**Course: Advance Bio Informatics**

**Module Title: Ontology of Autism**

**Module No: 78**

**Ontology of Autism**

* Genetics
* Teaching and training
* Reinforces and stimulus
* Sensory and auditory response
* Stereotypy and behavioral problems
* Language disorders and vaccination

**Autism**

1. Qualitative impairment in social interaction

a) Marked impairments in the use of multiple non-verbal behaviors such as eye-to-eye gaze, facial expression, body posture, and gestures to regulate social interaction.

b) Failure to develop peer relationships appropriate to developmental level.

c) A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people, (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people).

d) Lack of social or Emotional reciprocity

(2) Qualitative impairments in communication as

1. Delay in, or total lack of, the development of spoken language   (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime).
2. b) In individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others.
3. Stereotyped and repetitive use of language or idiosyncratic  language.
4. Lack of varied, spontaneous make-believe play or social  imitative play appropriate to developmental level.

3) Restricted repetitive & stereotyped patterns of behavior,  interests and activities

a) Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus.

b) Apparently inflexible adherence to specific, nonfunctional  routines or rituals.

c) Stereotyped and repetitive motor mannerisms (e.g. hand or finger flapping or twisting, or complex whole body movements)

d) Persistent preoccupation with parts of objects

**NDAR**

National Database for Autism Research

Develop standards to promote meta-analyses& cross site research data comparisons.

Provide researchers access to useful sw tools and infrastructure.

Promote sharing of research data relevant to AD.

