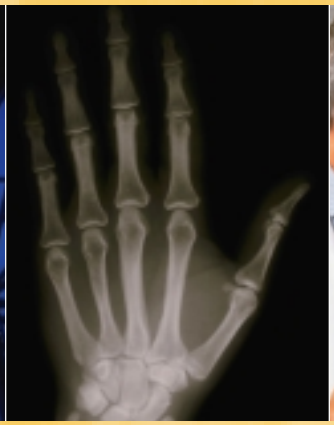
1998

annual report

Institute for Work & Health




INSTITUTE
FOR WORK & HEALTH
INSTITUT DE RECHERCHE
SUR LE TRAVAIL ET
LA SANTÉ

The Institute for Work & Health is a knowledge-based change organization that strives to Research and Promote:

- **new ways to prevent workplace disability**
- **improved treatment, and**
- **optimal recovery and safe return-to-work**

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Letter from the

Board Chair

Ninteen ninety-eight was an important year of change for the Institute for Work & Health. In 1998 we said goodbye to old friends and Board Members, Vice Chair Fred Telmer, Fred Pomeroy, David Crombie, Rick Van Loon and Linn Holness. We welcomed Pearl MacKay-Blake from the United Food & Commercial Workers International Union, Rosemary McCarney from Nortel, Mark Rochon from the Rehabilitation Institute of Toronto, and Linda Jolley from the Workplace Safety and Insurance Board as new Board Members. The Institute enters 1999 assured of a tradition of strong leadership and guidance from its Board of Directors and senior staff.

Under the leadership of Terry Sullivan as President and Donald Cole as Interim Research Director, the Institute has redefined its core research focus in the three broad areas of health services evaluation and rehabilitation, workplace studies, and workforce/population studies. Supplemented by a strong methods group and a research transfer group, the organization is well positioned to elaborate its important and practical program of research. The Institute now has a well-developed range of different types of studies to advance its mission across these core areas of research.

It is a fitting time indeed then for Lorna Marsden and Marilyn Knox to take on new roles as Vice Chairs of our Board in preparation for succession planning and renewal of the Board of the Institute for Work & Health.

J. Fraser Mustard

Board Chair

Letter from the

President

In 1998 the Institute consolidated and renewed its strategic plan and introduced a new organizational model with a core focus on research and research transfer. Dr. John Frank left the Institute to take up new research challenges in Berkeley, California, and was followed by Dr. Donald Cole, who carried the leadership for the scientific program through this important transitional year. In late 1998, Dr. Cameron Mustard was named as the new Scientific Director of the Institute for Work & Health. Cameron joins us with the distinction of a career scientist award from the Medical Research Council of Canada. Cameron Mustard has been building a creative portfolio of research projects looking at the factors that link social and occupational position with health service use and health outcomes. We are delighted with the continuing excellence of our scientific leadership and I want to acknowledge the foundational contribution of Dr. John Frank and the transitional stewardship of Dr. Donald Cole.

Nineteen ninety-eight also witnessed the establishment of a new Research Council to oversee a competitive grants program in occupational health and safety initiated by the Workplace Safety and Insurance Board. The Institute for Work & Health is an active partner in this program of research and welcomes this increased investment in research knowledge. Such knowledge is required to deliver and refine a world-standard occupational health and safety program in Ontario. We look forward to strengthening our links with developing and established centres in occupational health in Ontario. In addition, we look forward to sharing our own experience on the challenging task of putting research results to work on a range of practical challenges for workplaces, health care providers and policy makers.

Terrence Sullivan

President

The Modern World of Work
Finding New Solutions to New Workplace Problems

Today's workplace is not static. The growth of knowledge-intensive and service industries, the universal use of technology, modern management practices, global competition—these are just some of the catalysts for change in the workplace—change that is often radical and far-reaching. Indeed, it has been described as "an industrial revolution no less dramatic than the turn of the last century." A revolution that, in the words of our Board Chair, Fraser Mustard, involves the substitution of chips for neurons.

This revolution is leaving its mark on workplace health and well-being. Significant changes are evident in the type of injury, disability and disease that strike today's workforce. Occupational fatalities and disease remain a concern, but musculoskeletal injuries are on the rise. The interaction of biomechanical and psychosocial factors—a true mind-body connection in musculoskeletal injuries—has emerged as a new influence on work-related health outcomes.

Responding to the altered face of occupational disability and disease is the challenge today. Traditional tools and methods may no longer prove effective—new solutions are needed for new workplace problems.

A PROACTIVE APPROACH

The Institute for Work & Health plays a vital role in this new workplace reality, not only in conducting world-standard research, but also in promoting the applications of its findings and influencing health-related decision-making for the good of workers and businesses.

While the Institute addresses the treatment needs of injured workers, it is also focused on prevention—aiming to anticipate rather than react. Institute president, Terrence Sullivan say, "It's important to be proactive, so that we can prevent certain problems from arising or, at least, reduce their likelihood."

This proactive approach enables the Institute to look beyond immediate needs to the larger picture. "We track large changes in the pattern of injury and compensation, so we can perceive larger trends and respond to them effectively," says Sullivan.

Throughout 1998, the Institute was hard at work developing a collection of tools and measurements to meet emerging workplace needs, both short and long term. This work has yielded not only important research results, but also many practical tools that will be used on the frontlines of workplace health and safety.

A FRAMEWORK FOR NEW EFFORTS

Underpinning the Institute's initiatives during 1998 was a new organizing framework that consolidated research efforts into three working clusters:

1. Health Care Services Research, Monitoring and Evaluation
2. Workplace Studies
3. Population/Workforce Studies

"Taken together, these clusters provide us with three complementary yet distinct lenses for looking at workplace health issues," says Sullivan. "And this work is complemented by communications and research transfer efforts to get results into the hands of stakeholders."

HEALTH CARE SERVICES RESEARCH, MONITORING AND EVALUATION

Nineteen ninety-eight saw the amalgamation of two areas—Health Services and Rehabilitation with Applications and Quality Improvement. This merger reflected the Institute's new strategic direction towards a continuum of care, marrying research with the monitoring and evaluation of programs. According to manager Victoria Pennick, the two areas have dovetailed nicely, eliminating some of the overlap and duplication that previously existed. "It's a happy marriage," she says.

Projects within this research domain focus on promoting optimal recovery of an injured worker from work-related musculoskeletal disorders and helping the worker to return, as quickly and safely as possible, to regular activities such as work.

WORKPLACE STUDIES

Research within this area aims to understand the factors that influence workplace health, evaluate methods to improve the health of workers through workplace intervention and change, and demonstrate the effectiveness of these methods.

Increasingly, this research is examining the utility of research results through multi-phase studies that incorporate a participatory intervention component.

POPULATION/WORKFORCE STUDIES

This research domain comprises two content areas—disability compensation systems and labour market experiences. Disability compensation systems examine the behavioural consequences of these systems for employers, workers and health care providers, while labour market experiences explores the health and human development consequences of experiences such as job strain or unemployment. The Population/Workforce Studies team works to improve the data and methods used to address these issues, and to enhance the use of research results in decision-making.

SOLID SUPPORT

This three-cluster approach to research is supported by the Data and Information Systems group—the methodological engine for all research domains. It is a strong feature of the Institute, providing solid measurement and analysis (biostatistical and economic) to other research domains. By developing robust measures and tools, the Data and Information Systems area is a strong part of the Institute's science foundation from which all work is accomplished.

This new organization model performed well throughout 1998. "It helped our people to work more efficiently, and encouraged teamwork," says Sullivan. "Importantly, it enabled us to orient our work to diverse stakeholders who have differing needs and interests."

1998 PROJECTS...AT A GLANCE

The Institute's work agenda during 1998 was ambitious, covering a range of research contributions across the three research clusters. But supported by a strong organizational structure and close cooperation between distinct research domains, many important projects were initiated, continued or completed during this year. The table below features a sampling of these projects.

TYPES OF RESEARCH CONTRIBUTIONS	HEALTH CARE SERVICES	WORKPLACE	POPULATION/ WORKFORCE
Conceptual Models	• Classification of WMSD in video display terminal workers	• RSI Search Conference	• LABOUR MARKETS EXPERIENCE AND HEALTH: TOWARDS A RESEARCH FRAMEWORK
Systematic Reviews	• COCHRANE COLLABORATIVE BACK REVIEW GROUP • WSIB CHRONIC PAIN LITERATURE REVIEW	• GENDER AND WORKPLACE PSYCHOSOCIAL ISSUES	• Links between LABOUR MARKET EXPERIENCE & HEALTH
Descriptive Studies	• PREDICTING OCCUPATIONAL PERFORMANCE PROJECT (POPP)	• BURNOUT IN NURSES • NPHS (NATIONAL POPULATION HEALTH SURVEY) DATA ANALYSIS	• DISABILITY EXPENDITURES STUDY • NPHS DATA ANALYSIS
Cohort Studies	• Prognostic factors in the early claimant cohort	• BC HEALTHCARE WORKERS STUDY	• HEALTH CARE USE BY INJURED WORKERS WITH SOFT TISSUE INJURIES • DURATION OF WORKERS' COMPENSATION EPISODES • SOCIOECONOMIC STATUS AND SICKNESS ABSENCE
Intervention Studies	• COMMUNITY PILOT PROJECT PROJECT -using guide lines in LBP	• MANUFACTURING INTERVENTION STUDY • TORONTO STAR/SONG STUDY OF REPETITIVE STRAIN INJURY	
Evidence-based Tools	• DASH MANUAL • WORKREADY WORKBOOK • BACK GUIDE™*	• HEALTHY WORKPLACE PERFORMANCE INDEX	• POPULATION LEVEL INDICATORS

*www.backguide.com

THE HIGHLIGHTS

While space does not permit a discussion of all projects undertaken by the Institute during 1998, work that was particularly ground-breaking is featured below.

HEALTH CARE SERVICES RESEARCH, MONITORING AND EVALUATION

WSIB Chronic Pain Review: A Literature Review on the Etiology, Prognosis, Treatment, Prevention and Disability Management of Musculoskeletal Pain.

In 1997, the WSIB embarked on an independent scientific study of chronic pain. This study was requested by the government following the postponement of a call to limit compensation of work-related chronic pain disability. A Chronic Pain Expert Advisory Panel was struck and, in 1998, the Institute was asked to conduct a systematic literature review on chronic pain.

A systematic review has a clearly formulated question and uses systematic and explicit methods to identify, select and critically appraise relevant research, and to collect and analyze data from the original studies included in the review.

Critical to the success of this review was an explicit search strategy. Equally important were the perspectives and variety of players involved. "We not only had a broad clinical perspective," says Dr. Claire Bombardier, project researcher and Expert Panel member, "but also input from people trained in research design—this expertise was key."

Through the systematic review, a total of 11,565 titles were identified. In the end, 161 articles had a sufficiently high quality score to be included in the evidence tables. An additional 27 articles, though not meeting the inclusion/exclusion criteria, were added to the results as they raised interesting hypotheses about compensation as a prognostic factor. The evidence tables were sent to the Expert Panel who will synthesize the evidence and draft a final report.

"There has never been a systematic review on what we know about the natural history, prognostic factors and treatment of chronic pain," says Bombardier. "This project was absolutely vital."

Those in the community concur. Eldon Tunks, professor of psychiatry at McMaster University, says: "This type of systematic review is valuable. As a clinician, these reviews allow one to critically evaluate the significance of research findings and make sound, evidence-based decisions."

DASH Manual

The DASH (disabilities of the arm, shoulder and hand) is a standardized questionnaire that assists practitioners in treating upper-limb disorders. Since its release in 1997, the Institute has fielded calls from around the globe concerning its development and application. In response, an accompanying manual was created in 1998 and published in 1999. Its mission: to provide comprehensive details on the development of the DASH tool, as well as accessible information on how to use it.

According to project coordinator Dorcas Beaton, writing the manual involved significant time and effort. "We pulled together diverse documents to make the manual interesting and accessible to all stakeholders." Throughout the writing process, researchers and clinicians, within and without the Institute, were asked to comment on the manual to ensure its accessibility and ease of use.

Judging by feedback from individuals now using the manual, these efforts were well worth it.

"The DASH Manual is a researcher's dream—the conceptual underpinnings of the instrument, its psychometric properties, logistics of administration and context for interpretation can all be found in this single, nicely written document. Bravo!"

Jeffrey N. Katz, MD, MS

Director, Health Services Research, Robert Brigham Multipurpose Arthritis and Musculoskeletal Disease Centre

Associate Professor of Medicine, Harvard University, Boston, Massachusetts

WORKPLACE STUDIES

High Strain Jobs, Active Jobs and Self-rated Health in the National Population Health Survey (NPHS) 1994/95 data

Work stress takes its toll. But only now are we understanding the adverse consequences of this stress—cardiovascular disease, musculoskeletal disorders, depression and drug use are

but a few. Previous studies have hypothesized that stress arises from a mismatch between the demands placed on the worker and the control available to meet these demands.

In 1998, the Institute set out to test current hypotheses by exploring the associations of self-rated health with high-strain jobs, active jobs (which are high in demand *and* control) and job insecurity.

Job strain—the combined exposure to high psychological demands and low control.

Data were obtained from the 1994/95 NPHS. "This is an excellent source of information," says project coordinator Selahadin Ibrahim. "Our study benefited from its large sample size, excellent response rates and wide range of measured variables that allowed us to control for many confounders."

The results of the Institute's study confirmed previous findings—high job strain and job insecurity were associated with lower self-rated health for both genders. Increasing control appears to avert these adverse health outcomes without compromising productivity.

This study, and others like it, is essential for understanding the impact of psychosocial conditions on workplace health. "A country with healthy workers is a healthy nation," says Ibrahim. "If we can identify the causes of adverse health outcomes, we can then take steps to control them."

Development of a Healthy Workplace Conceptual Model and Health Workplace Performance Assessment Tool

Management theory suggests that to improve on a practice or system, it must first be measured. It is this theory that lies at the heart of the healthy workplace project, an initiative that will enable employers and labour representatives to measure their workplaces for performance in safety and health.

This project comprises several components:

- A preliminary search of the literature.
- The development of a conceptual model of a healthy workplace. This model synthesizes theory and other models from diverse fields including occupational health and safety, health promotion, occupational and social psychology and organizational theory.

- The creation of a performance assessment tool based on employee questionnaires externally benchmarked with made-in-Canada national survey data. A sub-section of this tool incorporates a group of indicators that can inform workplace parties about stress on the job. A software version of this tool will be available.
- The development of a more comprehensive performance tool, potentially in the form of a scorecard that will incorporate both upstream and downstream indicators.

A "healthy workplace" maintains and promotes the physical and mental health of its employees.

Stakeholder interviews were an integral part of this project. Conducted during the development phase, these interviews probed stakeholders' views on health and safety performance measurement, methodological needs, and planned performance assessment tools.

"We involved stakeholders early on," says project coordinator Lynda Robson. "Through this consultation, we hope the end product will be influenced by their needs and better equipped to meet them."

On the whole, stakeholder feedback was encouraging and indicates that the planned performance assessment tools would be of significant benefit to management and labour alike.

Robson concludes: "These tools will be an aid to workplace parties who seek to improve the health of employees. The will has to exist in the workplace for these tools to make a difference. I believe the will is there, as well as an appetite for information standardized on Canadian workers."

POPULATION/WORKFORCE STUDIES

Disability Expenditures by Public Disability Programs in Canada

The last several decades have witnessed dramatic increases in disability expenditures by public programs—increases that have threatened the viability of the support system for disabled people. Reform has occurred, though not on a widespread, consistent basis. In 1998, the Institute embarked upon a descriptive study that sought to shed light on this expenditure trend and the potential means to control it.

The study scrutinized the major public disability programs in Canada, the factors contributing to the increased expenditures and the reform efforts seeking to rein them in.

Study results suggested that expenditure growth may be due, in part, to increased benefits, looser eligibility and greater availability of programs. Reform efforts have focused on increased premiums, reduced coverage and lower benefit caps.

While overlap and interaction between programs was identified, study authors assert that the system is far from coordinated and more work is needed to achieve across-the-board integration. It is essential that programs are viewed as a system rather than disparate pieces.

> *"The tradeoffs, insofar as they exist, between cost containment and the consequences for disabled persons could be used to inform future reform efforts." Study author, economist Michele Campolieti.*

An integrated approach is welcomed by Richard Allingham, director of research at WSIB. "Our current system focuses so much on specific incidents in the workplace that it's starting to break down on cases where there is a long latency or cumulative effect. An integrated or system perspective may help disabled workers much more effectively."

According to project coordinator, economist Michele Campolieti, an integrated approach may also create greater information resources for future research into support systems for disabled workers. Good news for an area that has received little attention to date.

Allingham adds: "It's vital that this study is calling for more research. It will greatly assist decision-makers and policy-makers."

Already plans are in motion for at least one new research initiative. "We've discovered that the Canadian Disability Pension, ignored by researchers for the past 30 years, is ideally structured for analysis," says Campolieti, who will shortly initiate work in this area.

Health Care Use by Injured Workers with Soft-Tissue Injuries in Ontario

Emerging literature suggests a variation in the use of health care services in the treatment of soft-tissue musculoskeletal injuries. This is a concern, considering that soft-tissue injuries are the single largest category of lost-time injuries in Canada and account for more than 50% of all compensated claims in Ontario.

Given the magnitude of the problem and the lack of consensus around the diagnosis and treatment of soft-tissue injuries, it is vital to understand the role of the health care provider in influencing patients' use of health care services.

With this in mind, the Institute proposed a project to describe variations in health care utilization for workers and to estimate the strength of association between provider type and health care utilization. Project approval was granted in 1998.

A unique feature of this study is the ability to control for anatomic site and severity of injury, using self-reported data. Project coordinator Jennifer Payne says. "Using these data, we can compare the health care utilization of workers with a similar site and severity of soft-tissue injury. We won't be comparing apples with oranges."

This study involves the anonymous linkage of data from three sources—the Early Claimant Cohort Study, WSIB and OHIP. "From a research perspective, this is very exciting," says Payne. "We will be linking administrative data from OHIP and WSIB with self-reported data. This is a first for the Institute."

There will be challenges, however. With OHIP data, strict confidentiality is critical. As well, the volume of data is daunting. "The challenge will be distilling the information into something meaningful, so that we can make inferences about groups of people," says Payne.

Eventual results of this study will interest administrative and insurer stakeholders, injured workers, and provincial policy makers. Several applications are possible—from the development of policy guidelines to the formation of incentives for health care providers to act as points of first contact.

1998—TRANSITION AND TIMELY GAINS

From top to bottom, the Institute felt the effects of change during 1998.

Within the scientific realm, able interim leadership under Donald Cole prevailed until the appointment of Cameron Mustard late in the year. At the same time, many research efforts were building to a crescendo, while others were newly conceived. "We began to mine results and consolidate outputs from a number of studies, and began tooling up for a number of new research projects," says Sullivan. As well, the Institute was beginning the process of responding to external audience demands for large volumes of information.

Throughout this year of transition, the new organizing structure proved robust. "The framework was effective in carrying us through 1998," says Sullivan. "And it supported worthy initiatives in understanding workplace health and developing tools to measure and maintain it."

MOVING FORWARD WITH FLEXIBILITY

While the Institute's organizing structure has proved a solid foundation for growth and innovation, it is not, like the workplace, static in nature. As the Institute moves forward to the next millennium, the way it "works" will change to accommodate evolving needs and trends. "A knowledge-based organization like ours ought to adapt to changes in demands and working realities," says Sullivan. "The current domains of research are resilient, but if we need to alter our structure to meet new demands, we will do so. We must be flexible to meet the present and future needs of the external working world."

Auditors' Report

To the Directors of Institute for Work & Health

We have audited the balance sheet of Institute for Work & Health as at December 31, 1998 and the statements of revenue and expenses and surplus and changes in financial position for the year then ended. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Institute as at December 31, 1998 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles.

PRICEWATERHOUSECOOPERS

Chartered Accountants *March 12, 1999*

Institute for Work & Health

Balance Sheet

As at December 31, 1998	**1998** **$**	1997 $ *(note 9)*
ASSETS		
CURRENT ASSETS		
Cash	**724,258**	48,868
Short-term investments	**98,354**	596,752
Accounts receivable and accrued interest *(note 6)*	**174,606**	227,702
Prepaid expenses	**20,714**	80,180
GST recoverable	**11,558**	19,717
	1,029,490	973,219
Long-term investment	**209,000**	–
Capital assets *(note 3)*	**258,428**	342,987
	1,496,918	1,316,206
LIABILITIES AND SURPLUS		
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	**170,789**	215,854
Deferred revenue and contributions *(note 4)*	**679,232**	330,130
	850,021	545,984
Due to Workplace Safety & Insurance Board of Ontario	**–**	1,243
Lease inducement *(note 5)*	**193,352**	261,632
	1,043,373	808,859
Commitments and contingencies *(note 7)*		
Surplus	**453,545**	507,347
	1,496,918	1,316,206

Approved by the Board of Directors

Director

Director

Institute for Work & Health

Statement of Revenue and Expenses and Surplus

For the year ended December 31, 1998

	1998 $	1997 $ (note 9)
REVENUE		
Workplace Safety & Insurance Board of Ontario	**4,500,000**	4,498,757
Interest	**23,843**	16,379
Loan	**–**	25,940
Other	**593,180**	604,238
	5,117,023	5,145,314
EXPENSES		
Salaries and benefits	**3,472,892**	3,515,814
Program development	**394,610**	387,818
Amortization of capital assets	**179,523**	179,981
Computer	**16,094**	12,416
Research consultants and related costs	**60,000**	38,992
Rent and other building costs	**279,100**	280,677
Research Advisory Committee	**22,895**	19,499
Office and general	**315,453**	246,463
Meeting and conferences	**92,846**	55,246
Telecommunications	**51,683**	84,193
Travel	**191,687**	210,087
Interest on loan	**–**	25,940
	5,076,783	5,057,126
Excess of revenue over expenses for the year	**40,240**	88,188
Surplus – Beginning of year	**507,347**	699,159
Awards to Foundation *(note 6)*	**(94,042)**	(280,000)
Surplus – End of year	**453,545**	507,347

Institute for Work & Health

Statement of Change in Financial Position

For the year ended December 31, 1998	**1998** **$**	1997 $ *(note 9)*
CASH PROVIDED BY (USED IN)		
OPERATING ACTIVITIES		
Excess of revenue over expenses for the year	**40,240**	88,188
Items not affecting cash		
Amortization of capital assets	**179,523**	179,981
Amortization of lease inducement	**(25,452)**	(25,452)
Deferred revenue and contributions recognized	**(469,719)**	(265,074)
Decrease in deferred rent	**(42,828)**	(42,828)
	(318,236)	(65,185)
MOVEMENT IN WORKING CAPITAL BALANCES		
Decrease (increase) in accounts receivable and accrued interest	**53,096**	(90,357)
Decrease in prepaid expenses	**59,466**	9,506
Decrease in GST recoverable	**8,159**	1,153
Decrease in accounts payable and accrued liabilities	**(45,065)**	(146,591)
	(242,580)	(291,474)
FINANCING ACTIVITIES		
Increase (decrease) in due to Workplace Safety & Insurance Board of Ontario	**(1,243)**	1,243
Increase in due from Workplace Safety & Insurance Board of Ontario	**–**	660,719
Decrease in loan from Workplace Safety & Insurance Board of Ontario	**–**	(751,731)
Deferred revenue and contributions received	**818,821**	480,442
Awards to Foundation *(note 6)*	**(94,042)**	(280,000)
	723,536	110,673
INVESTING ACTIVITIES		
Increase in long-term investments	**(209,000)**	–
Purchase of capital assets	**(94,964)**	(109,437)
Increase in cash and cash equivalents during the year	**176,992**	(290,238)
Cash and cash equivalents – Beginning of year	**645,620**	935,858
Cash and cash equivalents – End of year	**822,612**	645,620
Cash and cash equivalents are comprised of		
Cash	**724,258**	48,868
Short-term investments	**98,354**	596,752
	822,612	645,620

Notes to Financial Statements

1 ORGANIZATION

The Institute for Work and Health was incorporated without share capital on December 20, 1989, as a not-for-profit organization.

The Institute is predominantly funded by the Workplace Safety and Insurance Board of Ontario (WSIB) up to the Institute's approved WSIB budget. Other revenues are generated through quality improvement and research activities and certain interest earned.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

REVENUE RECOGNITION

The Institute follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred. Unrestricted contributions, which include contributions from the WSIB, are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.

SHORT-TERM INVESTMENTS

Short-term investments are carried at the lower of cost or market. At December 31, 1998, the cost of these investments approximated market value.

LONG-TERM INVESTMENTS

Long-term investments are carried at cost and are written down if the loss in value is other than a temporary decline.

CAPITAL ASSETS

Capital assets are carried at cost less accumulated amortization. Amortization is calculated on the straight-line basis over the following periods:

Furniture and fixtures	5 years
Computer equipment	3 years
Leasehold improvements	term of the lease

LEASE INDUCEMENT

The lease inducement is deferred and amortized on a straight-line basis over the period of the premise's lease.

3 CAPITAL ASSETS

Capital assets consist of the following:

			1998	1997
	Cost	Acc. amortization	Net	Net
Furniture and fixtures	$ 205,243	$ 167,257	$ 37,986	$ 68,454
Computer equipment	446,833	327,215	119,618	144,101
Leasehold improvements	295,622	194,798	100,824	130,432
	$ 947,698	$ 689,270	$ 258,428	$ 342,987

Notes to Financial Statements

4 DEFERRED REVENUE AND CONTRIBUTIONS

Deferred revenue and contributions consist of the following:

	1998	1997
Deferred revenue	$ 162,930	$ 115,310
Deferred contributions	516,302	214,820
	$ 679,232	$ 330,130

Deferred revenue represents amounts received that will be recognized as revenue in the period earned.

Deferred contributions represent unspent resources externally restricted for research purposes received in the current year for which expenses have not been incurred.

Changes in the deferred contributions balance are as follows:

	1998	1997
Beginning balance related to restricted contributions	$ 214,820	$ 114,762
Less: Amount recognized as revenue in the year	(352,740)	(265,074)
Add: Amount received during the year	654,222	365,132
Ending balance related to restricted contributions	$ 516,302	$ 214,820

5 LEASE INDUCEMENT

The lease inducement reflected on the balance sheet is comprised of the following items:

	1998	1997
Lease inducement received at commencement of lease	$ 254,520	$ 254,520
Less: Accumulated amortization of lease inducement	(186,648)	(161,196)
	67,872	93,324
Deferred rent	125,480	168,308
	$ 193,352	$ 261,632

Deferred rent arises from the difference between the average annual cost over the term of the operating lease for office premises and the cash paid during the year.

6 FOUNDATION FOR RESEARCH AND EDUCATION IN WORK AND HEALTH STUDIES

During the year, the Institute transferred a net amount of $94,042 to the Foundation for Research and Education in Work and Health Studies (the Foundation). During 1997, the Institute had transferred $280,000 to the Trust for Research and Education in Work and Health Studies (the Trust). This Trust was formed in 1994 for the purpose of building an endowment to support a research fellowship in work and health studies and on September 3, 1997 transferred its net assets to the Foundation.

Included in accounts receivable at December 31, 1998 is $95,480 (1997 – $89,030) due from the Foundation.

Subsequent to year-end, the Institute awarded $133,000 to the Foundation. The award was made from the Institute's surplus, which has been accumulated from other revenues earned to date.

Notes to Financial Statements

7 COMMITMENTS AND CONTINGENCIES

Future minimum lease payments under an operating lease for office premises expiring in August 2001 are as follows:

1999	$ 194,844
2000	194,844
2001	141,208
	$ 530,896

The Institute has entered into certain multi-year contracts with various professionals for research services. The contracts generally provide for fixed annual payment amounts along with certain provisions for early termination of such contracts. If these contracts were to be terminated without sufficient notice, management's estimate of the liability approximates $500,000. The Institute believes that early termination of such contracts is unlikely. No amounts have been accrued in these financial statements for early termination.

8 PENSIONS

For those employees of the Institute who are members of the Hospitals of Ontario Pension Plan, a multi-employer final average payment contributory pension plan, the Institute made contributions to the Plan during the year amounting to $151,642 (1997 – $109,415).

9 PRIOR YEAR ADJUSTMENT

In the prior year, certain amounts advanced for projects in various stages of completion were incorrectly recognized as revenue. As a result, revenues and surplus were overstated by $116,495, deferred revenue was understated by $81,625, and deferred contributions were understated by $34,860 for the year ended December 31, 1997. In addition, $179,950 was reclassified from deferred revenue to deferred contributions. The reduction in the excess of revenue over expense to $88,188 and in surplus resulted in the Institute reducing its award to the Foundation from $233,425 to $94,042.

10 UNCERTAINTY DUE TO THE YEAR 2000 ISSUE

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems that use certain dates in 1999 to represent something other than a date. The effects of the Year 2000 Issue may be experienced before, on, or after January 1, 2000, and if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure that could affect the Institute's ability to conduct normal business operations. While management believes they have addressed the Institute's Year 2000 Issue, it is not possible to be certain that all aspects of the Year 2000 Issue affecting the Institute, including those related to the efforts of customers, suppliers or other third parties, will be fully resolved.

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