

## **Seminar**

### **Total Chemical Synthesis of L and D- Nectin-4 First Ig-like Domain**

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Cancer is a group of diseases that involves abnormal cell growth and could spread to other parts of the body. Targeting the proteins which control the growth or division of cancer cells is one way of treating cancer. Nectin-4 is one such protein target. It is a cell adhesion protein and is upregulated in breast, ovarian, lung, gallbladder and gastric cancer. There have been reports of an Antibody Drug Conjugate (ADC) “Enfortumab Vedotin” and a bicyclic peptide drug conjugate against Nectin-4. A properly engineered D-peptide/protein-based inhibitor or drug conjugate will have greater stability, higher efficacy and less immunogenicity. We set out to target the IgV domain with D peptide drug conjugate using mirror image phage display. As a first step, in my M.Sc. research, I chemically synthesised the L- and D- Nectin-4 first Ig-like domain, which would then be used to find a D-peptide/mini-protein binder of Nectin-4 using phage display in future.

***Monday, Jul 1<sup>st</sup> 2024***

***11:30 Hrs (Tea / Coffee 11:15 Hrs)***

***Auditorium, TIFR-H***