Ariel University at the Forefront of Innovation with Establishment of World's First Academic Center for Drug Repurposing

As part of its program to establish a new medical school and its recently opened Institute for Personalized Medicine, Ariel University has now launched a dedicated center for drug repurposing. Drug repurposing is the process of formalizing a new use for an existing drug, typically one that is already generic (i.e. without patent protection). It is the fastest growing segment in drug development, shortening the drug approval process by up to 15 years and additionally reducing costs by as much as 95%.

The new center is headed by Moshe Rogosnitzky, a 15 year veteran of personalized medicine and a prolific innovator of new uses for old drugs. His discoveries have already benefits hundreds of thousands of patients worldwide.

The new center will incorporate a "Knowledge Center", employing medical data-mining experts to populate a database known as Cureiosity® that can quickly identify new opportunities for drug rediscovery. The Cureiosity® database builds connections between drugs, diseases and therapeutic targets in dimensions never employed before.

In addition, the center will manage pre-clinical work at Ariel University that supports the drug repurposing process. Uniquely, most of the candidates to be studied will all have already been tried in humans on a small scale, thus hugely increasing the chances for successful repurposing by reducing the risk of failure.

"The benefit of our model is the practical application it makes available for patients. Typically it takes 5 – 20 years to translate academic research into benefits for patients. By focusing our research on therapies that already come with real-patient "proof of concept", we can save years of development time in these ideas to the marketplace. Our close collaboration with clinicians and with the Institute for Personalized Medicine headed by Dr. Igor Koman, means immediate realization of benefit for patients suffering from intractable diseases or deadly cancers" states Moshe Rogosnitzky.

One of the important areas the center will focus on is childhood cancers, a much neglected area of drug development. "Since this market is small and not sufficiently profitable, the pharmaceutical industry rarely invests in testing new drugs for pediatric cancers. Our model will incentivize industry to bring repurposed drugs to the pediatric cancer marketplace through lowering risks and costs sufficiently to make it commercially rewarding"

Another area of focus is eye disorders. The center is raising funds to conduct research on a novel treatment for vexing eye conditions known as pterygium and pinguecula. Pterygium, a disfiguring benign growth on the eye, affects up to 25% of the population in countries close to the equator. “Ours is the first non-surgical treatment for this condition. In addition, we are developing the same repurposed drug to treat dry eye, an endemic problem worldwide for which only one approved drug exists with only a 15% benefit rate. We plan a rapid development plan that can see these products available globally within 3 years” concludes Moshe Rogosnitzky.

For further information contact cdr@ariel.ac.il

March 30, 2015