

Humboldt Kolleg

Hilton Garden Inn Hotel, Doamnei St. 12, Bucharest
18-22 March 2020

Global Challenges of the 21st Century

- 1) Technological development and human health/ quality of life*
- 2) Climate change and environmental sustainability*
- 3) Democracy and cohesion in Europe*

Global Viral Epidemics (Ebola, HIV, Flu, COVID-19) in the 21st Century and Contemporary Science

In the 21st Century a lot of infectious diseases – acute and chronic - are happening in the world. Some of them are real challenges for both the science and health care services. The problems and their solutions regarding the most health threatening viral infections – Ebola, HIV and Flu - will be summarized in this paper according to recent breakthroughs in the field of genetics, vaccinology and therapy. The novel technologies have the potential to revolutionize medicine and promise to provide cures for so far incurable diseases, incl. infections. However, gene therapies and technologies also bear risks and a broad discussion in society is necessary to define ethical boundaries in this respect. The lecturer's wish is to stimulate thoughts on ethical questions of contemporary medical science that need to be addressed in the near future.

Radka Argirova is a Prof.DSc who graduated the Higher Medical Institute in Sofia as a medical doctor and obtained a Ph.D. in virology at the Ivanovski Institute of Virology – Moscow. There she worked on animal retroviruses. After returning to Sofia she joined the team of the National Institute of Oncology and later the Bulgarian Academy of Sciences – using mouse and avian retroviruses as a model. During the period 1980 – 1981 she was a Humboldt Fellow in Freiburg i. Br., again in the field of animal retroviruses. In 1985, in Hamburg, during a specialized congress, the U.S. Virologist Dr. Robert Gallo offered her HIV in human cells. Thus the work on HIV and the blood bank control have started in Bulgaria and Dr. Argirova has organized the first Lab for screening and confirmation of HIV infection in the country. Later on, she represented Bulgaria and then the Eastern European countries in the Global Program on HIV/AIDS in WHO – Geneva. She was invited to assess, as an expert, the National Programs on HIV/AIDS of Kongo, Phillipines and Salvation Army. For 2 years, she acted as Vice-Minister of Health in Bulgaria. After retirement, she was invited as a virologist in the Clinical Lab. of Tokuda Hospital in Sofia. In 2018 she gave a keynote lecture at the 7th Congress of Clinical Microbiology in London and a part of it will be included in the present talk. Prof. Argirova supervised 7 Ph.D. students and 13 Masters'

students in virology, authored/co-authored more than 100 articles, 9 monographies in Bulgarian, was Chair of the Society of Clinical Virology in Bulgaria, and consultant on virology in Kazakhstan for many years. During 2011-2015 and also currently, Prof. Argirova was/ is chair of the medicobiological section of the Humboldt Union in Bulgaria.