



## Genetics and Genomics of HPV and Cervical Cancer

Guest Editors:

**Prof. Dr. Alexandros Daponte**

Department of Obstetrics and Gynaecology, Faculty of Medicine, School of Health Sciences, University of Thessaly, 41500 Larissa, Greece

**Dr. Athina A. Samara**

Department of Obstetrics and Gynecology, University Hospital of Larissa, 41110 Larissa, Greece

Deadline for manuscript submissions:

**closed (20 May 2024)**

### Message from the Guest Editors

Cervical cancer is the fourth most common cancer amongst female patients worldwide. Infection by high-risk human papilloma virus (HPV) is necessary in most cases, but not sufficient to develop invasive cervical cancer. DNA sequence differences between HPV genomes determine whether an HPV infection has the potential for carcinogenesis. Despite the high frequency of HPV infections, in most cases the virus is cleared by the host immune response and only a small proportion of infected individuals develop persistent infections that can result in malignant transformation, indicating that other biological, genetic and environmental factors may influence individual susceptibility to HPV-associated cancers. Genetic factors contributing to the development of cervical dysplasia and invasive cervical cancer are largely unknown. However, genetic variants that appear to be associated with genes that predispose or protect the host to HPV infections, thereby affecting individual susceptibility, have been reported. The hypothesis of germline predisposition suggested that heritability via genetic factors might contribute to cervical cancer risk variation.





an Open Access Journal by MDPI

## Editors-in-Chief

### Prof. Dr. Peter E. Nielsen

Department of Cellular and  
Molecular Medicine, Faculty of  
Health and Medical Sciences,  
University of Copenhagen,  
Blegdamsvej 3C, DK-2200  
Copenhagen, Denmark

### Prof. Dr. Lukasz Kurgan

Department of Computer  
Science, Virginia Commonwealth  
University, Richmond, VA 23284,  
USA

## Message from the Editorial Board

*Biomolecules* is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)

## Contact Us

---

*Biomolecules* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/biomolecules  
biomolecules@mdpi.com  
X@Biomol\_MDPI