



Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/focus-on-global-medicine/improving-innovation-in-us-healthcare/3550/

ReachMD

www.reachmd.com info@reachmd.com (866) 423-7849

Improving Innovation in US Healthcare

BECOME AN INNOVATOR MAKE CHANGE IN HEALTHCARE

Our guest today says that the United States spends more on astrology than astronomy that we suffer from anosognosia. Welcome to the Clinician's Roundtable, I am Dr. Leslie Lundt, your host, and with me today is Dr. John Kao, originally trained as a psychiatrist John has gone on to get an MBA, teacher at Harvard Business School Yale and MIT just to name a few. He is now successful entrepreneur and the author of Innovation Nation.

DR. LESLIE LUNDT:

Welcome to ReachMD John.

DR. JOHN KAO:

Thanks

DR. LESLIE LUNDT:

Now John in your book you talked about how Psychiatry is useful in the study of Military Affairs. How so?

DR. JOHN KAO:

Well, I think first of all warfare is a very human activity and there is a lot of Psychology in whether people are seeing the same picture of things or not, which is often a precursor to war because people know and they misunderstand each other. There is also this famous Fog of War that should have stopped about where 2 people can see the same thing and see it completely differently. So I think having an understanding of human nature and how people think and how they perceive things, is pretty fundamental to understanding why things go right or wrong in a military context, but also you know in terms of designing the kind of systems that exist today, you know you have really complicated human in the loop technology base systems and increasing digital technology and network technology, speed things up and change the level of complexity of decision making. So again it is all about people. People sitting in a command center making decisions or people in a very ambiguous condition in a field trying to figure it out quickly and faster than the other guys. I think Psychology is pretty fundamental.





DR. LESLIE LUNDT:

Now what they mean by that we suffer from the anosognosia.

DR. JOHN KAO:

Well anosognosia is the neurological syndrome of not recognizing that you have an illness even if you have obvious symptoms of one, so you know neurologist and psychiatrist are familiar with patient's coming in with florid physical symptoms who don't believe they are sick. And I think that's in a way the condition of the US right now with regard to innovation. We have always thought of ourselves as being the innovation leaders for the world and in fact, you know in the 20th century, in the so called American Century that was largely true. You know we came out of World War II as the only superpower that was unscaved. We had at that time 50% of the world industrial output came from the US. We had all of the universities and we were the place where the people wanted to be. So you know, if you fast forward to 2008 we are in a situation where many countries are raising for a new kind of economic and social high ground that's forms by the ability to innovate and where many of our absolute advantages like Silicon Valley Venture Capital or it's model of organizing innovative activity, or our great universities, although it is absolute advantages become quite relative and you know unlike Sputnik, so Sputnik was an example of situation where America was guite traumatized by the notion that another could put satellite up and advance to the US and whether we were in fact behind the Soviet Union or not the fact and the matter was that we launched a large scale coordinated national innovation effort. It was the first and sadly the last time when we did that. Now today, I would argue that our situation is actually pretty serious in the sense that many of the foundations of our innovation economy like K-12 public education, the funding of science, the physical policies that support innovation and entrepreneurship, the condition of our capital market, the fact that you know we as a country kind of short of cash right now. We become detonation and our free cash flow to use the business term to invest in the future is quite limited. You know these and many other factors have combined to create a situation where America over the next couple of decades may stop being an innovation superpower in preference to countries like China or little well run countries like Finland and Singapore and Chile that are racing forward like jack rabbits to basically become innovation leader. So I think that we as country in a state of denial, I think that you know it's come through in this current presidential election cycle where aside from certain kind of ritualistic acknowledgments of how bad the education or the innovation problem might be, it's just part of a long list of problems. You know, there is not a lot of good critical thinking that's going on in this country about the subject, which is why I decided to invest the time to write this book. I was personally very upset about the indifference that this issue is all-important issue in my view is being treated with and so I wanted to reverse that.

DR. LESLIE LUNDT:

If you have just tuned in, you are listening to ReachMD, The Channel for Medical Professionals. I am Dr. Leslie Lundt, your host and with me today is Dr. John Kao. We are discussing with John Kao our countries anosognosia.

John lets focus on healthcare for a minute here and specifically the development of new drugs that seems like to me, we have a bunch and ME2 medications and not truly innovative products. Do you think that is true?

DR. JOHN KAO:

Well, It may be true, although I think there is plenty of kind of expeditionary drug development work going on especially in, shall we say medium size and more entrepreneurial companies, but I think that if you are going to commit the kind of resources that require to develop a new drug, you can't afford to take a lot or risk. So you know the paradox is that you will go for sure things, but at the same time there are no sure things and so you know may be the shift in the ecosystem for drug development is an indication of the kind of risk taking that you know for instance companies are no longer willing to take, so that's why a lot of them have gone out of basic research and are basically innovating through their mergers and acquisition activities, when they buy little companies that shows some promise that reach the threshold of some you know economic viability, but they are not going to, these large companies well enough to slowly





take the risk to do that development work anymore. So it is a big problem because you know, we obviously are all the beneficiaries or the victims of whether drug discovery occurs in an efficient way or not.

DR. LESLIE LUNDT:

Any ideas on how we can change this.

DR. JOHN KAO:

I think that one alarming symptom of our development of new therapeutics is that a lot of smart young people in United States are leaving Life Sciences and they are leaving Life Sciences for all kinds of reasons mostly having to do with the fact that you know they can make a living doing it. The funding of science is considered to be increasingly a non even playing field or they are going to places like Singapore or Thailand or you know other countries where a kind of knowledge they have is supported in more abundant way shall we say so. You know, if you don't have horses you can run, and I think we have not as the policy matter thought about the balance between science requirements, availability of training grounds, and the population of young sciences in the pipeline for Life Sciences and as a result we are in this kind of odd movement where there is miss alignment among those ingredients and as a result a lot of our most talented young people in Life Sciences are caught in the middle and you know they are going to work for hedge funds and strategy companies and you know other businesses that value smart brains and retrains them, but you know the net loser is ourselves. So we can't address the supply side of talent. You know, we will be buying drugs that will be developed in Singapore and China, and India, and other places.

DR. LESLIE LUNDT:

Yeah, in fact that one of the quotes that really stood out in your book to me was that scientist have become professional beggars.

DR. JOHN KAO:

Well that's quote from guy name Philip Yeo who oversaw the development of the Singapore Biopolis and Singapore has invested in a temple project there that aspires to have 10,000 PhD scientist working in a really well-designed modern complex in Singapore and of course 10,000 PhD scientist as roughly comparable to NIH. So that speaks to a couple of things. It speaks most importantly to the nonlinearity of innovation. The fact that not quite 5-million person country can mount a Life Sciences Research effort that is comparable to NIH. So you don't have to be big rich country. I mean Singapore is small rich country, but you know don't have you know US-sized treasury to be able to be world-class player in Life Sciences and what is really important is the pool of talents. So Philip Yeo whom I actually know guite well, so I don't restrain what I am about to say. He nicked name himself, you know, in Time Magazine interview he nicked name himself the Serial Kidnaper, because he said his job was to run around the world talking that world-class talent persuading them to move to Singapore. Now if you are a senior scientist and you just have been told that you can make 5 times your salary, 3 times of you salary whatever and design a brand new lab and have oceans of very respectful cooperative postop and be left alone to view which you want and then you never have to apply for grant again. That is going to appeal to a lot of people and in fact you know the former head of the national cancer institute and former dean of the UC San Diego School of Medicine and his wife who is a Rockstar _> >they are all in Singapore now. They haven't become Singaporean citizens, but they are driving big chunks of Singaporean national strategy for innovation and Life Sciences and you know talent is fickle these days. You talent can move around the world just by buying a plane ticket and money can move around the world just like doing a couple of mouse clicks on your computer. So you there is nothing sacred about America being the golden pillar of innovation in our global society anymore.





DR. LESLIE LUNDT:

But, as we have talked we are in denial that this is even a problem.

DR. JOHN KAO:

Right, exactly. I mean I think that people have tendency to look at this problem in a very segmented way. So Oh, I guess we have to fix K-12 education all right or Oh you know I guess you know our infrastructure is falling down may be we don't want to do so anything about it, but you know very few people have in political life have presented an integrated narrative of what the innovation challenge for a country is and what all the ingredients are that have to be wove in together for a national innovation agenda to really hold water. We have assumed in this country for a long time that not having a strategy was the strategy that we needed because we American, we are strong and we are number one and we don't need to things strategically and I think that is kind of dumb attitude especially in the opening years of the 21st Century, which we be better get over as quickly as possible.

DR. LESLIE LUNDT:

We have been speaking with Dr. John Kao who has written a book called Innovation Nation, which discusses these very issues.

Thanks John.

DR. JOHN KAO:

Thank you.

DR. LESLIE LUNDT:

I am Dr. Leslie Lundt. You have been listening to the Clinician's Roundtable, on ReachMD, The Channel for Medical Professionals. Thank you for listening.

You are listening to ReachMD XM160, The Channel for Medical Professionals.

You are listening to ReachMD XM160, The Channel for Medical Professionals. This is Dr. Mark Nolan Hill. This week we will be speaking with Dr. Arthur Matas at the University of Minnesota Medical School. We will be talking about global lessons for reducing the organ shortage in the United States.

This is Dr. Mary Leuchars, join me this week as I speak with Dr. William Collins from the City Atlanta where we will be talking about new vaccines for malaria and with them the host they carries for global medication of this disease.





I am Dr. Goldstein inviting you to tune in to GI Insights this week as we discussed what doctors' need to know about Probiotic. Our guest will be Dr. Richard Fedorak at University of Alberta in Canada.

Download complete program information, live streaming, on demand podcast and free CME at www.reachmd.com. ReachMD online, on demand, and on air at XM160.