DEAR EFI MEMBERS:

The EFI president with members of his lab who are EFI members.

This is the last time I will address you as EFI President. Dominique Charron will take over the presidency during the General Assembly at our Oslo Congress. I am convinced Dominique will do a great job with his considerable experience and abilities. He is an old friend who was always ready to start new enterprises. It is time now for me to express my sincere gratitude to all of you for your support and cooperation. I especially wish to thank the members of the EFI board and Committees, who have worked with enormous dedication and enthusiasm. Marcel Tilanus, Steve Marsh and Colette Raffoux deserve special recognition for the help they have given me as officers on the EFI board. I also want to dedicate a few words to Frans Claas, the Editor of our Newsletter, who is doing a fantastic job. I must not forget Add van Leeuwen and Sonja Mesander, who are in charge of the Accreditation Office in Leiden and are increasingly involved in coordinating EFI activities and in the day-to-day running of our Society. Their work in the Accreditation office and with the Secretariat, currently engaged in multiple support activities is fully appreciated.

It has been a great honour to be EFI President. EFI is a very active scientific society with a great future, which combines basic science with the clinical applications derived from findings and discoveries. We look forward to opening up new areas of clinical applications for Immunogenetics but we also need to look back and render tribute to the “old days” and to the pioneers in this field. I asked Jon van Rood as a representative of these pioneers to write a short note on “The birth of EFI” (see Jon’s article in this Newsletter). Last year in Istanbul the EFI board took the initiative of honouring distinguished retired EFI members. This year we will continue with such ceremony that will take place during the General Assembly. A specially designed “EFI medal” will be given to the honored members. In addition, we are pleased to be celebrating our 50th Newsletter with this issue. Peter Klouda has contributed memoirs of his “hard times” as previous Editor of the EFI Newsletter. Thanks Peter.

EFI now has an official Journal: Tissue Antigens. This was an old aspiration that has now become a reality. This newsletter also contains the new cover design of the Journal and the names of EFI members nominated as new advisory editors. We are actively cooperating with our homologous societies ASHI and ASEATTA. This cooperation will move on in the future “step by step” with exchange of information and the presence of representatives of the different societies in homologous official bodies. This year in Oslo the Accreditation Committee will have an ASHI representative to discuss common policies. Remember that the next Summer School will be organized by ASEATTA and will take place in Bangkok November 17-20. The local contact person is Nattiya Hirankarn (see announcement inside this Newsletter). Please, don’t forget that the Barcelona Congress is coming soon after Oslo in May 2007. EFI will continue its journey around Europe in the years to come.

Finally, I would like to dedicate a few words to the professionals in my lab for their invaluable support in covering my hospital and university duties, allowing me to dedicate time to EFI during my Presidency. The cover picture includes those who are EFI members.

Federico Garrido
EFI President
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....FROM THE EDITOR’S DESK

Dear EFI member,

Herewith you find the 50th issue of the EFI Newsletter with a lot of important information. Please take the opportunity to look carefully at the cv’s of the candidates for a new position in the EFI Board and use your right to vote for the most suitable candidate. I would recommend you to vote as soon as possible as the deadline is coming near. This issue is also the last one during the presidency of Federico Garrido, who is well known because of the very original pictures he has always added to his contribution as president. Quiet a challenge for our new president Dominique Chartron! I would like to thank Federico for his continuous support to the Newsletter.

The release of the 50th issue of the Newsletter was a reason to look back in time and it is a pleasure that the first editor Peter Klouda was willing to describe the start and the early days of the EFI Newsletter. Also Jon van Rood looks back in the history of our federation and describes in this issue the birth of EFI.

The meeting in Oslo is coming near and Erik Thorsby gives you the final update of the conference in Oslo. I am happy that several members have contributed to this issue by sending in reports of local meetings showing that the EFI Newsletter is really used as a newsletter. Finally, an important decision has been taken by the board, which is the nomination of Tissue Antigens as the official journal of our Federation.

Hopefully, you like reading this 50th issue of the Newsletter and I am looking forward to your contribution to the next one. See you in Oslo.

Frans Claas

Copy date for EFI Newsletter no 51 is August 25 2006. Please send your contributions to Frans Claas, Leiden, the Netherlands, preferentially by e-mail: fhjclaas@lumc.nl

IMPORTANT ANNOUNCEMENT TO EFI MEMBERS

For security reasons we need to change the username password for the EFI website on a regular basis. Changes to the password will be announced in the EFI Newsletter and will apply from the publication date of the Newsletter in which the change is announced.

The new username and password are:

Username: efi member  
Password: Oslo
URL: http://www.efi web.org/members/

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Editor-in-chief
Frans H.J. Claas

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EFI Executive Committee 2005

EFI President:  
F. Garrido (Spain)

President-elect:  
D. Chartron (France)

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M. Tilanus (Holland)

Deputy Secretary:  
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C. Raffoux (France)

EFI deputy Treasurer:  
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I. Duxidis (Holland)

Past Presidents:

The editor and the EFI officers do not accept responsibility for the contents of published articles. Opinions expressed by contributors are not necessarily those of the editorial board.

Please support the advertisers in this issue of EFI Newsletter

ISSN 0962-9521
Nominations were sought for the functions of Treasurer and Councillor.

**Colette Raffoux** was nominated as Treasurer

No further nominations for this position were received. If the General Assembly during the 20th European Immunogenetics and Histocompatibility Conference in Oslo approves of this nomination, Colette Raffoux will take office after the General Assembly

We have three nomination(s) for the one position of councillor:

**Cristina Navarrete**

**Elissaveta Naumova**

**Blanka Vidan-Jeras**

If you are paid-up EFI member you should use your right to vote. So please, fill in the ballot form, which is enclosed with this Newsletter, and send it to the EFI deputy secretary as soon as possible, following the instructions as indicated. To assist you with your decision, a short presentation of all candidates is included in this Newsletter.

**Federico Garrido**

President

**EUROPEAN FEDERATION FOR IMMUNOGENETICS**

Ballot form for EFI Councillor 2006

Candidates:

1. Cristina Navarrete
2. Elissaveta Naumova
3. Blanka Vidan-Jeras

How to Vote:

1. Select one candidate and give a mark beside their name.
2. Enclose the ballot sheet in a blank and anonymous envelope and seal.
3. Enclose this envelope into another envelope on which you should put your name, address and EFI membership number (if known). If you fail to do this your vote will not be counted!
4. Return this envelope before June 4, 2006 to:

Dr. Steven Marsh
Anthony Nolan Research Institute
Royal Free Hospital
Pond Street
London NW3 2QG
United Kingdom

**Colette Raffoux**

I completed my training as a medical doctor in 1968, and my PhD in Biology in 1971. I first worked in the Blood centre in Nancy and became Chief of the Immunohaematology laboratory. In 1981, at the invitation of Professor Jean Dausset, I moved to Hospital Saint Louis in Paris where I was responsible for the Histocompatibility Laboratory until 2000. I am currently the director of the French Registry of Bone Marrow Donors, *France-Greffe de Moelle*. I have been involved with EFI for a number of years, being responsible for the EFI Education Committee for region 4 up until 2004. I am also an EFI inspector for the accreditation process. I have served as EFI Treasurer for the past three years and will be happy to serve EFI for a second term of office.
BLANKA VIDAN-JERAS

I started my professional life as a pharmacist specialized in quality control of plasma proteins at the Blood Transfusion Centre of Slovenia in Ljubljana, where I still work. In 1992 I moved from Quality Control Department to the Mateja Bohinjec’s Tissue Typing Center located next door. I entered the field of immunogenetics through serostatistical analysis, population genetics and DNA typing with a lot of support from the Anthropology component of 12th IHW, Marie-Marthe Tongio and Jean-Marie Tiercy. For instance, I performed my first HLA class I DNA typing in 1994 at the University of Geneva. I was awarded a PhD for my work on HLA polymorphism in Slovenians and it’s associations with autoimmune diseases. I am currently a co-director of the Tissue Typing Centre in Ljubljana, and am in the process of appointment as Assistant Professor of Biochemistry and Molecular Biology at the Medical Faculty in Ljubljana. My scientific interest is focused on the immune response genes in diseases. Slovenian bone marrow registry was established in our laboratory and I was involved in the HLA typing and the development of a database. I have been an active member of the team that has joined Slovenia to the Eurotransplant International Foundation and serve on it’s Tissue Typing Advisory Committee from the association in 2000. I strongly believe that joint efforts in organ and haematopoietic stem cell transplantation, continuing education, standardisation and research, that are so common to the »immunogenetic community«, bring benefit to patients and progress to the field. For that reason I have been a member of EFI Education Committee, where I am responsible for bursaries. Also, I was involved in organisation of Immunogenetic schools in Ljubljana, which gathered lecturers from all over the Europe and students mostly from Central and Eastern parts. As an EFI member and EFI inspector I had the opportunity to know many of my colleagues and their laboratories. Some of them surprised me with my nomination for EFI councillor and I hope they know me well enough.

CRISTINA NAVARRETE

I began my career in the field of Histocompatibility & Immunogenetics (H&I) in 1978 in the Department of Transplantation Immunology at the London Hospital Medical College under the supervision of the late Professor Hilliard Festenstein. In 1987 I spent 18 months in New York working under Robert Winchester, and returned to The London Hospital in 1989.

In 1993, I moved to the North London Blood Transfusion Centre and in 2000 I became National Head of H&I Services for the National Blood Service.

In 1999-2000 I was Chair of the British Society for Histocompatibility & Immunogenetics and from 1999-2004 I was Chair of the Panel of Examiners in H&I for the Royal College of Pathologists. I also hold an academic appointment in the Department of Immunology & Molecular Pathology, at University College London.

Throughout my career I have been actively involved in both the research and clinical application of H&I in the fields of transplantation, immunogenetics and blood transfusion and in the training aspects of this specialty.

During this time I have been fortunate to have collaborated with colleagues not only from Europe, but from many parts of the world. I feel that the experience I have gained both personally and professionally could be used to contribute to the aims of the Society.
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I graduated in medicine at Medical University, Sofia and I have spent most of my professional life in the University Hospital Alexandrovska as an assistant professor, associate professor and professor in Immunology. I obtained my Ph.D. in 1990 with a thesis “Immunological investigation in kidney transplanted patients” and since 2003 I am a D.Sc. with a scientific thesis “Immunogenetic studies in the Bulgarian population – contribution to Anthropology, Autoimmunity and Transplantation”. I obtained M.D. in internal diseases and clinical immunology. Since 1997 I have been a director of the Central Laboratory of Clinical Immunology at University Hospital Alexandrovska, which became EFI accredited in 1998 and in 2000 - the National Reference Laboratory for Histocompatibility and Immunological Monitoring. In 1997 I was appointed by the Ministry of Health of Bulgaria as a national consultant of Immunology. I am a member of European Federation for Immunogenetics, American Society for Histocompatibility and Immunogenetics, and the Bulgarian Union of Science.

I became interested from the very beginning in immunology and particularly in immunogenetics and transplantation when I visited Department of Immunohaematology and Blood Bank, Leiden and met Jon van Rood and his excellent team. Since then I was involved in the major areas in this field: serology, genetics, population studies, transplantation and disease associations. In 1985 I worked on the immunological problems in organ transplantation in Laboratoire D’Immunologie et D’Histocompatibilite of Prof. Colombani, Hopital Saint Louis, Paris, France. When I returned in 1985 I was requested to establish and develop the National kidney waiting list. Since then the HLA laboratory, headed by me, has been responsible for tissue typing and searching for suitable donors for organ and bone marrow transplantation in our country. In August 2005 the Bulgarian Bone Marrow Donor Registry, directed by me, became a member of BMDW.

In addition to HLA system, my scientific interests include other related immune response genes such as NK receptor genes, cytokine and cytokine receptor genes. As a part of several projects supported by the European Communities my research has been focusing also on polymorphisms of immune response genes in longevity and cancer. A new component “Immunogenetics of Aging” chaired by me was included in the 14th HLA and Immunogenetics International Workshop. My academic and clinical positions gave me the opportunity to contact with both students and patients and to work in other fields of clinical immunology such as autoimmunity, immunodeficiency, cancer, etc. My contribution to HLA and to the above fields has been published in over 100 scientific articles and monographs. Since 1992 I have been an EFI member and I was a president of the Local Organizing Committee of the 13th European Immunogenetics and Histocompatibility Conference. As a member of EFI EPT Committee I am a coordinator for EPT in region 8.

I think that EFI provides excellent opportunities for education, development and standardization of tissue typing. This progress should go hand in hand with educational programs to facilitate the development of immunogenetics in Eastern Europe and particularly in the Balkan countries. As an EFI councilor I would promote the interest of EFI in these countries and the improvement of the quality of tissue typing to the standards required for EFI accreditation. EFI accreditation of more laboratories from that region will facilitate further the development of organ exchange programs. Establishment of “Balkan transplant program” is very important considering the similarities in the genetic background between populations from Balkan countries. I will also support EFI to extend scientific objectives to include additional areas of immunogenetics by incorporating all of the polymorphic genes involved in the immune response.
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PROPOSAL FOR CHANGES IN THE EFI STANDARDS TO BE INCLUDED IN A FUTURE VERSION 5.5

As announced in the autumn 2005 Newsletter the revision of the standards has been extended to address the following issues:

- the microbead array techniques in a new sub-section under Flow cytometry
- standard C4.220 on evaluation of test systems with a more detailed description
- definition of 4-digit typing (new standard D1.320)
- standards D2 on family studies (haplotype assignment)
- standards on confirmatory typing for stem cell transplantation using related/unrelated donors.

Sub-sections C4.200, D2.000, E3.400, M4.000, and section I are shown entirely.

The Standards Committee is now submitting these revised standards for public comments until June 1, 2006. All comments received on these standards as well as those on crossmatching will be discussed at the next Standards Committee meeting in Oslo.

PD Dr. J.-M. Tiercy
Chairman of the Standards and QA Committee

C - QUALITY ASSURANCE

C4.200 Systems for continuous test evaluation and monitoring.
C4.210 The laboratory must establish and employ policies and procedures, and document actions taken when 1) test systems do not meet the laboratory’s established criteria including quality control results that are outside of acceptable limits; and when 2) errors are detected in the reported patient results. In the latter instance, the laboratory must promptly a) notify the authorised person ordering or individual utilising the test results of reporting errors; b) issue corrected reports, and c) maintain copies of the original report as well as the corrected report for at least two years.

C4.220 The laboratory must have mechanisms in place for continuous monitoring of all test systems used. These mechanisms must include: a) validation/verification, before introduction in routine use, of all new tests, by systematic comparative evaluation of results obtained in parallel with the new and the standard system, b) regular evaluation of results obtained in external and internal QC testing, c) regular monitoring of test validity in routine testing, by recording observations diverging from the expected results (e.g. cross-reactivity of probes or primer mixes, day-to-day variations). Written evidence of the ongoing monitoring processes must be available in the laboratory for each test performed.

C4.230 If a laboratory performs the same test using different techniques, test results must be compared and inconsistencies documented.

C4.240 The laboratory must have a mechanism to identify and evaluate inconsistencies between test results and clinical data or diagnostic parameters provided.

D - HLA ALLELES AND ANTIGENS

D1.320 High resolution typing is defined as identifying HLA alleles at the resolution level of 4 digits or more, or at least resolving: a) all ambiguities resulting from polymorphisms located within exons 2 and 3 for HLA class I loci, and exon 2 for HLA class II loci, and b) all ambiguities that encompass a null allele, wherever the polymorphism is located, unless it can be demonstrated that an expressed antigen is present on the cells.

D2.000 Haplotype assignment.
D2.100 Determination of haplotypes can only be done by typing immediate family members including parents and/or siblings of the patient.
D2.110 Typing for HLA-A, B and DR locus alleles or antigens is mandatory.
D2.120 Genotypic identity can only be proven if both parents are available or if the segregation of the four haplotypes is clearly defined.
D2.130 Ambiguities in haplotype assignment must be resolved by typing for HLA-C, and/or DQ and/or DP. When appropriate high resolution typing must be used to resolve ambiguities.
D2.113 Reports of HLA haplotype assignments must include an explanation of recombination when this occurs.
D2.200 Unrelated individuals.
D2.210 Reports of probable haplotypes based on population frequencies must clearly indicate that they were so derived.
E - SEROLOGICAL HLA CLASS I AND CLASS II TYPING

E3.200 Control reagents.

E3.250 Procedures to deal with control serum failures in typing or crossmatch trays must be described in the laboratory manual.

E3.400 Antigen assignments.

E3.410 Each HLA-A, B antigen must be defined by at least two sera when available, if both are operationally monospecific. If multispecific sera are used, at least three partially non-overlapping sera must be used when available to define each HLA-A, B antigen.

E3.420 Each monoclonal antibody used for alloantigen assignment must be used at a dilution and with a technique in which it demonstrates specificity comparable to antigen assignment by alloantisera on a well-defined cell panel.

E3.430 Each HLA Class II antigen should be defined by at least three sera, if all are operationally monospecific. If multispecific sera are used, at least five partially non-overlapping sera must be used to define each HLA Class II antigen.

E3.440 Criteria for antigen assignment must be described in the laboratory manual.

E3.450 Ambiguity in antigen definition by serological typing must be referred for confirmation DNA based methods.

I - HAEMATOPOIETIC STEM CELL TRANSPLANTATION

I1.000 Histocompatibility testing for related transplants.

I1.100 HLA-A, B or DR typing of all available members of the immediate family is mandatory.

I1.110 HLA typing for HLA phenotypically identical siblings must include adequate testing to definitively establish HLA identity by descent (D2.120 applies), or use high resolution Class I and/or Class II typing (4-digit allele assignment) by DNA methods to determine the degree of HLA matching as appropriate for the transplant protocol.

I1.120 HLA typing for intra-familial recipient and potential donors who are not HLA identical siblings must include high resolution Class I and Class II typing (4-digit allele assignment) by DNA methods as required by the transplant protocol.

I1.130 Prior to transplantation using a related donor, HLA typing of both donor and recipient must be repeated using a new typing sample from each such that each individual’s typing is confirmed for HLA-A, -B, and -DRB1 loci at the generic level (2-digits), as a minimal requirement.

I1.140 If required by the transplant protocol, laboratories not able to perform high resolution Class I and/or Class II typing by DNA methods must arrange for an EFI or ASHI accredited laboratory to perform these tests at the required level of resolution. Where the ambiguities cannot be resolved, all the alternatives must be reported.

I2.000 Histocompatibility testing for unrelated transplants.

I2.100 Volunteer bone marrow donors registries.

I2.110 The donor must give his/her informed consent according to the national legislation before blood is taken for typing and before the donor is placed on a list of donors available to be called.

I2.120 Typing of the donors must be performed by serology or DNA methods at a level of resolution with at least 2 digits (e.g. A2 or A*02, DR11 or DRB1*11).

I2.200 Histocompatibility testing for transplants from unrelated donors.

I2.210 HLA typing for recipient and unrelated donors must include as a minimum requirement: low resolution Class I typing (2-digit allele assignment) and high resolution Class II typing (4-digit allele assignment) by DNA methods. Class I typing must, as a minimum, be at a resolution which allows definition of all serologically defined antigens.

I2.220 If required by the transplant protocol, the laboratory must be able to type the donor and the recipient for HLA Class I by DNA methods, to a level of resolution with 4 digits as defined under D1.320. Where the ambiguities cannot be resolved, all the alternatives must be reported.

I2.230 Laboratories not able to perform high resolution Class I typing by DNA methods must arrange for an EFI or ASHI accredited laboratory to perform these tests as required.

I2.240 Prior to transplantation using an unrelated donor, HLA typing of the recipient must be repeated using a different typing sample such that typing is confirmed for HLA-A, -B, -Cw, and -DRB1 loci at the generic level (2-digits), as a minimal requirement.

I2.250 For unrelated donors, requirements of I2.210, I2.220, and I2.230 must be met by typing on a different sample obtained by the laboratory. Registry data are not acceptable.

I2.260 Prior to transplantation confirmatory low resolution (2 digit-level) HLA-A, -B, -Cw, -DRB1 typing of unrelated donors must have been performed on a second donor sample. For this purpose, registry data are acceptable. Typing of donor and recipient at the highest level of resolution required by the transplant protocol must be performed in the laboratory of the transplant unit or as defined in I2.230.
IMPORTANT MESSAGE FOR THE EFI MEMBERS FROM THE CENTRAL EFI OFFICE

By Ieke Schreuder

Some of you may already have noticed that mail from the EFI membership secretary does no longer come from me but from Sonja Mesander. Also e-mail via the website to the membership secretary will now directly go to and be handled by Sonja.

I have been membership secretary for many years. Actually I took over this function from Peter Klouda in 1992. Since then I registered over 1000 people as new member. This doesn’t mean that EFI has as many as 1000 paying members. Often members resign, move out of the field, or retire.

Also quite a number of people change address, without notifying the membership secretary, and cannot be reached anymore.

I greatly enjoyed the function as membership secretary. It gave me the opportunity to communicate with many of you, to help joining EFI, and answer many questions.

I retired recently and I am glad that Sonja will take over the administration for the EFI membership. Many of you know Sonja because she takes care of the administration of the Accreditation Office and was willing to take on the EFI membership administration in addition.

However she will need the help of all EFI members to keep the membership database as up-to-date as possible. So please, don’t forget to send her any change of address, e-mail address or other details that need correction for an accurate and timely mailing.

Thank you all for your trust in me. I hope EFI will remain as lively and kicking as it used to be. Better still, it should keep growing. A healthy organisation depends completely on you as member. Give some of your spare time to join in committees. And enjoy the friendly atmosphere of the annual conferences. I wish you all the best.

The address for the EFI membership is now:
Sonja Mesander
EFI Central Office
Dept. of Immunohematology and Blood Transfusion, Bld 1, E3-Q
Leiden University Medical Centre,
PO Box 9600.
2300RC Leiden, The Netherlands
phone: +31 71 568 5800,
Fax: 31 71 568 5801
E-mail: shhmesander@lumc.nl

M - FLOW CYTOMETRY

M1.0000 The Flow Cytometry standards apply to MHC testing including B27 typing. Sections M1, M2, and M3 apply only when using a classical cytometer not dedicated to the use of a fluorescent bead array. Some of the M1 standards, as outlined in section M4, apply when using a dedicated cytometer-like instrument in conjunction with an array of fluorescent microbeads.

M4.000 Bead array techniques.

M4.100 This section applies to antibody screening and HLA typing when using a dedicated cytometer-like instrument in conjunction with an array of fluorescent microbeads.

M4.200 The optical and fluorescence calibrating standard must be run as specified by the manufacturer or at least weekly. The fluorescence standard must be run additionally any time the temperature delta check is not correct.

M4.300 The lot number of each kit and the reference parameters for controls must be recorded for each assay. The reference values must fall within acceptable limits for the assay to be valid.

M4.400 For antibody screening and identification the following standards in section M also apply: M1.1100, M1.1200, M1.1310, M1.1400, M1.1500.

M4.500 For antibody screening and identification (Mats) the following standards in section N also apply: N1.200, N2.100, N2.200, N2.210, N2.220, N2.400, N2.500, N2.700.

M4.600 For HLA typing using bead array techniques the standards in L3.200 also apply.

Modifications in section F resulting from the introduction of sub-section M4.000 on microbead arrays:

F3.000 Antibody screening using classical non-dedicated cytometers.

F3.100 Laboratories performing assays using flow cytometry must also conform to the standards in section M1, M2, and M3.

F4.000 Antibody screening by micro-plate ELISA.

F5.000 Antibody screening using fluorescent microbeads array in conjunction with a dedicated cytometer-like instrument.

F5.100 Laboratories performing assays using fluorescent microbeads array in conjunction with a dedicated cytometer-like instrument must additionally conform to relevant parts of section M.
Multiplex reactions and automated analysis reduce turnaround time, consumables and labor

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<td><strong>Class II</strong>: HLA-DRB (DRB 1, 3, 4, and 5) and DQB</td>
<td><strong>Class I and Class II ID Panels</strong></td>
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www.efi2006.org
to get the latest update on the conference.

We were overwhelmed by the number of abstracts received; 370! This is a new “all time high” for any EFI conference. EFI’s International Scientific Committee had to work very hard to select the best abstracts. We can promise you many very interesting oral and poster presentations dealing with cutting edge immunogenetics and histocompatibility.

The plenary and teaching sessions should also meet the needs and wishes for all working or interested in our field. During the Oslo conference you will be updated about most recent developments. The social events should further stimulate your appetite. Just look up our web site!

By 15. April we have 445 registered participants. But we have still room for more!

You will also find travel information on our web site, as well as information about some pre- and post-conference tours.

Welcome to Oslo!

Erik Thorsby
Chairman of the LOC

THE BIRTH OF EFI

Jon J van Rood

We are writing the seventies. HLA exists as a clinical reality. Eurotransplant functions in a part of Europe, similar organisations are set up in the UK, France, Scandinavia etc. The start of Eurodonor had been proposed and the Anthony Nolan was already making unrelated stem cell transplantation possible.

HLA typing was essential in all these operations, but expensive and not standardised. Altogether the ideal setting to start a committee in this case by the Council of Europe, which decided that its “Public Health committee would order its subsidiary, the Expert Committee on “Blood Transfusion and Immunohematology, to bring together a select “committee of experts on Histocompatibility Testing to prepare the necessary “documents to facilitate standardisation and to create a reference network for the “definition of the different HLA antigens”.

The man, who was chosen to bring this group together was Paul Engelfriet, at that time the head of the department of Immunohematology in the Central Laboratory of the Dutch Red Cross in Amsterdam(director: Professor Joghem van Loghem). Paul was a remarkable man. Over six feet tall, he was not only a MD, but also a colonel in the Dutch army and a sportsman. Apart from horse back riding, he was also Dutch champion figure skating and on top of that married to Helen, English born. I do not know what came first: his perfect command of the English language, which enabled him to marry Helen or Helen, who after marrying him, educated him in her mother’s language. Whatever the case Paul was a find. A gentleman to a tee with a good sense of humour and excellent memory he was the diplomat the committee needed. On top of that he was an expert blood transfusion specialist, who together with Marcella Contereras took care of the later editions of Pat Mollison’s monograph on blood transfusion. He knew how the Council of Europe worked, what one could achieve and what not. It was Paul, who guided us trough the intricacies of writing the guide lines on histocompatibility typing, collecting reference sera and panels (stored in the regional blood transfusion centre in Strasbourg (head Prof Simone Mayer)) and organising “European Courses on Histocompatibility testing” and cell exchanges.

It was hard and not very exciting work, but necessary and we learned a lot from each other. We were a collection of the younger HLA workers such as Ben Bradley, Machado Caetano, Jacques Hors, Michel Jeannet, Wolfgang Mayer, Lars Lamm, Eckehard Albert, Sergio Curtoni, Antonio Arnaiz Villena, Ieke Schreuder and others. While we were writing and...
rewriting the reports (with many corrections of our English by Paul) things were moving in a completely different direction in the USA. They were of course confronted with the same problems we were facing, but instead of working in a government committee the HLA workers rallied together in what was originally called the CRAB organisation, CRAB standing for “Cooperative Regions Against Bureaucracy!” They felt a need not only for standardisation of HLA typing, but also for a forum where new developments could be presented and discussed. This led to the incorporation of what now is known as ASHI in 1974 with a first meeting in 1975 in Birmingham (USA). I was invited to lecture at some of the later meetings, liked what I saw and heard and became a regular guest. Of course I reported back to the select committee on histocompatibility testing. After some discussion I was asked in 1981 to write a letter to the heads of the European HLA laboratories with the question whether they would support a similar initiative as that of ASHI in Europe to allow especially PhD students and (research) technicians to present their work for an International HLA audience. The response was certainly not unanimous with quite a few people arguing, that there were already too many meetings and that technicians should work and not go to international meetings! The committee of experts however liked the idea and I was asked to organise the first meeting, but it should not cost money (or anyhow not much). An interesting challenge!

In the typical wording of the Select Committee of Experts on Histocompatibility it was duly noted under point 28 (!) of the minutes:

1. formally took note of the decisions taken by its superior bodies during 1982 and of the initiatives undertaken by its members and national reference laboratory representatives;

2. Confirmed the arrangements for the Conference, subject to the Committee of Ministers’ decision on the Council of Europe’s 1983 Programme and Budget, to be held, at Strasbourg in the Council of Europe Headquarters, on 23, 24 and 25 March 1983, to be organised by the national reference laboratories in collaboration with the Council of Europe Secretariat under the responsibility of the Select Committee;

3. Adapted for submission to the European Health Committee, ad hoc terms of reference describing the Select Committee’s tasks in this matter;

4. Asked the following persons to report to members on various aspects of the preparation of the Conference on 31 December 1982 at the latest and again on 1 March 1983 at the latest etc”

Therefore we set to work. We were in this case Jacques Hors, Marie Marthe Tongio, Paul Engelfriet, Michel Jeannet and I. It became soon clear that the only way we could organise the meeting with a minimal amount of cash was by persuading the Council of Europe to “lend” us the big parliament hall of the Council itself. It took some doing, but again thanks to Paul Engelfriet’s connections and the excellent relationship with some of the ladies working in the secretariat of the council we managed to get not only the parliament hall but also the support of the interpreters, although only for French and English. The availability of interpreters was a condition sine qua non. It was unthinkable at that time to organise a meeting in France without French being the primary language! How times have changed!! The first meeting relied heavily on Marie Marthe Tongio, who with the help of her boss Madame Mayer made many of the facilities of the Blood Bank in Strasbourg available.

And so it happened, that we had the first meeting in the “Palais des Congres”, the main auditorium of the Council of Europe, on the 16th March (and not the 23rd!) 1983. The meeting was a great success, although with its own peculiarities, such as a speaker after giving a lecture in French being asked a question in English, after some hesitation, answering: “yes?” Of course there was an excellent dinner with afterwards dancing, organised by Marie Marthe Tongio, who deserves a large part of the credit that the meeting went so well.

The select committee of experts decided to organise a second meeting in 1985 again in Strasbourg. It was at that meeting that EFI was born. At that time we had no official name and I had, as interim president, promised a bottle of champagne to the person, who would propose the winning name for our new organisation. The winner was Bo Dupont, at that time already settled in the USA, who warned us not to use the word Histocompatibility as they had done with ASHI, because it narrowed the field of interest too much. He came up with the “European Foundation of Immunogenetics”, which was incorporated that same month by Jacques Hors.

On request of the French ministry for legal affairs the name was changed in 1996 in “European Federation for Immunogenetics”, but what is in a name as long as the organisation remains as vital and productive as EFI is today!
The European Foundation for Immunogenetics (EFI) was founded in the mid 1980s with the support of the Council of Europe as a loose organisation of European scientists with interest in histocompatibility and immunogenetics. EFI organised meetings and workshops with special emphasis on the needs and interests of junior scientists and laboratory staff. EFI had no paying membership and all income was derived from proceeds of meetings and commercial sponsorship.

The success of the EFI meetings and the need for a more permanent basis for European collaboration prompted plans for the establishment of EFI as an organisation with elected officers and members, who in return for an annual fee would receive many benefits. These included the receipt of an EFI Newsletter free of charge.

In 1990 EFI councillors decided that the time was right to proceed with the establishment of the EFI Newsletter as a way of communicating between European histocompatibility laboratories and immunogeneticists working in these laboratories. The design of the EFI logo was agreed upon and the first issue was published in August 1991.

From the very beginning one of the most important aims of the EFI Newsletter was to promote collaboration between laboratories. In addition the first three issues were concentrating on the recruitment of members. Multiple copies of the EFI Newsletter were sent to all European histocompatibility laboratories with an appeal to laboratory directors to enlist many immunogeneticists and laboratory personnel, particularly young workers, who would benefit from the activities of EFI.

The first Editorial Board of the EFI Newsletter consisted of A.A. Arnaiz-Villena (Spain), S. Curtoni (Italy), J. Hors (France) W.R. Mayr (Germany), G. Petpanyi (Hungary), G.M.Th. Schreuder (Holland), G. Stavropoulos-Giokas (Greece) and F. Vartdal (Norway). P. Klouda (U.K.) was asked to act as Editor-in-Chief. The format of the first issue has remained more or less the same till recent issues. From the start advertisements from commercial companies paid for the production costs of the EFI Newsletters and many advertisers have remained loyal through the years and the fifty issues.

With the establishment of a larger EFI membership by mid 1992, the EFI Newsletter was distributed to all members as well as to National tissue typing reference laboratories for local distribution. By early 1993 EFI welcomed its 500th member and the distribution list was kept by the membership secretary, Ieke Schreuder. The EFI Newsletter was distributed from Bristol, where the Editor-in-Chief, Peter Klouda, produced the next 34 issues till November 2001.

In 2002 the Editor-in-Chief became Frans Claas and the production and the EFI Office in Leiden carried out distribution.

Remembering the early issues of the EFI Newsletter, one of the greatest anxieties was to obtain enough quality material to fill each issue. Most contributions arrived just before or sometimes a few days after the deadline, but in the end the issues were produced on time. I enjoyed reading the contributions, some of which contained interesting verbal contortions, attributable to the contributors’ native language. I usually tried to make the contribution sound more English and as I never received any complaints, I hope my efforts did not cause offence.

Being the Editor of the first 34 issues kept me in close touch with a great number of colleagues and it was a privilege to be able to contribute to the success of the European Foundation of Immunogenetics and from autumn 1996 the European Federation of Immunogenetics. I thoroughly enjoyed my stint as the EFI Newsletter Editor.

Peter T. Klouda
EFI Newsletter Editor 1991 - 2001
NEW EFI ADVISORY EDITORS FOR TISSUE ANTIGENS

Tissue Antigens will be the official journal of EFI. Recently the Board of EFI has appointed the following members as new editors for Tissue Antigens:

Jean-Denis Bignon  France
Rainer Blasczyk  Germany
Frans Claas  The Netherlands
Federico Garrido  Spain
Ann-Margaret Little  UK
Alejandro Madrigal  UK
Patricia Momigliano-Richiardi  Italy
Jean Marie Tiercy  Switzerland
Marcel Tilanus  The Netherlands
Ralf Wassmuth  Germany

REMINISCENCE OF PAVOL IVANYI

By Eva Ivaskova

In the last year, at the end of July, we farewelled MUDr. Pavol Ivanyi, DrSc. I am thankful to Pavol for so much; he was my tutor, my colleague, and my advisor in difficult situations for many years. As one of the representatives of a famous tradition of Czech immunologists, he was a very well known immunogeneticist and transplant immunologist recognized abroad, as well.

He was born on 26 May 1930 in Kosice (Slovakia) where he studied a high school. Later on, he went to Prague to study at the Charles University on the faculty of Medicine.

During his studies, he started to be enthusiastic about biological sciences; he worked as a demonstrator in the Institute of Biology, Haematology and Immunopathology. In those years, as a student of medicine, he adopted a critical view over the theory of Lysenko.

After graduation in 1956, he started working in a hospital in the city of Nitra (in Slovakia). He was banned from continuing his scientific activities in Prague because of political reasons: his grandfather, landowner, and his father, lawyer, were considered as class enemies for the socialist establishment. Pavol spent 5 years in the Nitra Hospital and he obtained a specialization degree in internal medicine.

After those 5 years, he was invited back to Prague to work in the Czechoslovak Academy of Sciences (CSAV). The invitation came from Milan Hasek who had a strong political position at that time. In the CSAV, Pavol continued his experimental studies of histocompatibility in rabbits and mice.

In 1965, together with his wife Dagmar, they spent 6 months in the Institute of prof. Dausset in Paris. Pavol dedicated his studies there to the analysis of human alloantisera. The results of that analysis, together with findings in mixed lymphocyte cultures, led to the supposition that also in humans, one major system of histocompatibility exists.

The results contributed to the definition of transplant system in humans which they called Hu-1, later changed to HLA. Prof. Dausset was awarded the Nobel Prize in medicine for this discovery, in 1980.
In the years 1963 – 1976, Pavol Ivanyi worked as a chief of the Department of Immunogenetics in CSAV. He studied the presentation of peptides to T-lymphocyte receptors in the presence of HLA and MHC molecules specific antibodies at the time when knowledge of molecular models of immunogenetic recognition was incomplete.

He was collaborating with a number of worldwide known immunogeneticists, for example with van Rood. In 1969, he worked in the Department of Genetics in Columbia University in New York and in 1973 he obtained a scientific degree of DrSc. He participated in 3 anthropological expeditions to Siberia in cooperation with the Soviet Academy of Sciences.

By reason of a very unfavorable political situation which was endangering a possibility of any studies for his children he accepted an invitation from prof. Eijsvogel and left with the whole family to Amsterdam where he stayed and worked as a chief of the Department of Experimental Immunogenetics in the Central Laboratory Blood Transfusion Service till 1995.

The first Christmas after November 1989 was celebrated by husband and wife Ivanyi in Prague.

As of 1995, dr. Ivanyi collaborates very intensively especially with the Department of Immunogenetics in the frame of the Division of Immunology in the Institute for Clinical and Experimental Medicine (IKEM), Prague.

Here, he participated in research on histocompatibility antigens and helped with the development of informatics technology for analysis of peptides in HLA-B27 in healthy and diseased individuals. He obtained a number of grants, above all from the European Union, and he contributed remarkably to the establishment of the first bone marrow donor registry within the post-communist countries. Furthermore, he renewed his collaboration with the Czech Academy of Sciences (CAV).

His activities and his work were awarded a number of prizes of CSAV, College de France, Czech Society of Immunology, Slovak Society of Immunology and a prize of the Karel Pavlik Foundation.

He is author of 300 quoted works, a number of summary articles and editor of 2 monographies. Most of these contributions were published in prestigious Journals. He was the tutor of 11 PhD students, organizer of numerous Symposia and working sessions. He was elected member of the Learned Society of the Czech Republic.

Pavol Ivanyi was not only a great scientist, he was also a loving husband, father, brother and grand-father, a genuine man who always firmly suited the truth and efforts in the life. He was polyglot – spoke seven languages. He was patriot, lover of arts and life.

In his obituary, there was written: „He is living in our hearts and in contribution to science. “

He is counted among the giants of science, medicine and immunology. We will miss him.

With the words of one of the distinguished Czech immunologists living and working abroad, Jan Klein: „ Pavol Ivanyi, M.D., Ph.D., Dr.Sc., was a man who, with few others, placed HLA in the curricula of medical schools and the MHC in biology textbooks. He was a scientist and also a cultured human being. He was a person who found a lucky balance between devotion to science and devotion to his family. He loved his homeland, but was equally at home in Amsterdam or in Paris. He was a very special person to many. “
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THE EAST-WEST IMMUNOGENETICS CONFERENCE “TRANSFER OF KNOWLEDGE”

PRAGUE, 22-24.2.2006

Antonij Slavcev, Gottfried Fischer

The Central European Transplant (CET) conferences have been established in the early nineties (they were a continuation of the former Intertransplant1 conferences) and were highly successful in bringing together colleagues from Central and Eastern European countries working in the fields of Histocompatibility and Immunogenetics. The last conference, however, dated back a long time, it was the meeting held in the Lible Castle near Prague in 1999. Our intention was to revive the CET conferences. The idea of such a revival conference, originally intended to be small and focused on questions of accreditation, attracted considerable interest, in both, the east and the west. A web site had to be arranged and the themes of the meeting became increasingly comprehensive. As additional topics, solid organ transplantation and stem cell transplantation - especially from the point of view of the bone marrow registries - were chosen. As in the “old” CET meetings, both clinical and theoretical aspects were combined. Fortunately, recognised experts in the field accepted the invitation to share their thoughts in the plenary lectures. Therefore, “Transfer of Knowledge” became the motto of the East-West Immunogenetics Conference and this claim was further met by including a TransNet training course on graft versus host disease as a satellite symposium.

The main topics of the conference were as follows:

1. Plenary session on EFI Accreditation

Antonio Nuñez-Roldan and Gottfried Fischer chaired the plenary session on EFI accreditation of HLA laboratories. Antonio Nuñez pointed that the EFI accreditation program, which was launched in 1995, is now hugely successful – more than 180 laboratories from Europe are accredited and 70 EFI inspectors take part in the process. The main institutions in the field of haematopoietic stem cell transplantation require EFI or ASHI accreditation to laboratories participating in the exchanges of stem cell donation worldwide: WMDA (World Marrow Donor Association), NMDP (National Marrow Donor Program), NETCORD (Cord Blood Sharing Organization) and many others. Then, the formal procedures of becoming an EFI accredited laboratory and the process of inspection were described. An important point is that HLA laboratories should view the inspection as a way to improve their performance, to assist the inspectors and provide precise information on how techniques are performed. In region 5, which covers Central and Eastern European countries, ten laboratories have achieved and maintained EFI accreditation. A disturbing observation is that the number of EFI accredited laboratories in the region stagnates with only two new applications for accreditation during the year 2006 (from Zagreb and Bucharest). This development is moreover worrying, because more than fifteen years after the fall of the Berlin wall, HLA laboratories in the region still suffer from lack of money, equipment and expertise. During the following discussion, it was pointed that EFI is capable to assist scientists from Eastern countries to improve their qualification by educational grants and short-term stays in Western HLA laboratories. Anyway, it seems this support to help the EFI accreditation process is for the moment insufficient.

Ilias Doxiadis had a presentation on the External Proficiency Testing program of Eurotransplant. Every year the Eurotransplant Reference Laboratory (ETRL) sends out to participating centers 8 peripheral blood samples of healthy blood donors for serological typing and crossmatching, 12 sera for screening and calculation of the percentage-panel reactive antibody value (PRA), and 10 DNA samples for molecular typing. These numbers represent the minimum needed to fulfill the requirements for the EFI accreditation. The results are collected centrally and reported back to the participants in an open way, thus naming the laboratory. These exercises show that the quality of HLA typing, screening and crossmatching improved significantly over the years.

After the pre-session on EFI accreditation, Phil Dyer presented his opening lecture on “Histocompatibility risk analysis in allocation of kidneys for transplantation”. In kidney transplantation, the requirement for HLA matching limits the possibility for some patients to obtain a graft and the challenge is to achieve effective histocompatibility for all patients. Diverse techniques are applied for testing of patients for sensitization to antigenic stimuli. Whilst the complement dependent cytotoxicity test has a diminishing role, solid phase assays such as ELISA and bead-bound antigens together with detection methodologies such as flow-cytometry are
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sensitive and specific. Recent studies have shown that after transplantation, recipients often produce antibodies specific for mismatched donor HLA, and other antigens, and these may predict or initiate both humoral and cellular rejection. Strategies to minimize the risk from these antibodies are evolving but require effective analysis by histocompatibility experts. The best interests of the transplant patient must be central to the aims of laboratory testing procedures.

2. Plenary sessions on organ transplant activities in Central and Eastern Europe, immunogenetics of organ transplantation and various Frans Claas, Caner Süsal, Phil Dyer and Elissaveta Naumova chaired these sessions. Dr. Lyerova referred about the organ transplant activities in the Czech Republic. We hope these data will be published in a future edition of the EFI newsletter. Caner Süsal had a presentation on the “Role of Anti-HLA Antibodies in Organ Transplantation”. It is a matter of debate whether all antibodies detected by sensitive new techniques (ELISA, Flow cytometry) are clinically relevant. In the antibody screening program at the University of Heidelberg was found that 16% of ELISA-reactive IgG anti-HLA class I or class II antibodies remain undetected in the traditional complement-dependent cytotoxicity (CDC) test. The clinical significance of these antibodies on graft outcome was investigated in the CTS serum project. It was found that 2% of the CDC-negative patients were positive for both anti-HLA class I and class II antibodies in ELISA, and these patients had a significantly impaired graft survival than recipients who were negative for one or both antibody classes. On the contrary, 2% of ELISA-negative recipients showed a panel reactivity (PRA) of >30% in CDC, indicating that clinically relevant discrepancies occur into both directions. Therefore, the determination of clinically alloantibody status was recommended by the usage of both assays, CDC and ELISA.

Frans Claas gave a lecture about the “Differential immunogenicity of HLA mismatches in clinical transplantation”. The various immunogenicity of HLA mismatches can be determined by both retrospective analysis of graft survival data and by in vitro assays measuring T cell and B cell alloreactivity. The recently developed computer algorithm (HLA matchmaker) can be instrumental in selecting donors with HLA mismatches, which do not lead to alloantibody formation. This algorithm does not predict T cell alloreactivity, because it is focusing on the antibody accessible sites of the HLA molecules. Recently, preliminary evidence was obtained for an algorithm which predicts a low immunogenicity of allotypic HLA molecules for cytotoxic T cells. The theoretical background and practical implications of the differential immunogenicity of HLA mismatches was clearly discussed.

Katja Kotsch from the Charité Hospital in Berlin presented data of her group that incompatibility between KIR receptors and their HLA-C ligands might be associated with acute kidney transplant rejection. The group designed a PCR-SSP system for genotyping of 16 KIR genes. In the study, 42 out of 94 patients experienced one or more acute rejection episodes proven by kidney biopsy. Data were analyzed for every single KIR/HLA ligand pair for patients with acute rejection and compared with the control group. Patients with stable renal function displayed a significantly higher number of matches between the inhibitory receptor KIR2DL1 and its corresponding HLA-C group 2 alleles.

Milena Ivanova from the Central Laboratory of Clinical Immunology in Sofia presented data about the influence of cytokine gene polymorphisms on graft outcome in kidney transplantation. Eight SNPs including TNF-A (-308), TGF-B1 (codon10, codon25), IL-10 (-1082, -819, -592), IL-6 (-172) and IFN-gamma (+874) were determined by PCR-SSP in 56 patients with stable graft function and 10 with chronic allograft nephropathy (CAN). The development of CAN was significantly associated with the combination of homozygous genotype including codon10 T/T and codon25 G/G polymorphisms in the TGF-B1 gene (OR 0.141). These data suggested that TGF-B1 gene polymorphisms (cod10 T/T and cod25 G/G) might play a role in the fibrogenetic mechanism leading to the development of CAN.

Frantsisek Mrazek presented data of the collaborating groups of Martin Petrek and Gottfried Fischer about two novel HLA-B alleles identified in Czech families during the search for haematopoietic stem cell donor. Two novel HLA-B alleles (HLA-B*420502 and HLA-B*4442) were identified in families of Czech patients with leukemia during intrafamilial donor search for stem cell transplantation. The B*420502 allele was initially detected by HLA typing at low resolution using both sequence specific primers (SSP) and sequence specific oligonucleotides (SSO). B*420502 is identical with B*420501 except for a T/G exchange (synonymous mutation) at position 618. The presence of the novel allele B*4442 was suspected because of conflicting results between serological and DNA SSP typing techniques. SSP typing indicated an allele belonging to the HLA-B*44 group, while serology indicated HLA-B21. Sequencing revealed the novel allele that is identical with B*4405 except a single C/G nucleotide exchange at position 572. This exchange results in amino acid substitution at position 167 from serine to threonine.

Renata Zunec presented data from the Tissue Typing Center in Zagreb on “Three different ancestral recombinant haplotypes of the HLA class II region”. Three individuals with unusual DRB1-DQB1 haplotype associations were identified. The inheritance of unusual haplotypes was verified through family studies. The possible recombination sites and haplotypes involved in crossover events were deduced taking into consideration DRB1-DQA1-DQB1 linkage disequilibrium data. In family M. a recombination most likely occurred between DQA1*0501 on DRB1*03 haplotype and DQB1*0302 on the DRB1*04 haplotype. The unusual haplotype in family G. was probably a result of crossover between DRB1 gene on DRB1*07 haplotype and DQA1 gene on DRB1*13 haplotype, since the DQA1*0103-DQB1*0603 combination is usually found on DRB1*1301 haplotypes. The recombination event in family J. probably involved DRB1*11 and DRB1*16 haplotypes since the DQA1*0102-DQB1*0502 is usually found on DRB1*16 haplotype.
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3. Plenary sessions on stem cell donor registries

The two plenary sessions on Stem cell donor registries were chaired by Colette Raffoux, Eva Ivaskova, Ralf Wassmuth and Milena Vrana. Colette Raffoux (French Bone Marrow Donor Registry, Paris) presented the first lecture about “Significant factors influencing results of unrelated stem cells transplantation”. The success rate of hematopoietic stem cell transplantation (HSCT) has steadily increased in recent years, but graft-versus-host disease (GvHD) and other immune dysfunctions are still major causes of post-transplant mortality. Compared with HLA genotypically identical related HSCT, unrelated grafting is associated with a higher mortality rate. High-resolution HR HLA matching is associated with decreased mortality after HSCT. Only one class I/or HLA class II allelic incompatibility may be accepted. Efforts to lower relapse have included donor lymphocyte infusion (DLI) to stimulate donor anti-receptor T cell allore cognition of major and minor histocompatibility differences. Recently, alloreactive effects of donor natural killer (KIR) cell-mediated inhibitory killer Ig-like receptor (KIR) recognition of recipient HLA-C and B ligands have been described. Recipient homozygosity for HLA-B and C epitopes, that define KIR ligands, is a predictive factor for relapse following HCT from unrelated donors. Another factor influencing results of HCT is the median time elapsed from the start of diagnosis and the HCT: a short time between start of unrelated donor search and the HSCT improves outcome.

Eva Ivaskova had a lecture “15 years of the Czech Bone Marrow Donor Registry (CBMD)”. The CBMD was the first stem cell registry to be established in the former communist countries in 1991. By the end of October 2005, the registry had 18538 voluntary donors, 20.5% of which are also typed for HLA class II antigens by DNA methods. The registry actively collaborates with WMDA, BMDW, and NMMP and is among the 14 registries (out of 54) that operate via EMDIS. Since 1994 until the end of 2005, the registry has mediated 9943 searches by EMDIS and 291 donations of hematopoietic stem cells in the Czech Republic. In the last years, a significant increase in workload was observed (30%), while the time for finding a matched donor was significantly reduced.

Pavel Jindra (Pilsen) reported about the activities of the Czech National Marrow Donor Registry (CNMDR). The CNMDR was established in 1992, is a member of Bone Marrow Donors Worldwide (1994), and is accredited collaborating registry of the National Marrow Donor Program (1997). In 2005, the CNMDR acquired WMDA accreditation and became the first accredited registry in Central and Eastern Europe. The CNMDR has a pool of 29 800 donors with 22 900 (77 %) AB-DRB1 typed and 10 % of donors also Class I DNA typed. All donors at the recruitment stage are typed by serology for HLA-A, B and by DNA for DRB1. Totally, 221 CNMDR donors have donated stem cells (136 for Czech pts, 85 for foreign pts). In addition to that, CNMDR mediated stem cell collections from foreign registries for 125 Czech patients.

Ralf Wassmuth from the DKMS registry, Dresden, gave the lecture “Strategies and Perspectives for Registry HLA Typing”. At present, the DKMS (Deutsche Knochenmarkspendedateri) has over 1.3 million donors registered and assists average five stem cell donations per day. HLA typing for donor recruitment is performed in a stepwise procedure involving HLA class I A and B typing by molecular methodology at intermediate resolution followed by prospective typing for HLA-C and/or HLA-DRB1. Alternatively, HLA class I (HLA-A, -B, -C) and class II (HLA-DRB1) at high resolution is carried out prospectively in selected donors. In the donor replacement program, an HLA-identical donor is searched for every donor who has undergone stem cell donation. This maintains donor availability for patients and protects individual donors from multiple donations. In the high-risk program, patient-driven intermediate and high-resolution typings are initiated to fasten the search in high-risk patients and assist patients with insufficient health care coverage. Overall, 52% of all DKMS donors are typed for at least HLA-A, -B and -DRB1. Over 80% of the DKMS donors up to the age of 30 are HLA-DRB1 typed at intermediate resolution, while 27% of these donors are typed at high resolution. Taken together, prospective HLA typing programs support the availability of suitable donors and particularly provide assistance in patients with special needs.

Petr Kobylika and Lenka Zahravova provided basic information about the Cord Blood Bank Czech Republic (CBB-CR). The CBB-CR was founded in 1996 in Prague. In 2004, the CBB-CR became a member of NETCORD; by the end of 2005, the number of available CB units reached 1850. Each CB unit undergoes thorough virological and bacteriological testing before freezing. Subsequently, HLA typing by DNA methods (ABDR) is performed and the number of nucleated cells, CD34, and CFU-GM is assessed. The health status of the infant – the donor of the CB – is checked six months after donation. Afterwards, the required information about the CB unit (HLA type, number of CFU, etc.) is submitted to the CBMD registry. By the end of 2005, six related and seven unrelated transplantations using cord blood were performed – one graft was found in CBB-CR.

Milena Vrana had a communication of the team from the Institute of Hematology and Blood Transfusion named “10-year experience with the search for HLA compatible unrelated stem cell donors”. The cohort studied consisted of 124 patients transplanted in
the last 10 years and their unrelated stem cell donors. HLA class I (-A, -B, -C) as well as class II (-DRB1 and -DQB1) typing at high/medium-resolution level was performed. Complete match in all tested HLA loci was in 50 pairs (40.3 %), while 34 patients (27.4 %) were transplanted from donors with one mismatch. The remaining 40 pairs (32.3 %) had at least two HLA mismatches. In the group with one mismatch, there were 22 disparities at the allelic group level, most of them in the HLA-C locus. The remaining mismatches were differences between alleles within the same allelic group, i.e. at high-resolution level. The mismatches were heterogeneous and a correlation between a specific mismatch and transplantation outcome was not possible.

The presentation of Zuzana Ambruzova from the HLA laboratory at Palacký University, Olomouc was about IL-6 and IL-10 gene polymorphisms and the outcome of allogeneic stem cell transplantation. The team investigated whether IL-6 (-174G/C) and IL-10 (-1082G/A, -819C/T, -592C/A) polymorphisms are risk factors for the development of acute or chronic GvHD. Fifty-six patients and their HLA-identical sibling donors were typed for IL-6-174 and IL-10-1082 poly- morphisms by PCR-SSP. Significantly higher frequency of the IL-6-174*G allele was found among recipients with severe acute GvHD (66.7 %) compared to patients without GvHD (OR=2.8). Furthermore, IL-6-174*GG homozygous patients developed aGvHD more frequently than individuals with other genotypes (OR=3.2). Survival analysis showed a significant decrease of overall survival and a trend for decrease of disease free survival in patients with the IL-6-174*GG genotype. Shorter disease free survival was also observed in patients with IL-6-174*GG homozygous donor.

The presentation of Fani Martinova was related to the “Allogeneic hemato poietic stem cell transplantation in Bulgaria from the Children’s Onc hematology Transplant Center” in Sofia. Between 2000 and 2005 twenty allogeneic HSCT were performed in patients with severe hematological disorders. HLA typing class I (A, B, Cw) and class II (DRB1, DRB3,4,5, DQB1, DQA1) was performed using PCR-SSP CD34+ engraftment was achieved in 15 patients, 5 died from graft failure. Acute GvHD grade I-IV was seen in 10 patients and cGvHD – in five patients. The transplant-related mortality for was 28.5 % (from graft failure and hemorrhagic complications), the 5–year OS and EFS was 50 % and 85.71 % respectively. We are hopeful that the meeting fulfilled its main goal to encourage both EPI accreditation of HLA laboratories in region 5 and the exchange of ideas and expertise between people working in the field of immunogenetics. We also hope that participants enjoyed the informal and friendly discussions and last but not least, the beautiful city of Prague.

A cordial invitation is forwarded to you to attend the next East-West conference to be held again in Prague in February 2007.

Acknowledgement: The generous support of Abbott Molecular, Merck, One Lambda Inc., Biotest, Biomedica CS, Genovision, Mertrade, BAG, Protrans, Innogenetics, Kairtrade, Scintilla, Astellas, etc. as well as the assistance of The Czech Cord Blood Bank, The Drop of Hope Foundation and the Karel Pavlik Foundation are gratefully appreciated. We would like to thank Petra Kamenska and Jana Lukavska from Czech-In for their professional and friendly approach in the organization of the meeting.

(Footnotes)

1 Intertransplant was the organ exchange organization of the former communist countries in Europe including Cuba which stopped its activities after 1989.

REPORTS OF THE 9TH EDUCATION DAYS OF THE FRANCO-PHONE COUNTRIES

Mireille Drouet (Limoges)

The EPI meeting moved from the Atlantic Coast (Nantes) to join the Mediterranean, since the meeting was organized at Montpellier the 3rd and 4th of November 2005 by Jean François Eliaou and Annie Ramounau-Pigot. We must congratulate the organisers for the quality of their organisation and the enjoyable evening at Montpellier opera.

The first speaker was Jean Marie Tiercy (Geneva) who had the difficult task of introducing to us the polymorphism of NK receptors and its implication in bone marrow transplantation. Because the HLA and KIR genes are located on different chromosome, 75% of intrafamilial donors have a KIR mismatch with their recipient, and over 95% in case of non familial donors. The consequences of NK alloreactivity were explained through clinical studies and experimental models. We were encouraged to focus our effort on bone marrow transplantation by Mauricette Michalet (Lyon), who told us about the chronic GVH, which can seriously affect the lives of patients. No biological tests are actually reliable to predict the severity of GVH. The protocols of stem cells have changed with the introduction of lighter conditioning regimen for the recipients. In this graft, the survey of the chimerism is an essential tool for the clinician to adapt the immunosuppressive treatment or decide of donor lymphocytes injection (DLI). Between NK and microsatellites polymorphism, our laboratories are facing new fields.

The second part of this meeting dealt with organ transplantation. Corinne Antoine from the “Agence de Biomédecine”, Paris presented the new version of the software for organ transplant exchange program called “Cristal”. One improvement is that the immunologist can control immunological data. Genevieve Robles, former transplant coordinator in Montpellier, exposed the difficulties of the logistics of organ transplantation. We have to keep in mind that kidney survival depends on two major criteria: HLA matching and ischemia duration. She presented us an organisation which takes into account those two parameters and contributes to decreasing the ischemia period while respecting HLA matching. HLA antigens are not the
only target involve in kidney transplant: Caroline Suberbielle (Paris) reviewed non HLA antibodies, which recognized various epitopes of endothelial cells. Future developments are necessary to standardise screening and identification tests for these antibodies. Those tests should be combined with clinical studies to evaluate the real implication of those antibodies and the need of a cross match between donor and recipient for those antibodies.

Four teaching sessions were dedicated to analysis of the chimerism, sequence based typing, forbidden and permissive antibodies, and DNA extraction. The main objectives of those sessions were to exchange technical experiences.

We experienced a free communication session, with the recommendation that the communications should be presented by technicians. We congratulate the four technicians who presented their first live communications, and encourage others to follow their example in the coming years.

Announcement: 10th education days of the francophone countries GRENOBLE 21 & 22 SEPTEMBER 2006-02-14

Preliminary program:

Plenary sessions: Functions of HLA molecules and related molecules: from the theory to the patients:
1. HLA molecules and peptide presentation:
   - The relation between the structure and the function of CMH molecule
   - The use of fundamental knowledge on CMH in diagnosis and therapy
   - How a graft is recognized as foreign by the immune system?
   - Minor histocompatibility antigen
2. Antibodies: main actors for the outcome of allograft
3. Function of NK lymphocytes:
   - The reconnaissance by NK lymphocytes
   - NK and haematopoietic stem cell transplantation
4. CD1 molecules

Teaching sessions:
- Optimisation of the search of a bone marrow donor
- Identification of HLA antibodies
- Sequence base typing
- Crossmatch

Free communications

1ST EDUCATIONAL COURSE ON “MICROARRAYS AND GENE CHIPS IN MOLECULAR MEDICINE” - GENOA( ITALY)

By Sergio Barocci

A Course on “Microarrays and Gene Chips in Molecular Medicine” was held in Genoa (Italy) on 27-28 September 2005.

The aim of the course was to give, to the personnel involved in bone marrow and solid organ transplantation as well as in cancer biology field, basic knowledges about genomic and proteomic technologies and their clinical application as diagnostic tools in heart, kidney, lung, blood and skin disorders.

The Course was organized by Dr. Sergio Barocci (Transplant Immunology Unit, Department of Transplantation, S.Martino Hospital and University of Genoa- Italy) under the scientific patronage of the A.I.B.T. (Italian Association from Immunogenetics and Transplantation Biology) and S.I.M.T.I. (Italian Society of Transfusion Medicine).

The Course has represented an useful opportunity for sharing a series of lessons on genomics and proteomics presented by 11 senior researchers from Genoa and Milan cities. 120 participants, constituted by 50% technicians and by 50% biologists and medical doctors from Italian HLA and Molecular Biology Laboratories, were admitted to the Course.

The main topics, discussed in the course were:

a) theoretical approach to Real Time –PCR and microarrays techniques ;

b) cDNA arrays for the expression analysis of cytokines, chemokines and matrix-degrading metalloproteinases; DNA arrays for the analysis of new genes identified by human genome sequencing.

c) Functional genomic : HLA microchips and Dual Chips as analytical tools for the study of the bone marrow transplantation and inflammatory and apoptotic processes; low density microarrays in cancerogenesis and lymphoproliferative disorders;

d) bioinformatics and statistics applied to the microarrays (data analysis, data processing, gene prediction algorithms, database construction and searching)

e) theoretical and practical basis on techniques for protein separation, analysis and identification. (2D gel electrophoresis and techniques of protein spots visualization of peptides and proteins).

In addition, three satellite symposia respectively in genomes and development, genome evolution and drug design were also included.

At the end of the course the participants were asked to fill in anonymously a questionnaire from which an overall positive evaluation of the course was derived.
The Third International Summer School on Immunogenetics 2006

ASHI, EFI and ASEATTA, the international societies devoted to histocompatibility and immunogenetics, would like to invite applicants to join the 2006 International Summer School on Immunogenetics in Bangkok, Thailand.

The summer school will be held November 17-20, 2006 at the Suan Dusit Place, Bangkok (www.dusitplace.com), which is conveniently located within the city-center near various attractions. The participants are also invited to join the 30th ASEATTA Annual Scientific Meeting from November 22-24, 2006 in ChiangMai, located in the northern part of Thailand (http://www.aseatta.org.au).

The faculty for summer school include: Peter Nickerson (ASHI), Carolyn K. Hurley (ASHI), Frans Claas (EFI), Erik Thorsby (EFI), Jim McCluskey (ASEATTA), Frank Christiansen (ASEATTA), Chanvit Leelayuwat (ASEATTA), and Nattiya Hirankarn (ASEATTA).

The format will be the same as the Second International Summer School including the introductory lectures covering a broad range of related topics in immunology and genetics. Discussion sections and student presentations of their own research are highly encouraged to increase the interaction between participants and faculty.

As part of the proceedings, 25-30 graduate students and postdoctoral fellows, who have received their graduate degrees within the past 5 years, will be accepted.

Applications must include a CV, statement of motivation for attending, a letter of recommendation and a summary of current research projects. A committee consisting of ASHI, EFI and ASEATTA delegates will review the applications and select the candidates.

The registration fee of $100 USD includes lodging and meals (welcome and concluding receptions, breakfast & lunch everyday and one dinner on a boat trip).

Bursaries: Participants are to pay their own travel expenses.

A complete application package must be received by August 1, 2006. All questions and applications should be addressed to:

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THE THIRD INTERNATIONAL SUMMER SCHOOL ON IMMUNOGENETICS
November 17-20, 2006
Preliminary Program

Venue
The Suan Dusit Place, 295 Ratchasima Road, Dusit, Bangkok 10300 Tel (662) 241-7571-80, Fax (662) 243-6898-9, www.dusitplace.com

Thursday, November 16
The participants check in at Dusit Place, 6.00 pm Welcome reception

Friday, November 17
Morning
Topic: Overview of the HLA system
Tutors: Carolyn K. Hurley and Nattiya Hirankarn
Presentations by the participants

Afternoon
Topic: Antigen presentation
Tutor: James McCluskey
Presentations by participants
Saturday, November 18
Morning
Topic: T cell receptor recognition on MHC-peptide complexes
Tutor: James McCluskey
Presentations by participants

Afternoon
Topic: NK and KIR
Tutors: Frank Christiansen and Chanvit Leelayuwat
Presentations by participants

Evening
6.00-9.00 pm dinner cruise along the Chao Phraya River

Sunday, November 19
Morning
Topic: Disease predisposing genes in the HLA complex. Genes involved and their possible mechanisms.
Tutor: Erik Thorsby
Presentations by participants

Afternoon
Topic: Hematopoietic stem cell transplantation
Tutors: Frans Claas and Carolyn K. Hurley
Presentations by participants

Monday, November 20
Morning
Topic: Solid organ transplantation
Tutors: Peter Nickerson and Frans Claas
Presentations by participants and end-discussion

Afternoon
1.00 pm Guided visit to Vimanmek Palace, with traditional Thai dancing show

Evening
6.00 pm Concluding Reception

Tuesday, November 21
9.00 am Departure for the 30th ASEATTA Annual Scientific Meeting from November 22-24, 2006 in ChiangMai (The registration form and brochure can be downloaded from http://www.aseatta.org.au; details of the scientific program will be posted later).
Young scientists are encouraged to join and send an abstract for oral presentation during the ASEATTA meeting to win the $500 AUD awards sponsored by BC Serologicals, Australia.
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