VIDO ANNUAL REPORT

1994-95

Goals of VIDO

• To serve and assist the economic competitiveness of the livestock industry through research on the common infectious diseases of animals and poultry.

• To provide information leading to safe and effective animal health preventive medicine programs which enhance animal care through improved management and performance of livestock.

• To maximize funding by enhanced visibility and development of innovative communication programs with all organizations that provide support to VIDO.

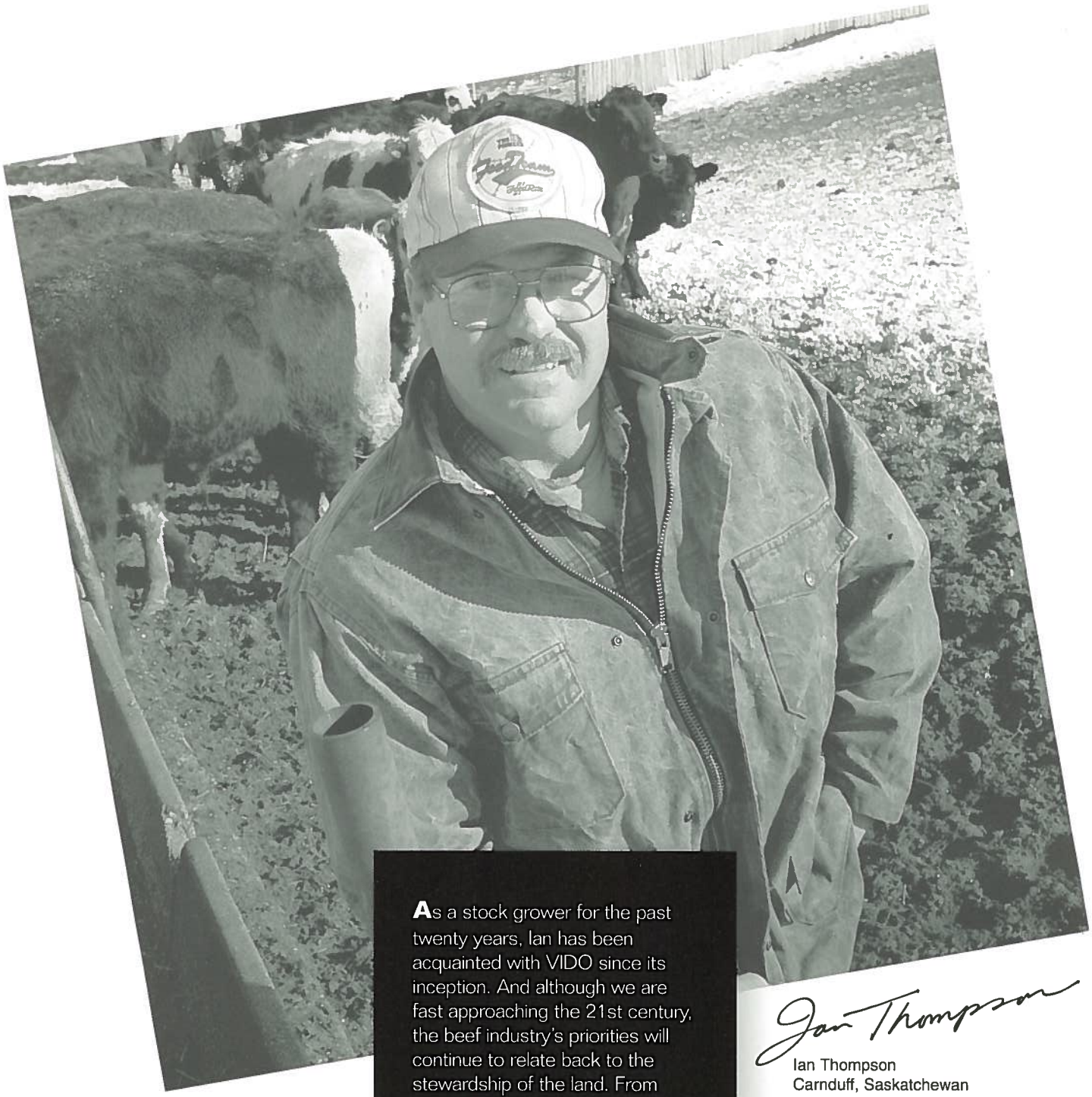
• To transfer technology to the biological industry to enhance its commercial application for the benefit of the Canadian livestock producers and to provide financial stability to VIDO.

VIDO's Mandate

VIDO's mandate is to serve the Canadian livestock and poultry industry by conducting animal health-related research, communicating livestock management techniques and information, and facilitating the transfer of technology for international commercial development.

• To identify opportunities to utilize VIDO's livestock research to improve human and companion animal health.

• To manage its financial, educational, and human resource efforts to ensure long-term benefits to the organization's stakeholders.

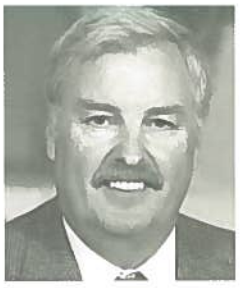


As a stock grower for the past twenty years, Ian has been acquainted with VIDO since its inception. And although we are fast approaching the 21st century, the beef industry's priorities will continue to relate back to the stewardship of the land. From environmental problems to animal rights, VIDO will feature prominently with innovative technology. As in all meat-producing industries, disease prevention is preferable to disease control. On the horizon are new "Cow-side Tests." Developments like these improve animal health and increase cost-effective production. With global exports on the rise, livestock producers are keenly aware of the future's potential. And with biotechnology from VIDO, the world market is closer to Ian Thompson than ever before.

Ian Thompson
Carnduff, Saskatchewan

Chairman's Report

Bob Hunsberger
Chairman



Ed Moss
Vice-Chairman

For VIDO, 1995 has been a year of transition. As a mature 20-year-old technical research organization competing in a highly sophisticated global environment, it became apparent that strategic planning would be essential for VIDO to survive. With hard work and input from all levels of the organization and the Board, VIDO's strategic plan for the future was completed and initiated this past year.

The plan allowed VIDO to redefine its goals and align personnel and resources to achieve these goals. It also provides predetermined check points to measure success along the way. The challenge now is to implement the plan, aware that as our environment changes so must our strategies. Success rests with being flexible enough to accommodate change without losing sight of the goal.

I would like to take this opportunity to discuss some of VIDO's goals in the context of the challenges facing the livestock industry now and in the future. Food safety, economics, and product quality that will sustain growth of domestic and export markets will be the forces driving the industry over the next decade. VIDO has made a commitment to assist the economic competitiveness of the livestock industry through research and development of modern vaccines and management programs that will prevent common infectious diseases in our livestock populations. Disease prevention through the use of quality vaccines remains a critical link in reaching optimal performance, reducing dependence on antibiotics, addressing common meat quality issues, while providing significant economic return at all levels. Meeting new export standards like the pathogen reduction proposals of the USDA will present significant challenges for both production and research.

VIDO has positioned itself well to meet these challenges but there are two lingering and growing concerns that must be addressed for Canada to continue to be a leader in this area. The first concern is the diminishing supply of core funding for all research institutions – the overhead money that pays wages, buys equipment and supplies, and keeps the lights and heat turned on. The shift to results oriented and contract research along with cutbacks in government funding has reduced these essential funds. Research institutions on the other hand must make every effort to communicate, collaborate, and prevent duplication in reducing costs and overhead. Although VIDO is very committed to co-operative ventures that increase efficiency and reduce costs, finding core funding is a constant struggle and too often takes key scientists away from the research bench.

The second concern is VIDO's commitment to the transfer of technology it develops to the commercial sector as quickly as possible. In today's competitive global environment, delays in bringing new vaccine technology to the market has a significant negative impact on its commercial value and its usefulness to the end user. Due mostly to underfunding, the current backlog in submissions for regulatory review has created delays of 18 to 24 months. Canada must address this problem if it expects to compete.

Overall, 1995 has been a very good year for VIDO and its clients. For this, credit must go to VIDO's staff and management for their dedication, hard work, and willingness to adapt to the changing scene in technical research.

Bob Hunsberger
Chairman

Board of Directors

Back Row:

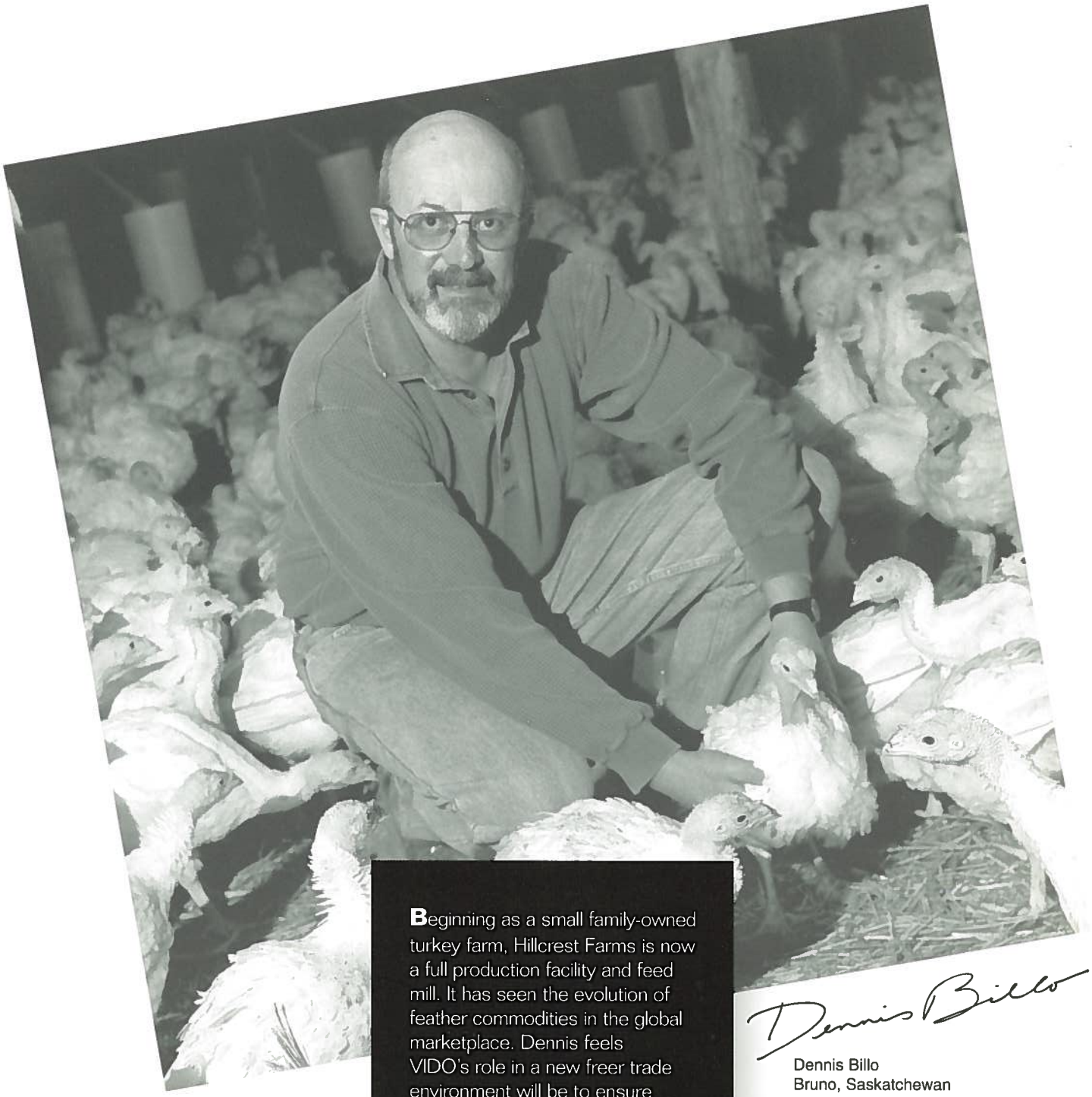
Bob Byle, Ralph Christian,
Peter Rempel, Lorne Hepworth,
Alex Livingston, Fred Van Ingen

Front Row:

Dennis Johnson, Lorne Babiuk,
Bob Hunsberger, Deborah Whale,
Ian Thompson

Missing:

Ed Moss, Don Taylor



Dennis Billo

Dennis Billo
Bruno, Saskatchewan

Beginning as a small family-owned turkey farm, Hillcrest Farms is now a full production facility and feed mill. It has seen the evolution of feather commodities in the global marketplace. Dennis feels VIDO's role in a new freer trade environment will be to ensure competitiveness through cutting edge technology. Disease prevention tools like the DNA immunization vaccine will help producers practice the new concept of HACCP (Hazard Analysis Critical Control Point), a worldwide standard system of assuring food safety at all levels. From input costs, production, processing and distribution to delivery and consumption, VIDO will play an important role in the universal acceptance of our food products.

Director's Report

Dr. Lorne Babiuk
Director

As we move forward, VIDO continues to achieve significant progress in new product development and technology transfer to industry and maintains its international reputation as a center of excellence in biotechnology related to animal health. Success is possible through the cooperation and support of many "Friends of VIDO" and our dedicated staff. Since VIDO has never had any guaranteed funding, we are extremely grateful for groups and individuals which see VIDO's research activities as being relevant to their industry. Your financial and moral support are extremely valuable because it reaffirms that our research is being directed at relevant problems. Furthermore, financial support from industry allows us to "match" funding from competitive granting agencies to expand our research efforts. While we were pleased with results achieved in 1995, we also recognize that we must continue to change and become more efficient as we build for the 21st century.

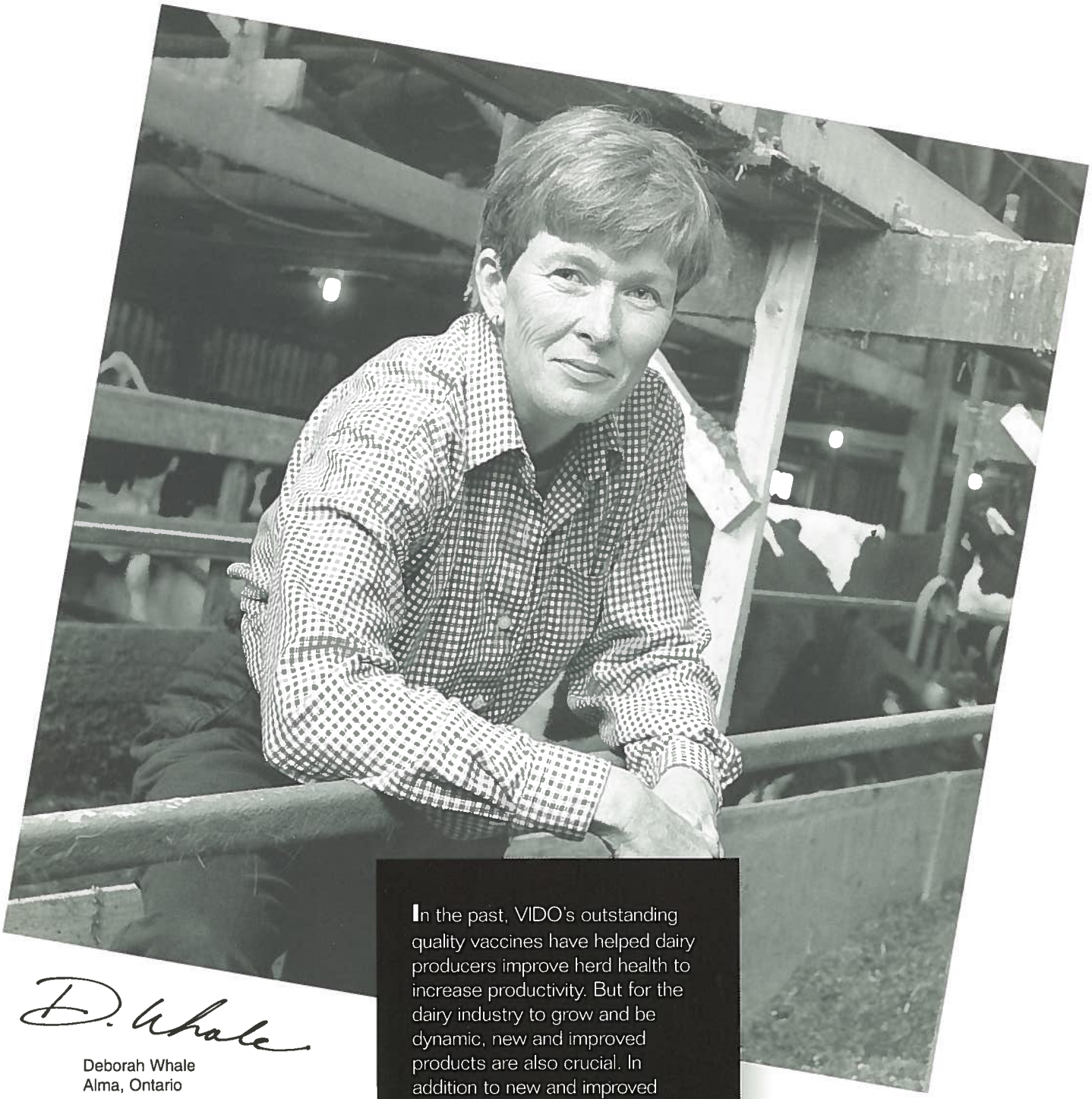
To help maintain VIDO as an international leader in animal health biotechnology, the Board of Directors and the staff continually assesses research progress and focus. This year we completed a major strategic planning process, redefining our mandate and establishing future goals. This effort will ensure VIDO's future success. The strategic planning process reaffirmed VIDO's main purpose: to assist Canadian livestock producers, recognizing that many of the problems faced by Canadian producers are global problems. VIDO feels that development and marketing of products in the Canadian and International markets will increase royalties payable to VIDO which in turn assist VIDO's research efforts. Currently, two products are in final stages of development and registration (an *Actinobacillus pleuropneumoniae* vaccine for pigs and a bovine herpesvirus 1 vaccine for cattle) by commercial partners.

To help expand activities, VIDO is negotiating research and marketing agreements with a number of multi-national companies. Through these agreements, VIDO will receive funding and access to technology, ensuring our vitality into the 21st century. VIDO's strategy is to seek collaborative opportunities with university researchers, government laboratories, and the biopharmaceutical industry. The animal health industry will be a major benefactor.

To assist in these efforts, VIDO hired Dr. Ron Clarke – Associate Director of Marketing and Administration and appointed Dr. Andrew Potter – Associate Director of Science, Carol Martel – Manager, Financial Operations and Joyce Sander – Manager, Human Resources and Intellectual Property.

We are proud of our employees and their contributions to VIDO's success in 1995. We are confident VIDO will meet the challenges it faces. Our long-term commitment is to serve the livestock industry through research, development, and commercialization of new technology.

Joyce Sander
Manager – Human Resources
& Intellectual Property

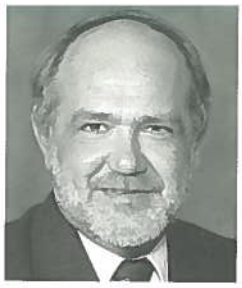


D. Whale

Deborah Whale
Alma, Ontario

In the past, VIDO's outstanding quality vaccines have helped dairy producers improve herd health to increase productivity. But for the dairy industry to grow and be dynamic, new and improved products are also crucial. In addition to new and improved vaccines, biotechnology will enable cows to produce pharmaceuticals in their milk. And, for Deborah, this Pharma-cow concept is an exciting path to the future. VIDO has developed guidelines for animal care and housing, with publications on a variety of issues. By being accountable to producers in these ways, VIDO has proven its ability to understand the priorities of the industry as it moves into the next century. And when dairy farms can selectively produce female offspring, the future really will be here.

Research Report



Dr. Andrew Potter
Associate Director of Science

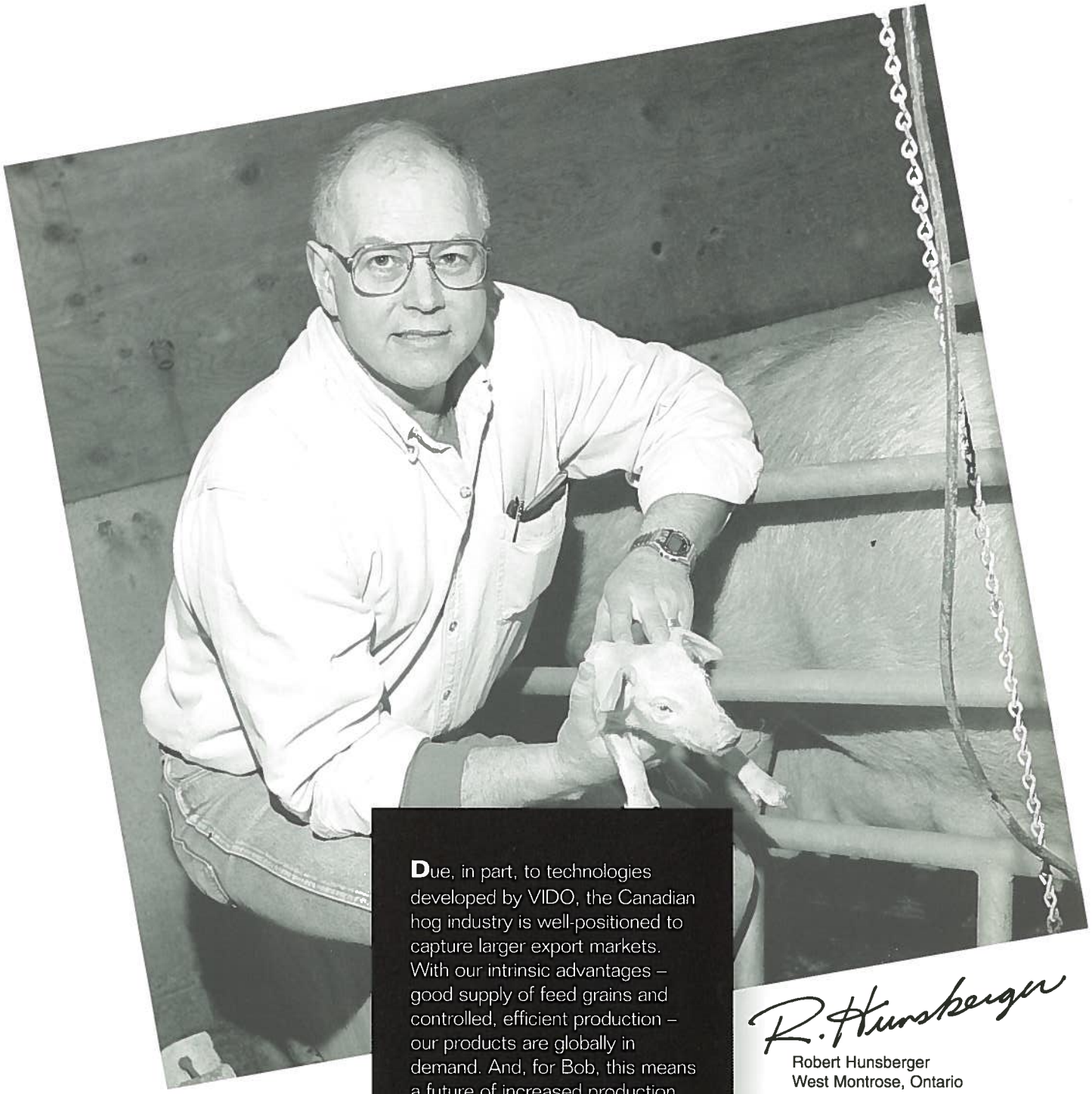
VIDO's research activities are focused in three main areas, including studies on the mechanism of infectious disease in livestock and poultry, development of new vaccines and ways of using them effectively. Our philosophy is to develop products and technology for producers through focused research on bacterial and viral infections including the identification of protective components from viruses and bacteria plus the way animals respond to infection. We have successfully used this approach to develop recombinant and conventional vaccines for *Pasteurella haemolytica, Haemophilus somnus,* Bovine herpesvirus 1, and *Actinobacillus pleuropneumoniae* infection in swine. We are continuing to develop new technologies applicable to control of other diseases in cattle, swine, and poultry.

A new genetically engineered (recombinant subunit) vaccine for the prevention of rotavirus and coronavirus infection in cattle is now in the final stages of field testing. This vaccine has several advantages over existing products, including reduced production cost as well as the ability to protect against a greater number of rotavirus serotypes. VIDO scientists successfully identified structural components of each virus (antigens) and portions of these molecules which could induce protective immunity (epitopes). These protective portions were then produced by genetic engineering using the bacteria *Escherichia coli* as the "factory," eliminating the need for expensive tissue culture techniques. A prototype 2-way vaccine was successfully field tested last year and this year two additional rotavirus serotypes have been added. This 4-way vaccine is currently being evaluated under field conditions and we anticipate the completion of this project within the next twelve months. Other subunit vaccines currently under development include those for *Haemophilus somnus,* Streptococcal mastitis and *Streptococcus suis* infection in swine.

Subunit vaccines are often expensive to produce. This is especially true with viral vaccines which often require two immunizations to be effective. We are pursuing a number of avenues to overcome these problems, one of which is the use of nucleic acid (DNA) immunization. With nucleic acid vaccines, the purified genes controlling production of protective antigens are injected directly into the animal. The genes are incorporated into the animal's own cells, turning the animal into its own vaccine production facility, thereby significantly reducing production costs. There is also evidence to suggest that a single DNA immunization will result in a long duration of immunity, eliminating the need for a second vaccination. Also, animals can be immunized at a younger age. VIDO scientists were the first in the world to demonstrate the utility of this technology in a target species, in this case cattle, and they remain leaders not only in the development of the technology but also in conducting research to understand the immune mechanisms involved. We anticipate that this type of vaccine will reach the marketplace at the turn of the century.

The infectious diseases of greatest economic importance to the livestock and poultry industries are caused by pathogens that infect mucosal surfaces. These surfaces include the lungs, gastrointestinal tract, reproductive system, and mammary gland to name a few. Protection against these diseases is best provided by local immune responses at these mucosal surfaces, and such responses are not efficiently induced by vaccines delivered via intramuscular or subcutaneous routes. VIDO is working on a number of different vaccination strategies designed to induce mucosal immunity. This includes the use of live adenovirus vectors for vaccination of cattle and live bacterial vectors for the immunization of poultry. In both cases, the viral or bacterial vector must be first crippled by creating lesions in their DNA so that they are able to colonize the host yet not cause disease. These vaccines will be delivered by aerosol or oral routes to induce a more natural immune response.

The information gained from VIDO's vaccine research will be directly applicable to cattle and poultry and will also form a technology base which can be utilized for other species, including humans.



Due, in part, to technologies developed by VIDO, the Canadian hog industry is well-positioned to capture larger export markets. With our intrinsic advantages – good supply of feed grains and controlled, efficient production – our products are globally in demand. And, for Bob, this means a future of increased production while maintaining today's high standards of quality and cost efficiencies. VIDO's liaison with producers has led to innovative research resulting in new technologies. In fact, VIDO has become a mechanism for those in the livestock industry to understand these new technologies and implement them into their production systems. Without VIDO, many problems faced by all commodity groups would go unchallenged, perhaps making the international marketplace harder to reach.

R. Hunsberger

Robert Hunsberger
West Montrose, Ontario

Marketing Report

Dr. Ron Clarke
Associate Director of Marketing and Administration

As VIDO prepares to step across the threshold of a new century, "challenge and change" best describe the new venture. On one side as partner is the livestock and poultry industry, on the other is the University of Saskatchewan. The quote, *"Change is inevitable; adaptation and survival are optional,"* attributed to more than one leader made famous through accounts of history, will be ratified by those recognized in future generations as having achieved success today.

I have just completed my first year with VIDO. What has been most striking is the technological breadth and seemingly limitless opportunities attainable as we unlock marvels at science's frontier through genetic engineering research.

VIDO, its people, and the governance that sustained its existence for 20 years are truly gems in a global, highly competitive environment pulsating with unprecedented scientific discovery. The prodigious rush of new technology jousting for position in world markets swaggers the uninitiated. Yet, world-class scientists from VIDO stand before audiences of peers around the world and send reverberations through their community with discovery spawned on the research benches of 120 Veterinary Road. What makes these accomplishments even more unique is that leading-edge research at VIDO is made possible through support by Canadian livestock and poultry producers and by a university, deemed small by world standards, but a giant in its ability to nurture and grow an agricultural biotechnology research community second to none anywhere in the world. Important also is the support garnered from a host of provincial and national funding agencies in recognition of what VIDO is capable of doing. Our food animal industry and the partners they attract from all levels of government and academia provide direction to research programs, programs crucial to VIDO's future.

What stands in our way? What challenges mark the path ahead? Just as the Canadian food animal industry competes in a global protein market, so must Canadian research, and the technology it creates, compete on the international stage of scientific discovery and business. The challenge lies only partially in sustaining the quality and innovation of scientific research. Opening the world's door to new technology, outside any special intellectual allocation inherent in discovery, means passing the test of commercial reality. Can it be brought to market? If not, will the next step lead to something that can? Will it survive? Regardless of novelty, today's research is often measured and inextricably linked with an organization's ability to successfully manage technology transfer – bridging the gap between the research bench and commercial development. VIDO's commitment to livestock and poultry stakeholders is technology development and transfer; the deliverables: high quality vaccines and management information ultimately used as tools to help compete in marketplaces around the world.

One of the greatest challenges is finding a balance between innovative, productive scientific endeavor and the pursuit of business opportunities. Both can be accomplished and must be accomplished if VIDO is to succeed and grow. To this end, assumptions about competencies, technology, systems, trends, competition, and customers will not become gospel. The benefits of any technology, if not properly communicated and accepted by someone else, has no value.

Teams drive accomplishment. They call for involvement from every corner of an organization's structure. Effective teams are self-regulated, are finely attuned to organizational goals and values and add an ingredient of innovative problem solving that becomes systemic. You do not delegate accountability, nor do you endow motivation, these are intrinsic values that "happen" when teams flourish. VIDO is fortunate in having all the right ingredients, amongst them a very dedicated administrative and technical support staff – the real heart and soul of any organization.

As the ink dries on VIDO's Strategic Plans there is room for great optimism. The Strategic Plan, its goals, and the values it exhorts clearly show that VIDO is ready to move forward. It will base its future on the following pillars of success:

- Developing technology considered by stakeholders and commercial partners as having value through the pursuit of quality scientific investigation,
- Attracting and retaining highly skilled people with strong organizational commitments,
- Achieving excellence in communication within and outside VIDO,
- Adherence to sound business principles that will sustain the strength of our organization and the value of VIDO technology offered to commercial and food animal industry partners.

I have every confidence VIDO can respond. Team work and innovation will be the intellectual instruments VIDO uses to open the next century.

AUDITOR'S REPORT

Carol Martel
Manager – Financial Operations

To the Board of Directors of the
Veterinary Infectious Disease Organization (VIDO),
University of Saskatchewan

We have audited the combined balance sheet of the University of Saskatchewan – Veterinary Infectious Disease Organization as at September 30, 1995 and the statements of income, expenditure and fund balance (Research Trust, Capital Trust, and Technology Development Trust) and combined statement of changes in financial position for the year then ended. These financial statements are the responsibility of the Organization'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 common with many non-profit organizations, the Organization derives part of its income in the form of donations and certain grants the completeness of which is not susceptible to satisfactory audit verification. Accordingly, our verification of revenues from these sources was limited to the amounts recorded in the records of the Organization and we were not able to determine whether any adjustments might be necessary to donations and grant revenue, excess of income over expenditure, assets and fund balance.

In our opinion, except for the effect of adjustments, if any, which we might have determined to be necessary had we been able to satisfy ourselves concerning the completeness of donations and certain grants referred to in the preceding paragraph, these financial statements present fairly, in all material respects, the financial position of the Organization as at September 30, 1995 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.

Deloitte & Touche

Chartered Accountants
December 15, 1995

University of Saskatchewan
Veterinary Infectious Disease Organization (VIDO)

Research Trust – Statement of Income, Expenditure and Fund Balance

Year ending September 30, 1995
(1994 figures restated – see Note 10)

	1995	1994
INCOME		
Donations and unconditional grants (Schedule 1)		
Livestock industry – beef	**$ 80,700**	$ 127,200
– dairy	**50,000**	71,000
– swine	**86,560**	73,913
– turkey	**25,000**	–
Provincial governments	**73,700**	65,500
Other foundations, companies and individuals	**120,000**	100,240
	435,960	437,853
Conditional grants (Schedule 2)	**1,736,302**	2,267,802
Contact research		
Department of Western Economic Diversification	**393,391**	–
Commercial	**(6,019)**	374,928
Associated Company	**183,530**	228,300
Government of the Province of Saskatchewan	**300,000**	300,000
Department of National Defense	**2,500**	–
Contract services	**306,305**	214,535
Royalties	**73,858**	63,083
Interest	**39,815**	22,984
Animal sales	**33,150**	87,747
University of Saskatchewan	**66,113**	30,657
	3,564,905	4,027,889
EXPENDITURE		
Salaries and fringe benefits	**2,416,346**	2,525,014
Materials and supplies	**505,766**	729,249
Animal services	**92,611**	337,403
Equipment and service agreements	**82,756**	138,109
Travel and recruiting	**145,197**	105,915
Patents and legal fees	**11,514**	5,707
Other expenditures (Note 7)	**188,489**	127,152
	3,442,679	3,968,549
EXCESS OF INCOME OVER EXPENDITURE	**122,226**	59,340
FUND BALANCE, BEGINNING OF YEAR	**829,060**	769,720
	951,286	829,060
TRANSFER TO CAPITAL TRUST	**–**	–
FUND BALANCE, END OF YEAR	**$ 951,286**	$ 829,060

University of Saskatchewan
Veterinary Infectious Disease Organization (VIDO)

Capital Trust – Statement of Income, Expenditure and Fund Balance

Year ending September 30, 1995

	1995	1994
FUND BALANCE, BEGINNING OF YEAR	**$ 30,000**	$ 30,000
TRANSFER FROM RESEARCH TRUST	**–**	–
FUND BALANCE, END OF YEAR	**$ 30,000**	$ 30,000

University of Saskatchewan
Veterinary Infectious Disease Organization (VIDO)

Technology Development Trust – Statement of Income, Expenditure and Fund Balance

Year ended September 30, 1995

	1995	1994
FUND BALANCE, BEGINNING OF YEAR	**$ 4,699,876**	$ 4,699,876
TRANSFER FROM TECHNOLOGY ACCESS AGREEMENTS	**–**	–
FUND BALANCE, END OF YEAR	**$ 4,699,876**	$ 4,699,876

University of Saskatchewan
Veterinary Infectious Disease Organization (VIDO)

Combined Balance Sheet

September 30, 1995 (1994 figures restated – see Note 10)

	1995	1994
ASSETS		
Current Assets		
Cash on hand	**$ 201,610**	$ 212,575
Funds held (claim on cash) – University of Saskatchewan	**270,385**	(331,764)
Due from University of Saskatchewan – operating fund	**940,627**	1,003,834
Accounts receivable (Note 3)	**470,141**	708,551
Inventories (Note 4)	**67,685**	64,633
	1,950,448	1,657,829
Note Receivable (Note 5)	**4,699,876**	4,699,876
Capital Assets		
Site and improvements	**146,503**	146,503
Furnishings, fixtures and equipment	**459,752**	459,752
Building and facilities	**5,036,996**	5,036,996
	5,643,251	5,643,251
	$12,293,575	$12,000,956
LIABILITIES		
Current Liabilities		
Accounts payable	**$ 10,200**	$ 8,303
Unearned revenue (Note 6)	**958,962**	790,466
	969,162	798,769
EQUITY		
Capital Assets	**5,643,251**	5,643,251
Research Trust	**951,286**	829,060
Capital Trust	**30,000**	30,000
Technology Development Trust	**4,699,876**	4,699,876
	11,324,413	11,202,187
	$12,293,575	$12,000,956

APPROVED BY THE BOARD:

Director Trustee

University of Saskatchewan
Veterinary Infectious Disease Organization (VIDO)

Combined Statement of Changes in Financial Position

Year ended September 30, 1995 (1994 figures restated – see Note 10)

	1995	1994
OPERATING ACTIVITIES		
Working capital from operations		
Research Trust – Excess of income over expenditure	**$ 122,226**	$ 59,340
Changes in non-cash operating working capital		
Due from University of Saskatchewan	**63,207**	(167,085)
Accounts receivable	**238,410**	144,061
Inventories	**(3,052)**	47,524
Accounts payable	**1,897**	(1,303)
Unearned revenue	**168,496**	(172,406)
Cash used in operating activities	**591,184**	(89,869)
INVESTING ACTIVITIES		
Reduction in investments	**–**	200,676
INCREASE (DECREASE) IN CASH	**591,184**	110,807
CASH (DEFICIENCY), BEGINNING OF YEAR	**(119,189)**	(229,996)
CASH (DEFICIENCY), END OF YEAR	**$ 471,995**	$ (119,189)
Cash (Deficiency) consists of:		
Cash on hand	**$ 201,610**	$ 212,575
Funds held (claim on cash) – University of Saskatchewan	**270,385**	(331,764)
	$ 471,995	$ (119,189)

Notes to the Financial Statements

September 30, 1995

1. ESTABLISHING AGREEMENT

The Organization was established by an Agreement dated August 11, 1975 between the Devonian Foundation of Calgary, Alberta, the Province of Alberta, the Province of Saskatchewan and the University of Saskatchewan to conduct research on indigenous infectious diseases of food producing animals.

Effective April 1, 1980 the above Agreement was replaced by a Constitution which provides for a Board of Directors to assume the responsibilities formerly performed by the Board of Advisors and the Governing Committee.

2. SIGNIFICANT ACCOUNTING POLICIES

These financial statements have been prepared in accordance with the following policies:

Fund Accounting

Transactions of the Organization are accounted for by fund accounting principles which require classification of resources into funds to reflect the various designated uses. The Research Trust fund consists of those revenues and expenses used in the general operations of the Organization. The Capital Trust fund consists of grants, interest and authorized transfers from the Research Trust for the purpose of acquiring capital assets. Funds are transferred from the Research Trust to operations and to the Capital Trust as approved by the Board of Directors. The Technology Development Trust fund consists of income generated from Technology Access Agreements and will be used for the future development of technology under patent or license. The balance sheet and statement of changes in financial position have been presented on a combined basis reflecting the activities of all funds.

Capital assets

Capital assets are recorded as Capital Trust expenditures when purchased. The same assets are included in the balance sheet as Capital assets offset by the Capital Assets equity account. No depreciation is recorded on the capital assets.

Equipment purchased with Research Trust monies is expensed as purchased, and is not included in the balance sheet as assets.

The Constitution referred to in Note 1 states that all buildings and facilities constructed for the Organization shall be used by it in accordance with the Constitution and upon termination of the Organization, the buildings, facilities and equipment therein shall remain the absolute property of the University of Saskatchewan.

Inventories

Inventories of materials and supplies are valued at the lower of cost and net realizable value. Animal inventory is valued at cost.

Grants and donations

Grants and donations are recognized in these financial statements in the period defined in the terms or conditions of the respective grants or donations.

Grants and donations received without terms or conditions as to the period in which the grant or donation is to be used are recognized in the financial statements when received.

Unearned revenue consists of unexpended funds relating to specific grants and donations and is determined on the percentage of completion basis.

License Fees and Royalties

License fees and royalties are recognized as they are received or earned under the terms of the agreements with licensees.

3. ACCOUNTS RECEIVABLE

	1995	1994
Donations and unconditional grants	$ 53,200	$ 15,000
Conditional grants (Schedule 2)	47,858	77,294
Contract research	266,029	480,994
Contract services	86,802	97,787
Royalties	15,250	37,476
Accrued interest	1,002	–
	$ 470,141	$ 708,551

4. INVENTORIES

	1995	1994
Animals	$ 3,640	$ 16,093
Materials and supplies	64,045	48,540
	$ 67,685	$ 64,633

5. NOTE RECEIVABLE

As of December 15, 1993, the University of Saskatchewan, as represented by VIDO signed a Debenture/Debt Transfer Agreement with 598707 Saskatchewan Ltd., the trustee of the BIOSTAR Trust. This agreement transfers the debt obligation including related interest as evidenced by the Debenture made between BIOSTAR Inc. and the University of Saskatchewan, effective December 11, 1991, to 598707 Saskatchewan Ltd. Consideration for the transfer is a Promissory Note of $4,699,876 bearing no interest and due on demand.

6. UNEARNED REVENUE

	1995	1994
Donations and unconditional grants	$ 15,085	$ 16,033
Conditional grants (Schedule 2)	797,243	749,933
University of Saskatchewan	56,634	–
Contract research	90,000	24,500
	$ 958,962	$ 790,466

7. OTHER EXPENDITURES

Other expenditures consist of VIDO operating accounts which include repairs and maintenance, equipment rental, annual report and technical bulletins, professional fees and Board expenses.

8. INCOME TAXES

The Organization is not subject to either federal or provincial income taxes.

9. RELATED PARTY TRANSACTIONS

a) VIDO is a research affiliate of the University of Saskatchewan. The University of Saskatchewan maintains, as part of its normal operations, various financial and administrative functions relating to VIDO. The financial statements do not include expenditures for administrative and ancillary services, or in-kind support provided by the University of Saskatchewan.

b) The University of Saskatchewan is the beneficiary of a Trust which own 47.5% of BIOSTAR Inc., a research and development company which assists VIDO in the development of its products and technologies. During the year VIDO had the following transactions with BIOSTAR Inc.:

	1995	1994
Income from BIOSTAR Inc. to VIDO		
Contract research	$ 177,511	$ 372,020
Contract service and leases	247,513	59,574
Royalties	73,858	63,083
Sponsorship of an industrial research chair at VIDO in conjunction with NSERC	72,096	110,332
Expenditures made by VIDO on BIOSTAR Inc.'s behalf	37,190	72,203

At September 30, 1995 the Organization has a receivable from BIOSTAR Inc. of $138,618 (1994 – $406,257).

c) In 1993, VIDO entered into technology access agreements relating to specific products with BIOSTAR Inc. Income generated from these agreements was $4,699,876. Consideration for this income was a Note Receivable (Note 5).

10. RESTATED FINANCIAL STATEMENTS

As a result of revisions to 1994 revenue and expenses, revenue from the University of Saskatchewan increased by $30,657 and total expenses decreased by $12,972 to $3,968,549, resulting in a net increase of $43,629 to the Research Trust Fund balance for 1994.

University of Saskatchewan
Veterinary Infectious Disease Organization (VIDO)

Schedule 1

Schedule of Donations and Unconditional Grants

Year ending September 30, 1995

		1995	1994
LIVESTOCK INDUSTRY			
Beef	Ontario Cattlemen's Association	$ 5,000	$ 5,000
	Canadian Association of Animal Breeders	–	15,000
	Saskatchewan Horned Cattle Trust Fund	–	25,000
	British Columbia Cattlemen's Association	–	5,000
	Kamloops Stockmen's Association	700	700
	Manitoba Cattle Producers Association	–	1,500
	Saskatchewan Cattle Marketing Deductions Fund	75,000	75,000
		80,700	127,200
Dairy	Alberta Milk Producers' Society	25,000	25,000
	Agrifoods International Cooperative Ltd.	–	1,000
	Manitoba Milk Producers' Marketing Board	25,000	25,000
	Ontario Milk Marketing Board	–	20,000
		50,000	71,000
Swine	Alberta Pork Producers Development Corporation	38,825	39,956
	B.C. Hog Marketing Commission	3,153	5,102
	Manitoba Pork est.	20,000	8,826
	SPI Marketing Group	24,308	19,214
	Swine Improvement Services Co-operative (SISCO)	274	815
		86,560	73,913
Turkey	Canadian Turkey Marketing Agency	25,000	–
PROVINCIAL GOVERNMENTS			
	Alberta	55,000	35,000
	British Columbia	3,200	15,000
	Manitoba	15,500	15,500
		73,700	65,500
OTHER FOUNDATIONS, COMPANIES AND INDIVIDUALS			
	Individuals	–	240
	Max Bell Foundation	120,000	100,000
		120,000	100,240
		$ 435,960	$ 437,853

University of Saskatchewan
Veterinary Infectious Disease Organization (VIDO)

Schedule 2

Schedule of Unconditional Grants and Contracts

Year ending September 30, 1995

	September 30, 1994		1995	September 30, 1995			
	Accounts Receivable	Unearned Revenue	Funds Received	Accounts Receivable	Unearned Revenue	1995 Income	1994 Income
Natural Sciences & Engineering Research Council of Canada (NSERC)							
– Co-operative Research Development	$ –	$ –	$ –	$ –	$ –	$ –	$ 288,750
– Industrial Research Chairs	–	2,696	–	–	–	2,696	9,435
– Operating, Strategic and Equipment	–	111,291	448,500	–	97,375	462,416	551,850
– Industry Matching	–	23,600	47,200	–	23,600	47,200	23,600
– President's Award	–	1,146	–	–	–	1,146	16,042
BIOSTAR Inc. – NSERC Industrial Research	–	23,600	72,097	–	23,600	72,097	133,932
Canadian Bacterial Diseases Network (CBDN)	–	89,756	195,260	–	97,630	187,386	299,370
Agriculture Canada/NSERC Research Partnership Grants	–	114,000	112,200	–	35,418	190,782	147,000
Medical Research Council	–	116,775	204,261	–	110,936	210,100	141,775
World Health Organization	–	–	56,505	–	–	56,505	–
Alberta Agriculture Research Institute (AARI)							
– Matching Grants Program	3,648	89,546	162,655	47,858	116,040	180,371	166,231
– Farming for the Future Program	–	12,802	62,994	–	35,214	40,582	135,775
Alberta Cattle Commission	–	63,866	119,400	–	107,420	75,846	15,240
Saskatchewan Agriculture Development Fund	43,600	43,600	159,000	–	57,700	101,300	43,600
Saskatchewan Beef Development Board	–	–	46,300	–	27,008	19,292	–
Province of Ontario (OMAF) and Agriculture Research Institute of Ontario	–	–	–	–	–	–	78,944
National Agricultural Biotechnology Initiative	30,046	–	30,046	–	–	–	78,944
Health Services Utilization and Research Commission	–	50,550	67,950	–	50,962	67,538	16,850
Saskatchewan Health Research Board Fellowship	–	6,705	28,680	–	14,340	21,045	89,955
Medical Research Council Fellowship	–	–	–	–	–	–	30,509
	$ 77,294	$ 749,933	$1,813,048	$ 47,858	$ 797,243	$1,736,302	$2,267,802

Patents, Publications, Presentations and Research Collaborators

Patents Issued on Which VIDO Staff are Inventors

United States Patent No 5,369,026
Title – DNA Encoding Bovine Coronavirus Polypeptides E2 and E3
Date – November 29, 1994
Inventors – M.D. Parker, G.J. Cox, and L.A. Babiuk

United States Patent No 5,374,426
Title – Rotavirus Nucleocapsid Protein VP6 in Vaccine Compositions
Date – December 20, 1994
Inventors – M.I. Sabara, P.J. Frenchick, and K.F. Mullin-Ready

European Patent No 90 911 509.9
Title – Bovine Coronavirus Polypeptides and Vaccines
Date – February 23, 1995
Inventors – M.D. Parker, G.J. Cox, and L.A. Babiuk

United States Patent No 5,417,971
Title – Vaccines for *Actinobacillus pleuropneumoniae*
Date – May 23, 1995
Inventors – A.A. Potter, G-F Gerlach, P.J. Willson, and A. Rossi-Campos

United States Patent No 5,422,110
Title – Enhanced Immunogenicity using Leukotoxin Chimeras
Date – June 6, 1995
Inventors – A.A. Potter, M.J. Redmond, and H.P.A. Hughes

Australian Patent No 660168
Title – VP6 Encapsulated Drug Delivery
Date – June 15, 1995
Inventors – M.J. Redmond and M. Campos

United States Patent No 5,441,736
Title – *Actinobacillus Pleuropneumoniae* Outer Membrane Lipoprotein A and Uses Thereof
Date – August 15, 1995
Inventors – G.F. Gerlach, P.J. Willson, A. Rossi-Campos, and A.A. Potter

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Bunka, S., Christensen, C., Potter, A., Willson, P.J., and Gerlach, G-F. 1995. Cloning and Characterization of a protective outer membrane lipoprotein of *Actinobacillus pleuropneumoniae* serotype 5. Infect. Immun. 63: 2797-2800.

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Godson, D. Serum Haptoglobin as a Diagnostic and Prognostic Aid. Western Canadian Association of Bovine Practitioners Annual Meeting. January 26, 1995. Calgary, AB

Godson, D. Polyclonal Antibody Production. 34th Conference of the Canadian Association for Laboratory Animal Science. June 13, 1995. Saskatoon, SK

Willson, P.J. 1995. *Streptococcus suis:* Molecular Immunity and Vaccine Development. Presentation to SPI Marketing Group Research Committee. Saskatoon, SK. January and July.

Willson, P.J. 1995. *Streptococcus suis:* Molecular Immunity and Vaccine Development. Presentation to Ontario Pork Producers' Marketing Board Research Committee. Guelph, ON. July

Potter, A.A. 1995. Overview of VIDO's Dairy Cattle Research. Alberta Agricultural Research Institute "Focus on Dairy Research Opportunities Workshop." Edmonton, AB. April 19, 1995.

Allan, B. 1995. Overview of VIDO's Poultry Research. "Focus on Poultry Research Opportunities Workshop." Edmonton, AB. April 19, 1995

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Canadian Bacterial Diseases Network Personnel – At Various Centres Throughout Canada

A network of over 50 investigators from seven Canadian universities, a number of industrial companies, and government laboratories interested in bacterial diseases of humans, animals, and fish.

VIDO FINANCIAL SUPPORTERS

The following groups and agencies contributed funds to VIDO over the course of the past fiscal year through donations, grants, or contracts. Their support is acknowledged and greatly appreciated.

Agriculture Canada

Alberta Agriculture Research Institute

Alberta Cattle Commission

Alberta Milk Producers' Society

Alberta Pork Producers Development Corporation

B.C. Hog Marketing Commission

BIOSTAR Inc.

Canadian Bacterial Diseases Network

Canadian Turkey Marketing Agency

Egyptian Cultural & Educational Bureau

Government of Canada – Department of Western Economic Diversification

Government of Saskatchewan – Saskatchewan Agriculture Development Fund

Health Services Utilization & Research Commission

Kamloops Stockmen's Association

Manitoba Milk Producers

Manitoba Pork est.

Max Bell Foundation

Medical Research Council

Miles Inc.

Natural Sciences & Engineering Research Council of Canada

Ontario Cattlemen's Association

Province of Alberta – Alberta Agriculture

Province of British Columbia – Ministry of Agriculture, Fisheries & Food

Province of Manitoba – Manitoba Agriculture

Saskatchewan Beef Development Board

Saskatchewan Cattle Marketing Deductions Fund

Saskatchewan Health Research Board

Saskatchewan Research Council

SPI Marketing Group

Swine Improvement Services Co-operative

World Health Organization