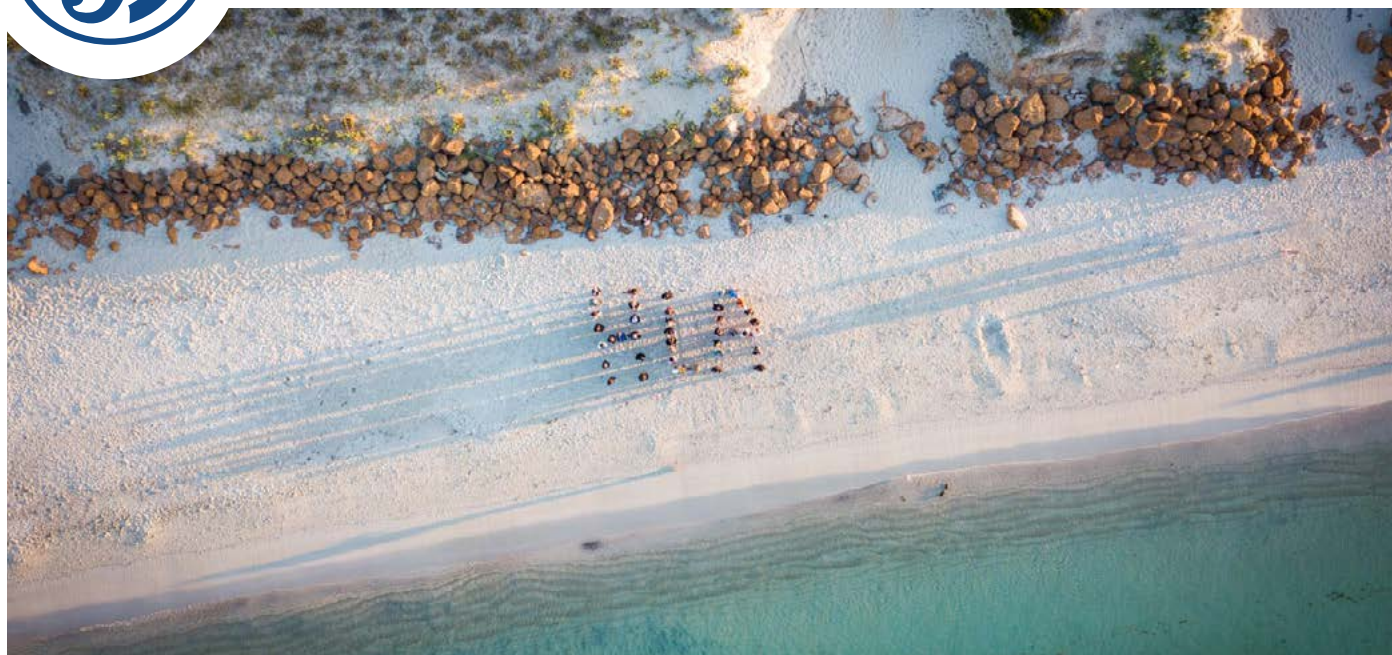




Newsletter



7

Report of the EFI Executive Committee Autumn meeting 2023

Last autumn, the EFI Executive Committee met in Leiden to discuss all matters EFI.

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Nominations for the EFI Executive Committee vacancies and the electronic election process

It is again time for the EFI membership to cast their votes. There are two vacancies for EFI Councillor and four candidates that applied.

23

Region 8 Balkan EPT meeting - a long-standing tradition

The EFI Region 8 & Balkan EPT meeting has a rich history of successful editions, which started in 1995 in Sofia, Bulgaria.

Report on the 17th International Summer School

This edition of the EFI Newsletter contains information on the upcoming elections, a report on the EFI Executive Committee meeting, a report on the very successful International Summerschool and lots more.



Dear EFI friends,

Since I last wrote to you in September (published in newsletter 101) a lot has happened. We have all been shocked by the horrific terrorist attacks within Israel and the resulting war in Gaza. My thoughts are with everyone that has been affected by these events, particularly our EFI members in Israel. We cannot truly imagine what they are having to endure.

As you all by now know, our EFI conference has been moved from Jerusalem to Geneva. I wish to thank everyone who offered support to host the EFI conference – it was so positive to receive the offers of help from various EFI members. We are very happy that our Treasurer,

Jean Villard and his colleague, Sylvie Ferrari-Lacraz, are organising our annual event. As I write, the scientific and social programme is at an advanced stage of organisation and we look forward to opening the registration webpages in the New Year.

In October, most of the EFI committees had their autumn face to face meetings. This is a very important time for the committee members to get together, review their activities and to make plans for the future. The Executive Committee met with the chairs for a full day during which the

continue on page 5

38th Annual HLA & Transplant Workshop

March 13-16, 2024 | Carlsbad, California

We are excited to invite you to our 38th Annual HLA and Transplant Workshop happening on March 13 – 16, 2024 at the Westin Carlsbad Resort & Spa in Carlsbad, California.

This workshop serves as a platform for directors, clinicians, and technologists to share cutting-edge research, engage in challenging discussions, and showcase innovative technologies. By fostering a dynamic exchange of knowledge and collaborations, we hope to accelerate the pace of innovation, with the goal of improving the lives of transplant patients around the globe.

Topics presented include:

- 2024 Paul I. Terasaki Antibody Award Lecture
- Post Transplant Monitoring Forum – Beyond Antibodies
- Autoreactive B Cells and Antibodies in Allotransplantation
- Hematopoietic Stem Cell Transplantation and Cellular Therapies
- In Celebration of One Lambda's 40-year Anniversary, a Discussion of the Evolution of the Modern Immunogenetics Laboratory
- Presentation of 5 selected Technologists Case Studies
- Featured Directors Abstract submissions

 Learn more at go.1lambda/2024hlaworkshop

Editor-in-chief

Sebastiaan Heidt

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EFI Executive Committee 2024**EFI President**

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EFI President-elect

M. Andreani (Italy)

EFI Secretary

D. Roelen (the Netherlands)

Deputy Secretary

K. Poulton (UK)

EFI Treasurer

J. Villard (Switzerland)

Deputy Treasurer

N. Vince (France)

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S. van Hensbergen (the Netherlands)

I. Abelman (the Netherlands)

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I.I.N. Doxiadis, G. Fischer, E. Naumova,
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From the editor's desk

I hope you all have had a great Christmas and a good start of the new year. Before you lies EFI Newsletter edition 102, which again is packed with information. Included is the report of the autumn meeting of the Executive Committee, as well as reports of the EFI committees, who work hard to keep EFI a relevant society.



As you all know, the EFI Annual Conference has been relocated to Geneva, Switzerland. The local organising committee led by Jean Villard together with the PCO Guarant are working hard to make this yet again a successful conference.

The Newsletter also includes a report on the 17th International Summer School which was held in the town of Busselton in the south west region of Western Australia. It is clear that the Summer School was a huge success and set a high standard for the upcoming Summer School which will be held in Merida, Mexico in 2025.

Once again it is election time for the EFI membership. There are vacancies for two Councillors on the EFI Executive Committee for which four candidates have applied. In this Newsletter the candidates introduce themselves. Please make sure to vote!

For now, I hope you enjoy reading the Newsletter, and look forward to your contributions to the next Newsletter.

Sebastiaan Heidt

Deadline for contributions to EFI Newsletter 103 is March 29, 2024.

Please send your contributions by e-mail to: efioffice@lumc.nl

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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:

M. Barthelmös, Aachen, Germany
E. Mohamed, Jacksonville, United States
A. Hedin, Borlänge, Sweden
A. Gaballa, Huddinge, Sweden
N. Richard, London, United Kingdom
N. Gouvea, Fortaleza, Brasil
T. Bakare, Liverpool, United Kingdom
N.M. Graça Vendeiro, Chêne-Bourg, Switzerland
S. Stadelmann, Chancy, Switzerland
V. Dinallo, Rome, Italy
M. Ciavarella, San Giovanni Rotondo, Italy
N. Suvajac, Milano, Italy
M. Macchiagodena, Casorate Primo, Italy
S. Reilman-van Cooten, Groningen, the Netherlands
L. Pham, Heidelberg, Germany
A.R. Ferreira, Lisboa, Portugal
O. Abade, Lisboa, Portugal
F. Alunni, Umbertide, Italy
S. Cheung, Amsterdam, the Netherlands



from the EFI President (continued)

activity and plans for each committee was presented and discussed. This year we welcomed Timo Olieslagers, as a representative of the 'EFI Young Professionals' working group. It was a positive experience for us and I hope also for Timo. It is important for all the committees to be aware of the needs of our members that are at the early stages of their careers and the Executive Committee encourages greater engagement between the committees and the EFI Young Professionals group to better plan our future activities. You can read the reports from each committee elsewhere in this newsletter.

The Executive Committee also spent a day reviewing our activities.

I am pleased to say we have finally embedded our Equity, Diversity and Inclusion (EDI) Action Plan (the EDI policy is available on the EFI website) within our regular agenda and I draw your attention to our preliminary "info-graphic", produced by Councillor Neema Mayor. This gives an overview of the current Executive Committee and also a snapshot of those members that responded to our 2023 membership survey. Need I mention again the need to engage more with our 'younger' members?

Our financial situation is always an important agenda item and we were all extremely pleased to receive the accounts from the successful Nantes meeting. Congratulations to Pierre-Antoine and his team, and also to Guarant our professional conference organisers for the positive income.

With regards to the administrative support available to EFI, an ongoing review of the EFI Central and Accreditation Offices and the workload of the EFI committees has led us to extend the contract for Ingrid Abelman who will now work solely for EFI, alongside Sandra van Hensbergen and Sonja Geelhoed.

Last month I was delighted to be one of the EFI faculty attending



the International Summer School (ISS). The other EFI faculty was Deb Sage, chair of the EFI Education Committee. The ISS takes place every year with the organising responsibility rotating amongst the four international histocompatibility and immunogenetics societies (EFI, ASHI, APHIA and ARSHI). This year the ISS was hosted by APHIA with Dianne De Santis from the Perth, Australia, H&I laboratory providing the excellent organisation. You can read Dianne's report elsewhere in this newsletter. The event was held in Busselton, Western Australia and comprised presentations by the faculty (from EFI, ASHI, APHIA and ARSHI); invited guests and the students, with opportunities to engage socially in this beautiful coastal region.

Thank you to Dianne and the local organising team and the professional conference organisers for the excellent planning and coordination of this event, and for making us all very welcome. Next year, ASHI will host the ISS from 14-17th April in Merida, the capital of the Mexican state of Yucatán. We look forward to hearing more details about this meeting. If you are interested in attending please look on the EFI website for information regarding bursary applications. Several of the ISS attendees also

attended the APHIA conference that took place in Perth the week following the ISS. This was also an excellent meeting, chaired by Lloyd D'Orsogna, (the EFI Julia Bodmer Award Winner 2011).

Within this newsletter you will find details of the candidates that have been nominated for the two Councillor positions which will become available at our next General Assembly. Thank you to those members that have applied. I encourage all members to participate in the elections which will take place in the New Year.

My congratulations are given to EFI Councillor, Sebastiaan Heidt, who received the Bernard Amos Distinguished Scientist Award at the ASHI conference in October. We also congratulate another EFI member, Cynthia Kramer for receiving an ASHI Abstract Scholar Award. Well done to both.

So we approach the end of 2023, and we look forward to the start of the New Year which I hope will bring you, your families and friends, good health, happiness and more than ever a peaceful 2024.

With best wishes
Ann-Margaret Little, EFI President



The 2023 ASHI Bernard Amos award



During the 49th annual meeting of the American Society for Histocompatibility and Immunogenetics (ASHI), dr. Sebastiaan Heidt was awarded the Bernard Amos Distinguished Scientist Award. In addition, dr. Cynthia Kramer received the ASHI Scholar Award for her submitted abstract.

The 49th ASHI annual meeting was held in San Antonio, USA, from October 16 to 20. During this meeting, dr. Sebastiaan Heidt, leader of the Transplant Immunology Research Group in the LUMC Immunology Department, received the Bernard Amos Distinguished Scientist Award.

This award was established in 2001 to honour a distinguished ASHI scientist, who like dr. Amos, has made significant contributions to the field of histocompatibility and immunogenetics.

The research of dr. Heidt focuses on HLA sensitization in the context of solid organ transplantation, with the aim to increase the chance of receiving a transplant and to maximize graft and patient survival. The Distinguished Scientist Award was handed out 22 times to date and dr. Heidt is the 3rd European awardee

During the same meeting, dr. Cynthia Kramer from the Transplant Immunology Research Group received the ASHI Scholar Award for her work on site-directed mutagenesis of HLA molecules for detailed analysis of the interaction between HLA-specific antibodies and target HLA molecules. This project is a collaboration with the research team of One Lambda Scientific.

Report of the EFI Executive Committee Autumn meeting 2023

The EFI Executive Committee (EC) had its second annual meeting of 2023 in Leiden in October. During this meeting members of the EC have ample time to discuss EFI business. The EFI EC, including the new councillors Sebastiaan Heidt, and Falko Heinemann, as well as the president elect Marco Andreani met with all the chairs of the various EFI committees the day before the EC meeting.

The EC discussed various items in detail including the memorandum of understanding (MOU) which we have with various other professional and scientific organisations and which outlines what to expect from both parties (for example with ESOT or ISHI).

EFI Office

Our secretaries from the EFI office announced that they are happy that Ingrid Abelman has joined their team to work for 32 hours a week. Ingrid will keep on working on projects such as ETHIQ but she will also be trained by Sonja in order to learn all the ins and outs of the accreditation program and how this is administered by Sonja.

EFI medals

The EC discussed and agreed upon the nominations received for the EFI medal. A discussion took place about where in the program of the annual meeting the medal ceremony should take place or whether we should do this outside the meeting. This discussion wasn't finished and will be continued in a later stage.

EFI elections

Four applications for the two Councillor positions were received from: Moshe Israeli (Israel), Emel Eksioglu-Demiralp (Turkey), Katerina Tarassi (Greece) and Sandra Tafulo (Portugal), of whom more information can be found in the current Newsletter. Elections for these positions are being organised.

EFI Finances

Our treasurer, Jean Villard, reviewed the budget and forecast for 2024. Membership fees and the EFI Newsletter has generated income above the level expected, with an excellent result from the Nantes conference. The Reimbursement policy was reviewed and approved. Bursaries for the 2024 annual meeting have been agreed upon for up to 10 for approved applications.

Equity, Diversity and Inclusion policy

Some decisions regarding Equity, Diversity and Inclusion (ED&I) were made: 1) the ED&I Policy will be placed on the EFI website. 2) The president is giving an annual update on ED&I and will report in the EFI Newsletter. 3) Bursary application procedures will be updated with an ED&I statement. 4) Review of the composition of the EFI EC Committee members is required and an ED&I statement now should be included on advertisements for committee vacancies.

EFI newsletter

The committee chairs were asked about ideas for the editorial board. Members of the Education Committee and EFI young professionals are invited to dedicate one member to join the editorial board. Based on the 2023 membership survey it was decided for the newsletter to go digital, which will start in this calendar year. A question will be included in the 2024 membership survey to ask what you would like to see in the digital newsletter. The idea is start with a simple digital version in PDF format and work from there.

EFI annual conferences

We look back on a very successful meeting which was held in Nantes. The upcoming meetings in Geneva (May 2024) and Prague (2025) have been discussed in the presence of representatives of the local organisers and that of Guarant. EFI has an agreement with Guarant to act as the Professional Conference Organiser for our EFI annual meetings for the next 4 years. The options for the location of the conference in 2026 were discussed, and a final decision will be made soon.

EFI bursaries

EFI Personal Bursaries are available for the annual EFI Conference to be held in Geneva, May 20-23 2024. Full details on how to apply for EFI personal bursaries are given on the EFI website on the Membership page in the document entitled "EFI Personal Bursaries".

Overall, the EC had a very productive and interactive weekend. The members of the EC and all the committees would collectively like to thank Sonja Geelhoed and Ingrid Abelman for the excellent organization of the meeting.

Kay Poulton and Dave Roelen, EFI Secretaries

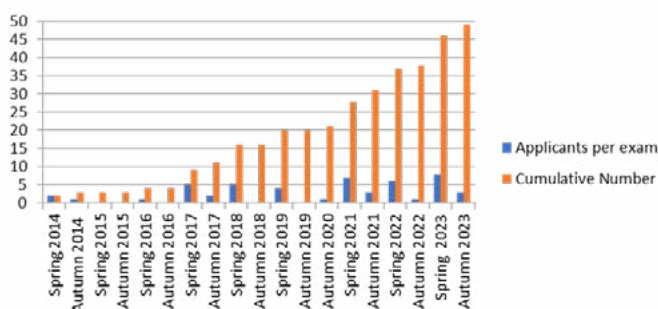


Update from the EFI Education Committee

The Education Committee met for an in-person meeting at the end of October 2023 in Leiden. A summary of the main areas of discussion is detailed below:

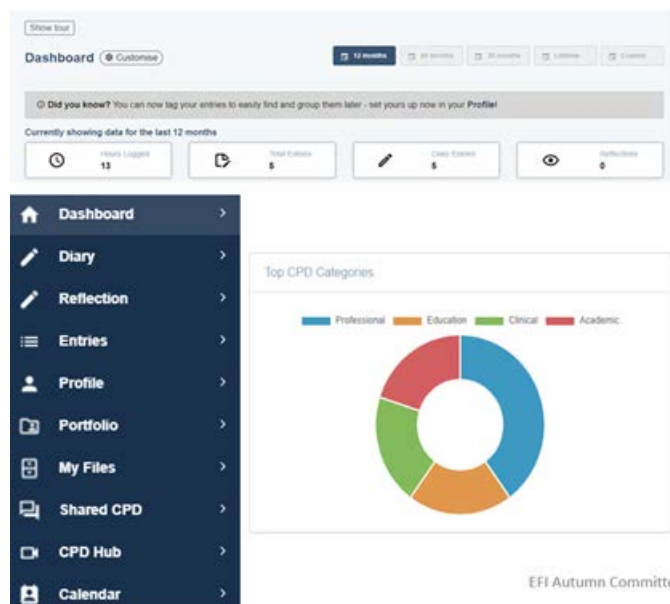
European Specialisation in H&I (ESHI) Diploma

The ESHI exams, aimed at EFI Directors/Co-Directors and those working towards this level, are offered at two time points each year; in Spring as an in person oral exam at the EFI annual conference, and in Autumn as an online oral exam. Details of the expected level of training and experience, the application process and the next round of exams can be found at the UEMS website (<https://uemssurg.org/surgicalspecialties/transplant-immunology/>). The next examinations will take place on the 19th May 2024 in Geneva, with an application deadline of 7th April 2024. Since the inception of the ESHI exam in 2014, 49 applicants have applied with 34 passing all modules and 4 passing at least one of the core modules (solid organ transplantation or HSCT).



EFI Continued Medical Education (CME) / Continued Professional Development (CPD)

The online system (supported by a UK company called CPDMe) will allow EFI members to record CME/CPD



activities. Final preparations are ongoing with members of the Education Committee, EFI Office & CPDMe, with the intention to launch the new system at the EFI Conference in Geneva. The system will be available via a link on the EFI website. Activities can be recorded under 4 different categories (Educational, Clinical, Professional or Academic) and self-reflective notes and other supporting documentation can be linked to each activity. A visual summary allows at a glance oversight of your CME/CPD activities, and an annual statement can be produced when required.

European Technical H&I Qualification (ETHIQ)

This training programme provides a qualification that gives a measure of both knowledge and technical competence in H&I. The scheme is for technical staff working in EFI accredited laboratories, with supervision given by senior staff in their own lab.

A more detailed article about the ETHIQ training course is included in the Newsletter and information about the training programme, registration process and deadlines can be accessed on the EFI website:

<https://efi-web.org/e-learning/ethiq-for-technical-staff>.

The portfolio is completed on-line, and the content of logbook is in English, although trainees can complete evidence in their own language. The final multiple-choice assessment is currently in English, however there are plans to translate this final assessment into other languages in 2024.

20 students were registered for the training programme in July 2023 from 7 different countries across Europe. We are planning 2 intakes each year and the registration deadlines will be 1st January and 1st July.



EFI/ASHI/APHIA/ARSHI International Summer School

The ISS in 2023 was hosted by APHIA and took place on 8th-11th November 2023 in Busselton, Western Australia. Further reports are included in the Newsletter, including one from Dayna Badaro (Cambridge, UK) the recipient of an EFI Education and Scientific Bursary award which

allowed her to visit the H&I laboratory in Perth and attend the ISS. The program covered clinical and laboratory aspects of solid organ transplantation, Haematopoietic Stem Cell Transplantation and blood transfusion. The EFI Faculty members were Ann-Margaret Little and Deborah Sage. Next year the ISS 2024 is hosted by ASHI.

EFI Education and Scientific Bursaries

Applications for Education and Training Bursaries up to a maximum of €1500 to promote training in the field of H&I by enabling visits to other laboratories, are now being received four times each year. Details of the closing dates, the process and the online application form are available on the EFI website bursaries page <http://www.efi-web.org/bursaries.html>.

e-Learning

The ten 30 minute presentations on different aspects of H&I in solid organ transplantation, HSCT, disease association and transfusion created as part of the expected preparation for the ESHI examination are now available to EFI members directly via the EFI website. Log on to the EFI website and follow the links to e-learning.

It is also hoped that talks from the 2021 International Summer School (which was held on line) and the Teaching Sessions from the Amsterdam 2022 meeting will also be available soon as e-learning resources, most likely in the respective areas for these events under 'Resources' on the EFI site.

Deborah Sage, Chair of the EFI Education Committee

Update from the EFI External Proficiency Testing Committee

Meetings: The External Proficiency Testing Committee (EPTC) met during the EFI autumn meetings on October 27th 2023.

Updates and an introduction of a new EPT tool for inspectors on the websites:

The Website has been updated with information about EPT providers including relevant information about the different EPT schemes of providers for the EFI community. Additionally, the website has been updated with new EPT tables for inspectors including a listing of tools for EPT evaluation, an overview of crosstalk between EFI standards, EPT provider standards, and the manual for inter-laboratory exchanges, and a list of minimum number of samples and acceptable performance in EPT. We hope this new tool will be useful in the evaluation of EPT performance in the accreditation program.

Manual for interlaboratory exchanges and standards for providers:

The EPTC is currently working on a second version of the Manual for inter-laboratory exchanges as the first version is from 2018.

Another task has been to prepare an update of standards for providers including a proposal for a policy for the participation of providers in own EPT schemes, a policy for additional EPT samples, and we have especially worked on the creation of a new EPT category for disease association/ pharmacogenetics after approval from the Executive Committee in the autumn meeting 2022.

The rationale for this is that HLA typings of samples in the accreditation category "Disease associations" (EFI standard E5.5 for laboratories) include often other techniques and procedures than used for full HLA typings.

We expect this work will be ready to be presented for the EFI community during the next months.

Modelling changes to scheme performance criteria for antibody testing and identification:

During the last 6 months the EPTC has worked on simulations for different criteria for successful performance based on data from ETRL, UKNEQAS, and ITA. A report has been written but final recommendations need approval in the EPTC.

Acknowledgements: I would like to acknowledge all the fruitful work performed by the members in the EPTC during 2023. Especially Yvonne Zoet and Deborah Pritchard have done a tremendous amount of work with revisions of documents, wording of new standards, and paraphrasing a report based on simulation studies. I would also like to express my gratitude and acknowledge Sandra Tafulo and Elena Longhi who have left the EPTC to become commissioners in the accreditation program. We will miss their professional expertise as colleagues, and we will miss them as friends.

*On behalf of the EFI EPT Committee, Helle Bruunsgaard
Chair EFI External Proficiency Testing Committee*

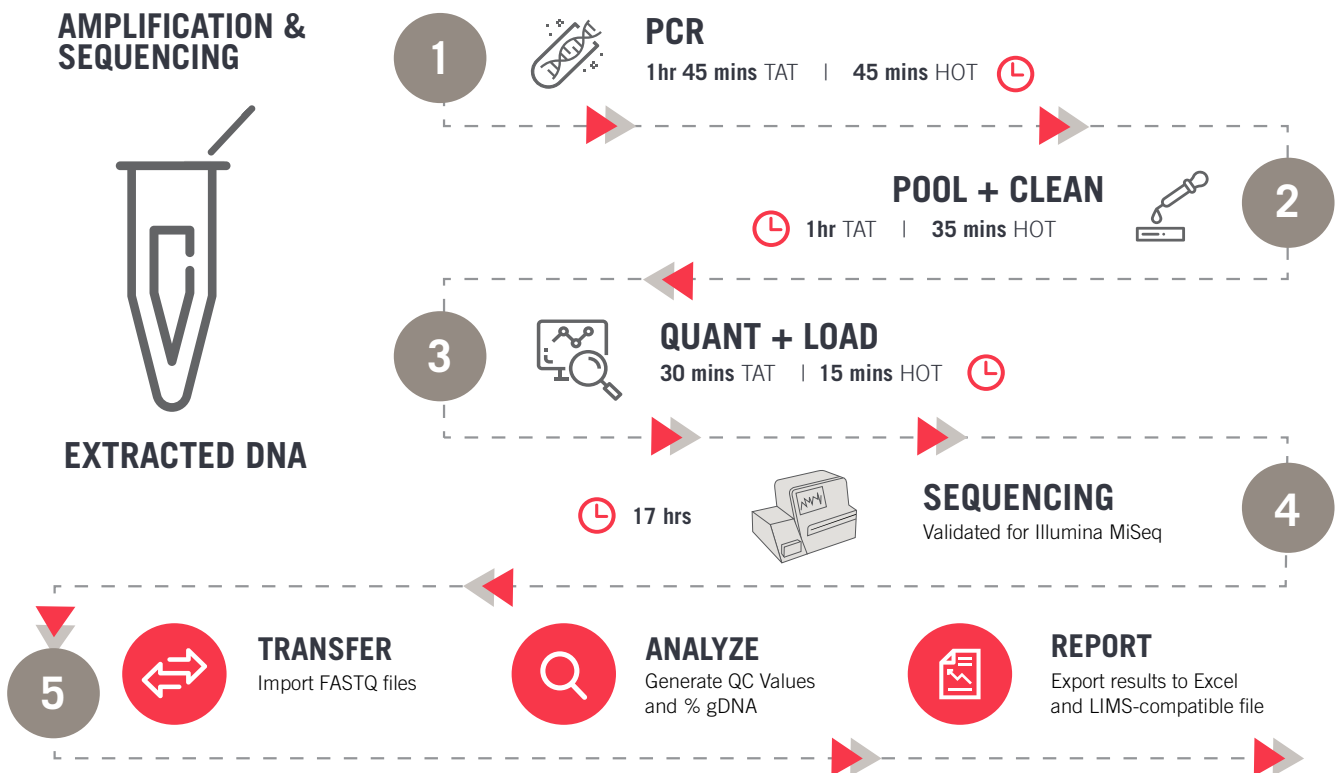
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- gDNA Sample to Report in Less than 24 hours



*References for early rejection • Rashef et al BBMT 2014;20:1758-66 • Tang et al BBMT 2014;20:1139:1144
*HOT: Hand-on Time (based on 48 samples) *TAT: Turn around time

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MAR118 Revision 1 Effective 2022-08

Update from the EFI Accreditation Committee

It has been a lively period with quite some changes and improvements within the EFI Accreditation Programme, most of them affecting EFI accredited laboratories and those seeking for accreditation. As you may know, Marco Andreani will take over EFI presidency from Ann-Margaret Little during next EFI conference in Geneva. Consequently, I am very sorry to announce that he will have to step down as an excellent commissioner for the region 7b (Italy) and as a very active inspector. Marco is passing on his valuable expertise and the laboratories he is responsible for to the new commissioner Elena Longhi, who was, based on the recommendation from the Italian H&I Association, approved as his replacement.

During the Accreditation Committee meeting in Nantes, the need for an additional Spanish/Portuguese speaking commissioner was discussed because of the increasing workload in the regions where these languages are spoken. A new commissioner, Sandra Tafulo, has been suggested by the Portuguese Transplant Society, supported by commissioners for region 9+10 (Spain and Portugal) Eduard Palou and Jose Vicario, and commissioner for region 99a (Outside Europe) Gottfried Fischer, who needs help with South American laboratories.

Due to the shocking start of the war in Gaza and its consequences in the beginning of October, Nina Svetlitzky from Israel asked for urgent retirement as a commissioner for EFI region 8a (South East Europe, Israel and Armenia). Members of the EFI Accreditation Permanent Commission Christien Voorter (co-chair and commissioner for region 99b - Commissioners' laboratories) and Sabine Scherer (general secretary and commissioner for region 4b - Germany) kindly and sympathetically offered their help and took over 20 laboratories from Nina. During the Annual EFI Region 8 Balkan EPT Meeting in November, the society represented by Elisaveta Naumova proposed Monica Dutescu from Bucharest as the new commissioner for region 8a. Monica is at the moment in the process of

learning and taking over the region 8a from Christien and Sabine, thanks a lot to all three. I would also like to thank Nina for the work she dedicated to EFI accreditation as a respected and popular commissioner. We are missing her very much in the committee as well as her straight to the point attitude.

Katerina Tarassi, commissioner for region 8b (South East Europe, Israel and Armenia), Ingrid Fae commissioner for region 5b (Central and East Europe) and I attended very informative and successful Annual EFI Region 8 Balkan EPT Meeting in Sofia. In the scope of EFI affairs Katerina and Ingrid presented their regions and I gave an update of the EFI Accreditation Programme. We were happy to answer many questions that revealed interest in our business. The EFI Accreditation Programme Procedure Manual underwent major changes, so that the new version 4.0 was prepared and eventually approved by Executive Committee in December. It will be uploaded to the EFI Accreditation website in very near future.

On the other hand, the accreditation certificate was amended just a bit with addition of supplemental techniques (abbreviated ST) in concordance with standard D1.2.2.

From the 1st of January 2024, every applicant for directorship according to EFI standards B must fill in the application form, initially prepared by Andreas Heinold, and provide the additional documents as listed at the end of the form, published on the EFI Accreditation website and available on request from Sonja Geelhoed, manager of the Accreditation Office .

I can't conclude this report without expressing hope for peace in Middle East. My thoughts are most of all with our Israeli colleagues and their families, excellent laboratories and hard working inspectors.

Best wishes

Blanka Vidan Jeras, Chair EFI Accreditation Committee



Nominations for the EFI Executive Committee vacancies and the electronic election process

Nominations were sought for the positions of two Councillors. We received four nominations for the position of two Councillors and the nominated candidates are presented below. As a result, elections will be organised early 2024 for the two Councillor positions. All active EFI members (having paid their membership fees for 2023) will receive notification by email regarding the election procedure. We urge members to check and ensure that the email address EFI holds is up to date.

Emel Ekşioğlu-Demiralp



I earned my MD from Istanbul University in 1987 and a Ph.D. in Immunology from Marmara University in 1995. I've held various roles, including establishing Department of Basic Immunology, directing the Tissue Typing and Immunology Laboratory at MU Hospital for 12 years, leading Immunology programs at the University and serving as the Director of the Tissue Typing & Immunology Laboratory at Istanbul Memorial Şişli Hospital since 2006. I've been involved in 750-800 transplantations annually. Our lab is a respected pioneer and reference institution, hosting various researchers and technicians. I've had the privilege of teaching flow cytometry to many individuals in Turkey. I've held executive roles in multiple societies and committees. My passion for HLA immunogenetics, coupled with my professional background, motivates me to contribute to EFI's continued growth and profitability. My experience suggests that focused, single-topic meetings are most effective. I believe my expertise can benefit EFI. Additionally, I can help address accreditation process issues for Eastern European countries and

my own where I've witnessed flaws. I am very excited about the prospect of working with the EFI Executive Board to advance the research of immunogenetics throughout Europe. If I would have an opportunity to serve on the board, I would contribute all my skills, experience, and enthusiasm to furthering EFI's goals.

Moshe Israeli

I am the Director of the Tissue Typing Laboratory at the Rabin Medical Center in Israel. In this capacity, I bear the responsibility of conducting H&I diagnostic testing for all organ



and stem cell transplants facilitated by Clalit Health Services in Israel. My academic journey started with a PhD in transplant immunology from Bar-Ilan University. I had the privilege of broadening my horizons through a post-doctoral fellowship at Leiden University under the mentorship of Prof. Frans Claas.

I have been an active member of several international committees in the field of transplantation and H&I such as: ASHI EPT committee, ASHI International affairs committee, WMDA QA working group and others. In the last 9 years I was privileged to volunteer for the EFI standards and QA committee. I have co-authored approximately 30 peer-reviewed publications in the field of transplant immunology, and have also received several awards such as the ASHI Marilyn McQueen 'Rising Star' Award. My deep commitment lies in fostering international collaboration within the HLA community. I believe that EFI should be a catalyst for sharing knowledge and igniting scientific research collaboration projects among its members worldwide.

As an EFI Councillor, my primary goal is to establish a robust infrastructure for facilitating the exchange of ideas, research, and expertise across borders. I am driven by a vision where EFI becomes a hub for meaningful international cooperation, ensuring that our field continues to thrive and advance. Together, we can create a more connected and impactful EFI community, benefiting all its members.

I finished my training in Biochemistry in Porto University in 1998, completed a master's degree in molecular genetics in 2002 and in clinical analysis in 2012. More recently in 2021, I completed my PhD in Biomedical Science from Oporto University and the European Specialization in H&I by EBTI.

Sandra Tafulo

I started working in Histocompatibility and Immunogenetic in 2000 in North

Histocompatibility Center in Porto. I started with technicians' functions in the molecular laboratory, and I joined the deceased donor on call service on 2001. In 2011 I moved to the HLA allosensitization laboratory as laboratory Supervisor. I am also an expert in the KPD working group developed by the Portuguese National Coordination.

I am a member of EFI since 2013, being an inspector since 2016, member of the organizing committee of EFI 2019 in Lisbon, a member of EPT committee from 2022-2023 and recently started as commissioner for region 9+10 in the Accreditation committee.



I am currently the Coordinator of the Portuguese Histocompatibility and Immunogenetic Group, within Portuguese Transplantation Society and I am a member of ASHI International Committee since the beginning of 2023.

As an EFI Councillor I hope to promote collaborations with our sisters' societies and contribute to education activities for all EFI members.

Katerina Tarassi

I was born and educated in Greece. After graduating from the Medical School (1984), I completed my specialization in Medical Biopathology (1990) and my PhD Thesis (1997). My interest in H&I dates back to 1990



when I started working as Registrar in Immunology-Histocompatibility Department of "Evangelismos" Hospital in Athens where I still work as Director since 2010. Additionally, I reinforced my knowledge in molecular techniques, trained in ARC Epidemiology Research Unit, Manchester-UK (1995 & 1996), in Immunology Laboratory-Hospital "Virgen de Rocio", Seville-Spain (1998) and in H&I and Disease profiling Laboratory-Stanford Medical School-USA (2015). I was also involved in research through publications, research projects and active participation in IHIWs since 1991. I was entitled to Honorary ESHI Diploma (2014).

I have been an EFI member since 1991, EFI Inspector (2009) and EFI Commissioner (2023). I would be happy to serve as EFI Councillor and I will try to do my best in order to promote collaboration between different countries and to support young scientists. I believe that the experience gained from my involvement as Member of the Executive Board of the Hellenic Society of Immunology (currently President) for many years will help me to accomplish this goal.







18TH INTERNATIONAL SUMMER SCHOOL ON IMMUNOGENETICS

FIESTA AMERICANA MERIDA HOTEL

MERIDA, MEXICO



POSTPONED TILL 2025





EFI Annual Conference Bursaries

It is our pleasure to announce the application procedure for EFI Personal Bursaries to join the annual EFI Conference to be held in Geneva, Switzerland 20-23 May 2024, is now open.

In addition to the deadlines given for personal bursary applications, a deadline of February 23rd, 2024 has been set for applications for bursaries specifically to support attendance at the annual EFI conference in Geneva. Preference for these applications will be given to members who have been selected to present an abstract at the EFI conference (either oral or poster presentation). Only one bursary per laboratory will be awarded.

All bursaries are awarded on the strict condition that the recipient submits a report of ~1 page on any scientific session of the conference, which will be published in the EFI newsletter, following the conference.

Application procedure

EFI members are invited to apply for the Personal Bursary via their personal Dashboard on the EFI website. When successfully logged in, please navigate to EFI Personal Bursary on your personal Dashboard and choose Apply. The application form will now appear partially completed with your personal details. In order to complete your bursary application, please check and complete the information requested. Next to this, you are requested to upload the following documents:

- Current Curriculum Vitae
- Submitted abstract
- Support letter from applicant's Laboratory Director
- Motivation letter to attend the meeting

Please click the submit button to send your application form to the EFI Office. The deadline for submission of the Personal Bursary application is February 23rd, 2024. We strive to inform successful Personal Bursary applicants prior to the deadline for early registration.



The Julia Bodmer Award

Applications are invited for the prestigious Julia Bodmer Award, to be delivered during the Opening Session at the 37th EFI conference in Geneva, Switzerland.

The Julia Bodmer Award is given to a young scientist in recognition of their outstanding work within the Immunogenetics field. The Award also acknowledges the laboratory in which the scientist has performed their research. Any member of EFI can propose a candidate for the Julia Bodmer Award.

The application must include the candidate's CV with a list of publications and a letter of support from the head of the candidate's laboratory. Candidates must be an EFI member (or become a member at the time of application) and be no more than 10 years past completion of their doctoral thesis if applicable; candidates who have not undertaken or completed a doctoral thesis are also eligible. All applications will be reviewed by the Scientific Committee who will make the final decision on who will receive the Award.

In addition to the presentation at the Opening Ceremony of the EFI Conference, the Award winner will also be invited to contribute a dedicated "Julia Bodmer Review" to HLA, the official journal of EFI. He/she will receive €1000 in addition to the expenses for registration, travel and lodging for attending the EFI Conference.

Applications must be sent in writing to the EFI Secretary via the EFI Central Office, (efioffice@lumc.nl) before February 16, 2024.

Bursary deadlines 2024

It is our pleasure inform you about the upcoming deadlines for application for the EFI Personal Bursary, the EFI Education and Scientific Bursary and the support for EFI

'International Affairs'. The bursary deadlines for 2024 are set as per below:

	Deadline 1	Deadline 2	Deadline 3	Deadline 4
EFI Personal Bursary	1 February 2024	1 May 2024	1 August 2024	1 November 2024
EFI Education and Scientific Bursary	1 February 2024	1 May 2024	1 August 2024	1 November 2024
Support for EFI 'International Affairs'	1 February 2024	1 May 2024	1 August 2024	1 November 2024

In addition, please note Annual Conference Bursaries are made available to attend the 37th European Immunogenetics and Histocompatibility Conference and more information is to be found elsewhere in this Newsletter.

Reminders of upcoming Bursary deadlines and information about the application procedure will be provided to you by the EFI Office by email. More information on the respective Bursaries is to be found on our website www.efi-web.org.



37TH EUROPEAN IMMUNOGENETICS & HISTOCOMPATIBILITY CONFERENCE

20–23 MAY, 2024
GENEVA, SWITZERLAND

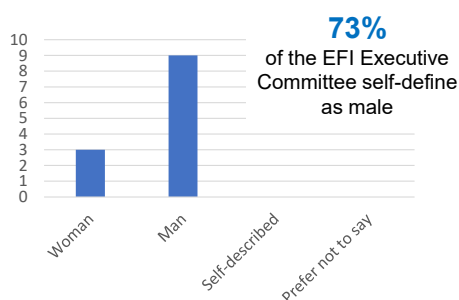


Unveiling Diversity, Nurturing Transplant Bonds, Orchestrating immunity

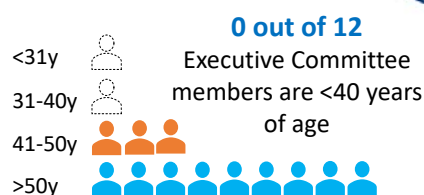




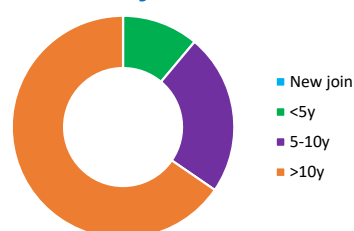
European Federation for Immunogenetics



The number of EFI regions represented on the Executive Committee
6 out of 10



Majority of EFI members responding to the membership survey had been members for
>10 years



Report on the 17th International Summer School in Busselton, Western Australia, Australia

The 17th International Summer School (ISS) was held from November 8th to 11th in the beautiful south west region of Western Australia in the town of Busselton, 2.5 hours from Perth on the west coast of Australia.

The aim of the summer school is to promote the field of immunogenetics through an intensive comprehensive course covering a broad range of related topics in immunology, genetics, histocompatibility and transplantation. It is aimed to inspire the next generation of scientists and laboratory directors, give an opportunity to students to present their research or expand on their understanding of histocompatibility and immunogenetics, I am extremely proud of what we achieved together to ensure the success of the 17th ISS.

The summer school brought together 26 students from all over the world including Australia, Thailand, Korea, India, United Kingdom, Germany, Canada, United Arab Emirates, New Zealand, Sweden and the Netherlands. The faculty provided by the four societies included Dr Robert Liwski and Dr Annette Jackson (ASHI), Dr Anne-Margaret Little and Dr Deborah Sage (EFI), Dr Ilias Doxiadis and Dr Hatim Alabbas Mostafa (ARSHI), Mary Diviney and Dr Duangtawan Thammanichanond (APHIA). We were also fortunate to



have Professor Jill Hollenbach, Professor Stefanie Gras and Assoc Professor Lloyd D'Orsogna who also contributed to presentations and discussions.

The 17th International Summer School was organised by APHIA and funding provided by each of the four societies APHIA, ASHI, EFI and ARSHI. Sponsorship was also provided by The Terasaki Innovation Centre supporting the Paul I.Terasaki Antibody Session at the 17th ISS. The success of the 17th ISS is owed to contributions from the local organising committee, ASN conference organisers and the faculty of ASHI, EFI, ARSHI and APHIA.

The 17th ISS started with the welcome function at the summer school venue, the Abbey Beach Resort. Students and faculty were welcomed to country by local aboriginal representatives followed by the opportunity to meet and get to know each other over dinner.

The first day of the 17th ISS started with lectures on HLA genes and antigens their function and inheritance, antigen presentation, MHC evolution, HLA typing techniques, HLA antibody testing, CDC and flow crossmatching and HLA and transfusion. Students presented in the areas of HLA typing, HLA and transplantation and transfusion. In addition, for the first time a series of case studies were included in the program which stimulated several discussions around the practical aspects in the Histocompatibility & Immunogenetics laboratory.

The day come to end with a walk along the Busselton Jetty and dinner at the Shelter Brewery Co.

The following day started with lectures on HLA and disease, HLA and autoimmunity, HLA and infection (thanks to Prof Jill Hollenbach for last minute addition to program), Haematopoietic Cell Transplantation HCT) and NK cells and KIR. Discussion around presented case studies included antibodies in kidney transplantation, HCT, virtual and flow crossmatching along with more wonderful presentations from students. There was a break from lectures with an organised guided tour of the Jewel Cave in Margaret River. The Jewel cave is the largest show cave in Western Australia

with three immense chambers. The first chamber is home to one of the longest straw stalactites found in any tourist cave in Australia. The day ended with an Aussie BBQ under the south west sky.

The final day of the summer school continued with faculty presentations on HLA and COVID, HLA and Drug Hypersensitivity, how we can optimise HLA antibody testing by refining data analysis, importance of quality control in the H&I laboratory and finally artificial intelligence in H&I. Student presentations and case studies completed a very busy and intensive summer school. The summer school concluded with a lunch farewell at Eagle Bay Brewery before the bus trip back to Perth for APHIA or journey back home.

I have experienced firsthand as a student, faculty and now as chair of the international summer school what opportunities come from attending an international summer school. This meeting brings together experts, and young scientists and lab directors, in the field of H&I, in a unique intimate environment that allows sharing of knowledge and ideas.

We now look to the 18th ISS to be held in Mexico by ASHI, I would encourage all young scientists and laboratory directors to attend!

Dr Dianne De Santis
Chair 17th International Summer School





Report on the APHIA scientific meeting, 13th – 16th November 2023 in Perth, Western Australia by Dr. Mahendra Narain Mishra

Introduction I attended this year's APHIA meeting as a delegate and presented my poster in the conference. I was very much excited as I was returning to Oceania after a gap of 24 years when I had attended the erstwhile ASEATTA meeting in Auckland in Nov 1999.

Preconference Workshop On the first day a workshop on Third Generation Next Generation Sequencing using Nanopore Platform was conducted by Dr Dianne De Santis, Senior Medical Scientist, for those who opted for participating in Fiona Stanley Hospital. All aspects of HLA typing on the platform were discussed including role of Cloud Based analysis using Microsoft Azure with 99.1% results concordant in the 3rd Field of resolution.

With Nanopore the advantages are enumerated below:

- HLA workflow from DNA extraction to interpretation in under four hours as amplification – 1.5 hrs, Library preparation – 1.5 hrs, and interpretation – 5 mins.
- It can be used for deceased donor high resolution HLA typing.
- Flowcell can be used up to 4 times.
- Nanopore generates haplotypes.
- Barcode contamination less than 0.5% at barcode ligation step

APHIA Meeting All the sessions were conducted in single hall so the delegates could attend all scientific sessions. There were nine plenary sessions all focussing on various aspects of H&I including solid organ transplantation (2), hematopoietic stem cell transplantation including KIR (3), immunotherapeutics for cancer control, population genetics, infection and Immunity and advancements in technologies.

HSCT Effie Petersdorf spoke on Immunogenetics of Allogeneic Hematopoietic Cell Transplantation after presenting the total number of allogeneic, cord blood unit and haploidentical HSCT in USA in 2022. The importance of looking beyond allocation mismatches including molecular mismatches on HLA DQA1 and MICA – STR mismatching was brought out. A protective effect of MICA-STR matching was observed which was enhanced by MICA-129 mismatching, while Donor MICB did not affect the outcome. The remaining two presentations discussed the HLA-DPB1 immunopeptidome in unrelated HSCT and measurement and prevention of GVHD. Dr. Duncan Purtill spoke on the ANZ perspective of measuring and preventing GVHD which had a lot of clinical content. In the second plenary "HSCT and Immunotherapy" session Professor

Rajiv Khanna spoke on the management of post -BMT viral infections using of adoptive cellular immunotherapy. David Sayer had a captivating discussion on the question "how mismatched are matched unrelated donors and what does this mean for future donor selection and typing strategies?". The presentation raised crucial questions about the implications of donor mismatches and their potential impact on future transplantation strategies. Some of the MUDs have non-HLA mismatches which can impact outcomes and may need to be included in future matching strategies. The role of T cell responses in HLA-DP permissive mismatched HSCT including core and non-core DPB1 TCE-3 alleles was discussed. A talk on measuring and preventing chronic GVHD was very informative which needs to be done at 6 months, 12 months and two years' time point post-BMT. In the 3rd session on HSCT a variety of subjects including polymorphism of KIRS, KIR data of local populations, HLA typing with buccal swab samples and a talk on bioinformatics were presented.

Solid Organ Transplantation On the second day the entire audience was spellbound learning a lot of new and practical things in the two plenary sessions on "Solid Organ Transplantation". The first talk "In search of permissible and unacceptable HLA-DQ mismatching" emphasised on the role of both DQA – DQB1 matching for solid organ recipients. I was particularly fascinated by Dr Robert Liwski's talk on Halifax protocol of flow crossmatch and AXE method for identifying true reactivities on single antigen bead assay by adsorption and elution method and given a chance would love to work towards the implementation of Halifax method of flow crossmatch in India as I strongly am of the opinion that there is a need to have uniformity in testing and reporting with the twin aim of minimizing false positive crossmatch and detecting even minimal reactivity.

Infections and Immunity The first talk by Prof Jim McCluskey was on "Mucosal Associated Invariant T cells-adaptive immunity working at the Innate Immunity interface", while remaining three speakers spoke on Covid 19, HLA-B*57:01 mediated HIV control and HLA and ERAP stasis in Viral Immunity.

Oral Presentations were conducted on 2nd -4th day of the conference and covered several interesting subjects with some overlap of the subjects discussed in the plenary sessions. The topics were very thought-provoking and clinically relevant for the audience. One presentation was on stimulation of memory B Cells for identification of unacceptable antigens in solid organ transplantation.

The workers in Perth were able to recapitulate a protocol for stimulation of memory B cells and characterization for the presence of HLA specific IgG published by Karahan et al.

Wine and Poster Session was on the second day and a total of 12 posters were presented. My poster was entitled "Assay Validation Performed in Establishment of a H&I Standalone laboratory in India".

Some pearls of wisdom useful for trainees:

- KIR A haplotypes associated with pre-eclampsia
- KIR B haplotypes are associated with improved CMV resistance and improved response to Leukaemia
- KIR3 DL1 and KIR3DS1 both bind to Bw4 and are associated with delayed AIDS progression and B*57:01 binds most strongly to KIR3DL1

- HLA DQA-DQB homozygosity was seen to be associated with PCR+ Covid
- DRB1*15:01 associated with plantar warts
- Booster Covid 19 dose was more frequently associated with side effects as compared to primary dose
- Highest Covid 19 vaccine response in those with HLA-A*03 as were the side effects
- Homozygosity HLA-DPA1>HLA-DPB1>HLA-DQA1>HLA-C>HLA-A>HLA-B
- 40% of HIV controllers are HLA-B57 or HLA-B27 positive; of which HLA-B57 can present a large range of highly conserved Gag-derived HIV peptides to CD8+ T cells and natural killer (NK) cells
- HLA-B*15:01 is associated with asymptomatic Covid profile and no complications
- HLA-Cw4 is associated with severe Covid



Mahendra Narain Mishra with Marcel Tilanus and Jim McCluskey

Social activities APHIA provided a very homely and friendly atmosphere for social interaction with three major functions. In the Opening Ceremony on 13th Nov an invited speaker spoke on history of Australia and the role of natives as well as their status.

This was followed by a welcome address and cocktails. On the morning of the 15th the Tulip run/walk was focussed on working together attracted around 25 participants including the Presidents of APHIA, ASHI and EFI. Same evening the Conference Dinner and Matilda Bay Restaurant which was open for all delegates provided a great opportunity to interact with other colleagues across the globe and dine and dance.

Update from the Standards Committee

The Committee has had a busy year and working hard to implement the topics we've covered in the updates at the AGM. The Committee has submitted v8.1 to the EC for approval/ratification during the Autumn meetings which is anticipated to be given soon and we will work with the EFI office to publish the new version onto the EFI website. As a reminder for members this is a point version change as there is no significant change to the structure but makes changes to specific standards following members' feedback.

As we need to give time for updates to be implemented by Labs we have also been working on a bigger change, version 9, which is still in progress. We have concentrated on the molecular

standards as we know that this is the area that new techniques come into most frequently; a review of the clinical interpretation standards and the structure overall. We aim to reduce duplication in the standards to increase their "user friendliness". Once we have a first draft we are happy to share we will liaise with the accreditation committee for initial feedback and with Young EFI for a fresh review of the Standards.

We also have **two** vacancies on our Committee. After many years of dedication Urs Wirthmueller and Moshe Israeli have completed their terms, we all would like to thank them for their input over the years which has been invaluable. We are looking for enthusiastic people to join us,

if you have a particular interest in transfusion that would be particularly helpful as it's currently a gap. Please get in touch with me katy.latham@nhsbt.nhs.uk if you are interested in joining the Committee or if you have any comments on the standards.

*Katy Latham,
chair of the Standards Committee*



EFI Educational and Scientific Bursary Report

I was fortunate enough to have been granted the EFI Educational and Scientific Bursary which enabled me to visit the Immunology and Transplant laboratory at the Fiona Stanley Hospital, Perth, Western Australia for 2 weeks. Hosting me was Acting Principal Scientist, Jonathan Downing, and his incredible team. In addition, the award also helped enable my attendance at the 17th HLA International Summer School, hosted by APHIA, in Busselton, Western Australia, chaired by Dr Dianne De Santis.

The laboratory is divided into three sections: molecular, serology and immunopathology (encompassing autoimmunity and infection immunology). During my visit, I was able to gain exposure to all disciplines. I found immunopathology particularly interesting, as in Cambridge, our immunology and transplant laboratories are separate. I was able to witness automated staining procedures being performed, and was given the chance to try and identify staining patterns myself after some training.



Fiona Stanley Hospital, Perth, Western Australia

Deceased donor typing

For deceased donor typing, the laboratory uses the Oxford Nanopore Technologies (ONT) MinION sequencer, which produces a high resolution HLA type at 11 HLA loci (HLA-A, -B, -C, -DRB1, -DRB3/4/5, -DQB1, -DQA1, -DPB1, -DPA1). During my visit, I was given the opportunity to perform the assay myself following the standard operating procedure. The method was relatively simple to perform, and instructions were well written. The laboratory also simultaneously uses LinkSeq RT-PCR to type deceased donors as a way of confirming the HLA type at low resolution. Both donor HLA types can be completed within 4-5 hours in an on-call scenario.



MinION flow cell

The ability to provide a high resolution donor HLA type improves the accuracy of donor-recipient compatibility assessment and the determination of pre-transplant DSA. I was able to witness the benefit of this myself when a highly sensitised recipient was offered a kidney from a HLA-A*02:01 homozygous donor. The recipient had moderate level allelic HLA-A*02:03 antibodies, as determined by Luminex SAB assay, which was deemed not to be DSA and therefore not a contraindication to transplant. At low resolution, the donor was typed as HLA-A*02 homozygous, which meant the presence of HLA-A*02:03 antibodies would have been classified as DSA, and the transplant potentially vetoed. In this particular case, the transplant did not go ahead due to a poor Kidney Donor Profile Index (KDPI).

High resolution typing for deceased donors particularly benefits patients who are highly sensitised and/or those with allelic antibodies. It provides recipients with more potential opportunities to receive a compatible transplant, which in turn, should reduce their time on the waiting list. However, a limitation is that not all alleles are represented on the Single Antigen Bead (SAB) assay, so it not possible

to accurately determine whether recipient antibodies are donor specific, even with the availability of a high resolution HLA type.

OrganMatch

During my time, I gained exposure to OrganMatch, an online system that facilitates compatibility matching of recipients and donors for organ transplantation in Australia and, in the case of paired exchange transplants, New Zealand. The recipients HLA type and HLA antibody profile are directly imported from the laboratory information system and HLA Fusion, respectively, eliminating the risk of transcription error. HLA antibody profiles are updated each time a new screening sample is received. HLA antibodies with an MFI >4000 for kidney/simultaneous kidney pancreas (SPK) recipients (or >8000 for heart and lung transplant) are listed as unacceptable and recipients will not receive offers from donors carrying these antigens. This is a fair bit different to Cambridge transplant centre as HLA antibodies with MFI >2000 are listed as unacceptable for kidney/SPK recipients.

When a donor becomes available, both their low and high resolution HLA types are imported onto OrganMatch software. The Medical Scientist on duty will initiate a search and the software will automatically perform a histocompatibility and donor-specific antibody (DSA) assessment for potential donor/recipient pairings. A ranked list of recipients is then produced, which the Medical Scientist will review with an Immunology Consultant, and then publish for transplant coordinators and clinicians to view. At the moment, in our Cambridge lab, we still manually check for DSA, which can be time consuming and there is always a slim chance that DSA could be missed in patients with complicated profiles. Use of similar software to OrganMatch could potentially improve the accuracy of pre-transplant assessments.

HLA Antibody Profiling

The laboratory uses a fully automated Luminex SAB assay to detect and define HLA specific antibodies. Barcoded 2ml storage tubes containing patient sera are loaded onto the Hamilton liquid handling systems, which aliquots sera and EDTA into corresponding wells in the microplate. The plate is then transferred to the LABXpress. SAB I & II beads are added, incubation is enabled, and then washing and centrifugation steps are performed. This step is repeated when conjugate is added. Finally, PBS is added to the plate which is then automatically transferred to the Luminex fluoroanalyser for result generation. HLA Fusion software is used to interpret results, which is the same software that is used in Cambridge. The benefits of a robotic system are that the assay is more controlled and reliable, and variability in results are reduced. A limitation however,

is that automated equipment is expensive to purchase, install and validate, and for each batch performed, around 10-15% of the already expensive single antigen beads are discarded as waste.

17th HLA International Summer School

The Summer School was packed full of teaching, discussions and social activities, I had a great time! The programme encompassed talks surrounding HLA genetics, function and evolution, solid organ transplantation/transfusion, HLA immunogenetics, and future directions within the field. From these sessions I believe my understanding of H&I has significantly improved, and I have more awareness of the clinical importance of the work we do. It was fascinating to learn about how transplantation science is applied across the world, and the differences between laboratories/research centres. Students also presented a piece of research or case study. I thoroughly enjoyed learning about current research that my peers are undertaking and new advances within the field. Case studies were also presented, and it was great to



Getting friendly with the Australian locals

get involved in the discussions and to hear the opinions of experts in the field.

I would like to say thank you to Jonathan Downing and his team for hosting the laboratory visit, and to Dr Dianne De Santis for chairing and leading such a fantastic summer school. Finally, thank you to EFI for the funding which has enabled me to embark on this fantastic opportunity.

Danya Badaro

HistoTrac™ Software

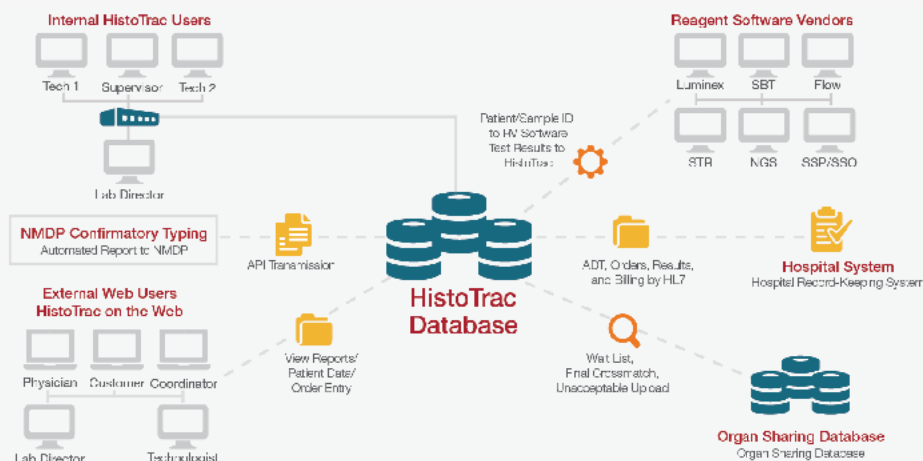
A comprehensive data management system for your HLA Laboratory

HistoTrac is a Laboratory Information Management System offered in modules to facilitate the building of a system that accommodates the testing services provided by your laboratory. The Core Package is the center of the software, providing for all the basic functions of the laboratory. Add modules, now or later, depending on your needs.

HistoTrac Software Configuration

HistoTrac software effectively manages HLA Laboratory workflow by:

- Sharing information with Reagent Vendor analysis software to complete test results.
- Sending automatic email transmission of NMDP donor confirmatory typings directly to the NMDP database.
- Managing the UNOS Wait List as well as updating unacceptable specificities via the UNET-specific API.
- Allowing remote access to patient data.



Information

- Patient/Donor Database
- Sample Registration
- Workflow Management
- Reporting



Innovation

- HistoTrac on the Web
- Paired Kidney Exchange
- DSA Analysis
- Virtual Crossmatch Assessment
- Eurotransplant Data Exchange



Integration

- HL7 Interfaces
 - ADT, Orders, Results, Billing
- Reagent Vendor Interfaces
 - Vendors for all methodologies are supported: Flow, Luminex, SSO, SSP, SBT, NGS, qPCR, STR
- HistoScope
- Organ Sharing Databases
- Bone Marrow Donor Databases



Services

- Data Conversion
- Custom Development and Reporting
- Training and Implementation Support

To learn more about the **HistoTrac Software**, visit go.1lambda.com/HistoTrac-software or contact your One Lambda Account Manager.

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Region 8 Balkan EPT meeting - a long-standing tradition

The EFI Region 8 & Balkan EPT meeting has a rich history of successful editions, which started in 1995 in Sofia, Bulgaria. This event has become a good tradition where participants from EFI Region 8 present their latest achievements and discuss practical cases in an informal atmosphere in addition to the scientific program. This year the Annual Region 8 & Balkan EPT meeting hosted by Department of Clinical Immunology, University Hospital Alexandrovska and Bulgarian Association of Clinical Immunology took place again in Sofia on 3rd - 4th of November 2023.

More than 140 colleagues working in the field of histocompatibility, immunogenetics and transplant immunology from Armenia, Austria, Bulgaria, France, Greece, Italy, Montenegro, Poland, Republic of North Macedonia, Romania, Serbia, Slovenia and Turkey participated in the meeting. This conference plays an important role in the exchange of knowledge and experience among colleagues from Southeast European countries and in enhancing the qualifications of young professionals. The scientific event is recognized by the European Federation of Immunogenetics and all registered participants were able to receive EFI Educational Credits for their continuous education.

The conference was opened on the evening of November 3rd with welcome addresses from official institutions in Bulgaria. In his key note lecture Dominique Charron set a promising start to the scientific program, introducing the audience to the main topics and achievements in 21st century in the field of transplant immunology. In the second lecture Elissaveta Naumova reviewed the history, accomplishment and future directions of transplant immunology in Bulgaria. The opening ceremony concluded with a welcome cocktail.

The main topic on the new achievements in the field of transplantation immunology was further developed in the first plenary session on the 4th of November, entitled "New Aspects in Transplantation", moderated by Catherine Stavropoulos-Giokas and Gottfried Fischer. The first speaker Catherine Stavropoulos-Giokas discussed the challenges and the future of cord blood banks in the 21st century. The activity of the biggest center for adult allogeneic hematopoietic stem cell transplantations in Bulgaria was reviewed by Georgi Mihaylov. The next two lecturers Metodi Milushev and Vassil Mihaylov discussed the kidney and liver transplants activities in the country. The last lecture delivered by Katerina Tarassi was focused on the interesting and challenging topic of xenotransplantation.

The second session chaired by Milena Ivanova and Dominique Charron discussed the current challenges in the field of histocompatibility and immunogenetics. The novel aspects of antibody screening and identification were presented by Gottfried Fischer. The second lecture of Blanka Vidan-Jeras reviewed the relevance of HLA-DP-specific antibodies in kidney transplantation. The sensitization in solid organ transplantation was further discussed in the talk of Antonij Slavcev who focused on the clinical significance of antibodies to non-HLA antigens. The activity of the Armenian Bone Marrow Donor Registry and its contribution to lifesaving transplantations in Armenia and abroad were presented by Frida Jordan.

The industry symposia included presentations on the application of immunoglobulin replacement therapy in transplanted patients (Takeda Pharmaceuticals), innovations of GenDx in HLA and chimerism diagnostics



HLA-FluoGene³⁸⁴ Match

Real-time detection for the perfect match

HLA GENOTYPING OF 11 LOCI IN <60 MIN

INNO-TRAIN EXCLUSIVE

- 1 or 2 tests on one 384-well plate.
- ALL from ONE company: Assay, Software, Instrument.
- Automated PCR setup with Opentrons OT-2.

QUALITY

- Resolution of CIWD common ambiguities (frequency > 0.1 %).
- Single antigen bead resolution.
- Discrimination of serotype ambiguities „split“ vs. „broad antigen“.

SPEED

- Time to result < 60 minutes.

FLEXIBILITY

- Manual or automated PCR setup (Integra VIAFLO ASSIST or Opentrons OT-2).
- Selectable result display based on CWD 2.0 and CIWD 3.0.



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- | | | | |
|-------------------------------------|--------------------------|--------------|---------------|
| • HLA-FluoGene ³⁸⁴ Match | Article no.: 002 085 010 | 10 tests/kit | 1 test/plate |
| • HLA-FluoGene ³⁸⁴ Match | Article no.: 002 085 020 | 20 tests/kit | 2 tests/plate |

NEW

Watch out for our high resolution typing based on Illumina (HLA-NGStype®) and with Oxford Nanopore (coming soon) on www.inno-train.com

(Antisel/GenDx), possibilities for automation in flow cytometry workflow (ELTA 90) and practical guide for Matchmaker in HLA Fusion Software (Biomedica).

After lunch and poster viewing the scientific program continued with selected oral presentations moderated by Frida Jordan, Katarzyna Bogunia-Kubik and Antonij Slavcev. Bulgaria, Greece, North Macedonia, Serbia, Romania and Turkey presented their activities and scientific achievements in the field of histocompatibility and immunogenetics.

The last session encompassed the presentations on the EPT and EFI accreditation activities. The session was moderated by Blanka Vidan-Jeras, Ingrid Fae, and Katerina Tarassi. The Chair of the EFI Accreditation Committee Blanka Vidan-Jeras presented an update of the EFI Accreditation program. The CET EPT program was presented by Ingrid Fae and Katarzyna Bogunia-Kubik who discussed the current activities and perspectives within EFI EPT Programs in Region 5. The good collaboration between EFI Region 5 and EFI Region 8 both in the field of

EPT and in the research aspect was also emphasized. The Commissioner report on EFI Region 8 was presented by the regional Commissioner Katerina Tarassi. Anastasiya Mihaylova and Fatma Oguz presented the results from Balkan EPT schemes for alloantibodies, crossmatch, HLA typing and HLA-B27 testing.

During the closing ceremony two best posters were awarded – “HLA-C*06:02 and DRB1*01:01 might indicate a good response to Pfizer-BioNTech anti-SARS-COV-2 vaccine” by the group of Catherine Stavropoulos-Giokas (Greece) and “The potential of a prospective HLA haplobank of the Bulgarian population” by the group of Elissaveta Naumova (Bulgaria).

In addition to the scientific and social events organized by the local organizing committee the participants also enjoyed their stay in Sofia.

Elissaveta Naumova

On behalf of the meeting organizers



REMINDER

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Office talk

It's the most wonderful time of the year it sure is a wonderful time for me. After 6 years I can say that it is a pleasure to be back at EFI. Since October 2022 I joined the EFI Office for 1 day per week to set up the ETHIQ qualification program and from the 1st of December I started working 32 hours per week for the EFI office.

Together with Sonja Geelhoed and Sandra van Hensbergen I complete the EFI Office team. The EFI Office is located in the beautiful historic "Poortgebouw" building. This characteristic building was the main building (next to various pavilion buildings) of the University Medical Center in Leiden and was built from 1925-1928. In the eighties all departments of the University Medical Center moved to the new building which is located opposite of the "Poortgebouw". Now various medical related organizations are situated in the "Poortgebouw".

As EFI office team we take care of all aspects that EFI offers to the EFI membership.

Sonja as manager accreditation office is fully committed to manage the complete accreditation process for more than 270 laboratories.



In her role as management assistant Sandra takes care of the EFI website, membership administration, election process, bursaries and sending out blast emails.



And I as management assistant take care of the ETHIQ qualification program, conference and autumn meetings organization, publication of education resources on the EFI website and special projects for 16 hours per week and I assist the accreditation office for 16 hours per week.

I hope you got a better insight of the EFI office in Leiden and the division of labor. The best way to contact us is via email (efioffice@lumc.nl).

Ingrid Abelman



A simplified personal view on crossmatches

There are methods following you throughout your carrier. For me, the first method was the measurement of the protein concentration by Lowry (Lowry et al. (1951). "Protein measurement with the Folin phenol reagent" Journal of Biological Chemistry. 193: 265–75. doi:10.1016/S0021-9258(19)52451-6). Now commercial kits are used for this type of analyses. The second method is the complement dependent cytotoxicity assay, short CDC. I learned the method back in 1981 when I was in the laboratory of Hans Grosse-Wilde in Essen. CDC was the state-of-the-art method for tissue typing and crossmatching. The method was introduced by Paul Terasaki and John McClelland (Nature 204:998, 1964). During my EFI-Presidency it became clear, that the world is divided with respect to the crossmatching procedure. One side was putting effort into the sensitivity of the crossmatch, mainly the colleagues in the States, while the other was more active in the matching procedure.

At least for tissue typing molecular methods took over from CDC since mid of the eighties of the last century. However, CDC is still around, at least in some countries of mainland Europe, for the crossmatching procedure. It has the best correlation with the short outcome of solid organ transplantation reducing significantly the number for hyperacute or accelerated rejections. However, the method harbors several problems. Viability of the cells being one of the most important. Additionally, the type of antibodies able to activate complement and their classification into transplantation relevant or not, and last but not least the transplantation relevance of the target antigens of the antibodies in the serum of the patient.

With time we learned that antibodies of the IgM type seem to be transplantation irrelevant and can be destroyed using dithiothreitol (DTT). Autoantibodies are usually of this type and a simple incubation with DTT allows their definition. NB there are also autoantibodies of the IgG type. By using T and B cells the target of the antibodies can be defined. HLA class I or II. Finally, knowing the immunohistory of the patient a decision for or against transplantation can be taken. This decision can be taken also using results obtained with the flow cytometry crossmatch (FCM) procedure introduced in the beginning of the eighties. In a single step the cell target can be defined, being T and/or B. Through the secondary antibody the patient serum antibody can be detected being IgG or IgM. This type of crossmatch was shown to be more sensitive than CDC allowing a better stratification of the risk or transplantation.

For transplantation centers a decision must be taken in choosing for either method. The immunohistory of the patient is known, extended typing of patient and donor is available, extended screening using solid phase assays is performed, and in case of HLA antibodies their specificities are known. Besides the possibility of the virtual crossmatch a physical simple crossmatch procedure, by FCM is suitable. Although the CDC has its merits it is a cumbersome outdated method with many problems. Therefore, my personal view is to omit CDC and concentrate on the virtual crossmatch and FCM if needed.

*Prof. Ilias Doxiadis
Leipzig, Germany*

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