Welcome to Research Seminar with Søren Salomo!

**Time:** 13:15, Tuesday, May 29

**Location:** Korsvägen 2456, Vera Sandbergs Allé 8, 411 33, Göteborg

**Title:** The influence of network characteristics on clinical trial costs in pharmaceutical new product development

**Abstract**

This study analyzes the cost drivers in inter-firm new product development (NPD) networks, with a focus on clinical trials as a time consuming and costly part of pharmaceutical drug development. Within clinical trials, pharmaceutical firms involve and pay clinical investigators for their development and testing activities. Combining network theory and the literature on bargaining power, we suggest that clinical trial costs depend on tie strength and on network characteristics such as the degree of network density, exclusiveness of network partners, geographical distance, and involvement of intermediaries (clinical research organizations) in network management. Thereby we focus the trade-off between efficiency gains through collaborative learning processes and increased relative bargaining power of partners in networks. The developed hypotheses are tested with unique longitudinal R&D partnership data from 33% of all the clinical trials in the pharmaceutical industry from 1988 to 2010 in North America, Europe and Asia. The results go beyond our current understanding and empirical evidence on NPD networks and as such contribute to the management of NPD networks in various industries. Exclusive collaborations that are geographically close to each other reduce clinical trial costs, while involving intermediaries only becomes relevant for non-exclusive partnerships and geographically dispersed networks. Clinical trial costs increase in dense networks, reflecting the relevance of structural holes for control and information advantages and the increase of bargaining power if NPD partners form coalitions. Tie strength does not influence clinical trial costs, underlining the potential trade-off between the value of strong and weak ties. This study enhances the relational and network view by integrating the bargaining power perspective to understand the benefits and downsides of specific network structures.