IFREE Distinguished Scholar: Kevin McCabe

Kevin McCabe is a professor of economics, law, and neuroscience at George Mason University, and he is director of GMU's Center for the Study of Neuroeconomics. Professor McCabe learned to do economic theory with Professor Beth Allen at the University of Pennsylvania, and after receiving his Ph.D. in 1985 and taking a job as an assistant professor at the University of Arizona, he learned experimental economics with Professors Vernon Smith and Stephen Rassenti. From these beginnings, Kevin found a research paradigm that excited him, and since then he has followed a hard learned rule from his competitive running in high school and college -- never look back.

In 1997 Professor McCabe became an IFREE Distinguished Scholar in Neuroeconomics. This scholarship allowed him to develop a research program with his co-authors in neuroeconomics. A neuroeconomics experiment allows economists to take noninvasive measurements of brain activity before, during, and after a person makes an economic decision. These measurements can then be used to test computational theories of the brain with the broader goal of understanding how emergent brain computations interact with emergent institutional computations to produce economic activity. Thanks to the IFREE support, this research has been widely disseminated to academics in economics and neuroscience, and ultimately helped result in the founding of the Society for Neuroeconomics in 2005. Through his center at George Mason, Kevin continues to do active research in neuroeconomics, with his most recent co-authored publication, "Reputation for reciprocity engages the brain reward center," in the Proceedings of the National Academy of Science in 2010, and he currently serves as co-editor of the Social Science Research Network Neuroeconomics eJournal.

Recently Professor McCabe has become interested in virtual worlds as a platform for doing economics experiments and for teaching economics through more immersive economic experiences that are usually unavailable in the classroom. A virtual world experiment allows economists to study economic behavior where the message spaces of institutions interact with the natural language capacity of humans and where the complexity of human interaction can be studied in a more naturally immersive economic environment. For behavioral economists this means that decision rules must be understood as emerging from the natural human proclivity to make sense of a complex world. For experimental economists this means that institutional rules must be understood as emerging from human attempts to discover ecologically rational ways to more efficiently work with one another. For neuroeconomists this means that neural computations must be understood as having evolved to allow humans with relatively small attention capacities to deal with highly complex informational and social environments. To understand economies from this perspective will require new collaborations, new experimental methods, new tools, and new theories that will keep economics research exciting.

The support of IFREE will continue to be instrumental in allowing Professor McCabe the opportunity to pursue these research programs. With the unencumbered money provided by IFREE, Professor McCabe has been able to recruit students and interns and fund early experiments that ultimately have allowed him to demonstrate the value of these research programs to the academic community. By teaching in the IFREE sponsored graduate student workshops, Professor

McCabe has had the opportunity to recruit many supporters to neuroeconomics when they are the most curious, and most eager, to learn new ideas. Recently Professor McCabe has begun to present his virtual worlds research in the same forum. Finally, the prestige of being associated with IFREE has given Professor McCabe access to many more forums around the world where he widely disseminates his research and ideas.