**EUROPEAN FEDERATION** 

# NEWSLETTER

#### September 2021 - Issue 95

For Immunogenetics

# .....FROM THE EFI PRESIDENT

# DEAR EFI MEMBERS,

It is with pleasure that I write my first newsletter report as EFI President. I am honoured to take on the position of President of our exceptional society EFI. Thank you to everyone that has supported me on my journey to this position.

On behalf of all the EFI membership, I wish to thank Joannis Mytilineos, our now Past President, for his excellent presidency over the last three years and especially for his thoughtful handover to myself. Under Joannis's tenure, improved communication channels within the Executive Committee and between the other EFI committees were implemented, which enabled us all to respond quickly to how we conducted EFI business during the turmoil of a pandemic. Indeed one of Joannis's objectives, to implement 'virtual' learning opportunities for EFI members, became a reality during this period in partnership with the Scientific and Education Committees. Thank you Joannis.

There have also been several changes in the chairs of our EFI committees. We welcome Blanka Vidan Jeras as chair of the Accreditation Committee, Luca Vago as chair of the Scientific Committee and Helle Bruunsgaard as chair of the External Proficiency Testing committee. Thank you for your commitment to the work of EFI. I wish you success and



enjoyment in your new roles. My appreciation is sent to the chairs that are stepping down: Andrea Harmer, Katharina Fleischhauer and Falko Heinemann. Thank you for all the work you have undertaken in support of EFI and I wish you well with your future professional activities.

This is the first newsletter since our virtual FFI conference which was held jointly with the British Society for Histocompatibility and Immunogenetics. Normally the EFI President congratulates the organisers on the (always) successful EFI conference. This is a little strange for me to do, as I was one of the organisers. So instead I will congratulate my co-organisers, Helen McFarlane and David Turner. Thank you - we had a huge challenge turning our live conference plans into, what has sadly become routine in our lives, the virtual event. Thanks to the support of our corporate partners and the commitment of the lecturers, oral abstract presenters, poster presenters, session chairs and the 1089 registered attendees we had, in my humble opinion, an excellent virtual conference. You will find a few reports on this event elsewhere in this newsletter.

So the EFI flag has virtually been passed to the organisers of EFI 2022 which will take place following the International Histocompatibility Workshop in Amsterdam on May 17<sup>th</sup> to 20<sup>th</sup>. The organisers, Eric Spierings and Sebastiaan Heidt and their team are putting together an excellent scientific and social programme. We are all looking forward to a face to face conference, with hopefully no travel restrictions in place.

Following Amsterdam 2022 we can look forward to Nantes 2023. The

Nantes meeting will be the first conference organised by the EFI appointed professional conference organiser (PCO) Guarant. The EFI secretariat and myself have established a regular meeting with the PCO and the local organisers to ensure optimum communication between involved parties, and continued success with future EFI conferences.



Another victim of the SARs-CoV-2 pandemic has been the International Summer School. Originally planned for the summer of 2020 to take place in the beautiful city of Prague, the event has been made virtual and is taking place as I write this report. The organisers, predominantly David Turner, Tony Slavcev and Sandra van Hensbergen have put together a faculty panel from the contributing societies: EFI, ASHI, APHIA and ARSHI. Attendees from all continents are participating, which has made the timings of the interactive sessions a little challenging! It is hoped that the presentations from the faculty will be made available for the EFI membership following the closure of the summer school.

It is now almost two years since EFI held a face to face business meeting. The committees usually meet during the annual conference and, when required,



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

This is already the 95th edition of the EFI Newsletter, which you receive after hopefully having had a nice and well-deserved summer break. With a bit of luck we can continue this positive spirit by being able to physically meet and interact more and more regularly. That being said, despite the EFI annual conference organized by the Scottish team being fully virtual, it was a great success. From here I would like to thank Ann-Margaret Little, David Turner and Helen McFarlane for making this first (and hopefully last) virtual EFI annual conference such a pleasant experience.

More congratulations go out to Ann-Margaret Little who now officially received the EFI mug (with photographic evidence in this Newsletter), and therefore now formally is our new President. I wish Ann-Margaret the best of luck and look forward to her Presidential contributions to the Newsletter.

Earlier this year we received the sad news that Erik Thorsby had passed. For those who knew Erik, his friendly and gentle spirit will be missed deeply. For those younger EFI members who might not know Erik, please look into the extensive body of work he and his team have published over the years, which includes seminal papers in our field. Both Ludvig Sollid and Frans Claas have written an obituary, published in this Newsletter.

Also in this Newsletter you can find the report from the (virtual) General Assembly held during the last EFI annual conference, the recipients of the awards handed out during this meeting, reports from several EFI committees, as well as reports from the joint EFI sessions at the ESOT meeting held in Milan, and the joint EFI-EFIS session at the ECI meeting held in Istanbul.

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

#### Sebastiaan Heidt

Deadline for contributions to EFI Newsletter 96 is November 8, 2021. Please send your contributions by e-mail to s.heidt@lumc.nl

# CONTENTS \_\_\_\_\_

From the EFI President From the editor's desk Membership update In memoriam: Erik Thorsby (1938-2021) Obituary. In memory of Erik Thorsby (1938-2021) Report from the EFI General Assembly April 22 2021 EFI conference 2021 Ceppellini Lecturer 2021 – Professor Jacques Neefjes EFI Medal Laureate 2021: Andrea Harmer EFI Medal Laureate 2021: Luca Mascaretti EFI Medal Laureate 2021: Carlo Carcassi EFI 2021 The best poster awards Julia Bodmer Award 2021 – Cristina Toffalori Report of the EFI Accreditation Committee The Jon van Rood award and best abstract session Future EFI conferences - call for EFI 2024 Report of the EFI Education Committee Report of the EFI EPT Committee Report of the EFI Scientific Committee Report on the ESOT Conference 2021 Report in the Joint EFI-EFIS symposium at the 6th European Congress of Immunology Call for bids for the 19th International HLA and Immunogenetics Workshop Highlights from the HLA journal

26





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

in the autumn. Due to restrictions on travel and the lack of financial income from conferences, the Executive Committee made the decision to not have face to face committee meetings in the autumn of 2021 and instead the committees will continue to undertake their business via video conferencing. We appreciate that this is disappointing for our committee members especially as travel is now easier for most people within Europe. However we look forward to resuming face to face committee meetings in 2022.

EFI has several 'Memorandum of Understanding' agreements with other societies reignited by Gottfried Fisher when he was President, and this endeavour continued with subsequent Presidents Elissaveta Naumova and Joannis Mytilineos. These agreements have led to joint sessions being hosted at conferences organised by various societies. During the EFI 2021 conference we had a very interesting joint session with ESOT called 'Increasing access to transplant', and during the ESOT conference which has just taken place there were two joint sessions with EFI: 'Present and future role of HLA and antibodies' and ' How to set up an ABO incompatibility programme'. In addition, Katharina Fleischhauer and the Scientific Committee organised a joint session at the European Congress on Immunology (ECI) entitled, 'Immunogenetics in Cancer'. These joint sessions are important for highlighting the impact of histocompatibility and immunogenetics to scientists and clinicians who do not work directly in our field and I hope we will continue with this successful programme of shared activities.

EFI also has representation within other organisations. There are two EFI representatives on the board of the Worldwide Network for Blood and Marrow Transplantation (WBMT), (www.wbmt.org) Mats Bengtsson and Steven Marsh. The Executive Committee have invited Mats and Steven to continue in this role until their terms come to an end on July 1st 2022. Furthermore, Sebastiaan Heidt just handed over his position in the ASHI Science and Technology Initiatives Committee (STIC, analogous to the EFI Scientific Committee) to James Robinson as EFI representative.

Since taking up the position of President, the Executive Committee has had one video meeting with another scheduled before this newsletter will be issued. We completed the changes to the Constitution as agreed at the General Assembly meeting and thanks to Gwendaline Guidicelli and Paul Rouzaire, these documents have been translated into French and approved by the Court of Strasbourg. This was a very important action as it allows EFI to continue its business using virtual General Assemblies and virtual Executive Committee meetings and also legitimises the minimum number of attendees that typically attend the annual General Assembly meeting.

It was highlighted to the Executive Committee, by the EFI accreditation software providers, that EFI does not have formal documentation to describe how we meet the General Data Protection Regulation (GDPR) that came into effect on 25th May 2018. The EFI Councillors, led by Kay Poulton have been addressing this issue and we are currently collating all the required information to enable us to be compliant with the regulation.

An important function of the Executive Committee is to support the work of the EFI committees. We had a meeting with the chairs of the committees prior to the EFI 2021 conference and following this several requests have been approved by the Executive Committee and you can learn more about these activities within the reports from each of the committees in this newsletter. We can look forward to new Scientific Webinars, more e-learning and a new database for recording our continuing professional development activities.

Sadly, in March this year, we lost Erik Thorsby. Erik was EFI President from 2002 to 2004 and was also an active member of the EFI Scientific Committee. I first met Erik at a conference in Bratislava in 1996, where there were more guest speakers than delegates, so we all got to know each other very well. I have many fond memories of our subsequent chats at various EFI conferences and Ceppellini dinners. He will be missed by many. Please take time to read the obituaries prepared by Ludvig Sollid and colleagues, and Frans Claas, which are published in this newsletter.

Well, I think I have taken up sufficient space in this newsletter. I welcome any suggestions from the membership regarding EFI activities, so if you wish to contact me, please use the following email address president@efi-web.org.

With best wishes

Ann-Margaret Little

### 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:

Y.C. Rocha, Medellin, Colombia

- M. Rakhmanov, Freiburg, Germany
- D.F. Colombo, Beerse, Belgium
- D. Colella, Napoli, Italy
- M. Braankman, Leiden, the Netherlands
- M. Gannage, Lausanne, Switzerland
- K. Kittisares, Bochum, Germany
- M.A. Jakobsen, Odense C, Denmark
- K. Lokk, Tartu, Estonia

- C. Jarosch, Hamburg, Germany
- D. Amerika-Lebedjkova, Riga, Latvia
- O. Batireva, Riga, Latvia
- E. Wojciechowski, Bordeaux, France
- D. Naker, Mumbai, India
- J. Rajak, Mumbai, India
- K. Koscinska, Wroclaw, Poland
- S. Seitz, Tübingen, Germany
- M. Lobb, Leeds, United Kingdom
- S.Y. Mogollón Torres, Cali, Colombia

P. Bergmann, Dresden, Germany

- J. Hjort Baatrup, Åbyhøj, Denmark
- R. Berg, Hinnerup, Denmark
- J.M. Neuhann, Cologne, Germany
- E. Yilmaz, Istanbul, Turkey
- T. Della Justina Farias, Denver, United States
- J. Beert, Mechelen, Belgium

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- The Immucor LIFECODES<sup>®</sup> LSA<sup>™</sup> Class I and Class II reagents will be used in the "Definition of Immunogenic Epitopes" project coordinated by Dr. Sebastiaan Heidt (The Netherlands) & Dr. Eric Spierings (The Netherlands).

To participate in these projects visit https://www.ihiw18.org/





# IN MEMORIAM: ERIK THORSBY (1938-2021) \_



Erik Thorsby, one of the true pioneers in the fields of HLA, immunogenetics and transplantation immunology passed away on March 23<sup>rd</sup>. His enthusiastic, boyish smile will no longer greet us. Erik had been living with prostate cancer for many years until he recently became severely ill, and the cancer conquered him.

Erik was born on July 13<sup>th</sup> in 1938. His father was the deputy chief for the fire department in Oslo at a time when this position came with an apartment at the main fire station, downtown Oslo. Here Erik spent his first years with his parents and two sisters. Later the family moved out of the city centre, closer to the woods surrounding Oslo, where Erik among others enjoyed cross-country skiing - a habit that stayed with him throughout his life. Erik graduated from Medical school at the University of Oslo in 1963. Afterwards, he did mandatory service required to become a licensed doctor and then compulsory military service in the Northern part of Norway, at Saetermoen in Troms. Here, he spent his days doing small surgical procedures on civilians at the brigade's hospital. However, there was not much to do in his spare time. Party life was sparse at Saetermoen. Thus, Erik had plenty of time to read and contemplate his future career. He had become interested in transplantation as a treatment for organ failure. If the kidneys failed, kidneys from a healthy relative or a cadaveric donor could replace them. Except for genetically identical twins, kidney transplantation was only occasionally successful (Anonymous 1953). This problem intrigued Erik; this was what he wanted to pursue when his military service ended.

In 1965, Erik contacted the only immunologist in Oslo at that time, the late Morten Harboe who at that time worked at the Institute for Experimental Medical Research at Ullevaal Hospital. Erik explained that he wanted to study the immune reaction that could be a barrier for successful transplantation. Would it be possible to make antibodies that could determine whether a patient could tolerate a donor organ? Harboe was positive. He suggested that Erik started by immunizing rabbits. Erik failed to raise HLA specific rabbit antibodies, which could help to identify donor-recipient pairs bearing compatible HLA-molecules. Erik quit and took a temporary job as a resident surgeon.

He did not give up his research plans though. He realised that if he wanted to obtain antibodies with relevance for transplantations, he had to immunize people. This had already successfully been done by others (Rapaport et al. 1962). It seemed much more promising than rabbits. Erik transplanted donor skin grafts (diameter 1.5 cm) onto six volunteers who were his colleagues at the lab. Five of the six individuals produced allo-antisera with limited reactivities. From one of the volunteers Erik collected serum which identified the antigen MH (Thorsby and Kissmeyer-Nielsen 1968), later baptised HLA-B5. The MH serum had a very high titre, and it subsequently served as a typing serum in tissue typing labs worldwide. Another antigen was ET defined by a serum from Erik after immunising himself. This antigen later became HLA-B21. Erik defended his doctoral thesis with Harboe as supervisor in 1969. The thesis entitled "Leucocyte antigens and antibodies in man" included descriptions of HLA variants that later were named HLA-B15 and HLA-B27, in addition to the HLA-B5 and HLA-B21 variants. The same year that Erik defended his thesis, he spent four months in Aarhus - Denmark, in the laboratory of the late Flemming Kissmeyer-Nielsen. Many important papers came out of this collaboration.

When the Norwegian government in 1969 decided that organ transplantation should be centralised to Rikshospitalet (The National Hospital), Erik was headhunted to establish the Tissue Typing Laboratory. In 1984 this unit was renamed to the Institute of Transplantation Immunology when affiliated also with the University of Oslo. When the new Rikshospitalet campus was completed in 2000, the Institute of Transplantation Immunology was merged with the Institute of Immunology and Rheumatology to become the Institute of Immunology. Erik was the head of this merged, flagship institute until 2006. Erik was also the Dean of the Faculty of Medicine at the University of Oslo from 1989 to 1990. The fact that Erik was the head of prosperous clinical service departments and university institutes for more than 40 years reflects his unique leadership capacity and leadership personality. Erik was dynamic, pragmatic and highly result oriented. He put high demands on himself and his co-workers. At the same time, Erik gave his co-workers a lot of freedom. Many talents developed under his wings. These talents on maturation, large in numbers, have populated leadership positions of academia and hospitals in Norway.

Erik as a scientist was curious and enthusiastic – his boyish spirit also surfaced here. The lab meetings were filled with a lot of discussions, ranging from What is the influence of HLA matching for graft survival? What is the importance of direct vs indirect allo-recognition? How do HLA molecules bind peptides? How does thymic selection of T cells happen? – to mention some topics. The lab meetings were the highlight of the week. At these meetings, Erik was never afraid to ask naïve questions. These naïve questions often went to the core of the matter. They were catalysts for the discussions to develop. Thus, Erik's questions were important by themselves. However, more importantly, as they were posted in a non-show-off manner, they paved the road for other lab members to ask their questions, not being afraid that their questions could be perceived as stupid.

Erik and his laboratory contributed over the years with many important pieces of new knowledge. He provided together with Kissmeyer-Nielsen in 1970 the first evidence for the existence of HLA-C molecules (Thorsby et al. 1970). He published papers in Nature showing that beta2-microglobulin is part of HLA class I molecules expressed in lymphocyte membranes (Solheim and Thorsby 1974) and that human macrophages express HLA-D determinants (i.e. HLA class II molecules) (Hirschberg et al. 1976). Erik provided evidence that HLA class II molecules on endothelial cells are functional for antigen presentation (Hirschberg et al. 1980). He provided evidence that matching for HLA matters for graft survival of transplanted kidneys (Albrechtsen et al. 1978), even in cyclosporine-treated patients (Leivestad et al. 1999). He did seminal work with human T-cell clones and showed the importance of HLA restriction for antigen recognition (Paulsen et al. 1985; Qvigstad et al. 1983). Erik was particularly interested in the biological function of HLA molecules. This is probably why he took such an eager interest in trying to understand how certain HLA allotypes predispose to disease. Erik became a world expert in this field producing key papers on the HLA association of type 1 diabetes (Ronningen et al. 1989), multiple sclerosis (Spurkland et al. 1991) and coeliac disease (Lundin et al. 1993; Sollid et al. 1989). We were all fortunate to collaborate with Erik on different aspects of HLA biology, ranging from organ transplantation to the molecular underpinnings of HLA-association in coeliac disease. Erik received numerous prizes and awards for his scientific work, perhaps most notably the Nordic Anders Jahre medical award for young scientists in 1974. He received the EFI Ceppelini Award in 2011.

Erik's influence went far beyond Norway. He was one of the founding figures and active participants of Scandiatransplant - an organisation made to facilitate the exchange of organs between the Nordic countries. Scandiatransplant celebrated its 50 years anniversary in 2019 - at that time more than 50 000 transplants had taken place within the organisation indeed a huge success. Erik was the president for the Scandinavian Society for Immunology in the mid 1980's. He was heavily involved in the International Transplantation Society where he served both as Secretary and Vice-president. Erik took an active role in the European Federation for Immunogenetics (EFI), where he was a member of the EFI Scientific Committee for several years and was also the President in the period 2002-2004. Erik took a particularly keen interest in the International Histocompatibility Workshops. He was a Councillor for many years, he highly prioritised the participation of his laboratory in all the workshops, and he was the chair of various HLA workshop components. We believe we do not overstate saying that Erik was one of the main driving forces in this extremely important work, done in a collaborative spirit with other scientists.

At scientific meetings, Erik often gave lectures. He was a much-wanted speaker. He gave lucid talks, speaking with huge enthusiasm. He managed to make complicated issues sound very simple. Although obviously having special gifts for speaking to an audience, part of Erik's success came from his meticulous preparations, not least from making didactic slides. The importance of easy-to-read, but still very informative slides was something Erik carefully taught all his doctoral candidates - and something we have all benefited from.

Erik lived an active life outside of science. He spent much time out in nature. His wife Anne accompanied Erik in these outdoor activities. For many years, Erik had his own sailing boat often exploring the Norwegian coastline. However, later in life Erik gravitated to the Norwegian mountains. Talking to a journalist, on the top of the monumental peak Slogen (1564 m above the fjord), Erik told the journalist *«These are moments in life you never forget»*. Due to his bonding to the mountains, Erik and Anne acquired an old picturesque farm, located in the outskirts of the massive mountain area Jotunheimen in the South of Norway. The farm has altogether 10 buildings, several of them more than 400 years old. Erik made his mission to restore these buildings back to their original shape.

It is strange that Erik is no more. There is no more an Erik to ask for advice and to discuss science with. Our thoughts go to Anne, to his children and the rest of Erik's large family.

Ludvig M. Sollid , Knut E. A. Lundin, Torbjørn Leivestad, Anne Spurkland, Frode Vartdal

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# OBITUARY. IN MEMORY OF ERIK THORSBY (1938-2021).



With sadness we earlier this year received the message that our good friend and colleague Erik Thorsby passed away. Erik was one of the pioneers, who made several important contributions to the field of histocompatibility and immunogenetics.

#### Short summary of his scientific work

Erik started his professional career in 1966 at the Ullevaal Hospital in Oslo, Norway. At that time kidney transplantation had just started in Scandinavia and Erik became very much interested in histocompatibility, and the role of HLA matching in renal transplantation. His studies revealed several new HLA antigens and, in collaboration with Fleming Kissmeyer-Nielsen, he provided in 1970 convincing evidence for the existence of a third HLA locus, HLA-C[1]. Erik became one of the initiators and the histocompatibility expert of Scandiatransplant [2], which had its 50 years anniversary in 2019. Originally, organ allocation was based on matching for HLA-A and -B. However, when the MLR determinants could be determined with serology, Erik was one of the first to demonstrate a strong effect of HLA-DR matching on graft survival, resulting in a publication in the Lancet in 1978 [3].

Erik was also an authority in research on HLA and disease associations with a special interest in coeliac disease[4] and type 1 diabetes[5]. His group made several crucial findings, not only by showing an association between DQ2 and coeliac disease[6] but also by revealing important aspects of the immune reactions involved such as the presentation of modified gliadin epitopes to the T cell receptor[7].

Erik also had great interest in population genetics and in particular in the migration patterns of different ethnic groups all over the world. His favorite story concerned the population of Easter Island, Rapa Nui. Studies on the genetics of mitochondrial DNA and the Y-chromosome had provided evidence that the settlers and ancestors of the current populations were Polynesians coming from the west. Erik could demonstrate by adding the results of (high resolution) HLA typing to the other 2 parameters that early Amerindians had also contributed to the gene pool.[8]

The research of Erik and his team has led to more than 500 papers in peer reviewed journals.

#### Other contributions to the field

Erik has always been a very active member of the international immunogenetics community, which is, amongst others, reflected by the contributions of his laboratory to the International Histocompatibility and Immunogenetics workshops since 1970. Erik was appointed as a workshop councilor in 1975 and has served as such until the last workshop in Asilomar.

Erik has served as EFI-president from 2002-2004 and was one of the first teachers during the international summer schools organized by EFI together with the sister organization ASHI and APHIA. In 2006 Erik was one of the organizers of a successful EFI meeting in Oslo. He was very often invited as a speaker on international meetings and was always clearly present as an active contributor to the discussions.

In 2011 he was awarded with the Ceppellini lecture during the EFI meeting in Prague.

Apart from being a brilliant scientist with major contributions to the field of H&I, Erik was also a very pleasant and social person. I remember his informal interactions with the students during the first summer schools. They could hardly believe that the great Erik Thorsby, whom they only knew from the literature, was such a friendly and helpful person. Also, personally, I have very good memories of Erik and will never forget the nice moments we had together, often with a beer. I am very glad that he could be present at my retirement symposium, where, of course, he talked about his favorite Easter Island and enjoyed the party afterwards.

Although Erik has passed away, his legacy to the field will remain, as is the case with our memories of a very pleasant and knowledgeable colleague and friend.

We wish his wife Anne and further family all strength with this great loss.

Frans Claas

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# REPORT FROM THE EFI GENERAL ASSEMBLY APRIL 22 2021

For the second time in history the EFI the General Assembly (GA) was held as an on-line webinar because of the Covid-19 pandemic. This time the GA was during the Annual meeting that was also a virtual meeting, the first in EFI's history.

#### 1. Opening

EFI President Joannis Mytilineos opened the GA and welcomed all EFI members present.

2. Minutes of the General Assembly July 23rd,2020. The minutes of the GA, held on-line, July 23rd 2020 and published in the EFI newsletter September 2020, issues 92 were approved.

#### 3. Report of the EFI President Teleconferences and Meetings

There have not been any in-person meetings since the last GA but there have been 10 teleconferences with the Executive Committee (EC), and among those, two with the ECC.

#### **Covid-19 consequences**

The EFI president summarized the consequences for EFI of the ongoing pandemic.

Because of postponement of the annual meeting in 2020 all subsequent meetings have been postponed also, which includes the start of the cooperation with the Corporate PCO- Guarant. This also has had a financial impact for EFI with loss of incomes from the annual conference. The planned International Summer School (ISS) in Prague 2020 will now be a fully virtual event later this year. Also, the accreditation activities have been postponed, but hopefully the on-site inspections will resume soon. It is not only EFI meetings that have been cancelled but almost every regional educational activity has been cancelled. But on the positive side, EFI has had the opportunity to establish video-conference meeting platforms and also host regular EFI webinars

#### International Collaboration

A cooperation agreement with ESOT was signed on January 22, 2020 and a successful joint session just carried out at the EFI virtual meeting 2021 and there will be a joint EFI-ESOT session at the ESOT meeting later this year. Because of our cooperation with EFIS we will also arrange a joint session at the European Congress on Immunology in September this year. The topic will be Immunogenetics in Cancer. Additionally, EFI is a partner of the Covid-HLA-Genome Project. There has also been a virtual meeting with the Presidents of our sister societies, ASHI, APHIA and ARSHI.

#### Annual conferences and International Summer School

As already mentioned, because of the pandemic, the planned EFI conference in Amsterdam 2021 will now be in 2022 and this means that the EFI meeting in Nantes moves to 2023. The ISS will be a fully virtual meeting between September 6-8, 2021

#### Other issues

There is an ongoing collaboration with DGI to negotiate an agreement with EFI and DAkkS, the German national accreditation body on how to perform joint accreditation inspections. The introduction of Slack, a video conference tool and instant messaging for communication between and within EFI committees has been very useful. EFI is also working on guidelines, policies for communications that will includes document retention guidelines.

#### Legal advice

During the last GA it was communicated that we have sought legal advice from a French law firm, DELSOL Avocats. One of the questions that needed clarification was if there is a requirement that the Treasurer must be from France. The Solicitors clearly responded that this is not the situation, but since EFI is based In France, at least one would be practical.

During this pandemic it was clear that we need to change our constitution in order to be able to include the option of holding a virtual GA and virtual meetings for the EC. A group under Ann-Margaret Little, our President-elect, have been working with the solicitors to make the necessary changes. The proposed changes were circulated by the EFI Office by blast-mail. The proposed changes introduce the option to hold meetings either in person, remotely or a hybrid of both. The solicitors informed us that the constitution must specify this and that advice is also supported by the "House of the associations" based in Strasbourg and our accountants. The French law has permitted us to hold last years GA and this year GA remotely but this option is only available, at present, until July 31, 2021. During the review of the constitution also the quorum requirement in Chapter 7, Article 14 is difficult to achieve and therefore a change has been proposed. Some minor changes in the English translation have also been introduced to improve the translation from French.

#### Questions from the membership

José Nunes asked if the GA can be in a mixed mode, both in with people present and members present remotely or if only one mode will be used. It was responded that both modes are possible.

#### Voting

The president then asked if the proposals could be voted for together or if separate votes were needed. It was accepted to have one vote with both the proposals in article 11 and 14 together. The voting was performed in the web platform- There was 95% approval, 3% abstain and only 2% against. Joannis Mytilineos therefore concluded that the GA had decided to change the constitution.

#### The new wording in Article 10

The Executive Committee may decide that the General Assembly meeting will be held remotely by any appropriate means of communication or telecommunication. The Executive Committee can also decide that any member may participate remotely by any appropriate means of communication or telecommunication. Members participating remotely are considered to be present for the calculation of the quorum and the majority.

#### New wording of Article 11

On the President's decision, the Executive Committee may meet remotely or members of the Executive Committee who wish to attend the meeting, may do so remotely, in both cases by any means of telecommunications enabling their identification and guaranteeing their effective and continuous participation (videoconference and teleconference, etc.). A member of the Executive Committee, participating remotely, is considered to be present for the calculation of the quorum and the majority.

#### New wording Article 14

The quorum for any meeting of the General Assembly will be 5% of the voting membership of the General Assembly or 50 voting members of the General Assembly, present or represented by proxy, the greater number of the two being that required to be reached for the validity of the General Assembly.

The President then ended his presentation with all the members of the different EFI committees, with special thanks to the chairs that are leaving but also a welcome to the new incoming chairs.

4. Report of the EFI Secretary, Mats Bengtsson Executive Committee Elections

There were no elections this year, but there will be a number of vacancies next year. Members that wish to be considered should apply before October 1st 2021. The procedure for nominations is published on the website, each candidate needs support from ten members from at least two different countries. We are looking for nominations for Secretary, deputy Secretary and Treasurer, as Mats Bengtsson, Dave Roelen and Gwendaline Guidicelli have all served their second term. There will also be three vacancies for councilors, as Katarzyna Bogunia-Kubik, Katerina Tarassi and Marco Andreani will come to the end of their terms. Elections will be during spring 2022.

#### **Future EFI Conferences**

Next year's EFI annual meeting will be held in Amsterdam followed by Nantes in 2023. We will be looking for applications to arrange the EFI meeting in 2024.

#### 5. Report of the EFI Treasurer, Gwendaline Guidicelli

The balance sheet for 2020 was presented. This now includes all accounts, both those in France and those in the Netherlands. There is a slight increase in total assets in 2020 compared to 2019 and the total assets are now €1.187.144. During 2020 there was less income from the Accreditation program because of the reduced fee, but also less expenses. There have also been no bursaries or expenses for meetings but also no income from the annual conference, which is a major source of income for EFI. Since the solicitor has raised questions on the financial organization of EFI it was decided to use Ernst & Young for the 2020 audit. The accounts in the Netherlands and the report is sent to Ernst & Young in France to compile the global report for EFI.

#### Net result 2020

The total income for 2020 is  $\notin$  282.746 and the total expenses were  $\notin$  305.731 resulting in an overall net result of minus  $\notin$  22.985.

#### Forecast budget 2021

The expected income for 2021 is €297.300 and the expected expenses are €388.356 leading to a minus result of €91.056. Major efforts have been made to reduce costs, almost no bursaries, less meeting support and no expenses for EC and committee meetings, but we have new costs for GoToWebinar subscription and Moodle e-learning.

#### Impact on Covid-19

The fact that the conference was cancelled in 2020 meant that we had no income from the annual meeting that year, and the income from the meeting is one of the major income sources for EFI. Also, the organization of this year's virtual meeting is expected to raise less than normal income for 2021. Costs were also incurred for rescheduling Amsterdam 2022, for the Workshop the cost is 5500 and for the Conference 12 000.

#### Questions from the membership

Peter Horn asked when EFI last changed auditor and the Treasurer responded that this was done this year to Ernst & Young International, there will now be the same company auditing both the accounts in France and the Netherlands. Carlo Carcassi asked if the expenses for the upcoming Workshop will be paid by EFI. The President responded that EFI will organize the annual meeting but that we of course support the Workshop. Frans Claas asked if EFI has received any support from companies and Joannis Mytilineos responded that EFI received support from companies during this meeting but that the benefit from the annual meeting is less than usual because we still had to pay for various services for the postponed live conference in 2020. Ann-Margaret Little added that the income from this year will be used to pay for the loss last year.

#### Voting

The result for 2020 and budget for 2021 was approved by voting. 91% approved, 9% abstained and no votes against.

- 6. Report from the EFI Committees
  - a. Report from the EFI Accreditation Committee chair, Andrea Harmer

The number of accredited laboratories remain stable with 270 laboratories, 2 fewer than in 2020. Because of the pandemic no new laboratories have been inspected and there are five that are waiting for their first inspection.

#### **Changes to the Accreditation Committee**

There should have been a large number of changes in the Accreditation Committee last year but because of the exceptional circumstances with the pandemic it was decided to postpone those to this year. Andrea Harmer will step down as chair and will be replaced by Blanka Vidan-Jeras. Christien Voorter will replace Ed Petershofen as co-chair. Sabine Scherer will be the new General Secretary for the committee. Five Commissioner will leave, Martin Howell, Sylvie Tourne, Dominique Masson, Luca Mascaretti and Amal Bishara and they will be replaced by Colin Brown, Agnès Basire, Sylvie Ferrari-Lacraz, Bendetta Mazzi and Nina Svetlicky. New to the committee will also be Kay Poulton replacing Ann-Margaret Little, Junior Lardy replacing Christien Voorter and Zorana Grubic replacing Blanka Vidan-Jeras in region 5a.

#### Inspections

Inspections have resumed from March 2021 and there will be both "normal" on-site inspections with both inspectors present. There will also be the alternative were only the local inspector is present on-site, but the outside region inspector will participate on-line and finally an alternative with fully remote inspections. New guidance for inspectors have been issued via a webinar.

#### **Committee Activities**

The committee has updated the Procedure Manual to take into account the questions about nominations for commissioners, raised at last General assembly, and to also include the requirement for inspector qualifications. There is also ongoing work with review of data retention policy for GDPR.

b. Report from the Education Committee Chair, David Turner.

#### **Committee membership**

David Turner started with an overview of the Committee membership, he will leave the committee next year and Deborah Sage will then become the new Chair.

#### **ESHI Diploma**

The first on-line assessment took place on November 2020. For upcoming examinations this year there are seven new candidates and these will also be on-line examinations. One expects more applications and therefore two new assessors will be trained. Next week the UEMS-EBTI assembly will take place and then some changes to the ESHI portfolio will be discussed. The plans are to reduce the number of assessors from three to two and detail the extra requirements for candidates not trained in EFI/ASHI accredited laboratories. An "Examination Rules of Conduct" will also be added.

#### **ETHIQ Diploma**

The EFI Technical H&I Qualification pilot started late 2019 with participants from France, the Netherlands, Italy and Sweden. Four of the registrants from France have now completed the Training Manual and also the on-line assessment on the Moodle platform. The four ETHIQ Diplomates, Isabelle Favre-Victoire, Geraldine Theilliere, Sandrine Paul and Claude Vichier will receive their newly designed Diploma.

The feedback has been very positive from the participants. The plan is now to move the logbook from pdf to the Moodle online platform. Hopefully, the program will welcome new participants in 2022. A survey will be sent out to get an idea of likely interest.

#### **CME/CPD** platform

The committee has been looking into a platform from a UK company used by BSHI. They can provide a custom-made platform that allows members to record all educational activities online and upload supporting evidence. The work is still in progress.

#### International Summer School (ISS)

The postponed ISS from last year will be a virtual event between September 6th to 8th. The faculty is confirmed and the registration is planned to open mid-May. EFI will for this event for the first time test a new abstract tool called EasyChair. Delegates will be selected based on abstract, region and training needs. The number of participants is limited to approximately 60.

#### **E-learning**

Dave Turner ended his presentation with an overview of the successful e-learning - ESHI Diploma training course. This was undertaken with the EBTI and with financial support from the Italian Berloni Foundation. The lectures have been viewed by more than 100 members with in total more than 1000 views!

c. Report from the External Proficiency testing Committee Chair, Falko Heinemann.

#### **Committee membership**

This will be Falko Heinemann's last presentation from the EPT committee since he has now served his last term: after this meeting Helle Bruunsgaard will be the new chair. Sandra Tafulo is a new member from region 9+10. There are two vacancies, one from Italy and one from Germany

#### **Coronavirus and EPT**

There is currently very little impact of the pandemic for EPT providers, the modification on the requirements on number of samples implemented in May 2020 are very seldomly used at present. Some laboratories have however reported that testing of EPT samples is restricted because of limited staff availability.

#### **New EPT standards**

The updated EPT standards for providers will include a more precisely defined standards for chimerism testing and more restrictive rules and more harmonized consensus thresholds for antibody identification. There is also ongoing discussions of how to deal with intermediate resolution typing results that are more often used in organ allocation systems. The two major alternatives are either creating a new category-"Intermediate resolution HLA typing" or one could modify the existing standards to match the requirements for organ allocation.

#### **EPTC Procedure Manual**

There is ongoing work to update the Procedure Manual, there will be changes for the mission statement, the composition of the committee with the balance between EPT providers and users and regulations for the chair/co-chair. d. Report from the Scientific Committee chair, Katharina Fleishhauer.

#### **Committee membership**

Katharina started with an overview of the committee membership. This is also her last presentation as chair because she will step down after this meeting. The new chair will be Luca Vago from Italy.

#### Joint meetings with other Societies

There will be a joint EFI-EFIS session at the Virtual 6th European Congress of Immunology (ECI) in September. The session will be titled "Immunogenetics of Cancer" and will be chaired by Katharina and with John Trowsdale, Luca Vago and Lotte Wieten from the scientific committee as speakers. During the 20th ESOT meeting in Milan August 21-September 1st there will be two joint sessions. One with Dave Roelen as chair-"Present and future role of HLA and antibodies" and one with David Turner as chair with the title "How to set up an ABO incompatibility program.

#### **EFI Scientific Webinars**

The Scientific webinars were launched last year with speakers selected and invited from the Scientific Committee. The latest one was with Mary Carrington "The impact of immunogenetic variation in viral disease". The webinar had over 270 participants from all over the world. The slides from the presentation are available at the EFI website. The committee are planning to have more webinars later this year.

#### Scientific awards

This year Ceppellini lecturer is Jacques Neefjes from Leiden, the Netherlands and next year it will be Peter Doherty from Melbourne. The Julia Bodmer award was given to Christina Toffalori this year and for next year candidates are welcome

e. Report from the Standards and Quality Assurance Committee chair, Katy Latham.

#### **Committee membership**

New members since April 2021 are Natasa Katalinic, Croatia, Sabine Wende, Austria and Chrysanthin Tsamadou from Germany.

#### International collaboration

A connection has been established with FACT-Netcord and the committee are invited to QAS meeting during ASHI annual meeting-. EFI also invites representatives from ASHI to their meetings

#### New standards

Version 8.1 of the EFI standards will be finalized during 2021 to be effective from 2022. It will include minor issues. The next major update will be version 9.0 that will include more complex issues. The plan is to have it ready during 2022 so it can be effective from 2023. It will include enhanced standards on training and competency but also on new reporting formats e.g. digital, GL strings and epitopes. Katy ended her presentation with a briefly description on comments received from the membership.

f. Report from the IT & Bioinformatics Committee chair, Eric Spierings

#### **Committee membership**

There are two new members, Mathijs Groenewegen and Nicolas Vince so the committee now comprise 5 members.

#### Abstract tool

A new abstract tool - EasyChair - will be tested at the upcoming ISS and the plan is then to introduce it at the EFI conference in 2022 in Amsterdam. The implementation involves interactions with the organizers of ISS, the Scientific Committee and the Educational Committee.

#### **E-learning**

The committee has evaluated different e-learning platforms and has concluded that Moodle is best suited for EFI. It can be used for education, training and also examinations. Moodle will be implemented during the coming months.

#### EFI progressive web application

The committee has been looking into a progressive web application that merges information from different sources into a single application. The needs and purposes will be defined after discussions with the EFI committees to provide basis for further exploration.

#### Digital data standards

New standards are being developed for communicat-

ing typing and antibody data within the IHIW/DasH and companies are adopting these standards and also allocation organizations have shown interest. For EFI it is very important to be actively involved and the committee follows the development closely.

- 7. Next EFI conference, Amsterdam, The Netherlands The next EFI conference will be in Amsterdam 2022, May 17-20. The Motto of the meeting is "Tolerance, Acceptance and Permissiveness". It will be organized as a hybrid meeting, with focus on the live event.
- 8. EFI medal

The EFI medal is awarded annually by the EFI Executive Committee to recognize the achievements of individuals who during the course of their career have made significant contribution to EFI. This year the EFI medal was awarded to Andrea Harmer, Luca Mascaretti and Carlo Carcassi. The medal to Andrea Harmer was presented by Blanka Vidan-Jeras, Katharina Fleischhauer presented Luca Mascaretti and for Carlo Carcassi Gottfried Fischer had composed a special piece of music. The award is described elsewhere in the newsletter.

9. Installation of the new EFI President

The outgoing EFI President, Joannis Mytilineos expressed his sincere appreciation to all EFI committees and members of the EFI EC for all support during his presidency. Joannis welcomed Ann-Margaret Little as the new president and the engraved EFI tankard was virtually handled over to her.

The General assembly was closed at approx. 20.45.

# EFI CONFERENCE 2021.

Dear colleagues,

It was a great honour for us to be selected to host an EFI conference here in Scotland. We were so looking forward to showing off the city of Glasgow and to hosting all our EFI friends. Alas the wee beastie called SARS-CoV-2 caused a delay of one year and a move to a virtual programme.

Although we were unable to provide the

social programme that we had worked very hard on, including lots of wine and food tastings, we were delighted that our scientific programme could be delivered. We were truly impressed with the commitment of (virtually) all our invited speakers and chairs, most of whom took time to pre-record their lectures and then appear live for questions and answers.

As this conference was held jointly with



the British Society for Histocompatibility and Immunogenetics, we had double the number of award lectures. Congratulations to Prof Jacques Neefjes, Ceppellini award; Cristina Toffalori, Julia Bodmer award; Ashley Moffett, the BSHI Festenstein award and Mary Carrington the BSHI Terasaki award.

In addition to the plenary and teaching sessions, we had 77 oral presentations and 241 posters.

Following the conference we received 328 responses to our feedback questionnaire. A few of the key findings are given here

- 96.3% rated the scientific content as good/ very good
- 91.5% thought the conference was the right length
- 93.7% rated timings convenient
- 92.27% rated overall conference good / very good
- 94.6% rated overall organisation good / very good

The success of our virtual conference was only possible because of the generous support from the 28 corporate sponsors, particularly our platinum sponsors One Lambda, CareDx and Immucor. We are also indebted to Elaine McKeown and her team from Fitwise Management Ltd who managed the conference organisation with true professionalism.

Thanks also to GenDx for organising

the virtual Tulip run which resulted in a donation of £2,097 to the Beatson Cancer Charity here in Glasgow.

Our appreciation goes to everyone that attended - all 1,089 delegates from 69 different countries. Remember the scientific and corporate presentations are still available for everyone that registered, allowing you to catch up on anything that you may have missed.

As is the EFI conference tradition, we

have 'virtually' handed the EFI flag to the organisers of Amsterdam 2022. We wish the organisers much success and we look forward to seeing many of you there.

With best wishes Ann-Margaret Little, Helen McFarlane, David Turner.

# **CEPPELLINI LECTURER 2021 – PROFESSOR JACQUES NEEFJES**



Each year at the annual EFI Conference, a scientist who has made substantial contributions to the field of Immunogenetics is honored by the Society and invited to present their work in the form of the Ceppellini Lecture. The Lecture is named in honor of Ruggero Ceppellini (1917-1988), the Italian geneticist who greatly influenced the HLA field. The first Ceppellini Lecture was delivered in 1988 by the late founder of EFI, Jon van Rood. Over the past five EFI Conferences, it has been held by Pamela Bjorkman (2019), Lorenzo Moretta (2018), John Kappler (2017), Effie Petersdorf (2016), and Frans Claas (2015). A complete list of Ceppellini Lecture Awardees can be found on the EFI website (http://www.efiweb. eu/awards/the-ceppellini-lecture.html). This year's Ceppellini Lecture was delivered by Jacques Neefjes, Professor and head of the Department of Cell and Chemical Biology at the Leiden University Medical Center (LUMC), the Netherlands. Jacques obtained his PhD in 1990 from the National Cancer Institute (NKI) in Amsterdam, on cell biological aspects of MHC class I and II molecules. He remained at the NKI to work as postdoc with Hidde Ploegh, to spend time thereafter as visiting scientist in the laboratory of Drs Christophe Benoist and Diane Mathis in Strasbourg, and as an EMBO fellow with Dr. Günter Hämmerling in Heidelberg. During this period, Jacques made milestone discoveries regarding the biochemical mechanisms of peptide antigen processing and presentation by MHC class I and Class II molecules, which were largely obscure at that time. In 1993, he returned to the NKI where he served until 2016, with an intermittent visiting professorship at the University of Oslo from 2009 to 2011. Lastly, he was Head of the Division of Cell Biology at the NKI, before moving to his current position at the LUMC. Jacques is author of 313 peer-reviewed publications with a Scopus h-index of 85 and over 25.000 citations. He received numerous Awards including the Antoni van Leeuwenhoek prize

(1990), a Golden Medal of the Royal Dutch Chemical Society (1996), the van Lochem career award of the Dutch Society of Immunology (2015), and two ERC Advanced grants (2009; 2015). Before receiving the Ceppellini Award, he has delivered honorary lectures at the Academic Medical Center in Amsterdam (Ruysch Lecture 2012) and at McGill University, Montreal, Canada (Beatty Lecture 2012).

In his Ceppellini Lecture, Jacques gave a brilliant, enlightening and very humorous overview of our current understanding of MHC class I and II antigen processing and its role in health and disease. His vivid explanations were illustrated by very pointed cartoons, which conveyed not only his clarity of mind but also the fun he has had and is still having in his research. Jacque's Ceppellini Lecture was a highly educational and motivating event for everyone in the audience, junior and senior alike, and definitely a highlight of the 2021 virtual EFI Conference!

Katharina Fleischhauer - on behalf of the EFI Scientific Committee



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# EFI MEDAL LAUREATE 2021: ANDREA HARMER

This year, the EFI Executive Committee decided to recognize and award the contribution of a person who has been synonym for EFI accreditation program for more than ten years, Andrea Harmer.

Andrea started her career in H&I in 1988 as a research assistant in Tissue Typing Laboratory at Guy's Hospital in London undertaking a project to develop flow cytometry crossmatching for renal transplantation. She continued as a clinical scientist with primary responsibility for antibody testing and crossmatching and clinical liaison with the paediatric renal unit. After defending her PhD thesis entitled "Significance of Antibody Production in Human Renal Transplantation" whilst at Guy's, she completed the UK higher specialist qualification Membership of the Royal College of Pathologists (MRCPath) in H&I. In 2001 she moved to Sheffield to become the Director of the H&I laboratory in the National Blood Service Sheffield Centre providing services for renal and stem cell transplantation, transfusion & immunogenetics . She was trained as an EFI inspector in 2002 and in 2003, and the Sheffield laboratory became the second lab in the UK, and the first in England, to gain EFI accreditation. Andrea was appointed National Head of H&I, NHS Blood & Transplant in 2013, becoming responsible for a network of six H&I laboratories within the English blood service which provide services for seven adult & three paediatric renal transplant programmes, two cardiothoracic transplant programmes, eleven HSCT programmes, as well as transfusion and immunogenetics testing.

Her involvement with EFI has run in parallel with her engagement in the UK by first joining the Standards Committee from 2000 till 2008. In addition to being an EFI inspector she served as the Commissioner for EFI Accreditation Region 3 (UK & Ireland) from 2004 till 2011, when she was nominated the Chair of the Accreditation Committee (2011-2021). Working as a closely connected team with Ed Petershofen, Luca Mascaretti and Sonja Geelhoed in the Accreditation Permanent Commission, a lot of routine and unique tasks, invisible to others, were completed. Andrea has been a systematic and convincing teacher when educating laboratories



seeking for accreditation within Europe and around the world. Aside from that, she has been very pleasant work and travel companion.

Apart from EFI, Andrea has been active in BSHI & RCPath over the years, including serving as the Chair of the Royal College of Pathologists H&I Specialty Advisory Committee (2009-2012) and as the Chair of BSHI (2017-2020). She was involved through BSHI in writing Guidelines for antibody detection in renal transplantation and for HLA testing in HSCT. She has always been interested in Education & Training including being an examiner for the RCPath.

EFI accreditation could not have had a more fair and correct Chair, that has been capable to listen and hear voices from all around the Europe and beyond. No matter how difficult and complicated the subject was, we were certain Andrea would approach it professionally with genuine intention to find consensus within the Accreditation Committee and help a commissioner, an inspector or a laboratory.

Since EFI conference in Glasgow had to be a virtual event, we all regret that EFI president, Joannis Mytillineos, was not able to hand over EFI medal to laureate Andrea Harmer and that we could not show our appreciation to her face to face. However, Brendan Clarke was kind enough to travel from Leeds to her home and excellently represented EFI, handing over the undoubtedly very much deserved medal to Andrea.

Blanka Vidan Jeras

# EFI MEDAL LAUREATE 2021: LUCA MASCARETTI \_\_\_\_

The EFI medal is awarded by the Executive Committee to individuals who have made a significant contribution to our Society during the course of their career. This certainly is the case for Luca Mascaretti, who received this recognition during the General Assembly of the virtual EFI meeting in Glasgow.

EFI is an international Society, and Luca's CV has been international from the beginning of his life. He was born in Sao Paolo, Brazil, but moved to England at a young age to complete an international baccalaureate in Wales. His University studies were done in Italy, where obtained an MD and subsequent Board in Hematology from the University of Pavia. He later returned to the UK for a Master's Degree in Medical Molecular Biology in London. His comprehensive training in medical life sciences was completed by a diploma of Health Management for Hospital Directors from Milan.



Luca's professional career has been centered in Italy, with three appointments, each for over a decade, being at the Policlinico di Milano, the San Gerardo Hospital in Monza and the Riuniti Hospital in Trieste. Here he became intimately involved in transplantation, both from the clinical and from the laboratory side. In Milan this was centered on solid organ transplantation, the Policlinico di Milano being the reference center for the North Italy Transplant Program. In Monza, his focus shifted more towards blood and stem cell donations, and the relevant H&I services under his direction. In 2009, he became the Director of the Blood Transfusion Service in Trieste, where he served intermittently for 2 years as Medical Director for the entire Riuniti Hospital. Luca brilliantly fulfilled the multiple challenges attached to this position, earning respect and popularity with colleagues regardless of position or standing

Within EFI, Luca has played an active role for over 15 years. He started to serve as an EFI inspector in 2006, and was asked to become one of the Italian Commissioners for EFI Accreditation in 2009. In 2011, he also became General Secretary of the Accreditation Committee. Luca interrupted these positions for a few years due to his afore-mentioned commitments in Trieste, resumed them between 2017 and his retirement in 2021.

Luca has been a very popular colleague for his well-known competence, integrity, altruism and his subtle sense of humor. He has been a highly demanded lecturer for both students and professionals, and his presentations at inspectors' workshops were appreciated for their clarity and practical utility. On the scientific side, Luca was involved in numerous peer-reviewed publications in our field, including a position statement from AIBT regarding tissue typing for HLA associated disease, and an invited review in *HLA* on the EFI Accreditation program, which he contributed together with Andrea Harmer, another recipient of the EFI medal 2021, and Ed Petershofen (https://onlinelibrary.wiley.com/doi/10.1111/tan.13289).

In his work as EFI inspector and commissioner, Luca has been well-known for his personal integrity, as one who always made fair and unbiased judgements and was a great teamplayer. These assets were appreciated by all those who had the pleasure to work with him, including his colleagues at the Accreditation Committee, his fellow inspectors as well as the team members of the laboratories he directed. The altruistic side of blood and stem cell donation was particularly well suited to Luca's personality, and his personal engagement has been an important contribution to Italian donor recruitment campaigns for many years. Last but not least, Luca is always one to have a good time with. His sense of humor is subtle and infectious, and he was a marvelous host of workshops and conferences.

Luca is a close friend of Francesca Poli, whom he worked with for many years in Milan, and who is kindred to him in many of his professional and personal qualities. It was therefore particularly nice that the EFI Office arranged for Francesca to hand over the EFI medal to Luca in her apartment in Milan, as unfortunately this could not be done personally during the General Assembly.

With the EFI medal, the EFI community says a big thank you to Luca for everything he did for our Society, for H&I and the patients in need of transplantation, and for the colleagues who had the privilege to work with him. Grazie e un grande abbraccio da tutti noi!

Katharina Fleischhauer

# EFI MEDAL LAUREATE 2021: CARLO CARCASSI

Carlo Carcassi is Professor for Medical Genetics at the University of Cagliari. His career included a stay as visiting research fellow in Janet Lee's lab at the Memorial Sloan Kettering Centre in New York and in Massimo Trucco's lab at the Pittsburgh Cancer Institute in Pittsburgh. I dare say that his scientific oeuvre shows definitively a slight bias towards immunogenetics, where he contributed to population genetics, the understanding of the gene organisation and the molecular structure of HLA extended haplotypes, and, more clinically, the study of immunogenetic factors influencing the outcome of organ, tissue and cell transplantation. His interest was, naturalmente, not restricted to HLA but involved many other polymorphic systems, including KIR. At a national expert level he acted for the Italian transplantation programme in his function as Director of the Sardinian Regional Government Reference Centre for organ, tissue and cell transplantation, the Sardinian Bone Marrow Donor Registry and the Regional Coordinator for organ, tissue and cell donation, extraction and transplantation.

Carlo Carcassi joined EFI already in 1991. Since then, he generously shared knowledge and expertise, contributed to the work of various committees and acted as councillor. He was also co-chairman together with Valeria Miotti (chair) and Antonio Amoroso (co-chair) of the 32<sup>nd</sup> European Immunogenetics and Histocompatibility Conference and the 25<sup>th</sup> Annual Meeting of the Italian Society for Immunogenetics and Transplantation Biology (AIBT) in Venice in 2018.

He joined the EFI accreditation program with his trainee inspection in 2004 and followed Francesca Poli as commissioner from Italy in 2007. He stayed for ten years and significantly shaped the accreditation programme. Many years ago, the late Aad van Leeuwen invented the EFI medal. She once said that she had been motivated by the idea that there should be 'a nice way of saying thank you' to commissioners. I am very happy that the EFI Board has chosen Carlo Carcassi as awardee for this medal and I want to join this 'thank you' for many years of working together (and having fun) for common ideas in EFI.

Gottfried Fischer



# EFI 2021 The best poster awards \_\_\_\_

This year at EFI 2021, there were 241 poster submissions. These were reviewed by a panel, chaired by David Turner and following extensive review and discussion, three winners were announced during the closing ceremony.

#### Congratulations to:

#### Gideon Honger, Basel Switzerland

P14: Towards defining the Immunogenicity of HLA Epitopes: Impact of HLA class I Eplets on Antibody Formation during Pregnancy

#### Aleksandar Senev, Leuven Belgium

P79: The impact of HLA-DQ molecular mismatches on de novo occurrence of donor-specific anti-HLA antibodies after kidney transplantation: an observational cohort study



#### Tamina Rother, Hannover Germany

P103: The inflammatory and thrombogenic response of kidneys in genetic engineering during ex vivo normothermic perfusion) All posters are still available on the EFI 2021 website for everyone that registered for the meeting, so if you missed any, there is still time to catch up.

# Julia Bodmer Award 2021 – Cristina Toffalori \_\_\_\_\_



The first Scientific Lecture at the Opening Ceremony of the annual EFI Conference is given by a young scientist, winner of the Julia Bodmer Award (JBA). This Award was created in memory of Lady Julia Bodmer (1934-2001), one of the founders of H&I and a mentor to EFI, which she served as President from 1996 to 1998. Julia was well aware of the importance of young scientists for the future of our field, and was known for her encouragement and support to younger generations. The JBA winner is selected by majority voting within the EFI Scientific Committee, in a competitive review process between the applications filed. The first JBA Lecture was delivered in 2002 by Benedicte Lee. Over the last five EFI Conferences, it has been held by Asbjørn Christophersen (2019), Maxime Rotival (2018), James Lee (2017), Hannah

Siddle (2016), and Céline René (2015). A complete list of JBA winners can be found on the EFI website (http://www.efiweb.eu/awards/the-julia-bodmer-award.html).

This year, the selected JBA winner was Christina Toffalori from the San Raffaele Scientific Institute in Milan. Italy. Cristina obtained a Master's degree in medical biotechnology from the San Raffaele University in 2008, with a thesis on the role of neutralizing antibodies in HIV infection. This prompted her to apply for a PhD in Molecular Biology at the same University, to work with Luca Vago on non-genomic mechanisms of HLA-deregulation as immune escape mechanism in leukemia relapses after allogeneic hematopoietic cell transplantation. After brilliantly graduating in 2013, Cristina decided to stay on as postdoctoral research fellow in Luca's group. Further pursuit of the studies initiated during her thesis unraveled distinct immune signatures of posttransplant leukemia relapse, involving either downregulation of MHC class II or upregulation of inhibitory checkpoints. These findings, published in Nature Medicine in 2019, have obvious important implications for post-transplant relapse diagnostics and therapy, and have received much scientific and mediatic attention.

Since unfortunately we could not hand over the Award personally to Cristina during the Opening Cermony of the EFI Conference, this was done in Milan by her mentor Luca Vago, himself a Julia Bodmer Awardee back in 2009 - good auspices for the future of science in EFI.

Katharina Fleischhauer – on behalf of the EFI Scientific Committee

## **REPORT OF THE EFI ACCREDITATION COMMITTEE**

Unfortunately, COVID-19 pandemic continues to have a strong impact on the EFI accreditation process. The accreditation Committee (AC) took the decision to suspend inspections for one year starting from April 2020. Instead, the regular three year accreditation cycle was extended to four years with the introduction of additional document-based assessment by the EFI Commissioners. The common believe and the decision that new laboratories could not be accredited based on a submitted documentation only resulted in a delay for all new applicants, who had to wait for inspections to start again. With the cancelation of the EFI conference 2020 in Glasgow, the inspectors' workshop was cancelled as well. Moreover, we haven't been able to educate and train new inspectors as we used to do by interactive workshops every autumn in Leiden and afterwards during on-site inspections, where

trainees joined experienced inspectors. Meanwhile, it became clear that we have to adjust to the new circumstances for a longer period of time, such that we have adopted the idea of virtual and hybrid (semi-virtual) inspections, and have defined new processes. In February 2021, we hosted a webinar for EFI inspectors where we presented an extended accreditation cycle, ways to prepare for and perform virtual or hybrid inspections (presentation can be seen at https://www.efi-accreditation. org/), and experiences from such kind of inspections. However, the agreed hierarchy for the type of inspection remains. Whenever possible, on-site inspections for EFI accreditation are performed again from March 2021. In addition, virtual and hybrid inspections have been introduced meaning that both, or one of the inspectors may assess the laboratory on-line. Applications by new laboratories have been processed and completed with at least one inspector on-site. In total, 53 inspections have taken place specified as follows:

- New laboratory inspections (Application Packet A): 2
- Interim inspections: 6
- Renewal of accreditation inspections (Application Packet C): 45

While 60 EFI inspectors were able to assess laboratories on-site, 40 inspectors performed the inspection remotely. In April 2021, the AC met virtually with record number of attendees, since the whole Permanent Commission and numerous Commissioners ended their terms. It was their last AC meeting and at the same time it was the introductory meeting for all new Commissioners. On behalf of EFI accreditation I would like to thank our long term Chair Andrea Harmer, Co-chair Eduard Petershofen and General Secretary Luca Mascaretti for all their work and dedication to the program. The three used to be EFI Commissioners, as well as Amal Bishara, Ann-Margaret Little, Dominique Masson, Martin Howell, Matthias Marget and Sylvie Tourne that all left the AC in April. Thank you all for significantly improving H&I services for European patients and for being very special persons that are linked with AC bonds not intended to untie.

Blanka Vidan Jeras Chair EFI Accreditation Committee

# The Jon van Rood award and best abstract session



The presenters participating in the Q&A session alongside session chairs Ann-Margaret Little and Katharina Fleischhauer

The best abstract session at EFI conferences consists of the highest scoring abstracts, following review by the Scientific Committee of all abstracts, submitted for an oral or oral/poster presentation. This year there were seven presentations delivered at the best abstract session of EFI 2021. The session was of a very high standard and included a variety of topics related to immunogenetics.

The presentations were scored by a team of 'Past EFI Presidents', chaired by Steven Marsh. All presentations

received positive feedback from the scoring committee, and the final win-

ners were announced during the closing ceremony as:

#### 1st Prize, the Jon van Rood Award

Esteban Arrieta-Bolaños "Unravelling the determinants of alloreactivity in humans: HLA-DP as a model for immunity and transplantation".

#### Joint 2nd Prize

Hannah Siddle "The immunopeptidomes of two transmissible cancers demonstrate a dominant and partly shared peptide motif for MHC class I" and.

Nicole Mifsud "Peptide-dependent T cell cross-reactivity drives allorecognition".

Congratulations to all the presenters in this excellent session.



Steven Marsh "delivering" the award to Esteban Arrieta-Bolaños

### FUTURE EFI CONFERENCES – CALL FOR EFI 2024

The highlight for our Society every year is the annual meeting and we all look forward to next year's meeting in Amsterdam, but we also have to look forward. We have organizers for the annual conferences until 2023 so we are now looking for members interested in organizing the meeting in 2024. In 2022 the Conference will be in Amsterdam, the Netherlands and in 2023 in Nantes, France. All interested should submit an application indicating that you are willing to host the meeting. Please note that Guarant is the Professional Conference Organiser (PCO) selected by EFI to support the Local Organisers in the organisation of the EFI Conference in 2024. Applications must be received by the EFI Secretary (mats.bengtsson@ igp.uu.se) by November 12<sup>th</sup>, 2021. At this time point we are only looking for members that are interested in organizing the meeting. The next step will then be to work together with Guarant on a more formal application.

Applications will be reviewed by the Executive Committee shortly after the deadline during a virtual meeting. If necessary, a shortlist of applications will be produced from whom further information will be requested.





AMSTERDAM - THE NETHERIANDS

# TOLERANCE, ACCEPTANCE AND PERMISSIVENESS

# 17-20 MAY 2022

# SAVE THE DATE

WWW.EFI-CONFERENCE.ORG

# **REPORT OF THE EFI EDUCATION COMMITTEE**

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

Online examinations for the ESHI Diploma were undertaken for 7 candidates in May/June 2021. Many thanks to the members of the EBTI who checked the candidates' suitability for examination and the examiners themselves. All candidates were successful in this round of exams. Since the inception of the diploma in 2014, 26 candidates have undertaken the oral examination with a pass rate of 81%. Applications for future examinations can be made via the Section of Surgery Transplant Immunology page of the UEMS website (now at: https://uemssurg.org/divisions/transplant-immunology/). The next examinations (again likely to be online) will be in Spring 2022. See the website for details.

#### e-Learning

Nine 30 minute presentations on different aspects of H&I in solid organ transplantation, HSCT, disease association and transfusion (relevant for those working towards taking the ESHI Diploma, but hopefully of interest to all) are now available to EFI members via the website. These talks have been recorded by eminent scientists and physicians in our field. Log on to the EFI website and navigate to 'Resources' under Useful Links and 'ESHI Diploma training course', then follow the instructions to register and create an account to access these talks.

Many other on line 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 on line courses provided by WMDA.

A reminder that plenary sessions, teaching sessions and other talks from the EFI/BSHI 2021 conference are also still available to registrants until Friday 22<sup>nd</sup> April 2022. Registrants will have received an email detailing how this resource can be accessed.

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

At the last EFI Executive Committee meeting it was agreed that the Education Committee and EFI Office will



work with a company called CPDme to develop and provide a system for EFI members to record CME/CPD activities. This will be for all members to use if they do not have a workable alternative that they already make use of in their country. It is hoped that this will be made live for members early in

# European Technical H&I Qualification (ETHIQ)

2022.

The pilot scheme of the ETHIO logbook is 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 H&I. Four French colleagues undertaking the pilot have completed the logbook and associated work (the logbook can be completed between 1-3 years after registration) and undertook a short on line assessment as a final piece of the training programme in April 2021. All four candidates passed and received appropriate recognition for their achievement during the EFI General Assembly meeting earlier this year. The Education Committee is very grateful to these 'early adopters' of the training scheme and appreciate the hard work they have obviously put into this. To grow the scheme the EFI Executive Committee has also agreed to develop the ETHIQ qualification as an online resource (using Moodle) to enable more members to access the programme. It is hoped that this new Moodle based ETHIQ diploma will be available for registration in early 2022.

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

The joint EFI, ASHI, APHIA and ARSHI International Summer School (ISS) was held as a virtual meeting between 6<sup>th</sup>-8<sup>th</sup> September 2021. This was a very different Summer School than usual, but feedback from delegates and faculty has been positive. Ten faculty members gave their time to create talks and attend interactive sessions with 34 delegates applying to attend the course. The interactive sessions were well attended and covered a broad array of different H&I topics, from routine testing for solid organ transplantation and HSCT to HLA and disease and new applications of HLA knowledge for cellular therapies. The EFI Education Committee thanks all those involved, especially the PCO, Guarant, who created a nice virtual space allowing easy navigation to the faculty and delegate presentations. In due course we hope to have many of the virtual ISS talks accessible to EFI members as another educational resource.

# **REPORT OF THE EFI EPT COMMITTEE**

Country

UK

Denmark

Germany

Poland

France

Bulgaria

Portugal

Italy

Corona virus and EPT: In 2021 there have been very little limitations for EPT providers and only few restrictions on laboratory and transplant activities.

An update on Standards for Providers has been created and accepted by the EFI EPT Committee in April 2021 and approved by the EFI Executive Committee. The implementation date for this version 7.3 will be January 1st, 2022.

#### Members of the EPT Committee in 2021:

Region

3+99

6+11

9+10

1

2

4

5

7

8

Name

Helle Bruunsgaard

**Deborah Pritchard** 

Sylvie Ferrari-Lacraz

Anastasiya Mihaylova

Katarzyna Bogunia-Kubik

Yvonne Zoet

Elena Longhi

Sandra Tafulo

#### Committee positions: The EPT has Committee has welcomed

several new members in 2021. Helle Bruunsgaard from Denmark/Region 1 has taken over Committee chair, following up Falko Heineman who has done an impressive effort for the Committee as a member since 2007 and as chair since 2012. The successor of Falko Heineman for Region 4 needs yet to be approved by the Executive Committee.

Role

Chair

Member

Member

Member

Member

Member

Member

Pending on EC approval

The Netherlands Co-Chair

Additionally, Martin Petrek from Czech Republic/Region 5 has been a member since 2003 and took his last round in 2020. Francesca Quintieri has represented Italy/region 7 since 2004 but she has now decided to retire. Elena Longhi has agreed to take over the representation of Region 7. Finally, Antonio Balas from Spain has represented region 9+10 since 2014 and his successor is Sandra Tafulo from Portugal.

A warm and grateful thank you to all the leaving members of the EFI EPT Committee for the fruitful collaboration and their high level of expertise. At the same time, a warm welcome to all the new members who are willing to contribute to the continued development of the work in the Committee.

On behalf of the EFI EPT Committee, Helle Bruunsgaard

# **Report of the EFI Scientific Committee**

First of all, I would like to thank the EFI Scientific Committee and the entire EFI community for the honor of selecting me as new chair of this Committee, taking over this appointment from former chair Prof. Katharina Fleischhauer, who ended her nine-year mandate at the end of the recently concluded EFI Conference. With the invaluable help of all other members of the Committee, I will do my best to further valorize the high expertise and scientific tradition of our Society, promoting its transition in the blooming era of new technologies and advanced immune-based personalized therapies.

We would also like to mention that James Robinson took over the position previously held by Sebastiaan Heidt as EFI representative in the Science and Technology Initiatives Committee (STIC) of the American Society for Histocompatibility and Immunogenetics (ASHI). We thank Sebastiaan for the important service he gave over these years in this position, and congratulate with James for the new appointment.

Finally, between September  $1^{st}$  and  $4^{th}$ , the  $6^{th}$  edition of European Congress of Immunology (ECI), previously

planned to be held in Belgrad, Serbia, took place in a virtual platform. The Congress represents the main scientific meeting conducted under the auspices of the European Federation of Immunological Societies (EFIS), a non-profit umbrella organization that represents 35 immunology societies from Eurasia and the Middle-East. ECI provides the opportunity to the nearly 14,000 individual researchers and clinicians affiliated to EFIS and working in the fields of immunology and allergology to get together and be updated on the latest achievements in these wide and diversified fields of research. As in the previous editions, the Congress included the EFIS-EFI Symposium, held this year on September 1<sup>st</sup> and focused on the topic "Immunogenetics of Cancer". Three members of the EFI Scientific Committee presented on the state-of-the art and their latest results on, respectively, "Immunogenetics of the MHC and NK Cell Receptors" (John Trowsdale), "Immunogenetics of Leukemia" (Luca Vago) and "Immunogenetics of Cancer Therapy" (Lotte Wieten). The symposium was very well attended, and all three presentations generated a lively discussion, which was excellently moderated by Lotte Wieten and Mirjam Heemskerk. For those who were not able to attend, the three presentations will be soon made available in the members-only section of the EFI Website.

On behalf of the EFI Scientific Committee, Luca Vago

# **REPORT ON THE ESOT CONFERENCE 2021**

### Joint ESOT-EFI Session on "Present and future role of HLA and antibodies "

Chairs: Dave Roelen, the Netherlands, Jacopo Romagnoli, Italy

Speakers: Carla Rosser, United Kingdom, David Turner, United Kingdom, Frans Claas, the Netherlands, Teresa Kauke, Germany, Antoine Roux, France and Vasilis Kosmoliaptsis, United Kingdom

The ESOT 2021 conference was held as a hybrid in person and online meeting between 29<sup>th</sup> August-1<sup>st</sup> September and this was quite a challenge for both the organisers, the speakers as the chairmen. But it worked out extremely well for which the organisers should get a big thank you!

As EFI we were invited to participate in a session on HLA antibodies in which Carla Rosser kicked off with a description of a case of a sensitized patient and how she used HLAMatchmaker.

David Turner shared the Scottish experience of omitting the "wet" crossmatch and showed that only a few number of cases of early ABMR occurred in Glasgow and Edinburgh. He also stressed the importance of understanding of potential risks and the agreement between H&I laboratories and the transplantation unit.

Frans Claas gave a comprehensive overview of how the HLA antibodies see a mismatched HLA molecule and how one can use the knowledge of these molecular mismatches (eplet/ epitopes) in the field of virtual crossmatches, including the usage of the newest epitope algorithm, HLA-EMMA, which has been developed by the Leiden team.

Antoine Roux addressed the caution one have to take when knowledge of HLA antibodies is extrapolated from kidney to lung transplantation.

Vasilis Kosmoliaptsis gave a detailed presentation on HLA immunogenicity using various algorithms (HLA Matchmaker, HLA-EMMA) as well as the one addressing potential indirect T cell reactivity (PIRCHE-II). He elaborated on the way the Cambridge team approach the HLA molecular mismatch taking the physico-chemical or electrostatic scores (EMS3D) of the mismatch into consideration.

Teresa Kauke ended with a short presentation in which she shared the case of a patient for which she applied epitope matching.

The session ended with a lively discussion on various issues like the usage of information on HLA-DQA1 and the future use of this gene and other genes in daily practice of virtual crossmatching. Furthermore, it was explained that not just the number of epitope or molecular mismatches is important but a higher number is more likely to include a highly immunogenic one. A uniform nomenclature of epitopes or molecular mismatches is also desirable and referral to the "Epitope component" in the upcoming International Workshop (May 2022) in Amsterdam was made several times.

#### Joint ESOT-EFI Session on "How to set up an ABO incompatibility programme"

Chairs: David Turner, United Kingdom, Emanuele Cozzi, Italy

Speakers: Nizam Mamode, United Kingdom, Arvinder Singh Soin, India, Lori West, Canada, Marta Crespo, Spain and Caner Süsal, Germany

The ESOT 2021 conference was held as a hybrid in-person and online meeting between 29th August-1st September and the first thing to say is that the organisers are to be congratulated on making this complicated audio-visual challenge work extremely well. EFI was invited to participate in a session on ABOi transplantation in which the first speakers covered kidney (Nizam Mamode), liver (Arvinder Soin) and cardiothoracic transplantation (Lori West) from the perspectives of candidate selection and pre-transplant management. post-operative management and immunosuppression. One of the unmet needs in ABOi from a laboratory perspective is the need for a reliable, objective test for anti-blood group A and B antibodies. Professor West's talk described a local Luminex based method used in her centre in Canada, which sounded as if it could be a great development opportunity for interested transplant supporting biotech companies! She also made the point that anti-A &-B 'titre' testing perhaps needed to move out of blood banks and more into the sphere of H&I labs as a means of allowing overall risk assessment at the time of transplantation.

Marta Crespo gave a comprehensive overview of the requirements for setting up ABOi programmes in her talk "Environment management when starting an ABO compatibility programme: Logistical considerations" followed by a pre-recorded talk by Caner Süsal showing impressive outcome data for kidney ABOi from the Collaborative Transplant Study analyses.

The session was informative to me personally as it gave an insight into the use of ABOi transplantation in organs other than kidney. The description of ABOi in paediatric cardiothoracic transplantation highlighted the fact that in the absence of the formation of anti-A &-B antibodies in infants, ABOi transplants can be tolerated well. It was also interesting to hear the subtly different protocols and approaches taken for ABOi in different organs and in different parts of the world. As suggested, it is likely that as newer technologies are applied for the detection and (semi) quantification of antibodies to blood groups, H&I labs will have an increasing role in both research and clinical work in this area in the future.

Dave Roelen and David Turner



# REPORT IN THE JOINT EFI-EFIS SYMPOSIUM AT THE 6TH EUROPEAN CONGRESS OF IMMUNOLOGY (SEPTEMBER 1-4, 2021)

The European Congress of Immunology (ECI) is one of the premier events for the European immunology community. This year's ECI was held virtually from Istanbul between September 1-4, 2021 and offered an exciting program, including a joint symposium hosted by EFI and the European Federation of Immunological Societies (EFIS). Professor Katharina Fleischhauer, former chair of the EFI Scientific Committee, had put together an excellent and very complementary program for the symposium entitled "Immunogenetics of cancer". As first speaker, Professor John Trowsdale presented a very comprehensive overview of the Immunogenetics of the MHC and NK Cell Receptors. Professor Luca Vago shared the impressive published and unpublished data from his group on the different immunogenetic aspects controlling the antileukemia immune response. Dr Lotte Wieten closed the session by discussing molecular profiles influencing sensitivity and resistance to NK cell based immunotherapy in solid malignancies. The multiple stimulating questions from the audience made it a vibrant event, which provided a wonderful snapshot of some of the ongoing scientific efforts in EFI to the greater ECI community.

Lotte Wieten (chair of the EFI-EFIS symposium)

# CALL FOR BIDS FOR THE 19TH INTERNATIONAL HLA AND IMMUNOGENETICS WORKSHOP

Historically, the International Histocompatibility Workshops, currently known as the International HLA and Immunogenetic Workshops (IHWS) have served as reservoir of common knowledge in HLA, histocompatibility and immunogenetics and have provided standardization and specifications for naming and tracking features of HLA antigens and alleles and other immunogenetic markers. These workshops have served the HLA, histocompatibility and immunogenetics fields by assisting in technology transfer, international cooperation, and individual laboratory development.

On behalf of the Councilors of the International HLA and Immunogenetics Workshop (IHIWS) we are calling for submissions of proposals for the organization of the 19th IHIWS. The proposals must include the constitution of the organizing committee and the location of the concluding workshop meeting. It has been customary that there are one or two chairpersons on the IHIWS organizing committee. The chairpersons must be IHIWS Councilors or wellrecognized scientists who have actively participated in past workshops, and are supported by at least one IHIWS Councilor. All bids must include the location, dates and goals for the 19<sup>th</sup> International Workshop. Submission of bids can be done via email marcelof@ stanford.edu or submitted online at the 18<sup>th</sup> IHIWS website (https://www. ihiw18.org/bid-for-the-19th-ihiws/) by February 1<sup>st</sup>, 2022.

A total of three applicants will be allowed to present their bid during the Councilors breakfast at the 18<sup>th</sup> IHIWS meeting. Depending on the number of submissions, a pre-selection by the current IHIWS president and organizers of the 18<sup>th</sup> IHIWS may be undertaken.

Marcelo A. Fernández-Viña President IHIWS

Sebastiaan Heidt Councilor and Co-Chair Organizing Committee of the 18<sup>th</sup> IHIWS

#### Eric Spierings

Councilor and Co-Chair Organizing Committee of the 18<sup>th</sup> IHIWS

### HIGHLIGHTS FROM THE HLA JOURNAL

#### Systematic comparative study of computational methods for HLA typing from next-generation sequencing. Yu Y, Wang K, Fahira A, Yang Q, Sun R,

Li Z, Wang Z, Shi Y.

HLA. 2021 Jun;97(6):481-492. doi: 10.1111/tan.14244.

#### By Luca Vago, section editor HLA journal

The advent of next-generation sequencing (NGS) technologies has provided new powerful means to study in detail the human genome and its expression proxies. Whereas in principle many of the recently developed highthroughput technologies allow also the possibility to extract HLA typing data, the extensive polymorphism that is characteristic of the histocompatibility complex renders this task complex and warrants the use of specific algorithms. The present study reports on the detailed comparison between eight software tools for HLA typing, testing their performance on different real or in-silico generated datasets originating from different technologies (whole-genome, whole-exome and transcriptome sequencing) and with different sequencing lengths, depths, and error rates. The Authors identify the algorithms with the best efficiency in different scenarios, providing a comprehensive evaluation that could assist researchers in selecting the most appropriate tool for analysis of their raw NGS datasets.

#### Use of DPB1 T-cell epitope algorithm among italian transplant centers: A survey on behalf of Associazione Italiana di Immunogenetica e Biologia dei Trapianti

Crocchiolo R, Mele L, Testi M, Scollo Chiara M, Murgia B, Rossi A, Vecchiato C, Grammatico P, Mininni D, Longhi E, Manfroi S, Giuliodori S, Castellani L, Carella G, Lai S, Azzaro Maria P, Mazzi B, Perotti L, Penta R, Lombardo C, Tognellini R, Andreani M, Albergoni Maria P, Nesci S, Cappuzzo V, Chiusolo P, Garino E, Cappucci G, Ceschini N, Bevilacqua E, Guizzardi E, Tagliaferri CM, Piazza A, Carcassi C, Miotti V.

HLA. 2021 Aug;98(2):114-121. doi: 10.1111/tan.14347.

A constantly growing number of studies are providing evidence that the donor-recipient matching status for HLA-DPB1 can have an impact on the outcome of allogeneic hematopoietic cell transplantation (allo-HCT). In particular, seminal studies from Katharina Fleischhauer and collaborators have shown that DPB1 alleles can be classified into different subgroups based on their immunogenicity to allogeneic T cells, and that incompatibilities between donor-recipient pairs belonging to same the immunogenicity group (-DPB1 permissive mismatches) are better tolerated than those between individuals from divers groups (-DPB1 non permissive mismatches). The present study collects the results of a survey performed amongst Italian histocompatibility laboratories to analyze the current implementation of this knowledge into real-life practice. The Authors documented a progressive increase in the proportion of laboratories typing DPB1 in patients and their potential donors during the search (from 44% to 79% during the 2010-2019 period) as well as in those suggesting the use of TCEbased algorithm for the donor choice whenever possible (from 24% to 65%

during the same period). Overall, the study captures an encouraging raise in the awareness of the role of -DPB1 in unrelated donor selection and evidence how mentioning the permissiveness status in the HLA typing report might represents a notable mean to raise awareness among transplant physicians and support them in their task of choosing the best donor.

#### Comparison of different luminex single antigen bead kits for memory B cellderived HLA antibody detection. Karahan GE, de Vaal Y, Bakker K, Roelen D, Claas FHJ, Heidt S.

HLA. 2021 Sep;98(3):200-206. doi: 10.1111/tan.14356.

Detection of HLA-specific memory B cells can complement the analysis of serum donor-specific HLA antibody (DSA), providing additional information on the presence of long-living mediators of alloimmunity. Profiling of memory B cell-derived HLA antibodies using luminex single antigen bead (SAB) assay represents a viable method to directly compare presence and specificity of memory B cells with their serum antibody counterparts. In the present interesting report, Karahan and coworkers compare the performance of SAB kits from two vendors in detecting anti HLA antibodies from the supernatants of polyclonally activated B cells from alloantigen-exposed or nonexposed individuals. The conclude that HLA-specific memory B cells can be profiled using kits from both vendors, but being aware of the specific features and caveats of each of the kits.

We also would like to suggest to our readers four interesting studies investigating the association between HLA and the clinical manifestations of COVID-19. The studies from Langton et al. and from Anzurez et al., published in the same issue of HLA (July 2021), both documented significant association between severe COVID-19 manifestation and HLA-DRB1 alleles, respectively DRB1\*04:01 (found by Langton and coworkers to be less frequent in individuals with severe clinical manifestations of the disease) and DRB1\*09:01 (found by Anzurez and coworkers to be enriched in patients with severe COVID-19). Conversely, the study from De Marco and collaborators, published in the August issue of HLA. found no significant associations

between any HLA-A, -B or -DRB1 allele and susceptibility or severity of the infection, but detected a higher incidence of COVID-19 in individuals with HLA-A homozygosity, which might be explained by a more limited repertoire of viral peptides presented by infected cells to T lymphocytes. Finally, the study from Schindler and coworkers. published on the October issue of the journal, analyzed HLA typing of 234 patients hospitalized for COVID-19 in the St. Louis metropolitan area, identifying two predisposing alleles: HLA-DRB1\*08:02 in the Hispanic group and HLA-A\*30:02 in younger African Americans with ages below the median. The picture of associations between HLA and COVID-19 still appears hazy, as expected for a complex multifactorial disease: large studies that are ongoing at the moment may be key to provide a wider frame to better understand also the apparent contradictions of smaller reports.

Finally we would like to point the attention of the EFI newsletter readership to two special issues of HLA collecting abstracts for the Joint 34<sup>th</sup> European Immunogenetics and Histocompatibility and 31st BSHI Virtual Conference (April issue) and for the 28<sup>th</sup> Annual Conference of the German Society for Immunogenetics (Deutsche Gesellschaft für Immungenetik -DGI) Virtual Conference (September supplement), to an excellent review on the role of Natural Killer Cells in allograft rejection, published in the September 2021 issue of HLA, and to the obituary written by Benedicte A. Lie, Marte K. Viken, Torstein Egeland, Dag Erik Undlien and John Torgils Vaage in memory of Erik Thorsby, celebrating his milestone contributions to the field of immunogenetics and his pivotal role in our scientific community, including his service as EFI president between 2002 and 2004.





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