**Course: Advanced Bioinformatics**

**Module title: Cell Signaling Ontology**

**Module no. : 75**

Human Genome Center of Tokyo University started to develop the Cell signaling ontology.

Based on the knowledge from the database for cell signaling networks (CSNDB).

The purpose of the project is to extract common natures of the cell signaling in the model species to find.

What is cell signaling and how we can reconstruct cell signaling system in computer?

In many cases it captures the same concepts as the GO but still has much less levels of hierarchy.

**GlycO**

Description of glycomics

Models the biosynthesis, metabolism, & biological relevance of complex glycan.s

Models complex carbohydrates as sets of simpler structures that are connected with rich relationships.

An ontology for structure and function of Glycopeptides.

Published through the National Center for Biomedical Ontology (NCBO) and Open Biomedical Ontologies (OBO).

**EnzyO**

The enzyme ontology highly intertwined with GlycO.

Structure is mostly that of a taxonomy.

Highly restricted at the class level.

Allows for comfortable classification of enzyme instances from multiple organisms.