## Anca Flavia Savulescu



This month we highlight, Anca Flavia Savulescu PhD, Research Scientist based at the Institute of Infectious Diseases and Molecular Medicine, University of Cape Town. Anca Flavia Savulescu's research interests are mainly in understanding the subcellular spatial location of biomolecules (RNA and proteins) and how this plays roles in



various branches of biological studies, including immunology and immune diseases.

How do you use your skillset to contribute to advances in immunology? My post-graduate studies and post-doctoral research background is mainly in cell biology and biochemistry. I love applying the skills that I have accumulated over the years in various contexts in basic biology, but also in disease contexts. For example, I am extremely interested in understanding how alterations subcellular localisation of biomolecules, such as RNA and protein can cause or contribute to disease, including immune responses and conditions such as allergy and asthma. Typically, researchers study differences in gene expression levels in healthy versus diseased cells. However, the subcellular localisation of specific mRNAs or proteins, which is often overlooked, may also contribute to the diseased phenotype, by altering the translation levels of key proteins, their interactions with biomolecules, or their area of

function in the cell.

What trans-disciplinary collaborative research projects have you been involved in? My research, especially in the last few years, has focused on establishing experimental and analytical tools that can be applied in various fields in biology. This has contributed to my involvement in a large number of trans-disciplinary collaborative research projects over the years. These include a collaboration with a virology group in Hannover, Germany that studies HSV1 biology, an ongoing collaboration with a bioinformatical group in Bordeaux, France that does wonders to extract important biological information from microscopy images, a wonderful collaboration with the group of Dr Anna Coussens and her former post-doc Dr Nash Peton at UCT, who study Mtb biology, an ongoing collaboration with Dr Sabelo Hadebe at UCT on IgM deficiency in asthma, as well as other fruitful and interesting collaborations.

Do you have any advice for early-career researchers? Any additional advice for immunologists who identify as women? My advice for early career researches is to remember that you are here to learn, there is no such thing as a "stupid" question, you don't need to know everything, you just need to have the curiosity to continuously learn and develop. Also, please keep in mind that there are many more unsuccessful experiments than successful ones, but this does not mean that your project is going nowhere, on the contrary, you learn from every unsuccessful experiment and failure! Specifically for women, although we are currently in a much better position than we were 20 years ago in terms of gender equality, unfortunately, it is still not quite perfect and it is up to you to make sure that things change and improve.

How has your research (work/life balance) been affected by the COVID-19 pandemic? My research has been affected by the COVID-19 pandemic, in a few areas: 1) I am a parent, and as schooling has been partially conducted online, the school-work-home routine has been partially disrupted; 2)

administration around contract renewal has been slower than in standard times; 3) during the first period of the pandemic it was not possible to conduct experiments, which on one hand caused delays in a few projects, but on the other hand, allowed me to focus on writing Review and Perspective type articles.

Any advice for non-immunologist who would like to contribute to the core in immunology research? I would consider myself a non-immunologist who would like to contribute to the core of immunology research! 

My advice is to, first of all, attend as many seminars, lab meetings, online lectures in immunology as you can, as well as chat to immunologists and ask the most basic questions. Although some of these lectures and concepts would sound very foreign to you, slowly by slowly the information will integrate and make more and more sense. Additionally, remember that as a non-immunologist, you may bring a completely novel and fresh approach to solve immunological research questions, so do share and explain your ideas and approaches clearly.

Interview by Dana Savulescu