

Canadian Hematology Society
Société Canadienne d'Hématologie

NEWSLETTER

199 - 435 St. Laurent Blvd., Ottawa, ON K1K 2Z8
Ph: 613-748-9613; Fax: 613-748-6392; E-mail: cag@ca.inter.net

July 2003

Members of the Society are invited to attend the
Canadian Hematology Society
Annual General Meeting

at

The Radisson Plaza Hotel Admiral

October 24th – 26th, 2003

In Toronto on the Harbour Front
For Hotel reservations call 1-416-203-3333

Hope to see you there!

**To pre-register please call Jeanne Burnham @ 403-625-4100 or email
info@haecanada.com**

***The CHS Annual General Business meeting is at 5:30PM
Fri October 24th***

Editor Gail Rock

Executive 2000-2003

President: Gail Rock

Secretary-Treasurer: Sue Robinson

Vice-President: Armand Keating

Past-President: Man-Chiu Poon

Sponsored, in part, by a grant from Bayer Inc.

PRESIDENT'S MESSAGE

Gail Rock, PhD, MD, FRCP(C)

In the natural order of things my term as president of the CHS would have been completed early this summer. However, because of the unfortunate events surrounding SARS, our meeting in Toronto was postponed. This meeting has been rescheduled to October and again will be held in conjunction with the Hereditary Angioedema Society. The meeting this year is being held at the Radisson Hotel with the CHS meeting on Friday and a continuation of activities on Saturday and Sunday as per the agenda on pages 5 and 6.

In order to effect a change to the executive prior to the meeting, we will carry out an election of officers for the new board by mail/fax. As per our bylaws, Dr Man-Chiu Poon, as past president, along with the members of the nominating committee, have prepared a slate of officers. Should there be alternative nominations for the one open position of vice-president they should be sent to Sue Robinson immediately. If no other nominations are forthcoming, the slate will be approved 30 days after the newsletter is first received by members. Should other nominations be received we will conduct a ballot by email and fax. This way, we expect to have the new board in place prior to the annual general business meeting with Dr Armand Keating, Chief Medical Services and Head of the Department of Medical Oncology and Hematology, Princess Margaret Hospital, as the new president.

In completing my term of office as president I would like to thank the members of the society and of the board for the help and support they have given me over the past few years. I believe a good deal has been accomplished: The CHS has begun to work with the Royal College on issues related to manpower. The excellent update from Graham Pineo in this copy of the newsletter will bring you up to date on developments in this area. We have approved our bylaws, begun to establish an independent meeting schedule separate from the Royal College and are working towards amalgamating the meeting with other hemalogical societies. It is hoped that next year's meeting will be in conjunction with the Bone Marrow Transplant group as well as the Canadian Apheresis Group. It will take some time to evolve to the point where a single joint meeting of all hematologists will occur in Canada, but that is the goal of this society. While the scientific sessions at ASH are undoubtedly superb, much is to be gained by having a gathering, in Canada, of hematologists. This fact was recognized many years ago when the Canadian Hematology Society was first formed and the reasons for having such a meeting have changed little over the ensuing many years. Hopefully, the future will allow further definition of our needs and development of a plan to meet these needs.

As I step down from the position of president may I offer my best wishes for success to Armand Keating and the members of the new executive. It is an interesting and challenging time with the opportunity to accomplish much. I am sure these opportunities will be realized under your new leadership.

NOTES

- The abstract should include the purpose of the investigation, methods, results and conclusions.
- Abstracts must be 12 point type and fit in the box with no overlap.
- Type title in capital letters, authors names and affiliations in capitals and lowercase.
- Underline all author's names, indicate presenting author with an asterisk (*).
- Leave no space between the title and the beginning of the text.
- Indent the first line by three spaces with no paragraph break.
- High quality diagrams or tables may be included within the available space.
- All submissions must be signed by the corresponding author to indicate approval of the abstract by all coauthors.

SUBMISSION

Please send this form to:
 The Canadian Hematology
 Society
 199-435 St. Laurent Blvd.
 Ottawa, ON K1K 2Z8
 Fax: (613) 748-6392

2003 CHS/CAMO Scientific Conference Toronto

Call for Abstracts

*For
 Residents & Staff*

*There is a \$500.00 Award for the best
 paper by a Trainee*

*Lunch will be provided Friday
 for all
 Registrants*

PLEASE COMPLETE**1. Corresponding Author**

Signature: _____

Name: _____

Tel: _____

**2. If you wish to have this paper considered for a Trainee Award
 please complete the following:**

Name: _____ Location: _____

Program: _____ Year: _____

NEWS

NATIONAL BLOOD SAFETY COUNCIL

On the 17 of July the Federal Minister of Health, Anne McLellan, announced that the NBSC was being consolidated with the Expert Advisory Committee on Blood Regulation.

The EAC provides technical and scientific advice to Health Canada. The news release stated that selected NBSC members will be invited to join the EAC.

The NBSC forum, scheduled for September in Toronto, appears to be cancelled.

RESIDENTS DAY THURSDAY OCTOBER 16 ONE WEEK BEFORE THE CHS MEETING DELTA CHELSEA HOTEL

CALL FOR ABSTRACTS

HOSTED BY UNIVERSITY OF TORONTO TRAINING PROGRAM

This is a request for a 1 page abstract of resident research (restricted to adult or pediatric hematology residents only). The session will be held Thursday October 16. An honorarium will be provided for the selected presentations. Abstracts should be sent to the following address:

Christine Chen
Hematology Program Director,
University of Toronto
Princess Margaret Hospital
Email: christine.chen@uhn.on.ca

610 University Avenue, Ste 5-220
Toronto, Ontario M5G 2M9
Tel: 416-946-2827
Fax: 416-946-6546

Speakers: 1-6pm Sessions: Dr J Ginsberg, "Thrombosis in Pregnancy"; Dr M Kirby, "Practical Management of Sickle Cell Disease"; Dr D Reece, "Practical Approach to Myeloma Treatment in 2003"; Dr R Wells, "AML—To Transplant or Not"; Dr J Connors, "An Overview of T-Cell Lymphomas"

To submit, please use the abstract form on the preceding page. Note the form is also to be used for general (staff) submissions to the CHS.

**Friday, October 24th,
2003 Joint Meeting:
Canadian Hematology Society/Societe Canadienne d'Hematologie
The Canadian Hereditary Angioedema Society/Societe d'Angioedeme Hereditaire du
Canada International Conference on
Management of Hereditary Angioedema
Specialized Systems for Blood and Immunology Corp**

8:30 Introduction – Dr. Gail Rock, President, CHS

Morning Symposium: Complement for the Hematologist
Chairperson – Dr. Armand Keating-President Elect

8:30 – 8:45 Introduction – Complement Disorders including Hereditary Angioedema – Canadian perspective
Dr. Tom Bowen, Canada

8:45 - 9:25 Complement Cascade and Deficiency States: genes to animal models and up to man
Dr. Alvin Davis III, USA

9:25 – 10:05 Human Complement Disorders Excluding Hereditary Angioedema
Dr. Jerry Winkelstein, USA

10:05 -10:45 Human Complement Disorders – Hereditary Angioedema – kinins, bradykinins, kallikrein interactions
Dr. Bruce Zuraw, USA

10:45 - 11:00 Refreshment break

11:00 - 12:30 Abstract Presentations

Friday Afternoon Symposium: Launch of the SSBI Canadian Clinic Network for Primary Immune Deficiencies, Hereditary Angioedema, and Rare Blood Disorders
Chairpersons – Dr. Jacques Hébert, Dr. Tom Bowen

13:15 – 13:50 Experience of the IDF NIH PID Data Base Registry & Collaboration
Dr. Jerry Winkelstein, IDF, USA

13:50 - 14:25 The Canadian Apheresis Group Registry Experience – Collaborative IVIG Study Proposal(s)
Dr. Gail Rock, Canada

14:25 – 15:00 International Hereditary Angioedema Data Base Registry
Dr. Marco Cicardi, Italy

Agenda – continued:

15:00 - 15:15 Refreshment Break

15:15 – 15:50 **The Canadian Hemophilia Clinic Group Experience – Collaborative Hemovigilance Protocol Proposal**
Dr. Bruce Ritchie, Canada

15:50 - 16:25 **Canadian PID,HAE, Rare Blood Disorders Data Bases and Registries TTISS Review - Health Canada Proposals**
Dr. Tony Giulivi, Canada

16:25 – 17:00 **SSBI - Clinic Launch Summation Discussion – So What Now? Where Now? – Website – Physician Discussion Patient Management – Next meeting?** Drs. Tom Bowen, Jacques Hébert, Bruce Ritchie, Tony Giulivi - Canada

17:30 - 18:30 **Annual Business Meetings:**
- **Canadian Hematology Society**
- **Specialized Systems for Blood and Immunology**

On Saturday and Sunday the meeting will continue with an International HAE symposium.

Weekend Presentations will Include:

- Clinic Network Launch—PID, HAE & Rare Blood Disorders
- HAE symposium—International guest speakers
- Canadian Consensus Conference on the Diagnosis, Therapy and Management of HAE
- CHAES 2003 Annual General Meeting
- Clinic Network partner's board or organization meetings
- COPO, CHAES MSAC

Sponsored by:

Health Canada, Canadian Institutes for Health Research (CIHR), Canadian Hereditary Angioedema Society (CHAES), Canadian Immunodeficiencies Patient Organization (CIPO), Canadian Hematology Society (CHS), Canadian Apheresis Group (CAG), Canadian Blood Services (CBS), Hema-Quebec (HQ), Canadian Society of Allergy and Clinical Immunology (CSACI), University of Calgary, Canadian Society for Immunology (CSI), Aventis Bhering, Baxter, Bayer and Dyax.

Registration Deadline September 3, 2003

For more information about the conference contact: Jeanne Burnham, CHAES, 403-625-4100 Fax: 403-625-4195 email info@haecanada.com.

Radisson Plaza Hotel Admiral, Toronto Harbourfront 416-203-2222, www.radisson.com/torontoca_admiral

We invite physicians, patients, family and friends to join us in Toronto for this landmark event to launch the Clinic Network—PID, HAE & Rare Blood Disorders.

CANADIAN HEMATOLOGY SOCIETY REPORT ON MANPOWER ISSUES

A couple of years ago, the then President of CHS, Dr. Man-Chiu Poon, invited me to Chair a group to look at manpower issues for the CHS. In discussion with some proposed members for a committee, as well as representatives from all of the university centers and a number of the larger communities, it became clear that this issue required more time and resources than we could provide on a voluntary basis. In the mid-1980's I was a member of the Central Committee on Manpower of the Royal College of Physicians and Surgeons and the CMA, chaired by Dr. Jim Low. Over the course of a few years, we prepared a detailed document enumerating the current and future needs in Clinical Hematology, as well as all of the other specialties. Unfortunately that committee received little or no attention and decision making was based on the report by Barer and Stoddart, which was based on an economic model and which recommended downsizing of both medical schools and post-graduate programs. We are currently paying the price for those ill conceived recommendations.

From my informal discussions with various people around the country, it is evident that we have a deficit of approximately 50 to 60 Clinical Hematologists across the country. In reaching those estimated numbers, the same methodology was used as in the previous Manpower Committee, so that these are not just wish lists, but realistic estimates of needs which are current, funded and being recruited, i.e. they are positions which are either funded or for which a practice opportunity is evident. Over the past few years, the number of Clinical Hematologists graduating from training programs is approximately equal to the number retiring. The estimates also take into account some of the growth areas such as BMT, Thrombosis Research and the like, but do not include people predominately involved with Laboratory Hematology or Pediatric Hemato-oncology.

Fortunately, two initiatives are under-way which should address manpower needs in a comprehensive and organized fashion which will be ongoing and which are well funded through Federal Agencies.

The first initiative is under the direction of the Canadian Strategy for Cancer Control in the form of the Human Resources Action Group. This Group is chaired by Dr. Andrew Padmos from Halifax and has wide representation from all of the involved cancer specialties including Hematologic Malignancies, which I represent, and also including Nursing, Pharmacy, Psycho-Social, Physics and the various specialty agencies including Cancer Care representatives from the provinces and territories. Human Resources are one of six initiatives of the CSCC and the workforce is divided into four task groups. The objectives of the four task groups are:

1. Define the Cancer Workforce problem set and the Workforce Task group.
2. Describe the components of the supply system for the Cancer Workforce Task Group.
3. Examine staffing patterns in cancer services and programs
4. Develop advocacy and support for Cancer Workforce.

I am a member of Workforce Task Group #2, looking at the supply system for the Cancer Workforce and my particular interest is in the area of Hematologic Malignancies. The various Task groups have been holding conference calls and there was a meeting of the entire Human Resources Action Group on May 9, 2003 in Ottawa. Data are currently being collected regarding Physicians in training in Canada and abroad for the area of Hematologic Malignancies and the plan is to develop a Federal Registry which will be kept concurrent and used for the purpose of directing Human Resources to correct the current and predicted deficiencies. Hematology is not the only specialty with a significant deficit as the same concerns apply to many specialties and our needs pale when compared with

Oncology Nursing. Only Physics and Radiation Oncology appear to have adequate trainees in the pipeline. The second initiative is Taskforce #2, which is partially funded from the Human Resources Development Corporation with additional funds to come from provincial jurisdictions. Taskforce #2 is co-chaired by Hugh Scully, Nicholas Busing and Michel Brazeau and has representation from all of the involved parties with an interest in Human Resources in Medicine and Nursing, including the Royal College, CMA, College of Family Practice, APMC, University Teaching Hospitals and Nursing with many ex-officio members as well. All of the specialty societies have been contacted and will be invited to discuss Human Resources needs with the Taskforce to Steering Committee. I will be representing the Canadian Hematology Society and have already submitted a preliminary report. Dr. Brazeau indicated that our Society will be invited to present in the near future. In fact, I had an opportunity to discuss this with Dr. Brazeau at the meeting in Ottawa of the CSCC on May 9, 2003 and he confirmed that his committee is just now preparing to meet with all the specialty societies to start collecting preliminary information. As with the CSCC, Human Resources Action Group, Taskforce #2 is a long-term project which appears to be adequately funded and which is aimed at tackling Human Resources needs as projected in both the Kirby and Romanow reports and the aim is to look at all possible solutions including innovations with the use of Human Resources, rationalizing Immigrant policies and attempting to recruit and retain Human Resources in Medicine and Nursing.

It is clear that our work is just beginning and many members of CHS will be contacted for input. Furthermore, this is a long-term project and it will be necessary to recruit additional help from the CHS members to continue these studies.

Respectfully submitted,

Dr. Graham Pineo, MD, FRCPC
Chairman, Manpower Committee
Canadian Hematology Society

**Report of
Nomination Committee
Members :**

Man-Chiu Poon (Chair), Stephen Nantel, and Jerome Teitel

Because our AGM was postponed from April 2003 due to SARS we will carry out the election of officers of the CHS by copy of this newsletter and/or mail.

Much of the work of the nominating committee this year was involved with identifying candidates for the Vice President position, as the other officers will continue with their respective terms, and the present Vice President will progress through the rank to assume the President position as stipulated in the Bylaws. The Committee notes that the Bylaws state "the Nomination Committee shall prepare a slate of Nominees for nomination in the next General Meeting". As directed by the Bylaws, the Nomination Committee therefore respectfully submits the following slate to the Executive Committee for distribution to the General membership.

President:	Dr. Armand Keating (2003-2005)
Vice President:	Dr. Pierre J. Laneuville (2003-2005) - [new position]
Secretary/Treasurer:	Dr. Sue Robinson (2000-2004)
Past President:	Dr. Gail Rock (2003-2005)

According to the Bylaws, "Further nominations may be submitted by any member in writing to the Secretary-Treasurer if signed by five Active Members and accompanied by the written consent of the nominee". Members can therefore send their further nominations for the Vice-President position to Dr. Sue Robinson, our current Treasurer/Secretary at Fax: 902-473-2394.

The Bylaws also state "The Executive is to be elected by acclamation rather than a secret ballot being carried out if no candidates other than those put forward by the Nominating Committee are nominated".

Therefore: if other nominations are received, a ballot will be sent out, if no other nominations are received the slate will be appointment by acclamation within 30 days.

CJD-SS Update Report

Objectives of CJD-SS

1. To gather information for all cases of Creutzfeldt Jakob Disease (CJD) identified to the Surveillance System in order to establish a database for research on CJD in Canada.
2. To participate in national and international studies to determine the epidemiology of CJD including variant CJD and to detect and characterize any cases occurring in Canada.

Methods

In April 1998, all Canadian physicians involved in the care of possible/probable cases of CJD were informed about our project and were asked to notify the CJD-SS, at a toll free number provided, to assist the Surveillance System in performing thorough case follow up. This involves ensuring the collection of a blood sample from the patient for genetic analysis, organizing an autopsy at time of death and obtaining consent from the patient's family to conduct a medical records review as well as an in depth interview. CJD-SS is involved with the European research community as an active participant within the EuroCJD group. This group usually meets once every 6 months to share data, information and knowledge and to further worldwide CJD research. Contact with Canadian physicians and patient's families is maintained by way of a yearly newsletter in which new information concerning CJD is disseminated.

Data and results obtained thus far

As of April 1, 2003 there have been 410 referrals to the Surveillance System: 44.6 % (183) of referrals are definite/probable CJD cases as defined by World Health Organization (WHO) criteria. Of these cases there have been 163 sporadic, 16 genetic (familial/GSS), 3 iatrogenic and one variant CJD. The annual incidence of CJD in Canada is as follows: for 1999, 1.02; for 2000, 1.14 and for 2001, 0.96 cases per million population.

The first case of variant CJD in Canada was diagnosed in August 2002 in a patient under the age of 50, who had multiple stays in the United Kingdom during the outbreak of bovine spongiform encephalopathy (BSE).

Conclusions

With the invaluable cooperation of both the physicians who care for patients with a CJD diagnosis and their families, CJD-SS has been able to detect, since 1999, CJD cases at a rate that reflects the expected worldwide incidence of CJD: approx. 1 case per million population per year. We have also identified the first case of variant CJD in Canada, carried out further study on familial cases of CJD as well as contributed to the ongoing worldwide research on CJD and variant CJD.

MRI very useful in CJD diagnosis

MRI changes have been described in patients with CJD in a number of recently published articles. In the case of sporadic CJD a hyperintensity of the putamen and caudate nuclei is frequently seen. In variant CJD a highly characteristic finding of bilateral hyperintensity of the pulvinar nuclei of the thalamus is described in the majority of patients. Because of these identified changes, MRI imaging (DWI, T2-weighted or FLAIR) is now considered an important non-invasive test for the diagnosis of both classical and variant CJD.

CJD Update—continued

See references below for more details:

DA Collie, RJ Sellar, M Zeidler, ACF Colchester, R Knight, R G Will. MRI of Creutzfeldt-Jakob Disease: Imaging features and recommended MRI protocol. *Clin Radiol* 2001; 56: 726-39.

Schroter A, Zerr I, Henkel K, Tschampa HJ, Finkenstaedt M, Poser S. Magnetic resonance imaging in the clinical diagnosis of Creutzfeldt-Jakob disease. *Arch Neurol* 2000; 57: 1751-7.

Taber KH, Cortelli P, Staffen W, Hurley RA. The expanding role of imaging in prion disease. *Clin eu-rosci* 2002; 14: 371-6.

Dr. Anthony Giulivi, Health Canada

Blood Substitutes: How Close?

The wish for blood substitutes has been with us for at least 20 years. However there is really no true “blood” substitute that can replace the cellular and plasma components of blood. Therefore development has concentrated on oxygen carriers, the two categories being, hemoglobin based oxygen carriers and perfluorocarbons.

First generation hemoglobin therapeutics have come and gone, and are being replaced by new approaches. During pre-clinical and clinical testing of these substitutes, significant issues were identified. These included, extravasation, pulmonary and systemic vascular vasoactivity, serum enzyme increases, adverse effects on gastrointestinal motility, generation of myocardial lesions and potential interactions between hemoglobin and endotoxin. In retrospect these physiologic effects could have been predicted, as the inherent effect of all natural hemoglobins is to strongly interact with nitric oxide (NO). This interaction is secondary to extravasation of the hemoglobin molecule into parenchymal tissue. Why continue development?

What are the potential benefits? Immediate availability and universal compatibility; immediate delivery of oxygen to tissues in need; free of disease transmission. Easy long term storage over a range of temperature, and free of side effects. These are the characteristics of the ideal blood substitute.

The hemoglobin based oxygen carriers are based on processing human or bovine hemoglobin. At the recent NATA conference one such product was profiled. This product is approved in South Africa and is currently filed with the FDA for clinical trials in trauma and in Cardiac ischemia. These studies, as one would expect are supported by the US Army and Navy.

The product Hemopure® (bovine hemoglobin glutamer) is a bovine derived, modified hemoglobin molecule that has been ultrapurified to remove any plasma proteins, red cell stroma and potential pathogenic material. During the manufacturing process, crosslinking and polymerization stabilize the hemoglobin molecule which increases its vascular persistence as well as the efficiency of oxygen trans-

Blood Substitutes—continued

transports to issues. To date, more than 800 patients in 22 completed, or ongoing studies have evaluated the efficacy and safety of < 300 gms of hemoglobin. This has been administered intravenously in single and multiple doses for up to 6 days.

The studies show a decrease of allogeneic blood by at least 35%, needed by FDA as a measure of effectiveness in decreasing allogeneic transfusion. Two phase III studies have been performed. In elective orthopedic surgery there was a 59% elimination of red cell transfusions in the intent to treat population. In non-cardiac elective surgery there was a 43% elimination of transfusion. In two phase II studies, a 34% reduction was seen in bypass surgery and in aortic reconstruction surgery a 27% reduction was seen.

In these trials adverse effects equal or greater than 5% included, abdominal pain, dysphagia, nausea and vomiting, jaundice not generally associated with liver dysfunction, increased lipase, oliguria, mild to moderate hypertension and tachycardia.

There are two other human hemoglobin based products currently in pivotal U.S Phase III clinical trials in progress or with applications for approval pending.

What are the issues.

Certainly the side effect profile is encouraging and less than previous products but still warrant concern. The human based products are dependent on outdated blood which is becoming more scarce. The bovine products raise the spectre of “mad cow” disease but the processing is stated to remove prion even if it was present. Clinical indications need to be clarified to justify cost, and the specific effects of these compounds measured and compared to “classic” transfusion.

What is in the future. Certainly a product that lasts greater than 24 hours is needed. The scavenging of NO is being tackled by promising recombinant technology that substitutes selected amino acids into the heme pockets of α and β subunits, maintaining O₂ delivery but decreasing NO scavenging by 30 fold. Recombinant technology would allow proteins not of human or animal origin and, as such, might solve supply issues. Such products are still in the future. Other techniques produce “stealth” cells that hide antigen, again searching for that universal donor .

Can we speculate on their future role. There are other means of decreasing allogeneic transfusion that are used and accepted. Studies need to evaluate situations where immediate delivery of tissue oxygen might be of benefit such as myocardial ischemia or stroke. Currently there still remains a trade off of NO scavenging and its effects.

For the future, industry, despite failure of products, is still at work to produce a safe and effective blood substitute.

Dr. J. Bormanis, Ottawa Hospital

ANEMIA INSTITUTE FOR RESEARCH AND EDUCATION CALL FOR LETTERS OF INTENT

The Anemia Institute for Research and Education is calling for letters of Intent for its fourth Research and Development Fund competition. This is an annual competition and the first research fund directed at research on anemia, its causes, prevention, diagnosis and treatment. Letters of Intent must be submitted by November 14, 2003. An original and twelve copies are required.

For further information, please contact.

Durhane Wong-Rieger, President & CEO **Anemia Institute for Research and Education**
151 Blood Street West, Suite 600 **Toronto, Ontario M5S 1S4**
Tel : 416-969-7435 Fax: 416-969-7420
Email: durhane@anemiainstitute.org **Website: www.anemiainstitute.org**

HEMOSTASIS FELLOWSHIP PROGRAM

CALL FOR FELLOWSHIP APPLICATIONS

Canadian Blood Services—Up to \$70,000.00 Hemostasis Research Fellowship

Nova Nordisk Canada Inc (NNCI) and Canadian Blood Services (CBS) are seeking to support basic, pre-clinical or clinical hemostasis research at a Canadian academic medical centre or research facility. The proposed research will contribute to further understanding the process of hemostasis, and may be of a basic, pre-clinical and/or clinical nature. THE NNCI/CBS award has an annual submission deadline of October 17. Forward completed submissions to:

Manager, Research & Development, Canadian Blood Services
1800 Alta Vista Drive, Ottawa, Ontario, K1G 4H5

Canadian Hemophilia Society/Association of Hemophilia Clinic Directors of Canadian—\$70,000.00

The Canadian Hemophilia Society (CHS) and the Association of Hemophilia Clinic Directors of Canadian (AHCDC), in collaboration with Nova Nordisk Canada Inc. have established a Fellowship in Congenital and Acquired Bleeding Disorders. Completed application forms must arrive on or before October 17, 2003. Candidates will be notified by December 15, 2003. Forward completed submissions to:

Fellowship in Congenital and Acquired Bleeding Disorders Program
C/O Canadian Hemophilia Society, 625 President Kennedy Avenue, Suite 1210
Montreal, Quebec H3A 1K2

UPCOMING EVENTS

Sept 10-13, 2003	E.S.F.H. 14th Congress	Prague, Czech Republic
Oct 22-25, 2003	III Congress of the Inter American Division of the International Society of Hematology	Santiago, Chile
Oct. 24-26, 2003	CHAES/SAHC International HAE Symposium In Conjunction with the Canadian Hematology Society Annual General Meeting	Toronto, Ontario
Oct 30-Nov 1, 2003	4th World Congress of the International Society for Apheresis	Nashville, Tennessee
Nov 1-4, 2003	American Association of Blood Banks	San Diego, California
Dec 5-9, 2003	American Society of Hematology	San Diego, California
May 5-8, 2004	World Apheresis Association/ American Society for Apheresis	Miami, Florida
May 2004	Joint Canadian Hematology Society and Canadian Apheresis Group Meeting	London, Ontario

EDITORS NOTE

This Newsletter is published three times a year by the CHS. We welcome your submissions. Please send articles and items of interest, care of the Coordinator, by email to cag@ca.inter.net or fax to 613-748-6392.

REMINDER: CHS DUES 2003

The CHS dues for the year 2003 are now over-due. If you have not already done so, please complete the enclosed and send your dues with an updated address. Thank you