

# **Thomas Hunt Morgan**

## **(1866-1945)**

---

Thomas Hunt Morgan had opened a new chapter in science, and, what is more, a chapter which is quite easy to understand, and which has led to results of great practical value.

He started as a student of embryology and of regeneration, that is to say, the capacity which many animals possess for growing limbs or other organs to replace those which they lose. In middle life he began work on inheritance in the little fly *Drosophila melanogaster*. This insect is almost ideal for such work, as one can grow several hundred in a pint bottle, and they get through a generation in a week or ten days.

Aston worked alone; Morgan led a brilliant team, whose most conspicuous members were Bridges, Muller, Sturtevant and Mrs. Morgan. Within a few years they had proved conclusively that the genes, which play a part in heredity similar to that of atoms in chemistry, are material objects located at definite point on the chromosomes in the nucleus of each cell.

The different members of the team made their own contributions, but it will never be known exactly who was responsible for which idea. This is as it should be. When men and women are working fruitfully together they all contribute something, even if one of them first puts an idea into words or symbols.

So far as I know Morgan never claimed any of the biggest discoveries as his own, though he often appeared as a joint author. The atmosphere in his laboratory was as different as it well could be from that in certain chemical laboratories where each junior worker is assigned a special task, and knows little or nothing of his colleagues' work or the general plan of the professor's investigation.

Morgan would take as much trouble to get one of his juniors out of a scrape as he would over a piece of research. In fact he had the qualities needed for a leader, as opposed to a dictator, in science.

As science is more and more planned, these qualities will become more and more important.

\* \* \*

Although he was aware of the importance of heredity in determining differences between human beings, he was opposed to the extreme «eugenic» propagandists.

«I am inclined to think», he wrote, «that the student of human heredity will do well to recommend more enlightenment on the social causes of deficiencies rather than more elimination, in the present deplorable state of our ignorance as to the causes of mental differences... Least of all should we feel any assurance in deciding genetic superiority or inferiority as applied to whole races».

He was, in fact, a wise man as well as a man of great knowledge and intellectual penetration. Those who were lucky enough to know him will remember him not only as a great scientist but as a great man.

**Questions:**

**A**

1. What did Morgan and his team prove?
2. What does Haldane say about the atmosphere in Morgan's laboratory?
3. To whom was Morgan opposed?
4. Analyse the word «*conspicuous*» used in the text.
5. What does the author mean by the expression «*a joint author*»?

**B**

1. What qualities do you think necessary for a leader of a scientific team?
2. Describe the atmosphere at your laboratory.