

**Romania**  
**„VASILE GOLDIȘ” Western University of Arad**

**STUDIA UNIVERSITATIS**  
**„VASILE GOLDIȘ”**

**SERIA**  
**ȘTIINȚELE VIETII**  
**(LIFE SCIENCES SERIES)**

**Vol. 27, Issue 2, 2017**

**ARAD 2017**

***Studia Universitatis „Vasile Goldiș”***  
***Seria Științele Vieții***  
***(Life Sciences Series)***

**Editorial Board:**

**Editor-in-Chief:**

Aurel Ardelean, Prof., PhD  
President, “Vasile Goldiș” Western University of Arad, Romania  
Member of the Romanian Medical Sciences Academy

**Secretary Editor:**

Research Assistant: Petrescu Constantin-Marian, PhD

**Board:**

Gheorghe Benga, Prof., MD, PhD  
Member of the Romanian Academy

Constantin Toma, Prof., PhD  
Member of the Romanian Academy

Marian-Traian Gomoiu, Prof., PhD  
Correspondent member of the Romanian Academy

Dan Munteanu, Prof., PhD  
Correspondent member of the Romanian Academy

Daniela Bratosin, Prof., PhD  
Faculty of Medicine, Department of Biology “Vasile Goldiș”  
Western University of Arad, Romania

Dorina Cachiță-Cosma, Prof., PhD  
Faculty of Medicine, Department of Biology “Vasile Goldiș”  
Western University of Arad, Romania

Coralia Cotoraci, Prof., MD, PhD  
Faculty of Medicine, Pharmacy and Dental Medicine  
Rector “Vasile Goldiș” Western University of Arad, Romania

Gicu – Gabriel Arsene, Prof., PhD  
Banat’s University of Agricultural Sciences and Veterinary  
Medicine of Timișoara “King Michael I of Romania”

Neli Kinga Olah, Assoc. Prof., PhD  
Faculty of Pharmacy  
“Vasile Goldiș” Western University of Arad, Romania

Violeta Turcuș, Assis. Prof., PhD  
Faculty of Medicine, Department of Biology Reader, “Vasile Goldiș”  
Western University of Arad, Romania

Sandor Keki, Prof., PhD  
University of Debrecen, Hungary

Anca Hermenean, Prof., PhD  
Faculty of Medicine, Pharmacy and Dental Medicine  
Vice-Rector, “Vasile Goldiș” Western University of Arad, Romania

Tommy Lennartsson, Prof., PhD  
University of Uppsala, Sweden

Laszlo Körmoczi, Prof., PhD  
University of Sciences, Szeged, Hungary

Ivo Krstic, Prof., PhD  
Biology Institute of Novi Sad, Serbia

Istvan Matskasi, Prof., PhD  
University of Budapest, Hungary

Istvan Krizbai, Prof., PhD  
Biological Research Centre  
Hungarian Academy of Sciences

Gheorghe Mohan, Prof., PhD  
“Vasile Goldiș” Western University of Arad, Romania

Marieta Costache, Prof., PhD  
University of Bucharest, Romania

Anca Dinischiotu, Prof., PhD  
University of Bucharest, Romania

Laurențiu Mogoantă, Prof., MD, PhD  
University of Craiova, Romania

Gheorghe Mustață, Prof., PhD  
“Al.I.Cuza” University of Iași, Romania

**Editorial Office:**

Faculty of Medicine, Department of Biology, „Vasile Goldiș” Western University, Arad  
no.86, L. Rebreanu St. Arad, 310414, Romania  
Tel/Fax +40-257-212 111  
Email: [contact@studiauniversitatis.ro](mailto:contact@studiauniversitatis.ro)  
Web: [www.studiauniversitatis.ro](http://www.studiauniversitatis.ro)



SCOPUS



This journal is indexed by SCOPUS, EBSCO Academic Search Complete, ProQuest, Index Copernicus Journals Master List, Directory of Open Access Journals and Genamics JournalSeek international databases.

“VASILE GOLDIȘ” UNIVERSITY PRESS

ISSN: 1584-2363  
e-ISSN: 1842-7863  
ISSN-L: 1584-2363