

40th Annual Meeting of the European Society for Dermatological Research (ESDR) in Helsinki, 8–10 September 2010

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The European Society for Dermatological Research (ESDR) returned to northern Europe 9 years after their Stockholm Meeting. The congress attracted more participants than any of the previous annual ESDR meetings: approximately 900 registered participants gathered in the Marina Congress Center in the heart of Helsinki, Finland. Over the years the meeting has expanded from a European affair to a truly international one, with more than 100 participants from Japan and around 30 other visitors from overseas. The city of Helsinki showed its best weather for the season and the convenient location of the congress venue and hotels contributed to a successful meeting.

The meeting programme began on Wednesday 8 September 2010 with satellite symposia, of which there were eight in total. The inaugural session, “Drug development in dermatology – principles and practice” aimed to encourage interaction between academia and the pharmaceutical industry.

On Thursday morning the *Acta Dermato-Venereologica* symposium gathered participants and speakers from the Nordic countries (see a separate report from this event on page 110–111).

The postgraduate course at noon was dedicated to the memory of *Professor Ulpu Saarialho-Kere* who was an ESDR board member and a member of the organizing of committee of this meeting until her untimely death a year ago. In this session the following people who had collaborated with her during the course of her career gave lectures: *Jonathan Barker* from London, UK, gave a talk entitled: “Clinical implications of gene discovery in common complex disease: example of psoriasis”; *Irma Thesleff* from Helsinki, Finland, gave a lecture on: “The pathogenesis of ectodermal dysplasia syndromes”; *William C. Parks* from Seattle, USA spoke on: “Metalloproteinases in repair and immunity”, and, finally, *Juha Kere* from Stockholm, Sweden, talked about “From genes to skin biology”.

This year's Rudi Cormane Lecture was given by *Thomas Schwarz* from Kiel, Germany, on the topic: “Understanding the Sun's language”; the René Touraine Lecture was presented by *Alain Hovnanian* from Toulouse, France, on the subject of: “Epidermal serine proteases and their inhibitors in skin barrier and diseases”. The topic of the ESDR Guest Lecture was Angiogenesis, and this was presented by *Kari Alitalo* from Helsinki, Finland, who gave a talk with the title: “Lymphangiogenesis in development and disease”.

The ESDR also organized a “Clinical Saturday” as part of the regular programme to encourage an increase in exchange of information between basic scientists and clinicians.

Daniel Hohl, Lausanne, Switzerland, gave an interesting lecture about genetic tumour syndromes. Angiomyolipomas in patients with the tuberous sclerosis are associated with mutations in tuberous sclerosis genes (*TSC1*, *TSC2*) resulting in constitutive activation of the mammalian target of rapamycin (mTOR). The drug sirolimus suppresses mTOR signalling. Suppression of mTOR signalling may constitute a promising treatment in patients with the tuberous sclerosis complex or sporadic lymphangioleiomyomatosis.



Fig. 1. The European Society of Dermatological Research (ESDR) held its 40th annual meeting in Helsinki in September 2010. The President of the ESDR, Eugene Healy (right), with the Chairman of the local organizing committee, Veli-Matti Kähari, (right), with the birthday cake.



Fig. 2. Participants gathered for the gala evening at the Wanha Satama (Old Harbour). This unique historical setting, with brick walls combined with modern construction, provided a lovely venue in which to enjoy an evening with colleagues.

Michael Hertl, Marburg, Germany focused on targeted therapies in inflammatory skin disorders. Pemphigus vulgaris is associated with immunoglobulin G (IgG) autoantibodies, which target desmoglein(dsg)-1 and dsg3, two transmembranous adhesion glycoproteins of desmosomes. He showed that the response to rituximab in pemphigus vulgaris involves two mechanisms: the depletion of autoreactive B cells and the specific downregulation of dsg3-specific CD4⁺ Th cells. Belimumab is a fully human monoclonal antibody targeting B-lymphocyte stimulator, a cytokine that is critical for B cell survival and development after exit from the bone marrow. B cells are believed to be important in the pathogenesis of systemic lupus erythematosus through a variety of mechanisms, including the production of autoantibodies, presentation of antigen, and secretion of cytokines. Belimumab could be the first biological agent approved in the treatment of systemic lupus erythematosus. IgE class autoantibodies have been identified in a growing number of autoimmune diseases; however, their pathogenic relevance remains unknown. One such disease is bullous pemphigoid. Omalizumab, which inhibits IgE binding to its high-affinity receptor (FcεRI), may provide a therapeutic option for pemphigoid patients when broader immunosuppressive therapy is contraindicated.

Leena Bruckner-Tuderman, Freiburg, Germany, gave an excellent lecture on the topic of skin fragility. Causal therapies for

genetic diseases are being intensely explored. Skin disorders are a prime focus of such developments, as the target organ is easily accessible. Leena Bruckner-Tuderman discussed gene therapy and therapeutic siRNAs. She also reviewed studies of the mechanisms of fibroblast cell therapy and bone marrow transplantation for dystrophic epidermolysis bullosa. Protein therapy may also be feasible for the treatment of human patients with dystrophic epidermolysis bullosa.

The youngest participants in the meeting were 50 high-school students from Helsinki, Tampere and Turku, who were invited to visit the congress on Friday. They were first given an introduction to dermatological research and then took part in guided tour of the posters.

Although the Marina – Congress Centre is a most convenient meeting venue, it was not large enough to display all 600 posters simultaneously. Half of the posters were set up on Thursday and the other half on Friday afternoon. In order to provide access to all posters throughout the whole meeting, an electronic poster viewing was organized on 20 computers. Poster presenters were asked to e-mail a pdf file of their posters, which were then made available throughout the meeting. The electronic poster technology enabled rapid browsing/search and provided a facility to contact the author. This service will also be made available at future ESDR meetings.