

# KNOWLEDGE TRANSFER PARTNERSHIPS

University-business partnerships that bring industry, academics and graduates together to support business growth through innovation and knowledge exchange.



## **KNOWLEDGE TRANSFER PARTNERSHIPS**

Partner with the University of York and gain access to a world-class knowledge base to transform your business.

If you're looking to improve company competitiveness, productivity, performance and profitability, Knowledge Transfer Partnerships (KTPs) at the University of York can help you achieve your strategic goals.

KTPs have been established for over 50 years to help a variety of businesses, from SMEs to large corporations. The partnership is a mutually beneficial 3-way collaboration between a business, a skilled graduate (a KTP Associate) and a university on an innovative project.

The projects typically last between 12 – 36 months and will have a transformational impact on the business through knowledge exchange.

The knowledge transferred during a project will be embedded in the business to provide longlasting capabilities and continued economic growth.

KTPs are funded by Innovate UK grants of up to 75% of the project's cost, depending on the size of the business involved (SME's 67%, large companies 50%, charities 75% and public sector organisations 50%).

#### **BENEFITS FOR BUSINESSES**

- Development of innovative solutions to stimulate business growth.
- Increase competitive advantage and productivity.
- Cost-effective way to enhance the knowledge and skills of your workforce.
- Access to and collaboration with world-leading academics.
- Access to a high-calibre, highlymotivated graduate to lead your project.
- Investment in research and development, likely eligible for R&D tax credits.



## THE KTP PROCESS

Contact the University of York, KTP Team at ktp@york.ac.uk to discuss your project idea.



Agree on the project outline between the academic and business partner and complete a Fact Find Form.



KT (Knowledge Transfer) Adviser reviews the Fact Find Form and decides if KTP is the right approach.



Meet with the KT Advisor, KTP Manager and the academic partner at the Company.



Work with the University of York KTP team to prepare the budget and grant application. Submit the grant application – there are normally five deadlines throughout the year.



Recruit a suitably qualified graduate as the KTP Associate who will manage the project and form a unique three-way partnership.



Meet regularly to ensure the project is on track.



Achieve the strategic objectives of the project.



Produce the Final Report which is set against the strategic objectives originally proposed for the project.

## **OUR UNIVERSITY**

At the University of York, we understand the importance of external engagement and proactively seek out opportunities to apply our research in industry sectors.

We are 1 of 24 Russell Group researchintensive universities. We are Top 10 in the UK for Research Impact (Research Excellence Framework 2021).

We were the first UK university to sign up The Good Business Charter initiative in 2021.

We have 47 specialised research centres and institutions.

Our research strategy 2023-2030 lays out how we advance knowledge for public good.

The University has a strong tradition of collaborative research and knowledge exchange. We will work with you to help develop new insights and harness the ability and creativity of your organisation. We will facilitate your access to high quality facilities and services, including laboratory, engineering, studio and performance spaces. Our academics will share their expertise with you across disciplines in the following key research themes;

- Creativity, Culture and Communication.
- Environmental Sustainability and Resilience.
- · Health and Wellbeing.

- Justice and Equality.
- Risk, Evidence and Decision Making.
- Technologies for the Future.





## SPOTLIGHT ON RESEARCH

#### **Data Analytics**

We use data in all aspects of 21st century life. Our Department of Computer Science, which is a UK top 10 research department according to the Times Higher Education's 2021 REF results, can enable you to stay at the forefront of data science, and provide solutions for safer data storage, analysing audience behaviour or creating more adaptable software. We are training the next generation of data scientists to meet both current and future challenges at our York Interdisciplinary Centre for Cyber Security.

#### **Digital Cultures**

Our networks in the School of Arts and Creative Technologies provide a forum for interdisciplinary research collaboration and discussion, which have meaningful impacts on culture and society. Our new perspectives in research have contributed to the UK creative sector and include DC Labs, XR Stories, WEAVR and SIGN.

#### **Biosciences**

We are in the top 10 in the UK for Biological Sciences according to the Times Higher Education's 2021 REF results. Our Department of Biology has undergone significant levels of investment in recent years and established prestigious institutes, which include York Biomedical Research Institute, the Biological Physical Sciences Institute (BPSI), the Leverhulme Centre for Anthropocene Biodiversity (LCAB), and the Centre for Novel Agricultural Products (CNAP). Our research lends itself to collaborations of breadth, depth and immediacy, which span molecular analysis of human diseases to understanding the global environment.

# **SOME OF OUR PREVIOUS KTP PROJECT PARTNERS**



#### **Award winning KTPs**

At the KTP Awards 2024, our African Agriculture KTP (AAKTP), in which researchers in the School for Business and Society collaborated with Savannah and Sahel Commodities (SSCL) Limited, and the University for Development Studies, both in Ghana, was nominated for and won two awards: "Best AAKTP" and "Changing the World."

# KTP WITH PHASE FOCUS LTD



Phasefocus is a venture capital-backed SME specialising in imaging technology and instruments using multiple wavelengths. They were awarded a Microscope Today Innovation Award in 2013 and again in 2017 for their Livecyte® microscope patented imaging technology.

It was the objective of the KTP with the University of York's Department of Biology to demonstrate and extend the label-free cell imaging application of this Phasefocus Livecyte® microscope.



The KTP programme offers an excellent personal development opportunity. I was allowed access to the best training courses and sharpen my microscopy knowledge to the point where I felt like an expert in my field."

Dr. Rakesh Suman, KTP Associate The KTP developed disruptive microscopic imaging technology. known as ptychography, that increases the clarity of live cell images. A major benefit of this technology is that it allows scientists to study cells without the need to stain the samples with markers, such as fluorescent labels or dyes, which can affect the structure and function of living cells. Through label-free ptychography university academics and scientists from Phasefocus were able to view cell movement and division without disruption and collect important quantitative information such as cell size, mass and volume.

The technology has enabled greater understanding of cell morphology and their behaviour and has been applied in practice to wound healing, oncology, toxicology and stem cells.

The potential applications for this technology are immense – most areas of biology that use primary cells from living tissue are potential benefactors - and this project is a perfect example of how academic institutions can work with industry to develop commercial applications for our world class research and laboratory facilities."

Professor Peter O'Toole, KTP Academic Lead

# KTP WITH PYROPURE LTD



PyroPure Ltd is a specialist waste technology company that has trademarked PyroPure® technology. The technology destroys non-recyclable waste on site leaving only metal and glass for recycling.

The objective of the KTP was to find an alternative solution to the UK's current practice whereby pharmaceutically and chemically contaminated wastes are disposed of in large-scale, high-temperature incinerators. PyroPure required expertise to establish, through laboratory trials, whether the PyroPure® system was able to sufficiently break down pharmaceutical substances and to identify a business case for PyroPure® treating other chemically contaminated wastes such as pesticides, rodenticides and biocides.

The Department of Environment and the Centre of Excellence in Mass Spectrometry at the University of

We found the KTP hugely beneficial to our business and would highly recommend this to any organisation considering its merits. By working in partnership, complex problems can very quickly be resolved through utilisation of skills in both organisations in a way that cannot be done by using external consultants."

Peter Selkirk, CEO Pyropure Ltd



York were engaged in a Knowledge Transfer Partnership with the Company during which seventeen of the most thermally stable pharmaceuticals were tested for level of breakdown.

Successful completion of these trials revealed that PyroPure® destroys over 99% of 10 of the pharmaceuticals and an average of 94% of the remaining seven. These results opened up major markets valued at over £30 million for the PyroPure® product.

It is great that through the KTP, the University of York will have played a key role in realising the potential of the innovative technology for treating pharmaceutical wastes while protecting the health of the natural environment."

Professor Alistair Boxall, KTP Academic Lead



01904 321124

ktp@york.ac.uk

**y** @ktpyork

59913 - york.ac.uk/design-print-solutions