BANTING
RESEARCH FOUNDATION

Annual Report 2018

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About our logo

Our logo shows the characteristic three-pair structure of the insulin molecule, with white lines radiating brightly from the centre. By evoking the explosive power of scientific discovery to change our lives profoundly, the stylized molecule and rays serve as a graphic metaphor for the history and contemporary mandate of the Banting Research Foundation.

Mission

The Banting Research Foundation invests in the early careers of researchers who demonstrate excellence and creativity in health and biomedical sciences.

La Fondation de recherche Banting investit dans le début de carrière de chercheurs qui font preuve d'excellence et de créativité en sciences de la santé et en sciences biomédicales.

A Frederick Banting oil sketch, composed during a painting expedition with AY Jackson of the Group of Seven, circa 1930

Message from the Chair

The Banting Research Foundation is very proud to provide a record number of Discovery Awards to nine new investigators across Canada from the 2018-19 competition. Our report highlights these awardees and their research proposals. We also report on the impressive outcomes of the 2017-18 awardees projects. Many thanks to our donors and new sponsors, including the McLean Foundation and the Dystonia Medical Research Foundation Canada, for their generous support that enabled us to continue to grow our Discovery Awards program. Despite this success, our Foundation continues to receive applications from many eligible candidates who we are unable to support. Therefore, we must continue to focus our efforts on increasing our funding capacity through strategic partnering and fund-raising.

May I thank our volunteers including our Board of Trustees, Campaign Cabinet members and Grant Review Panel for their commitment and expertise and many hours of service. Their efforts sustain the Banting legacy of scientific excellence and innovation in Canada.

Over the next year our Foundation will begin to plan for the 100th anniversary of the discovery of insulin in 2021. This is a great opportunity to engage both public and private sectors in learning about and investing in our Mission.

My final thanks is to Ms Ramona Rea, our Executive Director for the last 6 years, who has moved on in her career. Ramona was instrumental in propelling the Banting Research Foundation to a new level of organizational management and performance. Ms Tavia Caplan, our new Executive Director, is a recent MSc in Molecular Genetics graduate and is experienced in managing volunteer organizations. Welcome Tavia!

Catharine Whiteside, CM MD PhD FRCPC
Chair, Board of Trustees
The Banting Research Foundation

Board of Trustees 2017-18

Dr Catharine Whiteside
Chair of the Board
Emerita Professor and former Dean of Medicine
University of Toronto

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Senior Fellow, Massey College
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University of Toronto

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John M Burnes (2000-2009)
John G Ambrose (1994-2000)
Dorothy M Hellebust (1990-1994)
John H Watson (1987-1990)
Elizabeth H Pearce (1981-1987)
William J Farmery (1977-1981)
John K Macdonald (1960-1977)

Grant Review Panel 2018

Dr Reinhart Reithmeier, Chair
Professor, Department of Biochemistry
University of Toronto

Dr Patricia Brubaker, Vice-Chair and Scientific Officer
Professor, Departments of Physiology and Medicine
University of Toronto

Dr Dawn Bowdish
Associate Professor, Department of Pathology and Molecular Medicine
McMaster University

Dr Robert Chen
Professor, Department of Medicine
University of Toronto

Dr Brent Derry
Professor, Department of Molecular Genetics
University of Toronto

Dr Rodrigo Fernandez-Gonzalez
Associate Professor, Institute of Biomaterials & Biomedical Engineering
University of Toronto

Dr Anthony Gramolini
Professor, Department of Physiology
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Dr Susan Jaglal
Professor, Department of Physical Therapy
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Dr Robert Maunder
Professor, Department of Psychiatry
University of Toronto

Dr Arthur Mortha
Assistant Professor, Department of Immunology
University of Toronto

Dr Jonathan Rocheleau
Associate Professor, Institute of Biomaterials & Biomedical Engineering
University of Toronto

Dr Christopher Yip
Professor, Department of Chemical Engineering and Applied Chemistry
Director, Institute of Biomaterials & Biomedical Engineering
University of Toronto

Discovery Award Reports 2017-18

Florian Bentzinger, PhD, Université de Sherbrooke

Niche regulation of muscle stem cell specification

Skeletal muscle tissue is maintained and repaired by muscle stem cells (MuSCs), which are regulated by external signals in their "niche," the micro-environment in which they reside. Changes in niche signals that negatively affect stem cell function occur in degenerative diseases of muscles, and in aging and diabetes. To understand the role of the MuSC niche in the context of aging, Dr Bentzinger's research team examined the effects of aging on regulatory cells and discovered an aging defect in a fibroblastic muscle resident cell population that is a key regulator of MuSC function. His work also showed that altered signals from these cells contribute to MuSC dysfunction and that this mechanism can be targeted to rejuvenate muscle tissue. Dr Bentzinger's group continues to study the role of regulatory signals in the MuSC niche, with the goal of developing novel stem-cell-based treatments to restore or preserve healthy muscles.

Jennifer Gordon, PhD, University of Regina

HPA axis dysregulation in the etiology of perimenopausal depression

Women are 2-4 times more likely to develop depression during perimenopause than at any other time in their lives. Dr Gordon hypothesized that increased estrogen fluctuation during this menopause transition phase may trigger dysregulation of the body's central stress response system, causing women to be more susceptible to depression. To test this hypothesis, Dr Gordon's research group monitored and surveyed 100 perimenopausal women. Preliminary results show that there is a large amount of individual variability in terms of how women respond emotionally and biologically to hormonal fluctuation in the menopause transition. Her work continues with the aim of further understanding the effects of the hormonal environment on women's risk for depression.

Catherine Larochelle, MD PhD, CRCHUM, Université de Montréal

Molecular mechanisms underlying T lymphocytes interactions with oligodendrocytes in neuroinflammation

In multiple sclerosis (MS), there is an abnormal response of immune cells. This inflammatory response injures oligodendrocytes, the cells that support and insulate neurons, leaving neurons vulnerable. Dr Larochelle's research team previously discovered that certain immune cells, T lymphocytes, directly interact with oligodendrocytes. To understand this interaction, Dr Larochelle's team used biophysical technology to identify the cell adhesion molecules present on oligodendrocytes and showed that the expression of these molecules is increased in neuroinflammatory conditions. Her work to further characterize T lymphocytes interactions with oligodendrocytes continues towards the aim of understanding immune-mediated oligodendrocyte injury in MS.

Gareth Lim, PhD, CRCHUM, Université de Montréal

Evaluating the therapeutic potential of 14-3-3ζ for the treatment of obesity

Current therapies for reducing body weight are only modestly successful, and none directly target fat cells, which are key in the development of obesity. Fat cells require a complex roadmap of signals to grow. How these signals are coordinated is not known, but molecular scaffold proteins could be key players. The *14-3-3ζ* scaffold protein plays an essential role in the growth of fat cells, which raises the possibility of targeting it to treat obesity. Dr Lim's research team explored how obesity influences the types of molecules that interact with *14-3-3ζ*. By Identifying how these proteins control the growth of fat cells, this work will help to increase our understanding of the processes behind the development of obesity. Furthermore, these proteins may also represent potential therapeutic targets for treating obesity.

Adena Scheer, MD, St Michael's Hospital, University Of Toronto

Cross-cultural communications in breast cancer treatment

Breast cancer is a delicate diagnosis with multiple surgical treatment options to discuss, many of which are preference-based decisions. To understand how cultural and language barriers affect these decisions, Dr Scheer's research team conducted in-depth interviews with patients and health care practitioners. This foundational work showed that there is a clear inequity in the shared decision making process for immigrant women around the type of breast cancer surgery they should have. Multiple barriers to shared decision making have been identified including language, resource availability, and the use of family members as translators. These findings will ultimately be used to develop decision-support tools culturally tailored for immigrants diagnosed with breast cancer in order to reduce communication-related health inequities.

Julien van Grevenynghe, PhD, INRS – Institut Armand-Frappier, Université de Québec

Autophagy regulates CD8 T-cell killing activity during chronic HIV-1 infection

Persistent HIV-1 infection is associated with elevated inflammation that drives metabolic and molecular deregulations. In order to restore proper memory CD4 T-cell (Mem) survival in persistently-infected patients, Dr van Grevenynghe's research group is targeting sustained increased interferon type I (IFN-I) signaling among these cells. His team determined that blocking IFN-I pathways using specific antibodies in patients leads to a significant improvement in both cell resistance to programmed cell death and long-lasting cell maintenance. Further, these treatments improve Mem survival by inducing the activation of AKT signalling. His work continues with the aim of further identifying new molecular targets to enhance Mem survival and function during persistent HIV-1 infection.

2018-19 Discovery Awards

These projects were approved for funding in the 2018-19 year.

Ali Abdul-Sater, PhD, York University

Dissecting the role of TRAF1 in regulating inflammatory and autoimmune diseases

TRAF1 is an immune signaling molecule associated with the development of Rheumatoid Arthritis. By determining how TRAF1 functions and interacts with different immune pathways, Dr Abdul-Sater's group will be able to devise a research model to specifically target TRAF1, which may provide a favorable therapeutic outcome for Rheumatoid Arthritis.

Kyle Biggar, PhD, Carleton University

Identification of new substrates of the histone regulator, SMYD3, and their implication in lung cancer development

Dr Biggar's research team is using modern biochemical approaches to investigate the function of the histone regulator SMYD3. In lung cancer patients, analysis showed that SMYD3 expression predicted both progression and survival. The research team is working to identify new proteins that are modified by SMYD3 to advance our understanding of how SMYD3 dysfunction drives cancer.

Dylan Cooke, PhD, Simon Fraser University

Accelerated mapping of individual variation in brain organization with online detection of EMG activity

Dr Cooke's research team is developing a fast method to measure the organization of the part of the brain that controls muscle activity. The resulting "maps" will show how individual brains differ in their organization, and whether different patterns relate to different levels of ability.

Salim Islam, PhD, INRS – Institut Armand-Frappier

Understanding colonization and persistence in bacterial social networking

Dr Islam's research group is examining the mechanisms used by bacteria to remodel their surfaces in order to generate connection tubes important for colonizing biological settings. This knowledge can ultimately be used to develop therapeutics to target and disrupt the systems responsible for bacterial surface remodeling and enhance health outcomes for patients with both acute and chronic infections.

Nomazulu Dlamini, MD PhD, The Hospital for Sick Children, University of Toronto

Neural network reorganization and maladaptive plasticity in dystonia post childhood basal ganglia stroke

Dr Dlamini's research group is examining the neural networks of pediatric stroke patients with and without post-stroke dystonia. Identifying differences in neural networks between the patient populations will improve our understanding of why, when, and in whom dystonia occurs, and help to identify potential targeted therapies.

Robert Huber, PhD, Trent University

Using the social amoeba Dictyostelium discoideum to study Batten disease

Mutations in the CLN5 gene cause Batten disease, a rare and devastating neurological disorder. Dr Huber's research team is using a social amoeba as a model system to examine the effects of CLN5-deficiency on cellular and developmental processes. Translation of this work to human cell models will enhance our understanding of CLN5 function in human cells.

Ian Rodrigue-Gervais, PhD, INRS – Institut Armand-Frappier, Université de Québec

Examining the function of mitochondrial proteases in flu pathogenesis

The flu kills thousands of people annually, often as a result of tissue death, or necrosis, which occurs as the body attempts to clear the virus. Dr Rodrigue-Gervais' group is working to understand how proteins control necrosis, which is a key step towards developing new methods to combat the flu.

Rebecca Shapiro, PhD, University of Guelph

Using genetic and functional genomic analysis to study antifungal drug resistance in Candida auris

Candida auris is an emerging fungal pathogen that is highly resistant to antifungal drugs, and a critical threat to public health. Dr Shapiro's research group is developing cutting-edge CRISPR-based technologies to study how *C. auris* can tolerate antifungal drugs and cause life-threatening disease.

John Trant, PhD, University of Windsor

Developing enzymatically-resistant carbohydrate vaccines for treating lung cancer

Vaccines incorporating sugars found exclusively on cancer cells are promising strategies for treating cancer. Dr Trant's research team is working to create an effective vaccine that uses a form of stabilized sugar and is recognized by the immune system, that can ultimately be used to treat carcinomas.

Pathway to Discovery Event

At our September 2018 recognition event, **Dr Imogen Coe** (1998 Discovery Awardee) spoke on the importance of supporting researchers early on in their careers. She emphasized that early-career funding not only helps establish longer-term funding, but allows researchers to feel accepted and valued. **Dr Michael Suits** (2015 Discovery Awardee) spoke about his research on periodontal disease and acknowledged with gratitude how his award allowed him to hire students, read more, and apply for more grants.

Dr Michael Suits (left), Dr Imogen Coe (right)

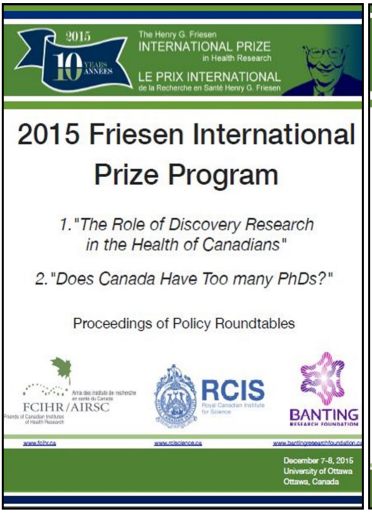
Dr Aubie Angel (left), Ms Ramona Rea (center), Dr Catharine Whiteside (right)

The Board recognized Executive Director of over six years, Ramona Rea, for her dedication and genuine commitment to the mission of the Foundation. The Board also recognized Dr Robert Chen and Dr Paul Cadario for their dedicated service to the Grant Review Panel and Board of Trustees, respectively.

Members of the Banting Research Foundation Board of Trustees and Honorary Patron Mrs Nona Macdonald Heaslip.

Henry G Friesen International Prize in Health Research

The Banting Research Foundation co-sponsored the Henry G Friesen International Prize in Health Research awarded to Sir Paul Nurse in 2015 and Janet Rossant in 2016. Dr Rossant and Dr Henry Friesen were both funded by the Banting Research Foundation early in their careers. In conjunction with the Friesen Prize Program, Roundtables were held in Ottawa to address major issues in Canadian science and education. The thoughts and ideas of the leading scientists brought together by the Roundtables are assembled in the 2015 and 2016 Proceedings of the Policy Roundtables.



CSCI-CITAC Young Investigators Forum

For the last four years, the Banting Research Foundation has sponsored the oral abstract and poster presentation awards in the Young Investigators Forum at the annual meeting of the Canadian Society for Clinical Investigation and the Clinician Investigator Trainee Association of Canada. Young clinician investigators presented research posters in several categories, and some were invited to present their research orally. Prizes were awarded to the highest-ranked presenters. These young clinician investigators in training represent the future of clinical research in Canada, and we are pleased to offer our support.

BALANCE SHEET

As at June 30

	2018	2017
	$	$
ASSETS		
Cash and cash equivalents	**23,849**	28,788
HST recoverable	**6,297**	6,292
Investments, at fair value	**4,670,922**	4,402,920
Artwork	**60,000**	—
	4,761,068	4,438,000
LIABILITIES AND FUND BALANCES		
Liabilities		
Accounts payable and accrued liabilities	**10,770**	17,327
Fund balances		
General Fund	**829,723**	664,555
Restricted Fund	**12,500**	—
Endowment Fund	**3,908,075**	3,756,118
Total fund balances	**4,750,298**	4,420,673
	4,761,068	4,438,000

This summarized financial information is derived from financial statements that were audited by Ernst & Young LLP, Chartered Professional Accountants. Complete financial statements are available upon request.

CONDENSED STATEMENT OF REVENUE AND EXPENSES AND CHANGES IN FUND BALANCES

Year ended June 30

	2018	2017
	$	$
REVENUE		
Investment income, net	**460,840**	430,920
Donations	**63,739**	38,964
Contribution of artwork	**60,000**	—
	584,579	469,884
EXPENSES		
Grants awarded to new investigators	**149,565**	146,000
Other grants	**9,500**	14,500
Professional fees	**75,932**	70,493
Accounting and audit fees	**11,164**	10,964
Office, general and administrative	**8,793**	10,153
	254,954	252,110
Excess of revenue over expenses for the year	**329,625**	217,774
Fund balances, beginning of year	**4,420,673**	4,202,899
Fund balances, end of year	**4,750,298**	4,420,673

This summarized financial information is derived from financial statements that were audited by Ernst & Young LLP, Chartered Professional Accountants. Complete financial statements are available upon request.

Donors, Partners and Sponsors

The Banting Research Foundation was established in 1925 to fund biomedical research innovation. From its endowment, interest and new donations the Foundation has now funded 1350 awards. Currently, only 10-12% of eligible Discovery Award applicants across Canada are funded due to our limited resources. To ensure that every opportunity to support innovative scientific discovery is achieved, we made it our aim in 2016 to double the number of awards over the next 5 years. We have since made great progress, increasing the number of awards from 6 to 9 in 2018-2019. Still every year several meritorious applications are left unfunded.

Your contribution will go a long way to help launch the careers of our young scientists whose research promises to have major impacts on improving health. We are interested in providing opportunities for sponsors who wish to partner with the Foundation targeting research in a specific health or biomedical field.

The Banting Research Foundation gratefully acknowledges donations from the following individuals and corporations during the 2018 fiscal year:

Mr John Burnes
Mr David J Foley
Ms Laura Formusa
Ms Sheila Jarvis
Ms Hollie Matthews
Dr Stephen Scherer
Dr Catharine Whiteside

Dystonia Medical Research Foundation Canada
The McLean Foundation
Donors through CanadaHelps
Donations in memory of Joanne Matthews
Anonymous

Thank you! Your donations have supported innovative health and biomedical research projects by outstanding early-career investigators.

Many thanks to the University of Toronto Faculty of Medicine for the in-kind contribution of our office space.

Thank you to Heffel Fine Art Auction House for the in-kind appraisal of our Banting paintings.

Charitable registration number 108072927 RR 0001

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BantingResearchFoundation.ca

The Banting Research Foundation

Financial statements
June 30, 2018

Independent auditors' report

To the Members of
The Banting Research Foundation

Report on the financial statements

We have audited the accompanying financial statements of **The Banting Research Foundation**, which comprise the statement of financial position as at June 30, 2018, and the statements of revenue and expenses and changes in fund balances and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of **The Banting Research Foundation** as at June 30, 2018, and the results of its operations and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Report on other legal and regulatory requirements

As required by the *Corporations Act* (Ontario), we report that, in our opinion, Canadian accounting standards for not-for-profit organizations have been applied on a basis consistent with that of the preceding year.

Ernst & Young LLP

Toronto, Canada
November 8, 2018

Chartered Professional Accountants
Licensed Public Accountants

The Banting Research Foundation

Statement of financial position

As at June 30

	2018 $	2017 $
Assets		
Cash and cash equivalents	**23,849**	28,788
HST recoverable	**6,297**	6,292
Investments, at fair value *[note 3]*	**4,670,922**	4,402,920
Artwork	**60,000**	—
	4,761,068	4,438,000
Liabilities and fund balances		
Liabilities		
Accounts payable and accrued liabilities	**10,770**	17,327
Commitment *[note 7]*		
Fund balances		
General Fund	**829,723**	664,555
Restricted Fund	**12,500**	—
Endowment Fund *[note 5]*	**3,908,075**	3,756,118
Total fund balances	**4,750,298**	4,420,673
	4,761,068	4,438,000

See accompanying notes

On behalf of the Board:

Trustee

Trustee

The Banting Research Foundation

Statement of revenue and expenses and changes in fund balances

Year ended June 30

	General Fund		Restricted Fund		Endowment Fund		Total	
	2018	2017	2018	2017	2018	2017	2018	2017
	$	$	$	$	$	$	$	$
Revenue								
Investment income, net *[note 6]*	**308,883**	299,876	**—**	—	**151,957**	131,044	**460,840**	430,920
Donations	**26,239**	38,964	**37,500**	—	**—**	—	**63,739**	38,964
Contribution of artwork	**60,000**	—	**—**	—	**—**	—	**60,000**	—
	395,122	338,840	**37,500**	—	**151,957**	131,044	**584,579**	469,884
Expenses								
Grants awarded to new investigators	**124,565**	146,000	**25,000**	—	**—**	—	**149,565**	146,000
Other grants	**9,500**	14,500	**—**	—	**—**	—	**9,500**	14,500
Professional fees	**75,932**	70,493	**—**	—	**—**	—	**75,932**	70,493
Accounting and audit fees *[note 4]*	**11,164**	10,964	**—**	—	**—**	—	**11,164**	10,964
Office, general and administrative	**8,793**	10,153	**—**	—	**—**	—	**8,793**	10,153
	229,954	252,110	**25,000**	—	**—**	—	**254,954**	252,110
Excess of revenue over expenses for the year	**165,168**	86,730	**12,500**	—	**151,957**	131,044	**329,625**	217,774
Fund balances, beginning of year	**664,555**	577,825	**—**	—	**3,756,118**	3,625,074	**4,420,673**	4,202,899
Fund balances, end of year	**829,723**	664,555	**12,500**	—	**3,908,075**	3,756,118	**4,750,298**	4,420,673

See accompanying notes

The Banting Research Foundation

Statement of cash flows

Year ended June 30

	2018 $	2017 $
Operating activities		
Excess of revenue over expenses for the year	**329,625**	217,774
Deduct non-cash items		
Realized gain on sale of investments	**(126,622)**	(6,496)
Increase in unrealized gain	**(175,357)**	(301,576)
Contribution of artwork	**(60,000)**	—
Changes in non-cash working capital balances related to operations		
Increase in HST recoverable	**(5)**	(370)
Increase (decrease) in accounts payable and accrued liabilities	**(6,557)**	2,551
Cash used in operating activities	**(38,916)**	(88,117)
Investing activities		
Proceeds on sale of investments, net	**33,977**	89,893
Cash provided by investing activities	**33,977**	89,893
Net increase (decrease) in cash during the year	**(4,939)**	1,776
Cash and cash equivalents, beginning of year	**28,788**	27,012
Cash and cash equivalents, end of year	**23,849**	28,788

See accompanying notes

The Banting Research Foundation

Notes to financial statements

June 30, 2018

1. Description of organization

The Banting Research Foundation [the "Foundation"] was incorporated under the *Corporations Act* (Ontario) by Letters Patent in 1925. The Foundation supports talented young medical researchers in Canada conducting a broad range of health and bio-medical research. As its principal focus, the Foundation supports research awards for investigators who are within the first three years of their first university or research institute appointment.

The Foundation is a registered charity [charitable number 108072927RR0001] and, as such, is exempt from income taxes under the *Income Tax Act* (Canada).

2. Summary of significant accounting policies

The financial statements of the Foundation have been prepared in accordance with Canadian accounting standards for not-for-profit organizations. The significant accounting policies are as follows:

Fund accounting

The Foundation follows the restricted fund method of accounting for contributions. The Foundation ensures, as part of its fiduciary responsibilities, that all funds received with a restricted purpose are expended for the purpose for which they are provided.

For financial reporting purposes, the accounts have been classified into the following funds:

[a] Endowment Fund

The Endowment Fund accounts for the resources that are required by the donor to be maintained by the Foundation on a permanent basis and resources transferred to the Endowment Fund by the Board of Trustees [the "Board"].

[b] Restricted Fund

The Restricted Fund accounts for the resources with restrictions required by the donor or the Board with respect to the purpose of the funds or when the funds can be spent. The Restricted Fund reports, as revenue and expenses, the receipt and the use of funds restricted by donors.

[c] General Fund

The General Fund accounts for the other revenue and expenses of the Foundation. The General Fund reports unrestricted resources available for immediate purposes.

Cash and cash equivalents

Cash and cash equivalents consist of cash on deposit and short-term investments with a short term to maturity of three months or less from the date of purchase unless they are held for investment rather than liquidity purposes, in which case they are classified as investments.

Notes to financial statements

June 30, 2018

Financial instruments

Investments reported at fair value consist of equity instruments that are quoted in an active market, as well as investments in pooled funds and any investments in fixed income securities that the Foundation designates upon purchase to be measured at fair value. Transaction costs are recognized in the statement of revenue and expenses and changes in fund balances in the period during which they are incurred.

Investments in fixed income securities not designated to be measured at fair value, are initially recorded at fair value plus transaction costs and are subsequently measured at amortized cost using the straight-line method, less any provision for impairment.

All investment transactions are recorded on the trade date.

Other financial instruments, including receivables and payables, are initially recorded at their fair value and are subsequently measured at cost.

Artwork

Donated artwork is recorded at an appraised value established by an independent appraisal in the year received by the Foundation. These assets are considered to have a permanent value and are not amortized, but are assessed annually for indicators of impairment.

Revenue recognition

Donations are recorded as revenue when received since pledges are not legally enforceable claims. Donor-restricted donations for endowment purposes are recognized as revenue in the Endowment Fund. Other donor-restricted donations are recognized as revenue in the Restricted Fund and unrestricted donations are recognized as revenue in the General Fund.

Income from investments, which consists of interest, dividends, distributions from pooled funds and realized and unrealized gains and losses, is recorded as revenue in the statement of revenue and expenses and changes in fund balances. Realized and unrealized gains (losses) earned on endowments externally restricted by donors are recorded as income (loss) of the Endowment Fund. Other investment income that must be spent on donor-restricted activities is recognized as income of the Restricted Fund. All other investment income (loss) is recognized as income (loss) of the General Fund.

Grants

Grants distributed by the Foundation are recorded as an expense when approved and all conditions to be complied with before payment is made have been met by the grantee. Grants returned to the Foundation are recorded as revenue when the Foundation becomes aware that the grantee is going to return the funds.

Contributed materials and services

Contributed materials and services are not recognized in the financial statements.

Notes to financial statements

June 30, 2018

3. Investments

Investments, at fair value, consist of the following:

	2018 $	2017 $
Cash	**13,049**	11,484
Phillips, Hager & North Canadian Money Market Fund	**88,308**	10,484
Phillips, Hager & North Bond Fund	**613,590**	567,589
Phillips, Hager & North Mortgage Pension Trust Fund	**622,688**	628,028
Phillips, Hager & North Canadian Equity Fund	**—**	665,695
Phillips, Hager & North Canadian Equity Value Fund	**717,090**	—
RBC Qube Low Volatile Canadian Equity Fund	**710,494**	631,228
RBC Emerging Markets Equity Fund	**219,911**	234,103
RBC Global Equity Focus Fund	**1,685,792**	1,654,309
	4,670,922	4,402,920

The asset mix of investments is as follows:

	2018 %	2017 %
Cash and cash equivalents	**2.2**	0.5
Canadian fixed income	**26.4**	27.2
Total cash and cash equivalents and fixed income	**28.6**	27.7
Canadian equities	**30.6**	29.4
Global equities	**40.8**	42.9
Total equities	**71.4**	72.3
	100.0	100.0

4. Related party transactions

The University of Toronto [the "University"] provides facilities to the Foundation for which no rent is paid. In addition, the University provides accounting services for a fee of $4,200 [2017 – $4,000]. In the event of dissolution of the Foundation, all of its remaining assets [after the payment of debts and liabilities] would be distributed to the University to form part of its Connaught Fund.

Notes to financial statements

June 30, 2018

5. Endowment Fund

The Endowment Fund consists of the following:

	2018 $	2017 $
Externally restricted by the donor	**1,607,261**	1,455,304
Internally restricted by the Board	**2,300,814**	2,300,814
	3,908,075	3,756,118

The portion of the Endowment Fund externally restricted by the donor was derived from the initial seed capital contributed in 1925 of $456,438. The portion of the Endowment Fund internally restricted by the Board was substantially derived from a $1,000,000 donation from the estate of Kate Taylor, contributed in 1952. The appreciation of the portion of the Endowment Fund externally restricted by the donor has been achieved through realized and unrealized gains in investment income, while the appreciation of the portion of the Endowment Fund internally restricted by the Board has been achieved through Board-approved transfers from the General Fund.

6. Investment income, net

Investment income, net consists of the following:

	2018 $	2017 $
Distributed income reinvested in pooled funds		
Interest and dividends	**101,152**	**103,634**
Capital gain distribution	**90,270**	**50,659**
Realized gain on sale of investments	**126,622**	**6,496**
Increase in unrealized gain	**175,357**	**301,576**
Investment management fees	**(32,561)**	**(31,445)**
	460,840	**430,920**

Investment income is allocated to the funds as follows:

	2018 $	2017 $
Total investment income reported above	**460,840**	430,920
Deduct 38.74% [2017 – 36.53%] of the realized gain and increase in unrealized gain allocated to the Endowment Fund	**(151,957)**	(131,044)
Investment gain allocated to the General Fund	**308,883**	299,876

Notes to financial statements

June 30, 2018

7. Commitment

The Foundation has committed to grant awards totalling $232,500 in the next fiscal year.

8. Financial instruments

Currency risk

The Foundation is exposed to currency risk with respect to the underlying investments held by pooled funds denominated in foreign currencies because the fair value and future cash flows will fluctuate due to the changes in the relative value of foreign currencies against the Canadian dollar.

Credit risk

The Foundation is exposed to credit risk in connection with its pooled funds that hold fixed income securities because of the risk that one party to the financial instrument may cause a financial loss for the other party by failing to discharge an obligation.

Interest rate risk

The Foundation is exposed to interest rate risk with respect to the underlying investments in fixed income securities held by the pooled funds because the fair value will fluctuate due to changes in market interest rates.

Other price risk

The Foundation is exposed to other price risk through changes in market prices [other than changes arising from interest rate or currency risks] in connection with its investments in pooled funds.