

M. Gabriela Sava Finalist for the 2020 MCDM Junior Researcher Best Paper Award

Birsen Karpak
Associate Editor, *IJAHP*
Distinguished Professor, Youngstown State University

In April 2020, M. Gabriela Sava received the great news that her paper [“An analysis of the sensitivity and stability of patients’ preferences can lead to more appropriate medical decisions.”](#) published in *Annals of Operations Research* was selected as a finalist for the 2020 MCDM Junior Researcher Best Paper Award. The paper was in collaboration with Dr. Luis G. Vargas and Dr. Jerrold H. May from University of Pittsburgh and Dr. James G. Dolan from University of Rochester Medical Center. The award honors junior academic researchers and practitioners who work in the area of multi-criteria decision-making for their excellence, creativity and innovation. Gabriela was nominated for this prestigious award by the Associate Editor of the *IJAHP*, Dr. Birsen Karpak from Youngstown State University.



M. Gabriela Sava was born in Romania, finished her undergraduate studies at Bucharest University of Economic Studies in 2008, and in 2016 graduated with a PhD in Business Analytics and Operations from Joseph M. Katz Graduate School of Business, University of Pittsburgh. Since 2016, she has been an Assistant Professor at the College of Business, Clemson University and a Faculty Scholar at Clemson School of Health Research (CUSHR).

Methodologically, Gabriela’s current research focuses on the use of sensitivity and stability analysis of multi-criteria decision models and on the use of data mining methods for improving resource allocation in preventive healthcare services. The paper nominated for the award is part of one of her research projects that focuses on designing a personalized approach that supports patient-healthcare provider communication in the selection of an appropriate alternative for colorectal cancer screening. To quantify the necessary level of personalization for each medical encounter between the patient and healthcare provider, she developed a new sensitivity and stability analysis for the Analytic Hierarchy Process (AHP)/Analytic Network Process (ANP) models. The new methodology can identify how additional medical information can change the patient’s preferences without additional elicitations, and how the healthcare provider can utilize the findings to tailor the discussions during the medical encounter. The work on this project was financially supported by a one-year accelerate grant from Clemson University.

We wish Gabriela the best of luck with the final presentation for this award that will take place during INFORMS Annual Meeting in Washington D.C, November 8-11, 2020.