

## **Controlling HCV replication by Interferon-inducible ER protein and autophagy**

**JOOYEON YOO, Ph.D.**

Department of Life Sciences, Pohang University of Science and Technology,  
Pohang, Korea

The ER plays several essential roles in the regulation of the HCV life cycle, as viral protein biogenesis, viral genome replication, and viral particle assembly occurs at the ER or in an ER-related compartment. Infected HCV mainly localizes in the ER membrane, which is considered to be the source of the autophagosomal membrane. We specifically searched for new IFN-inducible molecules that are capable of controlling replication of HCV in the ER compartment. In the present work, I will talk about molecular and cellular evidences of selective autolysosomal degradation and restriction of HCV, mediated by interferon-inducible host factor SCOTIN.