Innovation Activities and Regional Med-Tech Partnerships in Japan

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Background

Despite the decline in innovation activities since the 1990s, Japan is currently experiencing a rise of *ikō renkei* (医工連携, med-tech partnerships) at the interface between academia, industry and hospitals. These partnerships follow a different mode of innovation compared to conventional university-industry linkages (産学連携) as they are medical need-driven instead of technology seed-driven. However, while there is no clear definition of *ikō renkei*, the term points to boundaries between medicine/engineering, or clinical workplace/manufacturing.





Import-export ratio of Japan, 2011 (Unit: Billion Yen)

Research Question

Case II: Medical Device Development Promotion Center (Koriyama)

- 2005: established as intermediary organisation, since 2016 operating of a clinical R&D and testing site (most advanced in Japan) with 55 employees with various specialisations
- > purpose: reviving the economy in the Fukushima region
- renting-out of highly specialised med-tech laboratories and training rooms to hospitals, companies and students
- > medical lectures (up to 200 attendees), trainings, exhibitions
- strategic partnering and establishing of contacts with collaboration partners within and across the region
- proximity to the Kanto region is an incentive to attract highly qualified human resources (Shinkansen Station)

Concluding Remarks

- How far does the institutional context and STI policy in Japan influence the emergence, structure and innovation activities of med-tech partnerships in Japan?
- Which role do intermediary organisations such as regional matching-hubs play in fostering med-tech partnerships?

Data and Method

By employing a multiple-actor perspective, this research explores cases of med-tech partnerships in Japan and their innovation activities. This exploratory study consists of an interview study with central actors of academia, industry and medical institutions regarding single cases of med-tech partnerships. In addition, it investigates the institutional contexts by paying particular attention to boundaries: national and regional authorities, social insurance, and support schemes throughout the field of study.

Preliminary Findings

Case I: HAMIQ - Healthcare and Medical Device Industry in K(Q)yushu

Matching-hubs provide resources, knowledge and regional infrastructure for knowledge-based innovation. They improve the opportunity structure for med-tech partnerships within and across the region. They attempt to develop alternatives to declining industries and population in their region. More precisely, they foster strategic partnering and networks to overcome boundaries and increase collaboration.

In addition, networks and strategic partnering between center regions and periphery seems to be important as well as between regional centers and local communities. Nevertheless, while HAMIQ goes beyond a prefectural vision of economic revitalization, the Medical Device Development Promotion Center retains the focus on the prefectural economy.

References

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- 2013: initiated top-down by METI and the Cabinet Office
- Strategic partnering within and across the Kyushu region (広域連携: "all Kyushu" as regional cluster)
- information, consultation, networking, subsidies, matching events, seminars, trainings
- > platforms (*madoguchi*) within clinics and hospitals
- strategic matching with partners in the central regions is crucial (large firms, esp. the University of Tokyo)
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