



Andrew Maniotis earned his Ph.D. degree in cell biology from the department of Molecular Cell Biology and Zoology, University of California, Berkeley, CA, in 1991. As a postdoctoral fellow at Harvard Medical School, he worked on the cytoskeletal and extracellular basis of cellular tensegrity with Donald Ingber, and tumor anti-angiogenesis with Judah Folkman. At The University of Iowa, his team discovered vasculogenic mimicry in malignant melanoma. He is currently a program director of a research initiative focused on the cell and developmental biology of cancer at The University of Illinois, Chicago, in the department of pathology. His group is improving methods to non-toxically reverse transform cancer via dismantling the extracellular matrix, and are developing and testing new physical methods to detect and stage the chromatin structure of cancer. Recently, Maniotis, his laboratory, and his bioengineering and medical students have developed tests to detect different grades of cancer and virus pathogenicity, using concepts borrowed from cellular tensegrity. Several of these new cancer diagnostic and therapeutic strategies are in preclinical testing for melanoma and breast cancer in pet animals that have spontaneously acquired cancers.