Dr. Nicholas Port Receives Two Grant Awards

Dr. Nicholas L. Port, PhD is collaborating with Dr. Steven A. Hitzeman, OD, FAAO on a study entitled “A Prospective Examination of Micro-Neuroanatomical Brain Changes Following mTBI among IU Varsity Football Players.”

Each year more than one million mild traumatic brain injuries (mTBI or concussions) occur in the US through vehicular accidents, violence, military service, falls, and sports injuries. The purpose of this research project is to use cutting-edge MRI technologies (e.g. diffusion tensor imaging and functional connectivity) to measure changes in the brain with a pre-post prospective design among individuals who have suffered mTBI.

The award of $120,000 is from the Indiana Spinal Cord and Brain Injury fund of the Indiana State Department Health, with a starting date of January 1, 2012.

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Dr Nicholas L. Port and Dr. Colin Allen (Cognitive Science & History & Philosophy of Science) have received an award from the Collaborative Research and Creative Activity competition for their proposal titled “DogCam: An Accurate Eye-tracker for Naturalistic Social Cognition in Dogs.”

The Canis lupus (gray wolf) is a social animal with a sophisticated non-verbal communication system. The Canis lupus familiaris (domestic dog) was the first animal domesticated by homo sapiens approximately 15,000 years ago from the Canis lupus. Eye/gaze tracking experiments of non-laboratory environments has repeatedly been shown to reveal cognitive processes in human and non-human primate subjects. The purpose of this grant is to develop a lightweight portable eye tracking device for the Canis lupus familiaris, the domestic dog. The eye tracker will have both an outward facing scene camera and an eye-facing eye tracker camera so as to record what the animals are looking at during natural interactions with humans. Commercial eye trackers of this type already exist for humans and, combined with our dogcam, will allow us to do studies on non-verbal communication between humans and the domestic dog.

This award of $10,000 is from the Indiana University Collaborative Research program of the Office of the Vice Provost for Research, with a starting date of April 1, 2012.