

Diffusion of immunological innovations in Russia at the turn of the 19th/20th century

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The 19th century was marked by the emergence of new disciplines such as bacteriology, immunology and hygiene and it was characterized by important research and international collaboration of scientists in Europe. The establishment of those disciplines was stimulated by the development of new methods and techniques in medical sciences and by fighting against infectious diseases. The works of Louis Pasteur (1822-1895) formed a basis for the experimental immunology. His experiments with the fowl cholera let him not only develop a vaccine against it in 1880, but also discover a vaccine as the method of prevention against infectious diseases. The success of his first vaccines found a broad response in the scientific and public circles in different countries, including Russia [1].

The diffusion of the immunological innovations in Russia at the turn of the 19th-20th century proceeded at multiple levels. It was not only the acquisition of new techniques and know-hows, but also the transfer of objects (such as bacterial or vaccine strains). The knowledge exchange in practical contexts means an interaction between theoretical and applied studies. In immunology, as in other disciplines, new knowledge was often developed from the practical requirements, which in return produced new issues for the theoretical research. During the transfer process the local knowledge was acquired and then forced out. Thus the knowledge became at last international [2]. Because the transfer process of immunological research ran in both directions we can speak about diffusion or knowledge/scientific exchange rather than transfer, because transfer can go only in one direction. The current paper makes an attempt to analyze the diffusion of the foreign (French, German) innovations in Russia by discussing exchange practices and how successful they were.

References

- [1] Elizabeth A. Hachten: *Science in the Service of Society: Bacteriology, Medicine, and the Hygiene in Russia, 1855-1907*. Diss. Madison 1991; Oxana Kosenko: *Kampf der Zellen. Die Entstehung der Immunologie im Wissenschaftsdreieck Russland - Deutschland - Frankreich*. Aachen 2015.
- [2] Michael Ash: *Wissens- und Wissenschaftstransfer: Einführende Bemerkungen*. *Berichte zur Wissenschaftsgeschichte* 29/3, 181–189 (2006).

