Dr. Krakauer received his bachelor's and master's degree from Cambridge University, and his medical degree from Columbia University College of Physicians and Surgeons, where he was elected to Alpha Omega Alpha Medical Honor Society. After completing an internship in Internal Medicine at The Johns Hopkins Hospital, he returned to Columbia University for his residency in Neurology at the Neurological Institute of New York. He subsequently completed a research fellowship in motor control in the Center of Neurobiology and Behavior at Columbia and a clinical fellowship in stroke at the Neurological Institute at Columbia University Medical Center.

Dr. Krakauer's clinical interests include ischemic stroke, subarachnoid and intracerebral hemorrhage, arteriovenous malformations, cerebral vasculitis, migraine, cerebral sinus thrombosis, neuro-rehabilitation, and brain repair.

Dr. Krakauer is currently a Professor of Neurology and Neuroscience and Director of the Brain, Learning, Animation, and Movement Lab (www.BLAM-lab.org<http://www.blam-lab.org/>) at The Johns Hopkins University School of Medicine. His areas of research interest are: (1) Experimental and computational studies of motor control and motor learning in humans (2) Tracking long-term motor skill learning and its relation to higher cognitive processes such as decision-making. (3) Prediction of motor recovery after stroke (4) Mechanisms of spontaneous motor recovery after stroke in humans and in mouse models (5) New neuro-rehabilitation approaches for patients in the first 3 months after stroke.

Dr. Krakauer is also co-founder of the video gaming company Max and Haley, and of the creative engineering Hopkins-based project named KATA. KATA and M&H are both predicated on the idea that animal movement based on real physics is highly pleasurable and that this pleasure is hugely heightened when the animal movement is under the control of our own movements. This synchronized mapping between a virtual animal's complex movements and our own simpler movements is a cognitive interface of huge potential as it harnesses mechanisms of embodiment, playful motor exploration, and captures the hierarchical organization of the motor system itself. We would also argue that it is an experimental prototype of what lies at the heart of playing and observing sports and dance. A simulated dolphin and other cetaceans have now been made available by Max and Haley in two iOS games: one called "Shark Eaters: Rise of the Dolphins" and the other called "Bandit's Shark Showdown". Similar technology developed by KATA has led to a therapeutic game, interfaced with an FDA-approved 3D exoskeletal robot, which is being used in an ongoing multi-site rehabilitation trial for early stroke recovery.