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Review Article

# How and why did the Brain Evolve? What are the Molecular Determinants of Individual Brain Development? How Lactic is are Matured Brain?

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## Abstract

Brain theory

Development of brain starts from embryonic stage ASPM gene.

Is responsible for the Development of the brain.

Aim: Observing different brain of the animals and comparison with human brain

Apparatus: Dissected brain of human, amphibian, Aves and reptiles

Procedure

Observe structures in the microscopes.

Observation: Different stages of development of the brain was observed according to need .no convolution in aquatic to amphibians

Little convolution in reptiles to small mammals

Highly convoluted and specialised brain in human

Why and how did brain evolve.

Brain evolved as a central functioning unit because as organisms.

**Keywords:** Development of Brain; Neurology; Neuroscience; Embryonic Stage; ASMP Gene; Embryology

## Introduction

### Brain theory

Development of brain starts from embryonic stage ASPM gene [1]
Is responsible for the Development of the brain.

- **Aim:** Observing different brain of the animals and comparison with human brain
- **Apparatus:** Dissected brain of human, amphibian, Aves and reptiles

### Procedure

Observe structures in the microscopes.

**Observation:** Different stages of development of the brain was observed according to need .no convolution in aquatic to amphibians

Little convolution in reptiles to small mammals, Highly convoluted and specialised brain in human Why and how did brain evolve.

Brain evolved as a central functioning unit because as organisms.

Start increasing in size and start developing new structure than DNA modified accordingly and generated a new gene ASMP gene which created new cells neurons and these develop peripheral ner-

vous system in hydra and small organism and according to complexity neurons gathered and developed the CNS and after that complexity increased the brain was developed in the fishes [2].

DNA forward rolling occurred in the small organisms to humans.

According to need, complexity and environment and internal environment of cell brain evolved.

What is molecular determinant of individual brain?

Molecular determinants of brain are basically amount of neurotransmitters secreted and amount of hormones secreted from the glands present in the brain [3].

The neurotransmitters and secretions of neurohormones vary According to needs and conditions of organisms.

Even presence electrical transmission is also considered as the molecular determinant of brain as their count varies from person to person and even organisms to organisms [4]

How plastic is matured brain?

Depends on the memory and convolution of brain.

Brain is divided into two parts.

Subconscious and conscious

- Subconscious constitute more than 70% of our brain and stores photogenic and learned memory.
- Generates thought and dreams [5]
- Conscious works on thought and dreams constitute less than 30%of brain.
- So subconscious brain is more plastic than Conscious brain as we can generate the thought.
- So accordingly the plasticity of brain depends on the convolution of brain and moldiness of brain.

## DNA Architecture theory

- Zygote contains a dna as an architecture and form cells of ectoderm, mesoderm and endoderm [6]
- DNA contains a gene and act as an architecture for cell.

## It acts as a digital clock for the cell division.

- DNA base pair supplies energy to the cell for division as when the cell divides before cytoplasmic division chromosome divides and during chromosome division a huge amount of energy is released [7].
- this energy is supplied for division of organelle and accurate amount of energy is released by DNA for cell to divide it is during S phase [8].
- During meiotic when chromosome pair up then energy is released.

## DNA as a digital clock

- For cell division DNA act as a digital clock [9]
- During zygote formation or during cell division. DNA stores information for when to cell to divide
- During normal condition due to absence of T loop normal human cell divides within 24 hours.

## DNA as a cell division machinery [10]

- DNA starts the procedure of cell division.
- As when cell gets stimulated for systemic division than DNA first one to get stimulated and cell prepare for process for mitiosis or meiosis process.

## DNA division theory

- DNA contains the information stored when and how and what size cell has to divide.
- As DNA act as a digital clock and gets stimulated first so it starts cell cycle
- AS different cell have different function so different gene in DNA will be activated so DNA judges at what size cell has to divide before cell division.

Special case of neuron

## Mystery of G0 phase

- A constant division of DNA take place and constant amount of energy released .
- Because of which stimulation of cell is rare so there is very rare chances of cell division in neuron cells.

### Cell division theory

- DNA act as a machinery for cell division. Cell divide when DNA gets stimulated
- As DNA act as a digital clock

How DNA decides what size cell has to divide?

DNA decide as it contains different genes activate at different places which decide cell size

Similar genes are also present like

1 skin colour (for outer body)

Due to difference of origin of many tissues and different function cell have different size

Treatment of cancer (at any stage)

Cancer can be treated at any stage by introduction of gene leading to deactivation of oncogenes through.

Antibodies or any other method which leads to destruction of cancer cells and can lead to cure of cancer at any stage.

### Cause of formation of T loop

The activation oncogenes due to DNA backward rolling and formation of mRNA and formation of oncoprotiens lead to uncontrollable cell division.

### Cure

Deactivation of onocogenes by inside heat generation through heat gene activation. Through nuclear medicine.

## Discussion

- Brain mapping on patient
- Study of cell
- Study of development of brain
- Treatment of cancer
- Genetics determinants of brain development
- Cell accuracy
- Dna architecture

## Conclusion

Bon studying brain mapping and cells we found development of brain and its molecular determinant.

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