

**e-ASIA Science Talk Luncheon**  
**at the '15th International Conference on Emerging Infectious Diseases (EID)**  
**in the Pacific Rim'**  
**Sponsored by Japan Science and Technology Agency (JST)**  
Tuesday 12th March 2013

**Discussion Report**

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**Research Specialism: Viral Hepatitis**

1. What are the current 'hot topics' of research and their significance within your specialism?

Characterization of innate immunity using cell resident in the intrahepatic environment. There is a limited understanding (particularly in human) of intrahepatic immunity.

Other problem in the region connected with HBV infection is the pathogenesis of vertical HBV infection (mother to child). This infection modality is the cause of the most of the cases of chronic HBV infection.

HEV infection is associated with poor sanitation, particularly in rural areas, and is a sporadic problem in developed countries. Infection is typically limited, but can be severe in pregnant women. A vaccine has been developed in China, but questions remain as to how/if it will be widely deployed in the region.

2. Within the field of 'Infectious Diseases', what areas/diseases are prioritized by the countries represented at your discussion?

In our table there were people working in Hong-kong, Singapore and Japan (in addition to USA). As such the discussion was mainly related to HBV and HCV infection with more emphasis on HBV that is a bigger problem in Asia.

One of the topics was the universalization of HBV vaccine. It has been proved to be effective; however, there are some cases in Taiwan that the individuals who were vaccinated in early stage became infected when they reached the adult age. Therefore, duration of vaccine effect may require caution.

3. In the countries represented at your discussion, what national or regional programs/initiatives/plans were mentioned that are relevant to research within your specialism?

We discussed the fact that Singapore is still not the Member of the e-ASIA JRP. JST and the e-ASIA JRP Secretariat will keep promoting the participation of Singaporean funding agencies like A\*STAR or NEA so that the regional collaboration will be enhanced.

Moreover, the Program shall consider expanding the prospective Memberships to other countries such as Bangladesh since there is no national or regional border for infectious diseases.

4. What potential areas for multi-lateral research cooperation were identified between the countries represented at your discussion? What research areas within your specialism would benefit from multi-lateral joint research?

We discussed the necessity to plan cooperation in setting clinical trials testing new therapeutic strategies like adoptive transfer of TCR-redirected T cells in HBV related hepatocellular carcinoma. There is a need to gather clinical data on the outcome of new therapy in human or very relevant animal model (chimps).