Western Faculty Profile: Dr. Jimmy Dikeakos

**Background**

Dr. Jimmy Dikeakos is currently an Assistant Professor of Microbiology and Immunology at the Schulich School of Medicine and Dentistry at the University of Western Ontario in London, Ontario. He is a researcher at the Siebens Drake Medical Institute where he is working on the HIV protein NEF. He has been trained in various fields of biology which include biochemistry, structural biology and virology.

Dr. Dikeakos is a Montreal native who graduated with a Bachelor’s of Science degree from McGill University with a specialization in biochemistry. He then went on to obtain a PhD in biochemistry from the Université de Montréal, and completed a post postdoctoral fellowship at the Vollum Institute in Portland, Oregan specializing in HIV pathogenesis. WURJ coordinator, Tarandeep Sidiura, currently works with Dr. Dikeakos and had the chance to interview him.

**Questions for Dr. Dikeakos**

**What are you specifically looking at in virology? And why did you choose the field of virology for your research?**

We specifically study the interactions between viral proteins and host cellular proteins. These interactions mediate cellular pathways that result in disease. We are currently interested in a devastating virus, HIV-1 that has resulted in over 30 million deaths.

Virology is fascinating because viruses cannot do much on their own. They require the host to replicate and grow. Thus, by studying virus-host interactions we aim to understand how the virus utilizes the host to replicate and cause disease.

**What do you believe are the benefits of studying the HIV accessory protein Nef?**

HIV-1 has resulted in over 30 million deaths worldwide and the virus currently infects another 30 million people. We believe that Nef is a direct mediator of HIV-1 disease leading to full-blown AIDS.
What made you choose Western University as opposed to other academic institutions?

I chose Western because of its research intensive philosophy within a thriving undergraduate and graduate population. This gives me a unique opportunity to recruit graduate students from a highly talented a well-trained group of undergraduates.

In your opinion, what qualities would make one an excellent researcher/lecturer?

A great researcher is one who can admit to mistakes and is constantly innovating by integrating all aspects of science. In our lab, we strive to combine biochemistry, cell biology, biology, and immunology in order to study viruses.

A great lecturer is someone who is available to his/her students and who must understand that proper preparation of lectures will result in students comprehending the material better. I also believe that a great lecturer can synthesize concepts from different classes and illustrate how key concepts can be applied to concrete examples.

What advice would you give to an undergraduate student interested in getting involved in research?

I would advise students to contact investigators and seek volunteer or shadowing positions. This will give you a first-hand look at how science works. Also, students should make an effort to ask professors their key burning questions and not be afraid to propose ideas.

What qualities do you look for in a potential research assistant?

The qualities that I look for in a potential research assistant are dependence, work-ethic, honesty, and the potential ideas and innovations they bring to the environment.

What undergraduate courses do you believe will prepare students for further studies and possibly a career in microbiology and immunology?

In order to get a good grasp on concepts and ideas presented in upper year courses in the Department of Microbiology and Immunology, I recommend taking Microbiology and Immunology 2500 A/B (MNI 2500).

What do you believe will be the future of HIV research?

One of the greatest challenges facing modern medicine today is fighting against and preventing the onset as well as the progression of HIV. The future of HIV research will involve “the development of an effective HIV vaccine with the advent of novel HIV inhibitors. Also, the reactivation of latent HIV is a major challenge in our field that will allow for latently infected cells to become targets of drugs.”

To read more on Dr. Dikeakos' lab and research, please visit his website at http://www.uwo.ca/mni/research/web_pages/dikeakos.html