

## Emergence OF Cognitive Neuroscience IN The Middle East

Cognitive neuroscience has been emerged as one of the fields with high interest among academics in Iran, Turkey, Lebanon and other countries of Middle East. Today, a vast number of researchers from various fields ranging from basic sciences such as anatomy, histology and pharmacology to clinical sciences such as psychiatry, neurology and psychology are focusing their research on the cognitive neuroscience (CN). Multidisciplinary nature of CN has produced fascinating studies by collaboration between fields that previously were considered far away from each other. Submissions from software Engineers collaborating with psychologists, or control engineers working with neurologists are typical articles that we receive in Basic and Clinical Neuroscience Journal. This approach has yielded numerous interesting studies with applications that nobody has thought about them before even on a global scale.

More than half a century on from early birds activities on cognitive developmental psychology with a Piagetian flavour, formation of national committee on the cognitive science and technology in Iran has given this field a new boost. Institutes specifically working on cognitive neuroscience and even on a particular field of cognitive neuroscience have been formed during the past few years such as Institute for Cognitive Science Studies (ICSS). Other pioneers of the field include Tehran University of Medical Sciences (TUMS) and its divisions including Cellular and Molecular Research Center, and Iranian National Center for Addiction Studies (INCAS), Institute for Research in Fundamental Science (known as IPM) and its department of cognitive science, Amir Kabir University of Technology (an engineering school), the department of biomedical engineering of the Iran University of Science and Technology and some other engineering schools, and many more. Active centers in Turkey also include Karadeniz Technical University, Middle Eastern Technical University, Bilkent University, and many more. The trend is visible in the rest of the Middle East as well.

A recently introduced prize from ICSS named Haly Abbas International Fellowship in Cognitive Sciences

has been another sign of importance of this field to the academic research in the Middle East. Haly Abbas has been a prominent cognitive neuroscientist in Iran around 300 AH (or 900 CE). In the “Complete Art of Medicine” book, he describes neuroanatomy, neurobiology, and neurophysiology of the brain, and has deeply studied several disorders of central nervous system including coma, amnesia, insomnia, vertigo, and epilepsy. His methodological approach has earned him the title of the founder of medical ethics and biomedical research. This prestigious prize is open to all fields of cognitive neuroscience.

Two related societies in Iran, “Iranian Neuroscientists Society”(INSS) and “Iranian Society for Cognitive Science and Technology”(ISCST) were established recently and have enjoyed a surprising welcome from the community. In the first session of the ISCST about 70 academicians from different fields ranging from electrical engineering to psychiatry and addiction attended. INSS with its wider field is expected to gather around three folds of this number for its first meeting going to be held soon.

An international congress with the same title of this journal, Basic and Clinical Neuroscience (BCNC), is under way and is planned to be held on November 2012, followed by another international conference on May 2013 on Cognitive Neuroscience. BCNC covers a wide range of neuroscience, and scientists from around the globe have shown intense interest to attend the conference. The conference seems to be set to receive a widespread international network of visitors.

Many PhD students are directing their research toward cognitive science. Neuroscience students from top-ranking Tehran University of Medical Sciences are working on various fields including sleep, vision, addiction, and attention, while ICSS and IPM cognitive science students are working on similar fields.

Application of cognitive science in various applied fields such as marketing, economics, robotics, and

media is perceived as a strong sign that many people including decision-makers have realized the potentials that cognitive science can bring to advance our quality of life. We speculate that the world will observe novel and unprecedented basic research in this field from the Middle East, as well as new applications that nobody has realized before.

Ali Yoonessi, MD, PhD,  
Tehran University of Medical Sciences

Hamed Ekhtiari, MD,  
Institute for Cognitive Sciences Studies

Mohammad Taghi Jogataei, PhD,  
Tehran University of Medical Sciences

Hamid Reza Pouretamad, PhD,  
Institute for Cognitive Sciences Studies,  
Shahid Beheshti University