



Ignite Life Sciences

Accelerating the Translation and Commercialisation of Life
Sciences Research in Lithuania

Imran Haq, PhD, FHEA, MRSB

A focus on removing translational barriers



I have worked at the interface between industry and early stage life sciences research throughout my career. This has been at top tier universities, with large pharma, within start up companies, UK government funded organisations and non profits focused on medicines innovation.

During this time I have come to understand that the major barrier to translation is not the quality of research, but the development of the correct commercial mechanisms/knowledge to allow this work to flourish.

Addressing this market failure is incredibly important, as it has the potential to transform the health and wealth of the nation. Creating better medicines rapidly for the benefit of patients, providing highly paid employment for STEM graduates and providing economic return on the substantial investment in basic research.

Hence my passion to apply my entrepreneurial and commercial aptitude to remove barriers, thus supporting early stage research.

This approach has led to...

New medicines in clinical trials



UCLB reaches an exclusive license agreement for the treatment of Alpha-1-Antitrypsin Deficiency

National and Globally impactful collaborations



Founded start up companies

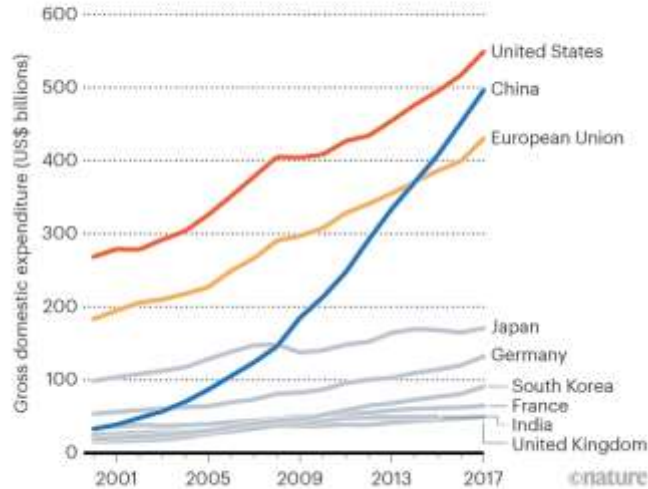


- Contributions to Lab Sciences Education (T-levels, NVQs)
- 120 Innovators advised in 2020/21 Financial Year
- Collaborations/discussions across top 20 global large pharma 2021/22

Leveraging UK Ecosystem Lessons for Lithuania

SCIENCE SPENDING

China is catching up to the United States on funding for research and development.



UK Life Sciences has very high productivity, delivering products such as drugs, medical technology, diagnostics and digital tools, as well as those for consumer health.

Less funded other countries, it is dramatically more productive - 185 life science publications per million people; compared to 66 in Germany and 121 in the US.

In venture investment, the United Kingdom stands out attracting more venture capital as biotechs in France or Germany and outstrips neighbours in biotechs seeded since 2012

The United Kingdom also outstrips its European neighbours in company creation, housing more than a third of all European biotechs seeded since 2012.

Much of this success can be attributed to the interconnectedness of the UK ecosystem, and the team science approach employed. There is much effort underway to build upon this inherent quality of the system, plugging gaps in the translational chain, and building on hubs of expertise.

The good news for Lithuania, is much of this work in creating R&D efficiencies have been tested and developed, and the learnings can be adopted and transferred.

Thus, maximising the value of investment, capitalising on current strengths to create material impact in job creation, inward investment, and the health/well-being of the nation.



Whole System Approach to Ecosystem Improvement

A package of skills based training and action driven consultancy to run concurrently within Lithuania to create immediate and long term lasting impacts

Skills Based Training

WP 1 - Creation of Technical Workforce

Development of vocational courses develop technical qualifications in lab sciences. Courses following global demand in skills can also be developed in Data Science, Quantum Computing and Sustainability.

Outcomes: Industry standard vocational training that creates an abundant technical workforce

WP 2 – R&D Efficiency Through Better Design

We will deliver a training course that will train early stage researchers (PhDs/PostDocs) in design thinking, and give them specialised understanding of developing life science innovation for end usage.

Outcomes: Better use of R&D expenditure, increased likelihood of translatable applications.

WP 3 – Entrepreneurship/Company Founding Experience

We will deliver a training course that will allow scientists to become entrepreneurs. This will be delivered by entrepreneurs and venture capitalists, which evaluates commercial readiness,

Outcomes: Scientific innovators creating companies out of their technologies

WP 5 Training the next generation of Technology Transfer Professionals

We will deliver a training course that allows business staff within universities and other institutes to become technology transfer professionals.

Outcomes: Professionals that can create economic and societal value from research developed in the Lithuanian landscape.

Initiatives

WP 1 Developing Synergies in the Lithuanian Ecosystem

We will undertake interactions with stakeholders across the Lithuanian research ecosystem to identify facilities, staff and expertise that can be aligned across innovation pipelines and create hubs of excellence. This work would also involve speaking to innovators within the Lithuanian ecosystem to identify immediately translatable research. International partners where appropriate, will be secured to support innovators/initiatives.

Outcomes: Synergies within Lithuanian system to accelerate research, gap analysis to be filled by international partners and innovators to develop onwards.

WP 2 Creation and Delivery of a Life Science Accelerator/Development Programme

Start-up companies assess therapeutic product profile fit for the end population, develop detailed, timed, costed project plans for delivery to key project milestones, including validation of data requirements by industry experts.

Outcomes: This plan will allow a clear roadmap for delivery to clinic, and build confidence for further investment and in-licencing by large organisations.

WP 3 Creation of a Fund Structure to Attract Inward Investment into Lithuania –

A legal structure for a potential fund will be created, including identification of a fund manager and investment team. This fund will leverage assigned Lithuanian investment funds (~10 mil) to provide the cornerstone create a fund in the range of 100 million.

Outcomes: This fund will be adequately powered to move forwards Lithuanian life science projects and provide follow up funding and returns to the Lithuanian life science ecosystem.

Consultants / Partners



Marc Daigneault is the former Head of Research Funding and Innovation at the Medicines Discovery Catapult. Overseeing a portfolio of 30 SMEs across biopharmaceuticals and diagnostics raising £35 million in non – dilutive funding. He has driven national level strategic initiatives including the new £13 million centre for infectious disease and the PET Network.



Anthony Khan formerly led commercial insight efforts at the University of Birmingham. He is a tech transfer specialist and trainer and have setup and supported multi – million incubator, accelerator and commercial collaboration programmes in the UK and globally

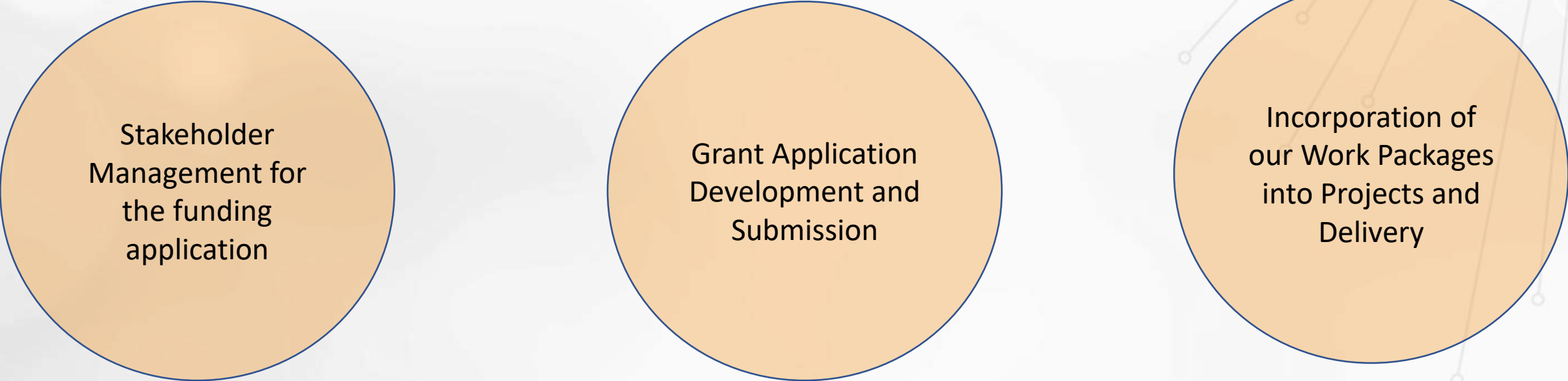


David Quinn is a life science sustainability specialist working with the Medicines Discovery Catapult and MMIP/ABPI Sustainability Working Group to lead change to industry practices.

He recently published a cross catapult report into sustainability in the sector



How to Collaborate with Us



Stakeholder
Management for
the funding
application

Grant Application
Development and
Submission

Incorporation of
our Work Packages
into Projects and
Delivery

Contact: imran@ignitelifesciences.com

Detailed 3 page proposal document on outlining proposed actions for the Lithuanian ecosystem available