

MURAJ: In Focus - Bringing Research Down to Earth with Dr. Pinar Karaca-Mandic

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Abstract: Dr. Pinar Karaca-Mandic, Director of the Business Advancement Center for Health at the University of Minnesota, has had a long career in economics and research. From her first research project with NASA’s Jet Propulsion Laboratory to her full docket of current projects, she has been fascinated by turning the complicated simple. Although her work is no longer space related, it has had an astronomical impact, appearing in the New York Times and Wall Street Journal. I sat down with Dr. Karaca-Mandic to learn about her path to becoming a leading health economist, her future goals, and her advice for aspiring researchers.

As Founding Director of the [Business Advancement Center for Health \(BACH\)](#), housed in the Carlson School of Management, Dr. Pinar Karaca-Mandic has plans to focus her research on the end user: the patient. This goal is a bit ironic when considering Karaca-Mandic’s first exposure to research had an out-of-this-world element. As an undergraduate student, Karaca-Mandic secured a ten-week fellowship at Caltech where she worked with NASA’s Jet Propulsion Laboratory (JPL). At the time, JPL was looking to receive bids for the development of the International Space Station. As a fellow, Karaca-Mandic was tasked with designing and simulating combinatorial auctions that would increase efficiency and produce the most value from bidders.



Figure 1: Professor Pinar Karaca-Mandic, Director of the Business Advancement Center for Health at the University of Minnesota¹

After this brief stint in California, Karaca-Mandic knew she wanted to pursue graduate school in economics and continue her foray into research. This led her back to California where she would go on to earn her PhD in Economics from the University of

California at Berkeley. While at Berkeley, Karaca-Mandic focused heavily on industrial organization economics where she was intrigued by consumer behavior. In the back of her mind, she was always interested in healthcare and different health behaviors but did not start focusing on this area of research until she took a job at RAND Corporation, a non-profit research organization, following her PhD. There she started looking at the optimal design of health insurance benefits and regulations. By the time she left the organization to join the University of Minnesota School of Public Health, Karaca-Mandic's entire research portfolio was healthcare oriented. Karaca-Mandic spent ten years at the School of Public Health, and she reflects fondly on her time there due to the highly interdisciplinary work that they conducted.

From there, she moved to the Carlson School of Management where she took over as the Academic Director for the [Medical Industry Leadership Institute \(MILI\)](#). Under Karaca-Mandic's leadership, MILI grew exponentially in several directions. She expanded the institute to encompass undergraduate students by developing a Business of Healthcare minor and supported the development of the undergraduate student group, Medical Industry Leadership Institute Undergraduates (MILIU). When reflecting on her time with MILI, Karaca-Mandic feels that her best accomplishment was contributing more to students and creating content that matters to them. She remains involved with students by teaching two courses in the Business of Healthcare minor and two MBA-level courses, as well as serving as the faculty advisor for MILIU.

Karaca-Mandic was originally enamored with research because she found she could use analytical skills and theories to model complicated situations in a way that became simplified; this innate ability and passion has helped her excel as an educator where reducing abstract ideas to consumable information is the key to success.

Turning to her primary role as a researcher, Karaca-Mandic shared how researchers plan for certain projects, commit to them, and manage them as if running a business. When the COVID-19 pandemic hit, Karaca-Mandic's pipeline of work was altered due to launching the [University of Minnesota COVID-19 Hospitalization Tracking Project](#). This project, still ongoing today, has won several awards, produced peer-reviewed publications in top journals such as the Journal of American Medical Association (JAMA), and has been featured in hundreds of national and local media outlets such as The New York Times, Wall Street Journal, and National Public Radio.

Karaca-Mandic divulged that over the past two years her work has felt incredibly different, but she could not identify why until a few weeks ago. What she recently recognized was that her work was having a visible impact on the community. To her, the act of producing something alongside of a community and returning something consumable to them is incredibly satisfying and motivating. Rather than have her research sit in journals, Karaca-Mandic wants her future research to continue the trend of providing a direct influence on those who can benefit from it.

The new center she founded and presides over, BACH, will do just that: provide an infrastructure for use- and need inspired research with a highly collaborative nature. Karaca-Mandic's COVID-19 research has instilled her with the courage to leverage resources beyond academia and has shown her the power of doing so. For her, interdisciplinary work is a requirement rather than an option, especially within the multidimensional world of healthcare where value is viewed differently by all stakeholders. BACH's first project is supported by the [Robert Wood Johnson Foundation Systems 4 Action Research Grant](#) and focuses on developing a "social bond," a financial instrument that aims to align participant incentives and improve health-related social needs.

When asked if she ever sees herself moving into a different field of economics, Karaca-Mandic confided that the core of her research will remain healthcare. With that, however, Karaca-Mandic explained she is always looking for new learning opportunities and directions to expand in. To her, this does not mean picking a field and spending years in it but rather exploring passions or interests as they arise; currently, she has delved into investigating sustainable financing options.

For students looking to get involved with research, Karaca-Mandic says networking is the key. By attending events and staying for networking sessions, students may be surprised to find the right person to work with. In our virtual world, browsing through conferences and the types of projects that people are presenting on is also a good

way to get involved – some researchers may even have recordings available to view. Karaca-Mandic encourages students to not be afraid to send an email or quick LinkedIn message to a researcher if they discover something that piques their interest. From her perspective, these micro interactions are super influential in building a network and establishing an appreciation for what you are seeking.

In listening to Karaca-Mandic discuss her work, it is clear she loves what she does and appreciates the past experiences that have gotten her to where she is today. From just reading her curriculum vitae, one could easily be intimidated by her accomplishments. However, if one took Karaca-Mandic's advice and reached out, they would find themselves connected with a down-to-earth individual who managed to bring her own research down from space and beyond the written page.

¹Figure taken from UMN Carlson School of Management webpage

<https://carlsonschool.umn.edu/faculty/pinar-karaca-mandic>.

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[Dr. Pinar Karaca-Mandic](#) is the C. Arthur Williams Jr. Professor in Healthcare Risk Management in the Department of Finance and the Founding Director of the Business Advancement Center for Health (BACH). Her research interests include consumer behaviors, technology adoption and de-adoption, healthcare regulations, and intersectional healthcare problems.