##  University of Bath KTP Programme

**Qualasept Ltd**

**Biopharmaceutical Scientist- KTP Associate**

## The Company – <https://bathasu.com/company/>

Qualasept Ltd (trading as Bath ASU) ranked Britain’s fastest growing Pharma company for the past two years (The Pharma Fast 50), is the leading commercial supplier of aseptically prepared pharmaceutical specials to the UK hospital sector including the NHS. The company was recently listed in Britain’s 100 fastest growing tech companies (The Sunday Times – 9 Sept 2018).

The company has its roots in the Aseptic Specials Unit at the University of Bath, which developed from research by Prof Graham Sewell. He showed that ‘dose banding’ – rounding up or down the amount of a drug in medicines – would not affect their quality or safety. As this is the second KTP project between the University of Bath and Qualasept the partnership continues to be very strong.

In the last six months the company has supplied circa 275 hospitals across the UK and Ireland. From their purpose-built offices and manufacturing facility with the UK’s biggest aseptic clean room, designed for energy efficiency, based in Corsham, Wiltshire, they have supplied over 3,000 individually prepared doses every day to those hospitals. The company has the widest range of biological products with extended shelf lives in the sector.

The company’s revenues are currently running at circa £166 M per annum with their ‘antibody’ category accounting for circa 80% of this. Qualasept has gone from £25.7m turnover in 2014 to £76.2m in 2016, increasing profit from £1.5m to £3.6m.

The role is full-time and will be based at Qualasept Ltd premises in Corsham, Wiltshire.

**What is a KTP?**

Knowledge Transfer Partnership (KTP), a government funded scheme brings together universities and businesses to work jointly on a development project that is strategically important to the future of an organisation. Throughout the project the KTP Associate will play a key role in managing and implementing strategic development in the business and transferring knowledge between the University and the business.

**Partnership objectives**

Antibody based drugs that work by engaging T cells are an exciting new class of cancer therapy. This KTP will develop, validate and implement novel methods for the characterisation of drugs in this class under extended storage. New Qualasept products will be produced that have extended shelf lives. However, there are significant challenges in turning good academic and laboratory ideas into real industrial solutions. Some of these challenges include the transfer of techniques from a research-based environment to an industrial one. In order to overcome these challenges, involvement in this project will build upon the University of Bath’s previous KTP with Qualasept (which ended successfully, in April 2018) and complement with existing knowledge of protein therapeutics and integrate this with existing knowledge of process design, production methods and QA/QC procedures held by Qualasept.

## Partnership management

The KTP Project is delivered by an Associate and is managed through the Local Management Committee (LMC). This is chaired by the senior company executive and comprises the Company and Academic leaders/supervisors and a KTP Advisor (Innovate UK representative). The LMC meets every four months and is responsible for programme direction, ensuring that all parties gain maximum benefit and for authorising expenditure. Associates are expected to prepare an executive summary, to report on progress for the LMC meeting and this must be circulated in advance to LMC members. They are also expected to make a formal presentation on some aspects of their work at this meeting.

The academic knowledge will be provided by Dr Andrew Watts from the University of Bath’s Department of Pharmacy & Pharmacology, his research interests are in mechanistic enzymology and protein engineering and Dr Watts has extensive experience in the production and chemical/functional characterisation of proteins. Dr Watts is a cofounder of the company Glythera Ltd., a biotechnology spin-out company from the University of Bath (2008) with a focus on modifying pharmacokinetics of protein-based therapeutics. Dr Watts generated novel bio-conjugation chemistries which make up the core IP of Glythera.

He also has significant expertise in the evaluation and characterisation of therapeutic proteins subjected to extended storage as well as the regulatory requirements for the application of extended shelf lives, both aspects fundamental to the success of the project, he is also experienced in KTP associate supervision, from his involvement as the academic lead in the previous KTP which ended successfully in 2018.

Further academic knowledge will be provided by Professor David Tosh who is currently Deputy Head of Department for Biology & Biochemistry. His research focuses predominantly on the phenomenon of trans differentiation (sometimes referred to as cellular reprogramming or metaplasia) or the conversion of one differentiated cell type to another. Professor Tosh has developed a number of in vitro models for the trans differentiation of pancreatic cells to hepatocytes and the reverse (hepatocytes to pancreatic beta-cells) as well as oesophagus to intestine. He has extensive experience of tissue culture models (3D ex vivo models and generating cells by directed differentiation of embryonic stem cells), creating reporter cell lines and development of functional readouts. Professor Tosh has had links with industry partners through a unique Public Private Partnership (Stem Cells for Safer Medicines).

A monthly progress meeting is held with the Company and Academic Supervisors. The Associate is expected to arrange and document these meetings. The Associate is required to maintain a log of the tangible benefits of the project and to provide internal seminars for other members of University and Company staff, based on knowledge acquired through attendance at courses and conferences.

**The ideal candidate will have:**

* A PhD in a relevant scientific background such as Pharmacology or Cell Biology or equivalent significant relevant experience and professional qualification. (Where the degree has not yet been awarded, a Thesis must be at least submitted).
* Significant practical laboratory experience and preferably some industrial experience in the pharmaceutical sector.
* Practical experience in cell culture techniques and cell-based functional assays.

**In addition:**

* Ideally have some experience with techniques such as HPLC (method development), mass spectrometry, and the analysis of biological therapeutics.
* The Associate is expected to play a major role in coordinating the stakeholders involved in this project, so must have good communication and organisation skills.
* Ability to rapidly select relevant data and create and test hypotheses with minimal supervision, work collaboratively and to react responsively to KTP project requirements

***KTP Associate – The benefits***

* Accelerate your career
* Gain valuable experience and marketable, highly transferable skills
* Take early responsibility for a high profile project
* Receive mentoring from the company and an experienced academic team
* Opportunity to gain a professional qualification
* Receive practical and formal management training and development
* Enjoy an excellent chance of a permanent post with the company

It is essential that you understand how KTP works with business and the University, and the vital role you will play if you successfully secure a KTP Associate position. Further information about KTPs and the advantages of being a KTP Associate can be found at <http://ktp.innovateuk.org/>

## Associate’s expectation

The Associate will have the opportunity to pursue another higher degree as a member of staff of the University. Bath provides an MPhil in Knowledge Transfer specifically for KTP Associates. The Associate will be encouraged to gain membership of a relevant professional body to enable them to work towards Chartered status. They may undertake several selected course activities as well as general courses at the University as a member of staff.

Within the limits of commercial confidentiality, the Associate will have the opportunity to deliver papers at conferences and will be expected to co-author articles.

On successful completion of the project, it is likely that the Associate will be offered a permanent position with the Company. However, if due to unforeseen circumstances this is not possible, the Associate will still have acquired invaluable commercial experience through close involvement with the senior management of the Company. Experience of project management will be gained, as well as knowledge of the daily running of a successful business.

**Salary and conditions of employment**

The post is fixed term for the duration of 36 months.

The salary is £31,000 to £35,000 p/a depending on qualifications and experience and the reward package includes a pension contribution and separate £6,000 personal training and development budget.

The Associate will be appointed by the University as a member of staff with the Department of Pharmacy & Pharmacology, responsible to the appointed academic supervisor. The contract of employment is for 36 months. There is a probationary period of six months, during which time the contract may be terminated by either side with one month’s notice. Thereafter, the required notice period to be given by either side is three months. The University requires a mid-probationary report after three months and a full probationary report at six months.

In other respects, the Associate will be treated as a Company employee and works full-time at the Company’s premises in Corsham. The project may require some periods of time to be spent at the University and could involve overseas travel. The conditions of work, including work hours and holiday entitlement, will be those applying to Company employees. An annual appraisal is carried out with the Academic and Company Supervisors. This is used to identify the Associate’s training requirements in relation to programme tasks and their personal development plan.

Whilst there is no commitment on the Company to retain the Associate at the end of the programme, it is expected that the Associate will be made aware of future prospects at their annual appraisal. KTP appointments cannot normally be extended beyond the end of the project.

***It should be noted that this KTP Associate post entails the development and application of knowledge for commercial outcome and that the Associate will be embedded in the company for the KTP duration. It is technology transfer focussed and not suitable for candidates primarily seeking an academic research or teaching career within the University.***