Your special skills that are valuable to the university

Eastern Illinois University is very excited to get me on board because I couple a very interesting research program that looks at wildlife and sets to solve ecological problems while at the same time collecting information on how animals are well suited to their environment and how we can learn from their morphology and behavior to improve current technology. They are also very interested in my commitment to teach human anatomy and human physiology and appeal to pre-health students especially due to my biomechanics background. In a school that has a large athletic and ROTC population, biomechanics and how humans perform under extreme conditions are much valued. The school is also interested in the fact that I use interdisciplinary and innovative approaches such as flow visualization techniques, material testing, electrophysiological recordings, accelerometry and custom made chips, and modeling in my research approach. Lastly, the school believes that since most of my research in conducted in the lab, it creates a great opportunity for undergraduate students to participate in research around their class schedule. My knowledge of anatomy, physiology, biomechanics and functional morphology, coupled with mastering of advanced techniques such as Particle Image Velocimetry, kinematic analyses, electromyography and neurophysiological records, respirometry, material testing, morphometrics, electronics, robotics and modeling, makes me an asset to the Department. My past experience in fish ecology, age and growth and reproduction make it easy to understand the requests of the Illinois Environmental Agencies to better manage their fish populations and enables me to collaborate with Dr. Robert Colombo and Dr. Karen Gaines in the department. Possible future collaborations with other institutions include: Prof. Melina Hale at the University of Chicago on fish fins and sensory information; Prof. Eric Tytell at Tufts University on the effects of turbulence in fish with different body shapes and fin placement; Prof. George Lauder at Harvard University in accelerometers to improve advances in fish robotics.