

# University of Kent

<b>Post title:</b>	<b>Research Associate</b>
<b>Reference Number:</b>	<b>STM0341</b>
<b>Salary Scale:</b>	<b>Grade 7: £31,020 per annum pro rata</b>
<b>Department:</b>	<b>Medway School of Pharmacy</b>
<b>Contract:</b>	<b>Fixed term of 12 months and full time</b>
<b>Location:</b>	<b>University of Kent, Medway Campus</b>
<b>Responsible to:</b>	<b>Dr Vladimir Gubala</b>

## University of Kent

The University of Kent was established at Canterbury in 1965 and has now become known as the UK's European university, with students in Brussels and Paris as well as at its other Kent campuses at Medway and Tonbridge. It has nearly 20,000 students, of which around 17,000 are undergraduates and approaching 3,000 are postgraduates.

The University has consistently been rated by its own students as one of the best universities in the UK for the quality of its teaching and academic provision. In the 2012 National Student Survey, Kent placed third out of all publically-funded multi-faculty universities in the UK for overall student satisfaction. In the 2013 Guardian University Guide, Kent achieved a ranking of 22nd, and was placed 28th in the Sunday Times League Table 2013.

In the 2008 Research Assessment Exercise, the University was placed 24th out of 159 participating institutions in the UK for its world-leading research, while 97% of its academic staff work in schools or centres where the research is rated as either internationally or nationally excellent.

In 2008, the University was awarded The Queen's Anniversary Prize for Higher and Further Education for the work of its Kent Law Clinic.

The University's strong European impact is reinforced by long-standing partnerships with more than 100 universities in Europe and it is the only UK university to have specialist postgraduate centres in Brussels and Paris. The University has also developed relationships with many leading universities outside Europe and in 2010 launched a new initiative to offer more scholarships to students from Hong Kong and China.

The University is a major economic force in the South East, supporting innovation and enterprise across the region. It is worth £0.6 billion to the economy of the South East, with its students contributing £211 million to that total. It also supports directly or indirectly almost 6,800 jobs in the South East.

Website: [www.kent.ac.uk](http://www.kent.ac.uk)

## Medway School of Pharmacy

The Medway School of Pharmacy is a unique collaboration between the University of Kent and the University of Greenwich. The School received accreditation from the Royal Pharmaceutical Society of Great Britain in June 2008 and is now recognised as an established School of Pharmacy.

The school now has over 600 undergraduates and more than 150 FTE postgraduates (including more than 30 PhD students). The school continues to establish an international research reputation in certain key areas including materials science for drug delivery and biomedical diagnostics. The successful candidate will be expected to make a significant contribution to this expansion.

Website: [www.msp.ac.uk](http://www.msp.ac.uk)

## Job Purpose

This is an exciting opportunity for a research associate to work on a scientific project entitled “Targeting of chemotactic vasoactive peptide receptor signalling in neurovascular diseases”. This project forms part of the “Peptide Research Network of Excellence” (PeReNE) and is funded by the Interreg-IVA program France (Channel) - England. The purpose of PeReNE is to place the Channel region at the forefront of peptide research by bringing together efforts of 23 research teams and 3 core facilities from INSERM, CNRS and Universities of Amiens, Rouen, Caen, Rennes, Brest, Exeter, Southampton, Portsmouth, Brighton, Sussex and Kent ([www.perene-project.eu](http://www.perene-project.eu)).

The scope of the project is to synthesize novel hybrid silica-core-noble-metal shell based nanocarriers and investigate their capacity for the targeted delivery and controlled release of neuroactive peptides into malignant brain tumours. The nanocarriers will be evaluated by the collaborating research team at the University of Rouen, France to ascertain their efficiency of delivery *in vitro* and *in vivo*. Working closely with researchers at Rouen, the design of the nanocarriers is expected to be further optimised to enhance the delivery and the therapeutic effect.

## Key Accountabilities and Key Duties

- To synthesise novel hybrid silica-core-noble-metal shell based nanoparticles.
- To characterise the nanoparticles by a range of analytical tools such as DLS, TEM and qNano.
- To implement bioconjugation strategies to attach neuroactive peptides (e.g. urotensin II) on the nanoparticle surface.
- Validation of the activity of the immobilised peptide on the nanocarrier surface by an antigen induced aggregation assay.
- To liaise with collaborators in Rouen to facilitate optimisation of the physicochemical properties of the nanocarriers.
- The generation and dissemination of scientific data and results through internationally respected peer-reviewed journals, meetings and conferences as well as within the PeReNE network.

### **Other duties**

- Liaise with project members within the department and with colleagues at different sites (e.g. technical, PhD, post-doc and academic staff).
- Work with technical clarity and undertake clear communication – this will be key to the success of the collaborative project.
- Work independently as a researcher including planning and managing own work, making decisions on appropriate resources and use of external networks to share information.
- To ensure that all developed methodologies are appropriately documented and validated for transfer of production to other research staff.
- Communicate the results of the research through written papers and presentations to collaborators and project partners as well as at conferences in order to increase public awareness of the project and the PeReNE network.

Such other duties, commensurate with the grading of the post that may be assigned by the Head of Department or their nominee.

### **Internal & External Relationships**

Internal: Dr Vladimir Gubala (project lead) and Dr Alison Edwards (PeReNE lead) and Mr Mohammed Momin (technical support and project development), Chemistry & Drug Delivery, Medway School of Pharmacy.

Effectively collaborate with staff within the School as well as the Universities of Kent and Greenwich, at all levels of the organisations.

External: Effectively collaborate with researchers at the University of Rouen on the project and more widely to suitably engage with the PeReNE network.

## Person Specification

The person specification details the necessary skills, qualifications, experience or other attributes needed to carry out the job. Applications are assessed against each of the criteria either at application or interview stage. Applications will be deemed unsuccessful if an essential criterion is not met. This may also help you self-select if you are suitable for the role.

### ▪ Qualifications / Training

	Essential	Desirable
Experience in organic synthesis and modern analytical methods to characterize inorganic, organic and bioorganic molecules and systems.	✓	
PhD or equivalent in chemistry or a related field	✓	
Good undergraduate degree or equivalent in Physical Sciences		✓

### ▪ Experience / Knowledge

	Essential	Desirable
Demonstrate expertise in the synthesis and characterization of polymeric nanoparticles	✓	
Experience in working with bioorganic material such as small peptides and antibodies.		✓
Good understanding of bioconjugation techniques.		✓
Evidence of knowledge of fundamental biology and the challenges of drug delivery across the blood brain barrier		✓
Demonstrate precision and accuracy in synthesis and purification of the products on the nano-/microscale		✓
Track record of designing and developing nanoparticulate systems and its application in medical research and drug delivery		✓
Record of peer reviewed publication		✓

### ▪ Skills / Abilities

	Essential	Desirable
Excellent interpersonal skills, both written and verbal	✓	
Excellent in record keeping, organisational and data management skills	✓	
Excellent team working skills, including with colleagues at different sites		✓
An ability to work independently as a researcher / developer		✓

- **Additional Attributes**

	<b>Essential</b>	<b>Desirable</b>
Ability to work effectively with researchers from different fields ranging from undergraduate students to professorial level.		✓
Willingness to share knowledge and skills with other members of the group		✓
Highly motivated and ability to meet deadlines		✓

## Application Process

To apply for this post you will be asked to complete a short form and upload your CV, a one page summary (covering letter) and any other supporting documents. The link to the application procedure can be found by returning to the position details page and clicking on 'click here to apply for this job'.

Applications must be received by the closing date and unfortunately late applications cannot be accepted.

Your application should provide clear evidence and examples demonstrating where you meet the criteria of the post.

If you are invited to attend an interview we will contact you by email confirming the arrangements.

<b>Closing date:</b>	<b>13<sup>th</sup> January 2013</b>
<b>Interviews are expected to be held on:</b>	<b>22/23/24 January 2013 (TBC)</b>

**Redeployment Policy:** Please note that applicants currently on the University of Kent redeployment register will be considered for this post prior to other applicants. For further information on our redeployment policy please visit <http://www.kent.ac.uk/hr-staffinformation/policies/redundancy-redeployment.html>



**Two Tick Symbol:** The University of Kent is proud to operate within the 'Positive about Disability' Employment Pledge (Two Tick Symbol) and guarantee an interview to candidates who declare a disability and meet the essential criteria listed in the person specification.

If you have a disability and require information regarding accessibility of our campus facilities please visit <http://www.disabledgo.com/en/org/university-of-kent>

**Job Share:** Applications to job-share this post are welcomed. If you wish to apply on a job-share basis indicate this on your application and include:

- If you are applying as part of a job-share team (please give name of sharer) or as an individual.
- The proportion of the job you would wish to work, expressed as a percentage.
- Whether you would be interested in the job on a full-time basis if a suitable sharer does not come forward.

**UK Border Agency Immigration regulations:** The University of Kent is unable, under current immigration law, to employ candidates who are not eligible to live and work in the UK.

For academic and research vacancies, or posts that require very specialist skills we can apply for a Certificate of Sponsorship (although there is no guarantee that this will be granted). This is on the basis that the criteria for such applications have been met.

Please refer to the Home Office website if you require further information on their Certificate of Sponsorship procedure/requirements at <http://www.bia.homeoffice.gov.uk/>



## Equality and Diversity

The University of Kent is committed to the provision and support of an inclusive and balanced environment that respects and celebrates diversity. The University has comprehensive Equality and Diversity policy that states our commitments to the various equality strands. Furthermore, we have Single Equality Scheme that outlines our intentions and actions with regards to the race, gender and disability equality duties. Both of these documents alongside other useful guidance can be found on [www.kent.ac.uk/equalityanddiversity](http://www.kent.ac.uk/equalityanddiversity)

**Mediation Service:** the University of Kent Mediation Service provides an Alternative Dispute Resolution Service to all employees. It is completely free and confidential and offers you a positive, collaborative approach to resolving work-place conflict should it arise; supporting the University's collective interest in encouraging two-way dialogue and discussions, where people are able to jointly find solutions to differences.

*2012 winner, Best Newcomer to Mediation – National Mediation Awards.*

## Benefits and Terms and Conditions

▪ <b>Generous holiday entitlement</b>	▪ <b>Competitive salaries</b>
▪ <b>Flexible working</b>	▪ <b>Pension scheme</b>
▪ <b>Childcare facilities/vouchers</b>	▪ <b>Training and development</b>

**Salary: Grade 7:** £31,020 per annum [pro rata if applicable] according to experience and qualifications.

Employees normally receive an increment annually until the top of the scale is reached. In addition there is normally a nationally agreed annual cost of living salary increase.

**Annual Leave:** Whilst there is no prescribed holiday entitlement for **Research** staff, a notional figure of 43 days per annum is applied (pro rata for part time staff); 8 of these days are reserved for bank/public holidays and 5 are 'customary' days when the University closes at Christmas. **Research** staff are expected to make arrangements for reasonable holidays with their line manager.

**Pension:** You will be automatically enrolled to become a member of **USS (Universities Superannuation Scheme)** – a defined benefit pension scheme, although you may choose to opt-out of the Scheme if you prefer.

Staff who commence employment at the University of Kent from 1 October 2011 who are not current members of the USS Scheme (either from their employment elsewhere or at the University of Kent) who wish to join the Scheme will pay an employee contribution rate of 6.5% of salary. The University contributes a sum equal to 16% of salary.

Staff who commence employment at the University of Kent from 1 October 2011 who are current members of USS (either from their employment elsewhere or at the University of Kent) or who have previously been a member of USS and wish to re-join the Scheme will pay an employee rate of 7.5% of salary. The University contributes a sum equal to 16% of salary. *NB To qualify to re-join USS under this arrangement there must not be a gap of more than 30 months since you were last a member of the Scheme.*

**Flexible Working:** The University is willing to consider changes in hours (either short or long term) for all groups of staff, when these are consistent with operational needs.

**Location:** The primary location is at the University's Medway Campus, although the post-holder may be required to work from time to time at other campuses and centres.

**Childcare:** There is an independent nursery on campus. There is usually a waiting list and to inquire about vacancies please contact the manager. Telephone 01227 827676

For full Terms and Conditions please see:  
<http://www.kent.ac.uk/hr-staffinformation/conditions-of-service>