

## **Brain Mapping of Fruit Fly**

## **Source: TH**

Recently, Scientists mapped the entire brain of an adult fruit fly, a breakthrough that advances our understanding of brain function in animals and humans.

- Objective:
  - Aimed to understand how brains are wired and the signals that support healthy brain functions.
- Research Scope:
  - The study **mapped over 50 million neural connections** among more than 139,000 neurons in the **fruit fly** a common model in neurobiological research.
- Connectome Development:
  - The research created a connectome for the adult fruit fly's brain, expanding on studies of simpler organisms like the worm Caenorhabditis elegans and fruit fly larvae.
- Applications to Neuroscience:
  - Fruit flies, capable of behaviors like learning, memory, and social interaction, serve as valuable models for studying brain functions relevant to humans.
- About Fruit Fly:
  - Fruit flies, part of the <u>Drosophilidae family</u>, are commonly known as vinegar, wine, or pomace flies and are usually found on ripe or rotten fruits.
  - It has been a **widely used model organism in biological research** for the last 100 years, contributing to many discoveries.
  - Its genome is fully sequenced, offering extensive information on its biochemistry, physiology, and behavior.

Read More: Connectome, Brainoware

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