



2011 Competition Statistics Discovery Grants Program

(Updated May 30, 2011)

This report includes tables and figures that provide additional information on the 2011 Discovery Grants competition.

| SECTION 1 | - GENERAL STATISTICS | 2 |
|------------|---|-----------|
| Table 1. | Overall Comparative Statistics — 2011 Discovery Grants Competition ¹ | 2 |
| Table 2. | Discovery Grants ¹ Competition Results by University – 2011 Competition | 3 |
| Figure 1. | Distribution of Grant Levels to Successful Applicants – 2011 Competition | 4 |
| Figure 2. | Change in Grant Level for All Established Researchers – 2011 Competition | 5 |
| Figure 3. | Change in Grant Level for Established Researchers 1 st Renewal – 2011 Competition | 5 |
| Figure 4. | Percentage Change in Grant Level – 2011 Competition | 6 |
| Figure 5. | Statistics by University Size – 2011 Competition | 7 |
| SECTION 2 | - STATISTICS BY EVALUATION GROUP (EG) | 8 |
| Table 3. | Evaluation Group Statistics – 2011 Competition | 8 |
| Figures 6. | Distribution of Applications by Quality Categories for each Evaluation Group -2011 Con 10 | npetition |



SECTION 1 – GENERAL STATISTICS

The number of applications was higher, relative to 2009 and 2010, reaching 3,482, reflecting an increasing number of returning unfunded applicants.

Going into the competition, there were 1,863 renewal applicants who held grants of, on average, \$30,999; after the competition, there are 2,002 funded researchers at an average grant level of \$32,186.

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 – 2011 Discovery Grants Competition¹

| Data ¹ | Number of Applications | Number of Awards | Amount Awarded | Success rate (%) | Average Grant |
|---|---------------------------|---------------------|-------------------|------------------|------------------|
| Early-career researchers (ECR) Established researchers (ER) | 457 | 245 | \$5,507,932 | 54 | \$22,481 |
| applicants who held a grant | 1,858 | 1,377 | \$48,256,932 | 74 | \$35,045 |
| applicants not previously holding a grant ² | 1,167 | 380 | \$10,671,233 | 33 | \$28,082 |

^{1.} Includes Discovery and Subatomic Physics (Individual and Team) grants.

^{2.} Includes returning unfunded applicants and experienced researchers submitting a first application.

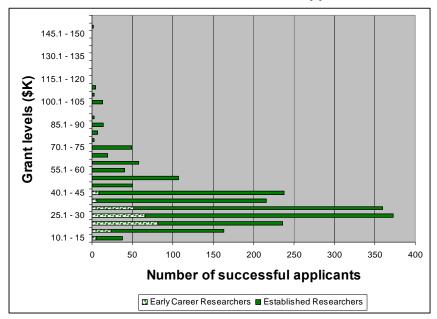
Discovery Grants¹ Competition Results by University – 2011 Competition Table 2.

| | Early | Career Rese | earchers | Established Researchers - Renewals | | Established Researchers - not previously holding a grant | | | |
|--|-----------------|-----------------|------------------|------------------------------------|-----------------|--|-----------------|-----------------|------------------|
| Institution | Success Rate | Total Amount | Average Grant | Success Rate | Total Amount | Average Grant | Success Rate | Total Amount | Average Grant |
| Acadia | * | | * | * | | * | 0% | 0 | 0 |
| Alberta | 58% | 302,000 | 20,133 | 82% | 3,065,000 | 36,488 | 48% | 767,000 | 29,500 |
| Athabasca | * | | * | | | | 0% | 0 | 0 |
| British Columbia | 57% | 302,000 | 23,231 | 91% | 4,012,674 | 40,127 | 49% | 748,000 | 26,714 |
| Brock | * | | * | 50% | 141,000 | 23,500 | 23% | 62,000 | 20,667 |
| Calgary | 64% | 177,000 | 25,286 | 62% | 1,223,600 | 33,070 | 33% | 520,200 | 32,513 |
| Cape Breton | * | | * | | | | * | | * |
| Carleton | 77% | 241,000 | 24,100 | 71% | 771,000 | 28,556 | 24% | 110,000 | 18,333 |
| Concordia | 64% | 159,000 | 22,714 | 71% | 838,700 | 28,921 | 33% | 149,000 | 21,286 |
| Dalhousie | 57% | 88,000 | 22,000 | 73% | 1,399,400 | 34,132 | 34% | 228,000 | 22,800 |
| Ecole de technologique supérieure | 67% | 106,000 | 17,667 | 67% | 287,000 | 28,700 | 38% | 96,000 | 19,200 |
| Ecole Polytechnique | * | | | 82% | 1,095,000 | 30,417 | 57% | 88,620 | 22,155 |
| Guelph | 44% | 94,000 | 23,500 | 76% | 1,667,000 | 34,729 | 16% | 183,000 | 36,600 |
| HEC Montréal | | | | * | | | * | | * |
| INRS | 60% | 77,000 | 25,667 | 73% | 414,000 | 37,636 | 50% | 153,000 | 38,250 |
| Lakehead | * | | * | 40% | 117,000 | 19,500 | 0% | 0 | 0 |
| Laurentian | * | | * | 57% | 109,000 | 27,250 | 16% | 52,763 | 17,588 |
| Laval | 45% | 266,000 | 26,600 | 72% | 1,507,000 | 34,250 | 32% | 471,400 | 33,671 |
| Lethbridge | * | | * | 80% | 248,000 | 31,000 | 43% | 71,000 | 23,667 |
| Manitoba | 56% | 78,000 | 15,600 | 61% | 1,019,000 | 32,871 | 37% | 445,000 | 26,176 |
| McGill | 63% | 431,000 | 22,684 | 77% | 3,236,000 | 39,463 | 50% | 1,066,000 | 35,533 |
| McMaster | 36% | 70,000 | 17,500 | 81% | 2,138,808 | 38,193 | 25% | 166,000 | 33,200 |
| Memorial Univ. of Newfoundland | 27% | 91,000 | 22,750 | 59% | 594,000 | 29,700 | 15% | 102,000 | 25,500 |
| Moncton | 17% | 27,000 | 27,000 | 57% | 97,000 | 24,250 | 8% | 20,000 | 20,000 |
| Montréal | 38% | 178,000 | 29,667 | 80% | 1,717,000 | 39,023 | 28% | 423,000 | 32,538 |
| Mount Allison | * | | * | * | | * | * | | |
| New Brunswick | * | | * | 74% | 638,000 | 31,900 | 26% | 92,000 | 18,400 |
| Nipissing | * | | * | * | | * | 29% | 28,000 | 14,000 |
| Northern British Columbia | * | | * | 54% | 174,000 | 24,857 | * | | |
| Ontario Institute of Technology | 33% | 38,000 | 19,000 | 100% | 217,000 | 27,125 | 36% | 99,000 | 24,750 |
| Ottawa | 67% | 162,000 | 20,250 | 75% | 1,598,850 | 33,309 | 31% | 290,000 | 26,364 |
| Prince Edward Island | * | | * | 90% | 212,950 | 23,661 | * | * | * |
| Québec à Chicoutimi | * | | * | * | | * | * | * | * |
| Québec à Montréal | 60% | 51,000 | 17,000 | 87% | 638,000 | 31,900 | 20% | 94,000 | 31,333 |
| Québec à Rimouski | * | | * | 60% | 118,000 | 39,333 | 20% | 24,000 | 24,000 |
| Québec à Trois-Rivières | 71% | 123,000 | 24,600 | 25% | 47,000 | 23,500 | 20% | 67,000 | 22,333 |
| Québec en Abitibi Témiscamingue | * | | * | * | | * | * | * | * |
| Québec en Outaouais | * | | * | 50% | 80,000 | 26,667 | * | * | * |
| Queen's | 50% | 89,000 | 22,250 | 77% | 1,753,885 | 43,847 | 59% | 278,684 | 27,868 |
| Regina | * | | * | 50% | 193,000 | 24,125 | 33% | 81,000 | 20,250 |
| Royal Military College of Canada | 42% | 110,000 | 22,000 | 71% | 139,000 | 27,800 | 6% | 20,000 | 20,000 |
| Ryerson | * | | * | 67% | 392,000 | 24,500 | 24% | 127,000 | 18,143 |
| Saint Mary's | * | | * | 80% | 192,000 | 48,000 | 40% | 30,000 | 15,000 |
| Saskatchewan | 60% | 175,000 | 19,444 | 74% | 1,028,743 | 32,148 | 15% | 177,000 | 25,286 |
| Sherbrooke | 77% | 220,000 | 22,000 | 78% | 836,000 | 33,440 | 33% | 193,000 | 27,571 |
| Simon Fraser | 67% | 114,000 | 28,500 | 72% | 1,440,700 | 35,139 | 52% | 302,000 | 21,571 |
| St. Francis Xavier | * | | * | 33% | 113,000 | 37,667 | * | * | * |
| Thomson Rivers | | | | * | | * | * | * | * |
| Toronto | 65% | 566,159 | 28,308 | 86% | 4,586,482 | 40,951 | 45% | 866,542 | 33,329 |
| Trent | | | | 55% | 240,000 | 40,000 | 20% | 11,000 | 11,000 |
| TRIUMF | | | | * | | * | * | | * |
| Victoria | 50% | 89,000 | 29,667 | 84% | 1,220,000 | 32,105 | 50% | 214,024 | 21,402 |
| Waterloo | 86% | 367,000 | 20,389 | 76% | 2,567,280 | 33,341 | 39% | 361,000 | 30,083 |
| Western Ontario | 33% | 61,000 | 20,333 | 74% | 1,851,160 | 34,928 | 44% | 593,000 | 31,211 |
| Wilfrid Laurier | * | | * | 38% | 156,000 | 26,000 | 40% | 113,000 | 28,250 |
| Windsor | * | | * | 63% | 591,000 | 34,765 | 33% | 160,000 | 22,857 |
| Winnipeg | * | | * | * | | * | 0% | 0 | 0 |
| York | * | | * | 70% | 976,700 | 37,565 | 25% | 178,000 | 29,667 |
| Institutions with less than 5 applications | 15% | 36,000 | 18,000 | 44% | 115,000 | 28,750 | 19% | 49,000 | 16,333 |
| Grand Total | 54% | 5,507,932 | 22,481 | 74% | 48,206,932 | 35,045 | 33% | 10,671,233 | 28,082 |

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

* Less than 5 applications

Figure 1. Distribution of Grant Levels to Successful Applicants – 2011 Competition



Renewal Applicants

Figure 2. Change in Grant Level for All Established Researchers – 2011 Competition

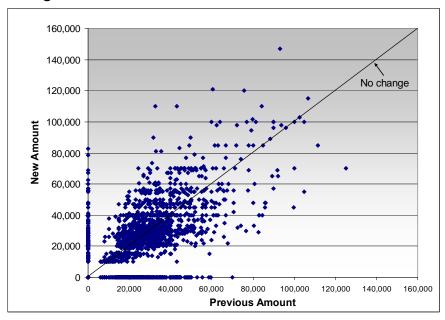
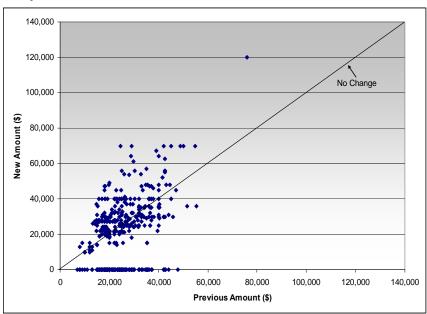


Figure 3 presents the changes in grant level for the subset of established researchers who submitted an application for the 1st renewal of their Discovery Grant.

Figure 3. Change in Grant Level for Established Researchers 1st Renewal – 2011 Competition

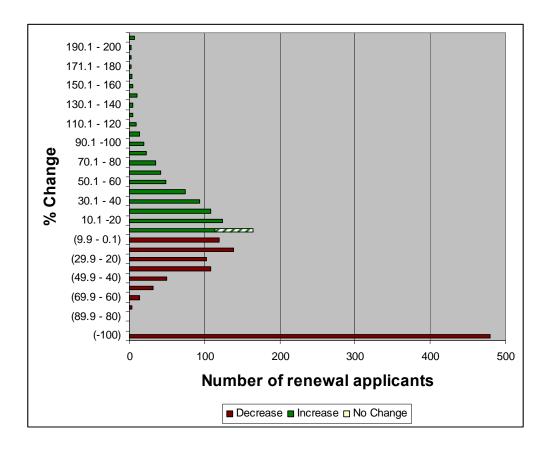


Renewal Applicants

Figure 4 shows the dynamic distribution of funds in 2011.

In 2011, 74 percent of renewal applicants received a grant; 483 of these Established Researchers were not successful.

Figure 4. Percentage Change in Grant Level – 2011 Competition



Statistics by Size of University

Figure 5. Statistics by University Size – 2011 Competition

| Catagory of Applicants | Dete | University Size | | | |
|---------------------------|---------------------|-----------------|-------------|-------------|--|
| Category of Applicants | Data | Large | Medium | Small | |
| | Number Applications | 301 | 71 | 85 | |
| | Number Grants | 178 | 38 | 29 | |
| Early Career Researchers | Success Rate | 59% | 54% | 34% | |
| | Total Amount | \$4,108,159 | \$799,000 | \$600,773 | |
| | Average Grant | \$23,080 | \$21,026 | \$20,716 | |
| | Number Applications | 1413 | 300 | 145 | |
| Established Researchers - | Number Grants | 1096 | 199 | 81 | |
| Renewal | Success Rate | 78% | 66% | 56% | |
| Renewai | Total Amount | \$39,734,582 | \$6,262,400 | \$2,236,950 | |
| | Average Grant | \$36,254 | \$31,469 | \$27,617 | |
| | Number Applications | 769 | 220 | 178 | |
| Catablished Decembers | Number Grants | 290 | 58 | 33 | |
| Established Researchers - | Success Rate | 38% | 26% | 19% | |
| Not Holding Grants | Total Amount | \$8,491,470 | \$1,361,000 | \$841,763 | |
| | Average Grant | \$29,281 | \$23,466 | \$25,508 | |

SECTION 2 – STATISTICS BY EVALUATION GROUP (EG)

Table 3. Evaluation Group Statistics – 2011 Competition

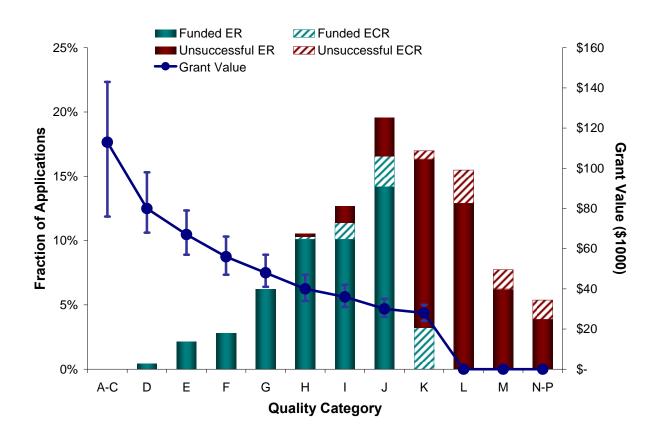
| Canaa Calla and | Early Career | Established Researchers | | | |
|--------------------------------|-----------------------------|-------------------------|-------------|--|--|
| Genes, Cells and Molecules | Researchers | Renewals | Other | | |
| Number of Applications | 62 | 181 | 222 | | |
| Number of Awards | 33 | 118 | 96 | | |
| Success Rate | 53% | 65% | 43% | | |
| Average Grant | 30,606 | 40,719 | 38,025 | | |
| Amount awarded | \$1,010,000 | \$4,804,829 | \$3,650,400 | | |
| | | | | | |
| Biological Systems | Early Career | Established F | Researchers | | |
| and Functions | Researchers | Renewals | Other | | |
| Number of Applications | 97 | 245 | 207 | | |
| Number of Awards | 32 | 189 | 61 | | |
| Success Rate | 33% | 77% | 29% | | |
| Average Grant | 26,810 | 39,965 | 28,406 | | |
| Amount awarded | \$857,932 | \$7,553,390 | \$1,732,748 | | |
| | | | | | |
| Evolution and Ecology | Early Career Researchers | Established F | | | |
| A1 1 (A 1) (1 | | Renewals | Other | | |
| Number of Applications | 28 | 118 | 52 | | |
| Number of Awards | 14 | 87 | 6 | | |
| Success Rate | 50% | 74% | 12% | | |
| Average Grant | 24,000 | 39,583 | 27,833 | | |
| Amount awarded | \$336,000 | \$3,443,700 | \$167,000 | | |
| | | | _ | | |
| Chemistry | Early Career | Established Researchers | | | |
| • | Researchers | Renewals | Other | | |
| Number of Applications | 28 | 141 | 85 | | |
| Number of Awards | 21 | 91 | 14 | | |
| Success Rate | 75% | 65% | 16% | | |
| Average Grant | 24,333 | 58,401 | 38,259 | | |
| Amount awarded | \$511,000 | \$5,314,500 | \$535,620 | | |
| | | | | | |
| Physics* | Early Career Researchers | Established F | Researchers | | |
| | | Renewals | Other | | |
| Number of Applications | 33 | 146 | 61 | | |
| Number of Awards | 21 | 118 | 29 | | |
| Success Rate | 64% | 81% | 48% | | |
| Average Grant | 30,381 | 37,722 | 31,332 | | |
| Amount awarded | \$638,000 | \$4,451,150 | \$908,622 | | |
| * Includes Subatomic Physics D | iscovery Individual and | Group, but not Projects | | | |

| Geosciences | Early Career | Established Researchers | | | |
|------------------------|-----------------------------|--------------------------------|-----------|--|--|
| Ocosciciocs | Researchers | Renewals | Other | | |
| Number of Applications | 31 | 129 | 68 | | |
| Number of Awards | 14 | 95 | 21 | | |
| Success Rate | 45% | 74% | 31% | | |
| Average Grant | 21,071 | 32,621 | 23,994 | | |
| Amount awarded | \$295,000 | \$3,099,000 | \$503,880 | | |
| Computer Science | Early Career Researchers | Established Researchers | | | |
| | | Renewals | Other | | |
| Number of Applications | 31 | 168 | 97 | | |
| Number of Awards | 25 | 141 | 36 | | |
| Success Rate | 81% | 84% | 37% | | |
| Average Grant | 20,960 | 28,571 | 15,944 | | |
| Amount awarded | \$524,000 | \$4,028,543 | \$574,000 | | |
| | | | | | |
| Mathematics and | Early Career | Established Researchers | | | |
| Statistics | Researchers | Renewals | Other | | |
| Number of Applications | 28 | 165 | 78 | | |
| Number of Awards | 19 | 130 | 30 | | |
| Success Rate | 68% | 79% | 38% | | |
| Average Grant | 11,368 | 18,331 | 13,600 | | |
| Amount awarded | \$216,000 | \$2,383,000 | \$408,000 | | |
| | | | | | |
| Civil, Industrial and | Early Career | Established Researchers | | | |
| Systems Engineering | Researchers | Renewals | Other | | |
| Number of Applications | 64 | 144 | 96 | | |
| Number of Awards | 34 | 108 | 36 | | |
| Success Rate | 53% | 75% | 38% | | |
| Average Grant | 18,706 | 26,380 | 20,160 | | |
| Amount awarded | \$636,000 | \$2,849,000 | \$725,763 | | |
| Electrical and | Early Career | Established Researchers | | | |
| Computer Engineering | Researchers | Renewals Other | | | |
| Number of Applications | 21 | 172 | 76 | | |
| Number of Awards | 15 | 119 | 16 | | |
| Success Rate | 71% | 69% | 21% | | |
| Average Grant | 23,733 | 36,738 | 27,325 | | |
| Amount awarded | \$356,000 | \$4,371,820 | \$437,200 | | |

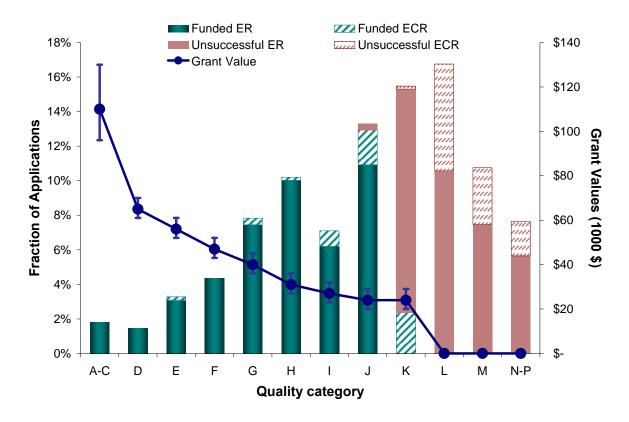
| Materials and | Early Career | Established Researchers | | | |
|------------------------|--------------|-------------------------|-----------|--|--|
| Chemical Engineering | Researchers | Renewals | Other | | |
| Number of Applications | 24 | 109 | 54 | | |
| Number of Awards | 16 | 81 | 13 | | |
| Success Rate | 67% | 74% | 24% | | |
| Average Grant | 21,063 | 36,667 | 23,077 | | |
| Amount awarded | \$337,000 | \$2,970,000 | \$300,000 | | |
| | | | | | |
| Mechanical | Early Career | Established Researchers | | | |
| Engineering | Researchers | Renewals | Other | | |
| Number of Applications | 26 | 130 | 67 | | |
| Number of Awards | 15 | 89 | 18 | | |
| Success Rate | 58% | 68% | 27% | | |
| Average Grant | 19,600 | 30,876 | 24,556 | | |
| Amount awarded | \$294,000 | \$2,748,000 | \$442,000 | | |

Figures 6. Distribution of Applications by Quality Categories for each Evaluation Group — 2011 Competition

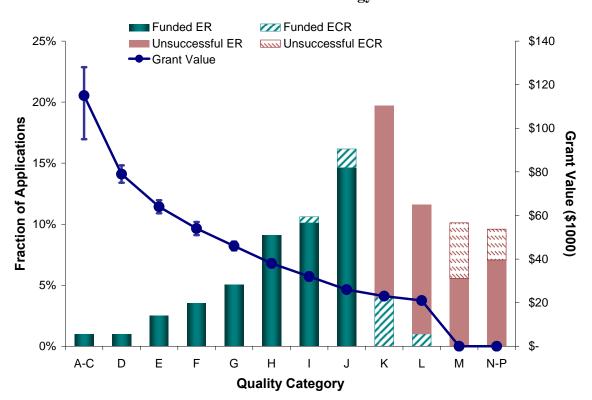
Gene, Cells and Molecules



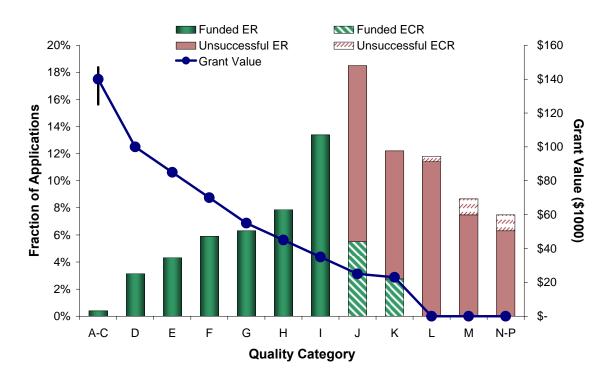
Biological Systems and Functions



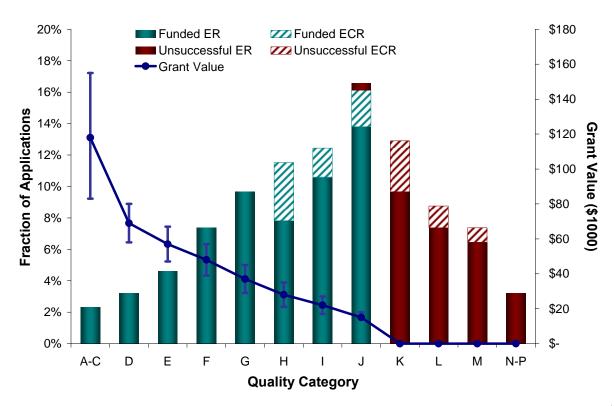
Evolution and Ecology



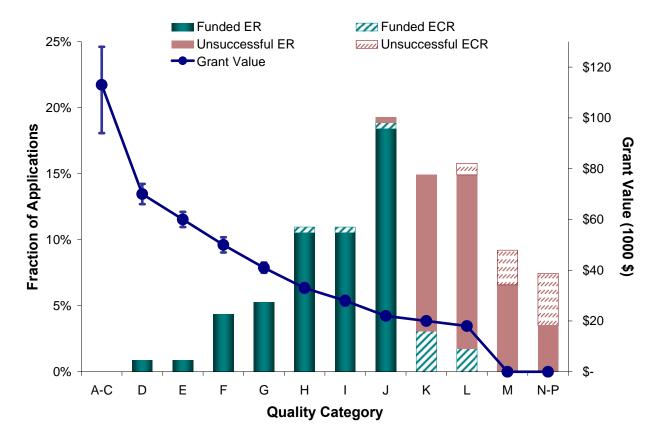
Chemistry



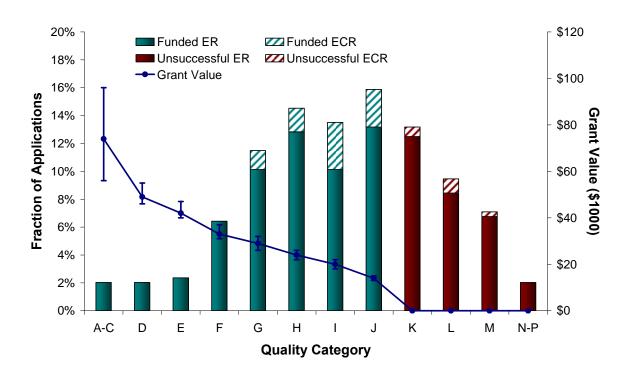
Physics (excluding Subatomic Physics)



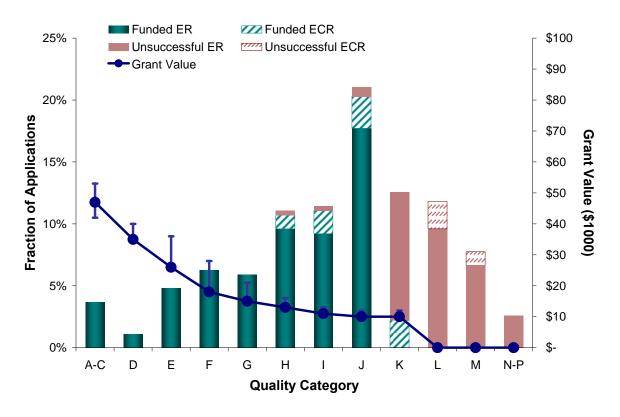
Geoscience



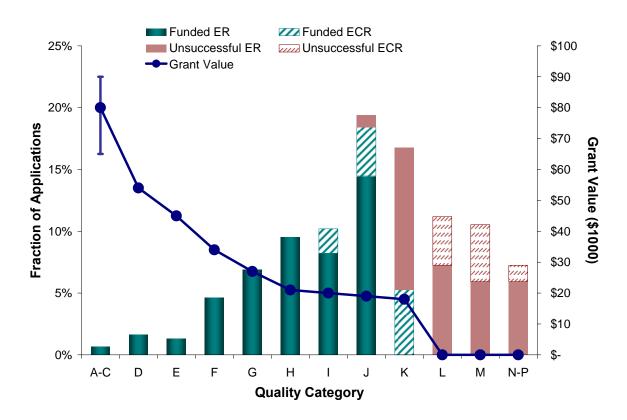
Computer Science



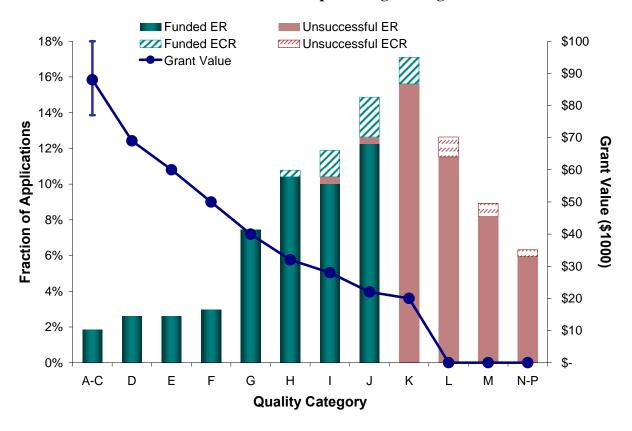
Mathematics and Statistics



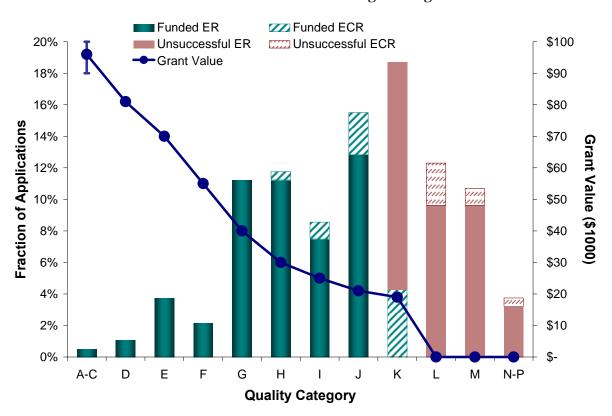
Civil, Industrial and Systems Engineering



Electrical and Computer Engineering



Materials and Chemical Engineering



Mechanical Engineering

