

## Francesca Dominici, PhD

Francesca Dominici is the Director of the [Harvard Data Science Initiative](#), at the Harvard T.H. Chan School of Public Health and Clarence James Gamble Professor of Biostatistics, Population and Data Science at the Harvard T.H. Chan School of Public Health. Her research focuses on the development of statistical methods for the analysis of large and complex data. She leads several interdisciplinary groups of scientists with the ultimate goal of addressing important questions in environmental health science, climate change, comparative effectiveness research in cancer, and health policy. Dominici was elected to the [National Academy of Medicine](#) in 2018.

Dominici is an Italian statistician who performs collaborative research on projects that combine big data with health policy and climate change. Her life's work has focused on developing and advancing statistical methods for the analysis of large, heterogeneous data sets to identify and understand the health impacts of environmental threats and inform policy. She is an expert in data science, Bayesian methods, and causal inference. Her productivity and contributions to the field have been remarkable. Dominici has provided the scientific community and policy makers with robust evidence on the adverse health effects of air pollution, noise pollution, and climate change. Her studies have directly and routinely impacted air quality policy, leading to more stringent ambient air quality standards in the United States.

Dominici has published more than 200 peer-reviewed publications, and was recognized in Thomson Reuter's 2019 list of the most highly cited researchers – ranking in the top 1% of cited scientists in her field. She has authored or co-authored a prolific body of peer-reviewed papers in leading statistical, biomedical and public health journals – including the Journal of American Statistical Association, Biometrics, New England Journal of Medicine, Journal of the American Medical Association, and Science. Her work has been covered by the New York Times, Los Angeles Times, and NPR.

Dominici is an advocate for the career advancement of women faculty. Her work on the Johns Hopkins University Committee on the Status of Women earned her the campus Diversity Recognition Award in 2009. At the T.H. Chan School of Public Health, she has led the Committee for the Advancement of Women Faculty.

Dominici's awards include the Mortimer Spiegelman Award of the [American Public Health Association](#) in 2006. The [Florence Nightingale David Award](#) of the [Committee of Presidents of Statistical Societies](#) in 2015; and the [University of Alabama at Birmingham's](#) Janet L. Norwood Award for Outstanding Achievement in Statistical Sciences, which honors a woman statistician for achievement in 2016.

Dominici has served on a number of international committees including the Radiation Effects Research Foundation Scientific Advisory Board, (2014-2019), Hiroshima Japan. She sits on multiple committees on public health, organized by the National Academy of Sciences, National Institutes of Health (NIH). She chaired the Biostatistics Methods Study Section for the NIH.

Born in Rome, Italy Dominici earned a bachelor degree in statistics from [Sapienza University of Rome](#) in 1993, and a PhD in statistics from the [University of Padua](#) in 1997. She taught [biostatistics](#) at the [Johns Hopkins Bloomberg School of Public Health](#) from 1997 to 2009, with a joint appointment in [epidemiology](#). She received her honorary Master of Public Health degree from Harvard in 2009.