Dr. Dey received his PhD from Calcutta University in 1972, after which he obtained postdoctoral training at Kansas University Medical Center from 1973-1977, followed by his faculty appointment in 1977 where he rose to the rank of University Distinguished Professor. He moved to Vanderbilt University as Dorothy Overall Wells Professor of Pediatrics, Cell & Dev Biology and Pharmacology in 2002. In both places, he directed NIH-funded reproductive biology training grants. In 2008, Dr. Dey moved to Cincinnati Children's Hospital Medical Center as Lova Riekert Chair and Professor of Pediatrics to start a new Division of Reproductive Sciences. He has published over 250 original articles and is funded by two MERIT Awards and a Program Project Grant from NIH. His research mission has been to define the molecular road map to embryo-uterine interactions during pregnancy. His recent work published in Nat Med and JCI provides novel information in the context of ectopic pregnancy and progesterone resistance to pregnancy failure. In 2008, Dr. Dey received Carl G. Hartman Award, the highest honor of the Society for the Study of Reproduction.

He has graduated 5 PhD students, and mentored 35 postdoctoral students, 20 of whom are currently independent faculty members, and most others are investigators in major research institutions. His laboratory currently consists of 4 postdoctoral fellows, 1 graduate student, 1 MD/PhD student, 1 visiting graduate student and two research assistants.