

I think that it could be possible a complete numerical simulation of a biological cell, similar to the OpenWorm project, so as to simulate the chemical interaction (acidity, concentration of elements, etc), physical (temperature, pressure, etc) and biological (protein, etc) with the environment, with a complete mathematical model.

This could be useful to simulate two different human cells, a carcinogen cell and a healthy cell: an artificial intelligence could identify different behaviors induced by complex chemicals (drugs), or proteins, that could accelerate the search for drugs to cure genetic diseases (or cancers) identified through dna sequencing; it could be possible to try thousands of known compounds, through parallel calculation, interacting with the mathematical model of the cell, to identify drugs with known chemical structure (and produced in the laboratory), or not yet produced