

# 14th World Immune Regulation Meeting - Q&A with the EJI-EFIS Travel grant winners



Caitlin McManus (University of Glasgow, UK)

#### What does this prize mean to you?

I'd like to thank the EFIS for awarding me this prize which has given me the opportunity to go to WIRM, my first major immunology conference. Regulation and the balance between clearance of a pathogen and immunopathology is the focus of my research and being able to discuss the plans I have to complete my PhD with other researchers in the field is really useful and exciting.

#### What is the current focus of your work?

My research focuses on the role of Tregs in the outcome of helminth infection. By using *Heligmosomoides polygyrus* as a gastrointestinal nematode model to investigate Treg subpopulations that are important in the clearance of the worm, I hope that this research can be translated to human infection and the treatment of helminth infection. Currently, therapeutic strategies for helminth infection are only a short-term solution and those with a high worm burden will return to having a high worm burden shortly after being treated with antihelmintics. My aim is to find a component of the immune system to target therapeutically which allows long lasting resistance to helminth infection and associated morbidities.

#### What do you think about the European Journal of Immunology?

The European Journal of Immunology is a fantastic journal with great support programs for early career researchers and minorities in science. It also allows articles to be open source which is important in a scientific climate where communication with the public is important to building trust between the scientific community and the general public.



James Davies (University of Southampton, UK)

#### What does this prize mean to you?

I am very grateful to have received an EJI-EFIS travel grant to attend the 14th World Immune Regulation Meeting (WIRM) in Davos, Switzerland. At WIRM I will have the opportunity to listen to talks from leading researchers in the immune regulation field from around the world and also present my own research findings. Thank you to EJI-EFIS for contributing to this experience.

#### What is the current focus of your work?

I am a final year PhD student at the University of Southampton, UK working in skin immunology. My project focusses on Langerhans cells, immune sentinels found in the epidermis, which contribute to immune activation and homeostasis. I am specifically interested in how Langerhans cells promote tolerance and the gene regulatory networks which underlie these responses.

### What do you think about the European Journal of Immunology?

The European Journal of Immunology is a fantastic journal which includes a diverse range of immunological themes. Many of the articles in EJI have been incredibly informative during my PhD studies and I will continue to keep myself updated with the journal's latest issues.



Jaxaira Maggi (University of Chile, Chile)

#### What does this prize mean to you

I am very grateful and honored to have been considered for this prize, because it represents a positive reception and recognition of my work, and gives me the great opportunity to share it with international scientific community and to be able to receive enriching feedback for the continuation of my research.

#### What is the current focus of your work?

My work is focused on the identification of autoantigenic peptides recognized by effector auto-reactive CD4<sup>+</sup> T cells, responsible for the deployment of pro-inflammatory responses in rheumatoid arthritis (RA). This knowledge will allow us to design antigen-specific therapies for the restoration of self-tolerance in RA patients, such as those based on the use of tolerogenic dendritic cells.

#### What do you think about the European Journal of Immunology?

I think that the *European Journal of Immunology* provides insights into top quality research in basic and clinical Immunology, which makes it one of the most important and prestigious journals in the field, as well as greatly influential within the academic community.



Jens Richter (Lund University, Sweden)

### What does this prize mean to you

It really helps with the opportunity to undertake the long train journey from Sweden to the Swiss Alps!

#### What is the current focus of your work?

In addition to my clinical work in the allergology department, I am currently in the process of planning a PhD project with the aim of untangling some of the environmental and social determinants of health in asthma and allergy in the urban context in Sweden.

# What do you think about the European Journal of Immunology?

A valuable resource both for the lab and the clinic.



Alexandra Goretzki (Paul-Ehrlich-Institut, Germany)

#### What does this prize mean to you

The prize is an appreciated valuation of my work. On the one hand, it shows that I am on the right way to become a good scientist, and, on the other hand, that creating this kind of new knowledge will bring us to a better understanding of immunology. It is an honor for me to be a part of this really important field of research.

#### What is the current focus of your work?

The focus of my PhD thesis is to characterize the fusion protein rFlaA:Betv1, consisting of the TLR5-ligand flagellin A and the major birch pollen allergen Betv1 for possible intervention of birch pollen allergies. I could show that in vitro treatment of naïve B cells with the fusion protein induced a thymus-independent but mTOR- and MyD88-dependent B cell activation, resulting in both IL-10 and IgG-antibody secretion and a regulatory phenotype.

# What do you think about the European Journal of Immunology?

For me the *European Journal of Immunology* is a highly respected journal in the field of immunology. It is a great resource for finding both the newest research results as well as well-structured and –visualized review articles covering all fields of immunology. I would be happy to get my future work published in EJI.



Anders K. Aarebrot (University of Bergen, Norway)

## What does this prize mean to you?

It's an honour to receive this travel grant. It makes my travel to WIRM financially viable, and gives me the opportunity to meet other researchers of my field across nation borders.

#### What is the current focus of your work?

Right now, I am still analyzing the mass cytometry data described in the abstract. I will, however, soon move on to study immune cell activity in psoriasis patients who respond or do not respond to treatment with anti-TNF, anti-IL12/23 and/or anti-IL17. I am a PhD candidate for another two years, which I will spend pursuing this research.

### What do you think about the European Journal of Immunology?

It is a highly respected immunology journal, where I would consider it an honour to have my research published.



Andreia Monteiro (Centro de Investigação em Ciências da Saúde, Portugal)

#### What does this prize mean to you?

I feel deeply honored to be one of the EJI-EFIS travel grants winners. This prize represents the recognition of my work in such a demanding field. In addition to economic aid for my travel to the WIRM, this prize is an incentive to continue to seek answers always integrated into the scientific community.

## What is the current focus of your work?

Around 2.5 million people worldwide live with multiple sclerosis (MS), a chronic inflammatory disease of the central nervous (CNS) system. Most MS research has focused on the role of CD4<sup>+</sup> T cells in disease pathogenesis. MS is mediated by effector T cells trafficking from the periphery into the CNS to trigger local inflammation, demyelination and neurodegeneration. However, the involvement of the humoral immunity has always been present by the intrathecal synthesis of oligoclonal bands (OCB) in the cerebrospinal fluid, but not in serum, of about 90% of relapsing-remitting (RR)MS patients. To date, there are no curative treatments for MS. Interferon beta (IFN-β) was the first immunomodulatory therapy approved by the United States Food and Drug Administration for MS treatment and is one of the most widely prescribed. The main aim of this project is to characterize the T and B cell subsets of RRMS patients submitted to IFN-β treatment, in different phases of the disease. Our work revealed that the circulating immune cells allow a better following and management of IFN-β-treated RRMS patients. We found a decreased ratio of plasmablast/immature B cells in relapse and an increase of IL-17 and Th/c17 cells in remission. This disequilibrium may contribute to perpetuate the chronic inflammation characteristic of this disease.

### What do you think about the European Journal of Immunology?

The European Journal of Immunology is a reference journal and has always been part of my scientific training. It greatly contributes to the development of my curiosity about immunology by presenting answers to my doubts. Actually, EJI is one of my main references where I find support for my work, and it is an essential journal for serious and current research.



Tim Delemarre (Ghent University, Belgium)

### What does this prize mean to you?

I am very grateful to receive the travel grant from the European Journal of Immunology to attend the 14th World Immune Regulation Meeting in Davos. This award allows me to present and discuss the current results of my PhD study, and gives me the opportunity to gain valuable feedback from experts in the field and to connect with possible collaborators. I feel very proud that our hard work on this project has been recognized with this prize.

#### What is the current focus of your work?

The general goal of my PhD project is to gain a better insight in the ambiguous behavior of neutrophils and eosinophils in chronic airway inflammation. We currently focus on unraveling the reciprocal effects of neutrophils in eosinophilic type 2 inflammation and the contribution of neutrophils in the maintenance of the chronic state of type 2 inflammation.

#### What do you think about the European Journal of Immunology?

EJI is a valuable source for up to date articles on basic immunology and clinical studies. Our special interest goes out to clinical studies concerning allergy and inflammation.





Radka Císařová (Charles University, Czech Republic)

#### What does this prize mean to you?

WIRM is going to be my first scientific conference and this is a great opportunity to present my results.

#### What is the current focus of your work?

My work is focused on environmental factors in pathogenesis and prevention of type 1 diabetes. In particular, a gluten-free diet and gut microbiota.

#### What do you think about the European Journal of Immunology?

The European Journal of Immunology is a great immunological journal with a broad scope, but I personally mostly enjoy its articles about the mechanistic workings of the immune system.

### Muamera Sarajlic (University of Salzburg, Austria)

### What does this prize mean to you?

I was one of the fortunate people to receive the EJI-EFIS travel grant. In my opinion, this is a valuable support for early careers for students like me. International conferences have the goal of providing a base for international collaborations, which are indispensable for scientific progress.

#### What is the current focus of your work?

My PhD project deals with the innate immune response elicited towards the gastric pathogen Helicobacter pylori. This pathogen accounts for different gastric pathologies, including gastritis but also gastric cancer. In particular, we are interested in the influence of H. pylori on dendritic cells and its potential to drive the DC towards a regulatory phenotype. This could represent another mechanism to manipulate the host immune system in order to promote bacterial survival and chronic infection.

# What do you think about the European Journal of Immunology?

I enjoy reading scientific work published in EJI due to the fact that the spectrum of this journal offers a rich resource in basic immunology. However, especially for my project, it is important to combine basic immunology, like signaling networks in dendritic cells, with other disciplines, such as infection biology. In my opinion, this journal provides a well-established platform for these challenges.