

CURRICULUM VITAE

NAME: Kyudong Han

ADDRESS:

OFFICE:

Department of Nanobiomedical Science
BK21 PLUS NBM Global Research Center for Regenerative Medicine
Dankook University
29 Anseo-Dong, Dongnam-Gu, Cheonan, Chungnam 330-714, Korea

EDUCATION:

Ph.D.	Biological Sciences, Louisiana State University	2006
M.S.	Microbiology, Dankook University, Korea	2002
B.S.	Microbiology, Dankook University, Korea	2000

EMPLOYMENT:

11/12 – present Director, DKU-Theragen institute for NGS analysis (DTiNa), Dankook University, Cheonan, Korea
02/11 – present Assistant Professor, Dept. of Nanobiomedical Science, Dankook University, Cheonan, Korea
09/10 – 02/11 Assistant Professor, Dept. of Microbiology, Dankook University, Cheonan, Korea
07/09 – 08/10 Postdoctoral Research Associate with Dr. Sara Sawyer, Dept. of Molecular Genetics and Microbiology, The University of Texas at Austin, USA
08/06 – 06/09 Postdoctoral Research Associate with Dr. Mark A. Batzer, Dept. of Biological Sciences, Louisiana State University, Baton Rouge, USA
08/03 – 08/06 Graduate Teaching/Research Assistant with Dr. Mark A. Batzer (Ph.D. Dissertation Director), Dept. of Biological Sciences, Louisiana State University, Baton Rouge, USA
08/00 – 08/02 Graduate Teaching/Research Assistant with Dr. Seung-Yeol Son (M.S. Thesis Director), Dept. of Microbiology, Dankook University, Cheonan, Korea

AWARDS, MEMBERSHIP AND SERVICE:

- Award of Excellent Scientists (given to 10 people) in Korea, 2007.
- William H. Gates Award for Teaching Excellence, Louisiana State University, 2006.
- ASM Travel Grant, Mobile DNA Conference, 2006.
- Vice Chancellor's Graduate Enhancement, Louisiana State University, 2003-2006.
- Associate Editor for *Gene*, *Meta Gene*, *Genes & Genomics*, *Genomics & Informatics* 2014-Present
- Editor for *The Open Access Journal of Science and Technology*, 2013-Present
- Guest Editor for *Comparative and Functional Genomics*, *The Scientific World Journal*
- Reviewer (*ad hoc*) for *Clinical Genetics*, *PLoS ONE*, *Genes & Genomics*, *Zoological Science*, *Analytical Biochemistry*, *Journal of Biomedical Science*, *Molecules & Cells*, *Genetica*, *Gene*, *Mobile DNA*, *Journal of Clinical Pathology*

SKILLS:

Molecular Biology Next Generation Sequencing; PCR; LDR (**L**igation **D**etection **R**eaction); DNA cloning; DNA sequencing/genotyping (ABI3100/3130x1), LI-COR, DNA isolation, purification, and quantification; quantitative PCR (ABI Prism 7000); southern blotting; RFLP; MLPA (**M**ultiplex **L**igation-dependent **P**robe **A**mplification); Site-Direct Mutagenesis

Computational Biology MEGA; CLUSTAL W/X; PAUP*4.0; Arlequin; MrBayes; Network; Treecon; Structure 2.1; Bioedit; DNASTAR package; Sequin; RepeatMasker; Censor; BLAT; BLAST; Primer3; PAML; Sequencher® 4.10

RESEACH INTEREST:

- Genetic conflict between host and retroviral genes
- Mobile element mediated genomic instability
- Comparative genomics and population genetics
- Primate genome evolution
- Forensic genetics
- Molecular phylogenetic analysis

Dr. Han has expertise in transposable element-related genomic instability and genetic variation. His laboratory is focusing on the identification and characterization of transposable element (i.e., retrotransposon) involved in genomic instability. Currently using Next Generation Sequencing (NGS) technique, he investigates that transcriptional activity of the retrotransposons can be specifically controlled by the host and may play unrecognized roles in regeneration in animal models and/or patients with lesions in the central/peripheral nervous and musculoskeletal system. In addition, he has been the director of DKU-Theragene institute for NGS analysis (DTiNa) since 2012. He supports various NGS researches including RNA-sequencing, exome sequencing, and epigenome sequencing. DTiNa supports NGS education and experiments for researchers in local biomedical industries and institutes. His bioinformatic expertise is important for basic approaches in transitional biomedical research.