

## PROPOSITIONS

### TO THE THESIS

#### **“Hepatitis E Virus Infection: Pathogenesis and Therapy”**

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1. In case of hepatitis E virus (HEV), reduction of immunosuppression is the primary intervention strategy to achieve viral clearance, otherwise treatment with off-label antivirals, in particular ribavirin, should be considered. (*This thesis*)
2. PI3K-PKB-mTOR pathway limits HEV infection through 4E-BP1 and acts as a gate-keeper limiting viral reproduction in human HEV target cells. (*This thesis*)
3. HEV is neurotropic *in vitro* and *in vivo* in mice, monkeys and probably human beings. This suggests HEV infection as a possibility in idiopathic neurological disease. (*This thesis*)
4. IFN- $\alpha$  treatment exerts moderate but delayed antiviral activity against HEV infection in experimental models and in patients. However, constitutive IFN pathway signaling can effectively protect against HEV infection. (*This thesis*)
5. The cap-dependent translation machinery plays a critical role in HEV infection, aiding efficient HEV replication. (*This thesis*)
6. The way that can be told of is not an unvarying way. The names that can be named are not the unvarying names (*Laozi, Tao Te Ching*). Similarly the notion that HEV is a hepatotropic virus is not an eternal and unchangeable truth, as it appears neurotropic. Thus HEV is misnamed as a hepatitis virus.
7. If you only read the books that everyone else reads, you can only think what everyone else is thinking (*Miyazaki Hayao*). This notion is illustrated by the constant novel aspects that continue to emerge in viral hepatitis, despite the immense amount of knowledge already available.
8. Any intelligent fool can make things bigger, more complex and more violent. It takes a touch of genius — and a lot of courage — to move in the opposite direction. (*Albert Einstein*). Likewise, in “the age of big data”, abstraction is the most important thing for developing ideas, not the megadata that cannot be handled and comprehended by our brain.
9. What gets us into trouble is not what we don't know. It's what we know for sure that just ain't so. (*Mark Twain*) Indeed, cerebral mechanisms filter information of an antipathy we feel, which can act as a protective barrier for us.
10. Science is to sort out the facts so that general laws or conclusions could be drawn. (*Charles Robert Darwin*). The “On the origin of species” by this author is maybe the most dramatical example of this adialogum.
11. Faith is the bird that feels the light when the dawn is still dark. (*Rabindranath Tagore*)