ESDR: A world of scientific endeavors and friendships

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How and why did you get involved with the ESDR? What was the first meeting you attended?

EH. I first attended the ESDR conference in 1994, when I was a Medical Research Council clinical training fellow undertaking my PhD on skin cancer genetics with Jonathan Rees in Newcastle, UK. I thought that the science which was presented at that ESDR meeting was really exciting, and therefore I was keen to keep attending the ESDR conferences (and have managed to do so for 25 years to date). At that meeting (and at many subsequent ESDR meetings and events), I met with many interesting scientists, including Peter Friedmann whom I later worked with in Southampton, and from whom I learned a lot about skin immunology.

LK. I started my research work at the Department of Dermatology and Allergology, Albert Szent-Györgyi Medical Center, University of Szeged. In my scientific carrier, a significant step was when I was granted the Humboldt fellowship between 1989-1991, providing me the possibility to work in the research laboratory of Thomas Ruzicka at the Department of Dermatology Ludwig-Maximilians University (LMU) of Munich. The Munich dermatology department chaired by Otto Braun-Falco provided an excellent opportunity to join a flourishing scientific network, thus in 1991, I started to attend the ESDR meetings. It was a great honor for me when I was elected as a board member and the President of the Eastern European Committee of the ESDR in 1996-1999. At that time, only very few abstracts were selected for oral presentation from the former Eastern European countries, and it has been very lovely to see how the contributions of the scientists from this region to the ESDR scientific program has now evolved.

SK. My clinical and immunofluorescence research started at the Heim Pál Children Hospital, Budapest, Hungary where where Eva Torok and I treated many kids with autoimmune blistering diseases. I attended my first ESDR meeting in 1990 as a Humboldt fellow from Munich, LMU where my blistering disease studies also included the ultrastructural gold labelling of tissues. Here, I worked together with Thomas Krieg, Wilhelm Stolz, Michael Meurer and Otto Braun-Falco. At that ESDR meeting, I had my first discussions with Hiroshi Shimizu from the research group of Takeji Nishikawa, Keio University, Toyko, Japan. Since that time, my scientific relation to the LMU, Keio and later to the National Institute of Health with Stephen I. Katz, John Stanley and Masayuki Amagai provided me with further collaborations and friendships that also strongly extended to research on inherited and rare diseases. I loved working on the ESDR Board, and receiving an honorary membership of the Society in 2017 was the highest honor for me.

Content, size and format of the 39th Annual Meeting in Hungary

SK. ESDR chair Reinhard Dummer, local organizing committee chair Sarolta Kárpáti and ESDR administrative director Thomas Florestan organized the event in Budapest, Hungary, at the Semmelweis University and in the adjacent Orczy Garden. More than 800 participants from 36 countries attended the meeting. Japan itself was represented by more than 100 dermatologists or scientists. Eugene Healy contributed as chair of the scientific programme committee.

In 2009, Sabine Werner gave the Rene´ Touraine lecture on stromal-epithelial interactions and Lars French gave the Rudi Cormane lecture on the inflammasome and danger sensing in skin diseases. That year, the ESDR guest lecturer was Moshe Oren, who reviewed the complex relationship of p53 and cancer. At the end of the meeting, John McGrath, Martin Rocken, and Thomas Schwarz pinpointed the highlights of the scientific program, one of which was how activated Langerhans cells captured external antigens through the dynamically reorganizing complex tight junction layers; this work by Masayuki Amagai’s group rendered a fundamentally new view of dendritic cell function within the skin barrier.

"Theme" of the decade: The most popular or hot topic. The most popular or advanced methods. Findings, which changed the field or opened new areas of research

EH. Genetics, in particular, finding the genes for many inherited skin disorders was an extremely hot topic and this along with the use of knockout mice and transgenic mice to show the effects of mutations / genetic alterations *in vivo* was the state of the art. For example, the genes identified as the cause of the different types of epidermolysis bullosa identified by many different researchers and/or groups at that time led the way to explaining why and how these skin diseases occurred, and subsequently led to advances in translational medicine over the next two decades to treat these diseases in the clinic using a variety of approaches, including gene therapy.

Closer to home, work by our group (led by Jonathan Rees and Tony Thody, in collaboration with Ian Jackson in Edinburgh, Scotland) at that time, which identified variants in the melanocortin 1 receptor (*MC1R*) gene as the cause of red hair and fair skin in humans changed the field of research on skin pigmentation and skin cancer susceptibility and led to numerous other research groups working on *MC1R* over the next two decades.

LK. In the 1990s, there was a shift from the lipid mediators to the role of cytokines and their receptors in inflammatory skin diseases. The basic research in these years served to the basis for the development of biological therapies starting with infliximab for psoriasis in 1999.

The discovery of receptor proteins in 1996 that can recognize microorganisms and activate innate immunity was awarded by the Nobel Prize in Physiology or Medicine 2011. The discoveries revealed how the innate and adaptive phases of the immune response are activated and thereby provided novel insights into disease mechanisms. Thus, the role of innate immune cells in the skin became a hot topic and had a significant impact in skin research.

SK. In 2009, the high-throughput technologies had already started to revolutionize skin research. Besides big data from integrative genetics, including genomics, epigenomics, and

transcriptomics, we can now gain further layers of information about the skin with proteomics, metabolomics, and microbiomics. Clinical and scientific observations on cutaneous revertant mosaicism opened new possibilities in inherited skin disease therapies. The contribution of the late Marcel Jonkman to this was significant.

Major contribution of the ESDR

EH. Multiple contributions, ranging from the (i) excellent dual combination of enjoyable social programmes and top quality science during the annual meetings which made many junior dermatologists keen to make the ESDR annual meeting one of the must attend meetings each year, to (ii) the desire to encourage the next generation of clinical academic dermatologists and non-clinical scientists which was consolidated by the Futures Leaders Academy set up by Alexander Enk during his time on the ESDR Board.

LK. The ESDR meetings provide an excellent opportunity to establish research cooperations at different levels, such as between research groups for different countries, between basic scientists and clinicians, between researchers and the industry.

SK. Beside fostering basic and clinical science in dermatology and in skin biology, it is important to educate and motivate the young generation to participate in the endeavor of international networking, information exchange and collaborations related to investigative dermatology in Europe and worldwide.

Important decisions made at the ESDR Board during the time as a Board member

EH. The ESDR, Japanese Society for Investigative Dermatology (JSID) and Society for Investigative Dermatology (SID) have worked collegially for many years, and there were many benefits of the Tricontinental and/or International Investigative Dermatology (IID) conferences that involved the three societies, including dissemination of cutting-edge research on a global stage. However, it was recognised that we could improve on this collaborative endeavour, and it was during my time as President of ESDR, while attending the SID in Atlanta, Georgia, that one of the main discussion points at a working dinner involving the leaders of the SID, JSID and ESDR focused on the future formation of a truly global investigative dermatology society. This subsequently led to the representatives of the ESDR, SID and JSID signing “a memorandum of understanding to form a new organization, the International Societies for Investigative Dermatology (ISID)” in Edinburgh Castle, Edinburgh, Scotland during the IID meeting in 2013, and the later birth of the ISID.

In a similar way, the ESDR and European Academy for Dermatology and Venereology (EADV) were keen to work more closely together so that trainees (clinical dermatologist and non-clinical scientists) could gain a better appreciation of the “bench to bedside” translational aspects of dermatology, thus encouraging more engagement by trainees in translational dermatology research. With involvement from Erwin Tschachler (EADV), Nick Reynolds (ESDR), Thomas Florestan (ESDR) and myself (ESDR), this resulted in the setting up of the ESDR/EADV Summer Research Workshops, the first of which was run in Vienna by Erwin and Nick in 2010.

LK. There were significant discussions on how to involve and integrate the researchers from the former Eastern European countries into the structure of the ESDR and how to show their presence at the ESDR meetings. We also discussed the possibility of organizing a separate conference only for researchers from Eastern European countries but it was considered preferable to improve the integration of these researchers into the ESDR meetings.

Free memories and anecdotes

EH. Fond memories of the late Marcel Jonkman at ESDR Board meetings, where he would listen intently to the discussions, and after much discussion by others he would then (in his characteristic soft-spoken voice) highlight some key additional points and/or ways of moving the relevant issue forward.

LK. I will never forget that after returning from the Humboldt fellowship to Hungary, Prof. Dr. Johannes Ring paid my ESDR membership fees for many years, enabling me to get the journal and to participate at the ESDR meetings.

After my first oral presentation at the ESDR meeting in 1992 in Amsterdam, I was very proud, supposing that I gave a brilliant lecture. My supervisor Thomas Ruzicka said to me right after my talk, while walking in a beautiful garden,”Dr. Kemény, this was an excellent lecture. However, the content, the presentation style, and the language were awful”. Therefore, I learned that you could learn only from the negative critiques.

SK. I will never forget the commitment of the late Stephen Katz when he presented recommendations for strengthening research in Eastern Europe at the 2009 ESDR meeting.

For that meeting, the old piano of Stephen Rothman in the Dermatology Clinic in Budapest, Hungary was restored, tuned, then transported to the main hall of the University and tuned again. Now sounds of dermatological solo and four hand improvisations of different quality fulfilled the coffee breaks. At the opening ceremony, Jozsef Balog presented to us the II. Hungarian Rhapsody by Franz Liszt. The international Liszt competition winner piano player needed a special piano with two-times controlled tuning. Thus, at the meeting we were busy transporting and tuning pianos.

Legends of Figures

Figure 1.A. R. Dummer, the running president at the Orczy Garden with S. Kárpáti. Opening Ceremony by residents prepared glasses. B. Hungarian dance education at the Bárka Theatre of the Garden. Old Tram 12 delivered friends to dinner organized in the Remise Restaurant.