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CANADIAN SOCIETY FOR IMMUNOLOGY SOCIÉTÉ CANADIENNE D'IMMUNOLOGIE

BULLETIN

OF THE CANADIAN SOCIETY FOR IMMUNOLOGY

DE LA SOCIÉTÉ CANADIENNE D'IMMUNOLOGIE

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Enquiries regarding membership in the Society should be directed to the Secretary-Treasurer. Membership applications are considered twice a year, in September and March. An Application Form is included in each issue of the BULLETIN.

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MEMBERSHIP APPLICATION FORM

EDITOR'S MESSAGE

Canada is proud to be the host country of the 6th International Congress of Immunology in 1986. The organization of an international congress with an anticipated attendance of more than 6,000 will require a great deal of time and coordinated effort. The Canadian Society for Immunology is pooling its resources to organize this very important scientific event for immunologists from all parts of the world. The organization of the Executive Committee of the Congress is in progress and each member of the Committee is responsible for a specific task. CSI members who wish to make suggestions or to offer help regarding any organizational aspect of the Congress should write or contact the appropriate individual of the organizing committee. Clearly, the pledge of full support by the membership is critical in assuring the success of the 6th Congress.

The response to our call for Regional Correspondents for the CSI Bulletin has been encouraging. There are now ten correspondents representing different areas across the country. Their reports appearing in the current and future issues of the Bulletin will keep our readers informed about important developments and scientific activities in different immunology centres from coast to coast. Obviously, this information network will not be complete without the participation of the remaining five cities, i.e., CALGARY, EDMONTON, LONDON, OTTAWA, and TORONTO, where there is no representative among our team of correspondents. Thus, we SOLICIT a Type I (IMMEDIATE), as distinct from a Type IV (DELAYED), reaction from CSI members of these cities to respond to our need for regional representation in their respective areas.

The CSI Council welcomes the twenty new members who joined our Society this year. It is not uncommon to hear the question, from our new colleagues, 'What can I do for the Society as a member?'. The following suggestions (listed in alphabetical order) may serve as a useful reminder:

COME to the CSI General Meeting every year and express your views.

CONTRIBUTE useful information (e.g. written articles) to the CSI Bulletin.

INFORM your Regional Correspondents about scientific events and research accomplishments in your laboratory/institute.

ORGANIZE immunology symposia and workshops and ask the CSI for blessings. PAY your membership dues promptly.
PRESENT your research work at the Annual CFBS Meeting.

RECRUIT new members.

VOLUNTEER to help with the 6th ICI.

WRITE to the President expressing your opinion on society business and activities.

I would like to take this opportunity to express the thanks of the membership to our past Secretary-Treasurer, Dr. Arnold Froese, for his excellent service to the CSI during the last six consecutive years. Besides playing a pivotal role in managing a vast number of functions for the Society, Dr. Froese also provided continuous valuable support to the last three CSI Presidents enabling them to run the society business smoothly and to serve the membership well.

TEACHING IMMUNOLOGY IN THE MEDICAL CURRICULUM OF THE UNIVERSITY OF TORONTO

Dr. S. Dubiski Professor Institute of Immunology University of Toronto

Immunology was first officially taught to the University of Toronto medical students in 1969. The introduction of immunology as a subject coincided with the new, system-oriented curriculum. Within this curriculum, immunology was initially taught in two weeks, crammed in one, and forgotten after three weeks (sometimes sooner). This form of teaching was short-lived, but immunology as a subject, once it had been introduced, became a standard feature of the first semester of the second year.

It would be very difficult for one teacher to keep track of all the changes in immunology, since they occur so often and so rapidly. In order to assure that the students are told of the newest relevant advances, a number of immunologists are asked to lecture on the subjects of their respective Thus, the course, totalling 31 hours, features 16 sub-specialties. Much emphasis is given to the practical aspects. This is lecturers. especially reflected in lectures entitled 'patient demonstrations'. one-hour sessions, usually held with an ambulatory patient, are devoted to a description of one pathologic condition, in which an immunological mechanism or immune damage is apparent. A lecture by a clinician is followed by patient-interview and is concluded by a brief question period, during which questions from the audience are answered by the patient or the lecturer. The course traditionally ends with the lecture 'Clinical Immunology as a Specialty', unfortunately poorly attended because of the closeness of the final examination.

The breakdown of the topics is as follows:

1	hr	Memory, Original Sin, Immunolo	gy	
		of the Influenza Virus		hr
1	hr	Immunologic Defenses in		
2	hrs	Infection	1	hr
2	hrs	Immunology of Parasitic		
		Infections	1	hr
1	hr	Immunology of Viral Hepatitis	2	hrs
2	hrs			
2	hrs		2	hrs
1	hr	Cancer Immunology	1	hr
		Demonstrations:		
1	hr	Atopic Disease	1	hr
lit	у	Dysproteinemia	1	hr
3	hrs	Organ Transplantation	1	hr
		Autoimmune Disease	1	hr
1	hr			
1	hr	Immune Disorders	1	hr
		Clinical Immunology as a		
			1	hr
	1 2 2 1 2 2 1 1 1it; 3	1 hr 1 hr 2 hrs 2 hrs 1 hr 2 hrs 2 hrs 1 hr	of the Influenza Virus 1 hr Immunologic Defenses in 2 hrs Infection 2 hrs Immunology of Parasitic	of the Influenza Virus 1 1 hr Immunologic Defenses in 2 hrs Infection 1 2 hrs Immunology of Parasitic

It is an advantage of this program that it reacts very rapidly to changes in the field. However, there are also disadvantages: continuity of presentation suffers to a certain extent, some vital pieces of information may be overlooked and never taught by any one of the lecturers, etc. The most common complaint by the students is that some lecturers do not distinguish between basic and superfluous, overload students with trivia and, in general, 'summarize their Ph.D. thesis for us' (the student says). Of course, the student is not the best judge of what is important and what is trivial, but the lecturers are not always entirely without guilt either. It goes without saying, that every year much of the co-ordinating efforts is directed towards improving the course and eliminating last year's omissions and mistakes.

Several textbooks are recommended, but none of them is listed as mandatory. As a rule, only the latest books are listed as recommended. The list usually includes two basic textbooks as alternatives, one reference book, and a book for 'devotees'. The syllabus of the course is a typewritten text, almost 400 pages long, which contains a summary of each lecture topic, a detailed guide to each laboratory session, a glossary of terms and a section, summarizing the lectures on clinical immunology given in the third year. The syllabus is revised every year.

The other integral part of the course is a series of 7 laboratorytutorial sessions, each lasting 2 - 3 hours (a total of 17 hours). Since the majority of the medical students are known to resent any manual exercise which does not involve examining the patient, the laboratory part is kept to In spite of this limitation the approximately 1/3 of the total time. students either perform or see a demonstration of a number of basic tests and reactions: a) immediate hypersensitivity, Arthus, and other skin reactions, b) ring precipitation, precipitation in gel, immunoelectrophoresis and radial immunodiffusion, c) antiglobulin test and passive hemagglutination, d) complement-mediated hemolysis and complement-mediated cytotoxicity, e) flocculation (VDRL), bacterial agglutination (H and O), and latex particle technique (histological antibody f) fluorescent and agglutination, sections). The rest of the time is filled with mini-lectures introducing the practical exercises, explaining selected topics of practical importance, and question-and-answer periods.

Audiovisual facilities at the Medical Sciences Building allow us to show videotapes simultaneously in all 12 laboratory rooms. Three such videotapes are shown as parts of the laboratory sessions: RAST test, Detection of single antibody forming cells (Jerne plaque assay), and 'Blueprints in the bloodstream', a 50-minute long film about HLA, the history of its discovery, its importance in organ transplantation and its association with diseases.

One laboratory session is devoted to clinical immunology. It is manned by a separate team of teachers, clinicians, who discuss a case of allergic rhinitis, monoclonal gammopathy, systemic lupus erythematosus, post-streptococcal glomerulonephritis, and hypersensitity to penicillin.

Knowledge acquired during the course is being tested by a two-hour multiple choice, computer assessed examination. In 1983-84, a one-hour

'laboratory test' was introduced. It is identicial in format to the final examination, but it is more laboratory-oriented and includes some fairly complex problem-solving questions. Another proportion of these questions, require knowledge of lecture material. A compromise was struck with the students, according to which the laboratory test is worth 15% of the final mark, but only if it improves the mark obtained in the final examination.

In comparison with other basic subjects taught in the medical curriculum, immunology is perhaps the youngest and, therefore, still in a state of considerable flux. The structure and the program of the course are constantly being changed in response to developments in the field, evaluations of the last year's course, performance by the students, their reaction to, and performance in the laboratory session, and the students' criticisms. Another 'renewal' of the medical school curriculum, which has just been launched will, no doubt profoundly affect immunology teaching. Whether such changes will be for better or for worse, remains to be seen.

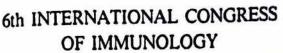
NEWS UPDATE

HYBRIDOMA AND MONOCLONAL ANTIBODIES DATA BANK

CODATA signed a contract in March 1983 with the American Type Culture Collections in Bethesda, Maryland, for the housing of its data bank on hybridomas and monoclonal antibodies. Staff has been hired and work was begun in early May collecting the available data.

The CODATA Task Group met in Geneva at the World Health Organization headquarters in January 1983 to complete the coding scheme for the data to be collected and to discuss the establishment of satellite banks in Europe and the Far East. Funds for the operation of the bank have been committed by several countries and further participation is expected.

The flow of information regarding hydridomas and monoclonal antibodies is increasing so rapidly that it is estimated that the number of antibodies existing today is certainly in the range of tens of thousands. In view of the importance of these reagents in basic research and diagnosis, not to mention their use in therapeutics, a catalog of these reagents becomes highly desirable. At present, any researcher, clinician, etc. who wants to know if a given hybridoma, monoclonal antibody or cell line exists, if it is available, and if so, where, has almost no way to make a comprehensive search. It is anticipated that retrieval of data by scientists will be possible in early 1984.



6° CONGRÈS INTERNATIONAL D'IMMUNOLOGIE

TORONTO, CANADA 6-11 July/juillet 1986

B. Cinader Chairman, Executive Committee of the Sixth ICI and the Canadian National Committee of IUIS

A wave of discovery and creative problem formulation has led to an era of novel biotechnology, immunodiagnostics, immunotherapy and genetic analysis. It will allow development of a new type of industry and of individualized medicine, based on the molecularly identified polymorphism of disease susceptibilty and of disease progression. Against this background, the 6th International Congress of Immunology should be viewed as a historic encounter among those who are committed to and responsible for developments in these areas of biological analysis, technology and clinical medicine. For us, the Canadian Immunologists, the 6th Congress will offer an opportunity to be hosts to our colleagues from all over the world, to learn from them and to project our own potential. Finally, it will allow us to introduce people from around the globe to the multi-ethnic culture of Canada as well as to aspects of Canadian science.

Our organization will provide for twelve functions: Scientific Program, Fund Raising, Treasurer, Opening Session, Pre-Congress Publications, Congress Centre Organization, Commercial Exhibitions, Satellite Symposia, Social Programs, International Relations, Hospitality for Guests from Developing and East European Countries and, finally, Accommodation, Registration and Transportation. Those responsible for these functions will form the Executive Committee; the Canadian National Committee of the International Union of Immunological Societies will act as the Board of Directors. Ultimately, every Canadian Immunologist will wish to make a contribution towards the comfort of our friends and visitors. At first, the administrative and organizational load will be heaviest on our colleagues in Ontario and, especially in or near Toronto. But even in this early period, the entire Canadian immunological community will be involved in the program formulation and each of us should use his or her connections and linkages to make some contribution towards identifying and contacting those willing to contribute financially or culturally. The Congress will be, in many respects, one of the great adventures of science in Canada and in the world; it will be a milestone in the evolution of the analysis of the immune system.

Early Pre-registration January 1, 1986
Abstract submission January 1, 1986
Symposium manuscripts June 15, 1986

Call for Registration and Abstracts (July 1, 1985)

This mailing will include all the forms necessary for registration and as much definitive information concerning the Congress. Symposia will be listed according to title, chairman, preliminary lecture titles and their scheduling with the Congress week. Workshops will be given by title but will not list chairmen or their scheduling. Poster sessions will also be given by title only.

SATELLITE SYMPOSIA (Dr. H.Z. Movat)

Individuals interested in organizing a satellite symposium before or after the 6th International Congress of Immunology should contact, for detailed information: Dr. Henry Z. Movat, Department of Pathology, Medical Sciences Building, University of Toronto, Toronto, Ontario M3S 1A8 (416) 978-2550.

SCIENTIFIC PROGRAM (Dr. R.G. Miller)

The long process of generating a program for the 1986 Congress has already started. Dr. A. Sehon (Winnipeg) has agreed to serve as Co-Chairman in charge of Workshops. I will have responsibility for Symposia and overall co-ordination. Dr. Sehon and I have each formed local advisory committees. Our first task, to appoint a National Program Committee, is currently underway. We plan to have a first draft of the program ready for submission to the National Committee by March 1984. This first draft should include about two-thirds of the final Symposia and Workshop titles plus a long list of possibilities for the remaining third. The final program must be ready by Spring 1985.

Dr. Sehon and I welcome any suggestions you may have concerning the program. They may be made either directly to either of us or to a Member of the National Committee.

SOCIAL PROGRAM (Dr. P.N. Shek)

A variety of cultural and industrial tours will be made available to participants of the 6th Congress. The cultural mosaic of Metropolitan Toronto renders it possible to offer a fairly wide choice of tourist attractions. Outside the City, Congress participants and their accompanying persons will have ample opportunities to discover the natural beauty of the Canadian landscape, e.g. the Niagara Falls, Thousand Islands, etc.

In addition to organizing the regular tours, plans are being made to promote the recognition of Canadian arts by foreign participants. It is anticipated that a number of art galleries will display the Congress emblem to attract the attention of Congress delegates. To add a touch of warm hospitality, spouses and friends of host CSI members are encouraged to act as volunteers in accompanying small groups of delegates in various social activities, such as visiting art galleries, the opera, museums, etc. A folded pamphlet, framed by colourful land-marks of Toronto and outlining the social activities, will be distributed to all pre-registrants.



The City of Toronto Arthur C. Eggleton Mayor

GREETINGS

TO THE

6TH INTERNATIONAL CONGRESS OF IMMUNOLOGY

It gives me great pleasure to extend greetings to the delegates who will be attending the 6th International Congress of Immunology, taking place in Toronto July 6-11, 1986.

Toronto is proud to be the host city to a congress of such importance. Your delegates can be justly proud of the many advances in the field of immunology over the past years. I hope that your discussions in Toronto will promote further research in the future.

I am especially pleased to welcome those delegates who will be visiting Toronto for the first time, and hope that you will be able to take time from your busy schedule to sample the many attractions and fine restaurants our City has to offer.

I wish you a most interesting and enlightening congress.

- FROESE, A. (Ph.D., McGill University), Professor

 Isolation and characterization of receptors for IgE on mast cells and basophils.
- GREENBERG, A. (M.D., Univ. of Manitoba; Ph.D., Univ. of London), Assoc. Prof.

 Regulation and genetics of natural resistance to tumors; membrane target structures for natural killer cells and natural antibodies; effects of stressors on immunological surveillance.
- KEPRON, M.W. (M.D., Univ. of Manitoba), Assistant Professor

 Humoral and cellular mechanisms involved in IgE-mediated bronchoconstriction in a canine model of allergic asthma and suppression of the IgE
 response.
- KISIL, F.T. (Ph.D., McGill University), Associate Professor

 Isolation and characterization of grass pollen allergens; identification of immunoreactive regions on allergens; modulation of the IgE antibody response to allergens by various constituents of pollen extracts.
- PARASKEVAS, F. (M.D., Univ. of Thessaloniki), Professor

 B and T lymphocytes; actions of adjuvants; effect of mouse myeloma proteins on immunoglobulin-carrying lymphocytes; immunosuppressive factors; mediators of macrophage-T cell and T-B cell interactions.
- SABBADINI, E. (M.D., Univ. of Pavia; Ph.D., McGill Univ.), Professor Transplantation and tumor immunology; delayed hypersensitivity.
- SCHWENK, R.J. (M.Sc., Ph.D., The Univ. of Manitoba), Assistant Professor Mechanisms of regulation of the antibody response by T cells; structure and function of T cell factors.
- SEHON,A. (M.Sc., Ph.D., D.Sc., Univ. of Manchester; F.R.S.C.), Professor and Head; Director, MRC Group for Allergy Research

 Characterization of antigen-antibody systems responsible for allergic conditions in man; development of immunotherapeutic procedures for immediate hypersensitivity with the aid of modified allergens.
- WARRINGTON, R.J. (M.B., B.S., Univ. of London; Ph.D., Memorial Univ. of Newfoundland), Assoc. Prof. of Medicine and Assist. Prof. of Immunology; Acting Head, Section of Allergy & Clinical Immunology, Health Sciences Centre; Director, Rheumatic Disease Unit Research Laboratory

 Research interests predominantly in the field of human lymphokines and monokines, with a special emphasis upon their role in the regulation of the normal immune response; abnormalities in production or response to such factors in various disease states.

INVESTIGATIONS WITHIN THE MRC GROUP FOR ALLERGY RESEARCH

The MRC Group for Allergy Research was originally formed in 1973. The long term, multifaceted and integrated goals of the Group are: (I) to elucidate the molecular, cellular and genetic parameters which regulate the IgE antibody response, (II) to devise effective immunotherapeutic methods for the suppression of IgE antibodies, (III) to unravel the events occurring on and

in the membranes of basophils and mast cells, which involve the receptors for IgE and which govern the release of inflammatory mediators from these cells, (IV) to establish the chemical nature of some of the allergens responsible for common forms of allergies to pollens, and (V) to study the pathophysiology of extrinsic (allergic) asthma.

SPECIAL SERVICE PROGRAMS

In view of the revolutionary discovery in 1975, at Cambridge University, by Kohler and Milstein, of cell fusion techniques for the development of monoclonal antibodies, a Hybridoma Laboratory was established within the Department of Immunology, for the needs of not only this Department, but also of any other department within the Faculty of Medicine. As a result of the initiative of the Department of Immunology, the Faculty has recently been awarded from the Medical Research Council the funds necessary to purchase a Fluorescence Activated Cell Sorter (FACS) which is presently being operated for the Faculty by one of the Department's research associates.

MAJOR ACHIEVEMENTS, RECOGNITION AND HONOURS

In recognition of his research and scholarly contribution, Dr. Sehon was awarded the Fellowship of the Royal Society of Canada in 1969; the Thomas W. Eadie Medal of the Royal Society of Canada in 1977; the Distinguished Service Award of the American Academy of Allergy in 1981; and was named "Distinguished Professor" of the University of Manitoba in 1982 and was elected in October 1982 as Vice-President of the Collegium Internationale Allergologicum for a period of four years. In November 1983, he was a recipient of one of the Annual International Awards of the St. Boniface Research Foundation, Inc.

Drs. Froese, Delespesse and Sehon have participated as invited lecturers in many international congresses. Recently, Dr. Delespesse presented an invited paper on "Pre- and Neonatal Synthesis IgE" at the 14th Congress of the Collegium Internationale Allergologicum in Sorrento, Italy, and participated in a workshop on the "Clinical Aspects of IgE" at the XI International Congress of Allergology and Clinical Immunology in London. Drs. Froese and Sehon were also invited speakers at two plenary sessions of the last mentioned Congress in London and presented the results of their long term research on, respectively, "The Receptors for IgE on Mast Cells and Basophils" and "Control of the IgE Response by Modified Allergens."

At the IV International Congress of Immunology in Paris in 1980, Dr. Sehon was Co-Chairman of the Workshop on "Regulation of IgE" and organized and chaired the Bernard Halpern Symposium on "Induction, Function and Suppression of IgE Antibodies"; the symposium volume was published under his editorship by Excerpta Medica in 1981. He participated as an invited speaker in the Symposium on "Mechanisms and Regulation of Immediate Hypersensitivity" at the V International Congress of Immunology in Kyoto in August 1983 and organized and chaired a symposium entitled "IgE Antibodies: Their Synthesis and Effector Functions".

In June of 1981 Drs. Froese and Paraskevas organized and participated in a 3-day International Symposium on "Structure and Function of Fc

Receptors" at the University of Manitoba and are the editors of a book on this topic published by Marcel Dekker in 1983.

In recognition of Dr. I. Berczi's pioneering studies on the effects of prolactin on the immune response, he has been recently invited to write and edit a book on "Pituitary Function and Immunity" which will be published by C.R.C. Press, Inc. Similarly, in recognition of the research contributions of Drs. Delespesse and Sehon to immediate hypersensitivity, they have been recently invited to write the first chapter entitled "IgE Structure and Synthesis" in the "Textbook of Allergic Diseases" which is being edited by Dr. Allen P. Kaplan of the State University at Stony Brook, N.Y.; this volume will be published by Churchill Livingstone Inc.

Drs. Froese, Sabbadini, Schwenk and Warrington have been Scholars of the Medical Research Council of Canada.

OTHER SCHOLARLY ACTIVITIES

In addition to serving on multiple departmental, faculty and university committees, most of the academic members of the Department are regularly invited to review grant applications for many Canadian and U.S. government and private granting agencies and to referee manuscripts for different scientific journals. Drs. Berczi, Delespesse, Froese and Sehon have been serving as members of grants review panels of the Medical Research Council of Canada, Department of National Health and Welfare (Canada), National Cancer Institute of Canada and the U.S. National Institutes of Health. Drs. Kisil and Sabbadini have served as members of the grants review panel of the Manitoba Health Research Council.

Drs. Froese and Sehon have served as Associate Editors for the Journal of Immunology, International Archives of Allergy and Applied Immunology, Molecular Immunology, Immunological Communications and Journal of Immunological Methods.

Dr. Froese had served as the Secretary-Treasurer of the Canadian Society for Immunology from 1977-1983. Dr. Sehon had served for three years as Member and finally as Chairman of the Program Committee of the Postgraduate Course of the American Academy of Allergy, and was a Member of the Medical Advisory Board of the Gairdner Foundation during the period of 1974-1982.

GRADUATE TRAINING

The Department of Immunology offers comprehensive programs of study and advanced research training in immunology leading to the M.Sc. and Ph.D. degrees. Predoctoral and postdoctoral training programs involve original research projects in three main subject areas: (1) cellular immunology and immunochemistry, including studies of the cellular interactions underlying the regulation of the immune response, the application of fluorescence-activated cell-sorting techniques to the separation and identification of subpopulations of lymphocytes, the characterization of the surface markers of these cells, and the development and application of monoclonal antibodies; (2) allergy, including the mechanisms governing the regulation of the anti-

body responses involved in common forms of allergy in man, the nature of the antigens inducing the formation of IgE antibodies, the chemical conversion of these antigens to suppressogenic derivatives, interactions of IgE antibody-antigen systems with cells and tissues leading to the allergic inflammatory response, the nature and function of the receptors for IgE on mast cells and basophils, and animal models of allergic asthma; (3) transplantation and tumor immunology, including the study of cellular and humoral factors in transplantation, immunologically specific methods for the destruction of cancer cells in vitro and in vivo, and the effect of adjuvants on different manifestations of the immune response in tumor-bearing animals.

In addition to a general course in immunology intended for medical students, a comprehensive set of graduate courses consisting of introductory immunology, immunological methodology, immunobiology, immunochemistry, medical immunology, selected topics in immunology, and seminars in immunology is offered.

POSTDOCTORAL TRAINING

A diversified program of experimental research projects provides opportunities for training at the postdoctoral level in the different areas of immunology for accredited immunologists as well as for individuals with backgrounds and interests which are complementary to immunology. Applicants are requested to send their curriculum vitae to the Department Head or to the professor in whose laboratory they wish to pursue their work. In addition, at least two letters of reference regarding their potential as independent investigators are to be provided by their former professors or supervisors.

(The information in this report was compiled by Dr. F.T. Kisil.)

"LOST" CSI MEMBERS

The following is a list of members whose mail is constantly being returned with the remark that the addressee has moved without leaving a forwarding address. ANYONE knowing the current address of these members should contact the Secretary-Treasurer. The former affiliation is listed with each name.

BALDWIN, J.F., Orange, California GOLDENBERG, P.Z., University of Toronto, Toronto KHAN, R.H., McMaster University, Hamilton NUSAIR, T.L., Willowdale, Ontario

PAPAIOANNOU, D.F., University of Calgary, Calgary PAPENBURG, R.R., MacDonald College, Quebec PATY, D.W., University Hospital, London, Ontario SOCKEN, D.J., University of Toronto, Toronto SZYMANSKA, I.Z., University of Toronto, Toronto ***** FOCUS *****

IMMUNOLOGY GROUP QUEEN'S UNIVERSITY

Kingston, Ontario

THE QUEEN'S IMMUNOLOGY GROUP

The Immunology Group at Queen's consists of a number of internationally known and respected investigators. Although there is no group in a formal sense, there certainly is in the functional sense, since all of the investigators mentioned below, collaborate and publish together on various research projects, share a joint seminar and course, attend one another's research meetings, make joint applications for major equipment, and encourage their students and post-doctoral fellows to interact widely throughout the group.

Department of Microbiology and Immunology

RODER, John

Dr. Roder's research centres around investigations of the molecular nature of the target-effector interaction in the Natural Killer Cell system, the development of a technology for producing human hybridomas and their applications to both cancer and leprosy, the immunology of Multiple Sclerosis, and the role of amplified gene sequences in tumor progression. Dr. Roder, an Associate Professor in the Department, currently houses three post-doctoral fellows, four graduate students, and one Research Associate, as well as technicians in his laboratories.

SZEWCZUK, M.

Dr. Szewczuk's main research interests centre around idiotype regulation during immune senescence, gut associated immunity in man, and immune defects in dystrophic mice. Dr. Szewczuk has two graduate students associated with his program.

Department of Pathology/National Cancer Institute Research Group

DENNIS, Jim

Dr. Dennis studies metastatic and non-metastatic lectin resistant variants of murine tumor cells.

ELLIOT, Bruce

Dr. Elliot studies the molecular basis for self Ia-recognition in classical alloimmune T-lymphocytes.

KERBEL, Bob

Dr. Kerbel works primarily on metastasis in murine models and studies the role of tumor cell heterogeneity in tumor progression.

LAGARDE, Alain

Dr. Lagarde is a Somatic Cell Genetist who is studying the genetic basis for tumor cell variant formation and he has also developed a large panel of murine NK cell clones.

There are three post-doctoral fellows and two graduate students within the N.C.I. group.

Research Funded by the Ontario Cancer Treatment Research Foundation

PROSS, Hugh

The main research interest of Dr. Pross lies in quantitating human NK cells in health and disease. Dr. Pross has one post-doctoral fellow and two graduate students in his laboratory.

Other investigators peripherally involved with the Immunology Group include Dr. Peter Aston (Complement Studies), Dr. June Chadwick (Insect Immunity), Dr. Sam Ludwin (Demyelinating Disease), Dr. Derrick Cooke (Rheumatoid Arthritis), Dr. Jack Wall (Auto-immune Thyroid Disease), and Dr. Peter Ford (Glomerulonephritis).

The Immunology Group at Queen's University is well-equipped and well-funded. They possess or have access to a fluorescence activated cell sorter (FACS-IV), a pathogen-free barrier unit for nude mouse breeding, gamma counters, scintillation counters, ELISA plate readers, cell banks, and DNA probes. Excellent resource groups in Recombinant DNA technology are situated in the Biology Department (Dr. Brad White), and Biochemistry Department (Drs. Spencer, Deeley, Davies).

(The information in this report was compiled by Dr. J.C. Roder.)



MOVING TO A NEW ADDRESS?

KEEP US INFORMED!

EDMONTON Dr. T.G. Wegmann

Department of Immunology

University of Alberta

OUEBEC Dr. M. Pagé

Département de Biochimie

Université Laval

GUELPH Dr. B.N. Wilkie

Department of Veterinary
Microbiology and Immunology

University of Guelph

SHERBROOKE Dr. M. Nemirovsky

Department of Anatomy University of Sherbrooke

University of Guerph

HAMILTON Dr. J. Bienenstock

Department of Pathology McMaster University VANCOUVER Dr. V.K. Singh

Immunology Laboratory Children's Hospital

KINGSTON Dr. J.C. Roder

Department of Microbiology

and Immunology Queen's University VICTORIA Dr. T. Pearson

Biochemistry Department

University of Victoria

MONTREAL Dr. R. Mandeville

Institut Armand-Frappier Université du Quebec WINNIPEG Dr. F.

Dr. F.T. Kisil

Department of Immunology University of Manitoba

GUELPH

(B.N. Wilkie)

The core of the Immunology Group at the University of Guelph is located in the Departments of Veterinary Microbiology and Immunology (VMI) and Microbiology. An increasing number of faculty members in other departments are developing interests in immunology leading to interaction particularly with the immunology section of the Department VMI. Faculty responsibilities formally include both teaching and research with the latter focusing heavily upon disease problems of agricultural animals. Teaching responsibility in the College of Veterinary Medicine is shared and includes two immunology courses given in the veterinary curriculum and two given to graduate students. The faculty also contribute lectures in body system courses and give tutorials to final year veterinary students. In the microbiology department both an undergraduate and graduate immunology course are offered. Graduate level immunology courses are widely used by students from several disciplines and are amongst the most highly attended graduate courses.

Research Funding

Research here is varied and is supported from several sources. Infrastructure is largely financed by a research contract with the Ontario Ministry of Agriculture and Food. Funding is also obtained from NSERC, Agriculture Canada, Ontario Pork Producers Marketing Board, Ontario Ministry of Natural Resources and from industrial concerns. Medical Research Council fellowships have supported graduate students.

Investigators in the Department of Veterinary Microbiology and Immunology

- DERBYSHIRE, Brian: Dr. Derbyshire is investigating natural killer cell activity of lymphocytes from the intestinal epithelium of pigs.
- JOHNSON, Roger: Dr. Johnson has recently joined the group in VMI and has the major responsibility of establishing a clinical immunology diagnostic service for the teaching hospital.
- SHEWEN, Particia: Dr. Shewen is continuing the investigation of host response to the bacterial pathogen Pasteurella haemolytica, the major associated agent in fibrinous pneumonia of cattle and the principal cause of morbidity and mortality in North American beef animal. Research is directed towards the immune response to virulence factors. Dr. Shewen is also investigating the immune response to Chlamydial agents to provide improved serodiagnosis.
- WILKIE, Bruce: Dr. Wilkie collaborates with Dr. Shewen in the respiratory research described above. He has initiated a study of immune response in pigs in relation to the major histocompatibility gene complex to investigate the feasibility of genetic manipulation of pigs towards disease resistance and improved response to prophylactic vaccination. Research is continuing into the immune response of foxes immunized by the intestinal route with inactivated rabies virus as part of a larger program intended to provide an oral vaccine for wildlife.

Research in Other Departments

- BURNSIDE, Ted and BURTON, John (Department of Animal and Poultry Science):

 Drs. Burnside and Burton are investigating familial relatedness of immunoglobulin and antibody production in Holstein Friesian cattle.
- EYRE, Peter (Department of Biomedical Sciences): Dr. Eyre conducts research in the area of immunopharmacology particularly in relation to type 1 allergy. His efforts currently involve the effects of infectious agents as modifiers of pulmonary response to allergens.
- MELLORS, Allen (Department of Biochemistry): Dr. Mellors is investigating membrane biochemical aspects of lymphocyte response to mitogens.

Several faculty in the Ontario Veterinary College and elsewhere are using immunological techniques and there is considerable interest in improved rapid serodiagnostic methods especially for veterinary viral diseases.

KINGSTON

(J.C. Roder)

Scientific Discoveries

Dr. Adolfo de Bold in the Department of Pathology has discovered a new hormone-like peptide which is stored in the granules of cardiocytes in the atrium of the heart. The peptide has recently been purified and shown to exert potent diuretic effects on the kidney. The factor also exerts a hypotensive effect on blood vessels. Dr. de Bold has assembled a team of co-investigators at Queen's, including Drs. G. Flynn, P. Davies and J. Roder, to sequence the amino acids, clone the genes synthesizing cardionatrin and develop a panel of monoclonal antibodies to obtain an antigenic map of the peptide. Because of its great pharmaceutical potential, the work has recently been awarded an \$800,000, two-year grant by the Idea Corporation of Ontario. The team of Queen's investigators hopes that this award will enable them to maintain an international lead in this rapidly accelerating field of investigation. The discovery of this "hormone" may rival the discovery of insulin by Banting, Best, McLeod and Collip in Toronto in the 1920's.

Local Meeting in 1984

The Canadian Society of Microbiologists' Annual Meeting will be held at Queen's University, Kingston, Ontario, on 10-14 June 1984. Details of the main syposium are outlined below.

MAIN SYMPOSIUM MOLECULAR ASPECTS OF PSEUDOMONAS PATHOGENICITY

Robert Hancock University of British Columbia

Larry Bryan University of Calgary

David Groff Washington State University

Barbara Iglewski University of Oregon

Ian Holder Shriner's Burn Unit Bacterial Cell Envelope and Antibiotic Resistance

Plasmids and Antibiotic Resistance

Phytopathological Studies

Exoenzymes and Toxins

Molecular Studies on Virulence



VANCOUVER

(V.K. Singh)

The immunology community in the province of B.C. is comprised of basic as well as clinical research investigators, who are active members of various departments affiliated with the University of British Columbia, Children's Hospital, Vancouver General Hospital, B.C. Cancer Reserach Centre, St. Paul's Hospital and the University of Victoria. The major source of funding for various research programs is made available through the MRC, NCI, CARS, BCHCRF, NSERC, BCCRF and Vancouver Foundation. The individual research programs are listed as follows:

- BOYKO, W. (Hematologist: SPH)

 Immunologic investigations of patients with AIDS.
- FERGUSON, A. (Allergist: UBC/CH)

 Immunologic mechanisms of allergic diseases in childhood.

 Antibody responses to allergens.
- FORD, D. (Rheumatologist: VGH/UBC)

 Studies of infection and immunity in Arthritis and Rheumatism.
- HOGG, J. (Pathologist: UBC/SPH)
 Immunology of lung diseases.
- JUNKER, A. (Clinical Immunologist: CH/UBC)

 Virus-host interactions; antibody responses in congenital CMV infections.
- KILBURN, D. (Immunologist: UBC)

 Role of helper cells and factors in anti-tumor response; cloning of Ag-specific T cells; identification of Ag-specific helper factors.
- LEVY, J. (Immunologist: UBC)

 Regulation of Immune Response to Tumors; identification and characterization of Tumor antigens by monclonal antibodies.
- McMASTER, W. (Geneticist: UBC)

 Molecular Immunology and immunogenetics; structure of immune response gene in rat.
- PATY, D. (Neurologist: VGH/UBC)

 Immunoregulation in multiple sclerosis.
- PEARSON, T. (Immunologist: University of Victoria)

 Immune regulation in protozoan infections.
- PETTY, R. (Rheumatologist: CH/UBC)

 Immunology of Rheumatic diseases in children; auto-immunity to collagen and nuclear antigens.

- SILVER, H. (Oncologist: BCCRC)

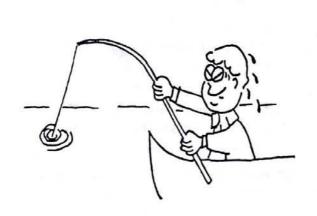
 Clinical trials of interferon therapy for patients with cancer and AIDS; studies of sialo-glycoprotein as a tumor marker for a variety of malignant diseases.
- SINGH, V. (Immunologist: UBC/CH)

 Laboratory assessment of human lymphoid cell subpopulation in health and disease: pathologic role of immune complexes and tissue auto-anti-bodies in clinical and experimental medicine.
- TAKEI, F. (Immunologist: BCCRC/UBC)

 Studies of cell surface markers in mouse and human leukemias and lymphomas by means of monoclonal antibody characterization of AML-specific antigens.
- TEH, H. (Immunologist: UBC)

 Characterization of Ag-Specific Helper cell function in T cell differentiation in fetal thymus in mice.
- TINGLE, A. (Immunologist: UBC/CH)

 Pathogenesis of rubella-associated arthritis; investigations of immunodeficiency disorders and virus infections in children.





VICTORIA

(T. Pearson)

New Faculty Members

During the past two years the Department of Biochemistry and Microbiology expanded somewhat with the addition of two new faculty members - Dr. Bob Olafson (protein chemistry) and Dr. Paul Romaniuk (RNA chemistry). This brings the faculty to a total of ten. Reflecting these additions is the increase in student enrolment which has been more than 10% per year for three years in a row.

Research

The number of research projects involving immunology has also increased. Primarily the various research projects involve immunochemical analysis of antigens involved as virulence determinants, or as protective The establishment of a antigens or antigens useful for immunodiagnosis. protein microsequencing facility along with a monoclonal antibody facility and associated HPLC technologies enables the immunochemical analysis of antigens for potential development of peptide vaccines and immunodiagnostic Indeed several of the ongoing research projects reflect this approach: vaccines for the fish diseases furunculosis and bacterial kidney disease of salmonids are being developed by Drs. Ishiguro, Kay and Trust. In addition, antigenic analysis of surface antigens of Neisseria meningitidis (Olafson), Neisseria gonhorroeae (Pearson), Campylobacter species (Trust) and of the tropical parasites Leishmania and Trypanosoma are underway (Olafson, Pearson). Antibodies are also being used as probes for ribosomal proteins in a project directed at molecular evolution under the direction of Dr. A.T. Matheson, head of the Department. A new development in the Department is a consolidated effort to study the biochemistry and immunochemistry of hydrophobic membrane antigens of African trypanosomes and Leishmania species by combining expertise and personnel in the immunology laboratory and protein microsequencing laboratories.

Scientific Meetings

The Department was involved in 1982-83 in the organization of two scientific meetings; Dr. Tom Buckley was the organizer of the 10th Annual meeting on Biomembranes held at Cowichan Bay on Vancouver Island and Dr. Trevor Trust organized the 6th Annual meeting on the Biological Implications of Microbiology Pathogenicity held at the Banff Springs Hotel.

Visiting Lecturers

The Department of Biochemistry and Microbiology hosted two Lansdowne visiting lecturers in 1982-83, Dr. Hans Kornberg, Cambridge University, Cambridge, England, and Dr. Martin Raff, University College, London, England. These are awarded annually by the University and allow departments to bring in distinguished scholars for periods ranging from 1-14 days.

Graduate Studies

The Department of Biochemistry and Microbiology has a young faculty and is one of the most rapidly growing Departments at the University of Victoria. Applications for graduate studies and postdoctoral positions are invited. A new building incorporating a new Faculty of Microelectronics Engineering and the Department of Biochemistry and Microbiology has been given the go-ahead by the Treasury Board of the Provincial Government and the design stage is almost complete. It is anticipated that this facility will allow the expansion of biomedical and biotechnological expertise in Victoria.

****** DRAWBACKS & QUOTES ******

The CELL family





CANADIAN SOCIETY FOR IMMUNOLOGY

SOCIETE CANADIENNE D'IMMUNOLOGIE

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1983-1984

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W. Pruzanski, Ph.D. Wellesley Hospital P.N. Shek, Ph.D. Defence & Civil Institute of Environmental Medicine

G3.2.4 Membership Dues

Dr. Froese reported that the Council had recommended that membership dues be increased from \$12.00 to \$14.60 per annum for full and associate members. Dues for student members to remain unchanged. This increase was recommended in order to partly offset an anticipated deficit brought about by travel support to help members involved in organizing the 1986 Toronto Congress, to go to the 1983 Kyoto Congress and to familiarize themselves with organizational aspects of this International Congress. In future years additional funds would be required to help finance symposia at CFBS Meetings as well as International Symposia sponsored by the Society.

After some discussion it was agreed that this was a modest increase and that the Society had to be put on a more solid financial footing.

Resolution: That the recommendation of Council to increase annual membership dues for full and associate members from \$12.00 to \$14.60 be approved.

Mover: A. Froese Seconder: A. Sehon

CARRIED

G3.2.5 Additional Temporary Dues

Dr. Froese also reported that Council had also recommended an additional increase in dues of \$10.00 per annum for a maximum of three Dr. Sinclair presented the reasons for introducing these temporary dues. The primary reason was a payment of \$5,000.00 which the Society will, in all probability, have to make towards the organization of the 1986 Int. Congress of Immunology in Toronto. addition, other unforeseen expenditures may arise in connection with this Congress. Dr. Sinclair pointed out that these costs would most likely be recovered after the Congress in the form of "profits" made as a result of the Congress. Several members suggested the temporary levy might be repaid to members in the form of decreased dues after the Congress. Dr. Froese pointed out that such a committment could not be made at this time. However, he recommended that Council review the entire financial situation following the 1986 Congress, taking into consideration the temporary levy introduced prior to the Congress.

Resolution: That the recommendation of Council to introduce additional temporary annual dues of \$10.00 on all but student members for a period of up to three years be approved provided the Society has to contribute \$5,000.00 (or any other substantial sum) towards the organization of the 1986 Congress and that the collection of these dues be reviewed annually.

Mover: A. Froese Seconder: N.R. Sinclair

CARRIED

Dr. Levy also reported that future meetings would be shortened to 3 days and this was strongly endorsed by those present. It was suggested that meetings be held over a weekend so participants can take advantage of cheaper flights which usually require that a Saturday be included in the trip.

G4.4 Scientific Program for the 1984 Meeting in Saskatoon

Dr. Levy asked Dr. H. Tabel, the CSI's local organizer to report on this Program. He reported that after a meeting with the Program Committee it was decided to hold two symposia, one entitled "T-Cell Receptors" and the other "Immunobiology of Pregnancy". In addition, a plenary lecture is to be held with L. Hood or P. Leder as possible speakers.

G4.5 CSI Journal

Dr. Levy reported that the answer to a questionnaire regarding such a Journal were generally favourable: 63 versus 18. Those responding favourably preferred a refereed journal, and suggested that publishing a computer-based journal should certainly be explored.

The concensus of those present at the Annual Meeting was also in favour of CSI Journal although some expressed fear that it might become a second rate journal. Others pointed out that much would depend on the membership and members would have to pledge to publish all or most of their papers for at least two years in such a Journal. Several reasons for publishing a CSI sponsored journal were cited: Control over editorial policy, page charges would benefit the CSI and not some other organization, service to members, etc.

Whether or not the word Canadian should appear in such a journal was debated for some time with the opinions being about equally divided.

Finally, it was agreed that Dr. Levy should continue to further explore the possibilities of publishing a CSI sponsored Journal. Dr. Levy stated that the membership would be consulted before a final decision to publish such a journal is made.

G4.6 The International Congress of 1986, Toronto

Dr. Levy asked Dr. Sinclair to report on devlopment during hte past year. Dr. Sinclair reported that in collaboration with the National Research Council posters were prepared to advertise the 1986 Congress in Kyoto. Three budget proposals had been made, each involving different levels of expenditures, going from a "bare bones" budget to one with some "frills". Ten individuals would be going to the Kyoto Congress in order to obtain organizational pointers from Japanese organizers of the 1983 Congress.

Resolution: That a Committee of Drs. B. Cinader, N.R. Sinclair and \overline{J} . Bienenstock prepare a written report on organizational details for the 1986 Congress and submit it to the CSI Council by the 31st of October 1983.

Mover: A. Sehon

Seconder: P.N. Shek

CARRIED

G5 Other Business

G5.1 Canadians for Health Research

Resolution: That the Society become a Corporate member of Canadians for Health Research.

Mover: J. Gordon

Seconder: A. Greenberg

CARRIED

Dr. Gordon agreed to provide the incoming Secretary-Treasurer, Dr. H.N. Rode, with details on how to become a corporate member.

G5.2 International Symposia

Drs. F. Paraskevas and K. Singhal reported that they were planning to organize an International Symposium on "Regulator Molecules" in 1985 to be held in London, Ontario.

Resolution: That this Symposium be endorsed by the CSI.

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Mover: A. Sehon Seconder: A. Greenberg

CARRIED

Dr. P. Kongshavn informed the meeting that she and Dr. E. Skamene were planning to organize a National RES Meeting in 1985.

THE CANADIAN SOCIETY FOR IMMUNOLOGY

STATEMENT OF FINANCIAL ACTIVITIES (Cash basis)

FOR THE YEAR ENDED MAY 31, 1982 (With comparative figures for 1981)

(With comparative figures for 1981)	1982	1981
REVENUES		
Membership fees, including levies to Canadian Federation of Biological Sciences and International Union of Immunological Societies	\$10,656	\$ 9,181
Interest	447	430
Other	11,012	9,711
EXPENSES		
Audit	315	
Bank charges	16	6
Graduate students, subsidy to attend conferences		1,440
Incorporation and legal costs	218	865
Levies		
Canadian Federation of Biological Sciences	6,414	5,139
International Union of Immunological Societies	504	542
Membership, Youth Science Foundation	75	75
Office and postage	291	
Percy Memorial Award, Youth Science Foundation	208	279
Printing and typing	266	271
Symposia	2,207	3,000
Telephone	99	64
	10,613	11,681
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENSES FOR THE YEAR	\$ 399	\$(1,970)
BALANCE SHEET		

BALANCE SHEET (Cash basis) AS AT MAY 31, 1982 (With comparative figures for 1981)

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CURRENT		1981
Cash in bank	\$ 5,107	\$ 4,708
April 4-6 SURPLUS	0	
BALANCE, beginning of year	\$ 4,708	\$ 6,678
Excess (deficiency) of revenues over expenses for the year	399	(1,970)
BALANCE, end of year	\$ 5,107	\$ 4,708

APPROVED ON BEHALF OF THE EXECUTIVE (Original signed by Dr. Arnold Froese) DIRECTOR

See auditors' qualified report dated July 28, 1982

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AUDITORS' REPORT

The Members of The Canadian Society for Immunology Winnipeg, Manitoba

We have examined the balance sheet of The Canadian Society for Immunology at May 31, 1982 and the related statement of financial activities for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances, except as explained in the following paragraph.

In common with many charitable organizations, The Canadian Society for Immunology derives its revenues from its members in the form of membership fees which are not susceptible to complete audit examination. Accordingly, our verification of these revenues was limite to accounting for the amounts recorded in the books of the Society.

In our opinion, except for the effects of adjustments, if any, had membership fees been susceptible to complete audit verification, these financial statements present fairly the financial position of The Canadian Society for Immunology as at May 31, 1982, and the results of its financial activities for the year then ended in accordance with the accounting principle described in Note 1 to the financial statements applied on a basis consistent with that of the preceding year.

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Winnipeg, Manitoba July 28, 1982

CHARTERED ACCOUNTANTS

ANNOUNCEMENT

Positions Available



UNIVERSITY OF VICTORIA

DEPARTMENT OF BIOCHEMISTRY AND MICROBIOLOGY

Postdoctoral Fellowship in Immunoparasitology

Funding is available for a three year period for a postdoctoral fellow-ship on a project directed at immunodiagnosis of African Trypanosomiasis. The project involves collaboration between a laboratory in Kenya where clinical specimens are collected. The applicant should have immunochemical experience and should be familiar with antibody/antigen assays. The work will involve monoclonal antibodies, ELISA/RIA, HPLC purification of antigens, microsequencing and possibly peptide synthesis. Applicants should forward their curriculum vitae and three letters of reference to Dr. T.W. Pearson, Department of Biochemistry and Microbiology, University of Victoria, Victoria, B.C. V8W 2Y2 ([604] 721-7080).



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