

## ABSTRACTS

The primary cilia has been found to be a key organelle for various cell signal transduction pathway, such as Hedgehog, wnt, and Notch pathway. Due to this reason, the primary cilia has an increased interest of research. The defects of primary cilia are usually referred to as ciliopathy, which will result in the disorder in the development of the cell. Some of the lethal syndrome is caused by the absence of Retinitis Pigmentosa GTPase Interacting Protein-1 Like Protein, also known as Rpgrip1l. It is a protein is found in the transition zone of primary cilia, and was found to play a crucial role to the formation of the structure of primary cilia. The protein has three domains; CC domain, C2 domain, and RIDL domain. This study aims to create a construct of *RPGRIP1L* with truncated RIDL domain as a stepping stone of observing the function of the domain in related to the ciliopathy. However, the construct that contain the truncated gene was not achieved as suggested by colony PCR. It is hypothesized that it is due to the presence of recombinant plasmid, and/or mutation of the sequence. However, further confirmation with sequencing is required.