## Ju Han Kim's biographical sketch,

Ju Han Kim, M.D., Ph.D., M.S. is an Assistant Professor of Medicine in Biomedical Informatics, Children's Hospital Informatics Program, Harvard Medical School. Ju Han Kim obtained his M.D. and Ph.D. degrees from Seoul National University (SNU) in Seoul, Korea and completed his residency training in neuro-psychiatry at SNU Hospital in 1996. During his residency program in 1995, Ju Han Kim developed a psychiatric electronic medical record system, PsyBase, which is currently being used as a part of integrated clinical information system in SNU Hospital. Through his master's and Ph.D. thesis work, he invented a series of novel brain-image pattern- analysis methodologies by area-preserving topographic transformation studies. He also participated in the development and management of the Dementia Telemedicine Center (DTC), which opened in September 1996 at SNU Hospital and provided community-based telepsychiatric services for the elderly.

Ju Han Kim's carrier has been focused on the state-of-the-art informatics technology and its impact on and utility of biomedical sciences and clinical practice. He joined, as a Douglas Porter Fellow in Medical Informatics, Drs. Charles Safran and Warner Slack, who are the pioneers in medical informatics and had developed prominent clinical information system in Boston's Beth Israel Deaconess Medical Center, Harvard Medical School. During his postdoctoral fellowship at Beth Israel Deaconess Medical Center, Harvard Medical School, he started a formal degree-seeking program at Harvard-MIT Division of Health Sciences and Technology. He obtained an M.S. degree in Medical Informatics from MIT by inventing novel unsupervised machine learning algorithms for functional genomic clustering, the matrix incision tree algorithms, based on geometric space partitioning principle which became prominent methods for largescale gene expression data analysis.

After completing his fellowship at Beth Israel Deaconess Medical Center in 2000, Ju Han Kim joined the faculty of Harvard Medical School as an Instructor of Medicine in Biomedical Informatics at Children's Hospital Informatics Program. With his expertise in pattern analysis and machine learning technologies as well as his understanding in biomedical and clinical sciences, Ju Han Kim is currently developing an integrated biochip informatics system, which aims to integrate complex bioinformatics technologies and biomedical databases with clinical phenotype information for large-scale functional genomic and proteomic studies in order to engineer the massively parallel processes of biomedical informatics research in the postgenomic era.

## Ju Han Kim's Brief C.V.

## Education

1988. 2: M.D. Seoul National University, School of Medicine, Seoul, Korea

- 1995. 2: M.S., Psychiatry, Seoul National University, School of Medicine, Seoul, Korea
- 1998. 2: Ph.D., Psychiatry, Seoul National University, School of Medicine, Seoul, Korea
- 2001. 2: M.S., Medical Informatics, Massachusetts Institute of Technology, Cambridge, MA

## **Professional Experience**

1988. 3 - 1989. 2 : Rotating Internship, Seoul National University Hospital, Seoul, Korea

- 1989. 3 1992. 4 : Public Health Doctor (military service), Ministry of Health and Welfare, Korea.
- 1992. 5 1996. 2 : Resident training in Psychiatry, Seoul National University Hospital, Seoul, Korea
- 1996. 3 1997. 2 : Clinical and research fellow in psychopharmacology, , Seoul National University Hospital, Seoul, Korea
- 1997. 3 1997.11: Clinical fellow in psychiatry, Asan Medical Center, Ulsan University, Seoul, Korea
- 1999.12-2000.4: Douglas Porter Fellow in Medical Informatics, Center for Clinical Computing, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA
- 2000.5-2001.4: Instructor of Medicine in Biomedical Informatics, Children's Hospital Informatics Program, Children's Hospital, Harvard Medical School, Boston, MA
- 2000.5- present: Assistant Professor of Medicine in Biomedical Informatics, Children's Hospital Informatics Program, Children's Hospital, Harvard Medical School, Boston, MA