

TOULOUSE

Center for Research in Management

Séminaire du 15 mars 2013 Salle J 323

10h00-12h00 : <u>Finn Valentin</u>, Copenhangen Business Schcool, « Pathways from opens science to invention impact »

Abstract: This paper studies research directly underpinning inventions in biotech firms and its corresponding technological impact. Invention Specific Research (ISR) is characterized by its performance in open science in terms of the number of papers it generates in peer reviewed journals and their forward citations. The relevance of scholarly strong ISR is higher for particular types of issues in company R&D some of which are directly related to technology creation, such as inventions requiring solutions within narrow optima or implying expansion of the knowledge base of the firm. For both types of R&D issues we find that scholarly strong ISR leads to significantly higher technology impact and value. When ISR without specification to particular tasks in technology creation obtains lower technology

impact of its inventions arguably it is because of its concentration in the explorative parts of company R&D. Whereas most previous literature has addressed the role of scholarly strong company research at the analytical level of the firm we find invention-level effects to be considerably stronger. Contrary to notions that have gained wide acceptance the thrust of this paper is that in the generation of science-based inventions scholarly research and technology represent highly related, if not identical, lines of thinking