

Travel report  
The 11<sup>th</sup> ESNI course  
Glasgow, UK – July 4-7, 2011

The aim of the European School of NeuroImmunology is to give a broad overview in the field and it is an excellent opportunity for PhD-students to talk to experts about their own work and at the same time meeting other people working on similar topics.

This year the organizing committee focused on student participation. On day 1 there was a debate about whether or not funding of research of rare diseases in neuroimmunology is a luxury we can no longer afford. The majority agreed that this kind of research should be funded although some people changed their minds during the debate. For the first time during an ESNI course, 12 students got the opportunity to present their work in short presentations while other students were chairing the discussions.

The main part of the course consisted of presentations by experts in the field of neuroimmunology, like Hans Lassmann, Tomas Olsson, Hugh Perry, Chris Linington, Angela Vincent and Hugh Willison. Topics discussed were diverse, from basic genetics to stem cell transplantation and the role of T-cells, B-cells and innate immunity in disease mechanisms and treatment strategies. Several speakers treated us with beautiful images of fluorescent nerves and/or cells from the immune system.

A big part of the course focused on diseases of the central nervous system, mainly multiple sclerosis, but also Alzheimer disease, neuromyelitis optica and some very rare disorders. The peripheral nervous system was discussed in presentations about the Guillain-Barré Syndrome (GBS) and Myasthenia Gravis.

Since my work focuses on cellular mechanisms leading to the production of pathogenic anti-ganglioside antibodies in GBS, I especially enjoyed the presentations about pathogenic antibodies in MS (anti-MOG), Myasthenia Gravis (anti-acetylcholine receptor (AChR)) and Neuromyelitis optica (anti-aquaporin-4).

During her talk, Angela Vincent discussed several of these pathogenic antibodies, anti-AchR, anti-MuSK (Muscle Specific Kinase), anti-voltage gated potassium channels and anti-NMDA Receptor.

Video fragments of patients before and after treatment with plasma exchange indicated the huge impact these antibodies have. Because of the antibodies patients totally lose control over their muscles, but after plasma exchange all functions were restored.

Hugh Willisons talk was about complex antibodies, stressing the importance of the natural environment of an antigen. Some antibodies recognize their antigen when it is purified, but fail to bind when it is in a complex. Other antibodies only bind complexes, not the individual antigens.

On the 3<sup>rd</sup> day of the course there was a social dinner, during which prizes were awarded for students who participated in the debate or the presentation session. I got the prize for the best presentation for my talk about the possible role of Interferon-beta in GBS. After dinner we got the opportunity to taste some Scottish folklore: céilidh dancing. The evening was a great success.

Altogether ESNI 2011 was a great experience and I want to thank NVVI for their support.

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