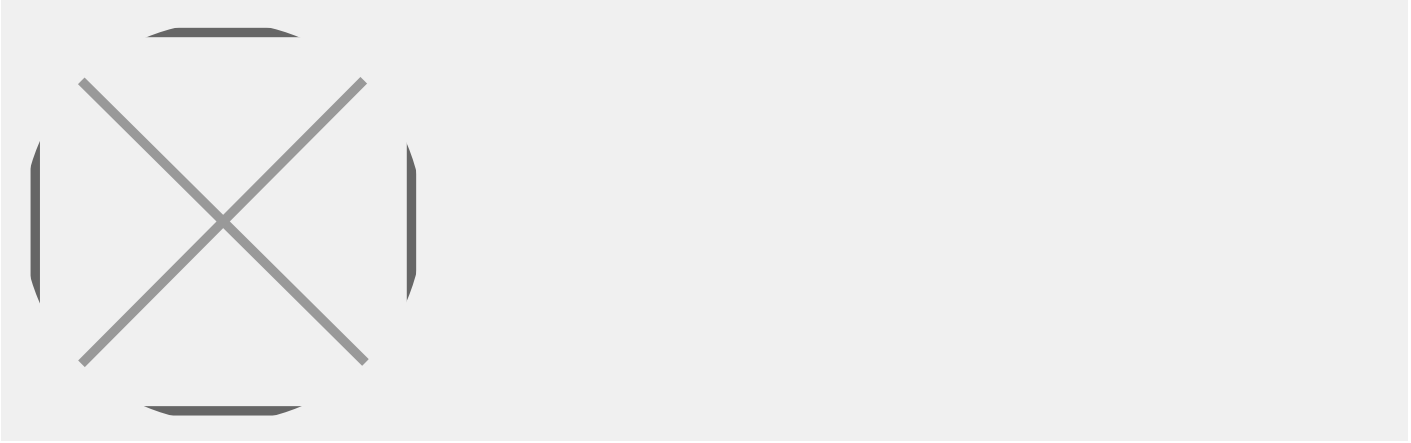
Interview: Paul Lucas President & Chair, Life Sciences Ontario



03.10.2013

Tags: Industrial Biotech, Life Sciences, Life Sciences Ontario, R&D, Venture Capitals,

Prior to joining Life Sciences Ontario (LSO), you served as CEO of GSK Canada for a number of years. What opportunities did you see in making the switch from an MNC to an association?

Having been in the pharmaceutical business for my entire career in Canada, I have always been interested in creating a higher profile, more important life sciences sector in Canada. There have been challenges diversifying the Ontario economy away from just cars, mining, and financial services, whereas life sciences represents a significant opportunity to create jobs and wealth in Ontario. Quebec has always had the life sciences industry as one of their key industrial sectors and the impact of this is evident.

It has been said that provinces benchmark each other to align or compete and have the best healthcare. Do you think it is the same for life sciences?

It is absolutely the same. Canada needs to grow up as a country because it is competing with the world, not with itself, especially for R&D. Quebec and Ontario worry too much about how the other is doing, and the other provinces feel they are not getting their share. We need to attract more global R&D, particularly in human life sciences by competing globally.

How would you recommend doing that?

The Quebec-Ontario Life Sciences Corridor is a good concept. LSO is working with its partners in Quebec to help drive this Corridor. I do not believe the government should be the leader in this area. However, they need to help create the right environment and support the sector.

What does Canada need to do to foster the business development segment of its great research?

This is Canada's big challenge. The country puts a lot of money into research, and is one of the best research countries in the world. However, not enough of that research is being commercialized. Firstly, we need to create the policy environment to encourage that to happen. We need to create sources of risk capital through Venture Capitals (VCs) and other sources as well as later stage capital. There is also the issue that academia and industry in the life science field do not have a culture of working together. John Manley and I co-chaired the Coalition for Action on Innovation in Canada. One of the recommendations in the report we published was that to drive more innovation, we need academia and industry working closer together. By contrast, industry and academia in the United States are very used to working with each other. Canada must also ensure that the talent and entrepreneurs exist to create these companies. LSO is actively working on this through a mentoring program focusing on developing entrepreneurs. Canada does not have enough entrepreneurial experience in the life sciences fields compared to other sectors like IT, mining, or oil production.

Why are there fewer entrepreneurs in life science than in these other sectors?

Life science is not as developed. It is a relatively new industry. These other sectors have had time to develop entrepreneurs and innovation in their sector, whereas in life science, the healthcare system is seen as a cost and a social program rather than an economic driver. Canadians need to think differently and realize that healthcare, which is the biggest expenditure in the country, can be an economic driver that utilizes innovation fostered in the life science sector.

How do you see the expiration of the Canada Health Accord in 2014 affecting the country in the next couple of years?

The federal government views healthcare as a provincial responsibility, and therefore fund 20 percent of Canadian healthcare and let the provinces run it. It is not a bad strategy in that the less money they give, the more usefully it is spent. Providing less money forces provinces to become more budget-conscious, to become more efficient and increase productivity. It is not necessarily the amount of money that is spent, but rather how it is spent. Healthcare has no competition in Canada, so it is not motivated to improve its customer service, or to be more efficient and

productive. To compete, Canada must look for ways to get more out of the money that it spends by investing in innovation to drive productivity in the healthcare system. For example, one hospital in Toronto improved its cancer treatment center's productivity dramatically simply by using innovation. Limiting spending and forcing the healthcare system to become more productive is good, and that is what the feds are trying to do.

As the bridge between various stakeholders, how challenging is your position in being a partner of the government and helping control costs while defending the interests of the industry, ensuring innovation is recognized at a government level?

LSO is an organization of many different kinds of partners. The association tries to create more partnering and networking within the sector to align on what we advocate to government. One of the key advocacy aspects is that it is an important sector that needs a strategy in each provincial government to help create a policy environment for the sector to flourish. In the absence of that, LSO will somehow have to do this itself.

LSOs membership includes associations, institutes, universities, and MNCs. How do you deal with conflicting interests among your membership base?

LSO has a strong outreach to its members. Even though it represents agriculture, food, industrial biotech, and life sciences, the issues are fairly common. Sometimes there are differences between small startups and big companies, but the only way to resolve such issues is to work together. In general, there is actually an incredible alignment in terms of what the key issues are for life sciences. The sector really works around recognizing its importance for the economy and the need for a policy environment to support it through government initiatives, so that the technologies used in health can be used in agriculture and industrial biotech. There should be no silos; these technologies are moving across sectors.

Intellectual property is also of concern. Canada needs solid IP protection for innovation in the life sciences sector because the timeline for innovation is so long, and because Canada is not globally competitive at the moment. There is also the issue of strategic procurement; whether you are in the agricultural, industrial biotech or pharmaceutical business, governments are the biggest procurer of services in the country and yet they do not strategically use that procurement to help drive innovation. If I invent something expensive, government will not buy the product because they see it simply as a costly invention rather than incremental innovation. Purchasing incremental innovation ultimately allows companies to be successful, branch out and sell globally. If a product is used properly, it will improve productivity in the system, create better patient outcomes and

lower costs.

Canada is well served by its manufacturing capacity, especially in the field of generics. What potential does Ontario hold for manufacturing facilities in the near future?

Government policy around generics and brands in Canada has been the single biggest inhibitor to driving innovation in the sector. There are discussions about a balanced IP policy between generic and brands but it is not good enough for the brands to compete globally for R&D. The result is that Canada only does one percent of global R&D as opposed to recognizing the need for globally competitive IP, which we do not have. That balanced policy has undermined investment in Canadian R&D and commercialization. I have told the government it is an outdated failed policy. Some European countries have the strongest IP policies in the world and yet their drug costs per capita are some of the lowest in the world. IP has nothing to do with the cost per capita for pharmaceuticals; that link does not exist. We have low R&D on the brand side, and the highest prices in the world for generics. When you buy commodities, as soon as you peg a price, you are going to pay too much because you eliminate the competition. The hope was to increase R&D in Canada but it has not happened. Generics should be competing on prices. That regulation on generic prices resulted in high prices, and Canadians have consequently paid too much for them and lost out on R&D.

Which industries have benefited more from partnering with other members of LSO in terms of innovation and synergies?

Everything at LSO involves incorporating different sectors of life science. LSO is trying to create a learning opportunity for the different sectors to allow them to learn from each other. Maybe the human health sector can learn from the agricultural sector in terms of entrepreneurship. LSO is trying to create cross-fertilization. The association determined that process of integrating across the life sciences at an early stage. The vision is there, and we see how the technology can be applied, but we still have a long way to go.

What is the competitive edge of Canada?

We are trying to capitalize on Canada’s science base. The quality of science in Canada is world-class, which should allow us to be successful in that sector. However, we must address the issue of moving into commercialization at both the federal and provincial level. We have to translate that science base into economic activity.

Does LSO have an international strategy in place in terms of partnering abroad?

I interviewed with people from the biotechnology sector around the world at BIO this year. We are reaching out to each other and trying to ensure a flow of information worldwide. People around the world are trying to build the sector, which is a good strategy. If we do not talk to each other, nobody is going to win. If we talk to each other, everyone wins because we can invest in each other`s countries and jobs will be created on both sides. LSO`s philosophy is to reach out beyond Canada`s borders to try to drive the sector. LSO wants to create global companies, not companies that just sell products in Canada.

Who do you see as the next Bombardier? Is that something that is possible in the human health or some other niche that LSO represents?

There are companies that have just started up and the CEO has only one objective: to sell the company as quickly as possible. This is a problem because it simply creates ten rich people. Hopefully such individuals would create another company, resulting in a few more jobs. There are other people that are trying to create small to medium-size, and eventually large companies in Canada. So there are many possibilities.

How will you measure success in the short to medium term?

I think success will come as long as we are making progress. We need government to support our objectives and to create the necessary policies and environment. But we cannot just be focused on the government, we need to lead ourselves. Five to ten years from now, I would like to see a lot of successful startup companies in this sector that have grown into SMEs. They may not be large companies within five years but within ten, it is possible. These companies will create jobs in Canada, and specifically in Ontario. This sector will have become part of the province’s industrial strategy.

Canada has strong research but needs to focus on translating it into commercial economic benefit. We therefore need a supportive policy environment, and we need industry to bring capital to help invest in the sector. We need more entrepreneurs and mentoring of entrepreneurs. We need governments to use their procurement power in the human health side and in other sectors to buy innovation and use those products to drive productivity. If they do not, the health care system is going to be broke. Canadians have to decide if they want to focus on innovation, which requires support through global and competitive policy, or to focus on imitation and commodities, driving down prices and cost. Compromising leads to mediocrity.

See more interviews