

SIgN Immunology Seminar

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Host: Prof Philippe Kourilsky
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Date: Monday, 14th November 2011
Time: 2.00pm – 3.00pm
Venue: SIgN Seminar Room, Immunos Building Level 4, Biopolis

Searching the commercial perspective of antibody research: an “engineering” solution

Antibody drug has become as an innovative concept following the landmark invention of hybridoma in 1975. Whereas this technology wave brought only three drug products with relatively minor impact to the medical society, mastery of cDNA cloning technology, most notably the display technology pioneered by phage display, led the industrial into an era of full-scale antibody technology development, in which ~30 antibody drugs have been born. Today, major players of the field are big pharmaceutical companies who have consolidated vital estates of the technology landscape, they are eager for opportunities to expand their product pipelines. The dominant agenda of this post-technology era is product development and betterment. With availability of various technologies in today's world, what kind of environment the basic research community is in? What are the new opportunities? What are the issues of antibody drug development? In light of the pending questions, three basic facts will be highlighted with analysis of industrial cases: The market of biologic drugs (antibodies and other protein therapeutics) has become highly successful and mature; Whereas armed to the teeth in technology, pharmaceutical industry is facing the reality of an anemic pipeline and expiration of the patents of their blockbuster drugs; The driving force of commercial value of antibody research derives from industry, especially large pharmas. Understanding relevant concerns and their decision making process is the key to address issues of the commercial value of antibody research; nonetheless, the know-how and capability of protein engineering will bridge substantial contribution to the future, a solution we can possibly take advantage rather than bypass.