

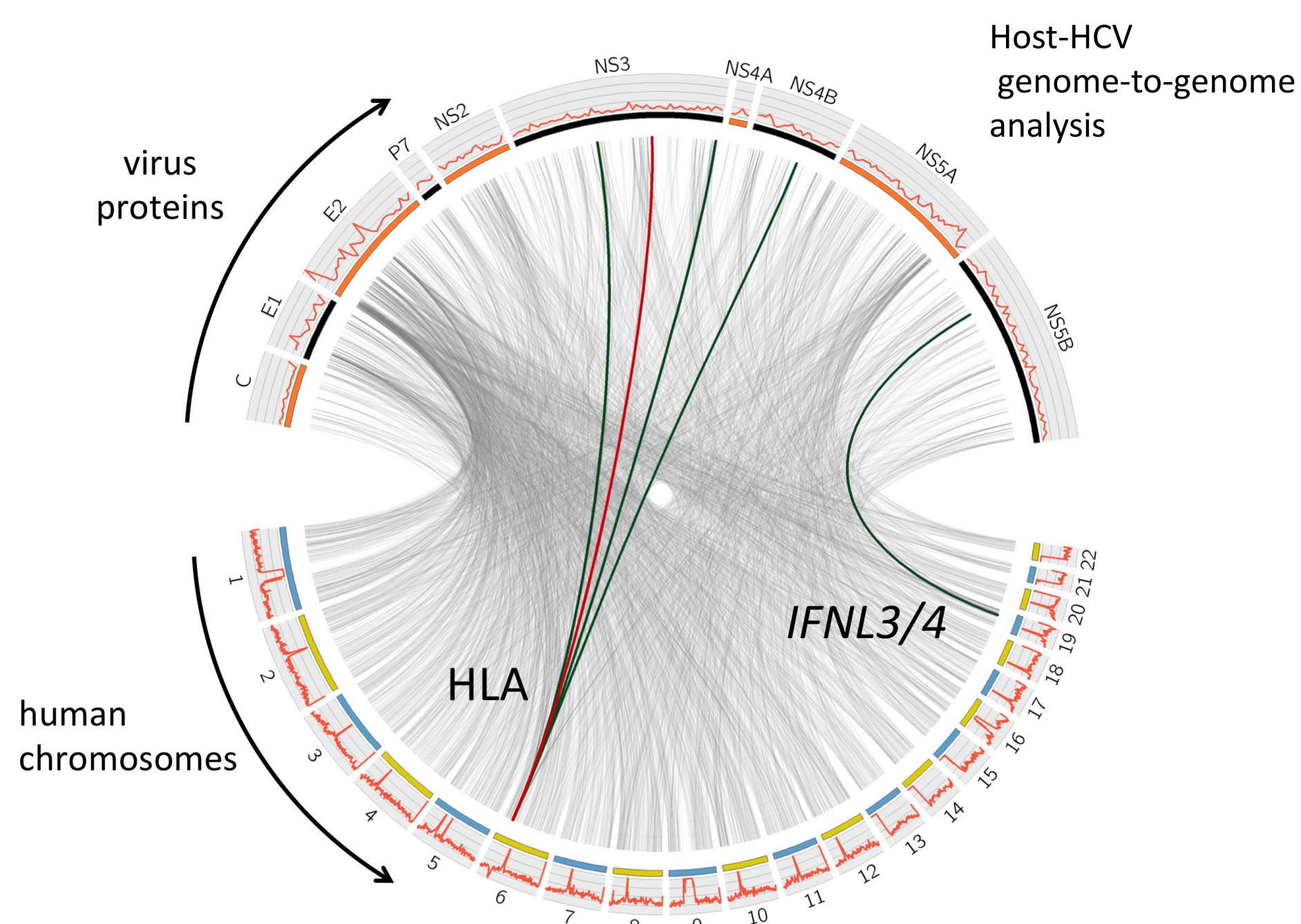
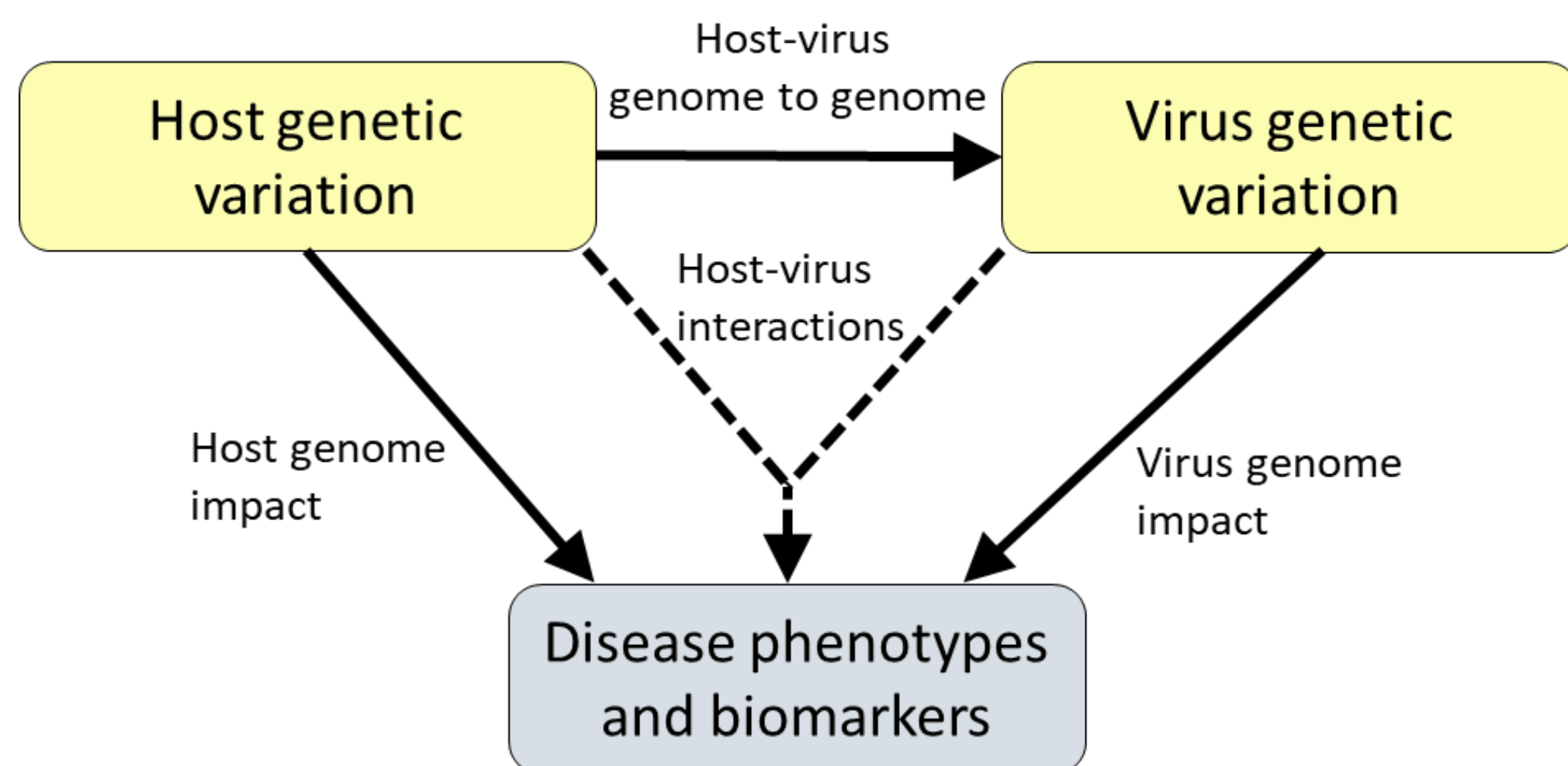
Investigating the role of host and virus genetics in viral hepatitis outcomes



Dr Azim Ansari, University of Oxford

Biography

I have a degree in Engineering and a PhD in Statistics and currently I am a group leader at the University of Oxford, specialising in studying how genetic variability in patient and virus affect infection outcomes.



What is your research focus, and what impact has your work had?

As a statistical geneticist, the overall theme of my research is understanding how patient and virus genetic variation, and the interaction between the two, results in differences in clinical outcomes of hepatitis C and hepatitis B virus infections.

Viruses rely heavily on the cellular machinery of their host for replication, and production of virus particles involve interactions between viral and host proteins.

By conducting association tests between genetic variations of the host and the virus, we can unveil these molecular interactions and identify regions of 'genomic conflict'. Our findings can help in development of more effective vaccines, drug targets and novel immunotherapies.

How will you use the Emerging Leaders Prize funding?

- **Attending an EMBO leadership course** to develop leadership skills, including communication, decision-making, delegation, and conflict resolution.
- **Investigating the transcriptomics of liver biopsies** from individuals infected with hepatitis C virus. By generating genome-wide transcriptomic data from a large dataset of 200 liver biopsies, this study is set to provide valuable insights into the host antiviral responses and immune system's role in HCV infection.
- **Providing novel insights into the molecular mechanisms underlying Liver Disease** and its association with immune response, ultimately contributing to advancements in preventing, diagnosing, and treating the disease.

