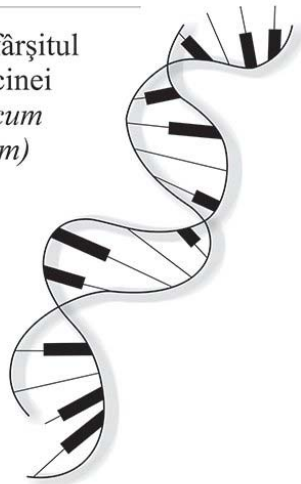




Adrian Restian

PIANISTUL EPIGENETIC

sau sfârșitul
medicinii
(așa cum
o știam)



THE EPIGENETIC PIANIST

(Author: Restian Adrian,
Amaltea Publishing House, 2020)

A book entitled *The Epigenetic Pianist* appeared in Amaltea Publishing House. At first I thought it was a novel. But to my surprise I saw that it is a medical book in which the author addresses a number of very important issues, such as the paradox between the great advances of modern medicine and the dizzying rise of chronic diseases, which affect more than half of humanity, although medicine is in a state of extraordinary performance, this pandemic, which has come upon us, has upset all the health systems in the world. And all this is due to the fact that today's medicine is at a crossroads, where it is struggling to find new ways to somehow be able to solve the increasingly complicated problems it faces.

The author shows that modern medicine began in 1770, when Giovanni Morgagni (1682–1771) found, after several hundred necropsies, that behind the clinical manifestations are some organic changes. But after a hundred years, Rudolf Virchow (1821–1902) showed that behind the organic changes are some cellular changes, thus laying the foundations of cellular pathology. And after another hundred years, Linus Pauling (1901–1994) showed that behind the cellular changes are some molecular changes, thus laying the foundations of molecular pathology, which has

achieved some absolutely extraordinary performance, but with which we can not solve too much. well neither the problem of chronic diseases, which are constantly growing, nor the problem of the pandemic, which is not too easily defeated by performance, or rather by our current possibilities. It is further shown that all these difficulties are determined by the fact that the molecular level is not the last level at which human pathology takes place. Behind the molecular changes are actually some informational changes, which is actually the main theme of the author, who showed, since 1970 that information can also be a pathogenic factor and that beyond molecular pathology is actually a “pathology informational”. As early as 1977, the author described (in the *Giornale di Clinica Medica*) the informational bases of human pathology.

In 1980, the author showed in the journal *Agessologie* (France) that behind the molecular pathology, which we are obsessed with, is in fact an informational pathology. And in 1990, the author showed in the journal *Cybernetica* (Belgium) that information is the hidden parameter of human pathology. Even behind the coronavirus is actually molecular information, Spike proteins that recognize ACE2 receptors with the help of which it manages to enter cells. If this recognition of molecular information did not exist, this pandemic would not have existed.

All molecules, all enzymes, all hormones and all antibodies, are actually chemical messengers, which carry through our body, which is, in fact, a very complicated communication system, a very large amount of information. And to prove this, the author shows that our whole human story, with its joys and sorrows, actually started from the genetic information we received from our parents. Because in the 7 pg, ie in the 7 millionths of a gram of DNA, they gave us a very large amount of information, of about 2 GB. And to realize the extremely large discrepancy between the tiny amount of substance and the very large amount of information, the author shows that to write on paper the 2 GB of genetic information, ie the three billion nucleotides, of which a DNA molecule, we would need over 4,000 volumes of a thousand pages each.

Until recently, geneticists believed that in this genetic information, ie in the 20 thousand genes, which we inherited from our parents, is inscribed our entire pathological destiny. And that every disease should be produced by a pathogenic gene. Which is true only in the case of monogenic diseases (hemophilia and cystic fibrosis). Because many suspicious genes are involved in chronic diseases, which sometimes produce and sometimes do not produce that disease. Because our genes are regulated by epigenetic mechanisms, which without changing the structure of DNA only inhibit or activate the 20 thousand genes as needed. That's why the author compared the 20,000 genes with the keys of a genetic piano. And the epigenetic mechanisms with an epigenetic pianist, who plays the 20 keys of the genetic piano, which we inherited from our parents.

Things do not stop here, because beyond the molecular information is quantum information, which intervenes in all biochemical processes in our body. And quantum information is the last frontier of contemporary medicine, as shown in the chapter on the quantum basis of human pathology.

But above all these extremely complicated and subtle levels, is the "epigenetic pianist", who must play the symphony of our lives, often in very

hostile conditions, on a piano often choked. It detaches itself to an imaginary pianist, who regulates the 20 thousand genes, on which ultimately depends the synthesis of all the proteins, enzymes, hormones and antibodies involved in the diseases we face.

That's why Richard Dawkins (b. 1941) said that the body plays the way its genes play. Which turned out not to be very true, because genes are also regulated, in turn, by some epigenetic mechanisms, ie by the epigenetic pianist, who without affecting the DNA structure, can activate, or inhibit, the 20 thousand genes on which we have. But if it is a regulation, the epigenetic pianist represents the software and the genetic piano represents the hard drive. And that's how we get to the look

Prof. Adrian Restian shows that our cells are Turing machines, formed by a very long band on which are inscribed the data and their processing, such as the DNA filiform molecule, along which are strung the 20 thousands of genes and from a reader, represented by epigenetic mechanisms, which allow or block the fulfillment of those commands. And if we consider that epigenetic mechanisms are a kind of interface between the body and the environment, we go from genetic destiny to epigenetic play, with a very variable environment and often even very hostile, as happens in this pandemic.

This is very important if we consider that in our genome there are also "good genes", such as suppressor genes, which oppose the appearance of cancer, and "bad genes", such as protooncogene genes, or even oncogenes, which causes cancer. But which can be blocked or stimulated by epigenetic mechanisms, which the author likened to an epigenetic pianist.

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