

1994 SPRING CSI MEETING  
FIRST ANNOUNCEMENT

SCI REUNION DU PRINTEMPS 1994  
PREMIERE ANNONCE



## BULLETIN

CANADIAN SOCIETY FOR IMMUNOLOGY

SOCIÉTÉ CANADIENNE D'IMMUNOLOGIE

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# UPCOMING MEETINGS

## Canadian Society for Immunology - Spring '94 Meeting

The 1994 Spring CSI meeting will be held at Le Chantecler, Sainte-Adèle, Québec from the evening of Friday 11th March to the morning of Monday 14th March 1994. The Cinader Lecture will be on Friday evening, the Symposia will be on Saturday, Sunday and Monday mornings and the workshops will be on Saturday and Sunday late afternoons. Saturday and Sunday evenings will be for poster sessions. Registration and abstract packages will be mailed in October, if you have received this CSI bulletin you will get the package, otherwise write or FAX to Michael Ratcliffe, McGill University. As in previous years there will be student travel bursaries for this meeting and prizes awarded for the best student posters; details of awards will be provided in the registration package.

## Société Canadienne d'Immunologie - Réunion du Printemps 1994

L'assemblée SCI du printemps 1994 aura lieu à l'hôtel Le Chantecler, Sainte-Adèle, Québec. La réunion débutera dans la soirée du vendredi 11 mars et se conclura dans la matinée du lundi 14 mars 1994. La présentation Cinader se donnera le vendredi soir, les conférences se tiendront les samedi, dimanche et lundi matins et les ateliers auront lieu les samedi et dimanche après-midi. Les soirées de samedi et dimanche seront réservées pour les séances d'affichage. Les inscriptions pour la réunion, le résumé et l'hôtel vous seront postés en octobre. Si vous avez reçu ce bulletin du SCI vous recevrez sans faute ces informations. Dans le cas échéant veuillez écrire ou télécopier votre demande à Michael Ratcliffe de l'Université McGill. Comme dans les années précédentes des bourses pour les frais de voyage et des prix pour les meilleures affiches seront attribués aux étudiants. Les détails des prix seront fournis dans le nécessaire d'inscription.

Early registration deadline: **7th January 1994**  
La date limite pour la pré-inscription:

Abstract deadline: **7th January 1994**  
La date limite de réception du résumé:

Student travel bursary deadline: **7th January 1994**  
Bourse de voyage pour les étudiants:

Hotel registration deadline: **1st February 1994**  
La date limite pour les réservations à l'hôtel:

Michael J.H. Ratcliffe,  
Department of Microbiology and Immunology,  
McGill University,  
3775 University St.,  
Montreal, Quebec,  
H3A 2B4

FAX (514)-398 7052

Preliminary Announcement



**Canadian Society for Immunology -- Spring '94 Meeting**  
**Société Canadienne d'Immunologie -- Réunion du Printemps**  
**1994**

**March 11-14, 1994 / le 11-14 mars, 1994**  
**Le Chantecler - Sainte-Adèle, Québec**

The meeting will consist of a symposium each morning, afternoon workshops and a poster session each evening after dinner.

Les matinées sont réservées pour les conférences et les soirées pour les séances d'affichage. Les après-midi sont libres pour les ateliers.

**Program/Programme**

**Cinader Award and Lecture**

**Symposium I     Peripheral Tolerance**

Chairperson: Peter Bretscher (Saskatoon)

**Symposium II     Signal transduction**

Chairperson: Hanne Ostergaard (Edmonton)

**Symposium III     Immunology of HIV**

Co-chairs: Rafik Sekaly (Montreal)  
Larry Guilbert (Edmonton)

Workshops:	I	<b>Immunoparasitology</b>	Co-chairs: Kris Chadee (Montreal) Terry Pearson (Victoria)
	II	<b>Cell death in ontogeny and lymphocyte activation</b>	Chair: John Reynolds (Calgary)
	III	<b>Superantigens</b>	Chair: Walid Mourad (Sainte-Foy)
	IV	<b>Nuclear regulation of lymphocyte activation</b>	Chair: Gill Wu (Toronto)





L'Hôtel Le Chantecler,  
site de villégiature par excellence  
des Laurentides, est fière de recevoir,  
pour la première fois, la conférence de la  
"Société Canadienne d'Immunologie"

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### Dates de la Conférence

Arrivée : vendredi, le 11 mars 1994

Départ : lundi, le 14 mars 1993

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### Tarifs

132,00 \$	par personne, occupation simple	(taxes en sus)
94,00 \$	par personne, occupation double	(taxes en sus)
86,00 \$	par personne, occupation triple	(taxes en sus)
77,00 \$	par personne, occupation quadruple	(taxes en sus)

Incluant: Petit déjeuner buffet  
Déjeuner buffet  
Dîner fixe  
Accès au centre sportif  
(piscine, squash, racquetball, ping-pong,  
tourbillon, sauna)  
Chambre avec bain tourbillon \*

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### Tarifs

#### Pré & Post-Congrès

99,00 \$ par chambre, occupation simple ou double  
( sans repas )

15,00 \$ par personne additionnelle

Notre tarif de groupe de ski alpin est de 10,00 \$ par  
personne, par jour.

\*\*\*

Les formulaires d'enregistrement seront disponibles à  
l'intérieur des enveloppes d'invitation à cet effet.

Nous vous souhaitons un merveilleux séjour dans nos belles  
Laurentides et, au plaisir de vous accueillir!

\* Certaines chambres de l'hôtel sont sans bain tourbillon.

#### **LE CHANTECLER**

1474, chemin Chantecler  
C.P. 10<sup>th</sup>  
Sainte-Adèle (Québec) J0R 1L0

Téléphone: Réservations, Est du Canada et É.-U.:  
Réservations, Eastern Canada and USA: 1-800-363-2420  
Sainte-Adèle: (514) 229-3555  
Fax: (514) 229-5593



Hôtel Le Chantecler,  
the conference and resort center by excellence,  
situated in the heart of the Laurentians,  
is pleased to host, for the first time, the  
Canadian Society of Immunology's March 1994 Meeting

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#### Conference Dates

Arrival : Friday, March 11, 1994

Departure : Monday, March 14, 1994

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#### Rates

\$132.00 per person, single occupancy	(taxes extra)
\$ 94.00 per person, double occupancy	(taxes extra)
\$ 86.00 per person, triple occupancy	(taxes extra)
\$ 77.00 per person, quadruple occupancy	(taxes extra)

Including: Breakfast "Buffet Style"  
Lunch "Buffet Style"  
Dinner "Fixed Menu"  
Access to our sports complex  
(pool, squash, racquetball, ping-pong,  
whirlpool, sauna)  
Room with a whirlpool bath \*

\*\*\*

#### Rates

##### Pré & Post-Conference

\$ 99.00 per room, single or double occupancy  
(without meals)

\$ 15.00 per additional person

Our group rate for downhill skiing is \$ 10.00 per person, per day.

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You will find the registration forms inside the invitation envelopes.

We look forward to greeting you at Le Chantecler and wish you success in this special upcoming event.

\* Certain rooms do not include a whirlpool bath.



## EDUCATION IN IMMUNOLOGY: PART ONE OF A SERIES

There is an unprecedented degree of interest in Immunology among scientists in other fields, the general public and, significantly, educators at all levels. The CSI/SCI Council has discussed a number of potential avenues we might take as an organization, or individually at the local level, to support this interest. John Reynolds (Calgary) is actively looking into the advantages of different strategies we could consider.

In this issue of the Bulletin, we begin a series on the theme of Education in Immunology with a thought provoking report. This paper was prepared by an international committee charged by the IUIS with establishing guidelines for doctoral degrees in Immunology. The article, reprinted from *The Immunologist* 1:22, 1993 (with permission), provides interesting food for thought on doctoral programs in immunology in Canada.

Your comments on this proposal, the strengths and weaknesses of Canadian training programs, or on the issue as a whole, are welcomed and will be published in the next issue of the Bulletin.

As the input of research trainees is particularly vital, we can publish comments on a "name withheld, University location-withheld" basis, should that be requested. Contributions can be mailed to the address provided on the cover of this issue or FAXed to the editor at 204 772 7924.



### THE BIOMEDICAL RESEARCH CENTRE

### POSITIONS AVAILABLE

2222 Health Sciences Mall, UBC  
Vancouver, British Columbia  
Canada, V6T 1Z3  
Telephone (604) 822-7810  
Telecopier (604) 822-7815

**POSTDOCTORAL POSITIONS:** available immediately at **The Biomedical Research Centre**, University of British Columbia to study cell-surface receptors for 1) transcobalamin II and 2) IL-5, using monoclonal antibodies, protein purification and recombinant DNA techniques. Successful candidates will have training and publications in areas of immunology/hemopoiesis, biochemistry of membrane proteins or signal transduction. The BRC provides an excellent interdisciplinary environment emphasizing interactions and collaborations. Applicants should send curriculum vitae and names of three referees to: **Dr. John Schrader or Dr. Hermann Ziltener, The Biomedical Research Centre, UBC, 2222 Health Sciences Mall, Vancouver B.C. V6T 1Z3, Canada FAX (604) 822 7515.**



# Guidelines for the PhD Degree in Immunology —

## Recommendations of the Education Committee of the IUIS

*Prepared by J.-P. Revillard*

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This document recommends a set of guidelines that guarantee an acceptable scientific competence in scientists awarded a PhD degree, but does not prescribe a rigid formula for education. It suggests how a PhD may be acquired, ways in which a PhD candidate may be assessed, and criteria for the overall evaluation of a PhD program. It is aimed at university departments, national organizations that set standards for graduate education, scientists who serve as external examiners for evaluation of theses for graduate degrees, and, most importantly, the candidates themselves.

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In many universities, specialized departments (or centers involving faculty from several departments) provide an integrated, multidisciplinary curriculum in basic immunology for undergraduate and graduate students. These institutions have the research facilities, personnel and educational experience required for the organization of PhD programs in immunology. The contributions of these establishments to education and research training over the last two or three decades has been central to the development of modern immunology as a recognized specialty in its own rights. However, the recognition of immunology as an independent scientific discipline is recent, and in some academic institutions, immunological research is carried out in departments primarily devoted to other specialties, such as biochemistry, molecular biology, microbiology or cell biology. The same holds true for research and training in clinical immunology: only a limited number of medical, dental, and veterinary schools have independent immunology departments with suitable research facilities. In many medical schools immunological research may be carried out in departments primarily devoted to pathology, microbiology, blood transfusion, pediatrics, transplantation, oncology, etc. Particularly in developing countries, where qualified immunologists are in great demand to tackle major and urgent problems of human and veterinary health, some of the more recently established universities and research institutes lack the necessary expertise and finance required for selecting, training and evaluating PhD candidates.

In 1989, the committee on education of the international union of biochemistry published a series of recommendations under the title "*Standards for the PhD Degree in Biochemistry and Molecular Biology*" [1]. This document provides valuable guidelines for the organization of PhD programs. The Education Committee of IUIS and many representatives of immunological societies felt that similar recommendations for immunology should be available. The present recommendations, essentially parallel to those prepared by our biochemistry colleagues, provide specific considerations relating to the position of immunology among other scientific disciplines.

### Rationale

Immunology emerged during the late-nineteenth century as the scientific discipline concerned with the mechanisms of host interactions with infectious agents. Major advances in immunology arose from different facets of basic biology and medical applications, a long time before immunology was recognized as a major independent discipline among sciences. For example, studies of blood transfusion and clinical organ transplantation provided a major impetus toward the discovery of blood groups and, later, of the major histocompatibility complex. Progress in protein biochemistry and in molecular biology of the gene led to the discovery of the structure, gene organization and rearrangements, and mechanisms of the diversity of antibody molecules and T cell receptors. Studies of patients with immunodeficiencies, allergy, or monoclonal lymphoproliferative diseases, provided new insights into many basic mechanisms underlying the immune response. In parallel, antibodies, especially monoclonal antibodies, and the technology of immunoassays, had extensive application in numerous fields of biology as well as in human and animal medicine. Thus numerous examples of conceptual and methodological interactions between immunology and other scientific disciplines may be found.

A scientific discipline relies on a few major leading concepts. In addition, scientific disciplines share a common language and



the pharmaceutical and biotechnology industries. Immunological expertise can be applied to areas of medicine involving allergy, autoimmunity, transplantation, biocompatibility of foreign devices, development of new vaccines or antibodies by genetic engineering, and subcellular interventions such as gene therapy.

## Standards

The recommendations presented below should be adapted to prevailing educational standards in the given country. However, in view of the increasing mobility of scientists, an attempt should be made to guarantee a minimum internationally acceptable level of competence for holders of the PhD degree in immunology. As for research in other biological disciplines, practical knowledge of applied statistics (including non-parametric tests) and competence in the use of personal computers (data analysis and graphic expression, keyboard efficiency) are mandatory for PhD students nowadays.

### 1. The Candidate Should Demonstrate a General Knowledge of Basic Immunology

The level of knowledge expected from a PhD candidate goes beyond the broad principles and terminology of the discipline. It should be based on an understanding of the experimental methods from which the basic concepts are derived, rather than on the conclusions that others have derived from the use of these methods. This implies the reading, in-depth analysis and understanding of original publications journals such as *Journal of Immunology*, *European Journal of Immunology*, *Nature*, *Science*, and *Cell*, and of review-type papers such as those published in *Annual Reviews of Immunology* and *Immunology Today*.

A good understanding of immunology requires extensive background knowledge of physiology, cell biology, biochemistry, molecular biology and microbiology. It requires familiarity with major areas of immunological research such as lymphocyte differentiation, receptor structure and repertoire selection, the regulation of cell activation, the biology of cytokines, networks, the MHC, complement, cell adhesion molecules, as well as more integrated studies of autoimmunity, immunodeficiency, oncology, transplantation, immunity in infectious diseases, and allergy. Since the extent to which such knowledge is acquired during undergraduate programs varies, supplementary formal courses during the PhD training period must be available to correct the deficiencies in some candidates.

Attainment of the required level of understanding can be evaluated by written examination and/or oral tests for the graduate courses, as well as by review of the candidate's progress in research.

### 2. The Candidate Should be Familiar with the Immunology Literature and Be Able to Acquire a Working Background Knowledge of Any Area Related to Immunology

Familiarity with the literature enables the candidate to identify areas that have already been explored, those that require

exploration, and those where results or interpretations are controversial. The literature is the major link between immunologists throughout the world and is the repository of all scientific information. This is the same literature to which candidates are expected to contribute during their training and in their future career as independent investigators. The ability to review the literature, to evaluate it critically, and to extract from it the reliable information to be used as a basis for further exploration or investigation, is essential for an independent immunologist.

The development and evaluation of these skills can be achieved by the preparation of the following: the research proposal, seminars and journal-club presentations, results for publication, periodic reviews of progress, the preparation of the thesis, and the preparation of a research grant application. To guarantee minimal standards and fairness in the evaluation process, it is advisable that the candidate's progress be assessed by his/her PhD Advisory Committee.

### 3. The Candidate Should Possess Technical Skill

Owing to the great number of experimental techniques used in modern immunology, a PhD candidate will not receive formal training in every technology. Rather, the candidate should be expected to have acquired sufficient technical skills, background knowledge and self confidence to conduct the research project assigned for his/her degree program; this indicates the ability to adapt or develop techniques for future research.

Technical competence, and adaptability are prerequisites for independent research, and these may be acquired primarily by the development of novel strategies for the thesis project, but also by specially designed laboratory courses, and/or short periods of training in other laboratories.

### 4. The Candidate Should Ask Meaningful Questions

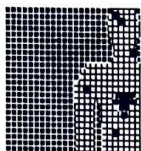
This ability arises in part from familiarity with, and critical evaluation of, the literature. It requires broad knowledge, creativity, and imagination, and is facilitated by discussion with other scientists. Meaningful questions must be circumscribed and answerable; the answers become part of the edifice of scientific knowledge and constitute the cornerstones for research by other scientists in immunology or in related areas.

The ability to formulate new avenues for research can be developed by the supervisor through periodic reviews of the doctoral research, by analyzing published papers, at scientific seminars, while drafting and defending research proposals, and finally in the preparation of the thesis.

The candidate should participate in organized seminars, to provide opportunities to present and defend research plans, experimental results and their interpretation, to evaluate and comment critically on the work of others, and to participate in discussions about technical and scientific issues.



# POSITIONS AVAILABLE



*The John P. Robarts*  
**RESEARCH  
INSTITUTE**

**Scientists in Autoimmunity at  
The John P. Robarts Research Institute  
The University of Western Ontario  
London, Ontario, Canada**

The John P. Robarts Research Institute is seeking applications for five positions of Research Scientist in the newly established Autoimmunity Group. Positions are available July 1, 1994, and appointments will be made on a renewable five year basis at a competitive salary. Establishment funds will be available for the initial three years. Academic rank will be determined by cross-appointment in the appropriate University/Hospital department (e.g. Microbiology and Immunology, Medicine), and applicants will have the opportunity to teach and supervise graduate students and research fellows.

Candidates (Ph.D. and/or M.D.) should be experienced in one or more of the following broad areas; autoimmunity, antigen processing and presentation, lymphocyte growth control and development, signal transduction, gene mapping and immunogenetics. Experience with transgenic and/or knockout animal models of disease is also desirable. Successful candidates are expected to establish independent research programs using genetic, molecular and cellular approaches to fundamental problems in autoimmune disease (e.g. diabetes, multiple sclerosis, rheumatoid arthritis). They will have opportunities to collaborate with members of other existing (Transplantation Immunology, Stroke and Aging, Heart and Circulation, Imaging, Clinical Pharmacology, Clinical Trials) and to be established (Cell Surface Receptor Biology and Signal Transduction, Vaccine Development, Gene and Cell Therapy, Neurobiology) research groups at the Institute, as well as with members of relevant university and hospital departments.

The John P. Robarts Institute, located on the very attractive campus setting of The University of Western Ontario, London, Ontario, is an autonomous, modern, medical research facility that aptly reflects the strong growth and commitment to basic and clinical research in Southwestern Ontario. London, a city with a population of 317,000, in the Great Lakes region, has easy access to several centres in Canada (Toronto) and U.S.A. (Detroit). The absence of urban congestion and pollution together with a mild climate makes it one of the most attractive and affordable communities in Canada, offering an excellent cultural and family-oriented environment.

In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada. Qualified candidates should forward a curriculum vitae, an outline of research interests and scientific goals, reprints of key publications, and arrange for three letters of reference to be sent to:

**Dr. Terry L. Delovitch, Director,  
Group on Autoimmunity  
Weinstein Scientist in Diabetes  
The John P. Robarts Research Institute  
P.O. Box 5015, 100 Perth Drive  
London, Ontario, Canada N6A 5K8**