



NEWSLETTER

APRIL 2018 - ISSUE 85

.....FROM THE EFI PRESIDENT

DEAR EFI MEMBERS,



This is my last letter to you as an EFI President. First of all I would like to say that my term as President was on the one hand a huge challenge and a responsibility, but on the other a great honor to work for EFI with a team of highly motivated and positive colleagues. To be honest, it took much more time and energy than I really thought. But if I have succeeded to contribute just a little bit to the development of EFI and the promotion of its achievements internationally it means it is worth it. Now I will try to outline some of the most important aspects of the EFI activities during this period.

The EFI daily work has been held in a relaxed and friendly atmosphere as well as with high efficiency and respect for the enormous efforts and professionalism of the EFI Committee members. The financial situation is stable, thanks to the successful EFI meetings and the improved coordination of incoming and spent funds, and it makes it possible to have more financial capacity for educational programs, updating websites and other useful activities for the EFI members. After introducing the reduced fee for the new (young) members since January 2016 there are 230 new registered EFI members. Another initiative to attract young people is that this year, for the first time, the participants in the EFI conference will receive certificates with educational credits, which is a part of the continuing education.

Efforts were being made to establish closer working relations with national histocompatibility societies. Shortly, agreements were being signed (MoU) with the societies in the UK, Germany, Poland, France, Italy, the Netherlands, Spain, Portugal and India. It makes our collaboration formal

in terms of education, research, EPT accreditation and increases the reliability of all aspects of H&I testing. In fact, the annual EFI conferences are jointly organized with the representatives of the national societies where they exist. For example, as result of this collaboration, a meeting has been held in Warsaw with the directors of the Polish HLA labs, where the participants were provided with detailed information on EFI accreditation, EPT and Education programs which were excellently presented by the chairs of the EFI Committees. Undoubtedly, this joint meeting contributed to a better integration of the Polish laboratories into the EFI family and encourage them to apply for EFI accreditation. Even more, the Polish association has developed national guidelines for histocompatibility testing in both organ and SCT requiring EFI accreditation for the labs. A similar meeting is scheduled to be held in April 2018 in Istanbul for the directors of the Turkish labs. During the fall EC meeting, it was decided that a joint meeting between the EFI and the Presidents of national societies in Europe will be organized in Venice. It will aim to identify steps for more effective collaboration in favour of our members, including a development of Guidelines for transplantation where EFI will act as a scientific umbrella, creating consensus documents, shared memberships, etc.

To keep up with modern medicine, we should put more effort to translate the latest immunogenetic achievements in clinical practice. In relation to this, an agreement (MoU) for collaboration with the European Society for Blood and Marrow Transplantation (EBMT) was signed. It is well known that EFI has a high expertise in histocompatibility and immunogenetics, which is beneficial to EBMT and SCT, as well as showing a strong scientific and clinical interest in using the immunogenetic data from SCT. A constructive meeting was recently held with the EBMT President-elect Nicolaus Kröger and the executive director Andreu Gusi, where more specific forms of collaboration including educational initiatives, scientific projects, joint sessions and others were considered. You will receive more detailed information during the GA in Venice. Another important agreement was signed with the EFIS, that set the beginning of closer cooperation with specialists working in basic science. Last month, a meeting was held with the Board of European Federation of Immunological Societies (EFIS) where it was reported that the two organizations shared interests in several fields and that the potential for collaboration in many areas is high. A first step towards this end was the mutual linking of web resources. Moreover, a need for the reciprocal exchange of information for scientific



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<http://www.efiweb.eu>

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....FROM THE EDITOR'S DESK

Herewith you will find the latest edition of the EFI Newsletter, which includes the program of the upcoming EFI annual meeting in Venice, Italy. The program looks very promising, with a great line-up of international speakers and various special sessions. The city of Venice promises to provide a great atmosphere for science, as well as the occasional sightseeing.

This issue is the last for which our current president Elissaveta Naumova has written the 'from the EFI President' section. From this place I would like to thank Elissaveta for her presidency and the fruitful collaboration over the last years.

Besides the EFI annual meeting, many other meetings and courses are being organised with the aid of EFI, some of which are summarized in this Newsletter; the 12th East-West Immunogenetics conference held in Prague, the Annual EFI Region 8 & Balkan EPT Meeting held in Athens and the Histocompatibility from Laboratory to Clinics course held in Barcelona. It is great to see so much activity in the H&I field.

The organization of the 2021 18th International HLA and Immunogenetics Workshop (IHIWS) is well underway, with a number of new projects and many existing projects having been registered. The official website is near completion and the database of the 17th IHIWS will be transferred shortly. You will be kept up-to-date on the progress.

As always, I hope that you enjoy reading this newsletter and I am looking forward to your contribution to the next edition.

Sebastiaan Heidt

Deadline for contributions to EFI Newsletter 86 is September 1, 2018.

Please send your contributions by e-mail to s.heidt@lumc.nl



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.....FROM THE EFI PRESIDENT (CONTINUED)

and educational purposes was particularly anticipated, for meetings and conferences, as well as for the Federations' respective journals. A first joint endeavor could, for example, be a session on basic immunology organized by EFIS at the EFI annual conference and respectively EFI session at the triennial European Congress of Immunology (ECI) during which topics related to clinical practice could be discussed. EFI, and in particular the EFI Education Committee, has played active role in the creation of the ESHI Diploma in collaboration with the EBTI/UEMS for the Directors/Co-Directors of H&I labs.

In order to strengthen International collaboration, a trilateral agreement for collaboration in H&I with our sister societies APHIA/ASHI was signed. As a result of this, regular meetings of their presidents at the annual conferences are held where the main points discussed are those related to partnership. Undoubtedly, one of the successful forms of this collaboration is that of the International Summer School on Immunogenetics. Due to the huge interest from the members of each of the three associations it was agreed that the Summer School will be held annually. Moreover, the lectures presented there are uploaded onto the websites of the three organizations. Further, meetings with the chairs of the International HLA and Immunogenetics Workshops (IHIWS) were also organized. The next steps for a more efficient and structural collaboration between APHIA/ASHI/EFI and IHIWS, as well as for continuity and continuation in the work from one WS to the next, have been outlined. In this context, we expect the results obtained from the 17th IHIWS to be used by all members of the H&I community for research and clinical applications providing high quality, highly informative data. All this clearly shows that the EFI is well recognized with leading positions in H&I as well

as being a reliable partner in the field of immunology, transplantation and immunogenetics.

Sadly, this period was deeply marked by the passing of Prof. Jon van Rood and Dr. Paul Terasaki. We lost great personalities, brilliant scientists and dear friends.

I hope that the next EFI President, Joannis Mytilineos will keep developing the good initiatives as well as new ones in favour of EFI. Also, I do believe that Joannis will be an excellent EFI President and would like to wish him every success and an enjoyable term.

Dear colleagues, dear friends, needless to say that I was most happy and very proud to work with you all for EFI. My heartfelt gratitude is to you all, and especially the EFI Committees members, for the work that each of you do that contributes to EFI's great reputation.

The experience shared by most of us shows that the annual EFI conferences remain a very important activity for our community. The next 32nd EFI meeting is in Venice, and will be held under the motto „Art and science: the evolving picture of Immunogenetics“. This motto perfectly reflects on one hand the rich historical and cultural heritage of Venice, and on the other hand, the multifaceted scientific and clinical research in the field of immunogenetics and transplantation.

Looking forward to welcoming you all to this exciting conference to be held in the romantic and unique city of Venice!

Elissaveta Naumova
EFI President

MEMBERSHIP UPDATE

Since the last issue of the EFI Newsletter we received a lot of applications forms from new members. Hereby we would like to welcome the following new EFI members:

T. Goeury, Geneva, Switzerland
M. Singh, Mumbai, India
J. Krop, Leiden, the Netherlands
S. Kadam, Mumbai, India
L. Boulland, Oslo, Norway
H. Guberina, Essen, Germany
C. Heylen, Nijlen, Belgium
Y. Wanner, Stuttgart, Germany
A.I. Lokki, Helsinki, Finland
D. Hayward, London, UK
G. Sharma, New Delhi, India
M. Craenmehr, Leiden, the Netherlands
H. Vazirinasab, Tehran, Iran
M. Tambe, Mumbai, India
E. Draghi, Milan, Italy
A. Ahani, Tehran, Iran

L. Florean, Rome, Italy
S. Lai, Cagliari, Italy
S. DSilva, Mumbai, India
A. Jaramillo, Phoenix, Arizona, USA
M. Gandhi, Rochester, USA
S. Ho, Ann Arbor, USA
M. Falco, Genoa, Italy
C.N. Scollo, Monza, Italy
R. Holdsworth, West Melbourne, Australia
M. Abneuf, Khamis Mushayt, Saudi Arabia
R. Munir, Lahore, Pakistan
M. Khalid, Lahore, Pakistan
T. Roth, Martinsried, Germany
E. Geffard, Nantes, France
S. Limou, Nantes, France
J.C. Schwartz, Woking, UK
D. Heimeijer, Woking, UK
R. Cacciatore, Pavia, Italy
R. Crossland, Newcastle upon Tyne, UK

S. Deidda, Cagliari, Italy
T. Shehadeh Mbariki, Haifa, Israel
J. Hammond, Woking, UK
R. Carapito, Strasbourg, France
M. Rotival, Paris, France
G. Maccari, Woking, UK
D. Di, Geneva, Switzerland
R. Littera, Cagliari, Italy
H. Car, Leiden, the Netherlands
M. Li, Mountain View, USA
D. Ferrarese, Piacenza, Italy
M. Ferenac Kis, Osijek, Croatia
H.O. Madsen, Denmark
A. Cannavo, Milano, Italy
S.M. Passamonti, Milano, Italy





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FUTURE EFI CONFERENCES

The highlight for our Society every year is our annual conference and we all look forward to this year's EFI meeting in Venice! However, we need to plan for the future too. We have already selected venues for the annual conferences until 2021, so we are now looking for members interested in organizing the meetings in 2022 and 2023. In 2019 we will be in Lisbon/Portugal, in 2020 we will meet in Glasgow/UK and in 2021 the Conference- together the IHIWS -will be held in Amsterdam/the Netherlands.

Colleagues interested in hosting EFI meetings from 2022 on must be aware of that the EC has for a period of time

investigated the possibility to have a contracted PCO to deal with the commercial exhibition, mainly in response to requests from the companies. There will still be a local PCO responsible for most of the arrangements but this PCO will not be dealing directly with the sponsoring and the exhibiting companies. The process of selection of this contracted PCO is, however, not completed yet at this time.

Interested colleagues should submit a formal application, using forms available at the EFI website. Completed applications must be received by the EFI Secretary (mats.bengtsson@igp.uu.se)

by September 15th 2018. Please indicate if you would like to organize the meeting in 2022 or 2023.

Applications will be reviewed by the Executive Committee during the autumn meeting in October 2018. If necessary, a shortlist of applications will be produced from which further information will be requested. The final decision will be made at the 2019 Annual Conference EFI Executive Committee meeting (in Lisbon).

Mats Bengtsson
EFI Secretary

INVITATION TO THE GENERAL ASSEMBLY 2018

All EFI members are invited to attend the 2018 EFI General Assembly, which will be held during the 32nd European Immunogenetics and Histocompatibility Conference.

The General Assembly will be held on Friday 11th May 2018, 18:00 – 19:30 in Perla Room in Palazzo Casinò (1st floor), Venice, Italy.

The General Assembly is chaired by the EFI President and a draft agenda is given below.

Mats Bengtsson, EFI Secretary on behalf of the Executive Committee

Agenda

1. Opening
2. Minutes of the General Assembly 1st June 2017 (EFI Newsletter September 2017 issue 83)
3. Report of the EFI President
4. Report of the EFI Secretary
5. Report of the EFI Treasurer
6. Report of the EFI Committees
 - a. Accreditation
 - b. Education
 - c. External Proficiency Testing
 - d. Scientific
 - e. Standards and Quality Assurance
7. Next EFI conference- Lisbon, Portugal, 2019
8. EFI medal
9. Installation of new EFI President

NEWS FROM THE EFI COMMITTEE FOR EXTERNAL PROFICIENCY TESTING

The EFI Committee for External Proficiency Testing invites all H&I laboratories and EPT Providers to attend our educational session that will take place at the next EFI conference in Venice:

Meet the Expert 2 - EPT External proficiency testing

Thursday, 10th of May 2018, 14:40-16:10
Palazzo del Cinema and Palazzo del Casinò, Venice Lido, Casinò room, Palazzo Casinò (1st floor)

We are happy to announce four exciting short presentations followed by a stimulating discussion regarding:

Extending the Spectrum of EPT in H&I

1. EPT in H&I: From History to New Developments
2. Organization of EPT: Schemes, Workshops and Inter-Laboratory Exchanges
3. Specialist EPT Schemes: HNA, HPA, mHAg and KIR

4. The Impact of New Technology on EPT: Next Generation Sequencing and Single Antigen Bead tests - 'Result based' or 'method based' assessment?

We are looking forward to welcoming the interested audience to our session!

Falko Heinemann and Yvonne Zoet
(chair and co-chair of the EPTC)

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REPORT FROM THE SCIENTIFIC COMMITTEE

The EFI Scientific Committee (EFI SC) is pleased to announce that Professor Lorenzo Moretta from the Ospedale Pediatrico Bambino Gesù in Rome will give the Ceppellini Lecture at the upcoming 32nd European Immunogenetics and Histocompatibility Conference in Venice. Professor Moretta is well-known to the EFI Community for his ground-breaking discoveries regarding polymorphic Natural Killer cell receptors and their interaction with HLA antigens, and the role of these receptors in clinical transplantation.

The winner of the Julia Bodmer Award (JBA) 2018 was selected by the EFI SC among four competitive applications from four different countries. We look forward to the JBA presentation during the Opening Ceremony at the upcoming EFI Conference in Venice.

Over 320 abstracts submitted to the EFI Conference in Venice were evaluated by the EFI SC and were assigned to oral or poster presentation based on average scores by the ten committee members.

A new endeavor of the EFI SC has been the drafting of guidelines for the preparation of the Scientific Program of EFI Conferences. These have now been approved by the Executive Board and are being made available to the organizers of upcoming EFI Conferences. They will be subject to annual review by the EFI SC, based on the input from the organizers of the yearly EFI Conference.

Katharina Fleischhauer
(on behalf of the EFI SC)



MEMBERSHIP FEE 2018

Renew your 2018 EFI membership today! Your membership fee allows us to provide programs, professional awards and educational opportunities to support the exchange of scientific information and to reinforce the skills and knowledge of young scientists and others working in the field of immunogenetics and histocompatibility. The annual membership fee is 50 Euro (for new members it is 20 euro per year for the first two years). After you login to the membership part of our website, click 'pay fee' and select the year and the payment method in order to renew your EFI membership.

EFI Membership

If you are not yet an EFI Member and you want to become one, we are of course happy to welcome you to our society. Benefits for EFI Members are receiving the EFI Newsletter, eligibility for a reduced EFI annual conference fee, possibility to apply for bursaries, have a vote, access to the membership section online, and free access to HLA (previously Tissue Antigens). To become an EFI member please fill in the Membership application form on our website www.efi-web.org

EFI Booth

At the upcoming conference the Membership Secretary will be available at the EFI Booth to assist you with renewing your EFI membership, completing the EFI Membership application form and to answer all your questions regarding the EFI Membership.

Please note the EFI Booth is situated in the Exhibition Hall on level 3 of Palazzo del Cinema, the Membership Secretary is available:

Thursday 10 May 2018	8:30 – 17:00
Friday 11 May from 2018	8:30 – 17:00

We are looking forward to meeting you in Venice!

Sonja Geelhoed & Sandra van Hensbergen



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UPDATE FROM THE EFI EDUCATION COMMITTEE

MARCH 2018

European Specialisation in H&I (ESHI) Diploma

The ESHI Diploma continues to be offered to senior scientists working in H&I. The Diploma is 'modular'; candidates must apply for at least one of the mandatory areas (Solid Organ Transplantation and/or HSCT) with two other optional modules available (Disease Association and Transfusion). The requirements to apply for the exam are detailed in the 'Portfolio' document available on the UEMS website (<http://www.uemssurg.org/divisions/transplantation/transplant-immunology2>). Applicants must demonstrate a period of sustained training (3 years for medics and 5 for scientists) within H&I, undertaken in an EFI accredited lab under appropriate supervision. Upon acceptance of the Portfolio logbook the candidate will be invited for the oral examination, either at the annual EFI Conference or at the Autumn EFI Business meeting. The next exam will be at the EFI meeting in Venice on 8th May 2018 and a further exam will be held at the Autumn EFI meeting in October 2018 if required. Applications for the examination should be made via the Section of Surgery/Transplantation/Transplant Immunology page of the UEMS website (<http://www.uemssurg.org/divisions/transplantation/transplant-immunology2>) where documents can be uploaded. Payment can be undertaken via Paypal upon application.

Since June 2014, a total of 15 candidates have submitted portfolios for consideration to take the ESHI Diploma examination. Ten candidates have been examined with 8 candidates passing. The award of the Honorary ESHI Diploma expired on the 31st August 2015 and a total of 251 ESHI Honorary Diplomas were granted. Please note, as described below, the EFI Education Committee and the European Board for Transplant Immunology (EBTI) have decided that in the future, evidence of participation in a CME/CPD scheme will be required to ensure ESHI Diploma Fellows have maintained their H&I knowledge and experience sufficiently to retain certification.

At the Venice EFI meeting at 10:20 on Thursday 10th May there will be a Meet the Expert session on the ESHI Diploma and the new CME/CPD scheme. This will be facilitated by Dr David Turner, Chair of the EFI Education Committee and Dr Marco Andreani, Chair of the European Board for Transplant Immunology. Please feel free to join us to hear about train-

ing, preparing for the ESHI Diploma exam and about how the CME/CPD scheme will be a requirement to maintain ESHI certification in the future.

EFI Continued Medical Education (CME) / Continued Professional Development (CPD): A pilot scheme for 2018.

The EFI Education Committee (EDC) has established a pilot EFI CME-CPD scheme to allow members to record professional activities which help them to retain their knowledge and skills in the field of H&I. In some countries such schemes already exist, but the new EFI scheme is aimed at members who have no other formal mechanism for recording CME/CPD events. **For those members who hold the ESHI Diploma (either Honorary or by examination) providing evidence of ongoing CME/CPD, either from a local recognised scheme or via this new EFI scheme, will be a mandatory requirement in the future to retain certification.** Also, the recording of training and development events in this EFI scheme will be accepted for EFI Accreditation purposes. The pilot EFI CME-CPD scheme has 31 registered participants, 24 of which are ESHI Diploma holders and it is not too late for members to register. Details on the scheme and access to the simple spreadsheet for recording CME-CPD activity are available in the EFI Education Committee area of the EFI website (<https://www.efi-web.org/efi-committees/education-committee/efi-cmecpd-scheme.html>). Anyone wishing to undertake the pilot scheme must download the spreadsheet and send a completed copy of the 'front page' worksheet to Sandra van Hensbergen at the EFI Office (ajvanhensbergen@lumc.nl) to register. At the end of 2018 the EDC will review the scheme, its ease of use and how many members have participated and hopefully launch a full scheme in 2019. At the moment participation will be free to EFI members, although in the future a small fee may be required for the re-issue of updated ESHI Diploma certificates.

EFI Education and Training Bursaries

Applications for Education and Training Bursaries to promote training in the field of H&I by enabling visits to other laboratories, are now being received four times each year. The next deadline for applications is 1st May 2018 for travel in July-Sept 2018. Details of the process and the application form are available on the EFI website bursaries page <http://www.efi-web.org/bursaries.html>.



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ASSOCIATED MEETINGS

Tuesday 8 May 2018

CASINÒ ROOM - PALAZZO CASINÒ 1 FLOOR

8:30-9:30 EBTI Assembly Meeting

Chairperson: Marco Andreani

11:30-18:30 IBMDR Meeting

Chairperson: Nicoletta Sacchi

BUY ROOM - PALAZZO CASINÒ 2 FLOOR

09:00-12:00 ESHI diploma examination

Chairperson: David Turner

FOYER - PALAZZO CINEMA

9:30-16:30 Accreditation Inspectors Workshop

Chairperson: Andrea Harmer

Wednesday 9 May 2018

AMICI ROOM - PALAZZO CASINÒ 2 FLOOR

8:30-16:00 External Proficiency Testing Committee

Chairperson: Falko Heinemann

MANGANO ROOM - PALAZZO CASINÒ 2 FLOOR

8:30-16:30 Executive Committee Meeting

Chairperson: Elissaveta Naumova

ROSSI DRAGO ROOM - PALAZZO CASINÒ 2 FLOOR

8:30-16:00 Standards Committee Meeting

Chairperson: Juha Peräsaari

MARTINELLI ROOM - PALAZZO CASINÒ 2 FLOOR

9:00-16:30 Accreditation Commissioners' Meeting

Chairperson: Andrea Harmer

BUY ROOM - PALAZZO CASINÒ 2 FLOOR

13:30-17:00 Education Committee

Chairperson: David Turner

CASINÒ ROOM - PALAZZO CASINÒ 1 FLOOR

14:00-15:00 Population Genetics Working Group (close meeting)

Chairperson: Katharina Fleischhauer

15:00-16:30 Open Meeting of the Population Genetics Working Group

Chairperson: Alicia Sanchez-Mazas

Thursday 10 May 2018

BUY ROOM - PALAZZO CASINÒ 2 FLOOR

10:00-12:00 Scientific Committee Meeting

Chairperson: Katharina Fleischhauer

MARTINELLI ROOM - PALAZZO CASINÒ 2 FLOOR

12:15-14:30 Executive Committee and Co-ordinators Meeting

Chairperson: Elissaveta Naumova

Friday 11 May 2018

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

18.00-19.30 EFI General Assembly

PROGRAMME

Wednesday 9 May 2018

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

9:00-16:30 AIBT ANNUAL MEETING

*Please note that the official language of the AIBT Meeting will be Italian.**No simultaneous translation will be provided.*

AUDITORIUM - PALAZZO CINEMA

OPENING CEREMONY

17:30-18:00 Welcome Addresses

Valeria Miotti, Carlo Carcassi, Antonio Amoroso, Elissaveta Naumova, Alessandro Nanni Costa

18:00-18:30 In memory of Jon van Rood

Frans H.J. Claas

18:30-18:55 Julia Bodmer Award

Katharina Fleischhauer

18:55-19:00 HLA Award

Steven G.E. Marsh

19:00-19:30 Ceppellini Lecture

Elissaveta Naumova

19:30-20:00 Sounds from Italy

Classic and Cinema

20:00-21:30 Welcome Reception

Thursday 10 May 2018

AUDITORIUM - PALAZZO CINEMA

PLENARY SESSION 1

Governance of immune-modulation in transplantation

Chairpersons: Frans H.J. Claas, Silvia Gregori

- 8:30-9:00 Mesenchymal stem cells in transplantation
Katarina K. Le Blanc
- 9:00-9:30 Exosome
Adrian E. Morelli
- 9:30-10:00 Innate lymphoid cells
Hergen Spits

PARALLEL SESSIONS

CASINÒ ROOM - PALAZZO CASINÒ 1 FLOOR

- 10:20-11:50 **Meet the Expert 1**
ESHI Diploma
Marco Andreani, David Turner
- Overview of the ESHI Diploma
David Turner
 - Preparation for the Application and Examination
Marco Andreani
 - New EFI CME/CPD scheme
David Turner
 - Q&A

MOSAICI 1 ROOM - PALAZZO CASINÒ 3 FLOOR

- 10:20-11:50 **Oral Session 1**
MHC Evolution - Anthropology -
Population Genetics (O9-O16)
- Chairpersons: Pierre-Antoine Gourraud, Alicia Sanchez-Mazas

MOSAICI 2 ROOM - PALAZZO CASINÒ 3 FLOOR

- 10:20-11:50 **Oral Session 2**
New Technologies and Bioinformatics
(O17-O24)
- Chairpersons: Emanuele Cozzi, Eric Spierings

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

- 10:20-11:50 **Teaching Session 1**
How NGS technology is changing the
way of HLA typing
Joannis Mytilineos, Sarah Patricia Peacock
- The whole gene: Application and implementation of whole gene sequencing in the clinical lab
Katy Latham

- NGS in a Transplant Center: a French experience
Béatrice Bardy
- Sequencing with nanopores: current status and near future potential
Vineeth Surendranath
- General discussion & close

LUNCHEON SESSIONS

CASINÒ ROOM - PALAZZO CASINÒ 1 FLOOR

- 12:00-13:00 *Luncheon Session CareDx*

MOSAICI 2 ROOM - PALAZZO CASINÒ 3 FLOOR

- 12:00-13:00 *Luncheon Session - GenDx*

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

- 12:00-13:00 *Luncheon Session - One Lambda*

CASINÒ ROOM - PALAZZO CASINÒ 1 FLOOR

- 13:30-14:30 *Luncheon Session - Immucor*

MOSAICI 2 ROOM - PALAZZO CASINÒ 3 FLOOR

- 13:30-14:30 *Luncheon Session - Omixon*

PARALLEL SESSIONS

CASINÒ ROOM - PALAZZO CASINÒ 1 FLOOR

- 14:40-16:10 **Meet the Expert 2**
EPT External proficiency testing
Falko Heinemann
- Extending the Spectrum of EPT in H&I
 - EPT in H&I: From History to New Developments
 - Organization of EPT: Schemes, Workshops and Inter-Laboratory Exchanges
 - Specialist EPT Schemes: HNA, HPA, mHAg and KIR
 - The Impact of New Technology on EPT: Next Generation Sequencing and Single Antigen Bead tests - 'result based' or 'method based' assessment?

MOSAICI 1 ROOM - PALAZZO CASINÒ 3 FLOOR

- 14:40-16:10 **Oral Session 3**
Immunotherapy - Gene Therapy -
Cellular Therapy (O25-O32)
- Chairpersons: Rainer Blasczyk, Mats Bengtsson

Thursday 10 May 2018

MOSAICI 2 ROOM - PALAZZO CASINÒ 3 FLOOR

14:40-16:10 Oral Session 4
Haematopoietic Stem Cell
Transplantation (O33-O40)

Chairpersons: Manuela Testi, Jean Villard

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

- 14:40-16:10 Teaching Session 2
Clinical impact of de-novo
HLA antibodies in solid organ
transplantation
Antonina Piazza, David Turner
- The clinical relevance of de novo HLA antibodies in renal transplantation
Antonina Piazza
 - The clinical relevance of de novo HLA antibodies in heart transplantation
Martin Howell
 - The clinical relevance of de novo HLA antibodies in pancreas and islet transplantation
David Turner
 - Q&A

AUDITORIUM - PALAZZO CINEMA

PLENARY SESSION 2 Solid Organ Transplantation

Chairpersons: Antonio Amoroso, Joannis Mytilineos

- 16:30-17:00 T regulatory cell based therapy in promoting
tolerance solid organ transplantation
Giovanna Lombardi
- 17:00-17:30 Desensitization in SOT
Christophe M.F. Legendre
- 17:30-18:00 Novel Biomarkers for allograft rejection in
SOT
Minnie M. Sarwal

PALAZZO CASINÒ 3 FLOOR

18:00-19:30 Poster Session (Wine&Cheese)

Solid Organ Transplantation	P1-P70
Haematopoietic Stem Cell Transplantation	P71-P115
Immunotherapy, Gene Therapy & Cellular Therapy	P116-P117
Bioinformatics	P118-P122
New Technologies	P123-P147
MHC Evolution, Anthropology & Population Genetics	P148-P194
NK & Non-MHC	P195-P206

Reproduction, Autoimmunity,
Infection & Cancer

P207-P251

Miscellaneous

P252-P261

Friday 11 May 2018

AUDITORIUM - PALAZZO CINEMA

PLENARY SESSION 3 HSCT Current clinical perspectives

Chairpersons: Luca Vago, Lotte Wieten

- 8:30-9:00 Haplo settings or Impact of non shared
haplotype on haplotransplant
Leonido Luznik
- 9:00-9:30 Adoptive Immunotherapies in HSCT
Chiara Bonini
- 9:30-10:00 Tregs in HSCT
Silvia Gregori

PARALLEL SESSIONS

MOSAICI 1 ROOM - PALAZZO CASINÒ 3 FLOOR

10:20-11:50 Oral Session 5
Solid Organ Transplantation (O41-O48)

Chairpersons: Franco Papola, Dave L. Roelen

MOSAICI 2 ROOM - PALAZZO CASINÒ 3 FLOOR

10:20-11:50 Oral Session 6
NK and Miscellaneous (O49-O56)

Chairpersons: Benedetta Mazzi, Caner Süsal

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

- 10:20-11:50 Teaching Session 3
Tools for a successful HSCT: evaluation
of HLA allele frequencies, anti-HLA
antibodies, structural and expression
models for permissive mismatches
Marcelo A. Fernández-Viña,
Katharina Fleischhauer
- Allele and haplotype frequencies: How variation affects donor searches
 - Anti-HLA antibodies: Role of DSA in HLA mismatched transplantation
 - Coding and non-coding HLA variation: Relationship between T-cell epitopes and HLA expression levels for permissive mismatches in HSCT

Friday 11 May 2018

LUNCHEON SESSIONS

MOSAICI 1 ROOM - PALAZZO CASINÒ 3 FLOOR

12:00-13:00 *Luncheon Session - Bag Healthcare*

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

12:00-13:00 *Luncheon Session - One Lambda*

MOSAICI 2 ROOM - PALAZZO CASINÒ 3 FLOOR

13:30-14:30 *Luncheon Session - Histogenetics*

PARALLEL SESSIONS

AUDITORIUM - PALAZZO CINEMA

SPECIAL JOINT SESSION WMDA and EFI

Chairpersons: Lydia Foeken, Nicoletta Sacchi, Elissaveta Naumova

14:40-15:10 Past, Present and future of unrelated Donor registries
Lydia Foeken

15:10-15:40 Pharma-economics of CB banking in the haplo era
Sergio Luis Querol-Giner

15:40-16:10 How to choose the best unrelated HSC donor?
Carolyn Katovich Hurley

MOSAICI 1 ROOM - PALAZZO CASINÒ 3 FLOOR

14:40-16:10 **Oral Session 7**
Reproduction, Autoimmunity, Infection & Cancer (O57-O64)

Chairpersons: Andrea Bontadini, Antonio Martinho

PERLA ROOM - PALAZZO CASINÒ 1 FLOOR

14:40-16:10 **Teaching Session 4**
How to prepare for an inspection: demonstrating how quality standards are met

Andrea Harmer, Luca Mascaretti

Presenters: Milena Ivanova, Christien Voorter

- Preparing for Packet A and Packet C inspection
- Common deficiencies
- How to meet molecular testing and main quality management standards
- Use of the accreditation software
- Q&A and best practices

AUDITORIUM - PALAZZO CINEMA

PLENARY SESSION 4

Immunogenetics beyond HLA

Chairpersons: Marcel G.J. Tilanus, John Trowsdale

16:30-17:00 Immunogenetics in Autoimmunity
Francesco Cucca

17:00-17:30 Epigenetic reprogramming in HSCT
Angelo Lombardo

17:30-18:00 GWAS in Multiple Sclerosis
Stephen James Sawcer

Saturday 12 May 2018

AUDITORIUM - PALAZZO CINEMA

8:30-10:00 **Best Abstract Session (O1-O8)**

Chairpersons: Katharina Fleischhauer, Luca Mascaretti

10:00-10:30 **17th and 18th IHW reports**

The 17th International HLA & Immunogenetics Workshop 2017
Marcelo A. Fernández-Viña

The 18th International HLA & Immunogenetics Workshop 2021
Eric Spierings

PLENARY SESSION 5

New Frontiers in Immunogenetics

Chairpersons: Elissaveta Naumova, David Turner

10:50-11:20 Single Cell Technologies
Ido Amit

11:20-11:50 Immunoepitome
Markus Löffler

11:50-12:20 Neoantigens in Cancer Immunotherapy
Catherine Ju-Ying Wu

CLOSING CEREMONY

Chairpersons: Valeria Miotti, Elissaveta Naumova

12:20-12:50 Closing Lecture

Chairpersons: Carlo Carcassi, Valeria Miotti

Leonardo da Vinci: the prototype of Art & Science man
Pietro Cesare Marani

12:50-13:00 Jon van Rood Award and Best Abstract Awards

Committee Chair: Frans H.J. Claas

13:00-13:10 Best Poster Awards

Committee: Marco Andreani, Carlo Carcassi, Luca Mascaretti, Sandra Tafulo, Hien Tran

13:20-13:30 Closing Remarks



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REPORT ON THE ANNUAL EFI REGION 8 & BALKAN EPT MEETING IN ATHENS - GREECE

On January 27th 2018, “Evangelismos” Hospital in Athens - Greece hosted the Annual EFI Region 8 & Balkan EPT Meeting, organized by Dr Katerina Tarassi, under the auspices of Hellenic (Greek) Society of Immunology (HSI). The Meeting was attended by 160 participants from 19 countries - not only from Region 8 but also from other European Countries, Middle East and even from the USA - bringing together specialists and experts in the field of Immunogenetics and Transplantation. A total of 11 speakers from Region 8 (Bulgaria, Turkey and Israel) as well as from Germany, Italy, Poland, Spain and USA accepted the invitation to share their knowledge and experience with the audience. We were also honoured by the presence of the EFI President Prof Elissaveta Naumova, the EFI President-Elect Dr Joannis Mytilineos, as well as the EFI ex-President Prof Ilias Doxiadis.

The Scientific Program, approved by the EFI Educational Committee, was scheduled in 5 Sessions (including 2 Abstracts Sessions) and 2 Special Lectures.

The Meeting started at 9 am with welcome addresses by Dr Katerina Tarassi (President of the Organizing Committee), Prof Elissaveta Naumova (EFI President) as well as Dr Alexandra Tsirogianni (President of HSI).

The first Session, chaired by Dr Katerina Tarassi (Greece) and Dr Aliki Iniotaki (Greece) was dedicated to Solid Organ Transplantation. The first speaker Prof Ilias Doxiadis (Germany) thoroughly presented the role of HLA matching at the epitope-level in correlation with the development of donor-specific antibodies as well as rejection incidence and allograft outcome. The next presenter Dr Eduard Palou (Spain), Member of the Experts Committee of the Spanish Kidney Paired Exchange (KPD) Program, analysed in detail the KPD programs worldwide, as an alternative solution for patients who have a living and willing donor but they cannot receive the graft.

The first Special Lecture, chaired by Prof Catherine Stavropoulos-Giokas (Greece) and Dr Joannis Mytilineos



(Germany), was presented by Prof Dimitris Monos (Professor of Pathology and Laboratory Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, USA), who analysed the emerging role of HLA high-resolution typing, especially by NGS technology, in Solid Organ Transplantation.

The second Session, chaired by Prof E. Naumova (Bulgaria) and Dr Marigoula Varla-Leftherioti (Greece) was dedicated to Hematopoietic Stem Cell Transplantation (HSCT). It was opened by the presentation of Dr J. Mytilineos, who reviewed the significance of matching for classical and non-classical HLA in HSCT outcome. The Session continued with 2 more presentations by Prof E. Naumova, focusing in KIR genes and their impact on HSCT outcome and by Ass Prof Milena Ivanova (Bulgaria) analysing the potential role of NGS technology, as a new tool in the field of HLA and other genes typing, with application in patients with hematologic malignancies.

During the lunch break, the participants had the opportunity to enjoy the view and the sunny weather from the veranda of “Evangelismos” Hospital. The second special lecture, chaired by Dr. Maria Spyropoulou-Vlachou (Greece) and Dr Paul Costeas (Cyprus), followed. It was a very interesting presentation by Dr Marco Andreani from Italy (Member of the EFI Population Genet-

ics core Group) on the catalogue of Common and Well-Documented (CWD) HLA alleles in Europe established by EFI, that provides new insights into European population genetics and will be a very useful tool for tissue-typing laboratories in and beyond Europe.

Seventeen free communications from 9 countries were divided into two Sessions. The first Abstract Session, moderated by Dr Amal Bishara (Israel) and Prof Svetlana Vojvodić (Serbia), was dedicated to Solid Organ and HSC Transplantation, whereas the second one, moderated by Dr Monica Dutescu (Romania) and Dr Nikki Constantinidou (Greece) included several issues (population genetics, disease associations, new techniques, EPT programs etc).

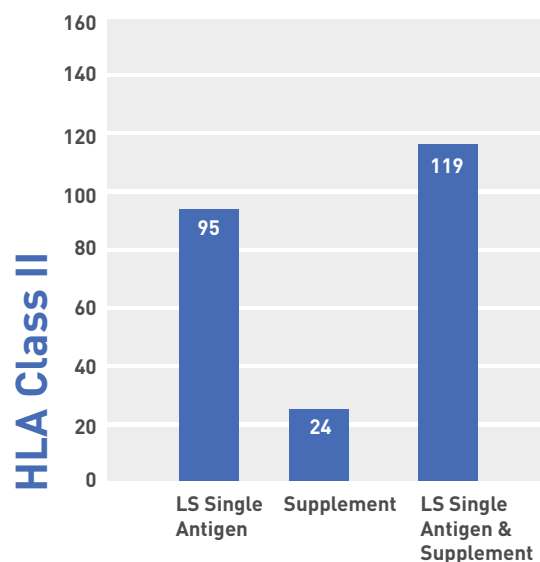
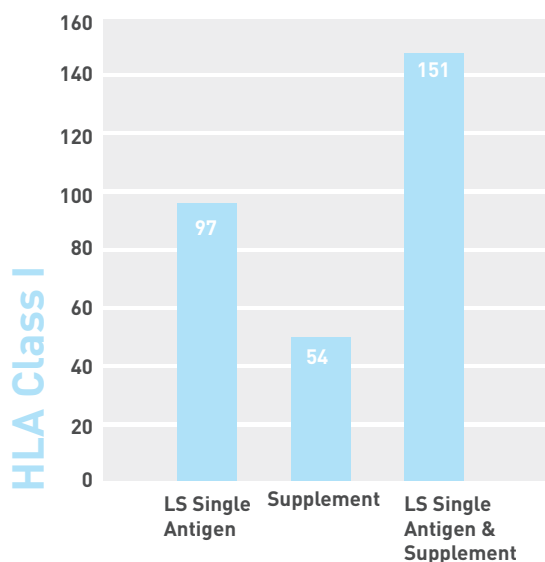
After a short coffee break, the 5th Session on EFI Accreditation Procedure and EPT Programs was chaired by Dr Chryssa Papasteriades (Greece) and Prof Fatma Oguz (Turkey). It started with the two EFI Region 8 Commissioners, Dr A. Bishara and Ass Prof M. Ivanova, who reviewed the current status in the Region. Subsequently, the two Balkan EPT providers, Prof Fatma Oguz (Turkey) and Prof Anastassia Mihaylova (Bulgaria) presented the latest programs (2017), analysing and discussing the relevant results. The Session ended with Prof. Dr Katarzyna Bogunia-Kubik (Poland) presenting the EFI Region 5 EPT Program and suggesting a very

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promising future collaboration between Region 5 & 8, followed by a general discussion with the participants.

The Scientific Program finished at around 7 pm. Many thanks both to the speakers for their scientific presentations and to the audience for their active participation, as well as to EFI for

its financial support were addressed. It was also mentioned that the contribution of the Sponsors was very valuable and without it, this Meeting would not have taken place.

After many hours of intense Scientific Program, all the participants were invited to a Gala Dinner, tasting Greek

food and wine, enjoying good music and dance and spending time with friends and colleagues in a traditional Restaurant (Taverna) in the "Plaka" area of Athens. The next morning, the attendees had the opportunity to participate in a guided visit in "Benaki" Museum, which houses a unique exhibition on Greek culture spanning from prehistory to the 20th century, in one of the most beautiful neoclassical-style buildings in Athens.

As always, this Meeting was an excellent occasion for continuing high-level education, thanks to the distinguished invited speakers. But most importantly, it offered the opportunity to EFI Region 8 Labs, to present their achievements and to exchange experience with colleagues.

*Dr Katerina Tarassi, MD, PhD
Director
Immunology-Histocompatibility Dept
"Evangelismos" Hospital
Athens-Greece*



BRIEF REPORT OF THE 12TH EAST-WEST IMMUNOGENETICS CONFERENCE

City Conference Center, Prague, Czech Republic, 8-9.3. 2018

Antonij Slavcev, Gottfried Fischer

Dept. Immunogenetics, IKEM, Prague, Dept. Bloodgroup Serology, AKH, Vienna

The idea for organizing the East-West conferences (EWIC) was born, as far as I remember, in 2004, when I was attending a Congress of the Transplantation Society in Vienna and Gottfried and I met in his laboratory in the AKH. Gottfried suggested that we should make an effort to revive the Central European Transplant (CET) conferences, which were unfortunately stopped after the last meeting in Bratislava in 1999. This really turned out to be a great initiative. After the surprising success of the first EWIC in 2006, together with colleagues from the region, we held three additional annual conferences in a row in Prague (2007-2009). Then other Central European cities followed: Pilsen (2010), Olomouc (2012 and 2017), Vienna (2014), Ljubljana (2015) and Wroclaw (2016).

This year's EWIC was held in Prague, Czech Republic. Fortunately, not only

leading experts in the field of immunogenetics, but also outstanding clinicians, working in the field of organ transplantation accepted our invitation to give lectures at the meeting. More than 110 participants from various regions, besides Central Europe, but also from the UK, Russia, Germany, Turkey, Saudi Arabia and other countries attended. The presentations were divided into four general topics – organ transplantation, stem cell transplantation, external proficiency testing and EFI matters (accreditation, etc.). Hereby we briefly cover just a few plenary talks given at the meeting. In the opening lecture, Marcello Fernandez-Vina (photo) discussed the results of the 17th International HLA and Immunogenetics Workshop, Pacific Grove, California, 6-9.9.2017. There were six Workshop components, with 279 delegates from 39 countries attending. Just in the frame of the Component HLA

typing by NGS, more than 2.3 million samples were tested (including 9362 unrelated individuals). The amount of information obtained concerning allele diversity and evolution, new haplotypes, etc. is extremely intriguing and by the way, overwhelming. We believe that discussion of the results of this major international effort deserves a full-length article in the EFI newsletter. Then followed the Plenary session on organ transplantation, where several first-rate presentations were included. Sebastiaan Heide (ETRL, Leiden) gave a lecture on Epitope matching in organ transplantation. This new approach in organ allocation has a great potential; it seems that matching strategies based on epitopes might prevent de novo antibody formation and facilitate the prediction of acceptable mismatches in highly sensitized patients. An unresolved question (still) remains how to perform rapid high-resolution



HLA typing of donors for the deceased organ transplant program. Caner Süsal (Dept. of Transplantation Immunology, Heidelberg University), reported on CTS data concerning the impact of underimmunosuppression on kidney allograft survival. Results of the CTS study suggest that in patients with stable kidney function, changing levels of tacrolimus maybe associated with impaired graft survival, possibly due to de novo DSA development. The presentation of Ondrej Viklicky (Clinic of nephrology, IKEM, Prague) discussed the outcome of HLA-incompatible transplantations in IKEM. Due to limited number of kidney offers, quite a few pre-sensitized patients may receive kidney transplants, against which they have pre-formed antibodies detectable by Luminex (negative complement-dependent cytotoxic test). Results of the clinic of nephrology suggest that pre-transplant desensitization and application of antithymocyte globulin together with IVIG in recipients with donor-specific antibodies (DSA) with MFI 1000-5000 is associated with good graft survival, while transplantation of patients with DSA with MFI >5000 should be accepted with caution.

The plenary session on Stem cell registries and chimerism was chaired by

Marco Andreani, Frantisek Mrazek and Milena Vrana. Marco Andreani (Laboratory of Immunogenetics and Transplant Biology – IME Foundation Tor Vergata, Rome), gave an excellent lecture on the study of engraftment after hematopoietic stem cell transplantation. Recent studies have shown that regulatory T cells induced by the establishment of mixed chimerism are involved in the maintenance of immune tolerance. Analogously, regulatory T cells play an important role in maintaining immune tolerance in patients who, after HSCT for defined inherited disorders, develop a status of persistent mixed chimerism. During the session on Immunogenetics, anthropology, disease associations, chaired by Martin Petrek, Zorana Grubic and Blanka Vidan-Jeras, Elissaveta Naumova (Department of Clinical Immunology, University Hospital “Alexandrovska”, Sofia), presented results of the “Immunogenetics of Ageing” component of the 17th IHWS. NGS-based results confirm HLA association with longevity, previously established in different populations. Positive association with healthy ageing is observed for DRB1*11:04 haplotypes, however larger cohorts may be needed in order to estimate reliably extended haplotypes. This suggests that survival and longevity might be associated with

selection of HLA alleles and haplotypes conferring disease resistance or susceptibility. Frantisek Mrazek (HLA laboratory, Univeristy Palacky, Olomouc), reported on the search for non-HLA / non-KIR gene variants which are associated with allogeneic HSCT outcome. Significant effort has been made for the identification of genes related with the outcome of allogeneic HSCT via candidate gene (CGS) and genome-wide association studies (GWAS). Importantly, for various reasons, only a small proportion of the original observations of CGS have been replicated. GWAS seem to be a good approach in the search for the missing part of non-HLA genomics of the allogeneic HSCT outcome, however, GWAS data are limited in comparison with those obtained for the study of complex diseases.

In conclusion, we do hope participants found the East-West Immunogenetics conference worth attending and stimulating. We are looking forward to the next East-West meeting to be held in Zagreb in 2019.

Acknowledgement: The 12th EWIC in Prague was organized under the auspices of EFI. The essential financial support of all contributors is gratefully appreciated.

REPORT ON BARCELONA “VII HISTOCOMPATIBILITY FROM LABORATORY TO CLINICS, HL2C” COURSE



The VII course “Histocompatibility from Laboratory to Clinics, HL2C” took place in Barcelona (Spain) on 6th–9th March 2018. Twenty-six participants

from five different Spanish speaking countries attended the course. Talks were designed to provide updates on the field of transplantation immunology

from the laboratory perspective and to advice clinicians on how to correctly interpret laboratory results. The course was also helpful in providing continuous education to technical personnel of H&I laboratories.

Speakers included experts in stem cell transplantation, organ procurement and exchange policies, ABO incompatible transplantation, NGS, etc. Other talks on immunological risk assessment pre and post-transplant analysing real patient cases were very well received.

The bench work part gave participants the opportunity to share among them the normal technical flow as well as some small tricks to obtain the best results, and to detect and solve real day to day problems.

We have the hope of having attained the main aim of the course sharing results and clinical information between laboratory specialists and clinicians.

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REPORT ON AN EDUCATIONAL VISIT TO THE DEPARTMENT FOR BLOOD GROUP SEROLOGY AND TRANSFUSION MEDICINE IN VIENNA

Iva Kratochvilova

Department of Immunogenetics, Institute for Clinical and Experimental Medicine (IKEM), Prague, CZ

Host Institute: Department for Blood Group Serology and transfusion Medicine, Vienna General Hospital (AKH), Vienna, AU

Firstly, I would like to thank the EFI Education Committee for the bursary that gave me the opportunity for an education visit to the immunogenetics laboratory in Vienna. I would also like to thank Gottfried Fischer, the director, and Ingrid Faé, the co-director of the HLA laboratory, for accepting me and for arranging my training program as well as all the generous staff.

The aim of my educational stay in Vienna was to concentrate on the scientific collaboration between the HLA laboratories in Prague and Vienna concerning especially the kidney paired donation program. We focused particularly on the methods used for antibody detection and specification, i.e. the flow cytometry crossmatch (FCXM) test and Luminex assay. The main goal of the collaboration is to make these methods closely comparable. The second purpose of my visit to the HLA laboratory in Vienna was to get acquainted with the FCXM test with pronase treatment - as it is planned to introduce this method at the Department of Immunogenetics, IKEM.

The Kidney Paired Exchange Program (KPEP) in the Institute for Clinical and Experimental Medicine (IKEM) was started in 2011. Since then, 60 transplants have been performed^[1]. The national Austrian KPEP started in 2013 with four participating transplant centers coordinated by the Medical University of Vienna. Between 2013 - 2016, 11 transplants were performed. In 2016, the cooperation between the transplantation centers in Prague and Vienna was officially launched. As a success of our collaboration, the first international kidney exchange in Europe was performed in September 2016^[2].

I started my training program in the antibody lab with the flow cytometry crossmatch (FCXM) protocol with pronase treatment. The Flow cytometry crossmatch as a cell base method



is (unfortunately) influenced by the administered immunosuppression, for example, antibody application – ATG, Rituximab, etc. Pronase treatment of lymphocytes is used to reduce non-specific binding of immunoglobulins to B lymphocytes and monocytes by their Fc receptors. My mentor Daniela Koren prepared the FCXM protocol in English for me and we went through the whole process step by step. We discussed in detail the dilution of pronase enzyme, dilution of monoclonal antibodies, the positive and negative controls. I gained practical experience in performing FCXM with pronase from the start to the end of the process including preparing the cells, dilution, measurement and interpretation of results. In the meantime we discussed the performance of the Luminex assay and the evaluation of results.

In conclusion, the education visit was a great opportunity to learn new methods and gain new knowledge and experience. I was pleased with the opportunity to visit an excellent laboratory with outstanding facilities. I would like to thank all the laboratory team for their kind assistance. Big thank belongs to Daniela Koren for her enthusiasm and patience with answering my numerous questions and also for sharing her the-

oretical and practical knowledge with me. I got lots of useful advice regarding the use of monoclonal antibodies, treatment of cells and evaluation of Luminex results. Besides the education visit, I enjoyed my stay in Vienna in general, especially its famous cuisine.

Acknowledgement: The stay of Iva Kratochvilova in Vienna was supported by EFI educational scholarship.

References:

[1] Fronek J, Janousek L, Marada T, Slavickova H, Zamecnikova R, Chromy P, Viklicky O. "Paired Kidney "Exchange" program – is there potential for European cooperation? Single Czech institution experience with 26 paired transplants since 2011. American Journal of Transplantation, 2014; 14 (S3): 614

[2] Böhmig GA, Fronek J, Slavcev A, Fischer GF, Berlakovich G, Viklicky O. Czech - Austrian kidney paired donation: first European cross-border living donor kidney exchange. Transpl Int. 2017; 30(6):638-639.

Please visit the official EFI website at www.efi-web.org to get the latest information on EFI. This includes the agenda for upcoming events, a repository of EFI Newsletters, information on bursaries and awards, and many other resources.

In the member's area you can find abstracts, slides from educational sessions, and photos from previous EFI annual meetings, as well as a link to get full access HLA, the official journal of EFI.



Highlights

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Welcome to the EFI website

This site is dedicated to information relating to Histocompatibility and Immunogenetics (H&I). On this site you will find information relating to EFI and its work as well as a wide range of information on H&I.

HLA (previously Tissue Antigens) is the official journal of EFI. Free access to the journal is available to all EFI members on the "HLA Journal and Nomenclature Updates" page in the "Resources" section after using your EFI member username and password.



EFI Members have access to the "Members Only" section of the website. This contains meeting abstracts, teaching sessions and a searchable directory of all EFI members. Access is only available using the username and password.

Please note that it is advised to use Internet Explorer Version 10 or higher in order to make optimal use of the website.

Events



Basic Histocompatibility Educational Course

Location: Dubai, UAE



32nd European Immunogenetics and Histocompatibility Conference

Location: Venice, Italy

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EFI standards

EFI standards for Histocompatibility testing



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Open to all workers in the field of Immunogenetics and Histocompatibility



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Saddlebags: A software interface for submitting full-length HLA allele sequences to the EMBL-ENA nucleotide database.

Matern BM, Groeneweg M, Voorter CEM, Tilanus MGJ. HLA. 2018 Jan;91(1):29-35. doi: 10.1111/tan.13179. Highlights: the number of full length-sequenced HLA alleles is increasing exponentially over the last few years, and with it the need of user-friendly interfaces to accurately report them. In this study, the Authors present Saddlebags, a software to assist in the generation of new allele sequence submissions. Saddlebags permits to rapidly submit full length HLA sequences to the EMBL European Nucleotide Archive (EMBL-ENA), and the resulting metadata facilitates the subsequent submission to the IPD-IMGT/HLA database. Combining these steps into a pipeline reduces effort and minimizes errors for submitting laboratories. Saddlebags has been validated at Maastricht University Medical Center Transplantation Immunology Laboratory, where it is currently in use, and is freely available for the HLA community.

Microsatellite markers for evaluating the diversity of the natural killer complex and major histocompatibility complex genomic regions in domestic horses.

Horecky C, Horecka E, Futas J, Janova E, Horin P, Knoll A. HLA. 2018 Apr;91(4):271-279. doi: 10.1111/tan.13211. Highlights: the analysis of microsatellite markers is a cost-effective and simple methodology to estimate the genetic diversity of complex genomic regions in populations or species of interest. In this study the Authors present a panel of 15 microsatellite markers in the equine MHC region, distributed across the class I, II and III sub-regions, and 11 microsatellite markers in the NKC region, validating in a group of 65 horses their utility in recapitulating the genetic variation within the horse species. The panel of markers developed in this work will be valuable for future analyses of model horse populations, as well for studies of associations with selected diseases.

The HLA-G 14 bp insertion/deletion polymorphism and its association with soluble HLA-G levels in women with recurrent miscarriages.

Kalotra V, Lall M, Verma IC, Kaur A, Kaur A. HLA. 2018 Mar;91(3):167-174. doi: 10.1111/tan.13198. Highlights: the non-classical HLA Class I molecule HLA-G plays a major role in regulating immune interactions in a number of physiological and pathological conditions. In particular, it is known to be highly expressed in trophoblast cells, promoting fetal-maternal tolerance. In the present study, the authors investigate in a large cohort of women and in their partners the link between a common polymorphism in HLA-G, the relative protein serum levels, and the risk of experiencing recurrent miscarriages. The study evidences a significant correlation between HLA-G protein levels and miscarriages, but no direct association between the polymorphism and the risk of miscarriages.

Single molecule real-time DNA sequencing of HLA genes at ultra-high resolution from 126 International HLA and Immunogenetics Workshop cell lines.

Turner TR, Hayhurst JD, Hayward DR, Bultitude WP, Barker DJ, Robinson J, Madrigal JA, Mayor NP, Marsh SGE. HLA. 2018 Feb;91(2):88-101. doi: 10.1111/tan.13184. Highlights: during the course of the 10th International Histocompatibility Workshop a panel of 107 B-lymphoblastoid cell lines (B-LCLs) derived from individuals with different ethnicities was established to facilitate research in immunogenetics. In the present study, the authors employ cutting-edge sequencing technology to HLA type at ultra-high resolution 126 B-LCL, including the 107 Workshop cell lines. 96% of typed alleles were consistent with the typing available in the IPD-IMGT/HLA database, and in almost two third of the lines the typing resolution was improved as compared to the one previously available. Results from this work update and improve the value of an important resource for immunogenetists, which will continue to be a reference for numerous studies.

Resolving incomplete single nucleotide polymorphism tagging of HLA-DQ2.2 for coeliac disease genotyping using digital droplet PCR.

Hardy MY, Ontiveros N, Varney MD, Tye-Din JA. HLA. 2018 Apr;91(4):280-288. doi: 10.1111/tan.13219. Highlights: droplet digital PCR is a novel and promising technology that permits to amplify difficult and rare sequences, thanks to the fact that the reactions occur in small droplets where primers and probes are facilitated in encountering their template. In the present study, the authors employ this innovative methodology to improve the detection of HLA-DQ2.2, one of the known risk alleles for coeliac disease that is more difficult to discriminate by standard single nucleotide polymorphism-based genotyping. The authors validate this novel two-step approach, demonstrating that they can now more accurately identify individuals who are negative for all risk alleles, and thus highly unlikely to be affected by coeliac disease.

In addition, we would like to point the attention of the EFI newsletter readership to some excellent reviews recently published in HLA on the role of HLA molecules in drug hypersensitivity (January issue), on graft survival analysis (February issue), on the genetic history of African Sahelians (March issue) and on the role of non-classical HLA-G in the response to parasitic infections (April issue). Finally, starting from the February issue, a new category of articles has been included, named „Population Reports“ aimed to present population genetic results for HLA, KIR or related polymorphisms for human populations of any geographic area of the world. In the February issue of HLA an editorial from our Section Editor Alicia Sanchez-Mazas, presents the objective and guidelines for this new initiative.

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