Abschlussbericht Teilprojekt 14.1

Projekttitel: Etablierung eines Netzwerks für Tiermodellsysteme zur Untersuchung der viralen Hepatitis

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1. Zusammenfassung:

Animal models are of central importance for studying virological and immunological aspects of viral hepatitis and for evaluating novel antiviral agents in preclinical studies. The aim of project 14.1 was to promote horizontal networking among research groups working with hepatitis animal models throughout Germany.

To achieve this goal a national HepNet workshop on models of viral hepatitis was organized for the first time in the previous funding period. The two-day workshop was held in February 2003 in Elmau, Germany. Leading experts on hepatitis animal models reported new scientific results and evolving methods in various animal models. Another workshop should take place in 2007.

As a result of the workshop 2003 collaborations were either initiated or intensified, i.e. the start-up-fund project between the groups of Dr. Urban, Heidelberg, and Dr. Petersen, Hamburg, could be initiated (see report 16.1).

The data presented at the workshop 2003 was summarized in a book ("Models of Viral Hepatitis"; F. von Weizsäcker, Michael Roggendorf, Editors, Monographs in Virology Vol. 25, Karger, Basel, Switzerland, 2005) and published in the current funding period.

2. Ziele des Projects:

- Acceleration of the translation of basic antiviral research into clinical practice by joining the resources of animal models available throughout Germany.
- Planning of regular informal meetings to exchange novel scientific results, materials and methods.
- Planning of preclinical studies jointly to make optimal use of the respective models and to avoid redundant experiments.
- Integration of selected international experts for external review and for exploring opportunities of international networking.

3. Wissenschaftliche Ergebnisse

Following the scientific workshop entitled "Model of Viral Hepatitis" in February 2003 at the Conference Center, Elmau, Germany, the coordinators of the network "animal model", Prof. F. v. Weizsäcker and Prof. R. Roggendorf published the conference proceedings in a book entitled "Models of Viral Hepatitis"; F. von Weizsäcker, Michael Roggendorf, Editors, Monographs in Virology Vol. 25, Karger, Basel, Switzerland, 2005. This comprehensive book summarizes the current state of the art of animal model systems for the study of viral hepatitis. In twelve individual chapters, international experts in the field describe and discuss new scientific results and evolving methods in viral hepatitis model systems.

4. Aims for the last funding period

Following the discovery and establishment of a novel tissue culture model system for the study of HCV infection by the laboratories of R. Bartenschlager, C. Rice and F. Chisari in June 2005, we expected substantial progress for hepatitis C virus research and the development of novel animal model systems for hepatitis C virus infection within this and the next year. Thus, we aimed to organize a second model system workshop in 2007 focussing on the application of this novel tissue culture model system for viral hepatitis research and the development of animal models. We therefore planed an extension of our contract (Laufzeitverlängerung) to use the remaining funds of this period for this second state-of-the-art Hep-Net viral hepatitis meeting in 2007. However, this second meeting could not take place because the BMBF did not approve the extension of our contract into 2007.

5. Publikationen und Patente

"Models of Viral Hepatitis"; F. von Weizsäcker, Michael Roggendorf, Editors, Monographs in Virology Vol. 25, Karger, Basel, Switzerland, 2005.