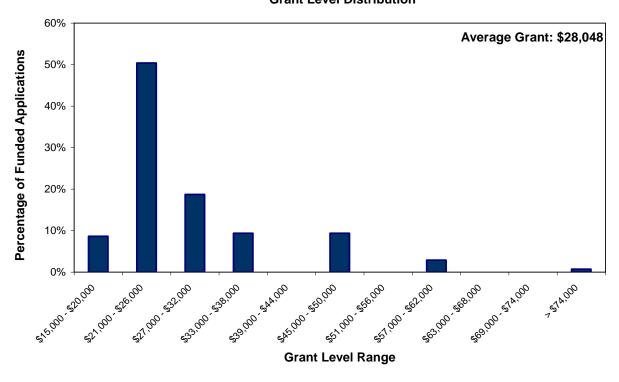
Civil Engineering Grant Selection Committee (GSC 1061 & 1062)
Discovery Grants Program, 2009 Competition
Grant Level Distribution



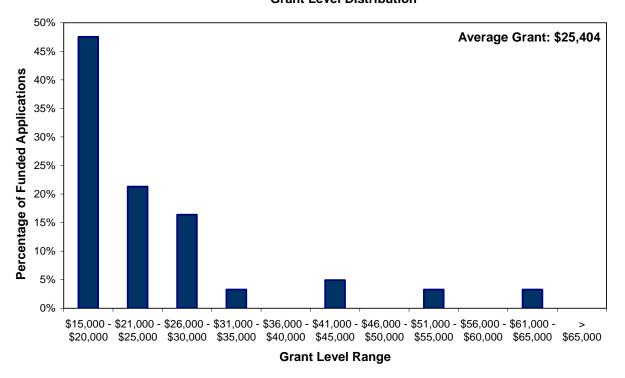
Electrical and Computer Engineering Grant Selection Committee (GSC 1079) Discovery Grants Program, 2009 Competition Grant Level Distribution



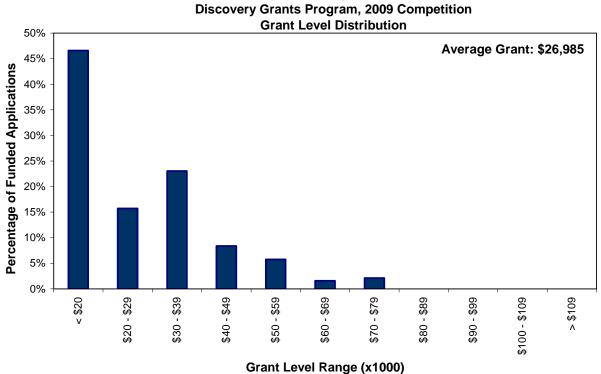
Mechanical Engineering Grant Selection Committee (GSC 1053 & 1054)
Discovery Grants Program, 2009 Competition
Grant Level Distribution



Industrial Engineering Grant Selection Committee (GSC 20) Discovery Grants Program, 2009 Competition Grant Level Distribution



Computing and Information Sciences Grant Selection Committee (GSC 330 - 331)



Interdisciplinary Grant Selection Committee (GSC 21) Discovery Grants Program, 2009 Competition Grant Level Distribution

