John S. Condeelis, Ph.D.
Professor and Co-Chair, Anatomy and Structural Biology
Judith and Burton P. Resnick Chair in Translational Research
Co-Director, Gruss Lipper Biophotonics Center
Scientific Director, Analytical Imaging Facility

John S. Condeelis, Ph.D., is the Judith and Burton P. Resnick Chair in Translational Research and professor and cochair of the department of anatomy and structural biology at Albert Einstein College of Medicine. The director of the Cancer Center program called "Tumor Microenvironment and Metastasis," he is the codirector, with Robert Singer, of the Gruss Lipper Biophotonics Center at Einstein, dedicated to the development and application of optical imaging technologies. Dr. Condeelis' training is in nuclear physics, optical physics and cell biology. He worked for the U.S. Navy on particle accelerators and wave guides, and was a Ph.D. student under Robert Allen, the developer of video microscope imaging, from whom he learned live cell microscopy and polarized optics.

Dr. Condeelis' current research interests are in tumor cell motility, chemotaxis and invasion during metastasis. He has pioneered the use of combined multiphoton imaging with expression analysis to derive gene-expression signatures that define the pathways used by tumor cells in mammary tumors to move and invade blood vessels. The invasion signature of breast tumors was one of his discoveries. Dr. Condeelis has devised optical microscopes for uncaging, biosensor detection and multiphoton imaging for these studies and has used novel caged enzymes and biosensors to test, in vivo, the predictions of the invasion signature regarding the mechanisms of tumor cell chemotaxis to epidermal growth factor.

The author of more than 200 scientific papers on various aspects of cell and cancer biology and optical imaging, he has served as president of the New York Society of Experimental Microscopists. From 2006 through 2009 he also served on the Council of the American Society of Cell Biology, and in 2006 and 2007 was on the Centennial Program Committee of the American Association of Cancer Research. Dr. Condeelis has participated in numerous study sections at the National Institutes of Health (NIH) and the American Cancer Society. He was named chair of the Physiology and Cell Biology Study Section and the Gordon Conference on Motile Systems and was elected to the Board of Scientific Councilors of the Heart, Lung and Blood Institute at NIH.

A member of the editorial boards of several prominent journals, including the *Journal of Cell Biology,* he was also a founding board member of *Cell Motility and the Cytoskeleton*. Honors extended to Dr. Condeelis include the Allen Foundation Scholar Award, the Hirschl Career Scientist Award and election as a fellow of the American Association for the Advancement of Science. He has served as a consultant to the National Cancer Institute for planning five programs: tumor microenvironment; tumor cell dormancy; tumor metastasis; multiphoton imaging; and optical microscopy.