



## *School of Pharmacy PhD Projects 2013*

**Project Title** Formulation and characterisation of novel mucoadhesive, rheologically structured dosage forms designed for the treatment of Xerostomia

**Supervisors** Prof. David Jones and Dr. Gavin P. Andrews

**Description** Xerostomia is a clinical condition in which there is a reduction in/absence of saliva secretion. Patients with Xerostomia have high morbidity due principally to problems with speech, swallowing, recurrent fungal infections and inflammation of the mucosa. Current treatments of xerostomia are largely ineffective due to their poor retention and lubricity properties within the oral cavity. Therefore, the development of new approaches for the treatment of this disorder is required. In the School of Pharmacy we have developed novel formulations for the treatment of xerostomia that offer enhanced retention within the oral cavity due to their unique liquid crystalline behaviour. This project seeks to further understand the unique chemistry of these systems and to investigate their use for the controlled delivery of antifungal and anti-inflammatory agents to the oral cavity.

This 3-year project will give extensive experience in materials science, pharmaceutical formulation and drug delivery as part of an internationally funded research team.

**Start Date** October 2013

**Keywords** Rheology, Drug delivery, material science

### **Contact Details**

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### **How to Apply**

Postgraduate applications should be made using Queen's Online:

<http://go.qub.ac.uk/pgapply>

Please note that there are two application processes: one for admission to the university and another for postgraduate awards.

### **Further Information**

Additional information for prospective postgraduate students can be found on the School of Pharmacy website:

<http://www.qub.ac.uk/pha>

and the Queen's Postgraduate website:

<http://www.qub.ac.uk/home/ProspectiveStudents/PostgraduateStudents/>