

Від _____

Dear colleagues!

Dear friends!

Today we met to honor the memory Jacques Benveniste. Ten years ago, departed this life a wonderful person and an outstanding scientist, immunologist. He devoted his life to the search for truth in order to help humanity in the fight against diseases.

In 1979 he published article on the structure of platelet-activating factor and its relationship with histamine, which cause long-term heated debate in the scientific community. The interest and discussion are not extinguished during this 35 year period. Researchers are keep coming back to this work because the idea and the results obtained Jacques Benveniste are interesting for global scientific community. He showed the action of very high dilutions of anti-IgE antibody on the degranulation of human basophils. This fact once was seen as supporting the concept of homeopathy. This was a major problem because a purely scientific question, unfortunately, passed from the sphere of science to the field of ideology of present-day conceptions.

It is known that scientific ideas are often developed in three phases: 1st: this cannot be, because there can never be; 2nd: this phenomenon is something interesting; 3rd: it's simple and elementary, and everyone knows about it! Unfortunately, at this time the first point of view dominates in scientific community, although there are many works that occasionally show evidence of biological activity of substances in extremely low concentrations. But the conservative scientific community does not trust these results. However, objective and unbiased scientists constantly pay attention to this problem. It should be noted that Burlakova et al (Russia) showed the different effects of extremely low concentrations of substances that cannot be explained on the basis of present-day concepts of molecular biology and biophysics.

An important analysis of this problem did Madeleine Ennis of The Queen's University of Belfast, which analyzed the experiments and concluded that the effects do exist, but the reasons for these effects are difficult to interpret.

Interesting data obtained by Konovalov et al.(Russia). Researchers showed the presence of nanostructured objects in the water at high dilution of the active ingredient. They found a very important fact: there is necessary simultaneous exposure to electromagnetic fields for the observation of water nanoclusters in extremely high diluted solutions. This proves that electromagnetic fields are necessary for energy pumping and ordering of water system. Probably similar effect we can be found under the influence of light, sound and normal ultrasound and hypersonic, vibration, etc.. The poor reproducibility of experiments conducted by Jacques Benveniste can be explained by presence or absence of such factors in laboratories. Certainly we can agree with the opinion of Madeleine Ennis, that we need a comprehensive standardization of research methods including how to source donor cells, how to prepare histamine solutions and how to detect cell activation, how to organize the good randomization and independent statistical analysis. But I think that this problem also requires new standardization of requirements to traditionally uncontrolled and weak intensive environmental factors - electromagnetic background fields of natural and man-made origin, fluctuations of ionizing radiation, atmospheric pressure, direct or diffused light, acoustic background in a wide range of frequencies (from infrasound to hypersonic). My scientific experience suggests that all these weak factors are really biologically active and can change effects of different substances. This issue should be thoroughly investigated.

In view of the above I want to note the our long-standing cooperation with colleagues from Italy who regularly participated in our International Conference "Cosmos and Biosphere" (Crimea, Ukraine) and "Biologically active substances: fundamental and applied aspects of obtaining and using" (Crimea , Ukraine). The questions of the biological activity of natural factors related to space and terrestrial weather and man-made human activities were one of main topic of these periodic conferences. The question of the biological activity of water and aqueous solutions is a key problem in understanding of the impact of physical factors on biological processes.

Jacques Benveniste Foundation is traditionally make important support for the conference "Space and Biosphere". This support allowed providing small grants for further research works of scientists, who presented at the conference the best results. On behalf of the Ukrainian Biophysical Society express my sincere gratitude to the Jacques Benveniste Foundation and its head Jerome Benveniste.

Unfortunately, due to the occupation of Crimea by Russian troops and war in Eastern Ukraine now we have difficulties in organization of the international conferences, so it is probably Italy can become the new working platform where scientists will gather to discuss interdisciplinary issues of biological activity of physical and chemical factors. Kyiv National University and Ukrainian Biophysical Society are very much interested to participate in such research activities.

In conclusion, I want on my behalf, from ESC "Institute of Biology" and Ukrainian Biophysical Society congratulate all the organizers and participants of the conference, wish you fruitful work and new scientific achievements.

Sincerely,

Doctor of Biological Sciences, Professor,
Deputy Director of Research ESC "Institute of Biology"
of Taras Shevchenko National University of Kyiv,
Vice-President of Ukrainian Biophysical Society

Victor Martyniuk

