

PERSONAL INFORMATION OF CANDIDATEE

EMINA DERVIŠEVIĆ, MD, PhD



Date of birth: 04/11/1988

Gender: Female

Nationality: Bosnian-Herzegovinian

Contact details

emina.dervisevic@mf.unsa.ba

mob. +387 061031191

Address: Čekaluša 90

71000 Sarajevo, Bosnia and Herzegovina

Position: Senior Assistant on Department of Forensic Medicine, Faculty of Medicine, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

<https://scholar.google.com/citations?hl=en&user=965WAuIAAAAJ>

<https://orcid.org/0000-0002-9673-4820>

<https://publons.com/researcher/5230166/emina-dervisevic/>

Dr. Emina Dervišević is currently working at the Department of Forensic Medicine, Faculty of Medicine, University of Sarajevo. She has conducted research in the field of Forensic Medicine, as well as Biomedicine in Public Health.. She completed her Ph.D. at the age of 32. She is the author of more than 60 original scientific research papers, 10 projects, and 3 books. She is in her final year of specialization in Forensic Pathology. She has actively participated in 22 international congresses through oral and poster presentations in the last two years. She attended Juvenile Osteology Education in Durham, England, in 2018, the Advanced Course in Paleopathology in Limassol, Cyprus, in 2022. She received the award "Young Achiever Award" in 2022. In March 2023, she was awarded the "Champion in University Skills" from the Research Life Ambassador Program. Dr. Emina Dervišević was awarded in the category of Forensic Medicine at the European Awards in Medicine on November

30th at the Ritz Hotel in Paris. In June 2023, she received the Young Research Award ICAVST 2023 from Turkey. In September 2023 she was awarded as „Best poster presentation“ on 28th International Meeting on Forensic Medicine Alpe – Adria – Pannonia, on “Homicide, suicide or accident?” from Italy. Since November 2022, she has been a member of the Global Burden of Disease (GBD) Collaborator Network with 6 published papers in *The Lancet*.

She was the first to introduce experimental forensic medicine to Bosnia and Herzegovina and the models she conducted with are the most complicated and unexplained deaths in the forensic pathology field related to deaths due to changes in core temperature caused by the new climate changes and research related to drowning. She is the first one to introduce the experiment with the tooth of a drowned person in the river Bosnia – as a new method that was awarded in front of the forensic society in Italy (September 2023). The mentioned method has proven to be highly successful in assessing the location and time of drowning on a global scale, but it has not yet been widely accepted in local contexts.

Dr. Emina has expertise in evaluating the pathology significance of improving the understanding of causes of death. Scientific data on the role and association of hyperthermia and hypothermia as a cause of sudden cardiac death are limited, and further research is needed in this field. Current scientific evidence suggests a causal relationship between hyperthermia and the cardiac response, according to the pathophysiological sequence of events in the era of climate changes. In forensic terms, there is limited evidence of the pathophysiological mechanism leading to sudden cardiac death. She was the first one to introduce experimental forensic medicine to Bosnia and Herzegovina and the models she conducted with are the most complicated and unexplained deaths in forensic medicine field. Deaths due to changes in core temperature caused by the new climate changes and research related to drowning.

PUBLICATIONS 2023-2024

- **E Dervišević**, N Čamdžić, E Mašić, A Dervišević, A Bešić, Z Ajanović, ...(2024) Comparative analysis of diatom testing and histopathological examination in lungs: An experimental study in Wistar rats. *Acta Veterinaria Hungarica* 72 (4), 262-270
- **E Dervišević**, N Čamdžić, E Mašić, M Katica, N Šuta, E Spahić, E Lazović, ...(2024) Biological markers as an additional method of determining drowning. *Open Veterinary Journal* 14 (11), 3047-3047
- **E Dervišević**, DA Jesenković, A Bešić, N Šuta, A Selmanagić, Z Ajanović, ...(2024) Differentiating Primary and Secondary Hypothermia in a Rat Model: The Role of Biochemical Markers in Postmortem Analysis. *Applied Sciences* 14 (23), 11123
- Global, regional, and national stillbirths at 20 weeks' gestation or longer in 204 countries and territories, 1990–2021: findings from the Global Burden of Disease Study 2021. GBDGS Collaborators. *The Lancet*

- **E Dervišević**, DA Jesenković, E Avdić, A Bešić, N Šuta, A Selmanagić (2024).The forensic significance of core temperature in identifying primary and secondary hypothermia as a cause of death: A pilot study on Wistar rats. *Legal Medicine* 71, 102523
- GBDSRF Collaborators (2024). Global, regional, and national burden of stroke and its risk factors, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021.The *Lancet Neurology* 23 (10), p973-1003
- SA Bukhari, L Shafqat, K Bilal, A Hussain, S Gul, S Naz, NA Shah, **Dervišević E** (2024).Incidence of cutaneous Leishmaniasis in humans during the COVID-19 pandemic in Baluchistan Province, Pakistan. *The Journal of Infection in Developing Countries* 18 (06), 862-869
- F Krupić, M Moravcova, **Dervišević E**, S Čustović, K Grbić, P Lindström (2024).When time does not heal all wounds: three decades' experience of immigrants living in Sweden. *Medicinski Glasnik* 21 (2)
- **Dervišević E** (2024). Hyperthermia: Is it always an accidental death?*Legal Medicine* 68, 102418
- **Dervišević E**, M Katica, E Mašić, N Čamdžić, Z Ajanović, L Dervišević (2024). Bone and Tooth: Substrates for determining Drowning: A new diagnostic procedure in forensic medicine Practice? *Legal Medicine* 66, 102366
- **Dervišević E**, A Selmanagić, P Milovanović, K Zelić-Mihajlović (2024). Age Determination Based on Open Apex Measurement in the Developing Dentition: Comparing the Accuracy of the Belgrade Age Formula (BAF) with the European Formula on a Bosnian ...*Acta stomatol Croat* 58 (3), 209-217
- Krupić F, Krupić M, **Dervišević E**, Čustović S, Supur E (2024).The Factors Influencing Organ Donation and the Transplantation of Organs: A Systematic Review of the Qualitative and Quantitative Literature
- GBDRF Collaborators* (2024). Global burden and strength of evidence for 88 risk factors in 204 countries and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease ...*The Lancet*. 101
- GBDCD Collaborators† (2024). Global burden of 288 causes of death and life expectancy decomposition in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis. *The Lancet*. 137
- S Krkic-Dautovic, A Salihbegovic, **E Dervisevic**, R Gojak (2024). Clinical Manifestations of European Borreliosis on the Skin in Acute, Subacute and Chronic Disease. *Materia Socio-Medica* 36 (1), 33

- Ajanović Z, **Dervišević E**... (2024). Analysis of Effect of Hyperthermia on White Blood Cells of Experimental Rats Using Geometric Morphometrics Method. KJVD. Volume: 30 Issue: 2 (March-April), 251
- **Dervišević E**, DA Jesenković, E Avdić, A Bešić, N Šuta, A Selmanagić (2024). The forensic significance of core temperature in identifying primary and secondary hypothermia as a cause of death: A pilot study on Wistar rats Legal Medicine 71, 102523
- **GBDSRF Collaborators** (2024). Global, regional, and national burden of stroke and its risk factors, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. The Lancet Neurology 23 (10), p973-1003
- SA Bukhari, L Shafqat, K Bilal, A Hussain, S Gul, S Naz, NA Shah, **Dervišević E** ... (2024). Incidence of cutaneous Leishmaniasis in humans during the COVID-19 pandemic in Baluchistan Province, Pakistan. The Journal of Infection in Developing Countries 18 (06), 862-869
- F Krupić, M Moravcova, **Dervišević E**, S Čustović, K Grbić, P Lindström (2024). When time does not heal all wounds: three decades' experience of immigrants living in Sweden. Med Glas 21 (2)
- **Dervišević E**, E Mašić, M Katica, N Čamdžić, Z Ajanović, L Dervišević (2024). Postmortem Analysis in Drowning-Related Death Determination: Application of the “Diatom Test” in the Forensic Field in Bosnia and Herzegovina. Unlocking the Mysteries of Death-New Perspectives for Post-mortem Examination
- **Dervišević E** (2024). Hyperthermia: Is it always an accidental death? Legal Medicine 68, 102418
- **Dervišević E**, M Katica, E Mašić, N Čamdžić, Z Ajanović, L Dervišević (2024). Bone and Tooth: Substrates for determining Drowning: A new diagnostic procedure in forensic medicine Practice? Legal Medicine 66, 102366
- MEDICON'23 and CMBEBIH'23: Proceedings of the Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON) and International Conference on Medical and ...Springer Nature 2024
- **Dervišević E**, A Selmanagić, P Milovanović, K Zelić-Mihajlović (2024). Age Determination Based on Open Apex Measurement in the Developing Dentition: Comparing the Accuracy of the Belgrade Age Formula (BAF) with the European Formula on a Bosnian population. Acta stomatol Croat 58 (3), 209-217
- Krupić F, Krupić M, **Dervišević E**, Čustović S, Supur E (2024). The Factors Influencing Organ Donation and the Transplantation of Organs: A Systematic Review of the Qualitative and Quantitative Literature.

- **GBDRF Collaborators*** (2024). Global burden and strength of evidence for 88 risk factors in 204 countries and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease ...The Lancet
- **GBDCD Collaborators†** (2024). Global burden of 288 causes of death and life expectancy decomposition in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the ...The Lancet
- S Krkic-Dautovic, A Salihbegovic, **Dervisevic E**, R Gojak (2024). Clinical Manifestations of European Borreliosis on the Skin in Acute, Subacute and Chronic Disease *Materia Socio-Medica* 36 (1), 33
- Ajanović Z, **Dervišević E**, Katica M... (2024). Analysis of Effect of Hyperthermia on White Blood Cells of Experimental Rats Using Geometric Morphometrics Method. *Kaf Univ FAC*. Volume: 30 Issue: 2 (March-April), 251
- **Dervišević E**, Dorić M, Salihbegović A, Čamdžić N. (2023). Histological diagnosis of Bechterew's disease on exhumed female remains in Bosnia and Herzegovina: a case report.. *International Journal of Research in Medical Sciences* 11 (8), 3026
- **Dervišević E**, Čamdžić N, Kuskunović-Vlahovljak S, Dervišević M. (2023) Multiorgan morphological changes caused by hyperthermia: Case study on experimental model. *Acta Marisiensis-Seria Medica* 69 (3), 220-225
- **Dervišević E**, Dervišević L, Ajanović Z, Bešić A, Salihbegović A, Mujarić E, Dervišević M. (2023). Forensic meaning of Core temperature-An indicator for assessing the severity of heatstroke in an animal model. *Veterinaria*, 72(2), 183-191.
- **Dervišević E**, Hasić S, Kiseljaković E, Jadrić R, Dervišević L, Ajanović Z, Salihbegović A. (2023). Cellular network of damage caused by exposure to high ambient temperature in Wistar rats: The role of Hsp70. *JKSUS*;102654: 1018-3647
- **Dervišević E**, Hasić S, Katica M, Dervišević L, Ajanović Z, Salihbegović A. (2023). Heat-related biomarkers: Focus on the correlation of troponin I and 70 kDa heat shock protein. *Heliyon*, 2023; 9(4): 2405-8440.
- KL Ong, LK Stafford, SA McLaughlin, EJ Boyko, **Dervišević E**... (2023). Global, regional, and national burden of diabetes from 1990 to 2021, with projections of prevalence to 2050: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet*
- GBD 2019 Meningitis Antimicrobial Resistance Collaborators. (2023). Global, regional, and national burden of meningitis and its aetiologies, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet. Neurology*, 22(8), 685-711
- Ajanović Z, Dervišević L, Dervišević A, Sarač-Hadžihalilović A, **Dervišević E**, Bišćević-Tokić J, Salihbegović A, Jugo A, Aganović I, Prasko S. (2023). Sex prediction by geometric

morphometric analysis of the hard palate. *European Review for Medical and Pharmacological Sciences*, 26(17):6057-6064.

- Ajanovic Z, Dervisevic L, **Dervisevic E**, Lujinovic A, Ajanovic U. (2023). Sex Estimation Based on Foramen Magnum: A Three-Dimensional Geometric Morphometrics Approach. *International Journal of Morphology* 41 (2)
- Ajanović Z, Ajanović U, Dervišević L, Hot H, Voljevica A, Talović E, **Dervišević E**, Hašimbegović S, Sarač-Hadžihalilović A. (2023). A Geometric Morphometrics Approach for Sex Estimation Based on the Orbital Region of Human Skulls from Bosnian Population. *Scanning*
- Dervišević M, Rebić D, **Dervišević E**. Correlation between diabetic nephropathy and diabetic retinopathy as a long term complications of diabetes mellitus.. *Acta Marisiensis-Seria Medica* 69 (3), 176-181
- Ajanović Z, Ajanović U, **Dervišević E**, Dervišević L, Lujinović A, Hot H. (2023). Three-dimensional models of human skulls and their application in sex differences analysis of midsagittal line. *Veterinaria* 72 (3), 261-270
- Dervišević L, Hasanbegović I, Čosović E, Ajanović Z, **Dervišević E**...(2023). Histomorphometric parameters as indicators of nerve tissue damage after perineural and intraneural application of liposomal bupivacaine in rat model. *Veterinaria* 72 (3), 271-282