



# RESEARCH2REALITY

Shining a light on research & innovation.

## An Ounce of Information Is Worth a Pound of Cure

An interview with **Kamran Khan**, Infectious Disease Physician, Researcher  
University of Toronto

We tend to discount the significance of prevention. We tend to reactive creatures by nature. If we do look at the last 20 years, however, we have had more major infectious disease events than in any other time in human history. In 1999, West Nile Virus makes a leap over into North America. Four years later, we have SARS in dozens of countries. We have a massive outbreak of Ebola in 2014. Zika in 2016. These are not localized outbreaks. These are things that have planetary or international consequences.

### What are your research questions and tools?

What do we know about how people move? How do we better understand the needs of people who are moving across the planet? How do we leverage data, advanced analytics, and artificial intelligence? How do we leverage digital technologies to literally spread knowledge around the world faster than the diseases themselves?

One of the most important principles of how we work is diversity. The fact is that we are dealing with a very complicated problem. Now, infectious diseases, some of them are spread by mosquitoes, some of them are spread from animals, some from person to person, others from the environment. And so you really need a very diverse set of skills. You need to have ecologists, and you need to have veterinarians, and data scientists, and designers and software developers, and engineers. All those different perspectives allow us to really tackle a problem that's very complex.

TODAY'S RESEARCH. TOMORROW'S REALITY.

