Mankind has been at the mercy of viral diseases for millennia. In the current virologic landscape, research is expanding at an unprecedented rate.

The fields of virology and genomic research have been closely linked for many years; the first whole genome to be sequenced was viral in origin – bacteriophage phi X174, in 1977. Since then, many more viral genomes have been mapped, and with the human genome also available, it is now possible to determine viral-host interactions during infection. This has consequently provided a complete catalogue of potential antiviral targets to be researched. The advent of the HIV pandemic led to a dramatic increase in research in the field of rational drug design, resulting in the large number of antiviral drugs and vaccines entering clinical trials today.

However, the very features and mechanisms of viruses that make them such a threat to humankind are also now being manipulated and utilized in the burgeoning field of gene therapy. Viral vectors are being used to efficiently deliver and express therapeutic genes for the treatment of a variety of conditions, including cancer. Viral vectors are also vital tools for the study of functional genomics, using, for example, viral-induced gene silencing.

In addition, viruses pose a threat as potential agents of bioterrorism in cases where no natural immunity exists in the population. This is the case for viral diseases such as smallpox.

The development of drug-resistant mutants and the emergence of new viruses (such as SARS coronavirus and avian influenza H5N1 – a virus with pandemic potential) are adding additional burdens to the already time-constrained virology community. The need to move swiftly in the event of a new disease outbreak makes it essential for the virologist to keep up-to-date with all key advances. *Future Virology* provides an interdisciplinary forum for all scientists working in the field today.

Articles published in *Future Virology* include key areas such as:

- The molecular basis of viral diseases
- Virus-host interactions
- Overviews highlighting optimal therapeutic and diagnostic approaches, along with potential future options
- Summaries evaluating newly approved antiviral agents
- Adverse events and drug safety
- Pharmacoeconomics and cost–benefit issues in virology
- New and re-emerging viruses
- DNA microarrays for the identification of new viruses
- Epidemiologic studies and trends
- The problem of viral drug resistance, and potential methods to overcome this
- Vaccine development and the prevention of viral diseases
- The use of viral vectors in gene therapy and functional genomics
- Defense against the use of viruses in bioterrorism

*Future Virology* delivers essential information in concise, at-a-glance article formats. Key advances in the field are reported and analyzed by international experts, providing an authoritative but accessible forum for this ever-expanding area of research.