

## **ANNOUNCEMENT**

### **Covid-19 Pandemic and Biological Literacy**

The current pandemic of Covid-19 infection of the respiratory system we are experiencing is caused by the SARS-CoV-2 virus. This virus belongs to the family of coronaviruses and is a member of the same large family with the previous SARS (SARS-CoV Coronavirus Causing the serious Respiratory Syndrome) and MERS (MERS-CoV Coronavirus Causing Middle East Respiratory Syndrome). Coronaviruses are a large family of viruses and some of them also occur in animals. Coronaviruses are RNA viruses (they do not have DNA as genetic material) whose structure, mutations and mechanisms of proliferation, identification (laboratory testing), modes of treatment and prophylaxis and the development of vaccines are the subject of specialised Biologists-virologists' study, Microbiologists, Immunologists, Molecular Biologists, Epidemiologists etc. To survive, coronaviruses need to enter a living cell and exploit the mechanisms for their reproduction.

The current pandemic highlights the importance and need for meaningful biological literacy of our students. Our students as tomorrow's citizens should be able to understand what viruses and microbes in general are, as well as what are contagious diseases, epidemics and pandemics are. They need to know what DNA and RNA are and what their role is. They need to understand what vaccines are and how they are developed as well as appreciate the importance of vaccines. It is also very pertinent for our students to understand what mutations are, how they are caused and what their effect is. It is also essential for tomorrow's citizens to understand what the mechanisms of spreading viruses and in general the microbes are, and what the treatment and prevention measures are.

The above are just some of the knowledge, skills, attitudes, values and behaviours that modern education must provide to its citizens of tomorrow so that they can safeguard their health and those around them, as well as be able to participate meaningfully in the modern scientific and social dialogue that takes place around them on biological and health issues. Also essential is the moulding of responsible citizens who will behave as 'responsible citizens' in health matters, such as infectious diseases, factors related to their appearance, prevention and treatment, sex education, nutrition, cancer and other diseases but also environmental issues.

The course in Biology at the Gymnasium and Lyceum is critical as far as the above are concerned. That is why we call on the State and the Ministry of Education, Culture, Sport and Youth to support the subject of Biology at all levels in Gymnasium and Lyceum. Contemporary issues require our education system to meet the modern requirements for the biological literacy of our students

Governing Body

Cyprus Biological Society