

People. Discovery. Innovation.  
Les gens. La découverte. L'innovation.



Natural Sciences and Engineering  
Research Council of Canada

Conseil de recherches en sciences  
naturelles et en génie du Canada

Canada

# CSEE - NSERC Liaison Meeting

## November 19, 2010



Natural Sciences and Engineering  
Research Council of Canada

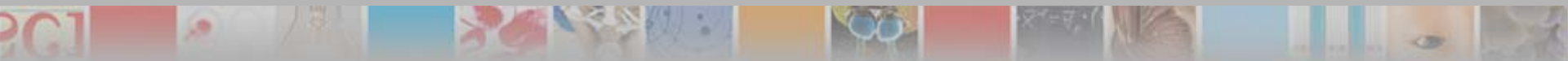
Conseil de recherches en sciences  
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# Federal Budget 2010

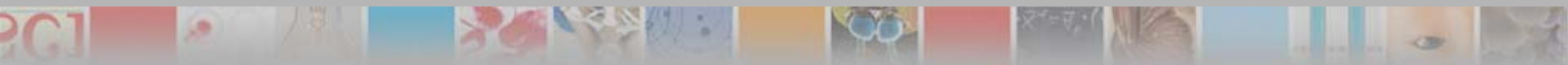


<b>New prestigious PDF program – Banting Postdoctoral Fellowships</b>	<b>\$45M over 5 years</b>
<b>NSERC Discovery Research (Discovery Frontiers: Northern Earth System Research)</b>	<b>\$8M permanent increase</b>
<b>NSERC Strategy for Partnerships and Innovation</b>	<b>\$5M permanent increase</b>
<b>College and Community Innovation Program</b>	<b>\$15M permanent increase</b>
<b>Indirect Costs Program</b>	<b>\$8M/yr</b>



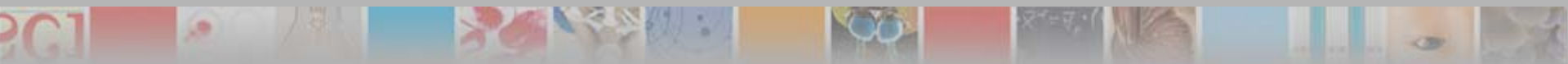
# NSERC Frontiers

- Initiative includes two elements:
  - [Discovery Frontiers](#), focused on discovery research
  - [Innovation Frontiers](#), focused on research partnerships with industry
- All funded projects will include an international partnership component that taps into global expertise



# Discovery Frontiers

- First call for proposals \$4 million over a four-year period to support research in Northern Earth Systems
- Researchers will work collaboratively to tackle broad problems defined with the input of the northern community
- Deadline for Letter of Intent December 10



- NSERC Strategy for Partnerships and Innovation
  - Launched in November 2009
  - Builds on the base of Discovery research
  - Connects academia and industry
  - Aims to double the number of companies partnering with NSERC-funded researchers by 2014
  - Regional offices are now focused on facilitating partnerships



# Discovery Grants Competition

## Full implementation of Conference Model

- 12 Evaluation Groups instead of 28 GSCs
- Flexible composition of sections to provide optimal review for applications
- A more dynamic system
- Raising the bar of excellence
- Applicants, new and established, with superior contributions more easily identified and awarded funding at appropriate level



# Evolution and Ecology (1503)

## Research Topics

(F180s received for 2011)

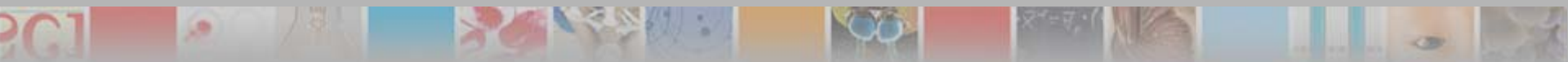
- LSC01 Populations & Communities (40)
- LSC02 Ecological & Evolutionary Applications (39)
- LSC03 Evolutionary Patterns (10)
- LSC04 Evolutionary Processes (17)
- LSC05 Ecosystem Patterns & Processes (20)
- LSC06 Spatial Patterns in Ecology & Evolution (11)
- LSC07 Ecology & Evolution of Behaviour (30)
- LSC08 Ecological Function (16)
- LSC09 Mathematical & Statistical Models in Evolution & Ecology (7)
- LSC10 Systematics & Taxonomy (22)



# Overall Statistics – 2010 Discovery Grants Competition

	Number of Applications	Number of Awards	Amount Awarded	Success rate (%)	Average Grant
Early-Career researchers (ECR)	532	310	\$7,418,449	58	\$23,930
Established researcher (ER) applicants who held a grant	1,902	1,360	\$49,412,777	72	\$36,333
Applicant 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.

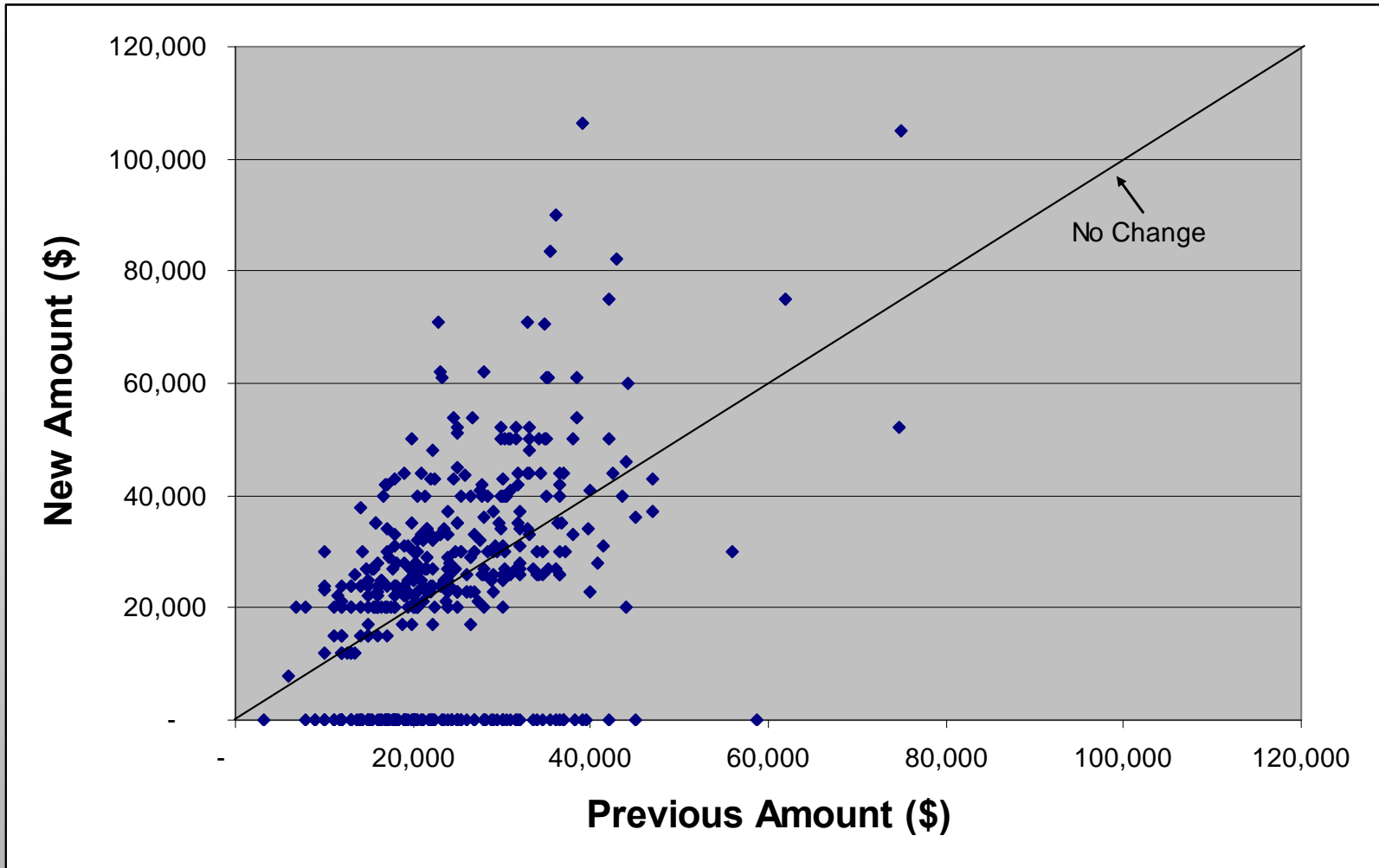


# 2010 Discovery Grants Competition

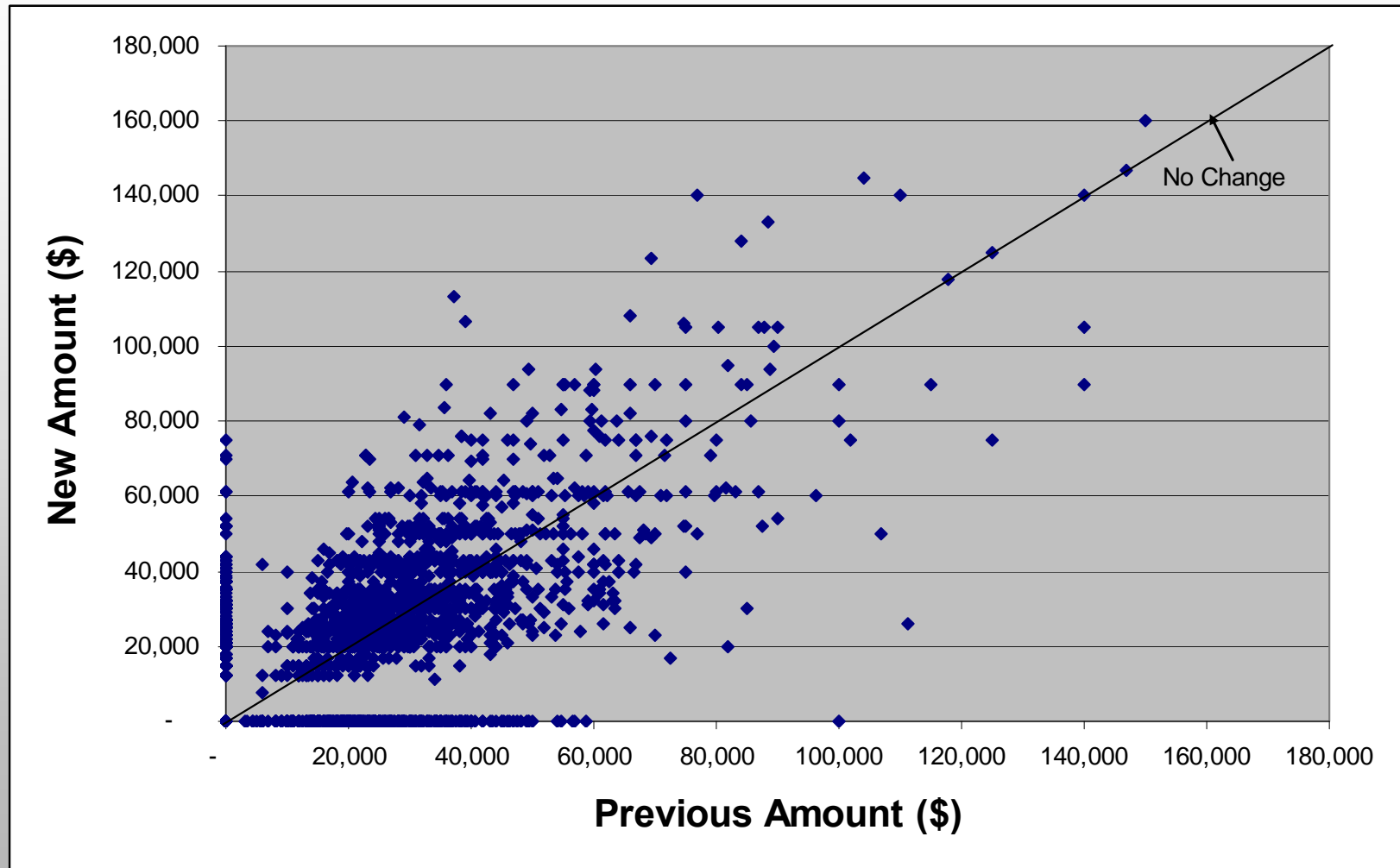
Evaluation Group	Success Rate	Average Grant
Genes, Cells & Molecules (1501)	52.2%	\$33,610
Biological Systems and Functions (1502)	51.4%	\$38,985
Evolution & Ecology (1503)	60.2%	\$32,798
Chemistry (1504)	53.8%	\$55,092
Physics including SAP (1505)	62.3%	\$40,828
Geosciences (1506)	54.3%	\$30,245
Computer Science (1507)	64.2%	\$27,044
Mathematics & Statistics (1508)	62.1%	\$19,656
Civil, Industrial & Systems Engineering (1509)	52.5%	\$30,131
Electrical and Computer Engineering (1510)	63.3%	\$30,401
Materials and Chemical Engineering (1511)	66.5%	\$32,271
Mechanical Engineering (1512)	63.7%	\$27,199



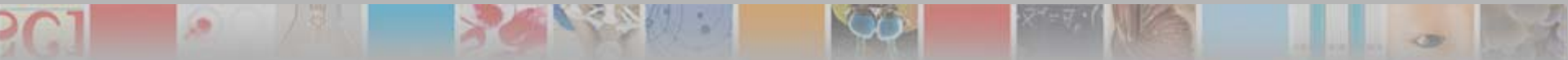
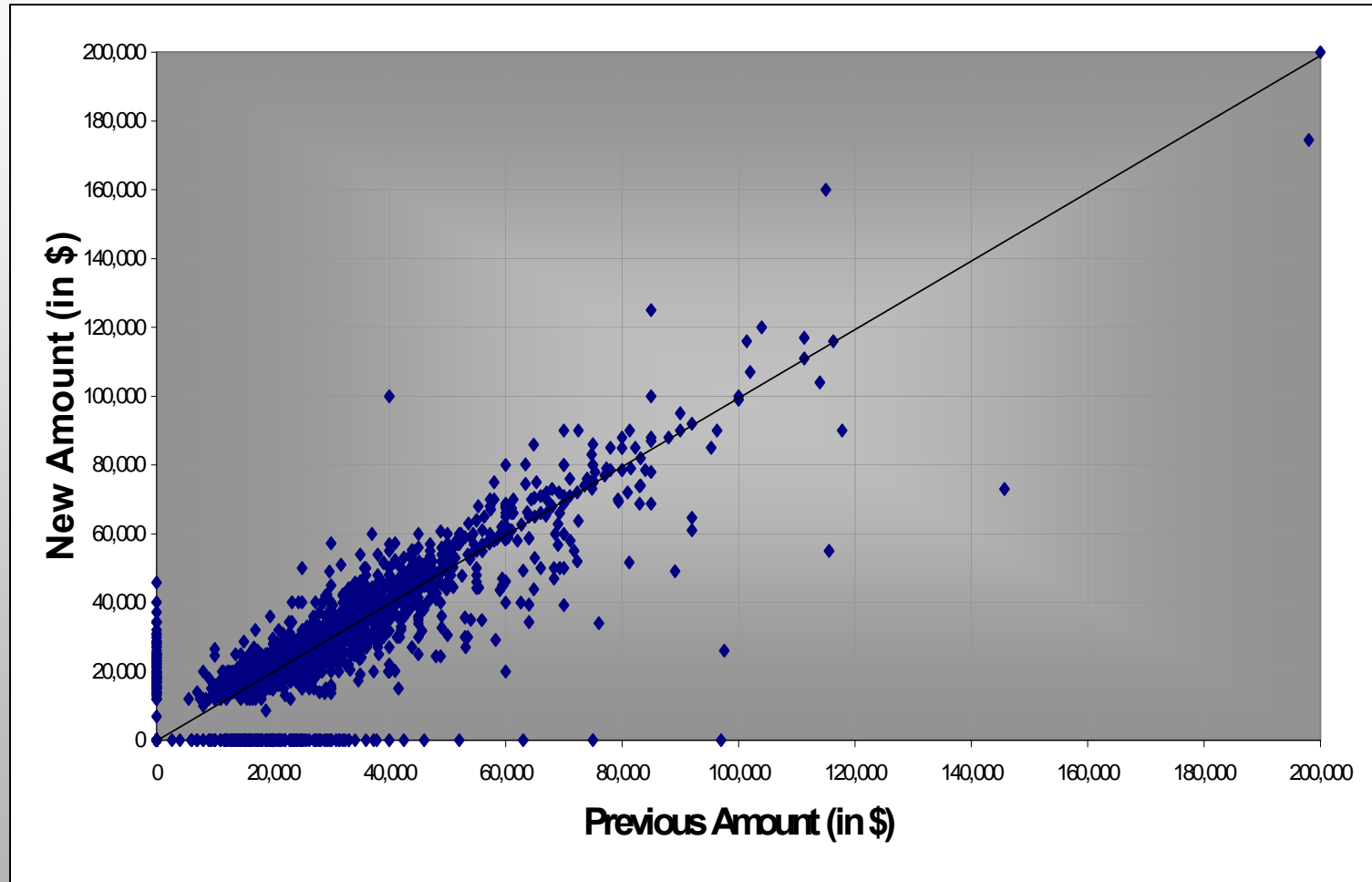
# Change in Grant Level for 1st Renewal – 2010 Competition



# Change in Grant Level for All Established Researchers – 2010 Competition

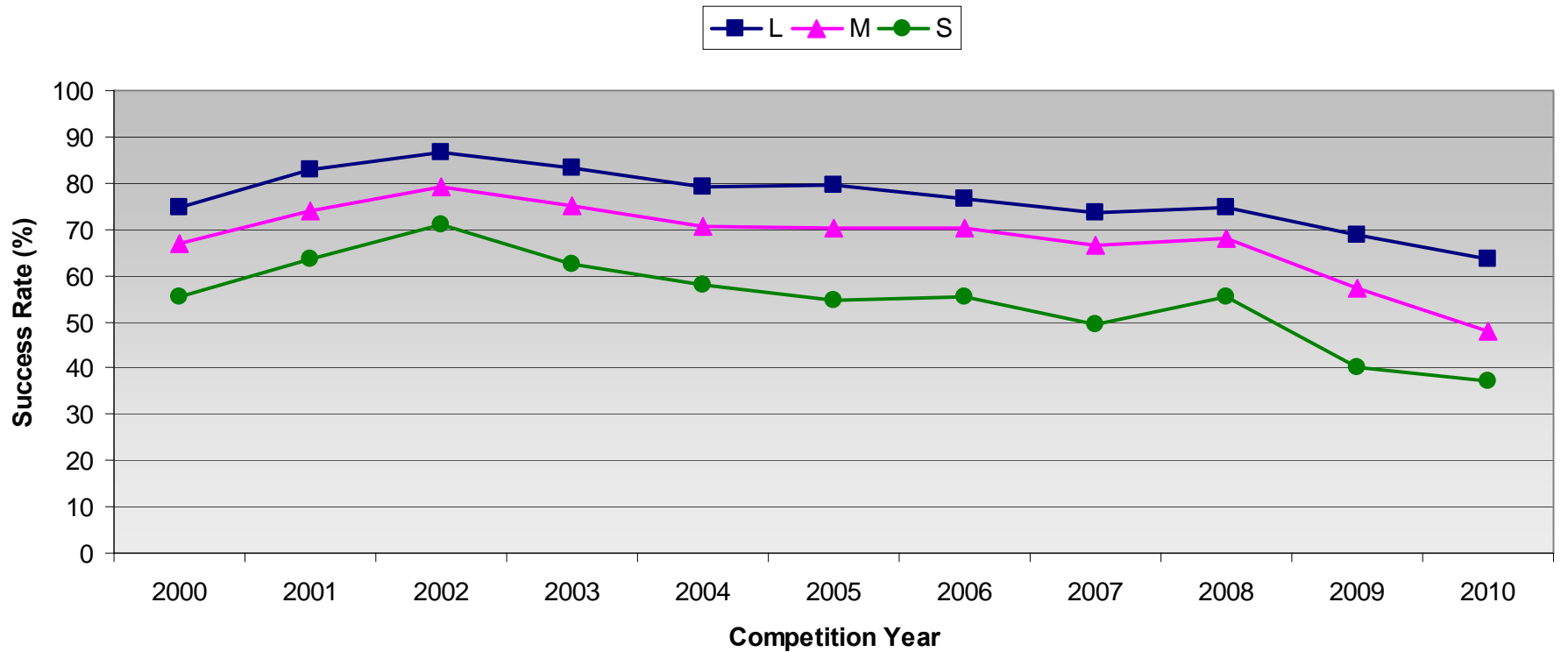


# Change in Grant Level for All Established Researchers – 2008 Competition



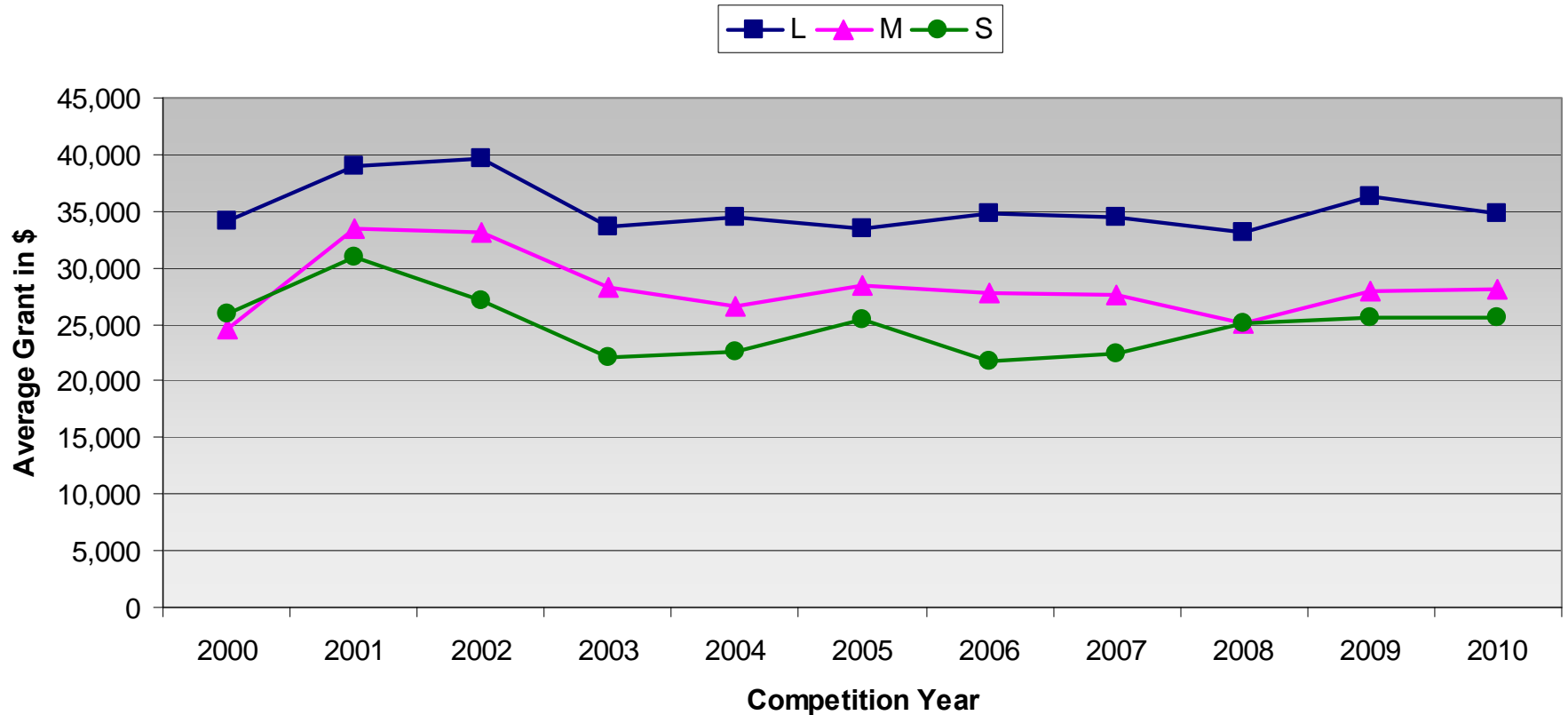
# Success Rate by University Size – Competitions 2000 to 2010

Success Rate by University Size - Competitions 2000 to 2010



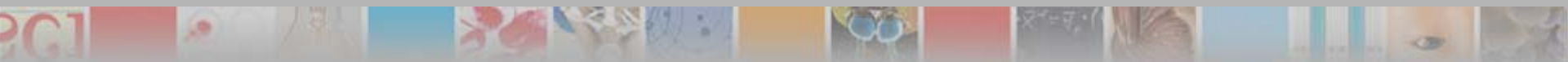
# Average Grant Awarded by University Size – Competitions 2000 to 2010

Average Grant Awarded by University Size - Competitions 2000 to 2010

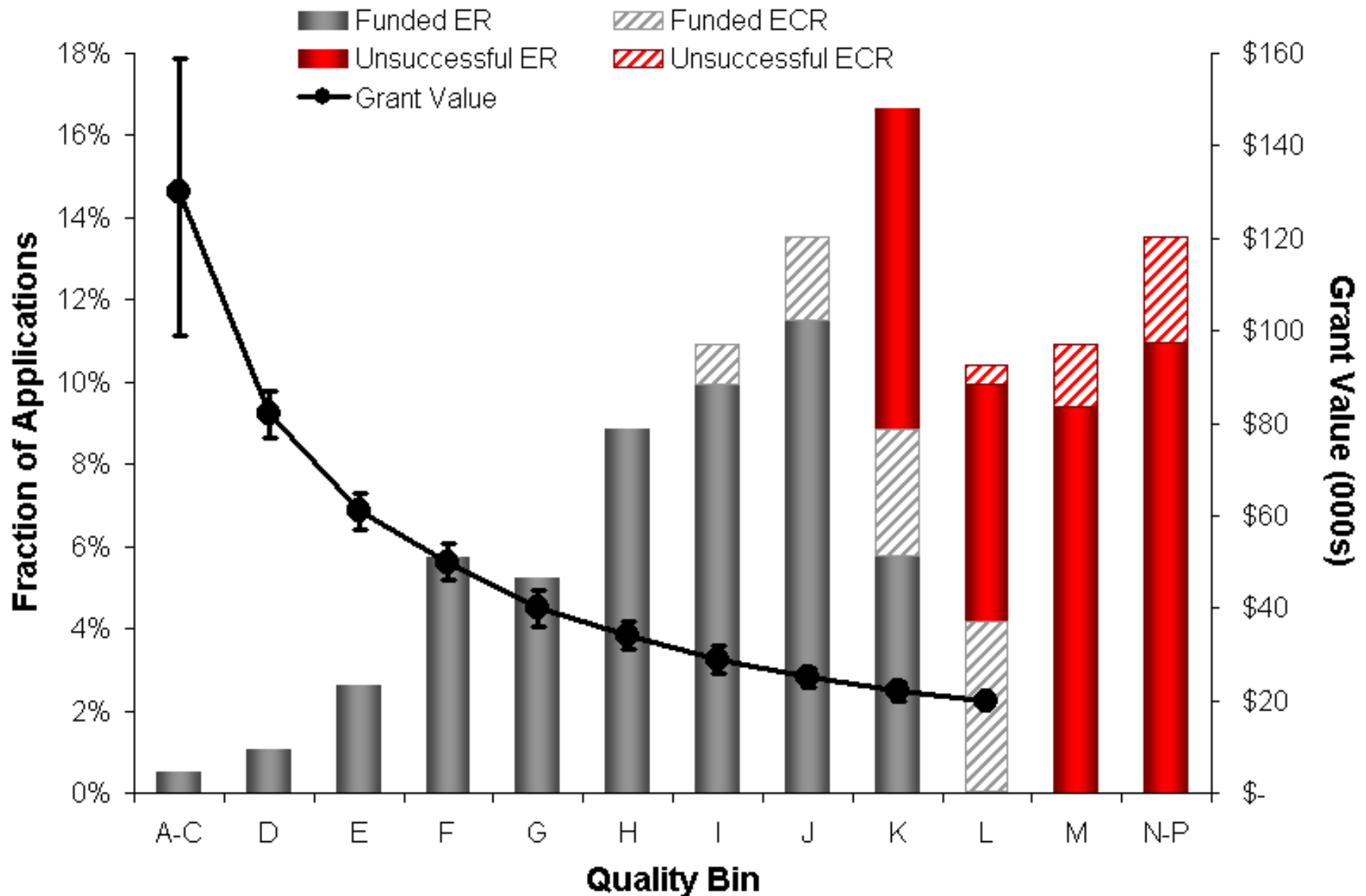


# DG Competition Results 2010

Evolution and Ecology (EG 1503)	Early Career Researchers (ECR)	Established Researchers (ER)		Overall
		Renewals	Others	
# of Applications	29	116	51	196
# of Awards	20	84	14	118
\$ Awarded	\$448k	\$3,074k	\$348k	\$3,870k
Success Rate	69.0%	72.4%	27.5%	60.2%
Average Grant	\$22,400	\$36,591	\$24,890	\$32,798



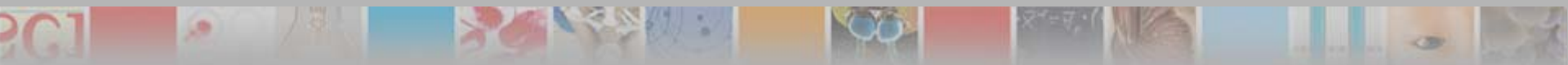
# DG Competition Results – EG 1503



# Discovery Grants 2010 Competition

- While the overall DGP budget was largely unchanged in the recent competition, the 2010 competition budget was lower than in 2009
  - differences in cohort make-up
  - fewer grant-holders choosing not to re-apply this year
  - a greater number of applicants who were not previously funded (Returning Unfunded: 2009 = 15.4%; 2010 = 23.0%; 2011 = 25.1%) \*
- This led to reduced success rate and a slightly smaller average grant for successful applicants

\* *statistics for EG 1503*



# Discovery Grants Competitions – For Evolution and Ecology

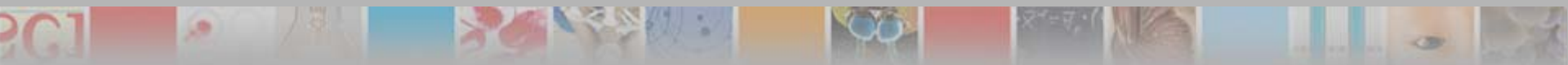
## ■ Success rates

### – 60.2% in 2010

- 118 awards
- Total of incoming grants: \$3.23M
- Average grant: \$32,798
- FTAs (all types): 35
- Re-applying, no grant: 45

### – 72.8% in 2009

- 137 awards
- Total of incoming grants: \$3.62M
- Average grant: \$33,351
- FTAs (all types): 44
- Re-applying, no grant: 29



# Discovery Grants 2010 Competition – For Evolution and Ecology

## ■ Other statistics of note

### – by gender

♀ - \$30.0k average grant, 60.4% SR

♂ - \$34.1k average grant, 60.1% SR

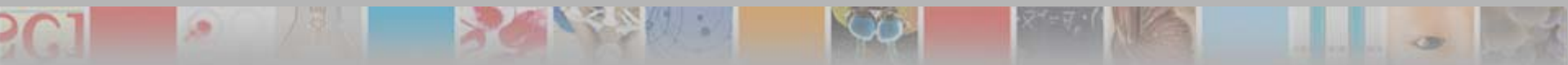
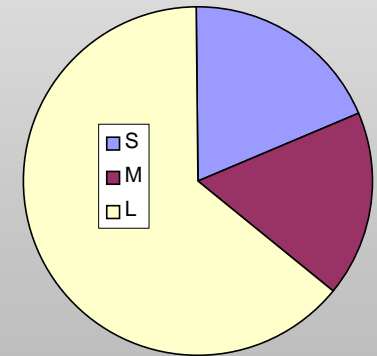
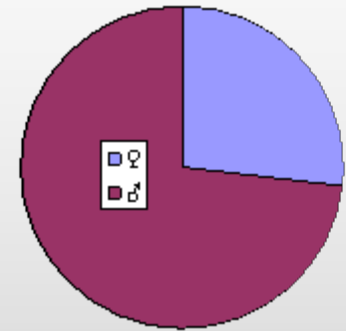
### – by institution size

S - \$24.6k average grant, 43.2% SR

M - \$29.9k average grant, 60.6% SR

L - \$35.1k average grant, 65.1% SR

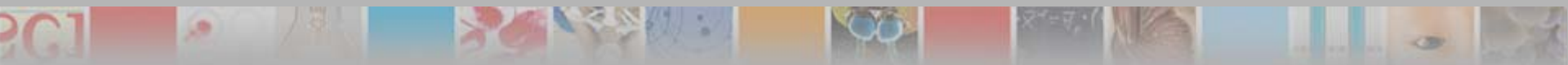
Cohort makeup



# Discovery Grants 2010 Competition – For Evolution and Ecology

- Interactions with other committees: transfers

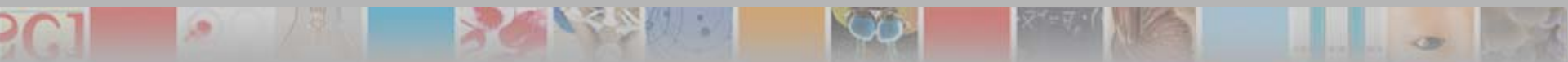
<b>Evaluation Group</b>	<b>Number of Applications Transferred In From:</b>	<b>Number of Applications Transferred Out To:</b>
1501 – Genes, Cells & Molecules	1	1
1502 – Biological Systems & Functions	1	0
1504 – Chemistry	1	0
1508 – Mathematics & Statistics	1	0
1509 – Civil, Industrial and Systems Engineering	1	0



# Discovery Grants 2010 Competition – For Evolution and Ecology

- Interactions with other committees: joint reviews

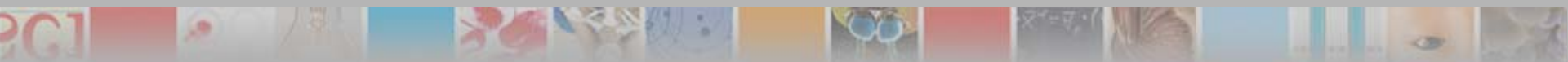
<b>Evaluation Group</b>	<b>Received input from:</b>	<b>Provided input on:</b>
1501 – Genes, Cells & Molecules	7	9
1502 – Biological Systems & Functions	9	5
1506 – Geosciences	9	13
1508 – Mathematics & Statistics	1	5
1509 – Civil, Industrial and Systems Engineering	1	0



# RTI Results by Evaluation Group

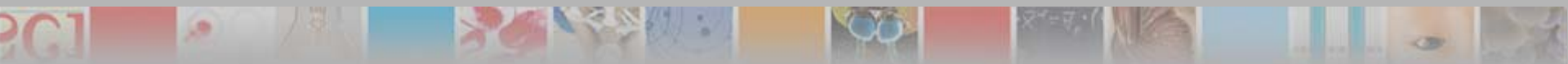
Evaluation Group	Total Received	Success Rate
Genes, Cells & Molecules (1501)	165	30.91%
Biological Systems and Functions (1502)	246	32.11%
Evolution & Ecology (1503)	114	34.21%
Chemistry (1504)	230	28.70%
Physics (1505)	133	27.07%
Geosciences (1506)	109	26.61%
Computer Science (1507)	59	28.81%
Mathematics & Statistics (1508)	11	54.55%
Civil, Industrial & Systems Engineering (1509)	119	26.05%
Electrical and Computer Engineering (1510)	136	23.53%
Materials and Chemical Engineering (1511)	177	24.86%
Mechanical Engineering (1512)	170	27.06%

**\* Funding rate for all EGs was ~27%**



# Discovery Accelerator Supplements (DAS) results

- 125 DAS were awarded among all EGs
- Evolution and Ecology reviewed all applications and recommended 9 applicants for a DAS supplement
- list provided to Executive Committee of EG, who conducted final analysis of DAS nominees to reduce to the given quota of 8 awards
- nominees who best met the objectives of the program recommended to NSERC President for a DAS award
- The *Evolution and Ecology* Evaluation Group recommended its full quota of 8 applicants



# Ship Time Allocation Committee (STAC) Results 2010

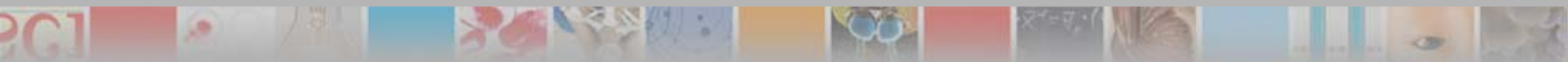
# of Applications	# of Awards	\$ Requested	\$ Awarded	DFO Awarded	Non-DFO Awarded
<b>13</b>	<b>9</b> (69.2% S/R)	<b>\$1,295k</b>	<b>\$833k</b> (64.3% F/R)	<b>3</b> (60%)	<b>6</b> (75%)

EGs requesting STAC support: 1502 - 1, 1503 - 4, and 1506 - 8

# Northern Research Supplements (NRS) Results 2010

# of Applications	# of Awards	\$ Requested	\$ Awarded (\$10k each)	Success Rate
<b>23</b>	<b>10</b>	<b>\$240k</b>	<b>\$100k</b>	<b>43.5%</b>

EGs requesting NRS support: 1503 - 11, 1504 - 1, 1506 - 10, and 1509 - 1



# Questions?

## Program Officers

- Evolution and Ecology – Brenda MacMurray  
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- Evolution and Ecology – Kenn Rankine  
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