

Dr Low Boon Chuan

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Citation

"For his research on signaling mechanism of cells."

Dr Low's research contributes to the identification of novel signaling proteins, or parts of proteins called "domains" that are important in controlling cell dynamics such as changes in cell shape and cell movement. These events can further govern various cell fates such as cell division, cell growth, cell death and formation of tissues or development of organs.

Dr Low discovered one novel protein domain termed "BCH domain". He also pioneers studies that demonstrate the effects of BCH domain on signaling for cell dynamics via interaction with key molecular switches in the cell. Using biochemical, molecular, cellular, proteomics and bioinformatics tools, his original work showcase such unique protein domain as novel checkpoints for cell dynamics control. His discovery raises great prospects that proteins carrying BCH domains could serve as new targets for manipulating cell fates by drug or peptide-based intervention.

For his research on signaling mechanism of cells, Dr Low Boon Chuan is awarded the Young Scientist Award 2003.