

It was a flash of inspiration on the highway that presented Kary B. Mullis with the Nobel Prize. Today he is paid by the U.S. government: His task is to find a remedy against chemical weapons.

„Life Is All Chemistry“

Dr. Mullis, you are a Nobel Prize laureate and have come to Melk to discuss, together with other experts, the meaning of life. Why?

That's a good question. Normally, I charge a minimum of 10.000 \$ when I give a speech somewhere. But for this I did not get a fee. Because in a way it is something very special...

- Did you learn anything about life here?

Yes, that nothing on this earth is absolute. That every truth has its back side.... And that the universe is a lot more than what we see and understand.

- You have invented something nobody understands.

But I do. To put it in very simple terms: My invention makes something possible that has become a natural matter today: the genetic fingerprint.

- They say that back then Hoffmann La Roche paid 300 million \$ for your polymerase chain reaction (PCR).

Yes, unfortunately not to me, but to the company I was working for. I got only 10.000 \$. And the Nobel Prize in Chemistry. Today PCR technology is a multi-billion-dollar market.

- Do you still remember the moment you suddenly knew how it works?

Yes, very well! It was in 1983, while I was driving on Highway 128 towards Mendocino, at mileage 46,58. I stopped the car in the middle of the road, right before a curve, got out and yelled „Holy shit!“. All of a sudden I realized how to make copies of copies of DNA copies. And fortunately I was not run over by a truck.

- That was 21 years ago. What do you do today?

Something that is at least just as exciting as that! In a network with many laboratories all over America I am searching for a small molecule that is able to play a trick on the human immune system by neutralizing penetrating germs. If I manage to find that it might put an end to all viral diseases, from influenza to smallpox. Then I really would have served mankind.

- What animals do you use in your tests?

Mice and rats. First I have to make them ill, but then I cure them again

- Or they die.

Every year many thousands of people die from influenza! Ornithosis is a particularly dangerous kind. If it ends up altering its genetic code in a way that people may also transfer this disease this would trigger a catastrophe.

- You are now 60 years old. How much time do you still allow yourself?

Actually I have decided that at 75 I will spend more time playing the piano than doing research. But I am afraid I will still be very curious then! And get good money for what I like best: working.

- Who pays you?

The American government. They expect me to obtain a substance for treating smallpox. So far we have only the vaccination, but no medicine once the disease has broken out. In that case you die within no more than three days.

- Is the U.S. preparing for terror attacks with chemical weapons?

That's right.

-Kary B. Mullis: this name stands for a daring theory on AIDS.

I state that AIDS and HIV do not constitute an entity. A healthy person with a positive HIV is considered somebody where AIDS has not yet broken out, who has received a last respite, being allowed to put off the inevitable with medicine only. Sometimes these substances do more harm to the body than the virus itself, for our body is full of viruses. While the immune system is able to cope with some, this is not the case with others.

- Does this apply to cancer, too?

Yes, cancer cells may also change. Cancer actually means that selected cells do not cooperate anymore with the whole of the organism.

- What actually makes chemistry so fascinating to you?

That it helps us trace the world back to its origin like in a slow-motion-movie. That the process we call development obeys a higher plan. That eventually all life is chemistry.

- And what about life's unanswered questions?

They have not been answered by religion, either. Although religion has been preaching about altruism for centuries people still keep on blowing up each other.

- But science is not much of a help there, either.

Science still more than religion. DNA for example tells us very clearly that 300.000 years ago there was only one species of man. No races, superior or inferior. Undisputedly, we are all descended from the same origin. If certain people took this more seriously the world would have less injustice and less war.

- Was the Nobel laureate in Chemistry already a researcher when he was a child?

I was a wild, happy little boy who grew up with his three brothers on our grandmother's farm in North Carolina. I still remember well how we tortured the cows...

- Why?

Just because we wanted to do what we liked. We slipped apples onto the electric fence and shook with laughter when they tried to eat them and jolted. I was free, nobody's shadow... That makes a child independent. And it gives him courage.

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Revolutionary of Genetic Engineering Technology

Dr. Kary B. Mullis, US American and Nobel Prize laureate in Chemistry, discovered the polymerase chain reaction (PCR), which offers a tool for multiplying one single DNA molecule in an almost unlimited number. So far experts in both biology and medicine were not able to cope with the problem of copying the genetic code (DNA) artificially in the test tube. With his invention Mullis revolutionized the entire biological and medical research. The list of applications ranges from the „genetic fingerprint“ to deciphering the human genetic code, and it was even the basis for the movie „Jurassic Park“. At the moment, Mullis explores a method which provides a revolutionary access to neutralizing penetrating germs, a process he named „Altermune“. This could result in curing all infectious diseases.