

Markakis Georgios CV (December 2024)

Degrees:

BSc in Mathematics, Department of Mathematics, University of Patras 1984

PhD in Mathematics, Department of Mathematics, University of Patras 1990

Current position:

Professor of Biostatistics and Applied Statistics, Department of Social Work, Hellenic Mediterranean University (HMU)

Subjects teaching (current)

a. Undergraduate

1. Statistics (Department of Social Work, HMU)
2. Biostatistics (Department of Nursery, HMU)
3. Applied Mathematics and Statistics in Agriculture (Department of Agriculture, HMU)

b. Postgraduate

1. Social Research Methodology (Interdisciplinary Social Interventions in Crisis Situations, Department of Social Work, HMU)
2. Biostatistics (Interdisciplinary Management of Chronic Diseases, Disability and Ageing, (Departments of Social Work, Nutrition and Dietetics Science and Business Administration and Tourism, HMU)
3. Crop Experimentation (Mediterranean Agronomic Institute of Chania)
4. Crop Experimentation (Department of Agriculture, HMU)

Administrative Experience:

President of Department of Agriculture, TEI of Crete (2002-2006 and 2008-2012), President of Department of Social Work, TEI of Crete (2017-2019), Dean of the School of Health Sciences, HMU (2019-2020), President of the Department of Nutrition and Dietary Science, HMU (2020-2022).

Scientific Publications

A Boolean generalization of Infinitesimal Analysis with applications to Fuzzy Set Theory. PhD Thesis, Patras 1990

(in international journals):

1. 2. Drossos C.A., G.Markakis: Boolean Fuzzy Sets. Fuzzy Sets & Systems, 46 (1992), pp. 81-95
2. Drossos C.A., G.Markakis, M.Shakhatreh: A non standard approach to fuzzy set theory suppl. to Kybernetika, 28 (1992), pp. 41-44.
3. Drossos C.A., G.Markakis: Boolean representation of fuzzy sets. Kybernetes, 22(3) (1993), pp.35-40

4. Drossos C.A., G.Markakis: Boolean Powers & Stochastic spaces. *Mathematika Slovaca*, 44(1) (1994), pp. 1-19
5. Chondropoulos B.P., Markakis G., & Franguedakis - Tsolis S.E.: Morphometric and immunological relationships among some Greek *Mus L.* populations (Mammalia, Rodentia, Muridae). *Z. Säugetierkunde*, 60 (1995), pp. 361-372
6. Giagia - Athanasopoulou E.D., G. Markakis: Multivariate analysis of morphometric characters in eastern hedgehog *Erinaceus concolor* from Greece and adjacent areas. *Z. Säugetierkunde*, 61 (1996), pp.129-139
7. Bourtzis K., Nirgianaki A., Markakis G. & Savakis C.: Wolbachia infection and cytoplasmic incompatibilities in *Drosophila* species. *Genetics*, 144 (1996), pp.1063- 1073.
8. Chondropoulos B.P., Franguedakis - Tsolis S.E., Markakis G., Giagia - Athanasopoulou E.D.: Morphometric variability in karyologically polymorphic populations of the wild house mouse *Mus musculus domesticus* in Greece. *Acta Theriologica*, 41 (1996), pp.375- 382.
9. Vidalis K.L., Markakis G., N. Tsimenides: Discrimination among populations of picarel (*Spicara smaris*, L.1758) in the Aegean Sea using multivariate analysis of phenetic characters. *Fisheries Research*, 30 (1997), pp.191-197.
10. Lambropoulou M., G. Markakis: Morphological - dietary relationships within two assemblages of marine demersal fishes. *Environmental Biology of Fishes* 51 (1998), pp. 309-319.
11. Manios Y., Kafatos A., G. Markakis. Physical activity of 6-year-old children: Validation of two proxy reports. *Pediatric Exercise Science*, 10 (1998), pp. 176-188.
12. Markakis G. Boolean fuzzy sets and possibility measures. *Fuzzy Sets and Systems*, 110 (2000), 279-285.
13. Poinot, K. Bourtzis, G. Markakis, C. Savakis and H. Mercot. Asymmetrical cytoplasmic incompatibility between *Wolbachia* infecting two sibling *Drosophila* species: *D. melanogaster* and *D. simulans*. *Genetics*, 150 (1998), 227-237
14. Chatzaki M., Trichas A., Markakis G., M. Mylonas. Seasonal activity of the ground spider fauna in a Mediterranean ecosystem (Mt. Youchtas, Crete, Greece). (in P.A.Selden 6 6 (ed.) *Proceedings of the 17th European Colloquium of Arachnology*, Edinburg, pp.235- 243)
15. Markakis G. A boolean generalization of the Dempster-Shafer construction of belief and plausibility functions *Tatra Mountains Mathematical Publications*, 16 (1999), 117-125
16. Paspatis M., Markakis G., Koumoundouros G., and M. Kentouri. Preliminary results on rearing of *Sparus aurata* x *Pagrus pagrus* hybrids. Performance comparison with the parental species. *Aquaculture International*, 7 (1999), 295-306

17. Papandroulakis N., Markakis G., Divanach P. and M. Kentouri: Feeding requirements of sea bream (*Sparus aurata*) larvae under intensive rearing conditions Development of a fuzzy logic controller for feeding. *Aquacultural Engineering*, Vol. 21 (2000), 285-299
18. Tsekoura N., Franguedakis-Tsolis S., Chondropoulos B. and G. Markakis: Morphometric and allozyme variation in central and southern Greek populations of the vole *Microtus (Terricola) thomasi* (Rodentia, Arvicolidae) *Acta Theriologica* 47(2002), 139-147.
19. Drossos C.A., Markakis G., and P.L. Theodoropoulos: B-Fuzzy Stochastics. *Asymptotics in Statistics and Probability* (2001) pp.155-170
20. Vavouranakis I., Lambrogiannakis E., Markakis G., Dermitzakis A., Haroniti Z., Ninidaki C., Borbantonaki A., Tsoutsoumanou K.: Effect of home-based intervention on hospital readmission and quality of life in middle-aged patients with severe congestive heart failure: a 12 month follow up study. *European J. Of Cardiovascular Nursing*, 2 (2003), pp. 105-111
21. Chatzaki M, Lymberakis P, Markakis G, Mylonas M: The distribution of ground spiders (Araneae, Gnaphosidae) along the altitudinal gradient of Crete, Greece: species richness, activity and altitudinal range *Journal of Biogeography*, 32 (5) (2005), pp. 813-831
22. Chatzaki M, Markakis G, Mylonas M. Phenological patterns of ground spiders (Araneae, Gnaphosidae) on Crete, Greece. *ecologia mediterranea* 31, 33-53, (2005)
23. Manios Y. Harizani K., Markakis G., Galani P., Manios T.: Relating Fruit And Vegetable Consumption In Households With Residues Generation And Utilization In The City Of Heraklion, Crete, Greece. *International Journal of Sustainable Development and World Ecology*, 12 (2005), pp.353-360
24. Manios T., Papagrigoriou I., Daskalakis G., Sampathiakakis I., Terzakis S., Maniadakis K., Markakis G.: Evaluation of primary and secondary treated and disinfected wastewater irrigation of tomato and cucumber plants under greenhouse conditions regarding growth and safety considerations. *Water Environment Research*, 78(8) (2006), pp. 797-804
25. Manios T., Maniadakis K., Boutzakis P., Naziridis Y., Lasaridi K., Markakis G., Stentiford EI.: Methane and carbon dioxide emission in a two-phase olive oil mill sludge windrow pile during composting. *Waste Management*, 27 (9) (2007), pp. 1092-1098
26. Zabalou S., Apostolaki A., Pattas S., Veneti Z., Paraskevopoulos C., Livadaras I., Markakis G., Brissac T., Mercot H., Bourtzis K.: Multiple rescue factors within a *Wolbachia* strain. *Genetics*, 178 (4) (2008), pp. 2145-2160
27. Veneti Z, Zabalou S, Papafotiou G, Paraskevopoulos C, Pattas S, Livadaras I, Markakis G, Herren JK, Jaenike J, Bourtzis K.: Loss of

- reproductive parasitism following transfer of male-killing *Wolbachia* to *Drosophila melanogaster* and *Drosophila simulans* *Heredity* (Edinb). 109(5) pp.306-12 (2014) 7 7
28. Kleisiaris C, Kritsotakis E, Daniil Z, Markakis G, Papathanasiou I, Androulaki Z, Gourgoulis K: Assessing the risk of obstructive sleep apnoea-hypopnoea syndrome in elderly home care patients with chronic multimorbidity: a cross-sectional screening study. *Springerplus* 5 (1), (2016).
 29. Kleisiaris C, Kritsotakis E, Daniil Z, Malli F, Markakis G, Papathanasiou I. Multimorbidity is a risk factor for obstructive sleep apnea-hypopnea syndrome in ageing. *European Respiratory Journal* 46 (suppl 59), PA2341, 2015
 30. Papadaki C, Stratigos M, Markakis G, Spiliotaki M, Mastrostamati G.... Circulating microRNAs in the early prediction of disease recurrence in primary breast cancer. *Breast Cancer Research* 20 (1), 72, 2018
 31. S Agelaki, C Papadaki, M Stratigos, M Spiliotaki, G Markakis. Circulating microRNAs (miRNAs) as predictors of relapse in early breast cancer (BC), *Journal of Clinical Oncology* 35 (15_suppl), e23030-e23030, 2017
 32. Gouma S., Papadaki A.A., Markakis G., Magan N. and Goumas D., 2019. Studies on pesticides mixture degradation by white rot fungi. *Journal of Ecological Engineering*, 20(2): 16-26, 2019.
 33. Papadaki A.A., Markakis G., Ladomenou K., Goumas D. and Magan N. Effect of nitrogen fertilization on downy mildew of cucumber. *Journal of Applied Horticulture*, (Vol. 20(3), 2019).
 34. Lioudaki S., Verikokos C., Kouraklis G., Kontopodis N., Markakis G., Ioannou C., Daskalopoulou A., Perrea D., Klonaris C. Paraoxonase-1 and Symptomatic Status in Carotid Artery Disease. *Annals of Vascular Surgery*, (Volume 64, April 2020), Pages 355-360
 35. Kalaitzaki A.E., Koukouli S., Foukaki M.E., Markakis G., Tziraki Ch. Dementia Family Carers' Quality of Life and Their Perceptions About Care-receivers' Dementia Symptoms: The Role of Resilience. *Journal of Aging and Health* (2021)
 36. Pérez-Urrestarazu L., Kaltsidi M.P., Nektarios P, Markakis G., Loges V., Perini K., Fernández-Cañero R.: Particularities of having plants at home during the confinement due to the COVID-19 pandemic. *Urban Forestry & Urban Greening*, Volume 59, April 2021
 37. Koukouli, S., Kalaitzaki, A.E., Panagiotakis, S., Markakis, G., Werner, P., & Tziraki, Ch. Factors associated with the perception of services by dementia informal caregivers in Greece: the role of familism. *Aging and Mental Health*, 26(2), 2022, 305-313
 38. Kartsoni E, Bakalis N, Patelarou E, Markakis G, Lahana E, Patelarou AE. Translation, cultural adaptation and validation of the Attitude Scale towards e-learning (ATel) into the Greek language. *Population Medicine*. 4(July 2022):19. doi:10.18332/popmed/151522.

39. Kyriakaki E., Detorakis E., Bertsiias A., Markakis G., Tsakalis N., Volkos P., Spandidos D., Symvoulakis E.. Ocular trauma, visual acuity related to time of referral and psychosocial determinants, during COVID-19 pandemic: A prospective study. *Exp Ther Med.* (2023) Feb 8;25(3):130. doi: 10.3892/etm.2023.11829.
40. Batala K., Papadakaki M., Kalaitzaki A., Paritsis N.C., Markakis G.: The Effectiveness of Human Systems Therapy (HST) on Intimate Partner Violence (IPV): An Empirical Study in Greece. *Psychology*, Vol.14 No.9, September 2023
41. Boura D., Spanakis M., Markakis G., Notas G., Lionis C., Tzanakis N. Paraschakis E. Exploring the Relationship between Wind Patterns and Hospital Admissions Due to 8 8 Respiratory Symptoms in Children. *Children (ISSN 2227-9067)* (2024) 11, 717

Citations

from Google Scholar = 2049 and h-index = 20

Research Projects:

Participation of at least 12 national and international research projects from the HMU, and from University of Crete.

I was also leader in two research projects:

1. Application of the environmental decision support expert system in Crete aquatic ecosystems (Expert System-Crete (ES-Cr)), 2004-2008.
2. Identification of Environmental perception of Cretan rural population. 2013-2015

PhD Supervision

Supervisor in PhD Thesis of the Department of Social Work, HMU. K. Batala (2024). Brief change interventions in the relationships of couples experiencing partner violence with the aim of eradicating it, with the model of Human Systems Therapy (HST): a contribution to the psychology of the family.

I also supervise 2 more PhD students in the Department of Social Work, HMU.

Member of supervision committee in 3 more PhD students from HMU and the University of Crete.