## Department of Pharmacology

## Research Studentships for October 2011

The Department of Pharmacology admits 12 - 15 graduate students per year and offers comprehensive facilities for research in a modern building located in the centre of Cambridge and well-equipped for postgraduate training. Research Studentships to study for the Ph.D degree are awarded on a competitive basis and supported by the research councils, medical research charities, industrial sponsors and by University schemes. In addition to these funding opportunities the Department also offers studentships, including <u>The David James Studentship</u>. Details of this, and other funding opportunities, can be found on our website.

The research areas of the Department include: molecular and cellular mechanisms of secretion and neurotransmitter release; receptor cycling; use of atomic force microscopy to investigate molecular structure; molecular mechanisms of sensation; neurodegeneration; control of appetite; mechanisms controlling sleep and appetite; drug action on membrane permeability and regulation of ion channels; angiogenesis and natural products; ion channel structure and function; receptor/intracellular messenger transduction mechanisms; vascular pharmacology; and anticancer drug resistance.

The following Ph.D. research projects are available for October 2011:			
• Regulation of neurotransmitter supply and release		• Regulation and function of inositide kinases	Professor RF Irvine
-	Dr BJ Billups	-	
<ul> <li>Neural circuits regulating behavioural arousal</li> </ul>		• P2X purinergic receptors: their structure, function, regulation and	
	Dr DI Burdakov	physiological roles	Dr RD Murrell-Lagnado
<ul> <li>Cyclic AMP and cancer</li> </ul>			
Professor DMF Cooper		<ul> <li>Structure and function of calcium signalling pathways</li> </ul>	
• Determination of the architecture of NMDA receptors using atomic			<b>Professor CW Taylor</b>
force microscopy P	Professor JM Edwardson	<ul> <li>Multidrug transporters: from microorganisms to</li> </ul>	
			Dr HW van Veen
		<ul> <li>Multidrug resistance and pathogenesis in Pseudomonas aeruginosa</li> </ul>	
			Dr H Venter

Applications are invited from those who wish to study for a Ph.D and who expect to graduate with a good honours degree in pharmacology (or a related subject such as biochemistry, physiology or cellular and molecular biology).

Home students should apply to: Dr LJ MacVinish, Department of Pharmacology, University of Cambridge, Tennis Court Road, Cambridge CB2 1PD. The application should consist of *two* copies of your *curriculum vitae* and *two* copies of your letter of application which should indicate 2 or 3 research projects in which you are interested and should provide *two* academic referees. The closing date is **15 November 2010** with interviews to be held in **early December**. Applicants who are classed as **EU (other than UK) or Overseas Students** for fees purposes **should apply through the Graduate School of Life Sciences by 30 November** (October 15 for Gates USA applicants) at the latest using the procedures described on our website.

Further information is available online: http://www.phar.cam.ac.uk/PhD/index.html