

2009-2010  
Annual Report



The Canadian Society for  
Mucopolysaccharide &  
Related Diseases Inc.

**Aerodynamically, the dragonfly shouldn't be able to fly...**

“When you  
care, people  
notice.”



-Susane  
Berger

Every day, kids with MPS and related diseases are overcoming challenges, working hard to be the best they can be, and soaring to new heights. For some, that means sitting up in a wheelchair or leaning in to deliver a kiss that brings indescribable joy to a parent or sibling; for others, it means getting an A on a math test, receiving an MVP award for athletic achievement, or lacing up ballet slippers for a big recital. Adults with MPS and related diseases are making their families proud by enriching family gatherings, living independently, or by passing bar exams. There are no limits on the human spirit and those with MPS display over and over again that they will not be contained by any arbitrary restrictions. In order to live their best lives, though, they need the

support of many. In the words of Susane Berger, “When you care, people notice.” Every donation made to support the Canadian MPS Society is gratefully received and we honour those who have made commitments to those living with MPS and related diseases.

On behalf of the Society’s board of directors, medical advisory board, and members, thank you to everyone who has provided wind for those with MPS to fly...

Judy Fowler-Byrne  
Chairperson

Kirsten Harkins  
Executive Director

**Inside the  
Annual Report:**

Letter from the Chairperson & Executive Director	1
What are MPS & Related Diseases? Board of Directors, & Medical Advisory Board	2
Reaching new heights!	3
Financial Statements	6
Major Donors	8



**Left: Trey Purcell (MPS II) receives an award for being named his baseball team's MVP; Right: Sarah Byrne (MPS I H) prepares for her dance recital**



**Our Mission:** The Canadian Society for Mucopolysaccharide & Related Diseases (The Canadian MPS Society) is committed to supporting families affected with MPS and related diseases, educating medical professionals and the general public about MPS and related diseases, and raising funds for research so that one day there will be cures for all types of MPS and related diseases.

# What are MPS and Related Diseases?

Mucopolysaccharide (MPS) and related diseases are lysosomal storage disorders (LSDs) caused by genetically inherited enzyme deficiencies. Because affected individuals lack particular enzymes necessary for normal cell degradation and recycling, substances store throughout their bodies, causing progressive damage to their hearts, bones, joints, respiratory systems and, sometimes, central nervous systems. While babies affected with MPS or related diseases often show no signs of disease, symptoms appear and intensify as storage increases.

## HOW ARE MPS AND RELATED DISEASES INHERITED?

Lysosomal storage diseases are usually autosomal recessive disorders, inherited from healthy parents who have no idea they carry a common recessive gene: for carrier parents, there is a one in four chance with every pregnancy that their child will inherit one recessive gene from each parent and suffer from the carried disease. MPS II (Hunter Syndrome) and

Fabry Disease are x-linked recessive disorders, meaning they are transmitted by carrier mothers to her sons: for carrier mothers, there is a one in two chance of an x-linked disorder occurring in the birth of a son. Parents of an affected child have the option of prenatal testing to determine if their next child will be affected by the same disease, and should seek genetic counseling before planning to have additional children or to inquire about available carrier testing for their healthy children. The occurrence of MPS in the population is estimated to be one in 25,000 births.

## WHAT ARE THE MAJOR CHARACTERISTICS OF MPS?

A wide spectrum of clinical involvement is seen in all MPS and related diseases ranging from onset of symptoms at birth leading to death in early childhood to later onset with a near normal life span. While specific enzyme deficiencies, and effects, vary from syndrome to syndrome, characteristics are often shared by individuals with MPS including:

course facial features, short stature, corneal clouding, speech and hearing impairment, chronic runny nose and diarrhea, hernias, heart disease, bone disease, stiff joints, liver and spleen enlargement, hyperactivity, mental retardation, and shortened life expectancy.

## TREATMENTS:

Currently there is no cure for MPS or related lysosomal storage disorders and until recently, treatment for MPS and related diseases has been primarily symptomatic, with bone marrow transplantation considered a successful, although high-risk, procedure in some cases. Research in the past decade, however, has led to exciting advancements in gene therapy as well as to the development of enzyme replacement therapies (ERTs). Continued research is necessary in order to find cures for all types of MPS and related diseases.

*\*A full list of lysosomal storage disorders can be found on our website:  
[www.mpssociety.ca](http://www.mpssociety.ca)*

## 2009-2010 Board of Directors and Medical Advisory Board

### EXECUTIVE DIRECTOR:

**Kirsten Harkins**  
MPS I parent, BC

### BOARD OF DIRECTORS:

**Chair—Judy Fowler Byrne**  
MPS I parent, ON

**Vice-Chair—Carrie Nimmo**  
MPS I aunt, BC

**Treasurer—Brenda MacLean**  
Professional, BC

**Secretary—Jean Linden**  
MPS III parent, BC

**Barb Boland**  
MPS III parent, NL

**Bernie Geiss**  
Professional, BC

**Todd Harkins**  
MPS I parent, BC

**Aubrey Hawton**  
MPS III parent, ON

**Simon Ibell**  
MPS II, ON

**Jim LeMaitre**  
MPS I parent, ON  
**Randall Linton**  
MPS III parent, ON  
**Mary Nelis**  
MPS I parent, QC  
**Deb Purcell**  
MPS II parent, BC

### MEDICAL ADVISORY BOARD:

**Chair—Lorne Clarke, MD, CM, FRCPC, FCCMG**  
University of British Columbia, BC  
**Robin Casey, MD, MSc**  
Alberta Children's Hospital, AB  
**Joe Clarke, MD, PhD**  
Hospital for Sick Children, ON  
**Cheryl Rockman Greenberg, MD, CM, FRCP**  
Winnipeg Children's Hospital, MB  
**Mark Ludman, MD, FRCPC, FCCMG**  
IWK Health Centre, NS

**Serge Melancon, MD**  
Montreal Children's Hospital, QC  
**Tony Rugar, BSc, PhD**  
University of Western Ontario, ON  
**Sylvia Stockler, MD**  
BC Children's Hospital, BC



*The Canadian Society for  
Mucopolysaccharide &  
Related Diseases Inc.*

PO Box 30034, RPO Parkgate  
North Vancouver, BC V7H 2Y8

T: (604) 924-5130/1-800-667-1846  
F: (604) 924-5131

[info@mpssociety.ca](mailto:info@mpssociety.ca)  
[www.mpssociety.ca](http://www.mpssociety.ca)

Registered Charity # 12903 0409 RR0001  
*Support for families. Research for a cure.*

## ...but the dragonfly doesn't care...

*Support for families. Research for a Cure.* Those are the mandates of The Canadian Society for Mucopolysaccharide & Related Diseases Inc. (The Canadian MPS Society) and during our 2009-2010 fiscal year, we strove to do both as well as possible.

### SUPPORT FOR FAMILIES:

We continued to support families by providing educational materials, such as our website, quarterly newsletters, and disease-specific booklets, and developed a brand-new MPS II Family Resource Binder, filled with information on MPS II (Hunter syndrome) and helpful resources, fact sheets for medical professionals and teachers, and tips on managing the complex care of an individual affected with this particular disease. We also began the process of researching for the production of an educational video as well as a fundraising video – look



**Matthew Santos (MPS IVB), a friend, and Verica Gacic (MPS IV A Mom) visit at the Toronto regional meeting**

for both of these in the year to come. We continued in our efforts to connect families, both with our family referral directory and regional family meetings. A very successful regional meeting was held in Toronto in November of 2009, bringing

together members and non-members to learn more about each other, new clinical studies and trials, financial resources available, and the rare disease framework in the Ontario Health Ministry. In BC, meanwhile, parents were invited to attend monthly meetings held by the Rare Disease Foundation, on topics from sleep therapy to recreational therapy.

We supported several families with direct financial aid, allowing them to modify their homes, hire respite care, and otherwise cope with the demands of raising children with very unique needs. In December of 2009, we provided a travel bursary so that a family could attend a MPS conference held at Disney World in Florida – a “magical” experience to be sure!



**Emma Hardman (MPS I H) with her American friend, who also has MPS I H, at the National MPS Society's Disney Conference.**



**The Nelis-Dupont family's 6th "Walk with Nature"**



The Society partnered with Genzyme by encouraging its members to participate in the Expression of Hope II art competition.

Expression of Hope is a global program featuring works of art by the community touched by lysosomal storage disorders (LSDs). Our vision is that those who experience this art will be inspired and moved by the powerful expressions of human spirit which the pieces will reveal. View the Expression of Hope II gallery at [www.expressionofhope.com](http://www.expressionofhope.com).

Jansen Harkins—brother of Nicklas Harkins, who has MPS I H/S—was very excited when his painting entitled “Burning Passion” was selected to be part of the exhibit in Boston and to be included in the Expression of Hope Art note cards, coffee table books, and calendars. These products are all available for sale through the Society's online store.



**Jansen Harkins with Genzyme CEO Henri Termier commemorating the launch of the 'Expression of Hope II: Inspiration through Art' exhibit**

## ...so it goes on flying anyway.

In order to provide important services to affected families, the Society raised funds through a number of events and activities and we thank everyone who contributed in any way.



**Canadian MPS Jeans Days** took place across Canada. Thanks to those who participated and helped us raise funds and awareness.



**The 2009 MPS CUP Fantasy Hockey Game and Gala** netted over \$93,000, and funds raised since the event's inception in 2003 passed the half a million dollar mark—a very exciting accomplishment that wouldn't have been possible without the dedication of a very committed team. The "goal" of the MPS CUP is to "help kids raise their arms in victory over MPS" and we thank the players, committee members, sponsors, donors & countless volunteers for believing in our vision of a brighter future.



**Nicklas Harkins (MPS I H/S) and Cliff Ronning at the 2009 MPS CUP**



The Canadian MPS Society was the featured charity at April 2010's **JSR (Just Singin' Round)** event at the Vancouver Rowing Club. JSR is a monthly singer-songwriter showcase produced by the Synergy Collective Society. Funds raised through JSR events are divided equally at the end of the year amongst participating charities and charity representatives have a unique opportunity to work together and learn from each other in a supportive and creative environment.



Team MPS participated for the third time in the **Scotiabank Toronto Waterfront Marathon** in September 2009. Several Society members and supporters either ran, walked, or wheeled to raise funds and awareness for the Society and over \$4,300 was raised by this energetic group.



**Team MPS at the Scotiabank Waterfront Marathon**

Our third **Annual Fund** campaign took place in December 2008 and resulted in \$5610.00 in revenue.

**Time for a Cure**, a virtual fundraiser, took place in May 2009 and \$13,972 (net) was raised for our MPS II Research Fund throughout the year.



The Society was also very fortunate to be the recipient of funds from various foundations and third-party charitable events, and gratefully received proceeds from the BC Hockey Benevolent Association (The Vancouver Canucks Alumni), the Little League BC Celebrity Golf Classic, and Friends of Ferrari, to name a few.

**The Purcell Family promote their Time for a Cure fundraiser**

### RESEARCH FOR A CURE:

Due to the generosity of our many caring donors and sponsors, two new exciting research projects were funded at the end of our 2009-2010 fiscal year, and a second installment

was paid out for a two-year grant initiated in the 2008-2009 fiscal year. We offer our heartfelt thanks to everyone who is funding these critical projects through their support of the Society and we pledge to continue to take the stewardship of our donors' funds very seriously. We are proud of our "grassroots" efforts!



**Nicklas and Kirsten Harkins gratefully accept a cheque for \$3000 from Friends of Ferrari**

### MPS II AAV Gene Therapy Research

Principal investigator: Dr. Joseph Muenzer

Institution: The University of North Carolina at Chapel Hill

Funds allocated (from the MPS II Research Fund): \$50,000.00

# Thanks for helping our children soar!

## Comprehensive study of pathogenic glycosaminoglycan storage in a murine model of MPS I

Principal Investigator: Dr. Lorne Clarke

Institution: University of British Columbia, Vancouver, BC

Funds allocated: \$100,000.00 (two year grant: \$50,000.00 per year for two years—funded first installment in 2009/2010)

## Proteomic studies of skeletal disease in a murine model of MPS I

Principal Investigator: Dr. Lorne Clarke

Institution: University of British Columbia, Vancouver, BC

Funds allocated: \$100,000.00 (two year grant: \$50,000.00 per year for two years—funded second installment in 2009/2010)

In addition to the research grants the Society funded on its own in 2009-2010, and in an effort to engage the federal government in funding research into lysosomal storage disorders,



**David Mackay (Mannosidosis) enjoys a smore while camping**

we initiated a partnership with the Canadian Institute of Health Research (CIHR) to fund a **2010 CIHR SHOPP (Small Health Organization Program Partnership) Grant**. The Canadian MPS Society and CIHR announced their intention to jointly fund a 3-year \$135,000.00 fellowship for research into Lysosomal Disease Research.

Since we recognize that all the research in the world means nothing if the resulting treatments don't reach the patients who need them, we continued to focus efforts on educating government officials on the need for federal orphan drug policy and on the reasons why funding treatments for those with MPS and related diseases is the right thing to do. We continued to work with the Canadian Organization for Rare Disorders (CORD) to this end by taking part in their *2nd Action Day on the Hill*, which took place in Ottawa April 30th, 2009, followed on May 1 & 2 by the *N of "1": Working Together to Meet the Challenge of Rare Disorders* conference.

We also had the unique opportunity of having one of our members publicly thank the Executive Officer of Ontario's Drugs for Rare Diseases program for not only developing a rare disease framework, but for funding enzyme replacement therapy for MPS II as the program's pilot project.

The Society continues to collaborate with Canadian rare disease groups (in addition to our work with CORD, we also work closely with the newly-formed Rare Disease Foundation), and also has strong ties with North American groups (like the Lysosomal Disease Network's Council of Patient Advocates, or COPA), and international groups (including



**Anisa Elder (MPS I H/S)**

*12<sup>th</sup> Annual Asia LSD Symposium; 2<sup>nd</sup> APAC Educational Forum for Families and Caregivers on MPS; & International Conference of National Policies and Actions on Rare Diseases*, hosted by the Taiwan MPS Society in Taipei, Taiwan in October 2009. The Society's executive director, Kirsten Harkins, was asked to sit on the family program planning committee for the 2010 symposium in Adelaide, Australia, and the Society joined the international community to celebrate International MPS Awareness Day on May 15<sup>th</sup>, 2009 by emailing e-cards to members, medical advisory board members, and other Society supporters, in order to remember those affected with, or by, MPS or a related disease.

Together as a community, we can help children with MPS and related diseases fly higher than imaginable. In the words of Maya Angelou, "*Nobody, but nobody, can make it out here alone.*"



**Members of the International MPS Network**

## Treatment on the horizon for those with MPS IVA:

BioMarin Pharmaceutical Inc. announced in April 2009 that it was initiating a phase I/II clinical trial for an enzyme replacement therapy (ERT) for the treatment of MPS IVA (Morquio A syndrome). The trial began in the UK in 2009 with the phase III trial beginning in 2010. Also, a cross-sectional natural history study (MorCAP) began in 2009 in several centres, including Montreal Children's Hospital. If approved, this ERT would add to the ERT treatments available currently for MPS I, MPS II, and MPS VI.

# Financial Statements for the Year Ended March 31, 2010

To the Directors of The Canadian Society for Mucopolysaccharide & Related Diseases Inc.,

We have reviewed the balance sheet of The Canadian Society for Mucopolysaccharide & Related Diseases Inc. as at March 31, 2010 and the Statement of Revenue, Expenditures and Surplus for the year then ended.

Our review was made in accordance with generally accepted standards for review engagements and accordingly consisted primarily of enquiry, analytical procedures and discussion related to information supplied to us by the Society.

A review does not constitute an audit and consequently we do not express an audit opinion on these Financial Statements.

Based on our review, nothing has come to our attention that causes us to believe that these Financial Statements are not, in all material respects, in accordance with Canadian generally accepted accounting principles.

Quantum Accounting Services Inc.  
Vancouver, BC  
July 20, 2010

## Balance Sheet as at March 31, 2010 (Unaudited)

March 31	2010	2009
<b>Assets</b>		
Cash and short term deposits	120,276	207,096
Sales tax receivable	423	434
Accrued interest receivable	826	792
Prepaid Expenses	11,910	1,500
<b>Total Current Assets</b>	<b>133,435</b>	<b>209,822</b>
<b>Liabilities</b>		
Accounts payable	1,000	1,100
<b>Total Current Liabilities</b>	<b>1,000</b>	<b>1,100</b>
<b>Surplus (Deficit)</b>	<b>132,435</b>	<b>208,722</b>
	<b>133,435</b>	<b>209,822</b>

On behalf of the Board of Directors,

*Brenda Maclean*  
Treasurer

*Judy Fowler Byrne*  
Chairperson

## Notes to Financial Statements:

(Unaudited)

### Note 1. Organization

The Canadian Society for Mucopolysaccharide & Related Diseases Inc. is incorporated under the laws of Canada as a not-for-profit organization and is registered under the Income Tax Act as a charitable organization and as such is not subject to income taxes. The Society's aim is to provide support to Canadians affected by lysosomal storage diseases (LSDs), to raise public and professional awareness of LSDs, and to fund research for a cure.

### Note 2. Significant Accounting Policies

#### Revenue Recognition

The Society follows the deferral method of accounting for contributions.

#### Capital Assets

Capital assets are not recorded on the balance sheet. Expenditures for capital assets in the year are recorded as expenses and disclosed in the statement of operations. The capital assets of the Society consist of office equipment and computer software.

#### Volunteer Services

The work of the Society is dependent on the efforts of many volunteers. Because these services are not normally purchased by the Society and because of the difficulty of determining their fair value, donated services are not recognized in these financial statements.

#### Financial Instruments

Unless otherwise noted, it is management's opinion that the Society is not exposed to significant interest rate or credit risks arising from its financial instruments.

Significant cash balances are being held at one major financial institution. The Society has a term deposit totaling \$72,435 which bears interest at 3.75%, semi-annually and matures December 2010.

### Note 3. Fundraising

Fundraising revenue is comprised of gross revenue in the amount of \$133,231 (2009—\$213,323) less expenditures in the amount of \$22,150 (2008—\$25,172).

# Financial Statements for the Year Ended March 31, 2010

For year ended March 31, 2010:	2010	2009
<i>Revenue</i>		
Fundraising, net of related expenses (Note 3)	111,081	188,151
Donations	56,248	53,526
MPS II Research Fund	13,972	59,144
Memberships	3,630	3,554
Interest	2,750	2,691
Sales	1,197	2,597
Miscellaneous Income	890	3,111
2008 Symposium	-	97,473
Conference Revenue	-	250
<b>Total Revenue</b>	<b>189,768</b>	<b>410,497</b>
<i>Expenditures</i>		
Salaries and contract fees	73,428	66,610
Travel	7,534	4,327
Printing, brochures and postage	6,498	7,887
Office lease	5,655	4,000
Office expense	4,747	4,500
Family assistance donations	4,587	7,886
Telephone and internet	2,995	3,602
Consulting/Website fees	2,870	-
Computer Software	1,750	1,650
Non-recoverable GST	1,225	1,070
Meetings	1,222	3,200
Professional fees	1,175	1,250
Insurance	1,001	1,057
Membership Dues	720	855
Promotional Items	413	2,253
Office equipment	235	2,439
2008 Symposium	-	19,685
	<b>116,055</b>	<b>132,271</b>
Research grants	150,000	157,930
<b>Total Expenditures</b>	<b>266,055</b>	<b>290,201</b>
Excess/(Deficiency) of revenue over expenditures for the year	(76,287)	120,296
Surplus, beginning of year	208,722	88,426
Surplus, end of year	132,435	208,722

# Our donors are helping kids with MPS reach new heights!

Many thanks to *everyone* who made contributions to the Society during our April 2009–March 2010 fiscal year.  
Special thanks to the following major sponsors and donors, as well as the organizers of major fundraisers:

## DIAMOND (Donations of \$10,000 +)

Shire Human Genetic Therapies  
(Canada) Inc.  
Genzyme Canada Inc  
Ivan & Shelley Harmatny  
**The MPS CUP Fantasy Hockey Game  
& Gala**—The Harkins Family  
**Time for a Cure\***—The Purcell Family

## PLATINUM (Donations of \$5,000 +)

Biomarin Pharmaceutical Inc.  
(Canada)  
CC Bouchard Ventures Inc.  
Ledcor Construction Limited  
The Sutton Place Hotel Vancouver  
The North Shore News



**Shawn Pyl (MPS III)**

## GOLD (Donations of \$2,500–\$4,999)

Black Gold Lodge  
Betty Done  
R. Chen (Friends of Ferrari)  
Linda Jones  
Peter & Ellen Muirhead  
Bill Adams  
**Team MPS at the Scotiabank Toronto  
Waterfront Marathon**  
—The Byrne Family

## SILVER (Donations of \$1,000–\$2,499)

Kent Scarborough & Krista Nickel  
TBG The Bicycle Group Inc.  
(Kona Bicycle Co.)  
Synergy Foundation  
BC Hockey Benevolent Association  
McCarthy Tetrault Foundation  
Mondiale Developments  
(Friends of Ferrari)  
North Shore Winter Club

The Destination Slope & Surf  
Outfitters  
Ryan & Deb Purcell\*  
Robert & Shirley Young  
Kaitlyn Bogas  
Bear Mountain Master Partnership  
The Maxwell Alexander Settari  
Memorial Fund at  
The Calgary Foundation  
Grenville Pinto  
NHLPA (NHL Players' Association)  
Shelly Bryant  
Lisa & John Stout  
Paul DiPasquale (Friends of Ferrari)  
Hans Holst\*  
Leone International Marketing Inc.  
(Friends of Ferrari)  
Robertson Floors  
Matcon Excavation & Shoring Ltd.  
Little League BC Celebrity Golf Classic  
MDE Mechanical (Friends of Ferrari)  
Enterprise Holdings Foundation  
Ted Newell & Associates  
(Friends of Ferrari)  
David Wills & The Dynamics  
Lyle S. Grant Digitally Assisted Design  
Vancouver Sharp Imaging  
Dearmore Construction Services  
(Friends of Ferrari)  
**Canadian MPS Jeans Day at Cove  
Cliff Elementary**  
—The Harkins family  
**Rosy Bowl Volleyball Tournament**  
—Jim LeMaitre  
**A Night of Enchantment**  
—Lara & Rudy Pietrolungo  
**Spaghetti Supper**—The Nelis Family  
**BRONZE (Donations of \$500–\$999)**  
Talee Lumber  
Canucks Sports & Entertainment  
John Henry Bikes  
Rob Thomson & Marianne Stowe-  
Thomson  
PPI Financial Group  
Gary & Marina Lewis  
Sharon Wyse-Boileau  
Gil & Jessica Rosenfeld  
Tubac Golf Resort & Spa  
Frank & Verle Kaweski  
Destination Ski Rentals Ltd.  
Kirsten & Todd Harkins

Robert & Lori Di Ilio  
Brenda Deseure-Casteels  
Nancy Trott & Ian Hanoomansingh



**Nathaniel Phaneuf (MPS II)**

Harbour Air Seaplanes  
Gayle Purcell\*  
Lori Ann Bradley\*  
James & Leslie Carter  
Jill & Gary Ley  
Linda & Graham Brown  
Brendan Morrison  
Steve & Laura Fryer  
Shirley Anderson\*  
Robert & Judith Hager  
Ayasha Valji & Salim Hirji-Lalani\*  
Ross & Diane Smith\*  
Arlene Stiles  
Carrie Marshall Photography  
JC Studio  
Sheraton Vancouver Wall Centre  
Hotel  
Broadway Moving Ltd.\*  
Core Electric Services Ltd.  
Vancouver Minor Baseball\*  
Canadian Building Materials  
Bell, Temple  
Corintia Developments Limited\*  
Signature Stone & Tile Inc.  
Rotary Women's Association  
North Shore Credit Union\*  
BC Hockey Now  
Mex-Y-Can Flowers  
Classic Rock 101  
**The Great Lake Walk**  
—Brooke & Wilma Hodson  
**Walk with Nature**  
—The Nelis-DuPont Family  
**Inspire: A Benefit Concert for MPS**  
—Meaghan Grant

\*indicates MPS II Research Fund Donation