

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

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2019 DG Competition Results & NSERC Updates

Jean-Marc David, Program Officer

Emily Diepenveen, Team Leader

Computer Science Evaluation Group (1507)



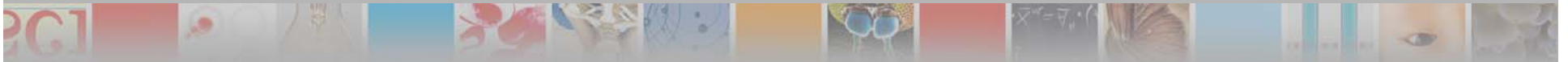
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Canada

Agenda

- Results overview
 - Discovery Grants
 - EDI data
 - RTI
 - DAS
 - DDG
- Program updates



2019 Competition Results

Peer Review-Thank you

- 3400+ Discovery Grants Applications =
 - 430+ Evaluation Group Members
 - 17 000+ Reviews by EG members
 - 9100+ External Reviewers Reports

“NSERC is extremely grateful for your significant contribution of time and effort in this process. We would not be able to operate the Discovery Grants Program – our flagship program – without your dedicated efforts. Your insights and informed feedback are essential to ensure quality in Canada’s discovery research enterprise.”

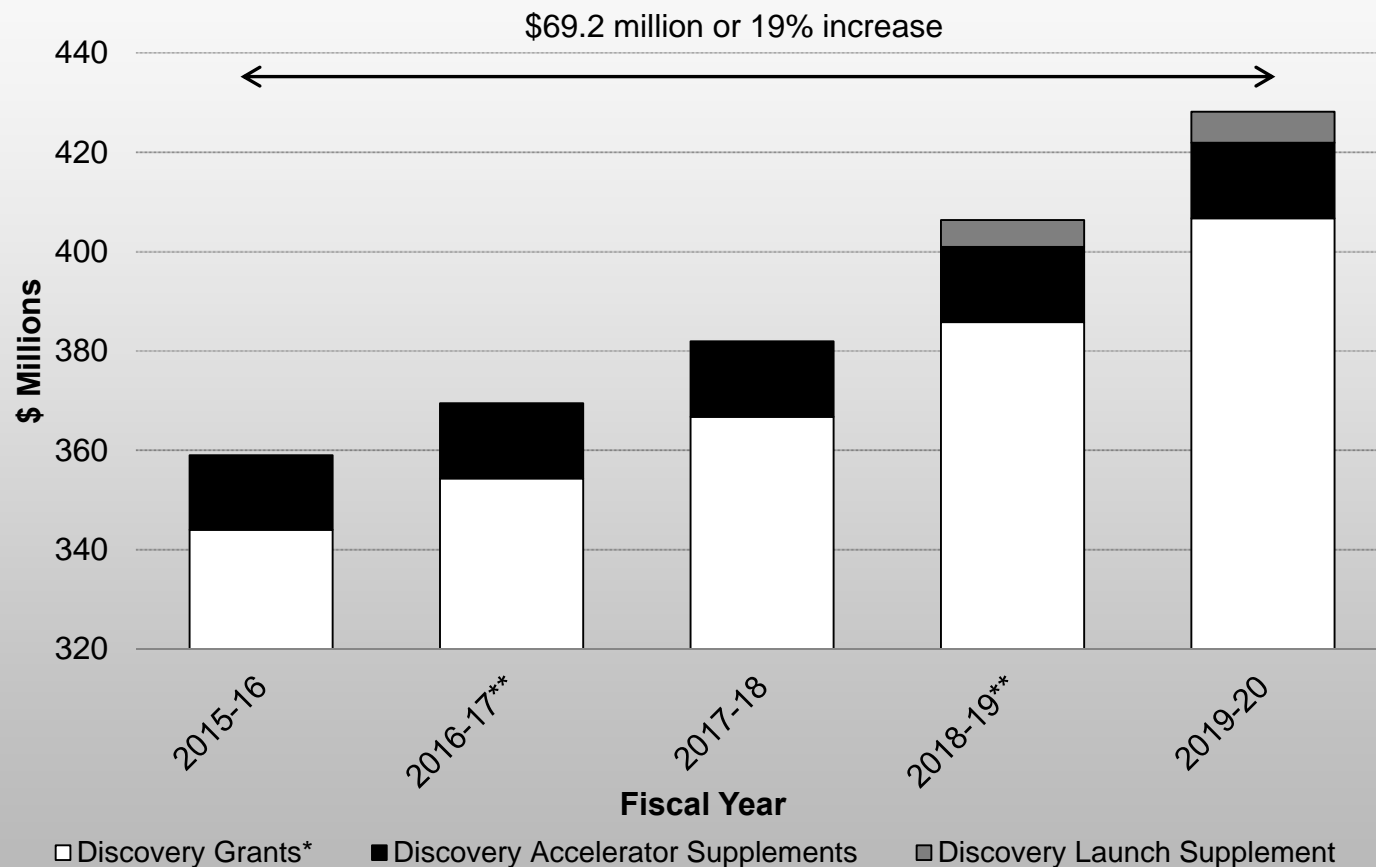
Danika L. Goosney, Vice-President, Research Grants and Scholarships



2019 Competition Results

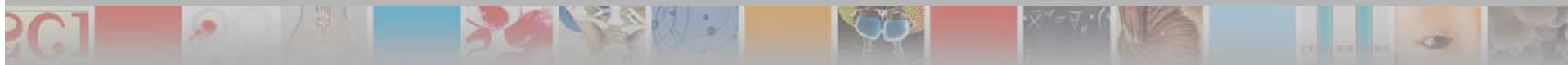
NSERC Discovery Grants Funding

(millions of dollars)



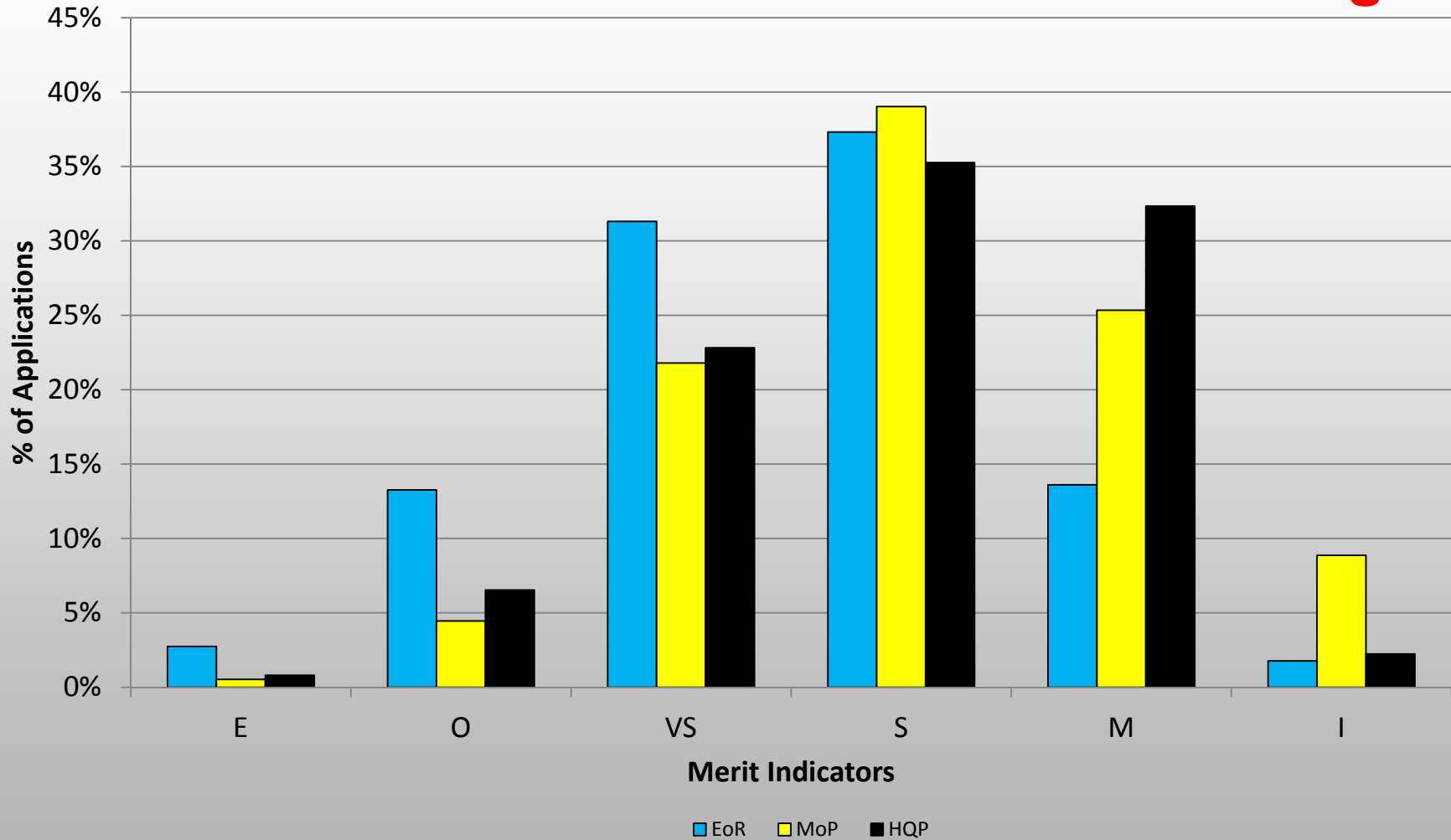
*Includes Discovery Grants (Individual and Team) and Subatomic Physics Discovery Grants (Individual, Team and Project)

**Includes additional funding received resulting from Federal Budget 2016 & 2018



2019 Competition Results

Overall – Distribution of merit indicator ratings

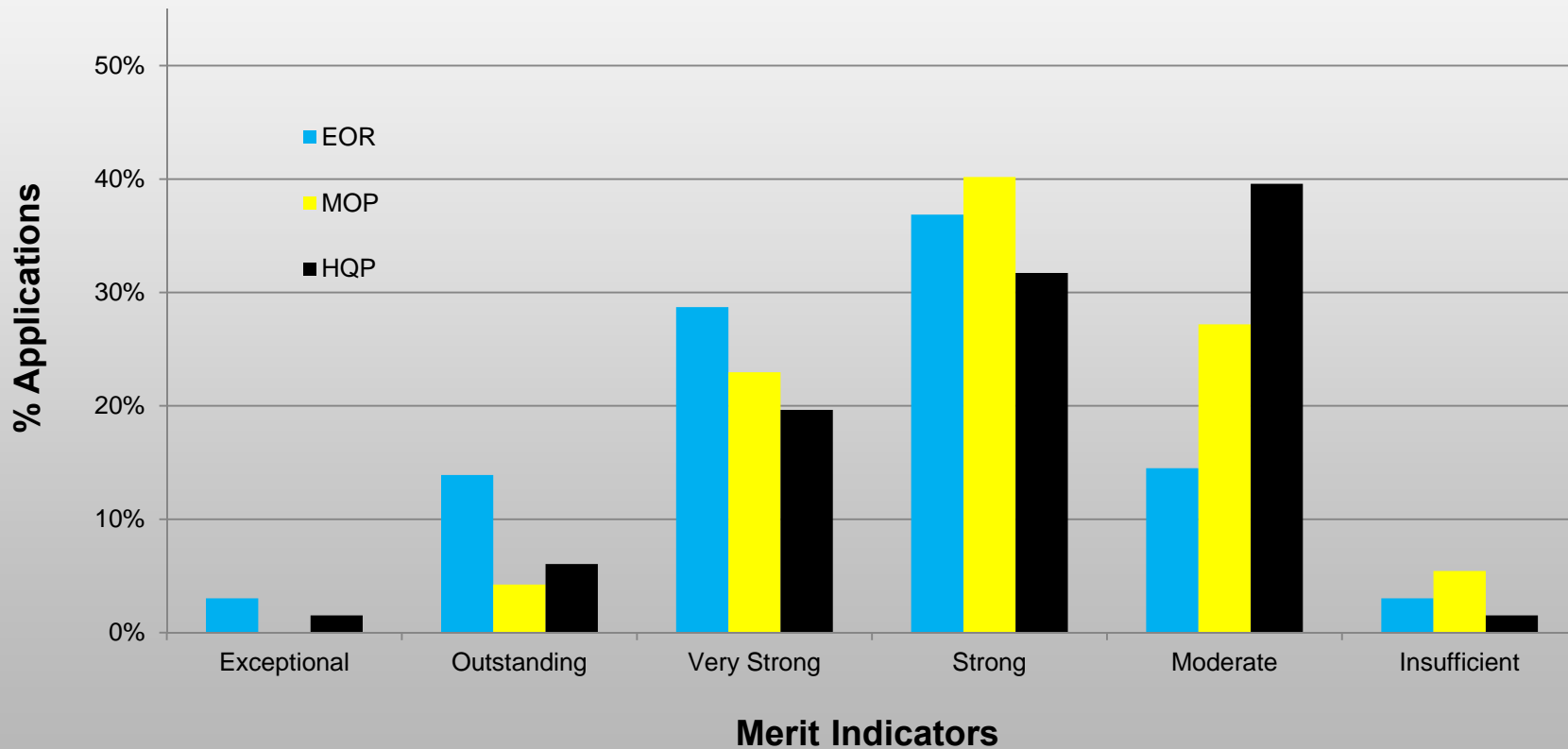


* Results presented are not official

2019 Competition Results

Computer Science (EG1507)

DG 2019 Merit Indicator Distribution for EG 1507

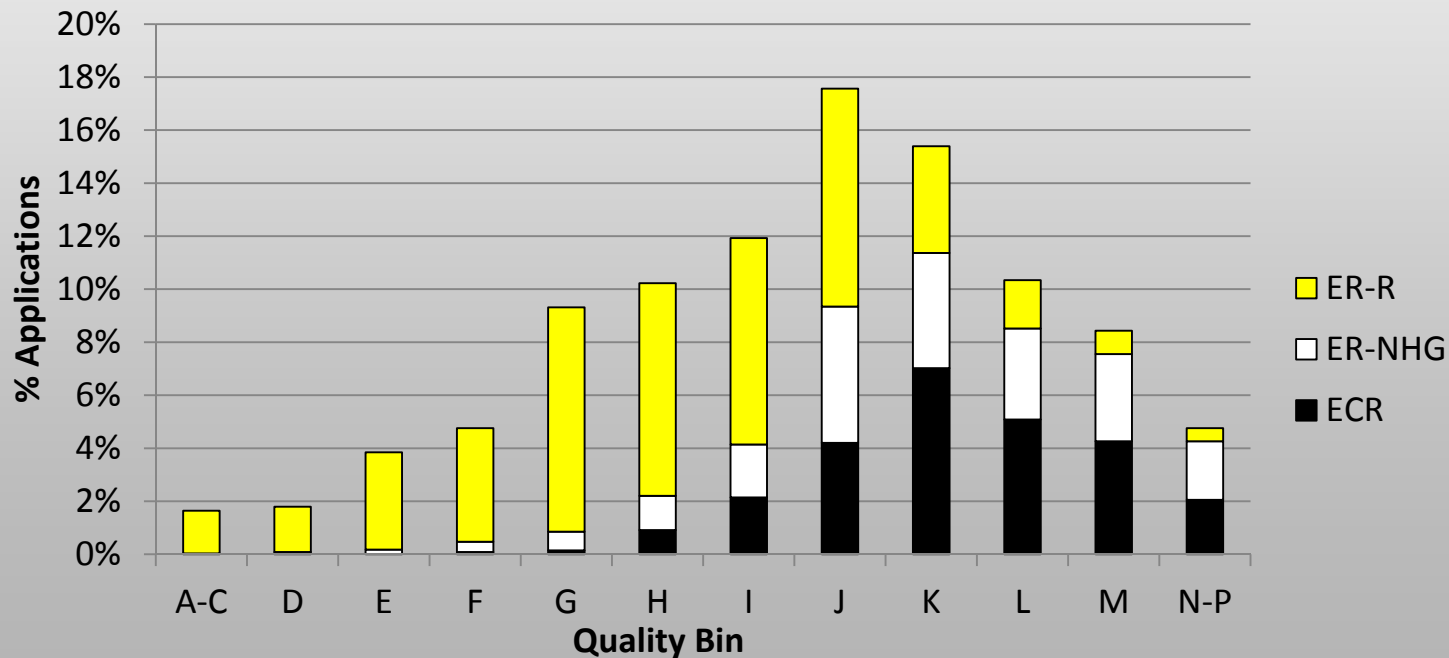


* Results presented are not official

2019 Competition Results

Overall – Discovery Grants

	Early Career Researchers	Established Researchers		Established Researchers	Total
		Returning	Not Holding a Grant		
# of Applications	882	1736	786	2522	3404
# of Awards	499	1462	318	1780	2279
Success Rate	57%	84%	40%	71%	67%
Average Grant (yearly)	\$30,018	\$41,554	\$33,287	\$40,077	\$37,875



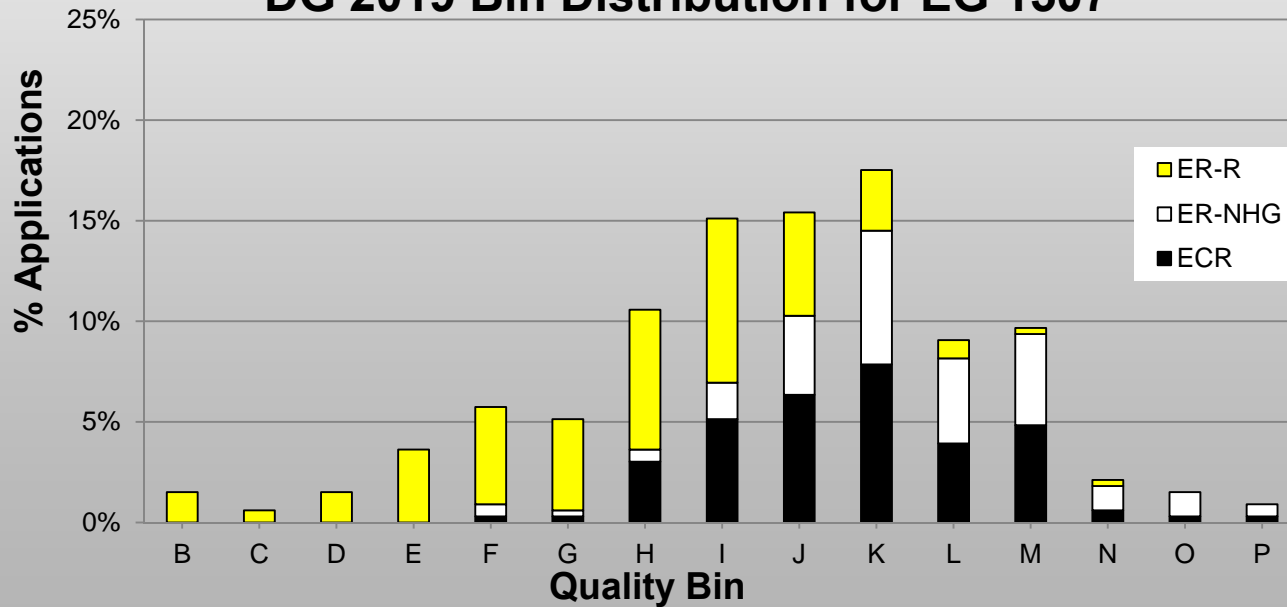
* Results presented are not official

2019 Competition Results

Computer Sciences (EG1507)

1507	Early Career Researchers	Established Researchers		Established Researchers	Total
		Returning	Not Holding a Grant		
# of Applications	109	137	85	222	331
# of Awards	76	122	24	146	222
Success Rate	70%	89%	28%	66%	67%
Average Grant	\$29,421	\$40,008	\$27,935	\$38,024	\$35,079

DG 2019 Bin Distribution for EG 1507

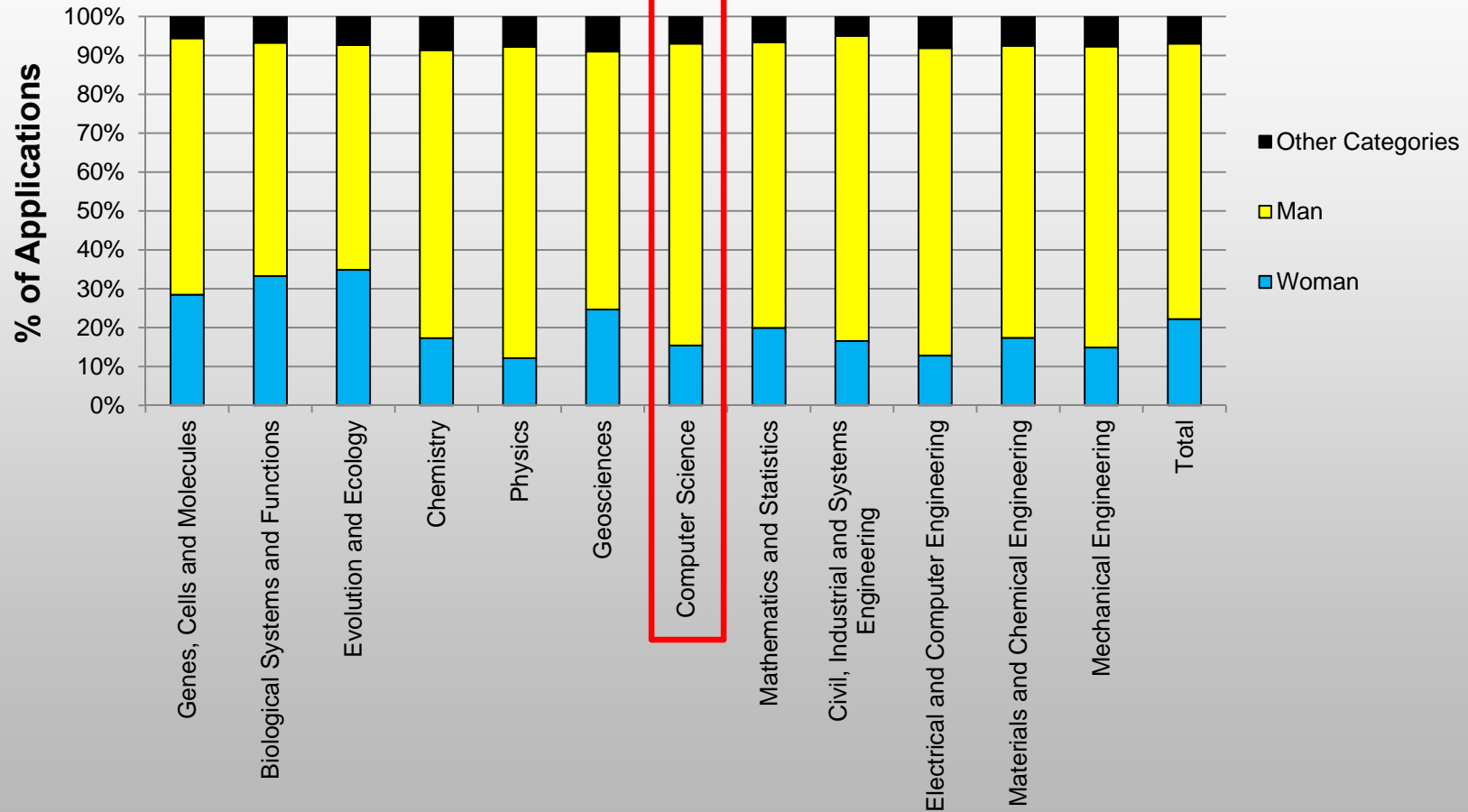


* Results presented are not official

2019 Competition Results

Equity, Diversity and Inclusion (EDI)

% of applicants by gender



* Results presented are not official

2019 Competition Results

Equity, Diversity and Inclusion (EDI)

All EGs		Women	Men	Other Categories*
Early Career Researchers (ECR)	Success rate	56%	57%	54%
	Average Grant	\$30,756	\$29,580	\$31,000
Established Researchers (ER)	Success rate	73%	70%	70%
	Average Grant	\$40,075	\$40,182	\$39,093

*Other categories includes Gender-fluid, Binary and/or Two-spirit, as well as those who selected "I prefer not to answer". These categories contain less than 5 applications when broken down further.

* Results presented are not official

2019 Competition Results

Equity, Diversity and Inclusion (EDI)

EG1507		Women	Men	Other categories
Early Career Researchers (ECR)	Success Rate	83%	66%	N/A
	Average Grant	\$29,550	\$29,309	N/A
Established Researchers (ER)	Success Rate	63%	65%	N/A
	Average Grant	\$38,824	\$38,765	N/A

*Other categories includes Gender-fluid, Binary and/or Two-spirit, as well as those who selected "I prefer not to answer". These categories contain less than 5 applications when broken down further.

* Results presented are not official

2019 Competition Results

Research Tools and Instruments (RTI)

RTI grants foster and enhance the discovery, innovation and training capability of university researchers in the NSE by supporting the purchase of research equipment

	2014	2015	2016	2017	2018	2019	EG1507 -2019
Budget	\$19.5M	\$25M	\$26M	\$30.5M	\$25.1M	\$25.3M	N/A
# Appl.	468	666	657	748	1043	1005	31
# Funded	176	218	215	241	208	210	7
Success Rate	38%	33%	33%	32%	20%	21%	22.6%
Funding Rate	38%	34%	33%	33%	21%	22%	23.2%

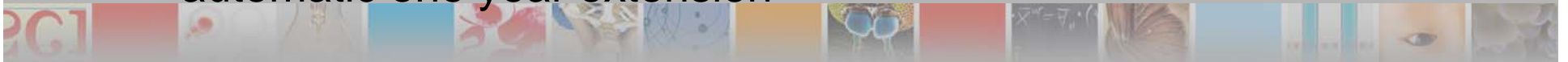
* Results presented are not official



2019 Competition Results

Discovery Accelerator Supplements

- DAS provides resources to researchers who:
 - *Have highly original and innovative research programs*
 - *Show strong potential to become international leaders within their field*
- \$120,000 - over three years
- **New CY2019** - Up to 130 Supplements per year
- Each EG will receive a quota of DAS nominations
- EG members nominate and vote during competition. Executive Committee makes the final recommendation to NSERC
- **New CY2019** - Awardees are able to use the amount over the length of the Discovery Grant – over 5 years, and the automatic one year extension

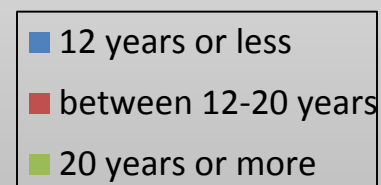
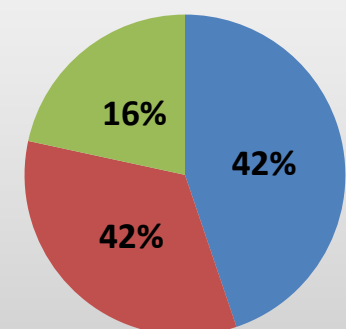


2019 Competition Results

Discovery Accelerator Supplements

Evaluation Group	Awards
Genes, Cells and Molecules (1501)	17
Biological Systems and Functions (1502)	18
Evolution and Ecology (1503)	10
Chemistry (1504)	7
Physics (1505)	8
Geosciences (1506)	9
Computer Science (1507)	13
Mathematics and Statistics (1508)	10
Civil, Industrial and Systems Engineering (1509)	12
Electrical and Computer Engineering (1510)	9
Materials and Chemical Engineering (1511)	7
Mechanical Engineering (1512)	8
Subatomic Physics (19)	1
Total	129

2019 DAS recipients
years from PhD



* Results presented are not official

2019 Competition Results

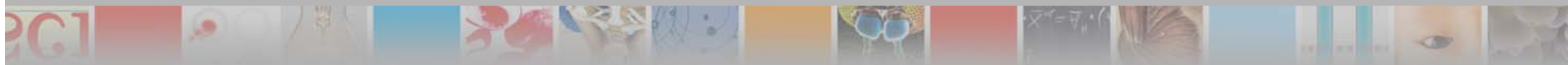
Discovery Development Grants (DDG)

Description:

- No separate application is required – offered according to DG results
- Provide resources to researchers from small universities whose DG applications were deemed to be of appropriate quality to merit research support, but were not funded in the DG Competition.
- **New Value:** \$15K/year for 2 years
- **New Eligibility CY2020:** may hold twice throughout their career

Objective:

- Promote a diversified base of high-quality research in small universities
- Foster a stimulating environment for research training in small universities



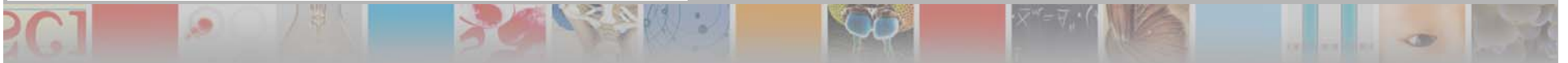
2019 Competition Results

Discovery Development Grants (DDG)

Results:

	2015	2016	2017	2018	2019*
Awarded	57	43	54	34	24*
Accepted	54	42	46	28	TBD
Declined	3	1	8	6	TBD

* Results presented are not official



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NSERC News and Program Updates



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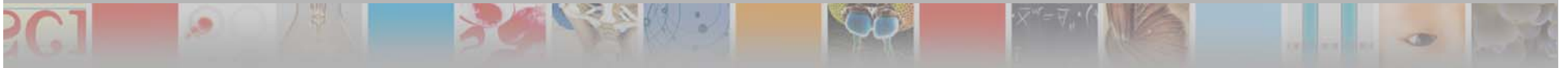
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RGS Program Updates

Support for Early Career Researchers

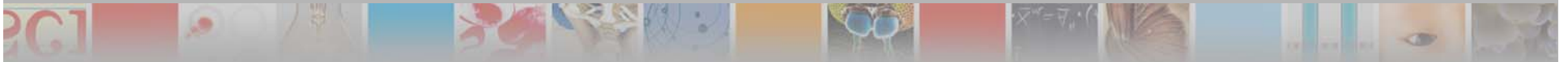
- The ECR eligibility window is now 5 years (previously 3 years) to harmonize with the other agencies *(New!)*
- NSERC devotes additional funds to support ECRs through
 - increases to Discovery Grants - \$5,000 per year
 - Discovery Launch Supplement - \$12,500 in first year *(New!)*
- ECRs re-applying for the first time have the option of extending their DG by one year with funds



RGS Program Updates

RTI Program Update

- Application deadline date remains **Oct 25**
- RTI selection criteria
 - Selection criteria reduced from five to three, weighted
 - Need, urgency and suitability of equipment for the research programs (40%)
 - Merit of the research programs supported by the equipment and excellence of the applicant(s) (40%)
 - Importance of the equipment for the training of highly qualified personnel (20%)
 - The weighted scoring method will better guide Selection Committee members during review
 - Provides applicants more detailed scoring on their proposals to help improve subsequent applications
- Research Portal opens in August



NSERC News

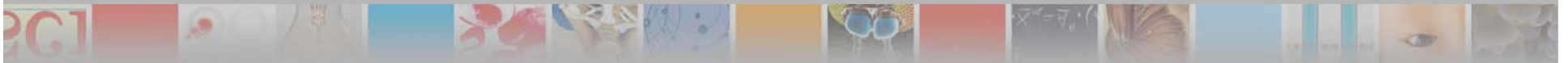
Equity, Diversity and Inclusion (EDI) Institutional Capacity-Building Grant – Tri-Agency

Created in 2018 - \$10 million over 5 years

Objectives

- To foster EDI in the Canadian post-secondary research enterprise
- Funds will allow institutions to undertake activities to advance their own EDI objectives

Value	Up to \$200,000 per year, for up to two years, non-renewable		
Eligible institutions	<ul style="list-style-type: none">• Canadian universities with Canada Research Chairs (CRC) program quota of 1 to 10• Canadian colleges that received between a total of \$100K and \$4M in tri-agency funding		
Selection Criteria	<ul style="list-style-type: none">• Motivation	<ul style="list-style-type: none">• Merit of Proposed Project	<ul style="list-style-type: none">• Institutional Commitment
Evaluation	Reviewed by a Committee constituted of researchers, administrators with expertise in EDI.		



NSERC News

Dimensions Program

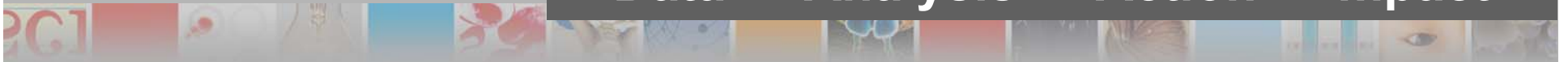
Brief Overview - Internationally Recognized Program – Athena SWAN

- Initiated in the United Kingdom in 2005
- Model exported to Ireland, Australia, and the United States
- Institutions are invited to endorse the charter and to commit to adopting these principles throughout their practices and culture to achieve greater equity, diversity and inclusion (EDI).

How it Works: Individualised approach requiring institutions to:

- Collect quantitative and qualitative data
- Critically analyse data and identify gaps
- Identify reasons for exclusion and under-representation
- Develop 4-year action plan
- Show progress over time
- REPEAT!

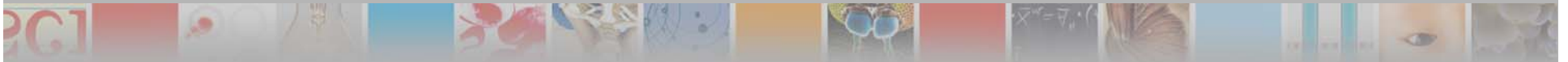
Data → Analysis → Action → Impact



NSERC News

Dimensions Proposed Timeline to Implementation

Milestones	Dates
Initial Consultations on Program	Fall 2018
Draft Charter consultations	February–March 2019
Launch of Charter	May 9 2019
Post-secondary institutions to voluntarily sign-on to the Dimensions Charter	Spring 2019
Interested institutions submit their Letters of Intent (LOIs)	June 2019
Selection of post-secondary institutions participating in pilot	July 2019
Institutions receive handbook and application materials to prepare their applications	Fall 2019
Full application deadline and peer review of applications	Late Summer 2021
Awards issued	October 2021
Assessment of pilot	April 2022

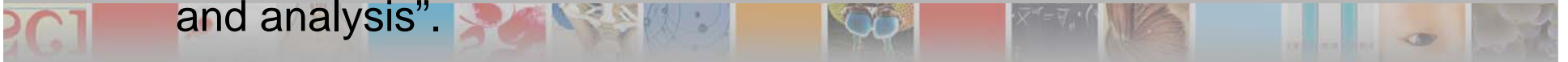


NSERC News

Collection of Self-Identification Data

Why is self-identification data collection important?

- Driven by the Government of Canada's commitment to equity, diversity and inclusion (EDI) in the federal research enterprise.
- Also guided by:
 - [Canada Research Coordinating Committee's](#) work plan includes “removing barriers faced by under-represented and disadvantaged groups to ensure equitable access across the granting agencies and establish Canada as a world leader in equity, diversity and inclusion in research”;
 - [Budget 2018](#) which requires the granting agencies “to publish an annual report for Canadians on progress in addressing challenges in the research system, including equity and diversity, and support for researchers at various career stages”; and
 - [Canada's Fundamental Science Review's](#) recommendation that federal funding agencies “should collaborate to improve data collection and analysis”.



NSERC News

Collection of Self-Identification Data

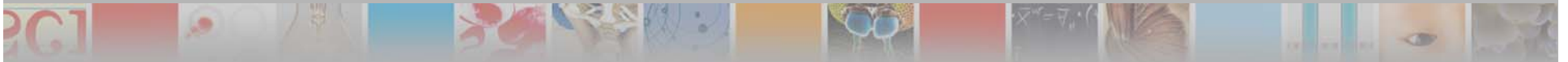
What questions are included in the mandatory self-identification form?

The granting agencies ask for the following information:

1. Age - What is your date of birth?
2. Gender – Select the option that you identify with, i.e. Woman; Man; or Gender-fluid, non-binary; and/or Two-Spirit
3. Indigenous Identity – Do you identify as Indigenous - that is First Nations, Métis, or Inuit?
4. Person with a disability – are you person with a disability?
5. Visible Minority - Do you identify as a member of a visible minority in Canada?

Completing the self-identification form is mandatory, but for each category there is an option for “I prefer not to answer.”

Please note that self-ID data is not shared with reviewers.



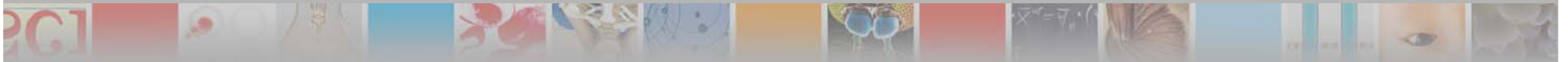
RGS Program Updates

Canada Graduate Scholarships – Doctoral (CGS D)

CGS D Harmonized Tri-Agency Program

- A modern, simplified process
- Communications plan in development
- Launch June 2019
- Harmonized design elements include:
 - Dates and deadlines
 - Program description
 - Indigenous applicants
 - Removal of SME
 - Selection process
 - Selection criteria and weighting
 - Application package
 - Value and duration

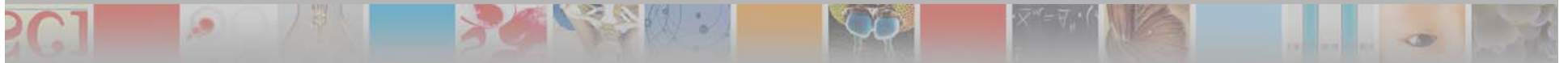
Contact: schol@nserc-crsng.gc.ca



NSERC News

Federal Budget 2018 Investing in Canadian Scientists and Researchers

Agency	Programs	Over five years	Ongoing/year
NSERC		\$354.7 million	\$90.1 million
CIHR		\$354.7 million	\$90.1 million
SSHRC		\$215.5 million	\$54.8 million
Tri-councils	New EDI initiatives	\$21 million	--
Tri-councils	New research fund	\$275 million	\$65 million
Tri-councils	Colleges (CCI)	\$140 million	--
Tri-councils	CRC (early career)	\$210 million	\$50 million
Tri-councils	Research support fund	\$231.3 million	\$58.8 million

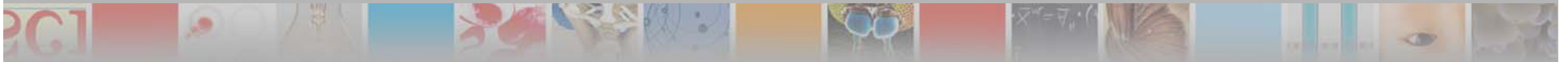


NSERC News

Federal Budget 2018 Investing in Canadian Scientists and Researchers

	2018-19	2019-20	2020-21	2021-22	2022-23	On-going
Federal Budget Amount	\$44M	\$59M	\$71M	\$90M	\$90M	\$90M

- 25% increase in Discovery Program budget
 - Tied to “clear objectives and conditions so that Canada’s next generation of researchers – including students, trainees and early-career researchers – is larger, more diverse and better supported”
- \$44M in 2018-19 includes new funds for:
 - **Discovery Grants**
 - Early Career Researchers
 - Discovery Development Grants
 - Research Tools and Instruments
 - Scholarships and Fellowships



NSERC News

Federal Budget 2019 Investing in the Middle Class

\$151.4 million over five years, starting in 2019/20, to the agencies

Agency	Programs	Over five years	Ongoing/year
NSERC/CIHR/SSHRC	Canada Graduate Scholarship (CGS) Master's (CGS-M) and Doctoral (CGS-D)	\$114 million	\$26.5 million
NSERC/CIHR/SSHRC	Paid parental leave for student researchers	\$37.4 million	\$8.6 million

