

Asst. Prof. ZEYNEP AHSEN KOÇER

Personal Information

Office Phone: [+90 232 412 6628](tel:+902324126628)

Email: zeynep.kocer@deu.edu.tr

Other Email: zeynep.kocer@ibg.edu.tr

Web: <https://avesis.deu.edu.tr/zeynep.kocer>

Address: Dokuz Eylül Üniversitesi, 15 Temmuz Sağlık ve Sanat Kampüsü, Mithatpaşa Cad. No: 58/5 Balçova 35340 İzmir

International Researcher IDs

ScholarID: [vklllbkAAAAJ](https://orcid.org/0000-0001-9178-0142)

ORCID: 0000-0001-9178-0142

Publons / Web Of Science ResearcherID: P-8983-2019

ScopusID: 55637220400

Yoksis Researcher ID: 269921

Education Information

Doctorate, Bowling Green State University, Biological Sciences, Biological Sciences, United States Of America 2006 - 2010

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biotechnology, Turkey 2002 - 2005

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Biology, Turkey 1994 - 2001

Foreign Languages

English, C1 Advanced

Certificates, Courses and Trainings

Occupational Health and Safety, Biorisk Management, International Federation of Biosafety Associations, 2022

Research Areas

Life Sciences, Bioinformatics, Environmental Biology, Microbiology, Molecular Biology and Genetics

Academic Titles / Tasks

Assistant Professor, Dokuz Eylül University, İzmir Uluslararası Biyotıp ve Genom Enstitüsü, 2017 - Continues

Research Assistant, University of Wisconsin - Madison, Veterinary Medicine, Pathobiological Sciences, 2015 - 2017

Academic and Administrative Experience

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Amino acids in the polymerase complex of shorebird-isolated H1N1 influenza virus impact replication and host-virus interactions in mammalian models.**
Bai Y., Lei H., Song W., Shin S., Wang J., Xiao B., Koçer Z. A., Song M., Webster R., Webby R. J., et al.
Emerging microbes & infections, vol.13, no.1, pp.2332652, 2024 (SCI-Expanded)
- II. **Handheld plasmonic biosensor for virus detection in field-settings.**
Cetin A. E., Kocer Z. A., TOPKAYA S. N., Yazici Z. A.
Sensors and actuators. B, Chemical, vol.344, pp.130301, 2021 (SCI-Expanded)
- III. **Potential for Low-Pathogenic Avian H7 Influenza A Viruses To Replicate and Cause Disease in a Mammalian Model**
Zanin M., KOÇER Z. A., Poulson R. L., Gabbard J. D., Howerth E. W., Jones C. A., Friedman K., Seiler J., Danner A., Kercher L., et al.
JOURNAL OF VIROLOGY, vol.91, no.3, 2017 (SCI-Expanded)
- IV. **Possible basis for the emergence of H1N1 viruses with pandemic potential from avian hosts**
KOÇER Z. A., Krauss S., Zanin M., Danner A., Gulati S., Jones J. C., Friedman K., Graham A., Forrest H., Seiler J., et al.
EMERGING MICROBES & INFECTIONS, vol.4, 2015 (SCI-Expanded)
- V. **The Genomic Contributions of Avian H1N1 Influenza A Viruses to the Evolution of Mammalian Strains**
Koer Z. A., Carter R., Wu G., Zhang J., Webster R. G.
PLOS ONE, vol.10, no.7, 2015 (SCI-Expanded)
- VI. **Survival analysis of infected mice reveals pathogenic variations in the genome of avian H1N1 viruses**
KOÇER Z. A., Fan Y., Huether R., Obenauer J., Webby R. J., Zhang J., Webster R. G., Wu G.
SCIENTIFIC REPORTS, vol.4, 2014 (SCI-Expanded)
- VII. **Possible Role of Songbirds and Parakeets in Transmission of Influenza A(H7N9) Virus to Humans**
Jones J. C., Sonnberg S., KOÇER Z. A., Shanmuganatham K., Seiler P., Shu Y., Zhu H., Guan Y., Peiris M., Webby R. J., et al.
EMERGING INFECTIOUS DISEASES, vol.20, no.3, pp.380-385, 2014 (SCI-Expanded)
- VIII. **Assessing the fitness of distinct clades of influenza A (H9N2) viruses**
Baranovich T., Bridges O., Burnham A., Carey D., Cline T. D., Crumpton J. C., DeBeauchamp J., Duan S., Ducatez M. F., Elbahesh H., et al.
EMERGING MICROBES & INFECTIONS, vol.2, 2013 (SCI-Expanded)
- IX. **Fecal Influenza in Mammals: Selection of Novel Variants**
KOÇER Z. A., Obenauer J., Zaraket H., Zhang J., Rehg J. E., Russell C. J., Webstera R. G.
JOURNAL OF VIROLOGY, vol.87, no.21, pp.11476-11486, 2013 (SCI-Expanded)
- X. **Diatom assemblages promote ice formation in large lakes**
D'souza N. A., Kawarasaki Y., Gantz J. D., Lee R. E., Beall B. F. N., Shtarkman Y. M., KOÇER Z. A., Rogers S. O., Wildschutte H., Bullerjahn G. S., et al.
ISME JOURNAL, vol.7, no.8, pp.1632-1640, 2013 (SCI-Expanded)
- XI. **Subglacial Lake Vostok (Antarctica) Accretion Ice Contains a Diverse Set of Sequences from Aquatic, Marine and Sediment-Inhabiting Bacteria and Eukarya**
Shtarkman Y. M., KOÇER Z. A., Edgar R., Veerapaneni R. S., D'Elia T., Morris P. F., Rogers S. O.
PLOS ONE, vol.8, no.7, 2013 (SCI-Expanded)
- XII. **The Potential of Avian H1N1 Influenza A Viruses to Replicate and Cause Disease in Mammalian Models**
KOÇER Z. A., Krauss S., Stallknecht D. E., Rehg J. E., Webster R. G.
PLOS ONE, vol.7, no.7, 2012 (SCI-Expanded)

- XIII. **Indirect organogenesis from bud explants of *Juniperus communis* L.: Effects of genotype, gender, sampling time and growth regulator combinations**
KOÇER Z. A., GÖZEN A. G., ÖNDE S., KAYA Z.
DENDROBIOLOGY, vol.66, pp.33-40, 2011 (SCI-Expanded)

Articles Published in Other Journals

- I. **Bio-Virus Spread Simulation in Real 3D Space using Augmented Reality**
Tsaramirsis K., Patel A., Sharma P., Reddy N., Randhawa P., Tsaramirsis G., PAVLOPOULOU A., KOÇER Z. A., Piromalis D.
Engineered Science, vol.16, pp.319-330, 2021 (Scopus)
- II. **Ecology of subglacial lake Vostok (Antarctica), based on metagenomic/metatranscriptomic analyses of accretion ice.**
Rogers S. O., Shtarkman Y. M., Koçer Z. A., Edgar R., Veerapaneni R., D'Elia T.
Biology, vol.2, no.2, pp.629-50, 2013 (Scopus)
- III. **Emergence of influenza viruses and crossing the species barrier**
KOÇER Z. A., Jones J. C., Webster R. G.
Microbiology Spectrum, vol.1, no.2, 2013 (Scopus)

Books & Book Chapters

- I. **İKLİM DEĞİŞİKLİĞİ, YABAN HAYATI KAYNAKLI ZONOTİK ENFEKSİYONLAR ve İNFLUENZA A VİRÜSLERİ**
Azbazdar M. E., Dikmenoğulları M., Koçer Z. A.
in: TEK SAĞLIK 21. Yüzyılın Karmaşık Sağlık Sorunlarıyla Yüzleşmek, Taştan Rüştü, Ak Ayşe, Peker Ayfer, Küçük Biçer Burcu, Editor, Duvar Yayınları, İzmir, pp.199-221, 2022
- II. **Emergence of Influenza Viruses and Crossing the Species Barrier**
KOÇER Z. A., Jones J. C., Webster R. G.
in: One Health: People, Animals, and the Environment, Atlas Ronald M, Maloy Stanley, Editor, ASM Press, pp.115-135, 2014

Refereed Congress / Symposium Publications in Proceedings

- I. **Low-cost and portable plasmonic biosensor for label-free detection of viruses in resource-limited settings**
Kurul F., Yazıcı Z. A., Koçer Z. A., Topkaya S. N., Çetin A. E.
European Conferences on Biomedical Optics, 2023, Munich, Germany, Munich, Germany, 25 - 29 June 2023, vol.12627, no.126272, pp.241-247
- II. **Farklı Adjuvan Sistemlerinin İnfluenza Aşı Formülasyonunda Kullanım Potansiyeli**
Çöven F. O., Azbazdar M. E., Dikmenoğulları M., Koçer Z. A., Çetin Uyanıkgil E. Ö., Sarıkahya N., Çöven F., Çöven N., Nalbantsoy A.
XV. Ulusal Veteriner Mikrobiyoloji Kongresi (Uluslararası Katılımlı), Şanlıurfa, Turkey, 26 October 2022
- III. **Egg Adaptation of Human H1N1 Influenza Virus for Vaccine Production**
Azbazdar M. E., Dikmenoğulları M., Çöven F. O., Nalbantsoy A., Çöven F., Koçer Z. A.
16th Vaccine Congress onsite in Lake Garda, Brescia, Italy, 12 - 14 September 2022
- IV. **Evaluation the Efficiency of Inactive Trivalent Influenza Vaccine Formulation Against Seasonal Influenza**
Çöven F. O., Azbazdar M. E., Dikmenoğulları M., Koçer Z. A., Çetin Uyanıkgil E. Ö., Sarıkahya N., Çöven F., Nalbantsoy

A.

16th Vaccine Congress onsite in Lake Garda, Brescia, Italy, 12 - 14 September 2022

V. **Portable Plasmonic Biosensor for Virus Detection in Resource-Poor Settings**

Avcı M. B., Koçer Z. A., Topkaya S. N., Yazıcı Z. A., Çetin A. E.

Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 09 September 2022, pp.21

VI. **Molecular and Biological Characterization of Avian H1N1 Influenza Viruses for Their Replication and Disease Potential in Mice**

Koçer Z. A., Webster R. G.

American Society for Virology 30th Annual Meeting, Minnesota, United States Of America, 16 - 20 July 2011, pp.182

VII. **Can Infectious Influenza A Viruses Survive the Winter in Lake and Pond Ice?**

Koçer Z. A., Rogers S.

109th American Society for Microbiology General Meeting, Pennsylvania, United States Of America, 17 - 21 May 2009

VIII. **Detection of Influenza A Viruses in Lake Ice Samples by Multiplex RT-PCR**

Rogers S. O., Koçer Z. A.

108th American Society for Microbiology General Meeting, Massachusetts, United States Of America, 1 - 05 June 2008

Supported Projects

AKINCI G., GÜVEN E. D., EROL M., ÖZMIHÇI S., ÖZUYSAL A., ŞİMŞEK C., ÖZEL DEMİRALP F. D., KOÇER Z. A., CANLI K., Project Supported by Higher Education Institutions, İklim Değişikliğine Uyum Kapsamında Toprak Sağlığı Araştırmaları Canlı Laboratuvarı (LivingLab), 2022 - Continues

Koçer Z. A., DİRİL M. K., TÜBİTAK Project, Korunma ve Tedavi Ulusal Platformu, 2023 - 2027

Koçer Z. A., Karasulu E., TÜBİTAK Project, Ülkemizde ve Dünyada Halk Sağlığını En Fazla Tehdit Eden HPV ve Influenza Kaynaklı Enfeksiyonlara Karşı Tanı Kitleri, İlaç Formülasyonları ve Aşı Geliştirilmesi, 2021 - 2025

Koçer Z. A., Barlas N., Kılıç Süloğlu A., Karabulut G., Karahisar Turan S., İnkaya E. N., Project Supported by Higher Education Institutions, Investigation of the Effects of Perfluorooctane Sulfonic Acid and Perfluorooctanoic Acid Exposure on Interleukin-17 Signaling Pathway and Induced Lung Injury in Balb/c Mice, 2022 - 2024

Nalbantsoy A., Koçer Z. A., Çetin Uyanıgil E. Ö., Sarıkahya N., TÜBİTAK Project, İnaktif Trivalan Grip Aşı Formülasyonunun Geliştirilmesi, 2021 - 2023

KOÇER Z. A., APPAK Ö., Dikmenoğulları M., SAYINER A. A., Project Supported by Higher Education Institutions, 2018-2019 ve 2019-2020 sezonlarında Ege Bölgesinde görülen mevsimsel influenza A virüslerinde ortaya çıkan genetik varyasyonların ve olası gen takası olgusunun değerlendirilmesi, 2021 - 2022

Congress and Symposium Activities

The Virtual Western Asia Bat Research Conference, Moderator, New York, United States Of America, 2023

2023 European Biosafety Association Conference, Attendee, Athens, Greece, 2023