



HFES Comments on the National Science Foundation Strategic Plan

September 26, 2016

On behalf of the Human Factors and Ergonomics Society (HFES), thank you for the opportunity to comment on the National Science Foundation (NSF) Strategic Plan for 2018 through 2022. NSF plays a vital role in supporting fundamental research and education across all areas of science and engineering. Going forward, we urge NSF to emphasize support for interdisciplinary and convergent research as a priority for the Foundation.

Continuing advances in technology are leading to new discoveries, practices, and solutions for a wide range of technical, societal, and economic issues. However, successful deployment is strongly dependent on how humans interact with those new technologies. The study of human factors and ergonomics (HF/E) works to develop safe, effective, and practical human use of technology, particularly by developing scientific approaches for understanding the ways in which humans interact with complex systems, known as “human-systems integration.”

With cyber-physical systems being identified as the “Fourth Industrial Revolution,” breakthroughs in emerging technology areas such as artificial intelligence, robotics, and autonomous vehicles are key to the successful advancement of the NSF Mission. As NSF develops its future initiative in “Human Technology Frontier,” we urge the agency to engage with established scientific societies such as HFES to seek expert guidance and input on the development of new research priorities.

As background, HFES is a multidisciplinary professional association with 4,500 individual members worldwide, including psychologists and other scientists, engineers, and designers, all with a common interest in creating safe and effective products, equipment, and systems that maximize and are adapted to human capabilities. HF/E works to develop safe, effective, and practical human use of technology, particularly in challenging settings. HF/E experts, research, and perspectives are vital additions to the development of cyber-physical systems.

Thank you for the opportunity to provide comments. Please do not hesitate to contact HFES should you require additional information.