Over the last ten years administrators, governmental officials, and clinical researchers have increasingly called for a greater emphasis on “translational research”, i.e., research that translates findings in the laboratory into new treatments for medical conditions, over basic research in the biological sciences. Although the application of biological research to human disease (as well as toward improvements in agriculture and development of biotechnology) is important, I feel that an increased emphasis is not needed and is actually detrimental. Ultimately, this emphasis is self-defeating because one needs the fruits of basic research to fuel these applications. I will give examples from my own research developing green fluorescent protein (GFP) as a biological marker and uncovering the molecular basis of the sense of touch to argue that basic research into fundamental problems in biology is important for its own sake and, not surprisingly, for the development of various applications.