SRM UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF BIOINFORMATICS

BI0312- IMMUNOINFORMATICS LABORATORY

Semester: VI   **Course: Immunoinformatics Laboratory**
Sub Code: BI0312   **Staff Handling: Ms.P.Rathi Suganya,**
                                                                  Mrs.Priya Swaminathan, Dr.Lilly M. Saleena

Hrs/Week: 2

Practical sessions	Topic	Learning outcome
1	Immuno informatics – Epitope prediction	
2	Target recognition & Domain analysis	• Objective is to find a vaccine candidate for a causative protein
3	MHC-I binding sites predictions using BIMAS for genome polyprotein	
4	MHC-I binding sites predictions using BIMAS for domain sequence	
5	MHC-I binding sites predictions using SYFPHEITI for genome polyprotein	• Using online tools epitopes recognized by various MHC I and MHCII molecules are recognized
6	MHC-I binding sites predictions using SYFPHEITI for domain sequence	
7	Proteosome cleavage prediction	• The most Promiscuous epitopes are suggested as good vaccine candidates
8	MHC-II binding sites predictions	
9	Promiscuous regions predictions	
10	Domain modeling using swiss model	
11	Sequential epitope prediction using swiss pdb viewer	
12	Conformational epitope prediction using swiss pdb viewer	

REFERENCE BOOK
• **Lab Manual**

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