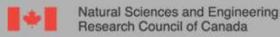
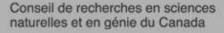
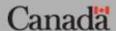
#### People. Discovery. Innovation. Les gens. La découverte. L'innovation.







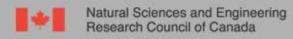


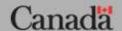


## **Connect with NSERC**

#### **Community Engagement Visit 2018**



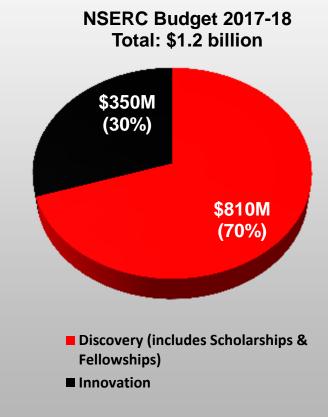




#### **NSERC Overview**

NSERC's vision is to make Canada a country of discoverers and innovators for the benefit of all Canadians.

- Supports more than 33,000 students and postdoctoral fellows.
- Funds more than 11,300 professors for their research programs.
- Supports university and college-industry research partnerships with over 3,600 Canadian companies.
- Business invests more than \$220 million in university and college researchers.



Excludes administration, 4% of total budget.



## 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

# Federal Investment in Fundamental Research - NSERC

	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"

# Canada Research Coordinating Committee

#### **Membership**

- Presidents of the three federal granting councils
- Deputy Ministers of Innovation, Science and Economic Development Canada (ISED) and Health Canada
- Presidents of Canada Foundation for Innovation (CFI) and National Research Council (NRC), and the Chief Science Advisor, are participants

#### **Priorities**

- International, multidisciplinary, high-risk and rapid-response research
- Emerging areas of research
- Equity, diversity and inclusion in research
- Indigenous research and research training model
- Development of talent throughout the research career life cycle

## **Equity, Diversity and Inclusion (EDI)**

Equity, diversity and inclusion (EDI) strengthen the scientific and engineering communities and the quality, social relevance and impact of research.

#### Visit NSERC's EDI website for resources:

http://www.nserc-crsng.gc.ca/NSERC-CRSNG/EDI-EDI/index\_eng.asp

- NSERC's EDI framework;
- Training modules and tools;
- Related programs and awards; and
- Events, such as Gender Summit.















## Over to you...

- Questions?
- Comments?
- Advice?























## **PEOPLE**























#### **Advances in Harmonization**

- 2018 Tri-Agency Research Training Award Holders Guide (i.e. scholarships literature)
  - Removal of restrictions on other sources of income
  - Simplification and expansion of allowed part-time arrangements
  - Harmonized Post-Award Forms
  - Paid Parental Leave made more accessible
  - Leave for Relevant Work Experience Expanded and Simplified
  - Interruption of CGS M award now allowed between a master's and a PhD program

# Michael Smith Foreign Study Supplements (MSFSS)

Changes to the MSFSS program further harmonize processes across agencies, reduce administrative burden on applicants, supervisors and institutions and provide increased flexibility.

- Removal of allocations
- Single program description webpage
- Simplified submission process
- Reduced application components
- Reduced minimum duration
- Post-award guide harmonization





# **Support for Indigenous Students & Fellows**

#### Postgraduate scholarships programs

Institutions can recommend an unlimited number of self-identified Indigenous applicants above their application quota

#### **USRA** awards

Applications submitted by Indigenous applicants will not be counted as part of the university quota

## Aboriginal Ambassadors in the Natural Sciences and Engineering Award (AANSE)

- Up to \$5,000 towards travel costs
- AANSE holder participates in science promotion events or shares their NSE research & education experience

#### **PromoScience**

#### **Objectives:**

- To inspire young Canadians, especially Aboriginal youth, girls, and other underrepresented youth, to study and plan careers in STEM
- 2018 special call continues for teacher tools and support

#### Youth:

- Kindergarten to high school (including 1st year college in Quebec)
- definition broadened for 2018 to include activities that encourage Indigenous undergraduate students to pursue graduate STEM studies

**Ten Days of Discovery and Innovation** 

# SCIENCE OIDYSSEY

From Friday May 11 to Sunday May 20, 2018



#### **NEW- NSERC Student Ambassadors**

- Promotion of STEM to Canadian youth by Canadian youth
- To encourage post-secondary students and fellows to share their NSE experience with underrepresented youth (K-12)
  - Outreach activity must be organized independently by the applicant
  - NSERC pays \$1,000 in support of event costs

# Collaborative Research and Training Experience Program (CREATE)

The CREATE program supports the training of teams of highly qualified students and postdoctoral fellows from Canada and abroad through the development of innovative training programs.

CONTACT: CREATE@NSERC-CRSNG.GC.Ca















# Collaborative Research and Training Experience Program (CREATE)

#### **Competition Statistics**

	2015	2016	2017	2018*
LOIs received:	125	114	109	112
Candidates invited:	48	52	53	55
Applications received:	45	52	51	53
Grants awarded:	17	13	18	18

### **CREATE Program – Recent Changes**

- CREATE grant start date: Choice of April 1 or September 1.
- Flexible budget request per year (total remains \$1.65M):
  - Year 1: \$150k ± 50k
  - Years 2-6: \$300k ± 50k per year
- Program coordinator salary: eligible expense for duration of the grant (formerly only first 2 years).
- International stream, DFG grant duration: can match the duration (up to 9 years) of the complementary German International Research Training Group (IRTG) grant.

## Over to you...

- Questions?
- Comments?
- Advice?





















## **DISCOVERY**





















#### 2018 Peer Review - Thank You!

More than 3000 Discovery Grant Applications annually

**16,000** reviews by more than **400** Evaluation Group Members, and **8000+** External Reviews















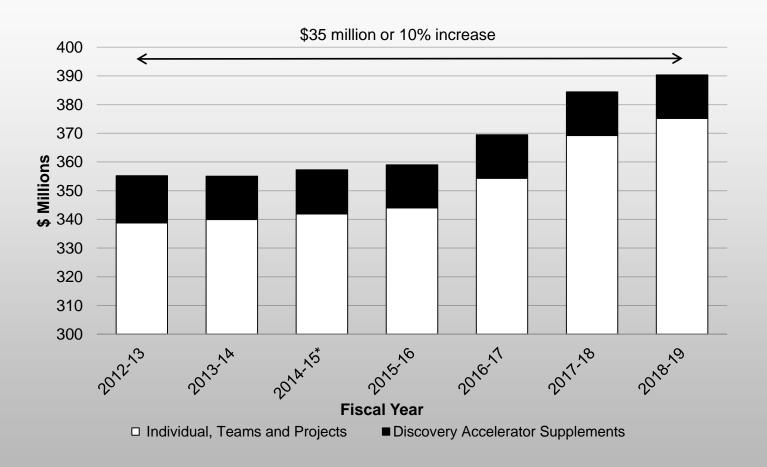






## **NSERC Discovery Grants Funding**

(millions of dollars)



- Includes additional funding received resulting from Federal Budgets 2014 and 2016
- Projected Expenditures for 2018-2019

## **Discovery Grants**

### Competition Results 2018\*

	Faulty Canada	Establishe		
	Early Career	Dotumina	Not Holding a	Total
	Researchers	Returning	Grant	
# of applications	677	1635	901	3213
# of awards	433	1366	326	2125
Success Rate	64%	84%	36%	66%

<sup>\*</sup>Not official results

### **Early Career Researchers (ECRs)**

#### Enhanced Support through Discovery Grants

- ECRs typically receive award top-up
- Success rate is always >50%

Competition Year	2013	2014	2015	2016	2017	2018
Success Rate for ECRs	60%	70%	65%	75%	69%	64%

433 new Discovery Grants to ECRs in 2018

### **Early Career Researchers (ECRs)**

#### Enhanced Support through Discovery Grants

#### 2017

- ECRs may extend their Discovery Grants for an additional year with funds before re-applying
- ECR definition changed to extend the window from two years to three years of the start date of an NSERC eligible position

#### 2018

- ECR definition further expanded: researchers with nonacademic research experience may now be considered ECRs
  - Includes all researchers who are within three years of their first independent academic position.
- Applicants may self-identify as ECR

### **Discovery Grants**

#### Equity, Diversity and Inclusion

#### **Competition Success Rates - 2018**

	Female*	Male*	Not indicated
Early Career Researchers (ECR)	60%	63%	69%
Established Researchers (ER)	70%	66%	65%

<sup>\*</sup>Data from CCV. NSERC is committed to using more gender inclusive language in the future.

#### **Discovery Grants**

#### Equity, Diversity and Inclusion

Bias in Peer Review training module for peer reviewers

Consideration of a researchers' contributions to Equity, Diversity and Inclusion in the research enterprise:

- ✓ As a contribution that has advanced a field of research (Excellence of the Researcher)
- ✓ As a contribution to the training of Highly Qualified Personnel

#### **Discovery Development Grants (DDG)**

#### A 5 year Pilot

- Promote a diversified base of high-quality research in small universities
- Foster a stimulating environment for research training in small universities
- Facilitate recipients' access to additional funding from other sources
- Award valued at \$10K /year for 2 years
- Was first launched in 2015 competition cycle

#### **DDG Competition Results**

- 2015, 57 awards
- 2016, 43 awards
- 2017, 54 awards
- 2018, 34 awards\*

#### **Discovery Supplements**

## DISCOVERY ACCELERATOR SUPPLEMENTS (DAS)

- > For researchers who:
  - Have highly original and innovative research programs
  - Show strong potential to become international leaders within their field
- > \$40,000 per year for 3 years; up to 125 supplements per year

## NORTHERN RESEARCH SUPPLEMENTS

- > For research in Canada's North
- > \$10-\$25,000 per year for 5 years

## DND / NSERC DISCOVERY GRANT SUPPLEMENTS

- Support for discovery-based research in the DND target areas
- > \$120,000 over three years; up to 50 supplements per year

## Research Tools and Instruments (RTI)

	2018*	2017	2016
Budget	\$25.1M	\$30.5M	\$26.1M
Applications	1043	748	657
Awards	208	241	215
Success Rate	20%	32%	33%
Funding Rate	21%	33%	33%

<sup>\*</sup>Not official results

#### RTI Program Update - 2019 competition

#### Changes to RTI selection criteria

- Reduction in the number of selection criteria from five
   (5) to three (3)
- Applied weighting for each criterion
- ➤ The weighted scoring method will better guide Selection Committee members during review
- ➤ Will provide applicants with more detailed scoring on their proposals to help improve subsequent applications

### **Evaluation of Discovery Program**

- Government of Canada requires that grants and contributions programs be evaluated every 5 years
- Will focus on different components of the Discovery Program
- How effectively does the Discovery Program support excellence in research in Canadian universities?
- The launch of data collection phase, which will include a survey to the research community, currently planned for Fall 2018



## Over to you...

- Questions?
- Comments?
- Advice?



















## INNOVATION





















#### **Celebrating >10,000 Engage Grants**

NSERC's Engage investment has created 10,377 new collaborations involving...

Engage kicks off collaboration

1 in 4

Engage projects become longer term collaborations

- **6,200** companies
  - 76% new to NSERC
  - 94% of companies describe their project as a success
  - 86% of companies state their problem was fully or partially solved through the Engage project
- 1,740 NSERC-funded followon collaborations

- 3,800 professors
  - 53% new to NSERC-funded industry collaboration
  - 2/3 of professors report using the results of the six-month Engage project in a publication and student thesis
- 19,000 HQP participating
  - One in six projects results in an Engage student being hired by the company.

#### Changes to CRD/IRC Literature

(effective April 1, 2018)

CRD grants encourage consideration of EDI.

NSERC is broadening the impact of its grants by...

- a. expanding the partnership models
- b. engaging multinationals (MNEs) on a global level
- c. having foreign companies collaborate with Canadian companies on an equal basis

NSERC will no longer request or review RAs

# **Budget 2018: Research Partnerships**

- As part of the Government of Canada's Horizontal Innovation Review of business-facing programs, Budget 2018 instructed NSERC to consolidate its Partnership grants into a single program.
  - Includes Engage Grants, Industrial Research Chairs, Connect Grants,
     Strategic Partnership Grants for Networks and Projects, Experience
     Awards, and Collaborative Research and Development Grants.
- Presents a significant opportunity to evolve, modernize and simplify our grants, while retaining the key features that have made these programs valuable.

### **Budget 2018: Research Partnerships**

- NSERC is currently working to define the way forward, including how we can best consult with partners and stakeholders in the research and innovation world.
- We will keep you informed of changes and timelines as we make progress.
- In the meantime, NSERC will continue to accept new applications to its existing suite of partnership programs, and will honour its commitments for currently-held awards.
- Please contact <u>RPP@NSERC-CRSNG.GC.CA</u> should you have any questions regarding your currently held grants.

# Over to you...

- Questions?
- Comments?
- Advice?















# SUPPORTING AWARDEES





















#### Family and Medical Leave

#### Grantees

Grant holders who plan to take family-related leave or medical leave may be eligible for a grant extension with funds for up to two years.

#### **Primary Caregiver Policy**

 Discovery Grant holders who decline taking extended maternity, parental or adoptive leave through their institution may be eligible to receive a one-year grant extension with funds.

#### Family and Medical Leave

#### Students & Fellows

- Paid Parental Leave for scholarship & fellowship holders for up to 6
  months
- For students and fellows paid from NSERC grants, parental leave supplement also paid by NSERC

NEW-- NSERC scholarship or fellowship holders who are eligible for employment insurance or other parental leave supplements from other sources now qualify for NSERC parental leave supplements.

# Over to you...

- Questions?
- Comments?
- Advice?

























# OTHER UPDATES



















#### **Open Access**

#### **Tri-Agency Open Access Policy on Publications**

http://www.science.gc.ca/eic/site/063.nsf/eng/h F6765465.html

- Researchers must make articles freely available online within 12 months of publication
- Applies to all grants awarded May 1, 2015 and onward
- How to comply:
  - Deposit final, full-text, peer-reviewed manuscript in a repository; and/or
  - Submit final, peer-reviewed manuscript to journal that offers open access within 12 months
- Contact: <u>openaccess@nserc-crsng.gc.ca</u>

#### **Data Management**

Based on research community feedback, the Tri-Agency Statement of Principles on Digital Data Management was released in June 2016.

http://www.science.gc.ca/eic/site/063.nsf/eng/h\_83F7624E.h tml?OpenDocument

- Over the coming months, NSERC, SSHRC and CIHR will be seeking input from the research community on draft policy text and how best to realize the principles presented in the Statement.
- Online consultation—visit NSERC's website over the next few months for news

http://www.nserc-crsng.gc.ca

#### Wrap-up

- Final questions/ comments?
- Other suggestions, questions can be directed to connect@nserc-crsng.gc.ca
- Thank you!











