

## **Contracting for Innovation Under Ambiguity**

**Swagata Bhattacharjee,  
Ashoka University**

**Date: 28.09.2018, Venue: C13 @ 2.30 PM**

### **Abstract**

In the research intensive sectors, eg. Biotechnology and Software sectors, it is a prominent and growing trend for the big commercial firms to outsource the research activities to smaller but research-oriented firms or research labs. In this paper, I provide an explanation based on the specialization to deal with research specific uncertainties or ambiguities. I model innovation as an ambiguous process, and assume that the commercial firms and research labs differ in their attitude towards ambiguity. I characterize the sequence of short term contracts between the ambiguity averse commercial firm and ambiguity neutral research lab, and examine how the special features of the optimal contract facilitates ambiguity sharing. I find that the commercial firm's ambiguity aversion mitigates the dynamic moral hazard problem. Experimentation stops earlier than is socially optimal. There is a range of posterior beliefs for which the contracting parties choose to liquidate the project even after being granted a Patent, which resembles the "Patent Troll" phenomenon often observed in real life. Finally, I discuss the policy implications, examining how the Patent Law affects innovation conducted in these research alliances.

### **Speaker Profile:**

<https://www.ashoka.edu.in/welcome/faculty#!/swagata-bhattacharjee-96>