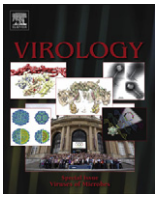
Virology 434 (2012) 137

Contents lists available at SciVerse ScienceDirect

Virology

journal homepage: www.elsevier.com/locate/yviro



Editorial

Introduction to special issue on viruses and microbes

This special issue of Virology is dedicated to highlight current research on viruses of microbes, as discussed at a recent EMBO Viruses of Microbes (VoM II) conference held in Brussels, Belgium, July 2012 (http://www.events.embo.org/12-virus-microbe/programme.html). Two salient events marked the meeting. First, it was the first official meeting of the International Society for Viruses of Microorganisms (ISVM), and the occasion of holding its first general assembly (http://www.youtube.com/user/EMBOVoM2012?feature=watch). Second, a special one afternoon Workshop, open to the medical community, addressed legal and other practical matters raised by the registration in Western countries of bacteriophage therapy (an alternative to treat more and more promiscuous multi-resistant bacterial infections) in humans.

ISVM's birth can be traced to the 2008 Edinburgh phage conference where organizers suggested the idea of an international phage society. During the 2009 Evergreen Phage Meeting (Washington State, USA) and in 2010, at the first Viruses of Microbes (VoM I) meeting in Paris the idea was expanded to include viruses of microorganisms. At the latter meeting a decision was made by acclamation to create such a society. ISVM was incorporated on September 27, 2011. The continued interest in viruses of bacteria (bacteriophages), archaea, algae, protists, yeast and other fungi, was amply confirmed by the 389 participants of VoM II (420 at VoM I).

Information about ISVM boards, membership and aims can be found on its website http://www.isvm.org/, which also provides various resources including microbial virus literature, illustrations, website links, databases, journals, and companies.

ISVM introductory statements refer to 100 years of microbial viruses that started with phages. Predating routine application of antibiotics by decades, phages served as one of the original antibacterials. They were instrumental and this could be formulated strong: phages were used to show that DNA and not proteins are the hereditary material in the development of molecular genetics—the study of how information flows from DNA to RNA to proteins—and have been key players in genetic engineering. Together the viruses of microorganisms are the most numerous "organisms" on Earth, perhaps the most diverse, and are crucial contributors to the ecology and evolution of microorganisms. As but one example, they are the key predators of cyanobacteria and therefore substantially impact global warming, climate change, and ocean acidification. Viruses of microorganisms, in short, are important players in ecology, public health, infectious disease, and environmental science. They serve as models for virus evolution and can be used to kill antibiotic-resistant bacteria. Notwithstanding numerous breakthroughs and Nobel Prizes, there has been little dedicated modern-day support for studying viruses of microorganism as an academic discipline, in terms of developmental assistance to phage-based businesses, or facilitation of an accurate public and scientific perception of what these organisms are all about. "Microbial Virology" is no different from any other area of science: it cannot exist aside from/without a collective voice espousing its importance to society. This cause is now, finally, being championed by a formal society, the International Society for Viruses of Microorganisms, ISVM.

Elsevier, through its journal *Virology*, supported VoM II in part by sponsoring this special issue, which contains an eclectic mix of research papers and reviews. No attempt was made to cover all the topics presented at the meeting (60 oral presentations and 243 posters focussing on Virus-host interactions, bacteriophage-based antibacterials, (meta)genomics, viral diversity and evolution, structure—function relationship in virions, and viruses in biotechnology). There were, in addition, two Workshops, one mentioned above and the other dedicated to standardisation of viral genomic sequence annotation. However we think that the articles in this issue reflect a broad spectrum of the research that was discussed and that should be of interest to all microbial virologists.

Editors

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0042-6822/$ - see front matter
http://dx.doi.org/10.1016/j.virol.2012.11.006