

Dr Shuttleworth obtained his PhD in Physiology from the University of Melbourne, Australia, and moved to the US in 1991 to investigate nitric oxide signaling and neurotransmitter mechanisms. Since 1998 he has been at the University of New Mexico (UNM) School of Medicine, where he established a research program focused on cellular mechanisms of neuronal injury. His work has involved brain slice and whole animal models of stroke and other acute brain injuries, often coupling electrophysiology with high-resolution neuronal calcium imaging and assessment of vascular dynamics. For the last decade, his group's work has focused almost entirely on understanding spreading depolarization (SD) and its relationship to secondary brain injury. In addition to laboratory-based SD work, Dr Shuttleworth collaborates extensively with clinical colleagues at UNM to assess SD in the intensive care unit and operating room.