Bioinspiration and life in 3D

Nature-inspired solutions have spawned such products as potential cancer cures from animal and plants, novel antibiotics, and gecko-inspired adhesives. This “bio-inspired” approach applies integrative methods from anatomy, animal function, evolution, and biomechanics to inspire novel synthetic materials. Further, new methods for visualizing animals has opened new doors into understanding the diversity of life. This lecture will discuss how studies of gecko form and functions have contributed to a broader understanding of bio-inspiration. It will also focus on recent research using 3-D imaging techniques to digitally reconstruct living animals in full 3-D color and high resolution, and explore biological diversity in a whole new way.