TRANSFUSION TODAY

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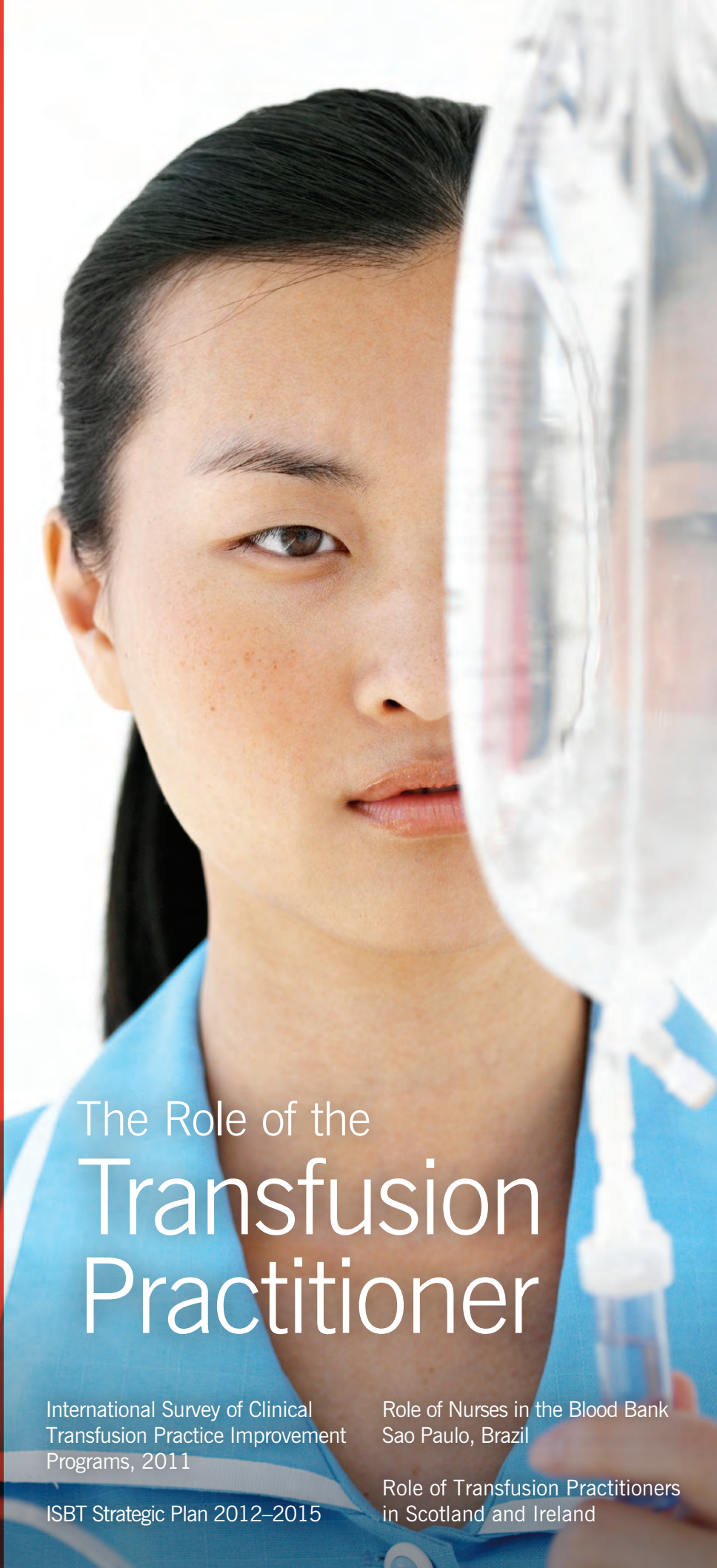

The Role of the Transfusion Practitioner

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ISBT

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Judith Chapman

Editorial

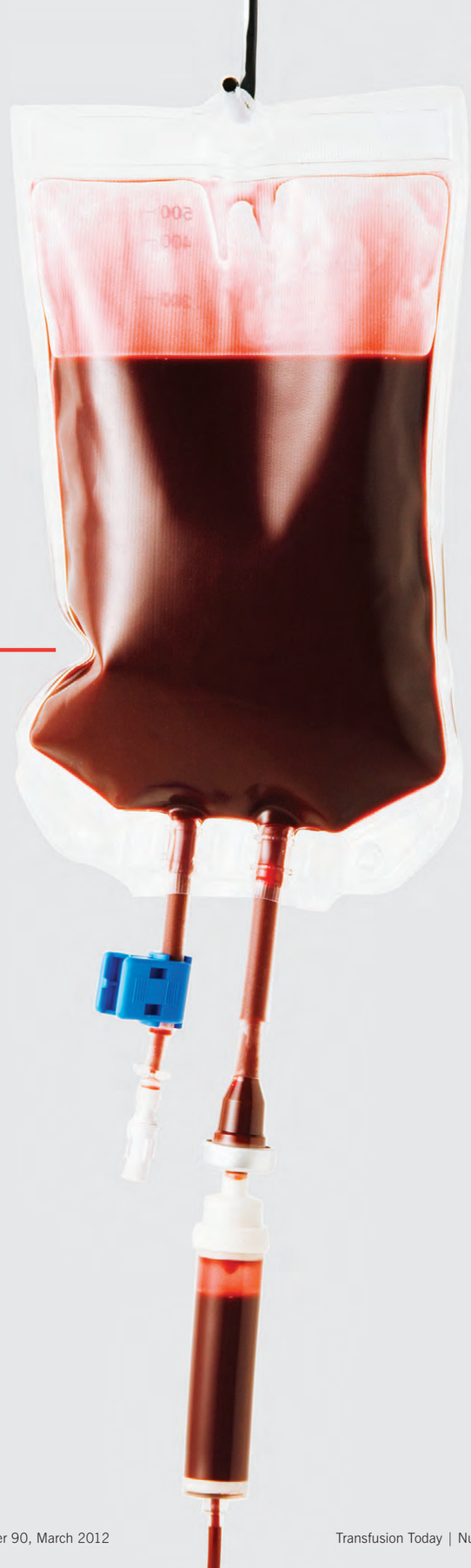
The 22nd Regional Congress of the ISBT in Taipei included a presentation by Linley Bielby on the role of the Transfusion Nurse in the hospital and blood centre. In preparation for her presentation Linley conducted a survey amongst ISBT members regarding blood improvement programmes and the role of the transfusion practitioner. The results of the survey are presented in this issue of Transfusion Today together with articles from Europe and South America on particular aspects of the role of Transfusion nurses. The role is developing in many countries and transfusion nurses have become valuable advocates of safe transfusion practice.

From the Central Office includes obituaries of two ISBT past Presidents. Former colleagues of Paddy Moore and Patrick Mollison have written tributes to them.

A summary of the ISBT strategic plan for 2012–2015 outlines the four main objectives of the plan. Work has already commenced on its implementation and you may have received an invitation to participate in a survey ISBT has conducted on giving added value for members.

As I write this editorial the abstract submission deadline for the 32nd International congress of the ISBT in Cancún is 3 days away. Martin Olsson and his committee together with the local scientific committee have put together an interesting and topical scientific programme covering all areas of our field. Highlights of the programme are presented in this issue together with information on some new initiatives at the congress in Cancún.

Don't forget the early bird registration deadline of April 30, 2012. We look forward to meeting you in Cancún.



International Survey of Clinical Transfusion Practice Improvement Programs 2011

Linley Bielby (photo), Lisa Stevenson and Erica Wood,
Blood Matters Program, Department of Health Victoria
and Australian Red Cross Blood Service, Victoria, Australia

Clinical transfusion practice improvement programs (CTPIP) have been established for a number of years in some countries, however no consolidated published data are available about the number, location and activities of these programs internationally.

In preparation for the ISBT Regional Congress in Taipei, a survey was circulated to ISBT members in August 2011. Questions addressed whether programs existed, main focus and activities, staff numbers employed, work location, communication/ reporting lines, funding, presence of haemovigilance systems, staff education/training and the major achievements and challenges.

Thirty-seven (37) responses were received, representing 14 countries (Argentina, Brazil, Canada, Denmark, England, Northern Ireland, India, Korea, Mexico, New Zealand, Poland, Russia, Taiwan and Australia (South Australia, Western Australia, New South Wales, Queensland, and Victoria)). Not all respondents answered all 24 questions. Twenty seven respondents indicated that there was a CTPIP in their country/region. Programs have been operating for a median of 7 years (range 2 months to 26 years).

Three main focus areas were identified by respondents. The majority of programs primarily focus on clinical safety, quality and appropriateness. Four mainly concentrated on donor issues and 2 were primarily haemovigilance programs.

Twenty-six responded that a Transfusion Nurse (TN) or equivalent was employed in the program; however, only 24 provided the actual staff numbers. Where documented, staff employed in each of the programs were reported as ranging from 1 to 237. The later figure includes 12 Transfusion Liaison Nurses who coordinate regional activities, and then 1-4 transfusion practitioners employed at each hospital in the country. Over the years most of the programs have either maintained staffing numbers or increased them, with one program reducing numbers. Figures 1 and 2 show where the TN/ Practitioners are based and who employs them. Fifty percent report to a clinical directorate, 28% to nursing and 22% to a pathology directorate.

Figure 1
Who employs the Transfusion Nurse / Practitioner?

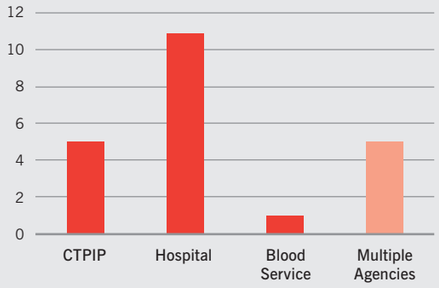


Figure 2
Where is the Transfusion Nurse/ Practitioner based?

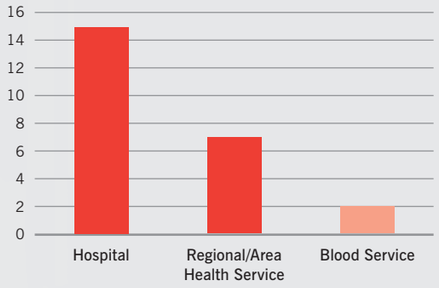
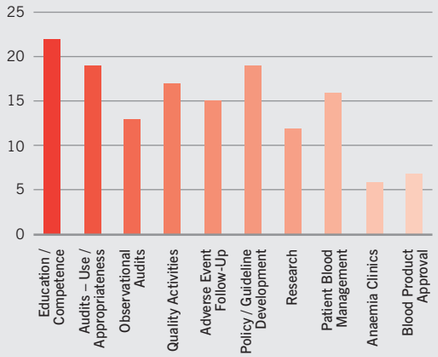


Figure 3
Main Activities of the Transfusion Nurse/Practitioner



Many varied activities are undertaken within the programs (Figure 3) with education and competence assessment the most common.

Twenty-one (91%) of the respondents reported a haemovigilance program was present in their country/region, with 16 (70%) describing mandatory reporting of adverse events.

Seventy-two percent of respondents reported formal training was provided to the TN/Practitioner, and in turn 50% of the TN/Practitioners provided or were involved in the implementation of online eLearning programs to other staff.

The respondents were asked to list 3 major achievements and challenges. There were many common themes, such as:

Achievements:
- Education, including development and implementation of eLearning programs and holding annual education days
- Reduction in ABO incompatible transfusions, other wrong blood events
- Increased transfusion appropriateness and reduced red cell use in spinal and orthopaedic surgery, use of Fresh Frozen Plasma, and blood wastage
- Improved reporting of adverse events
- Securing permanent funding

Challenges:
- Securing sufficient funding and staff
- Change management and overcoming resistance to change
- Engaging managers/clinical champions and empowering staff to challenge outdated concepts
- Maintaining momentum
- Undertaking research

Future areas that will be addressed by respondents include:
- Nurse prescribing
- Expand/embed patient blood management strategies through awareness and education
- Anaemia management
- Move education out to the community, including General Practitioners
- Electronic ordering and documentation of administration
- Specialisation with college degree in transfusion
- Strengthen existing networks
- Improve adverse events management.

Words of advice for those commencing a CTPIP:
- Start with colleagues who are interested and engaged to build a team with a shared vision, or choose the path of least resistance
- Secure adequate resources for the program
- Plan realistic targets and monitor these for effectiveness
- Celebrate successes and learn from others' mistakes.

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Clinical Transfusion Practice Improvement Programs in Australia

10 YEARS ON

Sydney harbour at first light, Sydney, Australia

Over the last decade, concern over the safety and quality of clinical transfusion practice has given impetus to develop clinical transfusion practice improvement programs (CTPIP) in many countries.

In Australia, the priority for governments is to improve transfusion outcomes for patients by promoting patient blood management, optimising appropriate use of blood components, and reducing procedural risks and avoidable wastage. The CTPIP align their programs activities with these policy objectives, however, the Australian health care system is complex, and differences in state and territory health service delivery influence the structure and activities of the jurisdictional CTPIP. There is communication and collaboration across the programs to share experience, minimise duplication and increase efficiencies.

The Australian jurisdictional programs are Blood Matters (Victoria), BloodSafe (South Australia), Blood Watch (New South Wales), Appropriate Use of Blood Reference Group (Australian Capital Territory), the Queensland Blood Management program and the Western Australian Patient Blood Management program. All of these function with a small secretariat of staff, clinical volunteers for steering committees and working groups, and Transfusion Nurses/Trainers (TNs/TTs) to undertake activities at the local health service level. The BloodSafe and Blood Matters programs are collaborations between state health departments and the Australian Red Cross Blood Service (the Blood Service) and with local hospitals. This year both of these programs will celebrate 10 years of activity. TNs are also employed outside these programs by the Blood Service, governments and hospitals and are supported by and contribute to CTPIP locally or where arrangements have been developed (Tasmania and Northern Territory within Blood Matters).

The programs have achieved a great deal over the years. Further information can be found at each program's website but the following list outlines a few highlights:

- Establishment of patient blood management programs, including anaemia management and blood conservation
- Development of tools and materials for staff and patients, including:
  - Patient information brochures (age appropriate and multilingual)
  - Policies and procedures, manuals, clinical guidelines, posters, standard forms and charts to support safe and appropriate transfusion practice, such as Flippin' Blood - an administration guide
  - Resources for orientation, support and continuing professional development of TNs, such as:
    - 'Handbook for Transfusion Practitioners 2010' for new TNs
    - Email network and online forum (e.g. Blood Matters Transfusion Interest Group, and the Australian and New Zealand Transfusion Professionals Special Interest Group of the Australian and New Zealand Society of Blood Transfusion [ANZSBT])
    - Graduate Certificate in Transfusion Practice, developed by Blood Matters and now offered on line by the University of Melbourne
- Development and delivery of training and education for clinical and laboratory staff and students, including both online e-learning and paper-based training/competency packages, such as BloodSafe eLearning
- Audits of administrative (policies and procedures), and clinical (appropriate blood use, blood storage and handling, patient identification and blood transfusion policy) aspects of transfusion
- Haemovigilance programs (such as Serious Transfusion Incident Reporting in Victoria, Tasmania, The Canberra Hospital and Northern Territory, and Queensland Incidents in Transfusion)

At a national level, transfusion education and clinical practice improvement activities are also carried out by the multidisciplinary transfusion medicine services team (TMS) of the Blood Service, and through the national professional society (ANZSBT). Blood Service TNs support TMS and have a significant role in the approval of Intravenous Immunoglobulin and coordination and provision of special platelet support across the country. The National Blood Authority has established a patient blood management committee, and is supporting the development of new clinical practice guidelines and oversees haemovigilance reporting nationally.

With continued imperatives to improve practice and reduce costs and risks, it is important that the outcomes and achievements from CTPIP are shared and publicised, to share results, celebrate achievements, identify lessons and problems, minimise duplication of effort and assist benchmarking. TNs/TTs, working as part of a multidisciplinary team play a significant role in delivery of the outcomes and achievements of CTPIP.

The full article with links to Australian transfusion websites is available on **www.isbtweb.org**

Learn-blood-transfusion

10 years of eLearning Experience in NHSScotland

Sandra Gray
Programme Director SNBTS

In the late 1990s, the Scottish National Blood Transfusion Service (SNBTS) developed the Learnbloodtransfusion (LBT) continuing education programme to support practitioners deliver safe, effective and appropriate care to all patients at risk of receiving a blood transfusion. Over the last decade a number of modules have been developed by SNBTS and the UK Blood Services including Safe Transfusion Practice, Blood Components and Indications for Use, GMP for Hospital Blood banks. In 2011 we added a Cell Salvage module which offers the learner an opportunity to gain an understanding of the broad principles of blood conservation.

SNBTS recognises the importance of providing relevant and accessible education to all its blood users. In Scotland the LBT programme is delivered using an interactive eLearning resource, www.learnbloodtransfusion.org.uk hosted on a national platform LearnPro NHSTM. NHS Scotland requires that all staff complete the LBT programme and demonstrate competence appropriate to their role if they take any part in the clinical transfusion process[1]. Learners are required to update their learning on a 2-yearly basis. Users register on the LearnPro system allowing them access to the modules; the platform permits the user to create a unique learner record which records the module assessment outcomes, print a certificate as evidence of their theoretical and/or clinical competence and to update their record if they move between hospitals. Each hospital has an authorised LearnPro NHSTM system administrator who is responsible for managing and reporting their local training figures. A resource library is also available which provides learners with electronic access to documents such as their local Transfusion Policy as well as providing links to external resources such as the Joint Professional Advisory Committee website[2]. The LBT modules are also available on a number of platforms across the UK.

A typical module contains 6-8 units; the Safe Transfusion Practice module for example, covers haemovigilance, blood group serology, requesting, sampling, collection, administration procedures and management of adverse events. The content includes didactic information on the transfusion process as well as interactive activities designed to translate theory into practice. Typically a module will take 1-2 hours to complete depending on the users' prior knowledge and experience.

Over 35,000 individual NHS Scotland staff including, nurses, doctors, phlebotomists and porters have completed the Safe Transfusion Practice module since its inception in 2003. A recent study tested participants' knowledge of the module. Approximately seven hundred staff participated in the questionnaire survey across 14 NHS Scotland Boards. The results demonstrated that retention of knowledge by staff groups was consistent over the 2-year revalidation period and that participants reported a greater awareness of the risks related to the transfusion process[3]. Participants also reported a more 'informed and questioning' approach to their transfusion practice3.

The LBT programme has been a resounding success in NHSScotland. Going forward we aim to develop a bespoke learning pathway within the LearnPro NHSTM platform so that users can pick and mix units from available modules relevant to their clinical role and responsibilities. In 2013 we are developing new modules covering consenting patients for transfusion and a revalidation module designed for users returning to update their knowledge every two years.

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The Role of the Hospital Based Haemovigilance Officer in Ireland

Kathleen Heery
Haemovigilance Officer Irish Blood Transfusion Service

The haemovigilance system in Ireland was launched in October 1999 under the National Haemovigilance Office (NHO) following a recommendation of the Report of The Tribunal of Inquiry into the Blood Transfusion Service Board (Government of Ireland 1997). A key feature of the system was the appointment of haemovigilance officers (HVOs) in each hospital or group of smaller hospitals. There are 73 haemovigilance officers employed nationally in 80 hospitals with the majority from nursing and scientific backgrounds. Clinical haemovigilance services in Ireland are led by Consultant Haematologists. These consultants are supported by Clinical Nurse Specialists (HVOs) mainly, with a small number of HVOs from scientific backgrounds. These liaise regularly with Chief Medical Scientists, Quality Officers and Risk Managers.

Initially when haemovigilance systems became established in Ireland there was little uniformity in the nature and scope of the role, with diversity in its interpretation by hospitals and HVOs. In 2004 the NHO examined the role and its function at hospital level using a survey methodology. In different centres the HVO role extended to cover additional duties such as stem cell harvesting, phlebotomy and plasma exchange. Transfusion surveillance formed an integral part of the role and ranged from random, routine and complete surveillance of all transfusion events. Audits into all aspects of transfusion practice were carried out, and clinical guidelines on blood transfusion practice were available at most hospitals. Planning and delivery of education programmes on transfusion practice were common among all HVOs. Direct patient contact was viewed as important and was achieved through audit, provision of patient information and clinical work.

Up to the end of 2005, the haemovigilance reporting system was anonymous and based on professional responsibility. Its success relied on leadership shown by individual HVOs at hospital level. The domains of haemovigilance and traceability were transposed into Irish law (SI 360 of 2005, SI 547 of 2006) following which reporting became mandatory to the NHO. Requirements for haemovigilance and traceability in an Irish context were published by the Irish National Accreditation Board (INAB) (2009). The role of the haemovigilance officer is pivotal in attaining and maintaining compliance with these requirements. However, competence in this area alone does not define the role. While traceability is the responsibility of the hospital blood bank, the HVO plays an important role in developing policies, guidelines and systems to meet these requirements.

The scope of the HVO role currently is far reaching and encompasses clinical and laboratory practice, coordination, management, investigation and reporting, of adverse events, adverse reactions and near-miss events to the NHO. The impact of on-going transfusion surveillance by HVOs is evident through practice changes nationally. For instance an increasing trend in reports of transfusion associated circulatory overload (TACO) in the early years led to a recommendation by the NHO on the use of prothrombin complex concentrate as the treatment of choice for reversal of the effect of warfarin.

The hospital HVO also acts as a source of information and an education provider for patients and health care workers. Haemovigilance officers are the driving force behind the implementation of E- learning programmes for clinical staff at hospital level. Many of them have availed of further opportunities for professional development by attending haemovigilance educational modules at Dublin City University.

In conclusion Irish hospital based HVOs have made a significant contribution to improved transfusion practice, patient safety and continuous quality improvement practices at hospital level. The specialist knowledge and range of skills required to fulfil the role coupled with the variety of practice settings have contributed to its success.

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Role of Nurses in the Blood Bank

Hospital Sirio Libanes, Sao Paulo, Brazil

Carla Tschudar
Head Nurse Blood Bank

In a hypothetical morning, the Blood Transfusion Service (BTS) is setting up an apheresis procedure in a chronic patient. This procedure requires technical expertise to operate apheresis machines and to deal with complex sequences of commands, which are demanded by the physician in charge of the patient. In many places this procedure could be considered to be carried out physicians, however, it is mostly a NURSE attribution.

In Brazil, many activities that were considered to be restricted to other health care workers (HCW) have been redirected to nurses. I can highlight several activities recently incorporated into the BTS nurse's role.

For services working only with automated platelet collection, it is important that nurses develop a complementary role with the recruitment team, in order to convert part of the whole blood donor pool into apheresis, taking advantage of their past donation experience, assuring better donor behaviour when donation takes place, as opposed to first time apheresis donations. Also, most of therapeutic cytapheresis and stem cell collection are performed by nurses, who are trained to provide adequate care of patients in case of adverse events. Nurses can aid physicians when harvesting bone marrow for transplants.

> "In Brazil, many activities that were considered to be restricted to other health care workers have been redirected to nurses."

Another role to develop is in blood donor recruitment and retention, in collaboration with the recruitment staff. Nurses could be in charge of developing partnerships and programs with corporations in order to schedule regular donation procedures and mobile collections. This includes selecting appropriate venues and logistics, in cooperation with managers, logistics experts and social assistants. Nurses are usually flexible and versatile professionals, once we are trained to have close contact with the donor, with abilities to provide the clinical interview with donor candidates and assuring at the same time donor confidentiality. In addition, trained nurses contribute to validate all steps for appropriate blood collection procedures (donor arm skin disinfection, unit identification, handling, etc).

Nurses should help to guarantee that medical prescriptions are performed based on standardized blood transfusion guidelines (local, regional, national), whose actions should be strictly followed. This will lead to periodic assessment of transfusion activities and continuous staff assessment, training and education. In order to achieve this level of excellency, having the skills, commitment, knowledge and a low nurse staff turn-over are key factors to be pursued by all BTS.

It is important to highlight the strategies and actions to ensure that blood products are appropriately managed by other professionals from the BTS. This is usually planned and conducted by nurses.

Another key role for nurses is related to performing or supervising a number of activities, such as establishing assertive actions at the surgical theatre in various situations that may be present in a surgical procedure related to the supply of blood products and their safe use. In this field, among other things, the nurse takes into consideration all clinical data related to the patient condition, ensuring that units are available whenever needed at the surgical theatre, avoiding delays or shortage of specific components for a given surgical procedure.

In order to achieve a safe blood transfusion, it is also important that nurses take the responsibility to provide adequate patient sample collections and correct patient identication both before and during transfusion of any blood component. Nurses are important to develop appropriate measures to minimize risks, through careful analysis of the entire transfusion process, establishing criteria to reduce errors during the several steps concerning the patient identification processes.

In summary, the recent changes concerning nurse activies within our BTS have to be cheered by all HCW as a benefit which contributes to blood safety, highlighting the concerns related to a continuous and progressive quality level of the whole BTS staff in order to provide better assistance to donors and patients.

This is the current role carried out by the nurse staff from the Hospital Sirio Libanes Blood Bank in São Paulo, Brazil.

"Please vote; exercise democracy!"

Silvano Wendel

I start this column with great regret, since two ISBT Past Presidents recently passed away; Pat Mollison and Paddy Moore (see related obituaries). These key leaders contributed for decades to the development of Transfusion Medicine worldwide, and influenced many generations. I remember quite well reading Mollison´s textbook as my first book in the field while I was in my internship at the medical school in 1980; a privilege that still persists today to several students and professionals of many nations. Our Society will always be grateful to them.

In this issue, the readers will have the opportunity to learn from the new ISBT strategy, which was developed by the Board in Estoril, Portugal, during the last summer. This long-term action complies with the ongoing projects already implemented towards more professional and sustainable Central Office activities.

This issue's main scientific focus is the role of the Transfusion Nurse/Practitioner. Whatever the policy adopted by a country or Blood Transfusion Service, nurses and practitioners take a pivotal role in developing adequate procedures related mainly to blood collection and transfusion of components, both from the donor and patient side of the transfusion chain. Thus, one can easily recognize how important these professionals are to maintain the blood safety. They are the interface between prescribing doctors, BTS medical staff and the patients, playing important role as far as clinical transfusion safety procedures are concerned. Who could envisage all donor interviews, blood collections, organization and management of mobile collection, apheresis, setting up adequate procedures to install and transfuse components into recipients, or even evaluation of transfusion reactions without the aid of a nurse? This is a field that deserves more attention from ISBT, where these professionals must be recognized as key members of the whole transfusion safety team. It parallels with our strategy to develop and implement blood transfusion clinical practices.

As many of you noticed, ISBT moved in February to a new office, as a result of the continuous professionalization of the Central Office. For more than 75 years, our Society never had an office independently from external organizations. Although there is nothing to complain or regret from that, it is clear from now on that in order to be more professional ISBT must have its Central Office and permanent staff working on its own. The new office will be open to the public on March 12, and it has been planned to comply with all current and future ISBT needs for the next decades. The office is 175m2, and consists of three rooms, one will be used as a Board/Meeting room, one is a large office and has a large store room and the third room is used by the Executive Director as an office and meeting room. The corporate identity of ISBT is very visible with large red panels on the walls. As a member of ISBT, you are quite welcome to visit us at any time, whenever you stop by in Amsterdam. We are all are indebted to EuroCongress (now MCI Amsterdam) staff members, who played a key role when the Central Office moved from England to The Netherlands and continued to help and support us until now. I would also like to congratulate our CEO (Judith Chapman) and her team (Monique van Dorp, Marlies Schiereck, and Ralph Zepeda) for their hard work in accomplishing this mission. Also, nothing could be possible without the support of the ISBT Board, who since the beginning of my term in 2010, supported my proposal.

On April 10th, 2012 ISBT will open voting for the vacant positions on the Board of Directors, including President-Elect, Vice-President, Treasurer and regional directors for Africa, South East Asia, Western Europe and Western Pacific. All candidates will deserve our respect, confidence and trust. Once elected, they will honor their votes, trustfully casted by ISBT members. Voting is the highest tool at the hands of any democratic institution and I urge all members to practice the right of voting. It is important that a substantial percentage of ISBT members actually vote for all elections as a routine practice. Only with their votes can the membership really delegate to any candidate the duty to rightfully perform their job. I pledge all ISBT members not to leave this great right of yours as a void act. Please vote; exercise democracy!

Silvano Wendel
ISBT President

Introducing Marlies Schiereck

ISBT's new Office Manager
at the ISBT Central Office
in Amsterdam

My name is Marlies Schiereck, 42 years old, born in Leiden, the Netherlands. Since November 1, 2011 I am the new Office Manager at ISBT Central Office in Amsterdam.

I studied HEAO (Business School) and Information Management at the University of Amsterdam, I was a business consultant for some years and travelled and worked for a year through Australia and New Zealand (since then hooked on travelling). Coming back from my travels I decided to do something practical. I ended up being a legal assistant for 10 years. What I love most about being an assistant, is the ability to facilitate people, who can that way use their intelligence and talents in a more efficient way. Since computers entered our lives, I have been a big fan of using them to make our lives easier. Keywords are efficiency, structure and joy!

After having worked for so long in corporate life, I felt it was time for something different. And after a couple of months of working for ISBT, I can say it feels like a breath of fresh air.

My tasks include all office tasks, memberships, assisting the Executive Director, the Board and much more. It will be a challenge to take over this task from Sophie who has such a long experience in ISBT.

I love to sing, to go out hiking or biking and enjoy our planet, to eat out and to laugh.

I am excited to be part of the ISBT team.

Welcome to our new members

November 2011 – January 2012

Africa

- **NIGERIA:** Augustina Isioma Ikusemoro

Americas

- **USA:** Patricia Brunker, Randal Covin, Obi Greenman, Nora Hirschler, Terri Ozegovich, Christina Yang

Eastern Mediterranean

- **PAKISTAN:** Irfan Syed
- **SAUDI ARABIA:** May Almoshary

Europe

- **FINLAND:** Sari Juutistenaho
- **GERMANY:** Anneke Fidder, Jochen Kirschner
- **ISRAEL:** Ronen Gorni
- **RUSSIA:** Anatoliy Soloviev
- **UKRAINE:** Larisa Mikhailovna Vakhnenko

South East Asia

- **INDONESIA:** Leni Lismayanti, Christina Roosarjani
- **NEPAL:** Shrawon Shrestha

Western Pacific

- **AUSTRALIA:** David Myatt
- **BRUNEI:** Mee Ging Nyau
- **CHINA:** Wai Yuen Jason Leung
- **HONG KONG SAR OF CHINA:** Sze Yeung Chan, Denna Ko, Stanley Leung
- **JAPAN:** Yukihiro Kawano, Yumi Kobayashi, Kaoru Maneyama, Takamichi Matsushita, Shinya Matsuyama, Takeshi Naito, Minori Niso, Shuichi Sigimoto, Hideo Yawata
- **MALAYSIA:** Afni Abu Bakar, Asnol Ahmad, Poh Yoke Rosalind Choo, Ainisah Md Ariffin, Noor Haslina Mohd Noor, Tian Sang Teng
- **SINGAPORE:** Alvin Cheong, Mickey Koh, Rhodel Mallion
- **SOUTH KOREA:** Jiyun Her, Giwyoung Oh, Chul Min Park
- **VIETNAM:** Thi Kim Dung Truong

Geoff Daniels

On February 1st I sent an email to all ISBT members inviting them to make nominations for positions on the Board and Executive that will become vacant in July: President elect (to become President in 2014), Vice President, Treasurer, and Regional Directors for Africa, South East Asia, Western Europe, and Western Pacific. Nominations will close on April 10th and electronic voting will begin on the same day. I urge all members to vote in this election. It is very important for the health and vitality of the Society that members entrusted with the privilege of running the Society are elected in polls in which most members have participated. Only in that way will the Society be owned by its members. Voting closes on Sunday 10th June and the result of the election will be announced at the General Assembly in Cancún, Mexico on July 10th.

On the subject of Cancún, the scientific programme is complete and what an excellent programme it is. Congratulations to the Scientific Secretary, Martin Olsson, and his team for putting it together. Blood transfusion, together with other closely associated therapies, involves a wide range of scientific disciplines and this scope is reflected in the congress programme. But the congress is not all about science; there is plenty of clinical, management, and educational content, plus, of course, the social programme. If you can, I suggest you register for the ISBT Congress in Cancún in July. Despite the very full programme, you might even find time to visit the beach.

Cellular therapy is a rapidly developing branch of medicine that is closely aligned with blood transfusion. Consequently, it is well represented on the programme for the Cancún congress, which includes a meeting of the Cellular Therapies Working Party.

This working party plays a very important role in ensuring that the ISBT stays abreast of developments in the field in order to attract scientists and clinicians from the cellular therapy field to the ISBT, a society that they may not have automatically considered the most pertinent to their expertise. The Cellular Therapies Working Party has a new Chair: Dr Mickey Koh, Director of the Stem Cell Transplant Programme at St George's Hospital and Medical School, London, UK and Medical Director of the Cell Therapy Facility at Health Sciences Authority in Singapore. Mickey Koh took on this role because he believes that cellular therapy fits firmly within the spectrum of transfusion medicine. Why? Well to quote Mickey Koh, "Cellular therapy shares with blood transfusion the emphasis on safe donor selection, stringent processing, staff training as well as the complexities involved in monitoring the clinical safety and efficacy of an infused product." He is now eager to attract participation from technical staff, researchers, and clinicians enthusiastic about cellular therapy, who may contact him at mickey.koh@stgeorges.nhs.uk or mickey_koh@hsa.gov.sg. I would like to thank the outgoing working party chair, Paulo Rebulla, for his contributions to the working party.

In February this year ISBT entered a new phase in its development as a professionally run organisation by moving into new offices in Amsterdam; the first time that the ISBT office has occupied its own premises. Congratulations to Judith Chapman, the ISBT Executive Director, and her team for making this possible.

Geoff Daniels
ISBT Secretary-General

Goodbye to Sophie Hamburger

For 30 years, the ISBT Central Office has been continuously supported by devoted people like Claudine Hossenloop, Margareth Gunson and then Sophie Hamburger. After 11 years, Sophie Hamburger has returned to work on congress management at MCI-Eurocongress.

It is quite hard to separate the vision of ISBT daily issues from the figure of Sophie. She took care of nearly everything in Amsterdam with a high level of professionalism, organization and commitment. During her long time with us, she understood how to conduct her activities with all new ISBT members, including the whole Board, where different cultural differences produced some interesting stories (her memories would certainly be enough for an interesting book). We all depended and benefitted from her excellent work.

In addition, she became a good friend of mine. Apart from professional issues, we regularly discussed several unrelated topics, like our family, and most interestingly, about the weather and football differences between Brazil and The Netherlands. Sophie, although you are embarking now on a different way, your place will always be remembered at the Central Office. Many thanks for everything and on behalf of all ISBT members, we wish Sophie success in the future.

Silvano Wendel

From ISBT Central Office

Invitation to renew your membership

We would like to invite you to renew your membership for the next membership year, which starts on April 1, 2012. Before you renew your membership, please ensure your details are properly completed. To renew your membership, please go to **www.isbtweb.org/membership** to login. When you login you will see the payment page, where you can proceed with your payment.

***NEW* 35 years and under fee**
We are happy to announce, that from this year, all those aged 35 and under, have the opportunity to pay a discounted fee of € 55 per year. This new membership class allows you the full benefits of ISBT membership, except for the fact that Vox Sanguinis and Transfusion Today will only be accessible online. If you would like to apply for this discounted fee, please send a scan of the photo page of your passport to membership@isbtweb.org, after which we will confirm the discounted membership.

Fee for those from low and medium development index countries
Reduced price membership for members from medium and low development index countries, included in the UN Development Programme (UNDP), remains in place for 2012.

You are requested to renew your membership by June 30, 2012.

Benefits
Being an ISBT member gives you these benefits:

- Free access to the exclusive membership part of the ISBT website which includes the membership directory, and important specified documentation that has been prepared by the ISBT Working Parties;
- A significantly reduced registration fee at ISBT Congresses, in 2012: the International congress of the ISBT, Cancun, Mexico in July 2012;
- A free copy of the Society's Scientific Journal 'Vox Sanguinis'*;
- A free copy of the ISBT Science Series, which includes State-of-the-Art articles on a number of different aspects of Transfusion Medicine*;
- A free copy of the Quarterly magazine 'Transfusion Today' with articles on blood transfusion medicine worldwide*;
- The monthly 'ISBT e-news' with updates on ISBT activities;
- Information on activities of the 'ISBT Academy of Transfusion Medicine', which supports educational courses and symposia worldwide;

* *If you are granted the 35 years and under fee, you will have online access only.*

World Blood Donor Day 2012

14 June 2012

On 14 June 2012, World Blood Donor Day will be marked with events around the world to raise awareness of the need for safe blood and blood products and to thank all voluntary unpaid donors for their life-saving gift of blood.

The global theme of World Blood Donor Day changes each year in recognition of the selfless individuals who donate their blood for people unknown to them. The theme of WBDD 2012 is *"Every blood donor is a hero"*.

Each year, a host country is identified for a global event that provides the focus for an international publicity campaign about World Blood Donor Day. The global event for 2012 will be held in Seoul, Republic of Korea, hosted by the Korean Red Cross and the Ministry of Health and Welfare.

To find out more about how your organization can become involved and join the network, please contact: **worldblooddonorday@who.int**

In the coming months, WHO's web page for World Blood Donor Day **www.who.int/worldblooddonorday** will present more information.

ISBT Corporate Membership

ISBT has introduced Corporate Membership and is pleased to announce that DiaSorin became a corporate member.

DiaSorin develops, produces, and distributes immunoreagent kits for clinical diagnostics. By making tests available that can provide guidance in making clinical decisions, DiaSorin has contributed to improving the delivery of health care and reducing its cost.DiaSorin has joined the Corporate Membership Programme as a Gold member.

For further information on Corporate Membership please contact the ISBT Central Office.

In Memoriam Written by Rachel Berger

Dr B.P.L (Paddy) Moore

D.Sc., F.R.C.P.C., F.R.C.Path.

Dr Paddy Moore died on December 5th 2011 at the age of 92 at Napanee, Ontario, Canada. Born in Belfast, Northern Ireland he graduated in medicine (M.B., B.Ch., B.A.O.) from Queens University, Belfast in 1942.

In 1944 he was appointed Junior Research Assistant to Sir Almroth Wright at what is now the Wright-Fleming Institute of St Mary's Hospital, London, England. The institute was then the epicentre for bacteriologists because of Fleming's work on penicillin and Wright's earlier work on opsonins and vaccine therapy; it was there he learned the mysteries of making and using capillary pipettes for serology. This interest in developing, making and using his own equipment and serums remained with him throughout his career. In 1948 the Mater Infirmorum Hospital Board in Belfast, where Dr Moore was working as Honorary Clinical Pathologist, decided to abstain from the new National Health Programme which left Dr Moore without a salary. Faced with the dilemma of private practice, joining the UK Public Health Service, or the fledgling Canadian Red Cross Blood Transfusion Service (CRCS-BTS), he chose the latter and emigrated to Canada, followed a year later by his wife (Maire) and young son.

Posted to Vancouver, British Columbia, he subsequently became medical director of the Vancouver Depot, a post he held until 1955 when he was appointed the first director of the National Blood Group Reference Laboratory (NRL) in Toronto – perhaps because of his serological experiences at St Mary's. Before taking up that position he was able to spend some months with Drs Race & Sanger at the Lister Institute, London. In his new position he was instrumental in introducing the latest laboratory routines across the country including the use of the enzyme papain in blood grouping in the '50s, automated testing of blood donations and automated quantification of blood group antibodies in the late '60s and the first tests for hepatitis B antigen in the early '70s. What started as a serology laboratory with a staff of six eventually had four sections (serology, HLA, hepatitis, and immunochemistry) and, when he retired in 1984, over 50 technologists and scientists. He authored over 90 peer-reviewed publications and wrote or co-edited (1948-1980) the CRCS- BTS textbook on laboratory aspects of transfusion medicine.

He was held in high esteem by his staff, many of whom, prior to his move from Toronto in 2008, attended several reunion lunches in his honour. Dr Moore, and his wife Maire, always attended even though at that time he was experiencing mobility issues. He remained cognitively astute to the end of his life and was always willing to be supportive and provide advice and historical facts to all who asked; just months before his death he had provided information to a transfusion medicine archivist who had not been able to obtain it from any other reference source. Not only have we lost a great man but also the history and knowledge that he so willingly shared. He mentored many and willingly volunteered his time and energy so others might benefit.

Dr Moore was ISBT President from 1980–1982. He was elected to Council in 1972; created three Working Parties (Automation and Data Processing, Terminology of Red Cell Surface Antigens, and Socio-Economic Aspects of Blood transfusion). He was Past Chair of the Publications Committee and the Committee of Ethics and Legislation.

In Memoriam Written by Marcela Contreras

Patrick Loudon Mollison

17 March 1914–26 November 2011

Considered and respected worldwide as the father of Clinical Blood Transfusion

Transfusion Medicine has become a clinical specialty in its own right, largely due to the contributions by Pat Mollison, whose textbook, with 11 editions, is considered as "the bible" amongst most specialists internationally. From 1951 to the early 1980's "Blood Transfusion in Clinical Medicine" was the only authoritative, comprehensive account on the subject. The strongest reason for the success was that Mollison had first-hand experience of many of the clinical, experimental and laboratory areas covered in the book.

The predicted need for blood, during World War II led to his involvement in transfusion. In 1939, four blood transfusion depots were set up in London. Mollison, a recently qualified doctor, was assigned, from St Thomas' Hospital, to the south west depot in Sutton. He combined research with the practicalities of the urgent provision of blood to hospitals, following the bombing raids. He acted as a blood donor phlebotomist, driver, delivery man, adviser in blood transfusion, laboratory tester and often as a perfusionist, in small hospitals where doctors had no experience of blood administration and warmly welcomed the offer of help.

Methods for blood preservation and storage had not made much progress after World War I. Blood was stored in glass bottles in large volumes of trisodium citrate and dextrose, which needed separate autoclaving to avoid caramelisation; red cells survived only a few days in this solution. Loutit, Mollison and Young investigated methods to improve blood preservation, resulting in the invention of a small-volume solution of acid citrate and dextrose (ACD) which allowed storage for 3 weeks; this was used by blood services in the UK and most other countries for more than 20 years. Also during the War, liquid plasma, siphoned off from whole blood, was used in large quantities for the treatment of shock. Mc Quaide and Mollison had the brilliant idea of transfusing, rather than discarding, the concentrated residual red cells for the treatment of anaemic patients, thus starting the use of red cell concentrates.

In the early 40's, Mollison did pioneering work, using the method of differential agglutination, on the survival of red cells in cases of incompatibility and various haemolytic anaemias, being able to differentiate between those with an intrinsic mechanism from the extrinsic ones. He also worked with Boorman and Dodd on the clinical significance of anti-Rh in haemolytic transfusion reactions and HDN and on the survival of Rh-positive and Rh-negative cells in Rh HDN, showing the importance of transfusing Rh-negative cells.

In 1943 Mollison joined the military service, serving for a time in a field ambulance and as a Regimental Medical Officer in England, followed by a few months in Belsen, Germany. He was then sent, as a Medical Specialist to India and Burma until 1946. On his return to the UK, the MRC founded a Blood Transfusion Research Unit for Mollison, sited in a small sideroom in an obstetric ward at the Postgraduate Medical School in the Hammersmith Hospital. With Mary Cutbush as his scientific assistant, he continued his research in Rh HDN, establishing that the level of haemoglobin in cord blood is the best indicator of disease severity, thus enabling decision making for treatment. He also established the relationship between the level of bilirubin in the infant and the occurrence of brain damage (kernicterus). Louis K Diamond, from Boston, the inventor of the technique for exchange transfusion through the umbilical vein in newborn infants, donated his equipment to Mollison when he visited London. Thus, after giving the first exchange transfusion on a bench in his laboratory, he became the sole UK expert in the technique for several years. He conducted clinical trials that showed that exchange transfusion decreased mortality of HDN and lowered the risk of kernicterus.

In 1960, the MRC moved the Unit, renamed the Experimental Haematology Unit, to St Mary's Hospital with Pat Mollison as its Director. He also became Professor and Head of Haematology and Honorary Consultant. On Mollison's retirement in 1979, the Unit closed.

At St Mary's, In the late 60's he investigated the mechanisms of suppression of maternal anti-D formation and, with Nevin Hughes -Jones, estimated the anti-D dose required to prevent Rh immunization. The dose proposed was the one used in maternity units throughout the UK up to now. His expertise in HDN made him the obvious adviser to the Queen at the delivery of her four children; a fact never discussed with colleagues or family.

With Norman Veall, he developed improved methods for radiolabelling red cells, resulting in the elucidation of the mechanisms and patterns of destruction of transfused red cells by different types of alloantibodies. In view of his expertise in measuring red cell survival, Mollison collaborated with H A Sloviter on the first successful transfusion of red cells stored for 6 months in glycerol in the frozen state.

Due to reasons of space, the above is an incomplete account of the enormous and seminal contribution made by Mollison to current understanding in Transfusion Medicine, acknowledged by the numerous recognitions and awards during his prolific life. To name a few: President of ISBT 1960–1964; Fellow of the Royal Society 1968; Commander of the British Empire 1979; Karl Landsteiner Award of the AABB; Philip Levine Award of the American Society of Clinical Pathology; ;James Blundell Award of the BBTS; first recipient of the Presidential Award of the ISBT.

Patrick Mollison was born in London in 1914. His father was a distinguished Ear, Nose and Throat surgeon. He studied in Cambridge and then at St Tomas's Hospital, qualifying as a doctor in 1938. He married Dr Margaret Peirce in 1940 and they had three sons: Simon, Denis and Anthony. They divorced in 1965. In 1973 he married Dr Jennifer Jones, a consultant anaesthetist, with whom he shared a very happy life of travel, opera, concerts and good food. In fact, he was skiing with a granddaughter at the age of 86; he drove a Mercedes Benz sport car up to the age of 95 and it was only last summer, at 97, that he went to 2 operas in Glyndebourne. A quiet and very private man, he was very generous with his knowledge. His solid and diverse contribution to Clinical Blood Transfusion will remain with us forever.

32nd International Congress of the ISBT

in joint cooperation with the 10th Congress of AMMTAC

Scientific Programme

Saturday July 7 **Spanish Speaking Education Day**
Is Spanish your language? Then the Spanish Speaking day is for you. The presenters will include many well known international experts in Transfusion Medicine.

Sunday July 8 **ISBT Academy Day** The day will include sessions on quality management, immuno-haematology, clinical aspects of transfusion medicine and a joint ISBT/ADRP workshop; Voluntary Non-Remunerated Blood Donor Program Achieving Success.

Monday July 9 – Thursday July 12 Scientific Programme

Plenary sessions

Monday July 9	Cells in the making
Wednesday July 11	New versus old blood
Thursday July 12	Blood philosophy

Parallel sessions The parallel sessions will be broken down into six streams; donors, donation and components, immunobiology of blood cells, clinical, adverse effects of transfusion, cellular therapies, management and organisation.

Parallel sessions

	Monday July 9	Tuesday July 10	Wednesday July 11	Thursday July 12
Donors, donation and components	Donor recruitment strategies	Donation by Apheresis	Young donors	The multi ethnic donor challenge
	Component quality	Promoting voluntary donation	Donor adverse events including use of senior donors	
	Pathogen reduction		Rare donor WP	
Immunobiology of blood cells	Report of genotyping workshop	Immune destruction of platelets and red cells	What makes erythrocytes (s)tick?	Platelet function beyond haemostasis
	Granulocyte working party session	Large scale NIPD testing	Feto maternal immunology of cells	
	Platelet working party session		New blood groups	
Clinical	Extra corporeal oxygenation	Massive bleeding	Clinical use of plasma	Alternatives to transfusion (joint session with NATA)
	Clinical Transfusion Working Party	Pharmaceutical intervention in bleeding trauma patients	Late breaking news	
	Transfusion in Sickle cell disease		Appropriate use of blood cells	
Adverse effects	Blood donation testing	Malaria by transfusion	Bacterial testing	Transfusion Transmitted Diseases
	Haemolytic transfusion reactions	TTID WP	Haemovigilance WP	
	TRALI		Chagas disease	
Cellular Therapies	Stem cell transplantation with cord blood	Natural killer cells and regulatory T cells	Cellular Therapies WP	
	Transplantation of gene modified progenitor cells	The promise of induced pluripotent stem cells	Cultured red cells	
	Mesenchymal stem cells and Dendritic cells		Cellular therapies in regenerative medicine	
Management and Organisation	Organisation of blood establishments	Blood Supply Management WP	Quality management WP Outcome	
	Implementing and maintaining a haemovigilance system	Blood management	Emergency planning	
	New By Laws and Statutes of ISBT		IT WP	

Young Investigators Breakfast Session

Monday July 9, 2012
If you are a scientific /medical researcher and under 35 years of age you can join the Young Investigators (YI) breakfast session.

You will be able to discuss your work with your peers and expert mentors and receive valuable feedback.

The session will be held at the beach restaurant in the Fiesta Americana Grand Coral Hotel which is located immediately opposite the Cancún Convention Centre.

To take part, you need to complete and submit the form which is available at isbtweb.org/mexico

Poster Sessions and Poster Prizes

Poster sessions will take place on Monday July 9 and Tuesday July 10, 2012. Ten poster prizes will be awarded to the best posters in the categories.

Further details about the scientific programme are available at **www.isbtweb.org/mexico**

Cellular Therapies Working Party

Dr. Mickey Koh has replaced Dr. Paolo Rebulla as chairperson of the Cellular Therapy Working Party.

Mickey writes:
"Cellular therapy continues to be one of the most exciting and rapidly evolving areas in medicine with promising results in cancer treatment and regenerative medicine."

ISBT confirms its commitment to the area of cell therapy with the appointment of Dr. Mickey Koh to the chair of the ISBT Cellular Therapy Working Party. This Working Party is in cooperation with AABB. Dr. Koh is the Director of the Stem Cell Transplant Programme at St George's Hospital and Medical School, London, UK. He is also the Medical Director of the Cell Therapy Facility at Health Sciences Authority in Singapore.

Dr. Mickey Koh is enthused about chairing this Working Party and the enormous opportunities available for defining this area of therapeutic and investigational medicine within ISBT. His firmly believes that cellular therapy forms part of the continuum and spectrum in transfusion medicine. He says "Cellular therapy shares with blood transfusion the emphasis on safe donor selection, stringent processing, staff training as well as the complexities involved in monitoring the clinical safety and efficacy of an infused product. The plethora of clinical trials in cancer, cardiac and neurological diseases provide ample scope for defining the terms of reference for the WP." He is keen to attract enthusiastic participation from interested parties including technical staff, researchers and clinicians.

A meeting of this Working Party will be held at the ISBT International Congress in Cancún. Individuals can email Mickey Koh indicating their expression of interest at either address: **mickey.koh@stgeorges.nhs.uk** **mickey_koh@hsa.gov.sg**.

New Vox Sanguinis Editor-in-Chief

Dana Devine

The end of 2011 saw the completion of an important chapter in the history of our society's journal, Vox Sanguinis. Under the leadership of then editor-in-chief, Prof. Wolfgang Mayr, and a group of diligent section editors, Vox solidified its position as one of the top journals in transfusion medicine. 2011 also saw the completion of terms for several section editors including, Paul Holland, Real Lemieux, Tom Krusius and Peter Flanagan. New section editors were appointed to handle submissions of reviews (Leo van de Watering and Zbigniew Szczepiorkowski), Blood-Component Collection & Production (Rebecca Cardigan) and Transfusion-Transmitted Disease and its Prevention (Clive Seed). At the start of January, 2012, I was privileged to assume the role of editor-in-chief of Vox with a responsibility to continue to build the reputation of our society's flagship publication. It is our hope as an editorial team that the membership of ISBT continues to learn from articles published in Vox, and that those working in transfusion who generate new knowledge will continue to use the journal as a means to communicate novel findings. The publication standards for Vox will remain high and we commit to bringing information of impact to transfusion medicine and of broad interest to the readership. There continues to be a strong growth of publications in the transfusion medicine field and Vox Sanguinis seeks to capture the best of this work to assist in moving our field toward its future.
– Dana Devine, Ph.D.

ISBT Strategic Plan 2012–2015

In 2008 the ISBT generated a strategic plan for the period 2009–2012, which is now complete. The objectives have been met and include the start of the professionalisation of the society, the employment of a full time executive director, enhanced communications with a new website, new look magazine, employment of a full time communications co-coordinator, financial stability, increased industry support and high quality congresses.

The ISBT Board held a strategic review meeting in June 2011, when different strategic options were developed, those achieving the highest priority were:
- General priorities for the Board including membership of the Society
- The growing importance of researchers and prescribers in the field of transfusion medicine
- The diminishing attraction of transfusion medicine
- Changes in clinical practice
- Geopolitical changes
- The impact of social media
- New technologies in Transfusion Medicine with developing importance.

These seven strategic options were further analysed and from the analysis four main areas of activity for the three years were identified:
1 Membership
2 Communication
3 Congresses
4 Finance

Strategic Objectives

The main strategic areas identified are summarised below.

1 Membership
Grow the membership and give added value. To do this ISBT will:
- Establish how it can better retain its current members by giving added value
- Clarify its target membership audience within the wider field of transfusion medicine
- Identify a strategy for increasing membership.

A number of key activities will be undertaken including understanding the demographic profile of current members, the needs and expectations of members and which of these are met and unmet, surveys of congress delegates who are not members of ISBT, and members of national societies who are not members of ISBT. The results of the surveys and research will be analysed and recommendations will be made with regard to further activities. ISBT will also review its membership structure and consider changes.

2 Communication
Exploit developments in social media and IT to extend and develop communications with stakeholders. To do this ISBT will:
- Increase its use of social media
- Increase the functionality of the website to improve access to available. information Develop a communication strategy which will include the utilisation of congress presentations for webcasts
- Investigate e-conferencing
- Harness the quality of the membership and the working parties to deliver more output via the website

The exponential increase in the use of the internet and social media offers new ways in which the ISBT can communicate with its stakeholders.

Improving the functionality and expanding the information available on the website to include a broader range of information on clinical practice will help ISBT to achieve its goal of engaging with prescribers and clinical researchers.

The internet offers the opportunity for ISBT to exploit the content of its congresses. ISBT will make available on line its congress presentations. This facility will also be used to extend the reach of the ISBT Academy.

3 Congresses
Offer sessions that are relevant for everyone working within the field of transfusion medicine and related therapies and at its periphery. To do this ISBT will:
- Ensure that leaders in the field of transfusion medicine and related therapies are included in the scientific programme
- Ensure that the congresses are relevant for all nations.
- Ensure the inclusion of new technologies.
- Integrate clinical practice in the scientific programme.
- Organise joint sessions with other research societies.

Organisation of congresses with high quality scientific programmes is one of the main activities of ISBT. ISBT should ensure that it seeks out and includes leaders in the field to enhance the quality of the programme. ISBT will ensure that sessions relevant to developing countries are an integral part of the scientific programme and include more sessions related to clinical practice. The congresses have the potential for including joint sessions with other societies e.g. NATA, ISTH, ISCT which will also increase the clinical focus.

4 Financial resources
Increase financial resources by identifying new sources of financial revenues and reducing costs. To do this ISBT will:
- Identify new sources of financial revenues which can be used to finance plans for the future including the development of the ISBT Academy.

ISBT's income is from three main sources: membership, congresses and Vox Sanguinis. There is the potential to increase the income by engaging with current corporate members to expand their involvement, recruiting more corporate members and exploring new membership categories e.g. institutional members. ISBT will also examine ways of cutting costs.

SOUTHEAST ASIA

Human Resource Development

in Indian Transfusion Medicine

Neelam Marwaha
Professor and Head M.D; F.A.M.S, Department of Transfusion Medicine Postgraduate Institute of Medical Education and Research, Chandigarh

Background

The focus on blood safety as a component of the National AIDS Control Project contributed significantly to improving the quality of blood products and blood services in India.

During phase I (1992-99) and II (1999-2006) of the project, blood banks were modernized, testing kits and reagents were financed and recruitment of voluntary non-remunerated blood donors was promoted. National Blood Policy was formulated and adopted by the Government in 2002 and An Action Plan on Blood Safety came into effect from 2003. As the scope of transfusion services expanded and implementation of quality practices become essential, a lack of trained personnel became apparent. The objective 6 of Action Plan for Blood Safety aptly reads as *"To strengthen the manpower through human resource development."*

Training Programmes

Postgraduate training programmes

After obtaining the medical graduate degree, three postgraduate courses are available, two of which are recognized by the Medical Council of India: the *Diploma in Immunohaematology and Blood Transfusion (DIBT)* and the degree course *Doctor of Medicine in Immunohaematology and Blood Transfusion/Transfusion Medicine (M.D IHBT/M.D TM)*, the former being a two year course and the latter a three year course. The National Board of Examinations offers a three year course for Diplomate National Board in Immunohaematology and Transfusion Medicine which is considered equivalent to M.D.

Structure of the training programme (M.D)

The M.D course is a three year residency programme. The curriculum encompasses all areas of the speciality. Lectures, journal reviews, case-discussions are supplemented with actual "hands-on" training. The initial lectures include relevant topics from the disciplines of haematology, immunology and genetics. The residents are familiarized with physiology and biochemistry of various elements of blood, haematopoiesis, humoral and cellular immunity, HLA system, principles of genetics and red cell antigen phenotypes and genotypes. Subsequently operational aspects of blood centres like management of blood donation (donor recruitment, selection, blood collection and donor care) blood component preparation including apheresis, storage, special processing requirements (washing, leucoreduction, irradiation, pooling, aliquotting, cryopreservation etc) donor blood testing for transfusion transmissible infections, blood grouping and antibody screening are taught. The residents are familiarised with document development, record maintenance and quality control procedures. They are apprised of national regulations, guidelines and standards. Immunohaematology is an important component of laboratory training and due emphasis is given to provide compatible blood in patients with thalassaemia major, alloimmunized antenatal women and newborns, haematopoietic stem cell transplant and solid organ transplant and in other complex clinical situations. Direct patient care is taught through therapeutic plasma exchange, therapeutic leucocytapheresis and thrombocytapheresis in haematological malignancies. Knowledge on stem cell collections, characterization and therapies is also imparted. Adverse reactions to transfusion, haemovigilance, transfusion audits, automation, modern biological techniques and recent advances in the speciality also form an important part of the curriculum.

During their tenure, the residents are exposed to research. A thesis research project is allocated under the guidance of a senior faculty staff. The resident thus gets familiarized with thesis plan writing, performing the work, data analysis and drawing conclusions. The resident is encouraged to submit manuscript for publication in a scientific journal.

Two Institutions took the lead in initiating M.D. Transfusion Medicine – Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow and the Postgraduate Institute of Medical Education and Research, Chandigarh.

Short term training programme

Staff already working in blood centres usually find it difficult to acquire a new degree / diploma. The Blood Safety Division of National AIDS Control Organization (NACO), Ministry of Health and Family Welfare Govt. of India initiated in-service induction and refresher training for medical officers, laboratory technologists and staff nurses already working in blood centres. Six day induction and three day refresher courses are being implemented on a countrywide basis since the year 2006 through seventeen nodal training centres. The training programme for medical officers consists of the following modules; donor room procedures, blood component preparation, red cell serology, screening for transfusion transmitted infections, quality control, standard operating procedures and biosafety. Theory lectures, benchside demonstration and limited hands on training are possible in this span of time and only key operational issues are highlighted. Refresher courses are conducted annually. During reviews of these training programmes it was observed that there was great variability in the course content between nodal centres. The Technical Resource Group of the Blood Safety Division of NACO held several meetings to finalize uniform training modules.

Realising the fact the blood safety cannot be achieved without educating the key prescribers (clinicians) of blood, NACO has also initiated CMEs(continuing medical education) for appropriate clinical use of blood. Information on blood components transfusion guidelines and early recognition and management of adverse events of transfusion are discussed. These guidelines are largely referenced from publications of World Health Organization. Objective 5 of Action Plan on Blood Safety is "To encourage appropriate clinical use of blood and blood products."

Future training plans

- More focus on appropriate clinical use of blood through interaction with members of the Indian Medical Association.
- Specific training courses for technologists. The Postgraduate Institute of Medical Education and Research, Chandigarh has initiated Masters course in Transfusion Technology.
- Training of Donor Recruiters. Training modules have already been prepared by the NACO Resource Group on Voluntary blood donation.
- Training of nursing staff through liason with Nursing Council of India.

AFRICA

Dr Janaki Sonoo
Chairperson
Local Organizing Committee

6th International Congress of Africa Society for Blood Transfusion

"Training and quality lead to safe and sustainable Blood Services" This is the theme chosen for the 6th International Congress of Africa Society for Blood Transfusion which will be held in Mauritius from 4-8 June 2012. This may seem quite obvious to many, however in the context of most Blood Services in Africa, this theme is aptly chosen.

Transfusion medicine has seen a paradigm shift in terms of safety and quality, driven by the reports of various adverse reactions and transmission of infections related to transfusion of blood and blood products. Although many infectious diseases have been triumphed over, Blood Transfusion continues to enjoy a high public profile due to emergence of new pathogens, attributed to climate change, migration and natural or man made disasters.

However, past decades have also seen vast progress in transfusion medicine in the developed world with unprecedented safety in production and administration of blood products. With the advent of cellular therapy, transfusion medicine is touching new horizons in saving and improving the quality of lives of people. Unfortunately, the progress made has not percolated to all parts of the globe and Blood Services in Africa still continue to struggle with adequacy and safety of blood products. High prevalence of HIV and other transfusion transmissible infections, fragmented organizational structures, paucity of skilled manpower and few training opportunities as well as unstable political environment in many countries make the task of blood services all the more daunting.

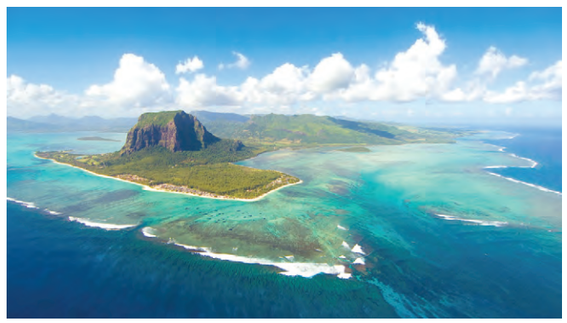
Mauritius, a small developing island nation, has taken the challenge of organizing this congress. In contrast to mainland Africa where the burden of infectious diseases is still high, chronic non communicable diseases are emerging as a major challenge for Mauritius. With a population of 1.2 million, a free and high tech public service and active promotion of medical tourism as yet another pillar of our economy, meeting transfusion requirements is becoming a day to day challenge. This congress is the first of its kind to be organized in the country and will provide us with an opportunity to network, share experiences and learn from others. Scientific program, covering all aspects of transfusion medicine, from donors to transfusion practices and hemovigilance, is particularly relevant to this part of the world. Congress will be preceded by ISBT Academy education day focussing on transfusion safety and transfusion approaches in different clinical situations. A day is also dedicated to AABB-AfSBT stepwise accreditation.

Congress also caters for exciting social program giving an opportunity to explore this paradise island. Mauritius is a sparkling crystal in the turquoise waters of the Indian Ocean and may be known to many of you as a tourist destination. Our blue lagoons, white sandy beaches, long hours of sunshine, the contrast of colours, cultures, tastes, multilingualism and Mauritian hospitality make the island so charming that you will not be able to resist few additional days for an unforgettable holiday.

Air Mauritius, our national airline is offering attractive rates to all the delegates and accompanying spouses.

It is our sincere hope that large number of people will attend this congress and make it a huge success.

For more information visit our website:
www.afsbt-mauritius.org



Le Morne Brabant - A World Heritage Site

Le Morne Brabant is a hill in west coast of Mauritius and became well known in 19th century as a hideaway for runaway slaves. After the abolition of slavery in Mauritius, a police expedition traveled to the hill on 1 February 1835 to tell the slaves that they are free people. However, the slaves misunderstood the expedition and jumped to death. Since then, this day is celebrated by Mauritians as Annual Commemoration of the Abolition of Slavery.

WESTERN EUROPE

Mahmut Bayık
President of BBTST and
Turkish Blood Foundation

Highlights of the 4th National Blood Centres & Transfusion Medicine Conference

Antalya, Turkey

Opening ceremony of the 4th National Blood Centres & Transfusion Medicine Conference

The 4th National Blood Centres and Transfusion Medicine Conference was held at Maritime Pine Beach Resort Hotel Belek in Antalya, Turkey on 14–18 December 2011. There were 870 participants at the conference, 24 of whom were from abroad. Two seminars were held during the conference: one on social skills and the other on the Basic Issues of Blood Banking. The conference briefcases included several books that would provide a rich library on the issue as well as a CD and a bulletin.

The conference included 4 presentations, 8 panel discussions, one workshop (round table discussion), two verbal presentations and four satellite symposia. 56 speakers took part in the sessions with 16 verbal presentations and 96 poster presentations.

During the conference, both during the satellite symposia and during the ISBT Academy session, simultaneous interpretation between Turkish and English was planned due to the fact that some of the presentations were delivered in English. However, since there was participation from abroad (24 participants from 11 countries) simultaneous interpretation into English was provided throughout the conference duration. This enabled participants from abroad to follow the sessions and participate interactively with questions and answers.

ISBT Academy participated in this national conference with a panel. Jill Story (Sweden) and Halvard Boenig provided by ISBT for this conference delivered presentations entitled 'Molecular typing of red blood cells' and 'How hematopoietic stem cells save lives?' respectively. Both speakers were received with great interest.

Some of the titles of the presentations delivered during the conference are as follows: 'Quality indicators and risk management in blood banking', 'Current status on blood banking and education in transfusion medicine', 'Blood donation and donor', 'Source plasma', 'Transfusion transmitted infections', 'Workshop on national guideline for blood and blood products', 'Cellular therapies', 'Immunohematology'.

One hunderd and seventeen companies sponsoring the conference introduced their products to the conference participants at 23 stands set up in the exhibition area. Even some foreign companies with no representation in Turkey set up stands at the fair and promoted their products.

The conference participants relaxed after a busy conference schedule at the social programmes organised in the evenings. This provided them with the opportunity to meet, mix and communicate with each other socially. There was also entertainment at the gala night.

In the closing session of this very successful conference, criticisms, requests and most beneficial aspects of the conference and suggestions for future conferences were elicited from the participants by means of electronic key pads, enabling the gathering of statistical data.

Eugene Zhiburt
Head of Blood Transfusion and Policlinic at National Pirogov Medical Surgical Centre

EASTERN EUROPE

Standards & Individual Approaches

in Clinical Transfusion Medicine

The Ministry of Health and Social Development of the Russian Federation and the Federal Medical-Biological Agency launched a large-scale development programme on voluntary blood donation to create awareness amongst Russians. This programme was promoted actively during 2008–2012.

The focus points of the programme are:
- Re-equipment of blood establishments,
- Creating a unified information database,
- Development of a system for voluntary blood and blood components donations.

The programme involved 82 subjects of the Russian Federation, including 96 regional and 11 federal blood establishments. The Russian state, hospitals, community organisations, businesses and individual donors and volunteers used the development programme, which resulted in a change in attitude amongst the Russians. This proofs that educational activities are very important in Russia.

The ISBT Academy workshop on "Standards and individual approaches in clinical transfusion medicine" was held in Russian Pirogov National Medical Surgical Centre in Moscow on December 14–16, 2011. The workshop counted 96 participants who mostly were physicians from blood banks and transfusion services. They listened to seven lectures. Afterwards the participants had the possibility to take part in a broad discussion. Since the quantity of blood establishments decreased from 1618 in 2001 to 584 in 2010, Russian blood service is under centralisation. This attracted great interest for the lecture of Mr. Angus Douglas. He spoke about the experience of blood service centralisation in Scotland. Instead of having several blood centres, a single management centre was created for Scotland.

The responsibilities of Scotland's management centre are:
- Supply Chain Directorate,
- Clinical Directorate,
- Quality Directorate,
- Tissues Directorate,
- Reagents Directorate,
- Plasma Fractionation Directorate,
- Support Services Directorate.

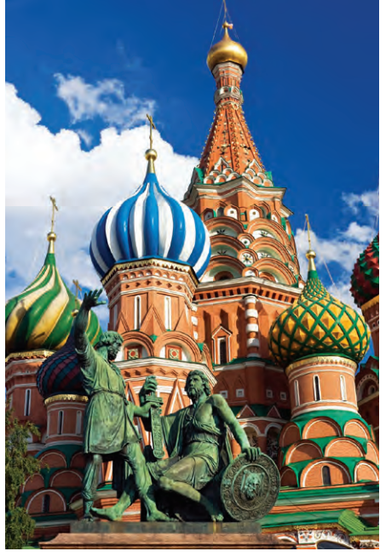
Scotland's management centre is designed to promote:
- Single donor management optimising collections across Scotland,
- 2 processing/testing centres under one management resulting in consistently high component quality,
- Single logistics management allowing stock optimisation,
- SNBT's clinical directors leading transfusion medicine in hospitals, including safety to bedside, optimal use, stem cells,
- Support service costs reduced,
- R&D improved through international partnerships,
- Decision devolution to energise staff.

The results of blood service centralisation reform in Scotland are:
- Improved donor management – central planning, community relationships;
- Improved quality of components;
- Improved quality of transfusion medicine (optimal blood use);
- Introduction of new technology;
- Improved R&D leading to real break-throughs, for example, sourcing blood components from stem cells;
- Improved staff morale and recruitment through devolving responsibility;
- Improved reputation of SNBTS;
- Financial savings funded modernisation.

Another interesting lecture on "Massive Transfusion; Lessons from Military Trauma" was delivered by Dr. Sam Rawlinson. He has looked at the rationale behind using a proactive approach to managing major haemorrhage following trauma, and highlighted the need for a more refined Transfusion Triage System. The need for rapid laboratory turnaround time, and the potential use of Near Patient Testing was highlighted.

A variety of risk reduction measures have been considered:
- Pretested Emergency Donor panels with optimal ABO group,
- Point of Collection testing,
- Age of Blood,
- Dry plasma,
- Potential value of using Fibrinogen concentrate.

The next workshop will be on "New in transfusion medicine" and will be held in Pirogov Center on May 16–18, 2012.



Top Left St Basil Cathedral, Moscow; **Top Right** Donating blood at the Blood Center of the Federal Medical-Biological Agency in the framework of the Blood Service state program to promote blood donation; **Bottom Right** British guests were welcomed by an old Russian tradition of "Bread and Salt"

NORTHERN AMERICAS

Olaya VA, Aguilar ED, Perez M, Bravo LA, Del Campo MA
National Institute of Pediatrics, Mexico City

Haploidentical Hematopoietic Stem Cell Transplantation in Children

The transplantation program of hematopoietic progenitor cells in the National Institute of Pediatrics was created with the aim of increasing the life expectancy in children with malignant diseases, initially (1992) by means of autologous transplantation and later (1998) with the transplantation of related allogeneic donors. In the year 2000 the transplantation program in non hemato-oncologic diseases was initiated. In March 2004 the first umbilical cord transplant of a non related donor was carried out.

At this moment it is the pediatric transplantation unit that carries out the greatest number of procedures in the country, being a center of national reference where about 30 annual transplants are performed, mainly umbilical cord progenitor cells and peripheral blood in diverse pathologies, Recently, and before the increase of patients who do not have a donor, the program of haploidentical transplantation has settled down.

The haploidentical transplantation of hematopoietic progenitor cells is a therapeutic alternative for patients with congenital and/or acquired hematopoietic diseases, immunological sufferings of the childhood and metabolic diseases and by hoarding, besides some solid tumors in which at the moment this evaluating its effectiveness like neuroblastoma.

The haploidentical transplant allows us to break the immunological barrier that prevents that some of the parents consider donating, which becomes an option of treatment for those patients that do not count on a source of compatible HLA progenitor cells.

The progenitor cells are obtained from peripheral blood through a harvesting aphaeresis from one of the parents who share a single haplotype with the receiver (HLA of 50%), and that previously is put under the application of colonies of granulocytes stimulating factor to dose of 10-20 μ/kg of weight by 5 days, and to elevate levels of CD34+ in peripheral blood >50cells/μlitro (pre aphaeresis).

In the Blood Bank of the National Institute of Pediatrics, Hematopoietic stem cells are collected and processed. It is advisable to process more than 3 volumes and anticoagulation with Heparin and citrate during the procedure to obtain an optimal harvest of CD34+ and to diminish the possibility of secondary events by citrate to the donor.

Later, the negative inmunomagnet selection by means of monoclonal antibodies together with nano metallic spheres, this when occurring through an electromagnetic field allows us to achieve the negative selection (depletion) of CD3+ and CD19+ cells, and positive selection (enrichment) of CD34+ (if necessary), following the protocol of Miltenyi for volume and cellularity adjustment, platelets washing, incubation and later washing of micro particles conjugated with monoclonal antibodies CD3+/CD19+; once ready the product together with to the monoclonal antibodies and the nano metallic spheres the negative selection is realized in the CliniMacs equipment (Miltenyi, Biotec). For the cell enrichment, monoclonal CD34+ markers are used, for posterior positive selection in the CliniMacs.

From the year 2009, T cell–depleted haploidentical hematopoietic stem cell transplantation has been developed in our institution; in this time 7 haploidentical transplants, 4 men and 3 women have taken place. The median age of children at the time of transplantation was 7 years. Four of the patients had acute lymphoblastic leukemia, 1 patient acute myeloblastic leukemia and 2 patients combined immunodeficiency severe. The criterion of selection in all the cases was that the children did not have an identical HLA donor and in the case of the patients with acute leukemia, the 5 patients had fallen after a transplant of umbilical cord blood. The donors were mothers in all cases.

Survival and causes of death: Of the 7 patients transplanted 3 of the acute leukemia patients had disease free survival in a period of observation of 6 months to 2 years, 2 patients presented relapse and death by progression of the disease, of the 2 children transplanted by congenital immunodeficiency, one is still alive with full donor chimerism. Primary graft failure was observed in 1 children.

In conclusion haploidentical hematopoietic stem cell transplantation is an alternative for those patients whom they require of this therapeutic modality and which they do not have related or not related donor available its main advantage is the immediate availability of a donor and his under risk of developing to graft versus host disease. The negative selection of lymphocytes B and T, allows us to mainly preserve the immunological potential of the rest of the inmunocompetentes cells obtained of the donor (dendritic cells, lymphocytes NK, monocytes, cells CD 34+) and the alloreactive capacity of the lymphocytes NK and their participation in the development graft versus leukemia effect.

Kuperman, Silvina, Gamba, Cecilia, Del Pozo Ana E.
Servicio de Hemoterapia-Hospital de Pediatría Juan P. Garrahan, Ciudad Autónoma de Buenoas Aires, Argentina

Public Cord Blood Bank Activities in Argentina

and its International Accreditation

In 1995 our team at the Hospital Garrahan's Bone Marrow Processing Lab started the collection of cord blood, only from babies whose siblings were patients who had a disease that could be cured by Haematopoietic Progenitor Cells (HPC) Related Program.

The first cord blood transplant with a unit collected and preserved in our bank was successfully performed in 1997 at Hospital Garrahan in a patient with SCID who had been previously transplanted with a haploidentical product whose engraftment had been lost later. After 14 years, this cord blood transplanted patient is still alive and in good health. In 2000, the sibling cord blood program was expanded to the rest of the country in order to process and preserve in our bank the cord blood of newborns collected nation wide offering the service to many patients.

The Public Cord Blood Bank

The use of Umbilical Cord Blood (UCB) as a source for non-related hematopoietic stem cells transplantation enhances the chances for under-represented ethnic minority groups to find a donor in the registries. When a patient with a Latin American background needs a transplant, she or he has fewer chances finding a match in the international HPC registry than other well represented populations (such as Caucasian).

In order to positively balance this situation, one of the most relevant aims when we started the Argentinean Public Cord Blood Bank (APCBB) located at Hospital Garrahan in Buenos Aires was to collect units that would represent our local genetic diversity.

The quality of the product is critical in order to attain the expected HPC transplant results. Due to this fact it was necessary to establish strict regulations and policies based on previous clinical results of transplants performed with cord blood.

Regional Southern Americas

SOUTHERN AMERICAS

At present the established Cord Blood Banks follow recommendations, guidelines and standards that let them appropriately perform the processes from donor recruitment and eligibility, unit collection and acceptance, processing (including unit processing and maternal detection of infection diseases, HLA typing among other lab assays), freezing and storage conditions, donor babies' health follow-up; to the unit release and distribution requirements. These standards and also the regulations have been harmonized globally and are based and developed on ethical, quality, clinical and scientific aspects regarding donors, patients, laboratory, epidemiology, environmental safety, transportation issues, among others.

Licensure and accreditation

In Argentina the cord blood banks must be licensed by the INCUCAI (Instituto Nacional Central Único Coordinador de Ablación e Implante, National Centralized Institute for the Coordination of Graft Ablation and Implantation, in English).

Added to this mandatory licensure, international voluntary accreditation process is critical to demonstrate safety, viability and potency of the UCB products through application of rigorous and regularly updated quality standards. The APCBB began its activities in April 2005; it received the INCUCAI licensure and immediately started the process of drafting agreements with maternities for UCB collection. In October 2011, 1850 UCB units were available for their use in the Bone Marrow Donor Worldwide Registry (BMDW).

> "The use of Umbilical Cord Blood (UCB) as a source for non-related hematopoietic stem cells transplantation enhances the chances for under-represented ethnic minority groups to find a donor in the registries."

Description of the international voluntary accreditation process

There are two major globally well-recognized CBB accreditation bodies, Foundation for the Accreditation Cellular Therapy (FACT) and Advancing Transfusion and Cellular Therapies Worldwide (AABB). Our Cord Blood Bank pursued the AABB. Once we had requested the AABB accreditation, we were asked to demonstrate that the eligibility requirements were successfully met for such undertakings.

A detailed gap analysis was carried out. One of the primary tasks was to detect weaknesses in the quality system. Weak points were identified, regarding records of human resources training and preventive maintenance. The Quality Team developed a plan to address these deviations. Full implementation of the AABB Quality Essentials was achieved within the established timeline.

After the required self-assessment qualification, the on-site audit by an assessor took place in May 2010. The audit involved an intensive two working days review of the policies, procedures and practices performed by the APCBB staff. The major purpose of the assessor was to evaluate the management's policies and competence in interpreting the AABB standards, recommending solutions to facilitate their achievement. The assessor found the activities at the laboratory and maternities were in compliance with the standards and recommended that the APCBB receive the AABB accreditation.

The international accreditation is a recognition that puts the APCBB at the level of the institutions that work under the required compliance and quality environment in obtaining and providing therapeutically effective products for cellular therapies. The accomplishment of the international continuously updated standards supports the safety, viability and potency of the UCB products collected, processed and stored in the APCBB.

2012

March 22 – 23

EDQM Certification Conference "Procedure for the Certification of Suitability to the Monographs of the European Pharmacopoeia"
Larnaca, Cyprus

March 30 – April 1

ESTM Iberian Residential Course
Barcelona, Spain
www.estm.info/
estm.secretariat@estm.info

April 12 – 13

13th Annual NATA Symposium
Copenhagen, Denmark

April 18 -20

International Haemapheresis Congress
The Hague, The Netherlands
www.hemaferesecongres.nl

April 25 – 27

14th Annual IHN Symposium
Montreal, Canada
www.ihn-org.com

April 25 – 28

XXXIV World Congress International Society of Hematology
Cancún, Mexico
www.hematology2012.com
contacto@amehac.org

May 9 – 12

PRION 2012 Congress
Amsterdam, The Netherlands
www.prion2012.com/home/welcome
info@prion2012.com

May 10 – 13

XII European Symposium on Platelet and Granulocyte Immunobiology
Warsaw, Poland
www.espgi2012.pl
iwent@hot.pl

May 10 – 13

22 Congreso de la Sociedad Española deTransfusión Sanguínea y Terapia Celular
Malaga, Spain

May 25 – 27

60th Annual Congress of the Japan Society of Transfusion Medicine and Cell Therapy
Koriyama City, Japan
www.fmu.ac.jp/home/yuketsu/jstmct60/

June 4-8

6th AfSBT Blood Transfusion Congress
Mauritius, Africa
www.afsbt.org/

June 14-15

Current issues in transfusion medicine and blood donation. Collection, processing and usage of blood and blood products
Riga, Latvia

July 7 -12

32nd International Congress of the ISBT
Cancún, Mexico
www.isbtweb.org/mexico

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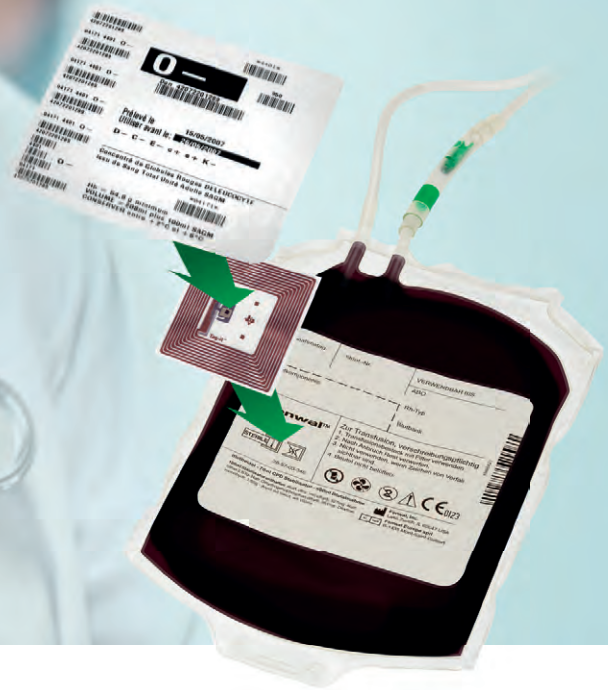

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