

Current Patents Gazette

Patenting in Context

News & Highlights from week 0803

7TM Pharma is claiming **cannabinoid receptor modulators** in GB0724096. The term 7TM or 7-transmembrane seems to have arrived in the patent literature with the publication of **WO9412365**, an **ICOS Corp** receptor case that became the subject of disputes involving both **SmithKline Beecham** and **Duphar**. SB went on to file more than 50 of its own applications in the field, most of them during 1997 and 1998. As a patentee name however, 7TM emerged only in mid-2002, when 7TM's **WO20254077** was published with claims to methodology for validating drug targets. More than 20 7TM applications have subsequently appeared on related themes, but to date there are no firm links between these cases and drug candidates, and no instances of third party involvement. The company does however have seven reported candidates in active development, two in early clinical trials and five preclinical. The latter include CB₁ antagonists with potential in obesity, from the May 2006 acquisition of **CareX**. The latter's **WO2006133926** relates to pyrazole derivatives acting as cannabinoid CB₁ modulators, but the current application may indicate that the search for a candidate with clear development potential continues.

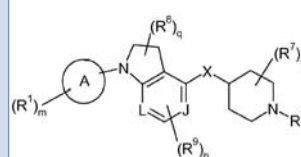
Lectus Therapeutics has filed (GB0723794) in order to protect **potassium ion channel modulators and their use**. The Babraham-

based company was established in 2003 in order to exploit its proprietary **LEPTICS ion channel screening technology** to discover modulators with enhanced safety profiles, targeting urinary bladder disorders, pain and angina in particular. **Takeda Research Investment** and **Astellas Venture Management** are among the institutions contributing funding to this effort, and a key event was the June 2006 acquisition of electrophysiology specialist **NeuroServe**. By chance, it seems, notification of this patent filing by Lectus coincides almost exactly with the publication on January 10, 2008 of the company's first international patent application, **WO2008004010**; this names **Roger Mason** as inventor and relates to multi-electrode arrays. The timing of that original UK application however, on July 07, 2006, seems not to be coincidental, since it closely follows on from the **NeuroServe** acquisition. Thomson Scientific analysts noted two previous Lectus applications relating to ion channel modulators filed during the first half of 2007, and it is possible that all three pending applications will shortly be cognated into a single PCT application with an estimated publication date in August 2008. At the time of the earlier filings, a link was noted between Lectus CEO, **Dr Roland Kozlowski**, and a dozen assay technology patents in the name of a company he was previously associated with, **Procgonia**.

Apitope Technology has lodged a new application (GB0723712) with the UK intellectual property office entitled **peptides**. To date, this **University of Bristol** spin-off's IP portfolio appears to be quite slim, comprising claims to a method for selecting a tolerogenic peptide in **WO216410** and the use of tolerogenic peptides from myelin basic protein for the treatment of multiple sclerosis in **WO3064464**. More recently, the company filed an initial UK application covering disease markers (GB0707933) in early 2007. From Apitope's website, it appears that their main development programs are targeted at multiple sclerosis and hemophilia. **ATX-MS-1467**, an MS therapy, has been undergoing phase Ib/IIa trials which were scheduled to be completed by the end of 2007. Alongside this, the company is developing an MS diagnostic blood test; a clinical study is in progress with the product expected to launch in late 2009. Apitope's hemophilia program, **iATX F-VIII**, has been focussing

on the identification of apitopes to prevent Factor VIII inhibitor formation. Interestingly, in the context of the current application, the company has reported that it expected to nominate a product candidate in late 2007.

Dr David Cavalla is seeking protection for a **treatment of cachexia** in a new UK initial application (GB0723757). This follows on from two UK initial applications targeting the same indication from this inventor which were filed in early 2007. Dr Cavalla, who is also the founder and CEO of **Arachnova Therapeutics**, gave a presentation discussing the advantages of therapeutic switching or generic substitution and the discovery and development of secondary uses for existing drugs with particular reference to case histories in the field of cachexia at the ACS Fall Meeting in Boston in August 2007. It is not clear whether any significance can be read into the fact that all three cachexia applications have been filed personally.



First patenting from GSK on GPR119 agonists for treating diabetes

UK Initial Applications

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A0 applications filed December 3rd - December 9th 2007 – expected to see publication in early June 2009

• **Drug Delivery Solutions** (DDS) has lodged a new UK application (GB0723728) covering a **topical composition**. This application claims additional priority from an EP and a US application and may see publication earlier than would normally be expected, in August 2008. DDS, established in Leatherhead in early 2005, signed a collaborative agreement with **Disperse** in July 2005 to use the latter's patented technology to develop new means of drug delivery. This technology includes biliquid foams suitable for use in topical pharmaceutical formulations, initially claimed in **WO2005011643**, and subsequently published by DDS as **EP1656121** and **EP1653923**. These biliquid foams may also be used for surface coatings as disclosed in **EP1664211**

• **ImmunoSolv** has filed a new UK initial application (GB0723797) claiming a **method**. This appears to be the first patent application from this company. Edinburgh-based ImmunoSolv was incorporated in October 2005 and is focussing on the development of disposable devices to remove dead and dying cells and debris from cell cultures for biomedical research and biomanufacturing sectors. The company reports that it has developed novel monoclonal antibodies that bind to dying and dead cells, particularly **imab6**; this novel monoclonal antibody binds effectively to dying cells prior to loss of membrane integrity similarly to the established reagent **annexin V**, but without high concentrations of calcium required for efficient annexin binding. Potential applications for the device include improved

recovery of cells post-revival from freezing, improved transfection efficiency and cell growth at higher density

• **Leica Biosystems Newcastle** is claiming a **ligand and method** in GB0723879. Inclusion of its location in the company's name at first appears helpful in distinguishing it from a similarly-named division of **Leica BioSystems** based in Melbourne, previously known as **Vision BioSystems**. However, it emerges that both the Australian company and the current patent applicant, situated on the Balliol Business Park in Newcastle on Tyne, are subsidiaries of **Leica MicroSystems** of Wetzlar in Germany. Leica Mikrosysteme GmbH is a prolific patentee, principally in the field of precision microscopy and associated laser technology.

Only rarely does the company file patent applications in the field of drug discovery, which seems to apply to the present filing. The Newcastle facility is described as home of the **Novocastra** range of antibodies and reagents, contributing to the company's comprehensive histopathology product portfolio.