Research on Innovation Promotion of interdisciplinary research projects

Knowledge Management in Laboratories

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Activities

We analyze individual tasks of each laboratory from the viewpoint of cultural anthropology, and conduct fundamental studies for the improvement of research performance.

This study can be considered as basic research for *improvement of research performance* via heuristic investigation, performed with the cooperation of biotechnology laboratories and researchers in the field of cultural anthropology. Though highly significant, such cultural anthropological and sociological research conducted in cooperation with experimental laboratories has not been carried out in Japan. This study is based on the need for research in this important area.

In this research project, several research subjects are being examined concurrently.

- (1) Questions regarding the relationship between the computerization of experimental data and laboratory management:
 - To improve information-sharing inside laboratories by computerization of research notebooks and related information, in order to optimize the technology of data computerization for the management of organizational control and resource allocation, and for performance improvement.
- (2) Improved understanding of the practices of scientific knowledge production through the application of learning theory:
 - Questions concerning the organizational socialization process of newcomers, who are graduate students (the process of forming individuality as researchers and as equal members of an organization). How do researchers (graduate students) form and develop themselves as researchers? How do they understand the organizational structures and experimental environment in laboratories, which are small organizations?
- (3) Application of organizational theory, specifically the application of new sociological insights, to laboratory research:
 - To verify the actual attitudes of specific laboratories toward customizing and adjusting to a configuration suitable to match the external environment, and to verify the adaptive strategies of individual researchers in social and institutional contexts, which can be separated into *the logic of learning and education* and *the logic of the market (industrialization)*, by comparing several laboratories.

Members

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