



## NEWSLETTER

MARCH 2020 - ISSUE 91

.....FROM THE EFI PRESIDENT

## DEAR COLLEAGUES AND FRIENDS,



I am pretty sure that all of you have been following the news about the severe Corona Virus outbreak (COVID-19) in China and other parts of the world and the relatively high number of deaths associated with this disease. For the time being Europe is quite safe and that gives us some time and hope that appropriate treatment options and vaccinations will be developed soon. We really feel sorry and sympathise with people in China who were struck by this pandemic and suffer the severe consequences of it. I am also pretty sure, that all HLA specialists in the world already thought of the implications of HLA in such an outbreak and the role that HLA may play in it. Susceptibility to COVID-19? Co-Responsibility for an effective or ineffective immunological response? Development of vaccines? Ineffectiveness of vaccination? There are so many parts in which our field could contribute – I think we are all aware of this and we are prepared and open for collaborations with colleagues

from other specialties. We look forward to first fascinating results which will allow us a better understanding of the processes involved and will show the way ahead.

Another subject that has dominated the news in the last weeks of 2019 until very recently (and which probably will continue to pick our brains in the following months) is the BREXIT chaos. I know that some of you cannot even stand seeing “BREXIT” being written down, however, there is no way of escape, in particular since our next annual EFI conference will be carried out in the United Kingdom. Space in the EFI Newsletters is too scarce to start elaborating and politicising on BREXIT, however, one thing should be said – we are happy that EFI stays united and that our BSHI colleagues along with the various EFI committees involved in the organisation of the 34<sup>th</sup> annual EFI meeting in Glasgow stayed united until the very end and were not affected by the negative discussions about BREXIT. I truly believe that in science there is no space for separation. If we want to move things forwards we need to keep cooperating closely, interact and exchange information aiming to learn from each other, and advance knowledge in order to eventually develop and offer state of the art treatment options for the patients we are serving. We owe this to the thousands of COVID-19 infected patients awaiting treatment and to the hundreds of thousands of waiting list patients in need of transplants.

As mentioned already above, this year's EFI conference will be carried out in Glasgow. This will be the first annual EFI conference ever carried out in Scotland, and the third one to be carried

out in the UK (after Brighton in 1995 and Liverpool in 2012). I would really like to thank Ann-Margaret Little, David Turner and Helen McFarlane as well as their BSHI colleagues, along with the EFI Scientific and Education Committee members for putting together such an exciting scientific program which covers the areas of Transplantation, Immunotherapy, Regenerative Medicine, Autoimmunity, Reproduction Medicine and Cancer Therapy. We are proud that our society hosts such a prestigious event with many outstanding invited speakers accepting our invitation! Make sure not to miss the joint EFI-ESOT session. We have recently signed a Cooperation Agreement/Memorandum of Understanding with the European Society for Organ Transplantation (ESOT) (as we did in the past with other scientific societies) and I am convinced that this will be a great starting point and an opportunity for the two societies to strengthen their ties and initiate new cooperation projects.

Another highlight of this year's EFI conference will be the Ceppellini lecture. This year's awardee is Prof. Jacques Neefjes who is a Professor in the department of Cell and Chemical Biology in the University of Leiden/the Netherlands. His outstanding work has been focusing for years in the field of Immunology and his almost 300 scientific papers are cited in more than 30.000 publications. His main achievements were in the description of Antigen presentation by Class I and Class II MHC molecules as well as the intracellular mechanisms that are associated with these processes. Make sure to be there at the opening session, where apart from the Ceppellini award also the Julia Bodmer and the HLA awards will be granted!



EFI 2020



We are excited to join you at the 2020 EFI Scientific Meeting in Glasgow, Scotland. For this year's meeting, we will showcase some of our latest advancements including LABScreen™ Single Antigen ExPlex, AllType™ FASTplex, and our LinkSēq™ Real Time PCR technology.

Our mission to improve the lives of transplant patients worldwide is the driving force of our commitment to provide the best quality products and services. Below are some of the events we will be hosting during this year's meeting. We hope to see you there!

### **Pre-EFI Workshop**

**Sunday, April 26**

9AM - 1PM

Dochart 1, SEC Glasgow

*Breakfast & Lunch included*

More information to follow.

### **Scientific Sessions**

**Monday, April 27th**

13:00-14:00

Lomond Suite, SEC

**Tuesday, April 28th**

13:00-14:00

Lomond Suite, SEC

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**EFI website**

[www.efi-web.org](http://www.efi-web.org)

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## ....FROM THE EDITOR'S DESK

Before you lies the 91<sup>st</sup> edition of the EFI Newsletter, which is printed somewhat earlier than you are used to due to the fact that the EFI annual meeting is relatively early in the year. In this edition of the EFI Newsletter you will find the program of this upcoming annual meeting, which will be held in Glasgow, Scotland, jointly with the British Society for Histocompatibility and Immunogenetics. The conference motto 'From Research to Clinical Reality' promises a program that is bound to be interesting to all of us. Beware that we will be in Scotland, and therefore checking the useful information section on the EFI2020 website for words you may otherwise misinterpret during your stay may be of vital importance!

During the annual meeting, there again will be several gatherings from projects of the 18<sup>th</sup> International HLA and Immunogenetics Workshop (IHIWS). The specifics on these meetings can be found in this Newsletter, will be incorporated in the final EFI meeting program, and will also be communicated through the IHIWS newsletter.

When compiling this Newsletter, we just had the opportunity to vote for the three vacant positions as Councilor on the EFI Executive Committee (EC). I hope all of you have used their right to vote! The results of the voting will be presented at the General Assembly during the EFI annual meeting on the 28<sup>th</sup> of April. With the election of three new Councilors, obviously three Councilors at the end of their term will step down. Many thanks to Neema Mayor, Jean Villard and Pierre-Antoine Gourraud for serving on the EC for the last three years.

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

*Sebastiaan Heidt*

Deadline for contributions to EFI Newsletter 92 is September 7, 2020.  
Please send your contributions by e-mail to [s.heidt@lumc.nl](mailto:s.heidt@lumc.nl)



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

By the time you will be keeping this EFI Newsletter's issue in your hands we will have completed this year's EFI elections. Indeed, we are about to have three new elected Councilors, as well as our new President! I hope that all members managed to give their vote on time. Since we introduced the electronic voting system participation in our elections went up and we expect also this year good partaking figures. At this point I would like to thank the three outgoing Councilors, Neema Mayor, Jean Villard, and Pierre-Antoine Gourraud for their excellent contribution in the EFI Executive Committee (EC) during the last three years! They brought much energy, spirit, new ideas, and were vastly involved in the various projects that were discussed and processed by the EC in their time as Councilors.

As time runs so quickly, I would also like to remind everyone, and in particular our young members, on the upcoming H&I International Summer School which this year will be organized by EFI

again and carried out in the beautiful city of Prague in the Czech Republic. The event is scheduled between the 30<sup>th</sup> of August and the 2<sup>nd</sup> of September, and the main organizers are Tony Slavcev and David Turner. The program for this popular joint event between EFI and its sister societies ASHI, APHA and ARSHI has been already set and soon you will be asked to submit your abstracts in order to qualify for participation. Please keep in mind that this event is limited to a maximum number of 50 participants, and provides a great opportunity to interact closely with young scientists from all over the world, as well as with the Faculty Members who always are highly esteemed and experienced members of the organizing H&I sister societies. Next year's ISS will then be carried out somewhere in the Middle East or North Africa and the Arabic Society for Histocompatibility and Immunogenetics (ARSHI) will be the hosting organization. Please also keep in mind that EFI always grants a limited number of bursaries for mem-

bers who wish to participate in the ISS and are willing to submit an abstract. Details will be announced soon via blast e-mail.

I would like to close by wishing all a successful time at the upcoming EFI conference in Glasgow. I hope, you will have safe travels to Scotland and will find the time to visit all the interesting sessions you wanted to attend, interact and intermingle with colleagues and scientists from all over the world, plan new co-operations and projects, and finally manage to enjoy the great Scottish hospitality, the food and drinks as well as the stunning Scottish landscapes and other important landmarks in and around Glasgow! I hope to see as many of you as possible in a couple of weeks' time at the 34<sup>th</sup> EFI meeting in Glasgow.

Joannis Mytilineos

EFI-President

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## 2<sup>ND</sup>-HANDS ON TRAINING HLA COURSE, NEW DELHI, INDIA

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*By M. Chowdhry, Indraprastha Apollo Hospital, New Delhi, India*

It was my proud privilege to have hosted the '2<sup>nd</sup> -Hands on Training-(HOT) HLA Course' at the Department of Transfusion Medicine and Transplant Immunology, Indraprastha Apollo Hospital, New Delhi under the aegis of Indian Society of Blood Transfusion and Immunohematology held from 2nd December to 14<sup>th</sup> December, 2019. It was a matter of pride that "The program of this event had been approved by the EFI Education Committee". This educational and scientific meeting was approved for EFI Educational Credits (EECs), for those wishing to record this event for personal CME-CPD. 1 EEC was awarded per hour of attendance at the event. The Course was attended by 12 candidates from across the country.

The aim of this hands-on training course was to promote the field of Transplant Immunology through the techniques involved and their interpretation in solid organ transplant immunological workup. This course strongly encouraged interactions between participants and faculty. Introductory lectures were followed by demonstrations and hands-on experience of the assays. Newer techniques like Luminex based assays, especially Single Antigen Bead (SAB) assays have made sure that the degree of alloimmunization and specificity of the antibody is ascertained. In most of the participating laboratories, the most important goal of determining speci-

ficity is not achieved. We also tried to explain the importance of the AHG -CDC crossmatch which has, although insensitive compared to these newer assays, many advantages, and serves as a test using natively expressed HLA antigens. We had carefully chosen and made sure that the candidates were given adequate exposure to all histocompatibility techniques including but not limited to CDC crossmatch, antibody screening, PRA, Luminex Crossmatch, Single antigen bead assay and HLA Typing techniques. Besides lectures and Hands on Training, we had multiple audio-visual sessions, Meet the Experts session, Journal Club, Panel Discussions and Interactive sessions in this meeting.

This year, we have tried to include another aspect of Transplant Immunology in the curriculum i.e. DNA fingerprinting and basic knowledge of DNA capillary sequencer. This aimed to ensure that the delegates gained adequate knowledge on this technique, which is used in Solid Organ Transplants to establish relationship, chimerism testing in Bone Marrow Transplant, as well as in forensic science.

We sincerely thank our experts for taking out time from their busy schedule to be a part of this endeavor. In the end, I would like to thank EFI educational committee for approving this event and keep us motivated for many such endeavors.



Margot D.,  
Stem cell transplant recipient

# More HLA, More than HLA

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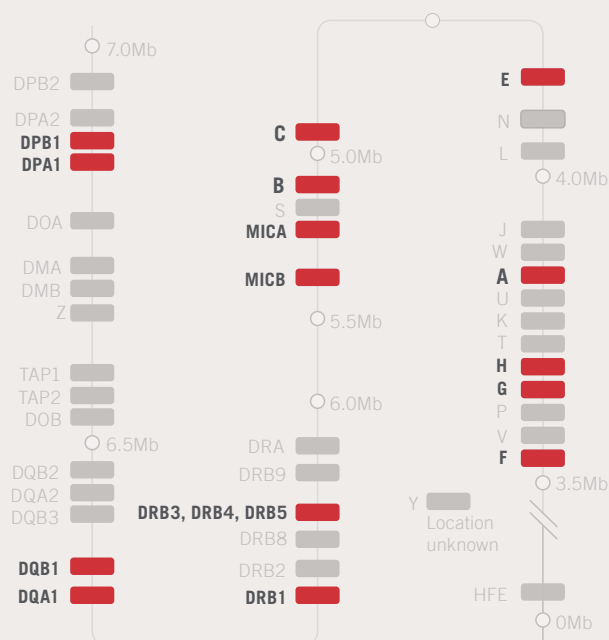
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# INVITATION TO THE GENERAL ASSEMBLY 2020

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All EFI members are invited to attend the 2020 EFI General Assembly, which will be held during the 34<sup>th</sup> European Immunogenetics and Histocompatibility Conference.

The General Assembly will be held on Tuesday 28<sup>th</sup> April 2020, 17:30 - 19:00 in Room Forth of the SEC Glasgow in Glasgow, Scotland, UK.

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

## Agenda

1. Opening
2. Minutes of the General Assembly 10<sup>th</sup> May 2019 (EFI Newsletter September 2019, issue 89)
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
  - f. IT & Bioinformatics
7. Next EFI conference – Amsterdam, the Netherlands
8. EFI medal
9. Installation of new EFI Councillors

Mats Bengtsson, EFI Secretary on behalf of the Executive Committee

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## UPDATE FROM THE EFI EDUCATION COMMITTEE FEBRUARY 2020

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### European Specialisation in H&I (ESHI) Diploma

The next examination will be held at the Glasgow 2020 EFI Conference on Saturday 25<sup>th</sup> April. Applications are now closed. The next examination will be offered at the EFI Business Meetings in October 2020. Applications for the examination must be made via the Section of Surgery/Transplantation/Transplant Immunology page of the UEMS website <https://www.uemsurg.org/divisions/transplantation/transplant-immunology2>.

### e-Learning

- The previously described plan to develop 10 x 30 minute online lectures, on H&I topics pertinent to the ESHI Diploma preparation, is progressing. Volunteers are busy recording their lectures and it is hoped these will be available soon for all EFI members via the EFI website.

- Also, please note that many other online resources are already available, such as the Massive Open Online Course (MOOC) on kidney, pancreas and islet transplantation, provided by Leiden University Medical Center (LUMC) and the Basic and Advanced online courses provided by WMDA. In addition, members can access pdfs

of slides from conference Teaching sessions and Summer Schools via the members area of the website.

- Many of the Plenary lectures and Teaching sessions at the upcoming EFI2020 meeting in Glasgow will be filmed and recorded to provide more educational resources for members on the EFI website. It is envisaged that these recordings will be made available a few weeks after the meeting to attending delegates and later on they will be available to all EFI members. If this is well used resource it would be hoped to continue this approach for future conferences.

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

- Discussions are still ongoing regarding the best way to provide the new EFI CME/CPD scheme for recording of individual's training and ongoing education. It is still hoped that a scheme can be provided to members in 2020.
- The new EFI scheme will be available for 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.

### European Technical H&I Qualification (ETHIQ)

The pilot scheme of the ETHIQ logbook is now being undertaken by 15 participants in 4 countries. The scheme is for technical staff working at the bench in EFI accredited laboratories, with supervision given by senior staff in their own lab. The aim is to create a qualification that gives a measure of technician's knowledge and technical competence in the H&I lab. Some of the individuals undertaking the pilot hope to complete the logbook and associated work by August 2020 (the logbook can be completed between 1-3 years after registration), so it is anticipated that the ETHIQ logbook could be made more widely available for EFI members after that date.

### EFI Education and Scientific Bursaries

Applications for Education and Training Bursaries to promote training in the field of H&I by enabling visits



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to other laboratories, are now being received four times each year. Details of the closing dates, the process and the on line application form are available on the EFI website bursaries page <http://www.efi-web.org/bursaries.html>.

#### ASHI/APHIA/EFI/ARSHI Summer School

• The joint EFI, ASHI, APHIA and ARSHI International Summer School

(ISS) provides a short, focused course on many aspects of theoretical and applied H&I. The course is limited to a small group (~50) and participants are invited to present their own research or clinical cases. It represents an opportunity for those studying towards higher H&I specific qualifications as well as a chance to meet others working in the field from different parts of the world.

• The next ISS course will be held 30th August-2nd September 2020 in the beautiful Lindner Hotel Castle, Prague, Czech Republic. In this Newsletter there is more information about applying for registration for this meeting. Please note as spaces are limited the applicants will be selected based on their abstract, their ongoing H&I training needs and the access they may have to other training opportunities in their countries.

## 18<sup>TH</sup> INTERNATIONAL HLA AND IMMUNOGENETICS WORKSHOP MEETINGS DURING THE EFI ANNUAL MEETING

During the EFI annual meeting there will be several business meetings of projects from the 18th IHWS. The project leaders will discuss plans, progress and preliminary results. The meetings that are scheduled can be found on the right. There may be additional meetings planned, which will be included in the final EFI meeting program and will be announced in the upcoming IHIWS newsletter. Please note that there is limited room space available for these meetings.

Project	Date and time	Room
HLA Haplotypes by families / the allele cataloguing project	April 27th, 11:00-12:00	M1
Population genetics, anthropology and evolution	April 27th, 12:00-13:00	M1
HLA-DP haplotypes	April 27th, 14:00-15:00	M1
Creating Fully Representative MHC Reference Haplotypes	April 27th, 15:00-15:30	M1
High-resolution KIR in populations	April 27th, 15:30-16:30	M1
Pharmacogenetics and HLA	April 28th, 11:00-12:00	Dochart 1
SNP-HLA Reference Consortium	April 28th, 12:00-13:00	Dochart 1
HLA epitope immunogenicity	April 28th, 14:00-15:00	Dochart 1

## 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:*

L. Pravisano, Bologna, Italy  
B. Zamostna, Utrecht, the Netherlands  
C. Mak, Utrecht, the Netherlands  
A. Galati, Dreieich, Germany  
L.N. Viemose, Copenhagen, Denmark  
A. Gustafsson, Stockholm, Sweden  
C. Wehmeier, Basel, Switzerland  
C. Cambridge, London, United Kingdom  
S. Bernas, Tübingen, Germany  
L. Storm, Rijswijk, the Netherlands  
Z. Dobeles, Riga, Latvia  
J. Libuše, Brno, Czech Republic  
L. Frischknecht, Zürich, Switzerland  
C. Grill, Vienna, Austria  
V. Civaj, Vienna, Austria  
L. Jukić, Zagreb, Croatia  
A. Rosas-Tarco, Monterrey, Mexico  
H. Macpherson, London, UK  
K. Sikorová, Olomouc, Czech Republic  
K. Osoegawa, Palo Alto, USA

A. Boros Major, Budapest, Hungary  
Z. Lerner, Budapest, Hungary  
A. Zoli, Ancona, Italy  
M. Peres, Vandoeuvre les Naancy, France  
Y.O. Chavez-Estrada, Monterrey, Mexico  
C. Surace, Rome, Italy  
D.G. De Ritis, Rome, Italy  
S. Marietti, Rome, Italy  
J. Norton, Wiesbaden, Germany  
E. Giurelli, Cagliari, Italy  
A. Manfreda, Rome, Italy  
A. Bonifacius, Hannover, Germany  
A.C. Dragon, Hannover, Germany  
E.C. Russel, Manchester, UK  
A.M. Vasilache, Linköping, Sweden  
L. Betke, Essen, Germany  
M. Betti, Scandicci, Italy  
L. Maldaner Amorim, Curitiba, Brasil  
K. David, Dublin, Ireland





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# EFI 2020

## 34th European Immunogenetics and Histocompatibility Conference

**SEC GLASGOW 26-29 APRIL 2020**

The programme has been awarded 17 CPD Credits by the Royal College of Pathologists and 17 CME credits by the European Federation for Immunogenetics

### Saturday 25 April 2020

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#### ETIVE

08:30 – 09:15 EBTI Assembly

#### M3

08:30 – 17:30 ESHI Diploma Examination

#### M5

08:30 – 17:30 ESHI Diploma Prep Room & Waiting Area

#### M1

09:30 – 17:00 Accreditation Inspectors Workshop

10:45 – 11:15 Refreshment Break

12:30 – 13:45 Lunch (*Mezzanine Level*)

15:00 – 15:30 Refreshment break

#### CORINTHIAN

18:30 Accreditation Dinner

### Sunday 26 April 2020

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#### M2

08:30 – 16:30 Executive Committee Meeting

10:00 – 10:15 Refreshments

12:30 – 13:30 Lunch (*served on Mezzanine outside M2 & M3*)

14:30 – 14:45 Refreshments

#### M3

08:30 – 16:30 External Proficiency Testing (EPT) Committee Meeting

10:00 – 10:15 Refreshments

12:30 – 13:30 Lunch (*served on Mezzanine outside M2 & M3*)

14:30 – 14:45 Refreshments

#### M4

14:30 - 16:30 Scientific Committee Meeting

14:30 – 14:45 Refreshments

#### ETIVE

08:30 – 16:00 Standards Committee Meeting

10:00 – 10:15 Refreshments

12:30 – 13:30 Lunch (*served on Mezzanine outside M2 & M3*)

14:30 – 14:45 Refreshments



## ALSH 1

09:00 – 15:15 Accreditation Committee Meeting  
10:30 – 11:00 Refreshments  
12:30 – 13:30 Lunch (served on Mezzanine outside M2 & M3)

## ALSH 2

12:30 – 14:00 Populations Genetics Working Group  
15:30 – 16:30 BSHI AGM

## BOISDALE 1

10:00 – 12:00 IT & Bioinformatics Committee Meeting  
10:00 – 10:15 Refreshments

## BOISDALE 2

13:30 – 17:00 Education Committee Meeting  
14:30 – 14:45 Refreshments

## HALL 2

14:00 Registration, Exhibition Viewing and Poster Hanging

## ARMADILLO

17:30 Opening Ceremony and Awards  
*Opening by 2020 Conference Organising Group followed by Welcome from the Lord Provost and EFI President*  
*Julia Bodmer Award*  
*HLA Award*  
*Cepellini Lecture and Award*

## GLASGOW SCIENCE CENTRE

19:00 Civic Reception  
*Courtesy of the Rt Hon The Lord Provost Councillor Philip Braat*

## Monday 27 April 2020

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## HALL 2

07:00 Delegate Registration, Poster and Exhibition Viewing

## ARMADILLO

08:30 PLENARY SESSION 1  
Foetal/Maternal Immunology  
08:30 BSHI Hilliard Festenstein Award Lecture  
The Immune System in Human Pregnancy  
*Prof Ashley Moffett, UK*  
09:00 NK Cells and HLA-G  
*Dr Sumi Rajagopalan, USA*  
09:30 Uterine Transplantation; a global update progress in the UK  
*Benjamin Jones, UK*

## HALL 2

10:00 Refreshments, Poster and Exhibition Viewing

## FORTH

10:30 TEACHING SESSION 1  
NK Cells, from Basics to Clinical Impact  
10:30 – 11:00 NK Cells, from Basics to Clinical Impact  
*Dr Paul Norman, USA*  
11:00 – 11:30 Bioinformatics Challenges and Solutions to Gain Insight in the Role of NK Cell Receptors in Health and Disease  
*Jill Hollenbach PhD, MPH, USA*  
11:30 – 12:00 Functional Heterogeneity in Human NK Cells

*Prof Karl-Johan Malmberg, Norway*

**12:00** **Lunch, Poster and Exhibition Viewing** (Hall 2)

**13:00** **TRADE SESSION 1** *sponsored by Immucor*

**14:00** **TEACHING SESSION 2**

**New Methods in Chimerism Testing**

**14:00 – 14:30** **New Methods in Chimerism Testing**

*Leigh Keen, UK*

**14:30 – 15:00** **TBC**

*Dr Michael Eikmans, Netherlands*

**15:00 – 15:30** **New Chimerism Technologies for the Study of Relapse Immunobiology**

*Dr Cristina Toffalori, Italy*

**15:30** **Refreshments, Poster and Exhibition Viewing** (Hall 2)

## **LOMOND**

**10:30 – 12:00** **SPECIAL SESSION 1**

**Mismatched VUD V Cord V Haplo - New Developments in HSCT and Cellular Therapies**

*Prof Alejandro Madrigal, UK* *Moderator*

**10:30 – 11:00** **Mismatched VUD**

*Prof Bronwen Shaw, USA*

**11:00 – 11:30** **Haplo**

*Prof Fabio Ciceri, Italy*

**11:30 – 12:00** **Cord**

*Robert Danby, UK*

**12:00** **Lunch, Poster and Exhibition Viewing** (Hall 2)

**13:00** **TRADE SESSION 2** *sponsored by One Lambda*

**15:30** **Refreshments, Poster and Exhibition Viewing** (Hall 2)

## **BOISDALE**

**10:30** **ORAL ABSTRACT SESSION 1**

**Solid Organ Transplantation**

**12:00** **Lunch, Poster and Exhibition Viewing** (Hall 2)

**13:00** **TRADE SESSION 3** *sponsored by Omixon*

**14:00** **ORAL ABSTRACT SESSION 3**

**MHC Evolution - Anthropology - Population Genetics**

**15:30** **Refreshments, Poster and Exhibition Viewing** (Hall 2)

## **ALSH**

**10:30** **ORAL ABSTRACT SESSION 2**

**Reproduction & Disease**

**12:00** **Lunch, Poster and Exhibition Viewing** (Hall 2)

**13:00** **TRADE SESSION 4** *sponsored by Caredx*

**14:00** **ORAL ABSTRACT SESSION 4**

**Immunotherapy & Antigen Presentation**

**15:30** **Refreshments, Poster and Exhibition Viewing** (Hall 2)

## **ETIVE**

**13:00 – 13:30** **PhD & Postdocs meet Speakers**

**13:30 – 14:00** **PhD & Postdocs meet Speakers**

**15:30** **Refreshments, Poster and Exhibition Viewing** (Hall 2)

## **M2**

**12:00 – 14:00** **Executive Committee & Co-ordinators Meeting**

**15:30** **Refreshments, Poster and Exhibition Viewing** (Hall 2)

## **ARMADILLO**

**PLENARY SESSION 2 - Regenerative Medicine**

**16:00** **Mastering Immunogenicity: How great is the challenge for regenerative medicine?**

*Prof Paul Fairchild, UK*

**16:30** **Mesenchymal Stromal Cells in Renal Transplantation**



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17:00	<i>Marlies Reinders, Netherlands</i> <b>Macrophages and Liver Fibrosis</b> <i>Prof Stuart Forbes, UK</i>
17:30	<b>Scientific Poster Cheese &amp; Wine Reception</b> <i>sponsored by GenDx</i>
	<b>HOUSE FOR AN ART LOVER</b>
19:00	<b>Speakers' Dinner &amp; Ceppellini Dinner</b>

## Tuesday 28 April 2020

07:00	<b>TULIP RUN</b> <i>organised by GenDx</i>
	<b>HALL 2</b>
08:00	<b>Delegate Registration, Poster and Exhibition Viewing</b>
	<b>ARMADILLO</b>
08:30	<b>PLENARY SESSION 3 - Solid Organ Transplantation</b> <b>GWAS Studies in Kidney Transplantation what they tell us</b> <i>Prof Peter Conlon, Ireland</i>
09:00	<b>HLA Molecular Mismatch - A prognostic and predictive biomarker for primary alloimmunity</b> <i>Dr Peter Nickerson, Canada</i>
09:30	<b>Treatment of late antibody-mediated rejection</b> <i>Dr Georg Böhmig, Austria</i>
10:00	<b>Refreshments, Poster and Exhibition Viewing (Hall 2)</b>
	<b>FORTH</b>
10:30	<b>TEACHING SESSION 3</b> <b>Relevance of HLA and non-HLA Pharmacogenetics in Drug Hypersensitivity &amp; Transplantation</b>
10:30 – 11:00	<b>The Role of Pharmacogenetics in the diagnostic armoury of the H&amp;I laboratory - current status and future directions</b> <i>Dr Martin Howell, UK</i>
11:00 – 11:30	<b>Transplant Drug-Related Pharmacogenetics</b> <i>Prof Iain A.M. Macphee, UK</i>
11:30 – 12:00	<b>HLA Associations in Drug-Induced Liver Injury and their clinical significance</b> <i>Prof Ann Daly, UK</i>
12:00	<b>Lunch, Poster and Exhibition Viewing (Hall 2)</b>
13:00	<b>TRADE SESSION 5</b> <i>sponsored by Bag Healthcare</i>
14:00	<b>TEACHING SESSION 4: New Research Methods</b>
14:00 – 14:30	<b>TBC</b> <i>Lotte Wieten, Netherlands</i>
14:30 – 15:00	<b>TBC</b> <i>TBC</i>
15:00 – 15:30	<b>TBC</b> <i>TBC</i>
15:30	<b>Refreshments, Poster and Exhibition Viewing (Hall 2)</b>
	<b>BOISDALE</b>
10:30	<b>ORAL ABSTRACT SESSION 5</b> <b>Haematopoietic Stem Cell Transplantation</b>
12:00	<b>Lunch, Poster and Exhibition Viewing (Hall 2)</b>
13:00	<b>TRADE SESSION 7</b> <i>sponsored by Caredx</i>
14:00	<b>ORAL ABSTRACT SESSION 7 - Miscellaneous</b>
15:30	<b>Refreshments, Poster and Exhibition Viewing (Hall 2)</b>
	<b>ALSH</b>
10:30	<b>ORAL ABSTRACT SESSION 6 - New Technologies</b>
12:00	<b>Lunch, Poster and Exhibition Viewing (Hall 2)</b>
13:00	<b>TRADE SESSION 8</b> <i>sponsored by GenDx</i>
14:00	<b>ORAL ABSTRACT SESSION 8 - Bioinformatics</b>

15:30 Refreshments, Poster and Exhibition Viewing (Hall 2)

## ETIVE

10:30 Meet the EPT Experts Session

12:00 Lunch, Poster and Exhibition Viewing (Hall 2)

13:00 – 13:30 PhD & Postdocs meet Speakers

13:30 – 14:00 PhD & Postdocs meet Speakers

## LOMOND

13:00 TRADE SESSION 6 *sponsored by One Lamda*

14:00 SPECIAL SESSION 2 ESOT: Increasing Access To Transplant

14:00 – 14:30 Cellular Therapies

*Dr Martin Hoogduijn, Netherlands*

14:30 – 15:00 Kinetics of Pretransplant HLA-DSA

*Prof Maarten Naesens, Belgium*

15:00 – 15:30 Improving Access to Transplantation through Technology

*Mr Gabriel Oniscu, UK*

15:30 Refreshments, Poster and Exhibition Viewing (Hall 2)

## ARMADILLO

16:00 – 16:30 Immunogenetics of Human NK Cells

*Prof Peter Parham, USA*

16:30 – 17:00 TBC

*Prof Salim Khakoo, UK*

17:00 – 17:30 TBC

*Prof Stefan O. Ciurea, USA*

## FORTH

17:30 – 19:00 EFI General Assembly

## MERCHANT SQUARE

20:00 Gala Dinner

## Wednesday 29 April 2020

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### ARMADILLO FOYER

08:00 Delegate Registration

### ARMADILLO

08:45 Best Oral Abstract Session

10:15 Refreshments (Gala Foyer)

### PLENARY SESSION 5

10:45 BSHI Terasaki Award Lecture

Distinguishing HLA allotypes through their interactions with the peptide loading complex

*Mary Carrington, USA*

11:15 HLA Presentation of Viral & Tumor Neoantigens

*William Hildebrand*

11:45 18th International Workshop Update

*TBC*

12:15 CLOSING LECTURE

Immune Cell Surfaces

*Prof Dan Davis, UK*

13:00 Closing Ceremony



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The 15<sup>th</sup> International Summer School on Histocompatibility and Immunogenetics, hosted by the European Federation for Immunogenetics (EFI) with support from American Society for Histocompatibility and Immunogenetics (ASHI), the Asia Pacific Histocompatibility and Immunogenetics Association (APHIA) and the Arabic Society for Histocompatibility and Immunogenetics (ARSHI) will take place at hotel Lindner Prague Castle in Prague, Czech Republic from 30 August to 2 September 2020.

The Summer School provides a focused course on many aspects of theoretical and applied Immunogenetics and Histocompatibility. It represents a great opportunity for those studying towards higher H&I qualifications as well as a chance to meet others working in the field in different parts of the world. Early applications are required as attendance is limited (50 places) to promote open discussion and facilitate presentation of research by each participant. In the event of having more applicants than places, delegates will be selected based on submitted abstract, access to learning resources in their home country and whether they are actively training towards a higher H&I qualification. The brochure holding more meeting information and the application procedure is available on the EFI website ([www.efi-web.org](http://www.efi-web.org)).

## **Preliminary program**

### **Session I: HLA in health and disease**

- *What does HLA do: latest theories of antigen presentation*
- *HLA in transplantation*
- *HLA in disease*
- *Abstract session I*

### **Session II: Solid organ transplantation**

- *Organ allocation in Europe*
- *Organ allocation and VXM in the UK*
- *New ways to match; towards molecular matching?*
- *Abstract session II*

### **Session III: HSCT**

- *Future of registries*
- *Outcome of using different sources of stem cells*
- *Non HLA genetics relevant in HSCT*
- *Abstract session III*

### **Session IV: HLA and other genetic systems in transfusion**

- *Platelet refractoriness: causes and management*
- *FNAIT and PTP*
- *TRALI: prevention and investigation*
- *Abstract session IV*

### **Session V: Practical skills**

- *Workshop 1: selecting unrelated donors for HSCT*
- *Workshop 2: assessing risk for kidney offers*
- *Abstract session V*

### **Session VI: Future of H&I: new methods and new roles**

- *NGS and Beyond*
- *New methods for chimerism testing*
- *Role of labs in cellular therapy/regenerative medicine*
- *Abstract session VI*

**We look forward to meeting you in Prague!**



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**SystemLink, Inc.** is a software development company focused on the needs of the histocompatibility community. HistoTrac is a customizable Laboratory Information Management System in use throughout the World. Since 1999, HistoTrac has become the primary software system for HLA labs in North America.



# XXIII<sup>RD</sup> FRENCH SPEAKING EDUCATIONAL SFHI MEETING, NANCY, FRANCE

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*By A. Aarnink and M. Pérès, HLA laboratory, Nancy, France*



The XXIII<sup>rd</sup> French speaking educational SFHI-EFI Meeting took place this year for the first time in Nancy. The meeting took place on the 19<sup>th</sup> and 20<sup>th</sup> of September on behalf of the Société Francophone d'Histocompatibilité et d'Immunogénétique (SFHI) at the "Centre des Congrès-Nancy Prouvé" where about 180 people from Belgian, French, Moroccan, Swiss and Tunisian HLA laboratories gathered.

The Thursday's first session was chaired by S. Girerd (Nephrology, Nancy) and Barbara Proust (HLA, Tours) and was mainly dedicated to news in solid organ transplantation. The first speaker, Myriam Labalette (HLA, Lille), showed an overview on the basics of alloreactivity mechanisms. Then Laurent Mesnard (Nephrology, Paris) followed with a presentation on the perspective of allogeneomics and the identification of new polymorphisms in renal transplantation. A. Koenig (Nephrology, Lyon) ended this session by explaining her work on allograft rejection by missing-self NK cell-mediated mechanisms.

The second part of Thursday morning, chaired by M. Ladrière (Nephrology, Nancy) and F. Delbos (HLA, Nantes), allowed 8 persons to present a selected abstracts on DNA HLA typing and detection of antibodies in solid organ transplant recipients.

In the afternoon, the session chaired by I. Top (HLA, Lille) and M. Filloux (HLA, Limoges) started by a presentation of C. Antoine (Nephrology and Agence de Biomédecine, Paris) on the regulation of the allocation process of solid organ transplant in France. She was followed by A. Del Bello (Nephrology, Toulouse), who spoke about desensitization programs in renal transplantation. Afterwards, N. Guillaume (HLA, Amiens), held an interactive presentation on pitfalls and technical limits of the flow cytometry crossmatch method. The sessions continued by two presentations of S. Tourne (HLA, Strasbourg) on the EFI standards and M. Foray (COFRAC, Paris) on the ISO15189 norm in HLA laboratories. The Thursday ended by presentations about technical innovations of HLA laboratories providers and manufacturers, and finally the annual general assembly of the SFHI.

On Friday morning the main topics of the first session chaired by C. Pochon (Pediatric onco-hematology, Nancy) and P. Rouzaire (HLA, Clermont-Ferrand) were hematology and allogeneic stem cell transplantation. M.T. Rubio (Hematology, Nancy) first explained the basics of CAR-T cell therapy in hematological malignancies. Then D. Bensoussan (Cell therapy unit, Nancy) presented the use of cord blood units as a source of hematopoietic stem cells but also mes-

enchymal stem cells. Afterwards, P. Loiseau (HLA, Paris) held a presentation on the impact of anti-HLA antibodies in haploidentical receiver and donor of hematopoietic stem cell. The last topic presented by J.L. Taupin (HLA, Paris) for J. Zuber (Nephrology, Paris) was a case report on the treatment of acute Graft versus Host Disease caused by anti-HLA antibodies after a renal allograft.

The second session was chaired by O. Agulles (HLA, Nancy) and allowed V. Renac (HLA, Rennes) to explain the recommendations of SFHI on HLA-related diseases testing. Then A. Aarnink (HLA, Nancy) presented the inter-university diploma of immunogenetic organized by N. Congy (HLA, Toulouse)

Afterwards, Catherine Giannoli (HLA, Lyon) and N. Guillaume (HLA, Amiens) chaired the last session of Friday morning with 3 presentations of Master 2 research project funded by SFHI and 5 presentation selected by abstract on HLA epitopes and chimerism in HSCT.

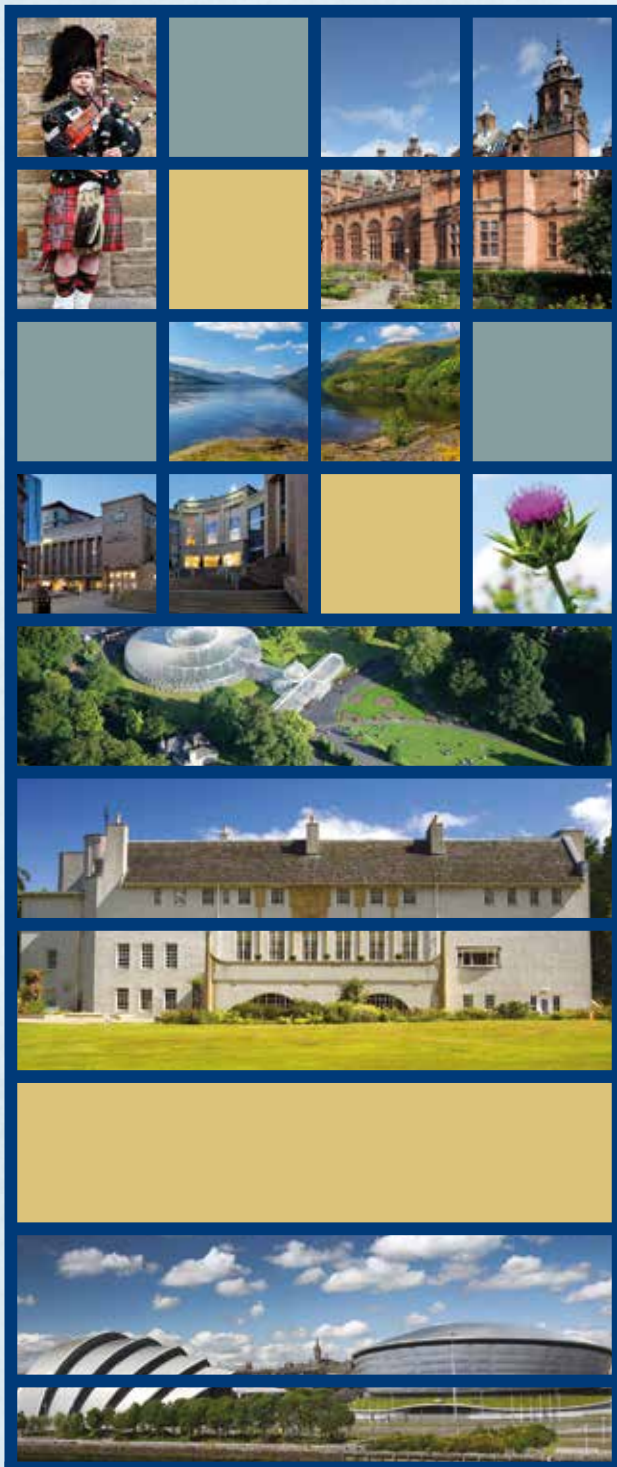
During Friday afternoon the session chaired by H. Mandin (HLA, Fort de France) and T. Tabary (HLA, Reims) was dedicated to anti-HLA antibodies. G. Maggipinto (HLA, Liège) reviewed the history of anti-HLA antibodies from serology to epitopes. This was followed by a presentation of the results of the anti-HLA antibodies SFHI external proficiency testing program. Then J.L. Taupin (HLA, Paris) and G. Guidicelli (HLA, Bordeaux) presented steps toward the automatic interpretation of single antigen testing by informatic laboratory software. Finally, the meeting closed with a presentation of the SFHI working groups and their objectives.

We gratefully thank the local organizing committee and all members of the HLA laboratory of Nancy for the wonderful organization and welcome. We warmly thank speakers for the quality of their presentations and participants for stimulating exchanges. These days are very helpful for continuous education of technicians and biologists working in the field of immunogenetic and transplantation.

# EFI 2020

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- HLA and Disease
- Research Methodologies

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Histocompatibility  
and Immunogenetics

Promoting Science and  
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By Luca Vago, section editor HLA journal

## **A novel multiplexed 11 locus HLA full gene amplification assay using next generation sequencing.**

Truong L, Matern B, D'Orsogna L, Martinez P, Tilanus MGJ, De Santis D. *HLA*. 2020 Feb;95(2):104-116. doi: 10.1111/tan.13729.

It is becoming increasingly recognized that donor-recipient HLA incompatibilities outside the antigen recognition site or even in non-coding regions might have a significant impact on the clinical outcome of allogeneic hematopoietic cell transplantation (allo-HCT). This prompts the development of practical and reliable technologies for the full-length typing of HLA genes. In the present study, Truong and coworkers developed a new strategy for the typing of 11 HLA genes (HLA-A, HLA-B, HLA-C, DRB1, DRB3/4/5, DQB1, DQA1, DPB1, and DPA1) through four multiplexed PCR reactions followed by generation of libraries and sequencing using the IonTorrent platform. The primer set was tested on a panel of 47 samples, chosen to be representative for the most common HLA alleles, and sensitivity and specificity of this typing strategy were validated in a cohort of 158 individuals. With a simple and fast workflow, this assay allows to generate a large amount of genetic data that will surely be instrumental to improve our understanding of allo-HCT immunogenetics and, ultimately, its clinical outcome.

## **Insights into the polymorphism in HLA-DRA and its evolutionary relationship with HLA haplotypes.**

Matern BM, Olieslagers TI, Voorter CEM, Groeneweg M, Tilanus MGJ. *HLA*. 2020 Feb;95(2):117-127. doi: 10.1111/tan.13730.

The HLA-DRA gene encodes for the alpha chain of the HLA-DR protein, and until now has been considered basically monomorphic due to the presence of a single described polymorphism in its coding sequence. In the present study, upon analysis of publicly available data from the 1000 Genomes Project and of full length gene sequencing of HLA-DRA in 98 healthy individuals, the authors describes an unexpected level of polymorphism of HLA-DRA non-coding sequences, documenting at least 22 novel HLA-DRA alleles, characterized by

differences in introns and in the 3'-UTR regulatory region. These results put into question the current perception of HLA-DRA as a single lineage, suggesting that it should be rather considered part of HLA-DRA~HLA-DRB345~HLA-DRB1~HLA-DQB1 haplotypes.

## **Real-time PCR based HLA-B\*27 screening directly in whole blood.**

Geiger K, Zach C, Leiherer A, Fraunberger P, Drexel H, Muendlein A. *HLA*. 2020 Mar;95(3):189-195. doi: 10.1111/tan.13767.

The association between HLA-B\*27 and autoimmune spondyloarthritides is strong and well-established, making HLA typing for this allele via flow cytometry or molecular methods a useful complement in case of uncertain diagnosis. In order to speed up and streamline the molecular detection of HLA-B\*27, in the present study the Authors developed and validated in a cohort of 216 samples a highly specific qPCR assay for the allele of interest, capable of performing efficiently using whole blood samples without genomic DNA extraction. This fast and practical assay might not only reduce the work load for lab operators, but also reduce the risk of cross-contaminations or sample mistakes related to extracting nucleic acids from the original patient samples.

## **Extending the sequences of HLA class I alleles without full-length genomic coverage using single molecule real-time DNA sequencing.**


Hassall KB, Latham K, Robinson J, Gymer A, Goodall R, Merlo D, Marsh SGE, Mayor NP. *HLA*. 2020 Mar;95(3):196-199. doi: 10.1111/tan.13800.

Over the last few years, next-generation sequencing technologies have facilitated the description of an unprecedented number of new HLA alleles, thanks to the possibility to capture the extensive polymorphism that characterizes non-coding regions. This raises the relevant issue of having in the IPD-IMGT/HLA database sequences of reference of the same extent and completeness. In the present study, the Authors took advantage of SMRT DNA sequencing to extend and complete genetic information for 85 HLA Class

I alleles, identifying in the process 13 novel sequence variants. The accurate consensus sequences generated from this study will rapidly be implemented in analytical software, and will be of fundamental relevance to the constantly increasing number of laboratories that are using next- and third generation sequencing methods for HLA typing.

Finally we would like to point the attention of the EFI newsletter readership to some excellent reviews published in the latest issues of *HLA*, focused on HLA diversity in the population of Brazil (January issue), on how structural biology can inform the design of vaccines for HIV (February issue), and on the use of mass cytometry tetramers to investigate antigen-specific T cell responses (March issue).



A close-up photograph of a rainbow chameleon, showing its vibrant green, blue, and yellow scales and its large, independently moving eye.

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