

Yeona Kang, Ph.D., is an associate professor in the Department of Mathematics at Howard University in Washington, D.C. She joined Howard University in 2018 after serving as instructor of mathematics in the Department of Radiology at Weill Cornell Medical College. Prior to her faculty appointment at Howard, Kang held research and visiting scientist positions at institutions including Brookhaven National Laboratory and the Department of Materials Science at Stony Brook University. She earned her doctorate in applied mathematics and statistics from SUNY Stony Brook and holds a master's and bachelor's degree from Pusan National University in the Republic of Korea.

Kang's research focuses on scientific computing and the mathematical and statistical analysis of dynamic brain positron emission tomography imaging, as well as machine learning and neural network modeling applied to biological and medical problems. She develops mathematical models using differential equations, spectral analysis and optimization techniques to describe complex physiological processes, and her work has appeared in peer-reviewed journals and collaborative scientific projects. In addition to her individual research, she plays a key role in multidisciplinary efforts funded by agencies such as the National Institutes of Health, the Simon Foundation and the National Science Foundation.

At Howard University, Kang teaches courses in probability, statistics and mathematical modeling and mentors undergraduate and graduate students in research and independent study. She serves on departmental committees, advises students on applied mathematics projects and contributes to curriculum development. Her scholarship and teaching reflect a commitment to advancing quantitative methods in science and expanding opportunities for students in mathematical and data sciences.