



Newsletter



Ann-Margaret handing over the EFI president's tankard to Marco Andreani

In this 104th EFI Newsletter you can find the reports of the various aspects of the 37th EFI annual conference held in Geneva. Enjoy the read!



Dear EFI Members,

As I step into the role of President of our community, I feel a deep sense of gratitude and responsibility. My predecessors have laid a solid Scientific Society, upon which we can continue to build and innovate. In particular, I would like to express my great appreciation for the outstanding contributions of Ann-Margaret Little. She led our Society during the last three years in an extreme wise and competent way, with strong

personality, but always with a gentle and lovely attitude. She has shown how to face and overcome the numerous and huge obstacles that she met during her Presidency, never complaining, but bringing practical and fast solutions. Her dedication to EFI has been exemplary. Many thanks, dear Ann-Margaret, from the depth of my heart, being sure to interpret the feeling of the entire EFI community. I'm lucky that I will not be alone

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EFI General Assembly

This Newsletter contains the minutes of the EFI General Assembly

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Report on the 37th EFI Conference in Geneva

The report of the wonderful 2024 EFI annual conference can be found here

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18th International Summer School on Immunogenetics

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From the editor's desk

On your screen is the first official 'digital only' EFI Newsletter. By distributing the EFI newsletter by PDF only we have listened to the EFI membership, and as an added bonus have become more ECO friendly as an organization. It is a great pleasure for me to welcome our new President Marco Andreani as the author of his first Presidential address.



In this edition of the Newsletter we look back to a highly successful EFI meeting in Geneva, organised by Jean Villard, Sylvie Ferrari-Lacraz, and their team. Their incredible effort in a very short time frame resulted in a wonderful meeting. The program was excellent, the Palexpo Convention Centre was extremely well to reach and convenient, and the social program was second to none. I am sure everyone enjoyed the local wines and tasty cheese fondue! The minutes from the General Assembly, and the reports on the prize winners of this 37th EFI meeting are included. Also, reports from the bursary awardees accompanied by pictures of the event can be found in this Newsletter. Besides these reports, also reports on the KIR 2024 workshop and the TTS meeting in Istanbul can be found.

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

Sebastiaan Heidt

Deadline for contributions to EFI Newsletter 105 is December 15, 2024.

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

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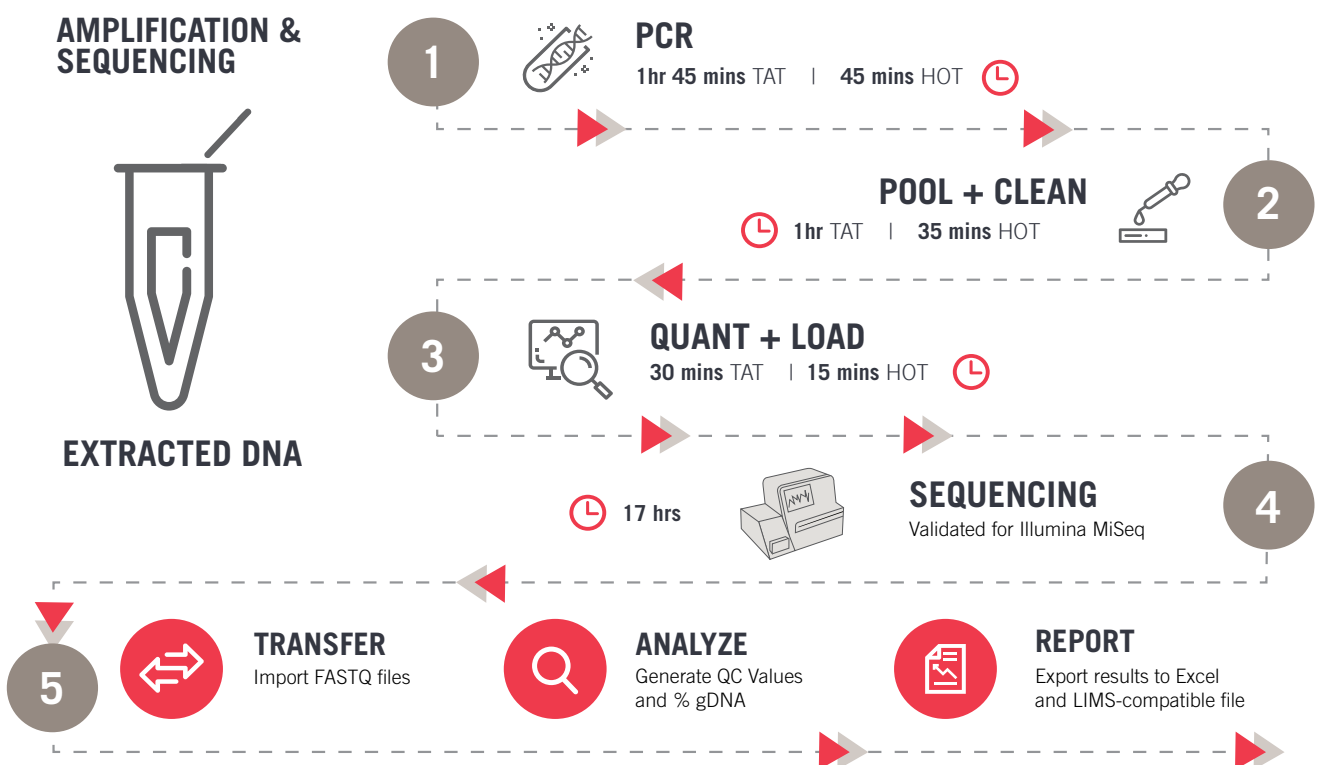
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from the EFI President (continued)

in my daily work, since it will be supported by the collaborative efforts of the members of the EFI Executive Committee, composed of valuable and efficient Officers and Councilors, as well as the members of the different EFI committees, all playing a crucial role in advancing our mission and achieving our objectives. The work of these committees is vital to our progress, and I am committed to supporting their ongoing efforts and initiatives. Regardless, nothing can be successful in our Society without the continuous support of Sonja and Ingrid, recently joined by Margriet in the EFI Office in Leiden, and by the contribution of each single EFI Member.

My primary goal, as EFI President, will be to maintain the relaxed and friendly atmosphere, as well as the strong relationships among us that have been well established over the years. These elements are not ends in themselves but are vital engines that continuously encourage and benefit the mutual scientific activities of our community. And it is important, in my opinion, to remind each other that our extensive work in Histocompatibility and Immunogenetics is crucial for the success of all the different solid organ and hematopoietic stem cell transplants programs, besides bringing a great help in diagnosing autoimmune diseases and providing new insights into genetic population studies. We must never forget that our constant scientific contributions performed as lab technicians, medical doctors, biologists, or nurses is dedicated to improving the possibility of curing patients and is vital; whether by bringing research projects to completion, managing teaching plans or performing the daily routine laboratory activities.

Recognizing the evolving landscape of Histocompatibility and Immunogenetics and the importance of continuous education, we are committed to share our experiences

participating in person to scientific events throughout the year, such as Workshops, Summer Schools, and Annual Conferences. On the other hand, especially during and after the Covid pandemic, we have very much appreciated the benefit of educational programs available online. Therefore, considering a key aim of my Presidency to focus on the professional development and education of our members, I will put many efforts in implementing the already existing e-learning platform present in the EFI website. Convinced that this initiative will provide accessible, high-quality specific educational resources to all members, regardless of their geographic location or difficulties to participate in live scientific events. The ultimate aim will be to have an e-learning platform that will offer a variety of courses and training modules designed to keep our members at the forefront of the field. Crucial to this will be the contribution of both the Scientific and Educational Committees, aware that increasing the tutorial options could be useful for the entire EFI Community, but in particular for the EFI Members that are willing to take the ETHIQ or the ESHI Diploma exams.

In line with the commitment to education and professional development, I admit to have a dream: to start future collaborations with leading Academic Institutions, ensuring to meet the highest professional standards, in order to provide formal programs for advanced training and education in Immunogenetics, preparing the next generation of leaders in the field. A further aim during my Presidency will be to strengthen the already ongoing collaboration with all the Scientific Sister Societies, in particular with the American Society for Histocompatibility and Immunogenetics (ASHI). By working closely together, we could harmonize and jointly develop accreditation standards, particularly in the rapidly evolving field of

Next-Generation Sequencing (NGS), unifying an approach of excellence in Immunogenetics, with the help and support of the Standard and Accreditation committees. Finally, I will try to encourage with all my strength the integration and scientific contribution to our Community that come from the young members, giving space to the relatively new committee, called Young EFI.

Most of us met a few months ago in Geneva, where we had an extremely successful EFI Conference, organized by Jean Villard with the help of his collaborators, last May 2024. We now look forward to a great meeting in Prague next year, organized by Tony Slavčev and Gottfried Fischer; therefore, we already look to the future, inspired by the incredible potential of our organization and its Members. Together, we will continue to advance the science and practice of Histocompatibility and Immunogenetics, built by our predecessors. I am really honored to serve as your President and look forward to working with each of you to achieve our shared goals.... hoping not to disappoint any of you.

Thank you for your ongoing dedication and support.

Marco Andreani





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EFI General Assembly

Wednesday 22nd May 16:00

114 EFI Members were present. The minutes from the 2023 General Assembly (published in Newsletter 101) were accepted. The following reports were presented with any questions for the presenters documented:

1. President's Report (Ann-Margaret Little).
EFI has a new formal MoU with ESOT and there will be joint EFI sessions at ESOT 2025 in London and EBMT 2025 in Florence. EDI data of the Executive Committee members was presented. The EFI Young Professionals members attended EFI Committee meetings this year, where appropriate. The EFI Young Professionals organised the session "AI and Big Data in Immunogenetics", and there is an intention to invite more young people to chair and present future sessions. Changes to the HLA journal editorial board were presented. The impact factor is 8.0 and it now has an online continuous publication model for rapid publication. EFI Newsletter number 103 will be the last to be printed and posted. Future editions will be electronic, available on the website and emailed to members. Sebastiaan Heidt continues as the Newsletter Editor with support from the Assistant Editor, Gurvinder Kaur. Special thanks were given to Sonja Geelhoed and Ingrid Abelman from the EFI office for their exceptional support this year.
2. Secretary's Report (Dave Roelen, Secretary and Kay Poulton, Deputy Secretary).
Sandra van Hensbergen will leave the EFI Office and her part-time position will be advertised. In the EFI elections 53% eligible members elected Sandra Tafulo and Katerina Tarassi as EFI Councillors. In 2025, four Councillors (Neema Mayor, Antonij Slavcev, David Turner and Luca Vago) will end their term of office. Two vacancies for councillors will be advertised in 2025, 2026 and 2027 to maintain a steady turnover. The positions of Treasurer, Secretary and Deputy Secretary will all be due for re-election with Jean Villard, Dave Roelen and Kay Poulton all willing to serve the second term in post. Four applications to host EFI 2026 are being reviewed, and expressions of interest for 2027 and 2028 will be advertised soon.
3. Treasurer's Report (Jean Villard, Treasurer and Nicolas Vince, Deputy Treasurer).
The Auditors Report from EY & Associates, Bordeaux (6th May 2024) was presented to the Assembly along with the Balance Sheet for 2023 showing total assets, liabilities and Equity for EFI at €1,126,251. The net results from 2023 showed a positive final result of €88,724, much better than expected due to more income (great profit from the Nantes conference and less outcome especially for accreditation). For 2024, we expect a deficit of €82,184.
Eric Spierings commented that the result of 2022 had not been approved at the General Assembly, although it had been checked and approved by the accountants. The EFI Members approved the results from 2022 retrospectively and also approved the results from 2023. The expected deficit for 2024 is mainly due to payroll expenditure and the predicted costs associated with administration. At present, the deficit will be absorbed by the EFI assets. There were no questions and the budget for 2024 was approved.
4. Marco Andreani (President Elect) announced the sad news of the death of Prof Alberto Piazza, a former Ceppellini Award recipient who passed away on 18th May 2024, aged 82. The Assembly stood in silence to mark a few moments in memoriam.
5. Reports were received from the following EFI Committees. Representatives of EFI Young Professionals joined these meetings to experience what is involved in running EFI. EFI would like to express their appreciation to all members serving on committees, especially those whose terms of office ended this year.
 - a. Accreditation Committee (Blanka Vidan-Jeras, Chair)
The Permanent Commission: Sabine Scherer (General Secretary), Christien Voorter (Co-Chair) and Blanka Vidan Jeras (Chair) completed their 1st term of office in April 2024 and their 2nd term has been approved. New Commissioners were welcomed: Elena Longhi (Region 7c, Italy, replacing Marco Andreani); Sandra Tafulo and Antonio Balas (Regions 9&10, Spanish-speaking countries outside Europe, replacing Jose Vicario) and Annamaria Pasi (Region 7b, Italy, replacing Benedetta Mazzi). In October 2023, following an urgent request from Nina Svetlitzky to step down from her post (Region 8a, South East Europe, Israel and Armenia), Christien Voorter and Sabine Scherer covered the duties until December 2023, when Monica Dutescu was appointed.

There are 273 EFI Accredited laboratories and the breakdown in the different regions was presented. 86 inspections were carried out last year. The total number of inspectors has fallen to 91 from 101 since 2023. Two inspectors' workshops were scheduled for 2024; the Annual Inspectors' Workshop on 19th May, and a New Inspectors' Workshop will be held on 8th November 2024 in Leiden. Sam Ho the ASHI



Accreditation Review Board Programme Director gave a talk at the Annual Inspectors' Workshop. Finally, Version 4.0 of the Accreditation Programme Procedure Manual has been active since 1st January 2024 and the Accreditation Committee is working closely with FACT to secure prolonged approval for the EFI Accreditation Programme.

b. Standards Committee (Katy Latham, Chair)

In the Standards Committee, Nataša Katalinić (Croatia), Sabine Wenda (Austria) and Chrysanthi Tsamadou (Germany) are in their 2nd term of office, with Pernille Koefoed-Nielsen (Denmark) in her 3rd term. Three new members have been appointed pending EC approval. The Standards Committee is working with the Bioinformatics & IT Committee to introduce Data Standards, and are creating a position paper together with ASHI, NMDP and WMDA that will be a basis for new standards. Version 8.1 of the EFI Standards is on the EFI Website, and the creation of v9.0 is in progress. The Standards Committee works closely with the Accreditation Committee to ensure good links and communication.

c. EPT Committee (Yvonne Zoet, Interim Chair)

Yvonne Zoet is acting as interim chair of the EPT Committee after Helle Bruunsgaard stepped down. Two new members (Maria Chiara de Stefano from Italy and Maria Jose Herrero Mata from Spain) were welcomed. There is a vacancy for Region 1 (Nordic region) which will be advertised. New committee members have been proposed for Regions 3 (UK) and 6+11 (France and Switzerland). There are new Standards for Providers and a manual for inter-lab exchanges awaiting EC ratification. Standards for Laboratories have been updated and shared with the Standards Committee and overviews of the Regions and Providers are ready for publication on the EFI website.

New schemes covering cell free DNA and MICA/B typing, and separate schemes from all providers for HLA antibody screening using single antigen beads were discussed.

d. Education Committee (Deborah Sage, Chair)

The membership remained unchanged this year with no vacancies. The ESHI Diploma has been running for 10 years with 57 applications from 16 countries so far. The ETHIQ Diploma has 31 candidates registered and celebrated the first applicant to complete the programme. Educational resources on the website were outlined. Plans are in place to translate the final assessment of multiple choice questions which are currently in English only. The EFI CME/CPD Portfolio will be launched in 2024. The next International

Summer School in Merida, Mexico has been postponed until 2025.

e. Scientific Committee (Luca Vago, Chair)

A member with preferred expertise in Immunogenetics is required to join at the Autumn Meeting in 2024 after Lotte Wieten completes her term of office. Three new SC members: Eric Spierings, Gonca Karahan and Natasja de Groot were welcomed and Pietro Crivello has been appointed as Deputy Chair. EFI Young Professional members have supported Poster Presentations and Awards at this meeting and strategies to improve the presentation of submitted abstracts were discussed. A Population Genetics Workshop was held on 20th May which had 50 participants. Online scientific webinars are to be scheduled, hosted and managed by members of this committee. Highlights from the HLA journal will continue to be presented in the EFI newsletter by members of this committee.

f. Bioinformatics and IT Committee (Eric Spierings, Chair)

The Bioinformatics focus of the committee will be extended through interactions with members of the Scientific and Education Committees and the Data Standards Hackathon. This committee is working with the Standards Committee to formulate new data standards and on the joint position paper with external agencies to maintain data integrity and safety. A 5-year commitment to continue the use of the abstract tool EasyChair and ongoing projects supporting the EFI website and its educational platform were presented.

6. Details of the 38th EFI Conference to be held in Prague, Czech Republic (May 13th-17th 2025) were presented. The EFI flag was presented to Tony Slavcev by Jean Villard.

7. Handover of New Councillors. The newly elected councillors Katerina Tarassi and Sandra Tafulo were invited to join the other councillors on the stage.

8. The handover of the Presidents. Ann-Margaret Little handed over the Presidency of EFI to Marco Andreani, who was pleased to receive the President's Tankard. Small gifts were presented to Ann-Margaret Little as a token of thanks for her services to EFI during her term of office.

9. Meeting Closed.

Kay Poulton
Deputy Secretary

Report on the 37th EFI Conference in Geneva

The 37th EFI Conference, held in the stunning city of Geneva, Switzerland, from May 20 to May 23, 2024, was a notable success, bringing together leading experts and practitioners in the fields of histocompatibility and immunogenetics. The conference, under the theme “Unveiling Diversity, Nurturing Transplant Bonds, Orchestrating Immunity,” offered an enriching experience that highlighted the latest advancements and fostered meaningful discussions among professionals.

The conference took place at the Palexpo Convention Centre, a venue perfectly suited for the event's scale and scope. Its facilities and layout provided an excellent environment for both formal presentations and informal networking. The picturesque setting of Geneva added a unique charm, enhancing the overall experience for attendees and making the conference both professionally rewarding and personally enjoyable.

In keeping with EFI's tradition, EFI2024 started with the opening ceremony presided over for the last time of her presidency by Ann-Margaret Little. This inaugural event featured lectures from EFI awards including the Julia Bodmer awards presented by Dr Agnes Bonifacius, the HLA award bestowed upon Prof. Paul Norman for the publication “Complete sequences of six major histocompatibility complex haplotypes, including all the major MHC class II structures” by Houwaart et al, and the Ceppellini lecture delivered by Prof. Jamie Rossjohn.



From the outset, the conference was marked by a series of high-impact keynote lectures given by prominent figures in the field. These addresses set the tone for the event, covering a range of topics from recent breakthroughs in HLA typing to innovative strategies in transplant immunology. The speakers provided valuable insights into the future directions of histocompatibility and immunogenetics, setting the stage for a productive and engaging conference.

Main sessions were dedicated to classical topics of the conference such as solid organ transplantation (how to

transplant highly sensitized patients), hematopoietic stem cell transplantation (new therapies for acute leukemia HSCT; CAR-T, bispecific Abs), HLA immunogenetics and population genetics (a combined SIP-EFI session), and two more diversified sessions, giving life-bone marrow and solid organ donors with a very informative view of the WHO (whose headquarters is in Geneva), and finally on antigen presentation and neoantigens. The scientific program was enriched with four special sessions, on tolerance organized by the SFHI, The network of immune cells in health and disease, a joint session with the University of Geneva, a special session on the HLA-DP models and finally a EFI Young Professionals session on AI and big data in immunogenetics.

Interactive workshops (on HLA and transfusion, HLA and disease, KIR in HSCT and SOT) and commercial symposia were a significant feature of the conference, offering attendees hands-on experience and in-depth discussions on specialized topics.



Oral and poster presentations showcased a broad spectrum of research, reflecting the high level of expertise within the EFI community. The quality of the research presented was exceptional, and the sessions were marked by vibrant discussions and exchanges of ideas.

The final day is always a special moment with the best abstract oral session and the ceremony of awards for the best orals and the best posters. A specific place is dedicated to the winners in this newsletter.



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All sessions were well-received, providing practical insights and allowing for deeper exploration of specific aspects of the field. Participants appreciated the opportunity to engage directly with experts and peers, further enhancing the collaborative spirit of the event. A special note for the final conference which was outstanding by bringing us so far away to “The strange Word of Exoplanets” by Prof. Monika Lendl from the university of Geneva.

Networking was a key aspect of the conference, with numerous opportunities for professionals to connect and explore potential collaborations. Special events, including the welcome reception (and the memorable fondue), wine and cheese poster session (with the participation of local wine makers), the usual Tulip run and the conference dinner in the beautiful site of Grand Malagny (ended by a unforgettable wild-dance party), were instrumental in fostering these connections. Attendees valued these moments for their informal yet impactful interactions, which strengthened the professional bonds within the EFI community.

Feedback from participants was overwhelmingly positive,



reflecting the success of the conference in meeting its objectives. Attendees praised the event for its well-organized program, the high caliber of presentations, and the overall quality of the experience. The conference not only provided valuable insights but also promoted a sense of community and collaboration among those involved in histocompatibility and immunogenetics. As the EFI society moves forward, the knowledge gained and the connections made at this conference will undoubtedly contribute to continued advancements in the field. We extend our gratitude to all speakers, participants, sponsors, our core PCO Guarant and the local organizers including the Geneva Convention Bureau and the city of Geneva for contributing to the success of the conference. We look forward to the continued progress in this dynamic field and to the next EFI Conference, where we anticipate further advancements and opportunities for growth.



Bye-Bye Geneva, welcome to Prague for the 38th EFI conference.

*Sylvie Ferrari-Lacraz and Jean Villard
On behalf of the local Organizing committee*



Ceppellini Lecture 2024 – Jamie Rossjohn

At the Opening Ceremony of each annual EFI Conference, a distinguished scientist who has made significant contributions to the field of Histocompatibility and Immunogenetics delivers the Ceppellini Lecture, which represents the highest honor from our Society.

This lecture is named in memory of Italian geneticist Ruggero Ceppellini (1917-1988), a pioneer and eminent figure of H&I research. The inaugural Ceppellini Lecture was presented in 1988 by Jon van Rood, one of the late founders of EFI. In the last five EFI Conferences, the lecture has been presented by Ronald E. Bontrop (2023), Peter Doherty (2022), Jacques Neefjes (2021), Pamela Bjorkman (2019), and Lorenzo Moretta (2018). A complete list of Ceppellini Lecture Awardees can be found on the EFI website (https://efi-web.org/fileadmin/Efi_web/Resource_collection/Awards/Ceppellini/Overview_Ceppellini_Lecture_website.pdf).

the achievements he is best known for, leading him to become one of the world most famous immunologists and structural biologists. Professor Rossjohn is particularly renowned for his contributions to understanding the molecular foundations of immunity. Utilizing structural biology, he has elucidated the self-association of pre-T-cell receptors (TCR) during T-cell development and how TCRs specifically recognize polymorphic HLA molecules in the context of viral immunity and atypical T-cell responses.

He has uncovered the structural mechanisms of HLA polymorphism

that it fundamentally differs from peptide-mediated adaptive immunity.

Recently, he has revealed the structural basis for how vitamin B metabolites can be presented and recognized by the immune system, identifying a new class of antigens. To date, he has published over 500 papers and has mentored numerous researchers in reaching scientific independence. He is currently a NHMRC Investigator L3 Fellow (2022-26) and previously an ARC Australian Laureate Fellow (2017-21), NHMRC Australia Fellow (2011-16) and ARC Federation Fellow (2007-11). In 2022, Prof. Rossjohn was elected as a Fellow of the Royal Society and Associate Member of EMBO.

Additionally, over the last decade, he has initiated scientific outreach programs aimed at supporting disadvantaged community members, including promoting internships and scholarship programs for individuals with disabilities. Moreover, in collaboration with legally blind artist Dr. Erica Tandori, he is currently working to make science accessible to the blind and low-vision community.

During his Ceppellini Lecture, Professor Rossjohn provided a captivating overview of the differences and similarities in how immune receptors interact with their targets, explaining the main features of CD1 and MR1 antigen presentation molecules in comparison to HLAs, and how they contribute to shaping the immune response against different pathogens and in different organs.



This year's Ceppellini Lecture was delivered by Jamie Rossjohn, from Monash University, Melbourne, Australia. Born in Wales, Jamie Rossjohn completed his PhD at the University of London before moving to Australia, where he gained most of

that influence drug and food hypersensitivities, as well as the recognition by Natural Killer cell receptors. His pioneering work has expanded our molecular understanding of lipid-based immunity in T cells, demonstrating



Julia Bodmer Award 2024 – Agnes Bonifacius

The Julia Bodmer Award (JBA) is presented annually to a young scientist who has made outstanding contributions to the field of Histocompatibility and Immunogenetics, and who is given the honor to present a lecture during the Opening Ceremony of the annual EFI Conference.

This prestigious award honors the legacy of Lady Julia Bodmer (1934-2001), a founding member of EFI who served as President from 1996 to 1998. Julia was a passionate advocate for nurturing young scientists, believing strongly in the importance of mentoring future generations to keep research vibrant and progressive. The JBA recipient is chosen through a majority vote by the EFI Scientific Committee upon competitive review of submitted applications. The inaugural JBA Lecture was presented in 2002 by Benedicte Lee. In the last five EFI Conferences, the lecture has been given by Esteban Arrieta-Bolanos (2023), Jesse Bruijnesteijn (2022), Cristina Toffalori (2021), Asbjørn Christophersen (2019), Maxime Rotival (2018), and James Lee (2017). A complete list of JBA winners can be found on the EFI website (https://efi-web.org/fileadmin/Efi_web/Resource_collection/Awards/JBA/Overview_Julia_Bodmer_Award_website.pdf).

This year, the JBA was awarded to Agnes Bonifacius from the Institute of Transfusion Medicine and Transplant Engineering, Hannover Medical School, Germany. Born in Hildesheim, Germany, Dr. Bonifacius pursued her studies in human biology, earning both a Bachelor of Science and a Master of Science degree from the University of Greifswald. She completed her doctoral research on “Modulation of effector and regulatory T cell differentiation and



function by bacterial compounds” at the Helmholtz Centre for Infection Research in Braunschweig, under the guidance of Prof. Dr. Jochen Hühn from the Department of Experimental Immunology. Since 2019, she has been a post-doctoral researcher in the “Molecular Immunotherapy” group led by Prof. Dr. Britta Eiz-Vesper.

Her scientific interests focus on cellular immunotherapy, particularly on naturally occurring antiviral T cells and on genetically modifying T cells using chimeric antigen receptors, recombinant T cell receptors, and CRISPR/Cas9 technologies. The goal of her research is to enhance adoptive cell therapy for immunocompromised patients. In addition to her research activities, Dr. Bonifacius is involved in the immune monitoring

and manufacturing team, where she is responsible for both the immune monitoring of patients and the quality control of antiviral T-cell products for clinical use.

During her lecture in Geneva, Dr. Bonifacius provided an exciting overview of her work, moving seamlessly from the ex vivo study of immune responses against viruses in patients to her more recent work on the generation of rapidly available cellular immunotherapies to fight infections in immunocompromised individuals. We congratulate Dr. Bonifacius for the award and wish her success in her already highly promising scientific career, hopefully maintaining and further increasing her involvement with our scientific society.



Martin Howell – EFI Medal Laureate 2024

Martin Howell began his scientific life at the University of London with a degree in Biology and then a PhD in Genetic Recombination. Subsequently, he went to the USA as a European Molecular Biology Organisation research fellow where he continued his work on genetic recombination at the University of Oregon.

He returned to the UK to work at the Regional Immunology Service in Southampton, initially as a research fellow but continuing to set up the HLA service working together with his friend and colleague Phil Evans. The development and introduction of molecular typing for HLA was a particular area of interest. Martin was also actively supporting the development of young scientists in Southampton and in all his subsequent roles. He has supervised and examined many PhD students

over the years as well as contributing to scientific and medical education as a lecturer.

In 2005 Martin became the Director for the NHS Blood and Transplant H&I laboratory in Newcastle. One of the first things he did there was to successfully gain EFI accreditation for the lab just one year after taking up his position there. This was a significant achievement for a laboratory supporting renal, cardio-thoracic and stem cell

transplantation as well as blood transfusion and disease association testing.

Martin has always been an active and supportive member of EFI. He has participated as a speaker or session chair at EFI conferences on many occasions. However, his biggest contribution has been to the EFI Accreditation Programme. He became an inspector in 2008 and then a Commissioner for region 3 (UK & Ireland) in 2011. Martin's term as a Commissioner coincided with my own time as Chair of the Accreditation Committee and I always valued his contribution to our activities highly. He was always one of the first to respond to any question or request whether from me, Sonja or another Commissioner. His response would always be a well thought out, helpful input into any topic and I know that his fellow commissioners welcomed his help and advice.

Over the last few years Martin stepped down from his role as Laboratory Director in Newcastle and returned to a more research focussed role leading a small H&I development team working on new technologies. Martin retired at the end of May 2024, just days after deservedly receiving the EFI medal in recognition of his support for EFI and contribution to the field of H&I.

Adrea Harmer



Christien Voorter – EFI Medal Laureate 2024

From 1998, Christien Voorter has been Deputy Head and EFI Director at the Department of Transplantation Immunology, Maastricht University Medical Center, the Netherlands.

She studied Biology at University of Nijmegen, where she later on received her PhD degree and continued with postdoctoral research, which she concluded at the department of Molecular Cell Biology and Genetics, Faculty of Medicine, University of Maastricht. This scientific background is very much reflected in the 160 articles that she published during her rich and colorful career. To be able to head the laboratory serving organ and HSC transplantation Christien is professionally qualified according to the Dutch law as a Certified Transplantation Immunologist and Certified Medical Immunologist. In addition, she has been awarded the ESHI diploma.

I see Christien as a very proactive person who has always been self-initiated, future-focused and change-oriented in the Dutch, European and international H&I communities. She has been a member of the Dutch HLA Working Party from 2001 and served as an ISO inspector for Dutch National Accreditation Body (Raad voor Accreditatie) from 2015 to 2023. Many of you know Christien as a thorough EFI inspector, who from 2000 till present performed 60 inspections for the EFI Accreditation Programme, which makes her one of the most experienced and reliable inspectors in the field. As the Commissioner for EFI region 2 (Belgium and the Netherlands) she was also a Member of the EFI Accreditation Committee from 2008 till 2021 and has continued to work in the committee as the Co-Chair till present.

Moreover, she was a member of the EFI Standards Committee from 2009 till 2018, which has contributed to her ability to act as a very knowledgeable and valuable liaison officer between Standards and Accreditation Committees currently. Christien was member of the organizing committee of the EFI Conference in Maastricht 2013. She co-chaired projects with a main focus on different techniques of sequence based typing for the International Histocompatibility Workshops in St. Malo (1996), Victoria (2002), Melbourne (2005), Asilomar (2017) and Noordwijkerhout (2022) and has become a Councilor for

the International Histocompatibility Working Group in 2017. Christien gladly shares her knowledge with students, EFI inspectors, inspected laboratories and all colleagues in the field but especially with those from her Maastricht laboratory that has special place in her heart. Her clear way of thinking, positive attitude and mischievous sense of humor make her a teacher that never loses attention of the audience. She has been educating new EFI inspectors from the year 2000 till now. I have had the privilege and pleasure to work with her on different occasions and tasks for last 20 years. Personally I am grateful for the kindness and loyalty she has shown me through our friendship. I hope there is still a lot of laughter and good times to be shared.

Blanka Vidan Jeras





Mats Bengtsson – EFI Medal Laureate 2024

It is a special moment and a great honour to reflect on the remarkable career of Mats Bengtsson, a dedicated and influential figure within the EFI community.

Mats has been a constant presence in the field of clinical immunology and transplantation for decades, serving EFI in numerous capacities with unparalleled expertise and passion. His journey with EFI began in the early 2000s, where his contribution, particularly as EFI Secretary in the last 8 years, proved invaluable.

Born in Skåne, southern Sweden, in 1958, Mats' roots are reflected in his distinct dialect and joyful approach to life. His academic and professional journey took shape at Uppsala University, where he earned his MD in 1984 and completed a PhD in Clinical Immunology in 1991. Mats quickly became a leading expert in his field, specializing in clinical immunology and playing key roles such as Director of the HLA Laboratory and the Stem Cell Processing Laboratory as well as Medical Director of the Tobias Registry for Swedish Bone Marrow Donors.

Throughout his illustrious career, Mats has been an active member of many prestigious societies, both in Sweden and internationally. He has shaped the field as a member of the ScandiTransplant steering committee and as a long-serving leader in EFI, holding positions such as councillor, deputy secretary, and secretary. His dedication to quality and standards in transplantation immunology is reflected in his involvement with the EFI Accreditation Committee and his work as an inspector and

commissioner for EFI and as an inspector for JAICE since 2001.

Mats' professional achievements are numerous, but his colleagues remember him just as much for his personal warmth and enthusiasm. Whether at Lucia celebrations or participating in competitive party games, Mats has always been a source of joy and laughter, never failing to brighten any occasion with his playful spirit. Beyond his humour, Mats is deeply admired for his integrity, his passionate commitment to quality, and his extensive immunological

accomplishments but by the friendships and respect he has cultivated over the years. His contributions have left an indelible mark on the field of clinical immunology and on the EFI community, and we extend our heartfelt thanks to him for all that he has done. There is no doubt that Mats will continue to inspire through the continued guidance he will offer his peers as well as with valuable discussions with us, at the upcoming EFI, WMDA or EBMT meetings.

Joannis Mytilineos



knowledge, all of which have had a lasting impact on EFI and the broader scientific community.

As he moves towards retirement, there is hope that Mats will remain a familiar figure within our EFI family. His participation in international conferences and his organization of significant events, such as the Nordic Symposium on Peripheral Stem Cell Transplantation and the EFI Meeting in Stockholm, demonstrate the extent of his influence and leadership.

Mats Bengtsson's legacy is defined not only by his professional



Celebrating Excellence: The Jon van Rood Award and Best Abstract Session at EFI2024

The EFI2024 conference brought together the brightest minds in the field of immunogenetics and histocompatibility.

Among its many highlights, the Jon van Rood Award and Best Abstract Session stood out as a showcase of the most outstanding abstracts selected by the Scientific Committee. The Best Abstract Session at EFI2024 showcased eight presentations, covering a wide range of topics within the field of immunogenetics and histocompatibility, these presentations underscored the depth and diversity of research in the field.

Professor Steven Marsh led the distinguished panel of judges of 'Past EFI Presidents' attending EFI2024, and

oversaw the assessment and scoring of the presentations. All presentations received positive feedback from the scoring committee. These researchers not only demonstrated excellence in their respective fields but also showcased the potential of their work to have a profound impact on medical science and patient care.

The winners were officially revealed during the closing ceremony. The first prize and Jon van Rood awardee was Alice Rovai for her presentation entitled Megakaryocytes with downregulated HLA class I and II

expression are protected from cellular and humoral allogeneic immune responses. The second prize was for Esteban Arrieta-Bolaños et al with the abstract "HLA class I mismatches associate with reduced survival in contemporary HCT with PTCy: A comprehensive study by the Cellular Therapy and Immunobiology Working Party of the EBMT". The third prize went to Emma Peereboom et al for the abstract "Peptide sharing between CMV and mismatched HLA class I peptides promotes T-cell-mediated rejection after kidney transplantation".

The EFI community warmly extends its congratulations to the award recipients and all participants for their outstanding achievements during this remarkable event.





Celebrating Excellence in Immunogenetics: The Best Poster Awards at EFI2024

EFI2024 was a celebration of excellence in the field of immunogenetics and histocompatibility, and one of the highlights of the conference was the Best Poster Awards session.



Led by Prof. Stefan Schaub, a dedicated team accepted the challenging task of assessing and scoring the posters during the wine and cheese poster viewing session.

This session, a showcase of 206 exceptional posters, spanned a wide range of topics within the field on

- 1) Autoimmunity, Infection, Reproduction, and Cancer,
- 2) Bioinformatics and Data Analysis in Immunogenetics,
- 3) Hematopoietic Stem Cell Transplantation (HSCT),
- 4) Immunogenetics in Organ Transplantation,
- 5) MHC Evolution and Population Genetics,
- 6) NK Cells and KIR, and 7) New Technologies and New approaches in the Immunogenetics

All the presentations received positive feedback from the assessment committee. However, with such excellence, the competition for the Best Poster Awards was intense. The winners announce during the closing ceremony were: Michaela Agapiou "Modelling an international donor recruitment strategy in a collaborative pilot study between a UK and Indian donor registry", Anne Halpin "Exploring ABO-histocompatibility: luminex assay allows detection and characterization of endothelial-targeted ABO antibodies" (handed over to Gonca Karahan) and Steven Koetzier "Interference of cold agglutinins and/or cryoglobulins in antibody diagnostics for kidney transplantation: a case study". Congratulations to them!



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Update from the EFI Education Committee

Delayed launch of EFI Continued Medical Education (CME) / Continued Professional Development (CPD)

The utility of the EFI CPDMe platformed was previewed at the EFI Conference in Geneva. Activities can be recorded under 4 different categories (Educational, Clinical, Professional or Academic) and self-reflective notes and other supporting documentation can be linked to each activity. A visual summary allows direct oversight of your CME/CPD activities, and an annual statement (suitable for EFI Accreditation applications) can be produced when required.

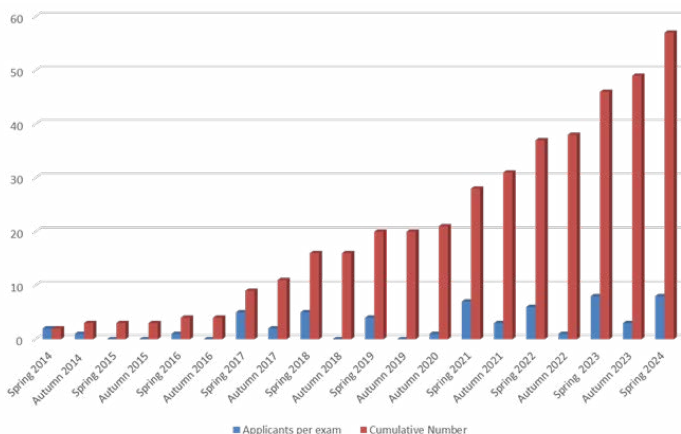
We want to make access to CPDMe platform to be as easy as possible via a single sign on through the website. Unfortunately, this has taken longer to set up than we originally expected, but work has now started to complete this final part of the preparation. We are hoping to have CPDMe available for a pilot at the start of 2025.

European Specialisation in H&I (ESHI) Diploma – 10 year anniversary

The first ESHI Diploma examinations took place 10 years ago and since the start of the ESHI exam in 2014 we have had 57 applicants from 16 different countries across the world – something to be truly proud of.

The ESHI Diploma exams, aimed at EFI Directors/ Co-Directors and those working towards this level, are offered at two time points each year; in Spring as an in person oral exam at the EFI annual conference, and in Autumn as an online oral exam. Information regarding of the expected level of training and experience, the application process and details of the next round of exams can be found at the UEMS website: Transplant Immunology – UEMS Section of Surgery (uemssurg.org).

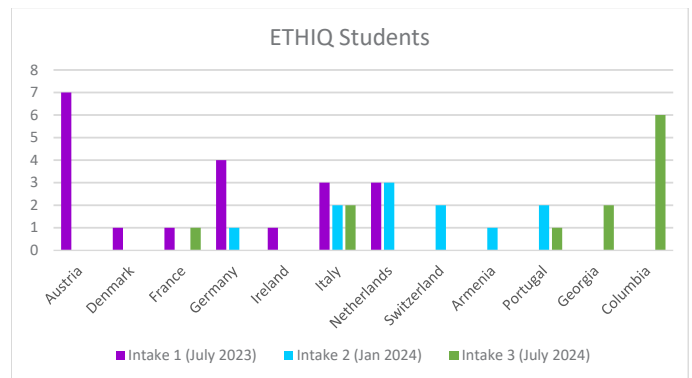
The last set of examinations took place on 19th May 2024 prior to the EFI conference in Geneva, with 8 candidates taking the exam. Unfortunately, there will not be an online Autumn exam in 2024, so the next examinations will be face to face in May 2025 prior to the EFI conference in Prague.



European Technical H&I Qualification (ETHIQ) – Final Assessment now available in French and German in addition to English.

This training programme provides a qualification that gives a measure of both knowledge and technical competence in H&I. The scheme is for technical staff working in EFI accredited laboratories, with supervision given by senior staff in their own lab. Information about the training programme, registration process and deadlines can be accessed on the EFI website: <https://efi-web.org/e-learning/ethiq-for-technical-staff>.

There are 2 intakes each year and the registration deadlines are **1st January and 1st July**.



The portfolio is completed on-line, and the content of the logbook is in English, although trainees can complete evidence in their own language. The final multiple-choice assessment was originally only available in English, however we have been working hard to translate the assessment into other languages and can now offer the final assessment in French and German in addition to English and hope to have Spanish and Italian versions available soon. There are also plans for Dutch and Portuguese translations available next year, so please don't let the thought of the having to complete the final assessment in English stop you from registering for the training programme.

In the July 2024 intake, 12 students registered for the ETHIQ programme bringing the total to 43 students currently registered on the programme from 12 different countries.

Our first online ETHIQ Programme completion – Maja Nørgaard

I'm sure you will join me in sending huge congratulations to Maja Nørgaard from the H&I laboratory in Aarhus, Denmark for successfully completing the ETHIQ training programme and final assessment in May this year. Maja is the first student to complete the online ETHIQ training portfolio and assessment.



Maja Nørgaard, Bloodbank of Immunology, Tissue Typing Laboratory, Aarhus, Denmark

EFI/ASHI/APHIA/ARSHI International Summer School

The next International Summer School hosted by ASHI will take place 6-9th April 2025 in Fiesta Americana Merida Hotel, Merida, Mexico. Registration is currently open with a closing date of 1st December 2024. The ISS due to be hosted by EFI will take place in 2026.

EFI Education and Scientific Bursaries

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

e-Learning

There are a variety of learning resources available on the EFI website. When you log in as an EFI member and use the e-learning button in the menu bar at the top of the screen. It takes you to the resources where lectures and information about training can be found. By selecting resources, you can access the EFI Newsletter, presentations from Teaching sessions at the EFI conference, The HLA Journal and other useful educational resources. Please take time to explore the EFI website and the learning resources available to you.

Deborah Sage, Chair of the EFI Education Committee



Maja Nørgaard and Colleagues Bjarne Kuno Møller, Pernille Koefoed-Nielsen and Randi Berg

Update from the EFI External Proficiency Testing Committee

Meetings: The last External Proficiency Testing Committee (EPTC) meeting took place in May 2024. An online meeting is planned in October 2024.

During the last meeting Helle Bruunsgaard (region 1) stepped down. Yvonne Zoet (region 2) temporarily took over her position as chairperson of the committee. Also Deborah Pritchard (region 3) stepped down. After the October meeting Sylvie Ferrari (region 6+11) will also step down.

This means that there are vacancies for regions 1, 3 and 6+11. These vacancies were advertised on the EFI website and by e-mail to all EFI members. In July a number of updated documents was published

on the EFI website (<https://efi-web.org/committees/ept-committee>):

- 1) The list of EFI EPT Regions, Regional Coordinators and local EPT Providers.
- 2) A document with the relevant information about the different EPT schemes of the Providers.
- 3) The manual for inter-laboratory exchanges.

In the near future the EPTC will focus on developing strategies for current EFI accreditation categories without established EPT schemes and new upcoming analyses such as donor derived cell-free-DNA.

On behalf of the EFI EPT Committee, Yvonne Zoet, interim chairperson of the EPTC



Update from the EFI Accreditation Committee

Firstly, I would like to thank Jose Vicario, past commissioner of the EFI region 9 +10 (Spain and Portugal) for all the work he dedicated to our Accreditation Programme. Antonio Balas Perez was welcomed as the new region 9 + 10 commissioner in springtime. At the same time general secretary Sabine Scherer, co-chair Christien Voorter and me as a chair of the committee started our second term.

that uses Oxford Nanopore Technology (ONT). Most of the following afternoon was spent even more interactively at round table discussions. Inspectors discussed relevant standards for monitoring of test systems C1.3.2, C1.3.2.3, C1.3.2.6, where all technical categories that EFI accredits were taken into account. We focused on this issue since a relatively high proportion of discrepancies that inspectors



The annual Inspectors' Workshop that took place in Geneva on May 19 went very well with interesting presentations followed by lively discussions. The lecture delivered by Sam Ho, ASHI Accreditation Review Board Program Director and active contribution of our American EFI inspector Marcelo Fernández-Viña gave us all the opportunity to learn about accreditation processes and requirements for directors' qualifications from another point of view. We realized that strengthening of the collaboration between ASHI and EFI would be of benefit to both organizations. Moreover,

Timo Olieslagers from Young EFI Working Group together with EFI inspector Sendi Montanic gave a presentation on how to inspect sequence based typing in the laboratory

find on-site is with these standards. Each round table, chaired by two commissioners, worked on one category. The session ended with the commissioners giving short lectures on each of the specific technical category. We were very happy to conclude the workshop with Katy Latham, Chair of the EFI Standards Committee, who talked about new version of EFI Standards, clarifying changes from the previous version to the audience. It was a very busy day which we traditionally ended with Inspectors' Dinner, perfectly organized by Sylvie Ferrari-Lacraz and Jean Villard in a restaurant at beautiful glacial Lake Léman.

Best wishes

Blanka Vidan Jeras, Chair EFI Accreditation Committee

Update from the EFI Scientific Committee

As every year, during the Geneve annual EFI conference, the members of the Scientific Committee met to discuss the scientific standing of our Society, and how to preserve and improve it.

During the meeting we discussed the applications we had received to fill in vacancies in the Committee, and, upon approval from the Executive Committee, we welcomed Gonca Karahan (Leiden, the Netherlands), Natasja de Groot (Rijswijk, the Netherlands) and Eric Spierings (Utrecht, the Netherlands) as new Regular Members. Another new addition to the Committee is Jonathan Lucas (London, UK), in representation of the Young EFI Professionals initiative, who will have the relevant task to bring to our table the point of view and scientific needs of the younger members of our scientific society. In addition, since also the mandate of Lotte Wieten (Maastricht, the Netherlands)

is approaching its end, an additional position as Regular members has been advertised, and selection is currently in progress, to be validated during the Autumn Meetings in Leiden. We take here the chance to sincerely thank Lotte for the valuable discussion and active contribution to the Committee activities, and hope to continue benefitting from her suggestions even in the future.

Finally, the Committee discussed the program draft for the next EFI Conference, already exciting at this early stage, and made plans to resume organization of scientific webinars, to be held every three months from prominent speakers invited on rotation by the members of our Committee.

Luca Vago, chair EFI Scientific Committee

Update from EFI Young professionals working party

For the second time, the EFI Young professionals working party hosted a session at the annual EFI conference. We were thrilled to have three experts share their career experiences of bioinformatics and AI as well as advise how people still developing their careers could approach and use these tools.

Professor Christian Lovis gave a talk on "AI and Big data, friend or foe?", Dr Nicolas Vince spoke about his career in "Endeavor in HLA research, an exciting winding path" and Dr Sandra Tafulo spoke about hers in "Scientific career path, inspiration, collaboration and commitment". From these talks we hope the audience was able to take away some useful learnings and consider how they might try to plan their own career paths in the future.

We also asked a surprise fourth panel member (ChatGPT!) some of the questions debated in the session to highlight the benefits and weaknesses of using such AI tools.

Like our session last year, these experts also joined us for interactive questions posed to the audience, prompting much debate and discussion. We feel this interactive aspect to our session is important in giving newer EFI members ample opportunity to ask questions and have debates with more experienced colleagues.

This also allowed us to collect useful feedback from the newer EFI members as to how EFI could further support the use of bioinformatics and AI in their work, which we will act upon at future events.

The session was a great success, and we are looking forward to the opportunity to host another session at the EFI 2025 conference and continue to get 'young' EFI members more involved in EFI.

*Timo Olieslagers,
EFI Young professionals working party*



Bursary reports EFI annual meeting 2024, Geneva, Switzerland

Report by Ritu Aggarwal, Chandigarh, India

The 37th EFI conference was centred around the theme 'Unveiling diversity, nurturing transplant bonds, orchestrating immunity' and took place at the city of Geneva, Switzerland which has an historical importance and is a hub of International Organizations of the World. The conference was held from 20th May to 23rd May 2024 at the State-of-the-art Convention centre Palexpo SA, Geneva. The conference commenced with a meeting of the Population Genetics Working Group chaired by Dr Alicia Sanchez-Mazas and Dr Jose Nunes, setting an interactive tone for the event. The evening's opening ceremony featured a welcome address by EFI President Dr Ann-Margaret Little, followed by the presentation of the prestigious HLA Award, Julia Bodmer Award, and the CPELLINI Lecture.



Throughout the conference, several informative plenary sessions captivated attendees. One notable session focused on solid organ transplantation, specifically addressing "How to Transplant Highly Sensitized Patients." Prof. Lori West delivered a thought-provoking talk on "New Approaches to ABO Incompatible Transplantation," highlighting the challenges and potential advancements in this critical area. Prof. West emphasised that while with the current state of technology the ABO assays using agglutination are adequate for transfusion applications but lack specific consideration for transplantation. ABO approach lacks standardisation and clinical decisions about ABO transplants are based on assumptions rather than evolving scientific knowledge. She emphasised on evaluation of the eligibility decision of ABO-A2 incompatible kidney transplant, measure subtype specific anti-A antibody in ABO-O and B candidates deemed eligible versus ineligible by titre and compare subtype specific antibodies to anti-A red cell titre. Following, Dr Mats Bengtsson addressed a very important subject "Is Imlifidase, the new magic bullet for highly sensitised recipients" shedding light on innovative HLA antibody reduction strategies that could revolutionize current

practices. He reiterated that the prevalent practises for treating anti HLA antibodies were not very efficient, they are time consuming, difficult to predict and have scope for improvement. He elaborated the mechanism of action of Imlifidase. Imlifidase is an enzyme cleaving all circulating IgG within hours. It disrupts all IgG in rabbits and human and binds to FC part of the antibody to start cleavage.

The conference also hosted specialized sessions such as the Society of Histocompatibility and Immunogenetics (SFHI) session on tolerance, featuring discussions on 'Mixed chimerism for induction of renal allograft tolerance induction and T cell therapies for transplantation. There was a string of interesting lectures on tolerance including that by Dr Thomas Fehr on "Mixed chimerism for induction of Renal allograft tolerance". Dr Fadi Issa discussed the 'Development and assessment of T cell therapies for transplantation'. Another session which sparked significant interest among the participants was the session on 'HLA and diseases'. The forum discussed the SFHI guidelines for HLA and genetic testing. Dr Frantisek Mrazek discussed the disease association with the HLA system and its relevance in clinical diagnosis. The pharmacogenetic role of HLA was elaborated as well. Dr Deborah Pritchard discussed at length 'HLA genetics and coeliac disease' including the common mistakes that occur during clinical reporting. Overall, this session was very interactive and informative.



Another interesting plenary session was on "HLA immunogenetics and population genetics". This was a combined SIP-EFI session chaired by Dr Neena Mayor and Dr Alicia Sanchez-Mazas. The session included lectures on "Using genomic data to understand the nature and time scale of selection on HLA genes" by Dr Diogo Meyer which was followed by talk on "Archaic introgression enhanced recognition of HLA-A by first nations Oceanian natural killer cells" by Dr Paul Norman. The takeaway key points from Dr Norman's lecture were that KIR3DL1*114 was

introduced by archaic humans and is now frequent across Oceania. The HLA-A*24:02 has expanded under natural selection in Oceania. KIR3DL1*114 enabled the expansion of HLA-A*24:02. The closing lecture was by Dr Sanchez on “Unveiling HLA population diversity: evolutionary changes and clinical implementation”. The highlight of the day was the session “HLA DP models and beyond” chaired by Dr Jill Hollenbach and Dr Pierre-Antoine Gourraud. This session contained three interacting lectures “The importance of immunopeptidomes data to analyse the immune response” by Dr Jullien Racle, followed by a lecture on ‘The Immunopeptidome in HCT sessions learnt from HLA-DP’ by Dr Katharina Fleischhauer. The closing lecture was by Dr Effie Petersdorf on “MHC class II haplotypes”.

The conference concluded with the presentation of the best abstracts and a session on antigen presentation and neoantigens. These included informative talks on anti-tumour immune therapies. The session dealt with anti-tumour responses by T cell in solid cancers, role of lymphatic vessels as immunomodulator and development of personalised cancer immunotherapy. The last, but not the least lecture took us to the exciting journey of universe, which was “the world of exoplanets” by Monica Lendl.

In conclusion, the 37th EFI Conference in Geneva was a dynamic platform that facilitated deep scientific engagement and knowledge exchange among experts in histocompatibility and immunogenetics. It underscored the evolving landscape of transplantation, disease association studies, and the role of HLA in diverse populations. The insights gained from the conference promise to shape future research and clinical practices in the field. This report encapsulates the highlights and significance of the conference, reflecting its role as a premier event in advancing knowledge and collaboration in immunogenetics and histocompatibility. I am grateful to the EFI for the bursary which enabled me to participate at this stimulating scientific event.

Report by Aisling O'Brien

Talk 1: New approach to ABO incompatible transplantation.

Presented by Lori West

Characterisation of clinically relevant ABO antibodies in transplants requires accurate identification of the antigen expressed on the graft and corresponding antibody negativity of the potential recipient. The speaker outlined while current technology in use is sufficient for transfusion but lacks specific consideration for transplantation. Particularly of concern is the general assumption that ABO antibodies are present when antigens are absent; such as A-specific antibodies in the serum of group B. Additionally, organ allocation is impacted as it is highly regulated according to ABO group disparity, not actual antibody/antigen status. While intentional transplantation of ABO-incompatible (ABOi) organs may occur under specified programmes; advancements in blood group subtype

identification methods may identify the non-A1 subtype specifically to any one of the other 5 A subtypes. Each subtype also has subgroups with qualitative & quantitative variability. For example the Subtype – ABO-A2 is safe to cross, is the most common ABOi in the US and could reduce wait times. However there is low uptake due to lack of awareness and information.

ABO antibody measurement using the Landsteiner antibody titre agglutination assay has limitations, lack of standardisation and reproducibility, no titre is predictive of risk for graft damage. The role of IgG subtypes and IgM remains unclear. There are new UNOS guidelines for use of Antibody titre.

Attempts to improve ABO antibody identification include a new research assay developed by Dr. Anne Halpin's team using luminex bead assay. The test reported to provide accurate assessment of ABO antibody to ABO subtypes which are known to be expressed differently in endothelium than on erythrocytes. Thus, have the potential for use for risk assessment of ABOi transplants. A second group, Cathi Murphy investigated ABO-A2 incompatible transplants compared to titre results, with a titre 1:4 or lower then proceed to transplant.

The concluding remarks were that there is a systemic inconsistency in approach to HLA versus ABO in organ transplant; research collaboration is needed to standardise the approach to determine the risk of ABOi transplants.



Talk 2: Is Imlifidase the new magic bullet for highly sensitised recipients? Presented by Mats Bengtsson

The options for immunised patients include: A prolonged wait-time for a suitable donor, entry into shared kidney programme or acceptable mismatch programmes. Alternatively, before going to desensitisation programmes - firstly delist HLA ab, rethink MFI cut-off but if delisting is not an option – desensitisation may proceed. Desensitisation takes considerable time, requires high dose Ivlg, and it is difficult to predict its effectiveness.

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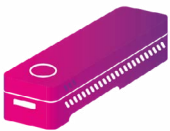
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Imlifidase (Ides) has been approved for use for highly sensitised patients to receive an HLA incompatible deceased donor kidney transplant. The primary mechanism for Ides is the specific cleavage of all IgG subclasses thus also removing donor specific HLA antibodies. Ides can convert a positive crossmatch to a negative crossmatch in a few hours thus provide an opportunity to transplant. Notably, most people will have antibody to Ides due to previous exposure to Streptococcus hence there is a need to neutralise these anti-Ides antibodies. Ides will also cleave the IgG on B cell receptor that also have the Fab fragment, therefore can potentially block maturation of IgG producing B cells.

The first in vitro-tests were performed in 2007; and the first phase clinical trial enrolled 29 healthy individuals; divided in 4 different doses, IgG antibody cleavage was demonstrated by splitting into 2 fragments and IgG re-appears in 14 days. The antibody cleavages shows up as proteinuria. The Phase IIa studies involved patients with kidney disease and on dialysis. Ides removed the Ab without adverse toxicity. Publication in the American Journal of transplant in 2018 reported that Creatinine was stable at 5 to 10 years.

A U.S. study in 2017 which was a 6 month study was the High Des trial – Cross-country, which also included Ivlg & rituximab after transplant, 19 enrolled, 18 transplanted, 17/19 became negative after Ides, 1/19 had an infusion reaction, DSA MFI may remain the same.

The concluding remarks included that there is a need to control ab rebound. If starting with high levels the rebound may be higher. It may also need Ivlg & rituximab during the treatment. Candidate selection criteria are outlined for example in the French guidelines. During treatment Ides will cleave IgG but after treatment there is a need to monitor. Studies that are ongoing include, Confides in US, PAES in Europe, and the DINKY trial – transplant in children.

Talk 3: 10 years of the Scandi transplant acceptable mismatch programme (STAMP). Presented by Pernille Koefoed-Nielsen
The History of Scandi transplant was outlined, a 6 Nordic country conglomerate established in 1969 for transplant organ exchange. Currently there are 10 H&I labs and 11 transplant centres involved in the organisation. Genomic HLA typing is performed at all the local tissue typing laboratories. In 2023 there were 678 deceased donors, with 2422 patients on the waiting list.

STAMP was started in 2009 to improve allocation of kidneys to sensitised patients. Potential candidates for STAMP are identified based on a transplantability score but will be further reviewed for waiting time, HLA sensitisation with a PRA >80%; HLA loci match and blood group compatibility. Originally in 2009 - the match was based on HLA-A, -B and -DR, extended to HLA-DQB in 2010, HLA-C in 2013 and to all

11 loci in 2020.

From 2017 inclusion into STAMP was based on the calculation of a transplantability score. The transplantability score is based on the frequency of ABO identical and HLA antigens in the general donor population, and must be less than 2% for inclusion. Extending the match to all 11 loci has increased the number of patients with a transplantability score <2%, thus the number of STAMP patients on the pool has increased. Once potential candidates for STAMP with a transplantability score <2% are identified, their inclusion is confirmed only following clinical review by a steering committee.

A further significant change in 2018 permitted kidney allocation to ABO compatible instead of ABO identical and consideration at split level antigen acceptable to the patient. Introducing ABO compatibility in 2018 has resulted in significantly more group O donors being allocated to STAMP patients instead of to general pool patients. 61% of group O kidneys allocated to the STAMP were allocated to non-group O recipients.

The programme hasn't recorded any unexpected positive crossmatches since 2019, most likely due to the level of ab screening. Prospective crossmatches are performed. The outcomes of the programme are continually monitored. STAMP outcome has noted that 10 year graft survival which was not significantly different to standard reference group. STAMP group (N= 259) had rejection rate of 13.9% with 7 antibody mediated rejection (AMR) in 1st year post-transplant.

Considerations for inclusion into STAMP at local level should be based on the likelihood of transplant allocation within STAMP compared to allocation if on the general pool. Standardisation of the HLA antibody method for generation of the PRA across the different H&I labs in Scandi transplant is also an area that may need improvement but this has been mitigated by the transplantability score.





Bursary report KIR 2024 Workshop, Estes Park, USA

I had the opportunity to attend the KIR 2024 workshop as an EFI personal bursary recipient. I was grateful to present for the first time in an international meeting, on my PhD work that is focused on the anti-leukemic potential of human Natural Killer (NK) cells in leukemic patients. The KIR 2024 workshop was held from May 6th to 8th 2024 in Estes Park, located in Colorado mountains, 1 hour from Denver airport. The conference brought together approximately 80 researchers from around the world to present their latest findings in their respective fields.

The KIR workshop provided an excellent opportunity to discuss recent advances in HLA and KIR population genetics and dynamics, as well as their impact on cellular therapies such as hematopoietic stem cell transplantations. This international workshop was attended by immunologists, population geneticists, clinicians, bone marrow registry managers, PhD and post-doctoral students. The KIR workshop was divided into 9 sessions covering a wide range of topics related to HLA/KIR polymorphisms and functions, including methods for modelling model genetic diversity and selection forces, as well as optimizing transplant matching.

The KIR 2024 workshop began with a welcome introduction by Dr Paul Norman, one of the two local organizers of this meeting with Prof. Mike Verneris. During the conference, Paul was assisted by members of his research team, wearing suitable green "PING" caps! The following day started with a presentation by Dr Justin Chuyen on the recovery of the black-footed ferret. Despite being declared extinct in 1979, a small population was discovered in 1981, offering the possibility for a new beginning. In order to facilitate



the expansion of the species, a captive-breeding program was launched. In 2021, the first clone of the black-footed ferret was presented, marking to a new era for the species.

After a small break, the inaugural session was on KIR and pregnancy. I was particularly interested in this session, which was outside the scope of my usual research themes. Prof. Ashley Moffett's presentation integrated the current knowledge on the role of NK cells in pregnancy and highlighted the immunological implications of uterine NK cells in a successful reproduction. Dr Eric Long and Dr Sumi Rajagopalan then addressed the question of KIR2DL4-HLA-G interaction.

The next session was on basic immunology. My PhD supervisor, Dr Christelle Retière presented one of our research themes developed in Nantes and recently published in *Frontiers in Immunology* (Ferron et al. 2024). This work provides a better understanding of the parameters impacting the diversity of NK cell populations. Dr Malcolm Sim presented a beautiful study on activating KIR, showing that these receptors are not weak but peptide specific.

The program continued with a session on autoimmunity and infectious diseases. During this session, Prof. Jeffrey Miller presented a new therapy that allows the formation of an immunological synapse between NK cells and HIV-infected cells, enhancing the elimination of infected cells. The final session focused on the evolution, function and structure of KIR, with presentations focusing on KIR3DL1 from Dr Paul Norman's group.

On Wednesday, the session on cancer and transplantation was opened by my presentation on NK cell interactions with acute leukemia. I shared the results of recent data which demonstrate the effect of one specific KIR on the anti-leukemic NK cell response to different targets. This session was chaired by Dr Mathijs Groeneweg and Dr Zakia Djaoud, who is herself a former PhD student in our laboratory of the French Blood Bank in Nantes. During this session, I was particularly captivated by the work presented by the member of Malmberg's group. Prof. Karl-Johan Malmberg presented a study on human induced pluripotent stem-cell derived NK cells (iPSC-NK) and their potential on cancer immunotherapies. Dr Pilar Lanuza presented a novel strategy of immunotherapy based on the blockade of KIR and NKG2A with

monoclonal antibodies. After that, two sessions on method development and a session on population genetics took place.

During this session, a member of our research laboratory in Nantes, Dr Katia Gagne presented the KIR genetic characteristics of the French population. This study was conducted using new computer tools set up in the laboratory in collaboration with a Brazilian and an American team. This

work is one of the research axis of Perla Salameh, a PhD colleague. The workshop ended with a session on KIR nomenclature, chaired by Prof. Steven Marsh. The next KIR Workshop will be organized by Dr Malcolm Sim and will take place in Oxford in 2026.

Altogether, I am grateful for this opportunity, as it was the first time for me to present my PhD work in front of renowned researchers. This KIR workshop provided me with valuable

experience and the opportunity to meet great researchers. I would like to thank all those involved in the LOC of this workshop. Finally, I would like to thank the EFI board for their financial support, which made it possible for me to attend this workshop and to further develop my scientific expertise.

Enora Ferron, Nantes, France

Bursary report TTS 2024, Istanbul, Turkey

Receiving the EFI bursary was a huge honor and an amazing opportunity for my professional development, as it allowed me to attend the TTS 2024 Congress in Istanbul. This meeting not only enabled me to dive deeper into the world of transplantation and immunogenetics, but it also gave me the chance to connect with colleagues from all over the world, opening doors for potential future collaborations. Together with my colleagues, we submitted three abstracts to the congress, and all of them were accepted: two for oral presentations and one for an e-poster. This was a great joy and recognition of our hard work and dedication.

The congress offered many interesting lectures on a variety of topics. I could attend sessions related to my work in HLA histocompatibility, but I also learned about different aspects of kidney transplantation, such as ABO incompatibility, donor characteristics, transplant management, biomarkers, infections, and many other issues that really complemented my knowledge. There were also talks on transplantation of other organs like liver, lung, heart, and intestine, as well as fascinating discussions on xenotransplantation and the use of AI in the field!

Regarding the oral presentations, it was my first time presenting in front of an audience, which was both nerve-wrecking and incredibly rewarding. Despite feeling a bit nervous, I was proud to share our work with such an

expert audience. This experience was definitely a milestone in my career, and it has encouraged me to continue participating in the scientific community. Additionally, it was my first time in Turkey, and I had the chance to truly experience and enjoy the incredible local culture. From exploring the vibrant streets of Istanbul to trying the delicious local food, I felt completely immersed in this fascinating country.

I am deeply grateful to EFI for this bursary, which allowed me to have this unique experience. I am looking forward to continuing to contribute to the scientific community in future meetings.

Manuel Quirno Costa, Buenos Aires, Argentina



REMINDER
2024 membership fee payment

www.efi-web.org/account

Please login to your personal Dashboard and pay your 2024 membership online. For questions and/or assistance please contact the EFI Office.



18th International Summer School on Immunogenetics

The 18th International Summer School (ISS) on Immunogenetics, hosted by the American Society for Histocompatibility and Immunogenetics (ASHI) and supported by the Asia Pacific Histocompatibility and Immunogenetics Association (APHIA), the European Federation for Immunogenetics (EFI), and the Arabic Society for Histocompatibility and Immunogenetics (ARSHI) will take place from April 6 - 9, 2025 in Merida, Mexico.

The International Summer School is designed to promote the field of Immunogenetics with intensive interaction between participating students and tutors. Introductory lectures will be followed by interactive discussions on recent developments,

promoting educational and scientific exchange encompassing the latest developments in the field of immunogenetics, including HLA typing, at both the technological and clinical level. This meeting is geared towards students and young investigators in the field. Furthermore, International Summer School attracts top faculty in the field of immunogenetics. The 18th International Summer School, sponsored by ASHI, EFI, APHIA, and ARSHI, provides a focused course on all aspects of theoretical and applied immunogenetics and histocompatibility. The meeting is limited to a small group of participants and is geared towards graduate students, post-doctoral fellows, laboratory directors in training and experienced technologists in the field of histocom-

patibility and/or immunogenetics with an interest in research or advanced learning opportunities.

The 18th International Summer School on Immunogenetics requires all interested attendees to complete an application for review before being approved to register and attend the 18th International Summer School. This application requests a copy of the participants curriculum vitae, letter of motivation, case study or abstract of own research, letter of support from mentor, supervisor or sponsor and a copy or verification of society membership with either APHIA, ARSHI, ASHI or EFI. Send in your application before 1st December 2024 via the website: <https://www.ashi-hla.org/page/ISS>



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:

J. Vionnet – Lausanne, Switzerland
 C. Sindici – Udine, Italy
 S. Mocci – Cagliari, Italy
 Z. Demir – Ankara, Turkey
 H. Yildizhan – Ankara, Turkey
 L. Porto – Rio de Janeiro, Brasil
 I. Faddeenkov – Nantes, France
 A. Sulejmani – Monza, Italy
 O. Davies – Innsbruck, Austria
 C. Pehlivanoglu – Istanbul, Turkey
 T. Browne – London, UK
 P. Wright – Liverpool, UK
 A. Schimanski – Berlin, Germany
 B. Gerritsen – Grünwald, Germany
 S. Bandstra – Grünwald, Germany
 C. Schmitt – Hannover, Germany
 S. Duman – Waltham Cross, UK
 D. O'Donghaile – Dublin, Ireland
 K. Poonia – Dublin, Ireland

A. Balc – Dublin, Ireland
 A. Reynolds – Dublin, Ireland
 K. Flood – Dublin, Ireland
 E. Colucci – Matera, Italy
 S. Toscano – Calatabiano, Italy
 K. Aitifiss – Salé, Marocco
 F. Valentin – Munster, Germany
 T. Vardiashvili – Tbilisi, Georgia
 E. Sauer – Stuttgart, Germany
 A. Mazanova – Kyiv, Ukraine
 F. Cornelis – Clermont-Ferrand, France
 A. Halpin – Edmonton, Canada
 N. Sengul Simsek – Istanbul, Turkey
 A. Mazzocchi – Milan, Italy
 A. Milano – Monza, Italy
 C.R. Varela-Briceño – Cartago, Costa Rica
 T. Blazi – La Salvetat Saint Gilles, France

S. Decap – Les herbiers, France
 B. Pezeshkpoor – Bonn, Germany
 R. Barbagallo – Cambridge, UK
 C. Teixeira – Lisbon, Portugal
 A. Cortes Hernandez, Soacha, Colombia
 L. Yunis – Bogota, Colombia
 K. Escobar – Guatemala, Guatemala
 N. Arias Morales – Bogota, Colombia
 J. Rodriguez Matiz – Bogota, Colombia
 A. Chamorro Jimenez – Bogota, Colombia
 F. Cox – Dublin, Ireland
 H. Ruhl – Bonn, Germany
 S. Reda – Köln, Germany
 C. Opitz – Dresden, Germany
 D. Costa – Napoli, Italy
 C. Merk – Krumbach, Germany

Office talk

Unfortunately it is already the end of the summer. I hope that everybody enjoyed the summer holidays and made unforgettable memories. To keep our holiday memories alive during these rainy autumn days we have two pictures in our office to look at. This always works to get some sunny vibes in the office.

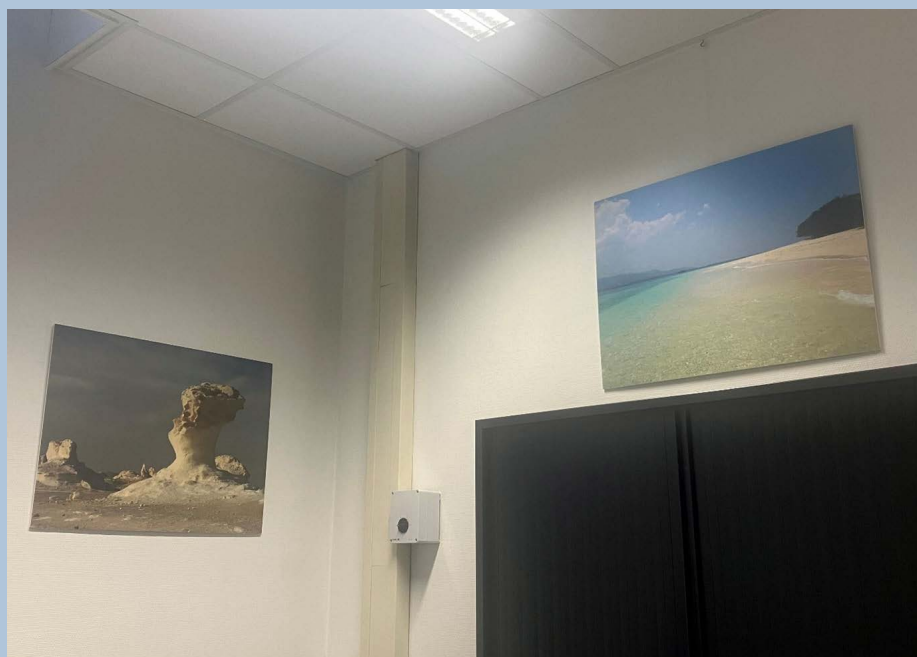
And when you say autumn we immediately think about the autumn meetings. We are very busy with the preparations for the EFI autumn meetings in Leiden for the Executive Board and Committees. It is always a pleasure to welcoming everybody in Leiden.

We also have sunny and pleasant news from the EFI Office. Maybe you already noticed her name in correspondence, on 1st August our new colleague Margriet van Rijn started in the EFI Office.

She succeeded Sandra van Hensbergen as EFI administrator. We are very happy that Margriet joined our EFI team and you will be able to get acquainted with her during

the autumn meetings or during the annual conference in Prague.

Ingrid Abelman



Highlights from the HLA journal

By Luca Vago, section editor HLA journal

Development and characterization of a cell donor registry for virus-specific T cell manufacture in a blood bank

Francesc Rudilla, María Paz Carrasco-Benso, Helena Pasamar, María López-Montañés, María Andrés-Rozas, Maria Tomás-Marín, Desirée Company, Cristina Moya, Luis Larrea, Manuel Guerreiro, Pere Barba, Cristina Arbona, Sergio Querol

HLA. 2024 Mar;103(3):e15419. doi: 10.1111/tan.15419.

Reactivation of latent viruses from the herpes family, and in particular of cytomegalovirus (CMV) and Epstein-Barr virus (EBV), continues to represent a medical concern in patients receiving transplantation and cellular therapies. Although a number of new and effective antiviral drugs have been developed, there are still patients in which they are ineffective. Infusion of virus-specific immune cells derived from healthy third-party individuals is generating interest based on its growing feasibility and promising efficacy. Still, the main limitation of this strategies

remains the unavailability of human leukocyte antigen (HLA)-matched cell therapies.

The authors here present the creation of a cell donor registry of HLA-typed blood donors, named REDOCEL, to facilitate the availability of compatible cells for donation when needed. In the registry, 597 healthy, young donors are already available. All the donors are screened for both cytomegalovirus (CMV) and Epstein-Barr virus (EBV) serology and typed at high-resolution HLA-A, -B, -C, -DRB1 and -DQB1. This registry represents an important innovation that may facilitate the access to third-party virus-specific cellular therapies for patients failing conventional treatments.

Qualitative, rather than quantitative, differences between HLA-DQ alleles affect HLA-DQ immunogenicity in organ transplantation.

Chelsea Maguire, Pietro Crivello, Katharina Fleischhauer, Dylan Isaacson, Aurora Casillas, Cynthia S. M. Kramer, Hannah C. Copley, Sebastiaan Heidt, Vasilis Kosmoliaptsis,



Maria Meneghini, Michael Gmeiner, Jesse Schold, Yoram Louzoun, Anat R. Tambur.
HLA. 2024 Apr;103(4):e15455. doi: 10.1111/tan.15455.

In this interesting study, the authors delve into the relevant question of why some transplant recipients develop de novo HLA-donor-specific antibodies (dnDSA) against HLA-DQ, and which immunogenetic differences are driving that. Through the use of innovative techniques including CRISPR-Cas9-modified cells, they authors found that the immunogenicity of HLA mismatches varies considerably, and challenge the notion that only HLAMatchmaker eplets represent “functional epitopes”. By analysis of cohorts in which the recipient carried two mismatched alleles, they showed that frequently the immunogenicity of the two was far from equal. Finally they explored the links between evolutionary genetics, and in particular HLA evolutionary distance, and immunogenicity, providing some relevant and intriguing observations. Overall, their findings support the growing understanding that factors beyond mere mismatch enumeration, such as the distinct properties of individual HLA alleles and their evolutionary differences, play crucial roles in shaping immune responses and transplant success.

Daratumumab treatment in six highly sensitised solid organ transplant recipients: A case series and literature review

Richard Lemal, Lucie Blandin, Charlotte Uro-Coste, Carole Philipponnet, Etienne Geoffroy, Anne-Elisabeth Heng, Cyril Garrouste, Paul Rouzaire.
HLA. 2024 Apr;103(4):e15458. doi: 10.1111/tan.15458.

This case series and literature review explores the use of daratumumab in organ transplantation, focusing on its efficacy in managing antibody-mediated rejection (ABMR). ABMR, a significant concern in SOT, is significantly linked to the presence or de novo development of donor-specific antibodies (DSAs), and can lead to irreversible endothelial damage. Current treatment strategies prioritize reducing DSA levels but often fall short in addressing ongoing DSA production by B cells and plasma cells. Daratumumab, a monoclonal antibody targeting CD38, offers a novel therapeutic approach by selectively targeting activated plasma cells. This study analyzes the impact of daratumumab on ABMR histological markers and DSA levels. Even if administered as a single dose, daratumumab yielded promising outcomes. These findings highlight the potential of daratumumab in reducing the risk of ABMR in SOT recipients, prompting further investigation into its clinical utility and optimal administration protocols.

The impact of MICB mismatches in unrelated haematopoietic stem cell transplantation.

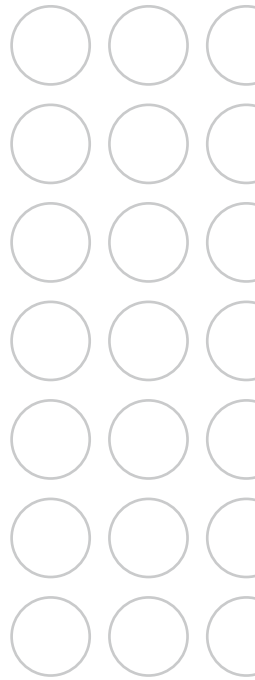
Amann EM, Gowdavally S, Tsamadou C, Platzbecker U, Sala E, Wagner-Drouet E, Valerius T, Kröger N, Wulf G, Einsele H, Thurner L, Schaefer-Eckart K, Freitag S, Casper J, Dürholt M, Kaufmann M, Hertenstein B, Klein S, Ringhoffer M, Frank S, Saal T, Schmid-Möglich A, Neuchel C, Schrezenmeier H, Mytilineos J, Fürst D.
HLA. 2024 Jun;103(6):e15584. doi: 10.1111/tan.15584.

MICA gene variations have been linked by a number of studies to a higher risk of acute graft-versus-host disease (GvHD) and negative outcomes in patients undergoing allogeneic hematopoietic stem cell transplantation (HSCT). This study explores the impact of incompatibility for the related gene MICB in HSCT outcome. For this purpose the authors typed this gene in a large group of patients and their donors (n=3031) and analyzed the how MICB matching affects main transplantation clinical endpoints. Most patients were well-matched for human leukocyte antigens (HLA), with 69.2% being 10/10 matched. Results showed that while MICB mismatches didn't significantly impact outcomes in fully matched patients, those with one HLA mismatch (9/10) who had MICB mismatches experienced worse disease-free survival and higher rates of GvHD. Interestingly, in this study MICA variations did not affect outcomes. The findings suggest that MICB typing could be valuable for selecting donors, particularly when only partial HLA matching is available.

In the issues of March and July of HLA, readers will find the relevant trimestral updates on HLA nomenclature, provided by the journal Editor-in-chief Steven G.E. Marsh.

Moreover, in the issue of March, we suggest to our readers the review “Role of HLA in cardiothoracic transplantation” by Giorgia Grutter and collaborators. This works gives a comprehensive and detailed overview of human leukocyte antibodies in heart and lung transplantation, with a clear characterization of the current state of the art on the role of HLA typing and HLA antibody in these procedures in pediatric and adult patients, describing both current clinical practice and future perspectives.

Finally, we would like to point to the EFI Newsletter readership the obituary in memory of Prof. Alberto Piazza (1941-2024) written by Giuseppe Matullo, Antonio Amoroso and Walter Bodmer and published in the September issue. Alberto was an eminent scientist and a beloved member of our community. He will be sorely missed.

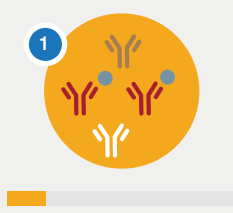


One Lambda MagSort

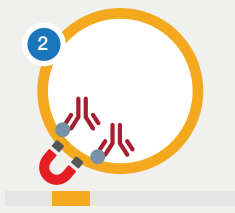
Redefining HLA antibody isolation, bead by bead

One Lambda™ MagSort™ isolates individual HLA antibodies from human serum in a targeted manner using adsorption and elution via antigen-coated magnetic beads.

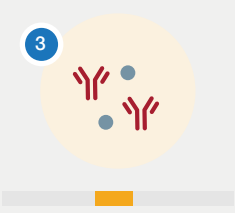
How does it work?



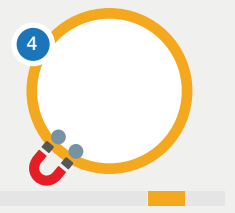
1
Combine 25uL serum with One Lambda MagSort beads
Rotate for 2 hours



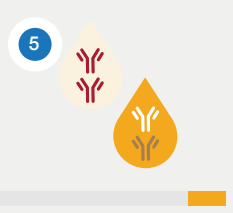
2
Remove adsorbed serum and save



3
Wash with 1x Wash Buffer and add Elution Buffer
Rotate for 1 hour



4
Remove antibody elution, add Neutralization buffer and save



5
25 uL antibody elution
25 uL adsorbed serum

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- Elute antibodies that bind to a specific antigen
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