

A REVIEW OF THE HISTORY OF THE ISBT.

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Our science expresses not only intellectual progress, but also the moral values of a nation (Ludwik Hirszfeld, Rome, 1935) (1)

Abstract.

The history of the ISBT since its foundation in 1937 may be divided into four phases: 1. Formation and development (1935-85), 2. Years of crisis (1985-2000), 3. Reformation (2000-2010), 4. A professional organisation (2010-present). While the ISBT was initially founded to organize congresses, today it stands forth as a global, diversified and respected scientific organisation in the field of transfusion, also having an educational branch and governing international reference functions. During the last 25 years, women have taken a more prominent role in the organisation. The challenge for the future is for ISBT to be the Society of first choice for professionals in the field of transfusion medicine and cellular therapies.

Background.

During the presidency of Silvano Wendel (2010-2012) the ISBT Executive Committee (EC) decided to ensure that the history of the ISBT is documented. The project began with the building of a dedicated area on the ISBT website which is divided into two sections; periods of time from 1930 – present and a section on publications, congresses and past Presidents. The author was asked to present a review and discussion of the society's nearly 80 years of existence. Opinions and suggestions expressed are those of the author alone.

Sources.

Tibor Greenwalt has provided detailed descriptions of ISBT congresses and leadership meetings from 1935 to 1995 (2). Additional data have been found in letters and meeting minutes in the ISBT archive, on the ISBT website and in the author's personal archive. Other sources are referred to specifically in the text.

Descriptive history.

The general history of the ISBT may be divided into four phases.

Phase 1: Formation and development: 1935 - 85. Formation of the ISBT was initiated at a meeting in Rome in 1935, with representatives of 20 nations, the International Red Cross and the Bogdanov institute in Moscow.

The delegates agreed that transfusion warranted regular, transfusion –specific congresses, both because of the potential importance of transfusion, and because of the incidents it seemed to provoke (1). A society was needed to organize the congresses.

The ISBT was founded accordingly in Paris in 1937. A Central Office (CO) was set up there with professor Antonin Gosset as Chairman and professor Arnault Tzanck (fig.1) as Secretary General. However, because of the Second World War (WW 2), CO activities had to stop in 1939.

Immediately afterwards transfusion science and technology saw an almost explosive development. Blood banks were formed, voluntary, non-remunerated blood donation became a mass activity in allied nations, the Rh and Kell systems were discovered, plasma transfusion became standard anti-shock treatment, and industrial plasma fractionation was developed (3). At the first post-war ISBT congress in Turin in 1947 new future goals were formulated in addition to organizing congresses:

- Standardization of equipment, reagents and nomenclature
- Non-commercialization of blood and its derivatives

- A central transfusion organisation for every country under the aegis of National Red Cross Societies unless otherwise organized (1).

Evidently, the young, post-war society had strong ambitions to become a forum for the development of transfusion science, including socio-political and socio-economic aspects. Professor Tzanck was elected President, with dr. V. Formentano as Secretary General. The society then continued to organize congresses and developed without great difficulties for about 40 years. The increased activity was reflected in the election of both a Secretary General (Almerindo Lessa (Portugal)) and a Deputy Secretary General (Jean Julliard (France)) (fig.2)). Jean Julliard took over as Secretary General in 1956 and remained in this position until his death in 1960. To his memory, the Jean Julliard Prize for young transfusion scientists was instituted in 1962.

During all these years the CO remained in Paris, integrated into the Institut (later Centre) National de Transfusion Sanguine (INTS resp CNTS).

Phase 2: Years of crisis: 1985-2000. When HIV/AIDS struck the world of transfusion in 1981-2, the Head of the CNTS, Michel Garretta, was ISBT Secretary General. The crisis developed into a catastrophe for the French transfusion system (2,3). Michel Garretta had to step down as ISBT Secretary General in June 1991. At the Hong Kong congress in 1991 it was decided that the ISBT could no longer be linked to the CNTS in Paris. Michel Garretta's appointed French successor could not take over. A breakdown of the ISBT organisation was imminent.

The ISBT President, Harold Gunson (fig.3), then took on also the burden as Acting Secretary General. Assisted by the CNTS and ISBT secretary Claudine Hossenlopp, he moved the CO to his office in Manchester, UK, at the end of 1991 (2). After his resignation as Blood Centre Director in Manchester in 1994 he moved it to his home in Lancaster. Here he upheld the CO functions with the assistance of his wife Margaret until the end of the millenium. A new Secretary General from the UK was appointed in 1999, but health problems prevented him from taking over. A permanent location and a new Secretary General had to be found.

Phase 3: Reformation: 2000-2010. The CO moved to Amsterdam in 2000 and entered into a cohabitation with the Professional Congress Organizer (PCO) Eurocongres. A doctor at the Sanquin headquarters, Paul Strengers (fig.4), was appointed Secretary General. The Executive Committee (EC) formulated a strategic plan for 2002-6, with a vision of developing the ISBT into an "umbrella" organisation, strengthening and professionalizing the CO, and improving the scientific and educational activities of the society and its communication with the membership.

Paul Strengers remained Secretary General for 10 years. ISBT statutes and by-laws were updated and adapted to Dutch law. The organisation expanded and was solidified. Eurocongres organized the congresses in cooperation with the CO and the local organizers. These then could take less economic risk than before, and their work was facilitated since an experienced PCO could provide detailed assistance.

Phase 4: A professional organisation: 2010 – today. The reformation period led to a great increase of the burden of work at the CO. In 2010 Judith Chapman (UK) was hired as a full-time, paid ISBT Executive Director. Geoff Daniels (UK) took over as Secretary General. The allotted space at Eurocongres became too small, and the CO left the cohabitation with Eurocongres for its own

location in Amsterdam in 2012. Currently, 4 paid persons are employed full time at the CO. Eurocongres (now MCI Eurocongres) continues as PCO. The first ISBT scientific secretary, Martin Olsson (unpaid) also took office in 2010, with the purpose of assuring the scientific quality of the congresses.

Specific topics.

Congresses. Until 1995, 28 ISBT congresses were organized, 23 of them international and 5 regional. There were 18 (64.3%) congresses in Europe and 10 (35.7%) outside Europe (table 1). After the Turin congress in 1947, the next one took place in Lisbon only in 1951. Bi-annual international congresses were arranged 1954-69, tri-annual ones 1972-78, and then again bi-annual ones from 1978 onward. The first European regional congress took place in Lugano in 1989 and the first regional congress outside Europe in Hong Kong in 1991.

From 1996 to 2014, 10 international and 18 regional congresses have been arranged. The European preponderance of locations is gone (table 2).

In 1956 the International Society of Haematology and the ISBT arranged simultaneous congresses in Mexico City. The congresses in Stockholm in 1962 and in Sydney in 1966 were arranged in cooperation between the ISH and the ISBT. No further congress cooperation has occurred between the ISH and the ISBT.

Many ISBT congresses have been arranged in cooperation with a national transfusion organisation. Usually, the ISBT-arranged programme has predominated. In contrast, the 3 congresses arranged in the USA together with the American Association of Blood Banks (AABB) have been shaped essentially as AABB Annual Meetings. The last one took place in 1990.

The ISBT and the Network for the Advancement of Transfusion Alternatives (NATA) have had specific sessions at several of each others' congresses.

Among the 56 congresses, 11 had a female congress president (19.6%), the first being Susan Hollàn in Budapest, 1982. Interestingly, 7 of these 11 congresses took place after 2000 (63.6%). Thus, of the 18 congresses held after 2000, 38.9% had a female president. One woman - but no man - has chaired two congresses: Zarin Bharucha in Mumbai 1998 and New Delhi in 2003.

Table 3 shows the numbers of participants at 29 of the congresses.

Cooperation with global organisations.

- **World Health Organisation (WHO).** In February 1955 the WHO officially entered into relations with the ISBT (2). The WHO remains very active in the field of transfusion, especially by promoting VNRBD (4). WHO representatives have through the years been active within the ISBT, e.g. as Board members. The contact between the WHO and the ISBT remains close (5).
- **League of Red Cross and Red Crescent Societies (LORCS).** From 1954 to 1958 the LORCS had a representative in the ISBT Bureau. The cooperation is mentioned again in the minutes of the ISBT Executive Council meeting in San Francisco in 1976. There were LORCS representatives in ISBT committees for several years after that (2).
- **Fédération Internationale des Organisations des Donneurs de Sang (FIODS).** FIODS became a corporate member of the ISBT in 1980.

- **ICCBBA - ISBT Code 128.** The development of this standard for the identification and coding of Medical Products of Human Origin (MPHO) was initiated by the ISBT WP on Automation and Standardization in 1980. Today the Code is maintained and developed by the USA-based, non-profit, independent organisation ICCBBA . The code is endorsed by the ISBT.

Education. Many ISBT congresses have arranged specific educational sessions. However, around 2000 the ISBT leadership started to consider the development of a broader engagement for education of all aspects of transfusion. In 2004 it was decided to start cooperation with the European School of Transfusion Medicine (ESTM) with the future aim to develop it into the ISBT educational branch. However, the initiative met with legal, economic and organisational obstacles, and in 2011 efforts to establish a formal ISBT-ESTM cooperation were terminated.

In 2006 the idea came up in the ISBT Executive Committee (EC) to establish an ISBT Academy as educational branch. Today the Academy managed by an ISBT Standing committee of 9 members representing each of the WHO regions and is chaired by the acting ISBT Senior Vice President assisted by the Junior Vice President. The Academy organizes educational whole-day sessions at ISBT congresses in addition to separate topic-oriented courses in various locations around the world. From April 2012 – March 2014 the ISBT Academy supported 29 events in 18 countries. The support has been financial, helping to construct a scientific programme and/or use of the ISBT logo

ISBT Presidents. Seventeen of the 30 ISBT presidents were Europeans (56.7%). Eleven had their home country in US/Canada/Australia or New Zealand, while only 2 have come from Asia (Hong Kong and Japan) and 1 from South America (Brazil). Since 1996 only 3 of 11 (27.3%) have been Europeans. Only three presidents were women (10.0%), Susan Leong (Hong Kong) (1992-4) Francine Décary (Canada) (2004-6), and Marcela Contreras from UK (1996-8)).

ISBT Vice Presidents and Board Members. No complete list of individuals serving at these posts is available. From 2000-2014, 3 of 8 Vice Presidents are women, (37,5) all from the developed world (Francine Décary (2000-2004), Judith Chapman (2006-2010), Anne Husebekk (Norway)(2008-2012)).

Membership. “There was considerable discussion of membership. The major issue was that there are too few members in proportion to the worldwide interest and involvement in blood transfusion” (2). A campaign was launched after the Paris meeting, and in Montreal in 1980 the results were recorded: 206 new members, all together 843, 764 being individuals (p.113). During the following years membership increased gradually, reaching 2046 in 1992 (ISBT archive, Amsterdam).

In the Strategic plan for 2002-6, increasing membership was again set up as an important goal. Vox Sanguinis (VS) was offered for free to all members, in addition to a reduced fee at congresses. A “membership only” section was set up at the ISBT web site. Nevertheless it has not been possible to stabilize membership above 1500 (Table 5). On the other hand, the number and percentage of members below the age of 60 years has increased considerably (table 5).

The high number of members in 2010 may be related to the presidential election. Quite a number registered as members, apparently to achieve the right to vote. These new members did not get a voting right, however, as their membership was established only after the deadline set for achievement of voting right. This created a conflict which was taken to court in Amsterdam. The court decided in favour of the ISBT.

Working Parties (WP) and Standing Committees (SC). Committees are mentioned for the first time in the minutes of the Executive Council Meeting in San Francisco in 1976 (2). Four committees were set up: Membership, Education, Publication, World Blood Resources ,and the Jean Julliard price committee (2).

The number of WPs and SCs has continued to grow. In 2014 there are fifteen active WPs and four Standing Committees within the ISBT.

The Biological Excellence of Standards of Transfusion (BEST) group was established as a WP on blood components at the Hong Kong congress in 1991. Due to the crisis of the ISBT, the BEST had to finance its projects independently. For many years the BEST reported annually to the ISBT, but in 2004 their leadership decided to establish themselves as an independent organisation rooted in the USA.

The ISBT Foundation. In 2002, the EC began efforts to raise funds for a Foundation aiming to support scientific projects and education in transfusion medicine. The Foundation was set up with its own chairman and steering committee. Some funds were raised, and support was granted to several projects, but funds never reached the expected level. Economic problems in the industry may provide some explanation. The Foundation was rejuvenated in 2013 with the primary goal of supporting educational activities.

Prizes and awards. The *Jean Julliard Prize* for scientists below 40 years of age was instituted in 1975 and has been awarded 19 times to 21 winners. All were from developed world countries. All research topics have been within the area of transfusion relevant biology (table 6a). M. de Haas of the Netherlands remains the only female winner of this prize.

The *ISBT Award* was instituted in 2002 and may be awarded at each congress to persons who have contributed significantly to transfusion medicine and science, mainly in educational aspects. The award has been presented 12 times to altogether 26 individuals, 10 women and 16 men, and to 3 committees or organisations (table 6b).

The *Woman in Transfusion Award* was instituted in 2004 in cooperation with the American Association of Blood Banks and the British Blood Transfusion Society. Five women have received this award (table 6c). The Award was discontinued in 2009, as the three societies agreed that: “the need for such an award that specifically recognises the contribution of women has passed”(common statement of the three societies, 2009).

The *ISBT Developing Country Award* was instituted in 2012 and granted to the National Blood Service of Sri Lanka that year and to the National Blood Centre of Myanmar in 2014.

Vox Sanguinis (VS). The history of the VS was delineated recently by Leikola and van Aken (4) on the occasion of the issue of its Vol 100. Briefly, VS was founded in 1956 and run since 1987 by an independent foundation located in Switzerland. The board of this foundation decided to transfer the journal to the ISBT. VS remains a main scientific journal in the field of transfusion. It is managed under the ISBT “umbrella” by the VS SC, but the ISBT EC exerts no influence on its editorial policies. The current impact factor is 2.847. For comparison, that of “Transfusion” is 3.526 and of “Transfusion medicine” 1.259 (websites of the respective journals accessed 240114). The VS affiliated publication,

ISBT Science Series, publishes congress proceedings and special papers. Efforts to have the Science Series indexed by Medline are ongoing.

Transfusion Today (TT) is a continuation of the “Bulletin of the ISBT/SITS”, which was initiated in 1956 and later renamed as “ISBT Newsletters”. In March 1989 the first edition of TT appeared. This membership specific journal was run as a separate foundation headed by Cees Smit Sibinga (NL). TT was transferred to the ISBT in 2004. TT is now compiled and managed by the communications coordinator at the ISBT CO.

The ISBT Code of Ethics. The ethics of transfusion has remained an important field of work for the ISBT throughout its existence and was emphasized by Ludwik Hirsfeld in 1935 and by the Turin congress in 1947. There it was recommended that blood and its derivatives should be free of charge, that commercialisation of any part of blood should be avoided, and that the control of blood as a resource should be left to the public authorities of each country (2).

The following years, however, saw a tendency for commercialisation of the blood and plasma field, and there was a tendency for exploitation of plasma donors (3). A need for ethical guidelines became evident. In 1974 the ISBT established its Ethics Committee under the leadership of Jean-Pierre Soulier (France “A Code of ethics for blood transfusion” was endorsed by the ISBT General Assembly in Montreal, 1980 (5). It has also been endorsed by the WHO and the League of Red Cross and Red Crescent Societies and is in line with the Oviedo convention of the Council of Europe of 1997 (6). The Code was revised and adopted in Vienna in 2000. Thus the ISBT has established itself as a firm defender of voluntary, non-remunerated blood donation (VNRBD). However, the Code has not been endorsed by any US blood organisation. Recently, the WHO has reaffirmed its strong support of VNRBD as the basis of all transfusion activities globally (7). The Code will be reviewed over the next two years (P.Flanagan, personal communication 2013).

Discussion.

With 56 congresses arranged, and with more than 3000 participants at the largest of them, the ISBT has certainly fulfilled its primary purpose. The value of congresses as fora for the formation of networks and friendships has been emphasized by outstanding transfusionists: “The major and spectacular activity of an international society is without doubt the organisation of its *congresses*, which permit it to recognize and confront its works, and above all provoke human contacts which give it a feeling of solidarity; --” (1) (author’s translation); “The most important events at a congress do not take place in the auditorium, but in the bar” (Erik Freiesleben, Denmark, personal communication 1984).

The engagement of a scientific secretary in 2010 shows the will to secure the scientific quality of its congresses and other activities in the future.

The ISBT has contributed significantly to standardization and non-commercialisation in transfusion. The WP on blood group nomenclature has become a world reference group. Initiating the work of ICCBBA and BEST is also significant. The Code of ethics represents a continuous engagement to promote transfusion as a non-commercial, beneficial act of fellow human beings. Although the impact of other WPs may be less visible, these have provided discussions and recommendations and contributed to the general process of promoting transfusion science.

The ISBT was born in Europe, and “International” at the outset probably meant “plurinational”. European congress sites predominated until 1996. Afterwards, however, the majority of congresses have taken place outside Europe. Simultaneously, non-European colleagues have come to predominate as ISBT presidents. The ISBT has become global, in keeping with the general globalisation and with the upcoming of transfusion as a therapeutic measure throughout the world.

Up to now, few women have been ISBT presidents. However, there has been an increasing number of female ISBT congress presidents, and after 2000, the number of female ISBT vice presidents is substantial. In the future, female members should be encouraged to take on leading ISBT positions. There is also a huge male preponderance among the Jean Julliard recipients, while a greater proportion of the ISBT Award recipients are women. The latter award has no age limit, while the Jean Julliard prize is only for scientists below 40 years. The underrepresentation of women may relate in part to the career delay that many women face because of having children. Arguments seem strong that the age limit should be increased, e.g. to 50 years. A reinstatement of a separate Women’s award may not seem a good solution, as it may come to be considered inferior to an open award.

All Jean Julliard prize recipients have focused on transfusion relevant biology. No prize has been granted for research into society or social aspects of transfusion, or for purely clinical studies. In the future, research also in these fields should be encouraged by being proposed for the Jean Julliard prize.

The average age of the membership has gone down, signalling positively for future activities. An analysis of gender composition of the ISBT membership over years should be performed to see if more women have signed in as members recently.

Attempts at formal cooperations with the ISH, ESH and ESTM have failed. In addition, the BEST has left the ISBT, even though it started as an ISBT WP. Thus, the strategy of making the ISBT an “umbrella” organisation in the field of transfusion, has met with limited success. Legal and economic obstacles have evidently hampered the processes, and focus of the various organisations may have been too different for the development of a fruitful cooperation. Furthermore, organisations give identity to their members (8). Therefore organisational changes, especially integration with others, will always cause problems and resistance.

In the future, therefore, the ISBT should probably not use much energy to integrate other organisations if these do not explicitly ask for it. Instead, case-oriented cooperation projects, like organizing common symposia, or having representation at other organisations’ meetings, would appear more interesting. Focus should be on keeping closely with ISBT’s purpose and identity and develop the organisation to the highest possible scientific and organisational level.

The integration of VS and TT under the ISBT “umbrella” are important exceptions. As a respected scientific journal the VS emphasizes that the ISBT is a scientific organisation. This has been further substantiated by the formation of the ISBT Science Series. The TT provides an efficient channel for communication with ISBT members, and this has been further facilitated by updating of the ISBT web site.

Today the ISBT stands forth as a diversified and respected scientific organisation in the field of transfusion. In addition to congresses, activities comprise education, scientific publishing, work on

specific topics in WPs and SCs and cooperation with other organisations. The society has its own, well established CO in Amsterdam, with 4 full-time employees. The economy is in balance, although more economic resources would be most welcome.

This is the result of nearly 80 years of development, in which the society has gone through progressive as well as difficult, even dramatic, periods. Both the birth of the society and its later history shows the importance of having really committed individuals in the leadership. However, it has not proved possible to stabilize individual membership above 1500. Activation of and service to members should be focused. As many members as possible should be challenged to join WPs and SCs. The ISBT might also help members to keep up with the literature by providing lists of recent, valuable papers in specific fields.

The challenge for the future is for ISBT to be the Society of first choice for professionals in the field of transfusion medicine and cellular therapies. Transfusion will continue as a “unique human achievement which integrates science, technology, medicine, public health administration and the community as a whole” (9).

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Table 1. Locations of the 28 ISBT congresses 1935-95

International congresses		Regional congresses	
In Europe	Outside Europe	European**	Non-European***
14	9*	4	1

*: USA: 3. Canada: 1. Mexico: 1. Brazil: 1. Japan: 1. Australia: 2

** : 1989-95

*** : 1991

Table 2. Locations of the 28 ISBT congresses 1996-2014

International congresses		Regional congresses	
In Europe	Outside Europe	European	Non-European
4	6	9*	9

*: Including Jerusalem (1999) and Cairo (2009)

Table 3. Numbers of participants at 26 ISBT congresses.

Year and city	No. of participants	Year and city	No of participants
1960, Tokyo	589	2005, Bangkok ³	759
1964, Stockholm	830	2006, Cape Town	1900
1969, Moscow	1850	2007, Madrid ³	2106
1972, Washington DC	2462 ¹	2007, Hanoi ³	758
1975, Helsinki	1050	2008, Macao	1863
1978, Paris	3338	2009, Cairo ³	1545
1982, Budapest	2700	2009, Nagoya ³	1668
1984, Munich	1250	2010, Berlin	3395
1985, Sydney	1980	2011, Lisbon ³	2241
1990, Los Angeles	8000 ²	2011, Taipei ³	860
1992, São Paolo	1100	2012, Cancun	1906
1994, Amsterdam	1600	2013, Amsterdam ³	2357
1995, Venice ³	1100	2013, Kuala Lumpur ³	886
1998, Oslo	1830	2014, Seoul	2261
2005, Athens ³	1548		

¹: Joint congress with the AABB; 380 from outside the USA.

²: Joint congress with the AABB. About 1100 participants registered through the ISBT

³: Regional congress

Table 4. Home country of ISBT Presidents 1935-2014

	European	US/Can/Austr/NZ	Japan/Brazil
1935-1995	13	6*	0
1996-2014	3	6**	2

*: 3 from USA, 2 from Canada, 1 from Australia

** : 2 from USA (including the incoming one 2014), 2 from Canada, 1 from Australia, 1 from New Zealand.

Table 5. Recent changes of membership age profile.

	2009	2010	2011	2012
Total membership	1454	2136	1738	1299
Age <60	488 (33.6%)	540 (25,3%)	763 (43.9%)	768 (59.1%)

Table 6a. Jean Julliard Price winners (no prize granted in 2004). ((F)= female)

Year	Name of winner	Country	Subject
1975	F. Jorgensen, L.U. Lamm	Denmark	Work on the major LD-Locus within the HLA system
1978	J.-P. Cartron	France	Demonstration of T transferase deficiency in Tn polyagglutinable bloods
1980	D.J. Anstee, M.J. Tanner	United Kingdom	Analysis of erythrocyte membrane proteins in genetic variants of the Mns blood group system
1982	G.J. O'Neill	Australia	The Genetic control of complement C4 (Chido and Rogers) and linkage to HLA
1984	W. Dahr	Germany	Molecular biology of red cell membrane sialo-glycoproteins
1986	J. G. Kelton	Canada	Contribution of the reticuloendothelial system to cell clearance
1988	D. Blanchard	France	Contribution to the biochemical determination of red cell membrane antigens
1990	L.T. Sinor	USA	Advances in solid phase red cell adherence methods and transfusion serology
1992	F. Yamamoto	USA	Molecular genetic study of histo-blood group ABO system
1994	Y. Colin	France	Molecular genetics of the RH blood group system
1996	T.E. Warkenton	Canada	Heparin-induced thrombocytopenia (HIA)
1998	S. Henry	New Zealand	Molecular and genetic studies of fucosylated histo-blood group systems
2000	M.L. Olsson	Sweden	Analysis of Polymorphisms at the ABO, Fy and Jk Loci for Improvement of Clinical Blood Transfusion
2002	N.A. Watkins	United Kingdom	Molecular characterisation of platelet specific antibodies and antigens
2006	M. de Haas (F)	Netherlands	High Throughput Genotyping For Red Cell Blood Groups And Platelet Antigens In Transfusion
2008	J. Zimring	USA	Unique properties of transfused erythrocytes as inducers of and targets for the immune response
2010	M. Looney	USA	The Immunobiology of Transfusion-Related Acute Lung Injury (TRALI).
2012	P. Horn	Germany	Advances towards in vitro generation of patient-specific cellular blood products
2014	E. Hod	USA	Red blood cell transfusion-induced inflammation: myth or reality?

Table 6b. ISBT Presidential Award recipients. ((F)=female).

Year	Recipients
2002	Umberto Rossi (Italy), Imelda Bromilow (Switzerland) (F)
2004	Dame Professor Marcela Contreras (United Kingdom) (F)
2005	Geoff Daniels (United Kingdom), John Barbara (United Kingdom)
2006	Brian McClelland (United Kingdom), Diane de Coning (South Africa) (F)
2007	The Expert Committee on Blood Transfusion and Immunohematology, and the Select Committee of Experts on Quality Assurance in Blood Transfusion Services of the Council of Europe
2008	Jean Claude Faber (Luxemburg), Masaru Shimizu (Japan)
2009	Gamal Gabra (United Kingdom), Jean Emmanuel (Zimbabwe), Yasmin Ayob (Malaysia) (F), Shinji Yuasa (Japan)
2010	Claudine Hossenlopp (France) (F) , Wolfgang Mayr (Austria)
2011	Marie Lin (Taiwan)(F), John Moulds (USA), Bill Wagstaff (United Kingdom)
2012	Joyce Poole (United Kingdom) (F), Marion Reid (USA) (F),Héctor Rodríguez Moyado (Mexico)
2013	Cees van der Poel (Netherlands), Henk Reesink (Netherlands), Cecilia Tan (Singapore) (F), Che-Kit Lin (Hongkong)
2014	Japan and Thailand Red Cross Societies, Zarin Bharucha (India) (F)

Table 6c. Woman in Transfusion Award recipients.

Year	Recipient
2005	Marcela Contreras
2006	Marion Reid
2007	Pearl Toy
2008	Cécile Kaplan-Gouet
2009	Nancy Heddle

Legends to figures.

Figure 1. Arnault Tzanck, Founder and first Secretary General of the ISBT

Figure 2. Jean Julliard, Médecin Général, ISBT Deputy Secretary General 1951-56, ISBT Secretary General 1956-60.

Figure 3. Harold Gunson, ISBT President 1990-2 and Acting ISBT Secretary General 1991-2000.

Figure 4. Paul Strengers, ISBT Secretary General 2000-10.

Figure 1.



Figure 2.



Figure 3.



Figure 4.

