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Editorial

EDITORIAL

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Editorial foreword

The development of neuroscience and its role in understanding the central nervous system has come a long way. A quick search in the Web of Science database (JCR Science Edition, 2010) shows 239 journals under the heading of neurosciences, with one of the longest-standing journals beginning in 1891. However, the quest to understand human behavior through the study of brain systems has just begun. The "Decade of the Brain" in the 1990s brought international focus to the study of brain functions, to seek cures for neurologic and psychiatric diseases. This was followed by the "Decade of the Mind," to further appreciate the complexities of higher cognition in human behavior. Currently, both initiatives are still ongoing and are continuously fueled by advancements in neuroimaging and neurotechnology. In such a research climate, it is foreseeable that in the coming decade there will be a rapid development in the integration of interdisciplinary research between the neurosciences, engineering, and social sciences.

Much interest has been shown in understanding human behavior in social and natural environments; thus new interdisciplinary research fields such as social neuroscience, cultural neuroscience, decision neuroscience, and neuroeconomics have evolved. Such investigations are the beginnings of our understanding of the complexities of the interaction between brain and behavior. Findings from these new integrations will also aid advancement in understanding psychopathologies, and improving interventions for related disorders.

An intriguing convergence of neuroscience, psychology, and economics into a unified discipline has begun in the last decade. The ultimate aim is to provide a single, general theory to explain human behavior and decision-making in the natural environment, where risks, emotions, and uncertainties abound. This is the emerging field of neuroeconomics, which can be encompassed under the broader heading of decision neuroscience. The steady growth of these fields is evident by a cursory search on the number of published peer-reviewed journal articles, as shown in Figure 1.

Our journal, *Neuroscience and Neuroeconomics*, provides a timely, open access platform for researchers to present their cutting-edge research in neuroeconomics and related neuroscience fields. We are devoted to providing up-to-date information on advancements in this field, and establishing a forum that will promote active discussion between authors and readers. This journal will focus on the identification of brain structures and functions related to behavior, behavioral predictions, and decisionmaking in health and disease. We encourage authors to contribute their ideas and vision, critical reviews, and commentary, so that *Neuroscience and Neuroeconomics* will serve as a forum for the lively exchange of ideas. In particular, we welcome papers that employ brain imaging techniques and methodologies investigating neuronetworks in

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Figure I Number of publications per year located using keywords "neuroeconomics" and "decision neuroscience" in the PubMed Central (PMC) database. Tracking started in 2003 when the first paper in neuroeconomics was recorded in the database. Note that the search was done in October 2011, hence the number of publications representing 2011 is not complete.

decision-making, behavior preference, satisfaction, emotion, reward/temptation, and loyalty, as well as economic and predictive assessments. The format of this journal will include empirical research papers, critical review papers, commentaries and methodology papers.

I am proud and honored to be the founding editor of *Neuroscience and Neuroeconomics*. We have a prestigious board of honorary reviewers who are leaders in their respective fields. They have been selected on the basis of their widely recognized work and scientific rigor. They will provide the breadth of interests required of an international, peer-reviewed journal. Submitted manuscripts will be anonymously refereed

by experienced and expert researchers. *Neuroscience and Neuroeconomics* will depend on the commitment and diligence of these reviewers and we will work closely with them at the forefront of electronic publishing. It is our aim to keep the submission-to-decision time to 2 weeks, and to get accepted manuscripts online with open access at the earliest possible hour. I thank Dove Medical Press for their full support in the entire publishing process and their commitment to upholding the scientific integrity of this journal. We believe that *Neuroscience and Neuroeconomics* will provide an important platform for the presentation of innovative discoveries and the understanding of human behavior.

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