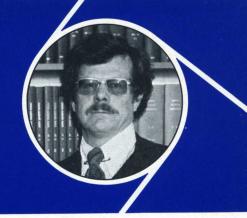
### VETERINARY INFECTIOUS DISEASE ORGANIZATION

VIDO

ANNUAL REPORT 1978-79

# BOARD OF ADVISORS' REPORT



In recognition of the regional importance of VIDO's work, the Board of Advisors met in four locations this year: Saskatoon, Edmonton, Calgary and Winnipeg.

In commenting for the Board of Advisors in this the Fourth Annual Report of VIDO, I found it interesting to re-read the Report of the Director in the First Annual Report, March 1976. Dr. Chris Bigland envisioned "Future Endeavors".

- The start of building construction of the VIDO Laboratory with an appropriate Ground Breaking Ceremony.
- (2) The hiring of personnel including two veterinary research scientists, a research microbiologist, a business manager, research technicians, a visiting scientist, another full-time secretary, and a grants consultant.
- (3) Rental of additional laboratory and office space in the Federal Animal Pathology Building near the VIDO site.
- (4) Initiation of research in VIDO on neonatal diarrhea with emphasis on management control of scours in calves and improved techniques for establishing definitive diagnoses on the causes of neonatal diarrhea.
- (5) Expanding our contacts with the livestock industry through additional newsletters, surveys and speaking engagements.
- (6) The solicitation of additional grants or contracts for research.

Three short years later, these endeavors are now accomplishments. The VIDO laboratory is now constructed and in active use, a highly competent and dedicated staff is in action, significant achievements have been made in producing a vaccine to reduce the occurrence of neonatal diarrhea in calves, widespread participation has come from the livestock industry and funds have been received from producers, agricultural organizations, provincial governments and the Devonian Foundation.

The combination of scientific credibility, the establishment of a Research Trust Fund and the provision of continued support from the University of Saskatchewan has brought VIDO to a position of stability.

The Organization is now firmly in a position to fulfill its motto "Serving the Livestock Industry Through Research".

During the coming year it is expected that the attainment of this goal will be demonstrated in practice through the availability of a vaccine which will save the lives of farm

Having participated in a successful launching, the Board of

Advisors will now be looking to the "Second Five Years". In consultation with the livestock industry, the fight against other infectious diseases will be undertaken through applying research to distinctive Canadian problems.

In chairing a Board which advises on a highly focussed Research Plan, I am grateful for the expert contributions made by the Board Members. The three new members appointed this year: Dr. Zane Block, Mr. Jim McCague, and Mr. Paul Riese, have added a valuable perspective to our decisions. Additionally, the Board's ability to counsel is greatly fortified by the guests from all sectors of the agricultural community across Canada who have attended our meetings. We view these people, who have given so freely of their time, as members of the team which has brought success to VIDO.

A. E. Pallister, Chairman, Board of Advisors, VIDO.

### **BOARD OF ADVISORS**

Mr. A. E. Pallister — Chairman Devonian Group of Charitable Foundations Calgary, Alberta

Dr. W. Weir — Director Veterinary Services Branch, Saskatchewan Department of Agriculture Regina, Saskatchewan

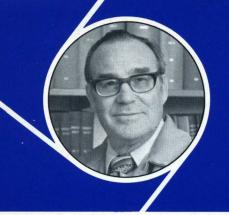
> Dr. Hugh Vance — Director Veterinary Services Division, Alberta Agriculture Edmonton, Alberta

> > Mr. James McCague Alliston, Ontario

Mr. Paul Riese Selkirk, Manitoba

Dr. Zane Block Standard, Alberta

Dr. C. H. Bigland — Director VIDO



# DIRECTOR'S REPORT

The 1978-79 year has been an active, exciting and productive one at VIDO. Some of the highlights of the year include:

- 1. The VIDO laboratory was officially opened on October 2, 1978 by Mr. Patrick Harvie of Crestview Ranches, Priddis, Alberta, grandson of the late Mr. Eric L. Harvie who endowed the Devonian Group of Charitable Foundations. Greetings were extended by The Honorable Marvin Moore, Minister of Agriculture, Government of Alberta; The Honorable Herman Rolfes, Minister of Social Services, representing The Honorable Edgar Kaeding, Government of Saskatchewan; Mr. Jim Fish, Vice-President of the Devonian Group of Charitable Foundations, and Dr. R. W. Begg, President of the University of Saskatchewan.
- 2. More livestock organizations and marketing boards looking upon VIDO as their own research arm, in which they have direct input through six producers who are full members of the Board of Advisors and Governing Committee. Through their donations and influence, governments both provincial and federal, are becoming aware of VIDO and may consider core funding or the matching of producer contributions.
- 3. One of the vaccines found effective against the pathogenic E. coli causing calf scours has been further developed, tested by challenge and under field conditions, and found effective in preventing a high percentage of death loss. A contract has been negotiated with Connaught Laboratories of Toronto, a Canadian biologics company, to mass produce the vaccine in time to be available to protect calves in the 1979-80 calving season.
- 4. The scientific staff of VIDO has doubled, which allows for wider research potential in calf and pig scours and other enteric diseases, respiratory disease; swine diseases; and possible poultry disease problems. Drs. Stephen Acres and Bob Kapitany have been joined by Dr. A. (Tony) J. Forman, Veterinary Microbiologist; Dr. Harold Fast, Swine Research Veterinarian, and Mr. Paul Hodgman, Executive Officer. Productive, highly qualified technical staff contribute markedly to VIDO research. We regret the resignations of Ms. Marsha Permut as Business Manager, and Mr. Brian Freeze as Agricultural Economist.

VIDO research is also continued more widely by an excellent group of VIDO research collaborators. These include Drs. Lorne Babiuk, Peter Stockdale, Henry Tabel, Otto Radostits, Eugene Janzen, Terry Church, George Forsyth, and Jim Bellamy at the Western College of Veterinary Medicine; Dr. George Khachatourians at the College of Medicine, Dr. Jeremy V. W. Greenfield of the

- B.C. Veterinary Laboratory, Abbotsford; and Dr. Dick Isaacson formerly at the National Animal Disease Laboratory at Ames, Iowa. Next year it is expected that additional scientists will become VIDO research collaborators. Research at VIDO is also guided by the advice of three large research teams drawn from all scientists interested in the area, and include teams on enteric diseases, respiratory diseases, and preventive medicine with present emphasis on swine diseases.
- The second successful Symposium on Neonatal Diarrhea in Calves and Pigs was held in October in conjunction with the official opening of VIDO. The refereed Proceedings will be available in June 1979.
- 6. Serving the livestock industry through information on VIDO research included the publication of three fact sheets — "VIDO VIEWS" on Thromboembolic Meningo Encephalitis (TEME), Blue Tongue, and Brucellosis; speaking to many livestock organizations and meeting several hundred producers, together with valuable contacts with friends in provincial and federal governments, and radio, press, and television. These activities were mainly carried by Dr. Lorne Greenaway, Mr. Paul Hodgman, Dr. Chris Bigland, and Dr. Stephen Acres.
- 7. Problems in building design and operation of the VIDO laboratory are rapidly being overcome by the University of Saskatchewan Buildings and Grounds personnel working closely with Ms. Margot Buckley, who is in charge of all the isolation and service areas in VIDO.
- 8. The unprecedented financial momentum of the donation of over \$250,000 by the livestock industry and personal donations, was augmented and accelerated by the generous matching funds on a dollar-for-dollar basis by the Devonian Group of Charitable Foundations. These contributors, together with the Government of Saskatchewan, and with the B.C. Government matching livestock donations from that province have assisted VIDO in "turning the financial corner". Although much needs to be done to fully exploit the potential of VIDO facilities and the needs of the livestock industry for research; we now have the assurance of the continued viability of VIDO. The first visible research "pay-off" will be the calf scour vaccine. If successfully employed, this will save the livestock industry in Canada alone, more money in one year than has been invested in VIDO to date. Already the confidence of the donors has been justified and we have just started!
- The cooperation, understanding and tireless work of the Board of Advisors, under the direction of Mr. A. Ernie Pallister, and the Governing Committee, under the direction of Dr. N. Ole Nielsen is deeply appreciated.

10. The VIDO Research Trust has been established with University of Saskatchewan controller, Mr. M. G. Sheppard, as trustee. The Trust receives all donations and funding to VIDO with disbursement by budget allocation approved by the Governing Committee and Board of Advisors. A format for budgets and financial reports satisfactory to these administrative bodies was developed by personnel of the Controller's Office, working with Mr. Paul Hodgman.

#### **Problems**

- Guaranteed core funding of VIDO by other provincial and federal governments, representing the consumers of Canada, is needed. Livestock organizations cannot be expected to carry the whole load when much of the research will benefit the consumer. Also, the Devonian Group of Charitable Foundations will soon have completed their commitment to VIDO.
- Decisions on research direction and priorities to best serve the livestock industry with limited funds and personnel is a major responsibility.
- The uniqueness of VIDO appears to preclude our participation in the programs of many of the federal granting agencies. Assistance and advice is needed in clarifying to them VIDO's potentially large role in preventing livestock diseases.

### **Future Endeavors**

 Revamping of the ten-year research plan will be undertaken.

- In addition to expanded research in enteric diseases and respiratory diseases, work will be started on preventive medicine in the area of swine diseases, and research on poultry disease problems.
- A new Constitution and By-Laws will be formulated, together with a renewed agreement by the original major donors.
- The Annual Report and newsletter "Viewing VIDO" will come out under different format.
- Farm facilities for vaccine testing and other research are being explored at the University Goodale Farm, or other farm facilities.

#### **Summary**

The financial and scientific strength of VIDO has improved markedly in the last year, which allows for broadening and increasing research activity. The first highly visible achievement of VIDO research scientists is a vaccine to control *E. coli* scours in calves. The vaccine should save the lives of enough calves in one year to pay for the whole cost of establishing VIDO to date, justifying the confidence of our many donors.

Dr. C. H. Bigland, Director — VIDO

### LIST OF SCIENTIFIC PUBLICATIONS

- Acres, S. D. and O. M. Radostits. The efficacy of a modified live Reo-like virus vaccine and an *E. coli* bacterin for prevention of acute undifferentiated neonatal diarrhea of beef calves. Can. vet. J. 17: 197-212. 1976.
- Acres, S. D., C. J. Laing, J. R. Saunders and O. M. Radostits. Acute undifferentiated neonatal diarrhea in beef calves. I. Occurrence and distribution of infectious agents. Can. J. comp. Med. 39: 116-132. 1975.
- Acres, S. D., J. R. Saunders and O. M. Radostits. The prevalence of enterotoxigenic *E. coli* and rotavirus in cow-calf herds in Western Canada. Can. vet. J. 18: 113-121. 1977.
- Babiuk, L. A., S. D. Acres, and B. T. Rouse. Solid-phase radioimmunoassay for detecting bovine (neonatal calf diarrhea) Rotavirus antibody. J. Clin. Microbiol. 6: 10-15. 1977.
- Acres, S. D., Isaacson, R. E., Babiuk, L. A. and R. A. Kapitany. Immunization of calves against enterotoxigenic colibacillosis by vaccinating dams with purified K99 antigen, and whole cell bacterins. Submitted Infec. Immun. 1978.

- Bellamy, J. E. C., and S. D. Acres. Experimental enterotoxigenic colibacillosis in colostrum-fed calves: pathologic changes. Accepted for publication, Am. J. vet. Res. 1978.
- Bigland, C. H. and M. W. Warenycia. Effects of biotin, folic acid and pantothenic acid on the growth of *Mycoplasma meleagridis*, a turkey pathogen. Poultry Sci. 57(3): 611-618. 1978.
- Ward, G. E. and C. H. Bigland. Use of a formalin-treated, live *Escherichia coli* vaccine in the prevention of neonatal enteric colibacillosis in swine. JAVMA 168(4): 317-318. 1976.
- Monette, J. P. L., M. Carpio, R. A. Kapitany, and L. A. Babiuk 1978. Polypeptide analysis of bovine rotavirus. International Symposium on Neonatal Diarrhea accepted for publication.
- Kapitany, R. A., A. Scoot, and G. Forsyth. 1978. Comparison of heat stable enterotoxins from bovine and porcine strains of enterotoxigenic *Escherichia coli*. International Symposium on Neonatal Diarrhea accepted for publication.

- Zebrowski, E. J., Kapitany, R. A. and Brunka, J. R. 1976. A simple and effective technique for destraining polyacrylamide disc gels. IRCS Medical Science: Biochemistry; Biochemical Technology 4: 470.
- Acres, S. D., R. E. Isaacson, G. Khachatourians, L. A. Babiuk and R. A. Kapitany. A K99+ ALEC and whole cell bacterin containing enterotoxigenic *E. coli* for prevention of enterotoxigenic colibacillosis of calves. International Symposium on Neonatal Diarrhea accepted for publication (1978).
- Acres, S. D., R. E. Isaacson, L. Babiuk and R. A. Kapitany. Immunization of calves against enterotoxigenic colibacillosis of vaccinating dams with purified K99 antigen and whole cell bacterins. Infection and Immunity submitted (1978).
- Freeze, Brian. "A Decision Analysis of Beef Calf Neonatal Diarrhea Vaccination Strategies Via Computer Simulation" MSc thesis December 1978 University of Saskatchewan.

### FINANCIAL STATEMENT AUDITOR'S REPORT

To the Board of Advisors of the Veterinary Infectious Disease Organization:

I have examined the balance sheets of the Research Trust Account and the Capital Trust Account for The University of Saskatchewan - Veterinary Infectious Disease Organization as at March 31, 1979 and the statements of income, expenditure and unexpended funds for the year then ended. My examination was made in accordance with generally accepted auditing standards and accordingly included such tests and other procedures as I considered necessary in the circumstances.

In my opinion, these financial statements present fairly the financial position of the University of Saskatchewan - Veterinary Infectious Disease Organization as at March 31, 1979 and the results of its operations for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Regina, Saskatchewan, May 18, 1979.

> W. G. Lutz, C.A. Provincial Auditor.

#### Statement 1

### VETERINARY INFECTIOUS DISEASE ORGANIZATION (V.I.D.O.)

#### RESEARCH TRUST BALANCE SHEET As At March 31

	<u>1979</u>	1978
ASS	ETS	
Cash in bank Investments — short term	<u>\$ 147,196</u>	\$ 17,164
Accrued interest income Contributions receivable —Devonian Group of	660,000 12,324	250,000 5,626
Charitable Foundations  —Research and development  —Alberta Agricultural	421,894 200,000	
Research Trust  Miscellaneous	24,950 ————————————————————————————————————	1,160 1,160 \$273,950
LIABI	LITIES	
Due to University of Saskatchewan —Operating Fund	\$ 107,253	\$ 44,822
	JITY	
Unexpended funds (Statement 2)	1,359,111 \$1,466,364	229,128 \$273,950

See accompanying notes.

#### Statement 2

### VETERINARY INFECTIOUS DISEASE ORGANIZATION (V.I.D.O.)

# RESEARCH TRUST STATEMENT OF INCOME, EXPENDITURE AND UNEXPENDED FUNDS Year Ended March 31

	1979	1978
INCOME		
Grants and donations: The Devonian Group of		
Charitable Foundations	\$ 853,471	\$120,000
Livestock industry Provincial Governments	235,021	
—British Columbia	23,848	
—Saskatchewan	250,780	200,000
Alberta Agricultural Research	75,337	
Trust (Note 3) National Research	75,337	V .
Council (Note 3)	5,000	21,000
Other individuals		10.100
and foundations	18,695 1,462,152	18,460 359,460
Research and development revenue	250,000	-
Interest income	53,125	21,698
Miscellaneous	19,060	800 381,958
	1,704,337	001,000
EXPENDITU	IRE	
University of Saskatchewan: (Note 1)	306,103	191,108
Salaries and fringe benefits  Materials and supplies	163,639	80,747
Equipment	95,547	38,405
Travel	49,176	39,733
Other	15,039 629,504	38,041 388,034
Alberta Agricultural Research	029,504	000,004
Trust (Note 3)	24,850	_
Francisco di nacca avan avana ditura	654,354 1,129,983	388,034 (6,076)
Excess of income over expenditure Unexpended funds, beginning of year	229,128	235,204
Unexpended funds, end of		
year (Statement 1)	\$1,359,111	\$229,128

See accompanying notes.

#### Statement 3

### VETERINARY INFECTIOUS DISEASE ORGANIZATION(V.I.D.O.)

CAPITAL TRUST BALANCE SHEET As At March 31

	1979	1978		
ASSET	ΓS			
Current: Cash in bank Investments — short term	\$ 27,819	\$ 119		
at cost     Accrued interest income     Total current assets Capital Assets (Note 2)	300,000 1,091 328,910	600,000 15,646 615,765		
Site and improvements Furnishings and fixtures Buildings Total capital assets	133,506 248,322 3,763,884 4,145,712 \$4,474,622	34,245 71,988 3,417,078 3,523,311 \$4,139,076		
. LIABILITI	ES			
Due to University of Saskatchewan — Capital Fund EQUITY	\$ 57,713	\$ 285,311		
Equity in Capital Assets Unexpended funds (Statement 4)	\$4,145,712 271,197 \$4,474,622	\$3,523,311 330,454 \$4,139,076		
See accompanying notes.				

#### Statement 4

### VETERINARY INFECTIOUS DISEASE ORGANIZATION (V.I.D.O.)

CAPITAL TRUST
STATEMENT OF INCOME, EXPENDITURE
AND UNEXPENDED FUNDS
Year Ended March 31

	1979	1978	Cumulative Total To Date
	INCOME		
Grants: The Devonian Group of Charitable Foundations	\$510,000	\$1,670,000	£2 180 000
Province of Alberta	\$5 10,000 —	\$1,670,000	\$2,180,000 1,870,000
Interest income	53,144	63,470	366,909
	563,144	1,733,470	4,416,909
EXPEN	DITURE (No	te 1)	
Sites and improvements (Note 2)	99,261	23,286	133,506
Furnishings and fixtures (Note 2)	176,334	46,970	248,322
Buildings (Note 2)	346,806	2,275,591	3,763,884
Buildings (140to 2)	622,401	2,345,847	4,145,712
Excess of income			
over expenditure	(59, 257)	(612,377)	271,197
Unexpended funds,			
beginning of year	_330,454	942,831	
Unexpended funds, end of year			
(Statement 3)	\$271,197	\$ 330,454	\$ 271,197

See accompanying notes.

# UNIVERSITY OF SASKATCHEWAN VETERINARY INFECTIOUS DISEASE ORGANIZATION (V.I.D.O.) NOTES TO FINANCIAL STATEMENTS March 31, 1979

- 1. The Veterinary Infectious Disease Organization (V.I.D.O.) was established by an agreement dated August 11, 1975, between the Devonian Foundation, the Province of Alberta, The Province of Saskatchewan and the University of Saskatchewan to conduct research on indigenous infectious diseases of food producing animals. The V.I.D.O. Research Trust and the V.I.D.O. Capital Trust are funds within the University of Saskatchewan Trust Fund established to administer unexpended V.I.D.O. operating and capital funds respectively. Funds are transferred from the Research Trust as approved by the V.I.D.O. Board of Advisors and from the Capital Trust as expenditures are incurred.
- 2. The above agreement also states that all buildings and facilities constructed for V.I.D.O., shall be used by them in accordance with the agreement and upon termination of the V.I.D.O. project, the buildings, facilities and equipment therein shall remain the absolute property of the University of Saskatchewan.
- 3. The research grants as received from the National Research Council (N.R.C.) and the Alberta Agricultural Research Trust (A.A.R.T.) are transferred to the University of Saskatchewan and are administered on behalf of the grantees for purposes of research conducted by V.I.D.O. In order to receive the level of financial support as provided it was necessary for V.I.D.O. to provide industry support in the amount of \$24,850.
- 4. The accompanying financial statements do not include expenditures for administrative services provided by the University of Saskatchewan.
- 5. At March 31, 1979, V.I.D.O. had commitments of \$70,221 in the Research Trust and \$13,824 in the Capital Trust.
- Certain 1978 comparative figures have been reclassified to conform with the financial statement presentation adopted for 1979.



# GOVERNING COMMITTEE'S REPORT

The VIDO Governing Committee held regular meetings on August 22, 1978, November 16, 1978 and March 6, 1979, and a special meeting on January 19 for the purpose of establishing conditions under which VIDO would negotiate its expertise for the commercial development of *E. coli* vaccines.

The addition of producers to the Governing Committee was particularly welcome. Their understanding of problems of the livestock industry and their experience in management provided a sound basis for a great deal of helpful advice.

A subcommittee of the Governing Committee acted as the negotiating team for the development of an agreement with a prominent Canadian pharmaceutical firm to license a vaccine for *E. coli* scours that VIDO has developed.

The Governing Committee is especially gratified at the progress VIDO has made in the development of methods to control *E. coli* scours in calves. This progress has been so extensive as to allow the acceleration of VIDO's long-term research plan. VIDO's research philosophy of concentrating its efforts in one or two important disease complexes at any one time appears to have been a wise one.

The recruitment by VIDO of additional veterinary scientists to tackle other major disease problems in livestock industry has been encouraged.

The widespread and generous donations of producers and producer organizations together with the ongoing support of the Devonian Foundation allowed VIDO to move to a more stable financial position during the past year. The research program in the coming year has been budgeted on the assumption that a high level of support by producers will continue.

It would appear that VIDO has filled an important gap in the livestock disease research system by focusing on developmental research that applies basic research learned in Government and University laboratories to the solution of practical farm problems.

Dr. N. O. Nielsen - Chairman Governing Committee, VIDO

### **GOVERNING COMMITTEE**

Dean N. O. Nielsen — Chairman Western College of Veterinary Medicine University of Saskatchewan

> President R. W. Begg University of Saskatchewan

> Vice-President J. A. Pringle University of Saskatchewan

Dean. K. J. McCallum Graduate Studies and Research University of Saskatchewan

Dean J. A. Brown — College of Agriculture University of Saskatchewan

Dean B. Schnell — College of Pharmacy University of Saskatchewan

Dr. D. Eidinger — Head, Medical Microbiology University of Saskatchewan

> Mr. J. McFaull University Board of Governors Saskatoon, Sask.

> > Mr. Gary Jones Crane Valley, Sask.

Mr. Ben Thorlakson Airdrie, Alberta

Mr. Orest Lukey Acme, Alberta

Dr. C. H. Bigland — Director V.I.D.O.

### HISTORICAL DEVELOPMENT

The Veterinary Infectious Disease Organization (VIDO) is devoted to serving the livestock industry through applied research on the control of common infectious diseases of food-producing animals. The conception of establishing such a research laboratory to act as a bridge between basic scientific discoveries and their use on the farm, has been in the minds of livestock men and veterinarians in Western Canada for many years. However, the embryonic concept started to develop only when the Devonian Group of Charitable Foundations of Calgary investigated VIDO through the Science Council of Canada and then decided to substantially fund it with \$2.2 million. It was quickly joined by the province of Saskatchewan, who offered \$1 million operating funds over a five-year period, and by the province of Alberta who gave a grant of \$1.87 million towards the cost of the laboratory building. The University of Saskatchewan agreed to provide the salary of the Director, 5 acres of land, maintenance of the building when complete, financial administration, and other ancillary services. The final agreement between the above parties establishing VIDO was signed in September, 1975. Since then, the new VIDO Laboratory building has been completed and various research projects are underway.

#### STAFF

Top Row — Left to Right: Gerry Weinmaster, Dr. Bob Kapitany, Dr. Steve Acres, Dr. Tony Forman, Dr. Harold Fast, Pat Platel, Carolyn Ashley.

Bottom Row — Left to Right: Raul Tabelon, Margot Buckley, Patty Merkel, Dr. Chris Bigland (Director), Maureen Kumph, Janice LeDuc, Irene Richard, Phyllis Zoerb, Paul Hodgman.

Missing: Sandy Feschuk, Molly Denson.



# VIDO IS UNIQUE

"Unique" is a term that is often over-used and improperly applied in today's society. It means simply "being the only one" or "being without like or equal". When it comes to research in North America and the rest of the world, VIDO (Veterinary Infectious Disease Organization) is truly "unique" in the terms of concept, operations and facilities.

"Unique" — VIDO receives direction and input from livestock producers and their organizations. This enables VIDO to research effectively. VIDO has representatives from all facets of the livestock and poultry industries from four different provinces on its governing bodies. To complement these producers, the governing bodies have representatives from the University, Government, and people from the private sector. VIDO, in turn, also reports back to producers on our activities and the latest developments in various research problems.

"Unique" — VIDO does *only* practical producer-orientated research. Producers and their organizations help pin-point problem areas for VIDO researchers to focus on. VIDO does result-orientated research that will have economic impact on the livestock and poultry industries in Canada.

"Unique" — VIDO operates on a research scientist-technician basis with *no* teaching responsibilities. VIDO serves the livestock industry through full-time applied research.

"Unique" — VIDO is concentrating its efforts on those infectious diseases of farm animals that have been with the industry since time began. We are working on the *prevention* of those diseases that the industry can now only treat after the disease has been contracted. Our primary efforts have been in the field of calf neonatal diarrhea or scours but we are now branching into the swine area as well as working on respiratory diseases.

"Unique" — VIDO operates on a self-reliant national basis from its location on the University of Saskatchewan's campus. By being situated in Saskatoon, VIDO is able to cooperate and collaborate with other faculties at the University, most notably the Western College of Veterinary Medicine.

"Unique" — VIDO has facilities not to be found elsewhere for the research into infectious diseases. The VIDO building has over 36,000 square feet consisting of offices, laboratories,

media preparation area, isolator rooms, and animal isolation units. The building is unique in that over one-half of the space is devoted to animal isolation facilities, most of which is capable of handling large animals. In these specialized facilities animals can be held in complete environmental isolation from one another.

"Unique" — VIDO support has come from many sources. In 1975, there was an agreement between the University of Saskatchewan, the Government of Alberta, the Government of Saskatchewan and the Devonian Group of Charitable Foundations of Calgary to establish and finance VIDO and its facilities. Since then, VIDO's additional funds have been secured from livestock and poultry organizations both provincial and national, individual producers and various granting agencies. VIDO must continually attract funds from these many sources in order to have operating capital to do its research.

VIDO is truly "unique" — VIDO intends on staying unique. Uniqueness will enable VIDO to fill those important roles and functions not covered by other research facilities or organizations.

### VIDO MAKES NEWS IN LIVESTOCK INDUSTRY.

Canadian research scientists have scored a major breakthrough by developing the world's first safe, economical, and proven-effective vaccine against bacterial calf scours caused by *E. coli.* It was announced jointly by the Veterinary Infectious Disease Organization (VIDO), of Saskatoon, and Connaught Laboratories Limited, of Toronto.

Bacterial calf scours, technically called neonatal diarrhea, can strike newborn animals with devastating mortality. It is estimated that the losses to the Canadian beef and dairy industries from this disease alone exceed \$40 million per year.

The new vaccine was developed at VIDO's research facilities at the University of Saskatoon by a team headed by Dr. Chris Bigland, Director of the Organization. VIDO is supported financially by provincial governments, livestock organizations, charitable agencies, private industries, and research funding bodies including Connaught Laboratories.

The new vaccine will be manufactured in Canada by Connaught and distributed world-wide by the Company.

### LIST OF GUESTS TO VIDO BOARD OF ADVISORS MEETINGS

AHERNE, Dr. Frank X., Faculty of Agriculture and Forestry, University of Alberta, EDMONTON, Alberta.

ALL:EWELL, Mr. Don, Manager, Marketing and Operating Sections, Livestock Divisions, Saskatchewan Wheat Pool, REGINA, Saskatchewan.

CAMPBELL, Ms. Kathy, Ministry of State, Science and Technology, OTTAWA, Ontario.

CLEWS, Mr. Wayne, Rep. of Sask. Charolais Association, PANGMAN, Saskatchewan.

COUSINEAU, Dr. Guy, Dean, Faculté de Médecine Vétérinaire, SAINT-HYACINTHE, Québec.

CHURCH, Mr. Al, Acting Secretary, Manitoba Cattle Producers Association, WINNIPEG, Manitoba.

DILWORTH, Mr. Art, Manager, Livestock Division, Manitoba Pool Elevators, WINNIPEG, Manitoba.

EDIE, Mr. Norman, Vice President, Manitoba Cattle Producers Association, DUGALD, Manitoba.

FLATEN, Mr. Glen, Secretary-Manager, Sask. Broiler Chicken Producers Marketing Board and Chairman, Sask. Hog Marketing Commission, REGINA, Saskatchewan. FRANKLIN, Dr. Mervyn, President, University of Windsor, WINDSOR, Ontario. GRACEY, Mr. Charles A., Manager, Canadian Cattlemen's Association, TORONTO, Ontario.

GREENAWAY, Dr. Lorne E., Steveston Veterinary Hospital,, RICHMOND, B.C.

GREENFIELD, Dr. J. V. W., Department of Agriculture, Veterinary Laboratory, ABBOTSFORD, B.C.

HAIGHT, Mr. Alan, Floral View Holsteins, SASKATOON, Saskatchewan.

HAYS, Senator Harry W., CALGARY, Alberta.

KIDD, Dr. A. B., Head, Veterinary Branch, VICTORIA, B.C.

LYNCH-STAUNTON, Mr. Frank, LUNDBRECK, Alberta.

McGOWAN, Dr. John E., Assistant Deputy Minister, Health of Animals Branch, OTTAWA, Ontario.

McPHEDRAN, Dr. Jack A., Director, Veterinary Services Branch, WINNIPEG, Manitoba. MILLS, Mr. Chris J., Secretary, Canadian Cattlemen's Association,

CALGARY, Alberta.

MITCHELL, Dr. Doug, Director, Animal Diseases Research Institute, LETHBRIDGE, Alberta.

MUNROE, Mr. Robert J., Director, Canadian Charolais Association, WARREN, Manitoba.

SINGLETON, Dr. J. Ross, Regional Veterinary Director, Health of Animals Branch, WINNIPEG, Manitoba.

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