With the formal transition underway, there are many supply chain and regulatory details that must be worked out to ensure that there are no supply disruptions for either EU or UK patients. But what issues must be addressed for the UK to maintain its leadership status within the global life sciences community? The answer is an unrelenting dedication to innovation.

Although this is a simple statement to make, there are both substantial challenges and opportunities ahead as the UK seeks to not only maintain its global leadership status but also to advance it. However, by continuing to attract scientific talent, accelerating innovation through regulatory efficiencies, and leveraging its unique competitive advantages, the British life sciences sector has the potential to thrive.

LIFE SCIENCES TALENT POOL

As with the United States, a significant portion of the UK's scientific success has been within its universities. With some of the world's most outstanding universities doing some of the most cutting-edge research, leading talent has flocked to the UK to study, teach, and conduct research. This scientific capacity was, in many ways, further enhanced by the ability to tap into EU scientific funds, which will no longer be accessible to UK institutions.

However, the scientific community's willingness to collaborate tends not to be heavily influenced by national politics. Additionally, the British government has committed to covering funding sources lost as a result of breaking from the EU. Furthermore, the student count from other EU countries studying in the UK has not declined and has instead increased slightly in the last year.[3] This increase is unsurprising and is likely a short-term bump after the government guaranteed that EU students who start their programs in 2019 or 2020 will continue to be eligible for UK domestic tuition rates and loan funding for the duration of their programs.[4] After this period, however, will international tuition levels fall, causing a longer-term decline in academic and research leadership?

Although weakened universities would likely diminish the UK's academic and scientific leadership, the opportunity to reconfigure immigration policies might present the opportunity to strengthen the country's scientific talent pool.

No longer bound by the free movement of any EU citizen, new immigration policy provides unlimited global talent visas. Those qualified for these new visas are talented foreign nationals working in a range of fields, including life sciences, general sciences, research, and mathematics. Applicants are not required to have a job prior to application but are required to have an endorsement from a recognized UK body, such as The Royal Society or The Royal Academy of Engineering.[5]

REGULATORY EFFICIENCY COULD FOSTER INNOVATION

Leaving the EU could also facilitate life sciences innovation by becoming a more efficient market. Currently, the EU is the UK's biggest export market, accounting for approximately 40% of exports.[1] There is a substantial risk that, because it is no longer an EU member, regulatory costs to trade with the UK's largest trading partner will greatly increase and cause life sciences investments to leave the UK. Or alternatively, once unshackled from EU regulations, will the UK life sciences sector be able to create a faster and more efficient regulatory system that will lead to more innovations at an accelerated pace?

There will be a delicate balancing act between the UK's desire for more efficient regulations and the desire for UK–EU mutual recognitions to keep regulatory costs with the UK's largest trading partner as low as possible and market access as high as possible. If the UK can strike this delicate balance, it could become an extremely attractive market for global life sciences investments.

RICH BIG DATA SOURCE OFFERS UNIQUE COMPETITIVE ADVANTAGE

Yet another highly compelling asset belonging to the UK life sciences community is its extremely rich data. Not only does the UK have the ability to assemble cohesive data from its world-leading genomics work and clinical trial expertise, but NHS Digital has expanded access to its data for enhanced collaboration and innovation.[6] Given its more than 70-year-old central healthcare system, the UK can use these data to advance machine learning, improve predictive models, measure the impacts of therapeutic innovation, and more. No other nation on earth has this robust historic and ongoing data from which to drive life sciences innovation.

Although a great deal of uncertainty remains as the UK and EU begin the arduous process of detailed Brexit negotiations, the British life sciences sector must focus on ways to enhance its innovation capacity. Implementing policies and approaches to drive innovation all have the potential to solidify the UK's life sciences leadership role for decades to come. P

REFERENCES

1. "Future of UK Life Sciences: how to reshape the industry for the 2020s." *The Economist Intelligence Unit*. Jan. 2020. Web.
2. Lord Henley. "Life Science Competitiveness Indicators." Rep. Jun. 2019. Web.
3. "First rise in university applications for three years." Universities and Colleges Admissions Service. 7 Feb. 2019. Web.
4. Adams, Richard. "EU students will not face Brexit penalty next year." *The Guardian.* 28 May 2019. Web.
5. Waldron, Daniel and Sanwar Ali. "Post-Brexit Global Talent UK visa to launch 20 February 2020." www.workpermit.com. 1 Feb. 2020.
6. "Innovative uses of data and data science." NHS Digital. n.d. Web.

ABOUT THE AUTHOR

Haig Armaghanian
Founder and CEO, Haig Barrett, Inc.

With over 25 years of experience, **Haig** has accumulated a wealth of knowledge and experience in global business leadership and strategic facilitation and planning. Over the last 15 years, Haig has built Haig Barrett into a leading consulting firm with clients ranging from chemicals, automotive, energy, pharmaceutical, and biotech sectors. Prior to founding Haig Barrett, Haig led divisions for leading global Fortune 50 corporations, including Rio Tinto. Haig graduated with a B.Sc. Honors in chemical engineering from Surrey University, England.

LinkedIn www.linkedin.com/in/haigbarrett/
Email haig@haigbarrett.com