Oxfordshire Innovation Engine 2023 Case Study – Oxford Science Enterprises (OSE)

Oxford Science Enterprises (OSE) launched in 2015 to build world-changing businesses based on academic discoveries in life sciences, deep tech and health tech made at the University of Oxford.

It was originally called OSI (where the 'I' stood for 'Innovation') but changed its name in 2021 to more strongly reflect its role as an independent investment company that helps to found, fund and build new enterprises.

OSE was founded by executives of the investment business, IP Group, which was originally set up in Oxford in 2000 before moving to London and floating on the London Stock Exchange. The aim of OSE was to tackle what the founders, and fellow investors, considered to be an imbalance between the funding and support available to spin outs from the top universities in the United States compared to Oxford.

OSE's Chief Financial Officer, Jim Wilkinson, believes the problem the company was set up to address speaks for itself when you compare the fact that Oxford can point to only four, billion-pound companies (or 'unicorns') founded on its science, compared to the 200 from Silicon Valley's Stanford and 50 from MIT in Boston. He claims that Oxford, as a world leader in research, clearly had untapped potential, which OSE was set up to release.

"Our impact was almost immediate. After our launch in 2015, you suddenly get up to 20 companies a year coming out of Oxford and that starts building the critical mass needed to create an ecosystem," he says. "While around about £125 million a year in total was invested in all Oxford spin outs each year in the five years up to 2015, we're now running at well over a £1 billion a year. We're investing about £200 million ourselves across all stages from spin-outs through scale-up, with the remainder coming from other investors outside Oxford, including international VCs and corporate investors who really recognise the quality of the science and get what we're trying to do. We're covering everything that the university does from a science and technology perspective. We're doing quantum computing and AI, fusion power, food and climate tech, biologics and small molecule therapeutics, digital health and diagnostics – areas that can make a real impact to people and society."

Long-term view

OSE evaluates the commercial potential offered by the science and technology developed at, or in partnership with, the University of Oxford. As such, it has a close working relationship with the university's knowledge exchange and technology transfer division, Oxford University Innovation (OUI). The arrangement is underpinned by a fifteen-year contract with the University, which can be renewed in 2030 if both sides agree.

On its launch in 2015, OSE raised £600 million from its founders and other investors and, in 2022, it added a further £250 million of investment. The ultimate aim is to become self-funding through receiving sizeable returns when a business it has helped to build either floats or is sold. It is not quite there yet because, as CFO Jim Wilkinson explains, OSE takes a long-term view on its investments, in contrast to the average VC firm, which operates under the constraints of a limited lifetime fund.

"We find an idea and then create a company to get it out into the world," he says. "We tend to find the management, other investors and help with 'hands-on' operational support and on finding space for the company. We're very patient investors, we expect our average holdings to be about 10-12 years. We hold these companies with the intention of building world-changing businesses, which takes time. Our fellow investors will typically include international firms like Google Ventures, Tencent, and other companies, who can help our companies become global leaders."

So far, the business has benefited from two flotations, Vaccitech (which helped to develop the Oxford vaccine against Covid, developed and distributed by AstraZeneca) and Pepgen, which is transforming treatments for neuromuscular conditions. It has also benefited from seven company sales, including electric motor manufacturer YASA to Mercedes in 2021 as well as DJS Antibodies to AbbVie and MiroBio to Gilead Sciences, both in 2022.

City centre wet labs

Another crucial facility brings to its portfolio is office and lab space, starting off with the Grass Roots incubator, which occupies the basement level of its Oxford headquarters. For companies needing more room, it also has two properties on the Oxford Science Park that offer 50,000 square feet of office space and 58,000 square feet of wet lab facilities.

The new development for 2023, and beyond, is the conversion of part of the Clarendon shopping centre in the heart of Oxford's city centre, to offer 5,000 square feet of wet lab space for start-ups. Pete Wilder, Head of Property at OSE explains it has taken on the lease for part of the redeveloped centre to fix the twin problems of a lack of wet lab space in the city centre and, more specifically, inflexible landlords.

“Landlords often don’t understand what our companies need,” he explains. “They are unwilling to offer the flexibility of term, for example, if you consider that funding rounds might take place every two years, it's just impossible to sign up to a ten-year lease. So, we've leased space ourselves and then lease it back to our companies by using our covenants to underwrite the value of the building, which is great for landlords.”

The new city centre wet lab facilities are expected to be ready for OSE’s companies during 2025 and with start-up space in great demand in and around Oxford, OSE has its sights set on providing further capacity in the coming years with the goal of providing its companies with the best start in life possible.