

## Curriculum Vitae

Name: Yuseob Kim  
Nationality: Rep. of Korea (South Korea)  
Date of birth: Sept. 7. 1970  
Current address: Center for Evolutionary Functional Genomics  
The Biodesign Institute  
Arizona State University  
P.O. Box 875301  
Tempe, AZ 85287-5301  
email: yuseob.kim@asu.edu  
website: <http://sols.asu.edu/faculty/ykim.php>

### Education:

- 2002 **Ph. D.** University of Rochester, NY, USA.  
- Advisor: Dr. Wolfgang Stephan.  
- Subject: Theoretical population genetics.
- 1995 **M. S.** Seoul National University, Seoul, Korea.  
- Advisor: Dr. Chung Choo Lee.  
- Subject: Drosophila experimental quantitative genetics.
- 1993 **B. S.** Seoul National University, Seoul, Korea.

### Work/Teaching experience:

- 2006 – present, Assistant professor, School of Life Sciences, Arizona State University
- 2003 – 2005, Postdoctoral fellow, Department of Biology, University of Rochester, NY, USA -Advisor: Dr. H. Allen Orr.
- 2002 – 2003, Postdoctoral Associate, Department of Biological Statistics and Computational Biology, Cornell University, NY, USA.  
- Advisor: Dr. Rasmus Nielsen.
- 2000 – 2001, Wissenschaftlicher Assistent in Wolfgang Stephan lab, University of Munich, Munich, Germany.

- 2000 Teaching Assistant (Lab in Molecular Cell Biology, Molecular Population Genetics).
- 1999 Teaching Assistant (Principles of Biology lab).

Honors:

Ernst Caspari Fellowship (University of Rochester) 1998-2000.

Grants:

Theory of adaption in experimental and natural populations. NSF. \$214,197.  
2005 – 2007. (with Allen Orr, University of Rochester)

Invited Talks:

- 2006 “Is adaptation faster with genetic robustness?”, Society for Molecular Biology and Evolution meeting, Arizona State University
- 2006 Workshop on Mathematical Population Genetics, International Centre for Mathematical Sciences, Edinburgh, UK
- 2005 Faculty search seminar, School of Life Sciences, Arizona State University, Tempe, Arizona
- 2005 Faculty search seminar, Department of Biology and Biochemistry, University of Houston, Houston, Texas
- 2005 Faculty search seminar, Section of Evolution and Ecology, University of California, Davis, California
- 2004 Workshop “Stochastic processes in evolutionary and disease genetics”, Banff International Research Station, Banff, Canada
- 2004 Faculty search seminar, Department of Zoology, University of Florida, Gainesville, Florida
- 2003 Faculty search seminar, Department of Genetics, North Carolina State University, Raleigh, North Carolina
- 2003 Faculty search seminar, Department of Biology, University of Iowa, Iowa city, Iowa
- 2002 “Detecting a local signature of selective sweep”, Society for Molecular Biology and Evolution meeting, Sorrento, Italy.

2001 “Patterns of genetic variation with selective sweeps”, Statistics department seminar, University of Oxford, Oxford, UK.

Publications:

Kim, Y. (2006): Allele frequency distribution under recurrent selective sweeps. *Genetics*, 172: 1967-1978.

Xue, Y., Daly, A., Yngvadottir, B., Liu, M., Coop, G., Kim, Y., Sabeti, P., Chen, Y., Stalker, J., Huckle, E., Burton, J., Leonard, S., Rogers, J. & Tyler-Smith, C. (2006): Spread of an inactive form of caspase-12 in humans is due to recent positive selection. *American Journal of Human Genetics*, 78:659-70.

Kim, Y. & Orr, H. A. (2005): Adaptation in sexuals vs. asexuals: clonal interference and the Fisher-Muller model. *Genetics*, 171:1377-1386.

Nielsen, R., Williamson, S., Kim, Y., Hubisz, M. J., Clark, A. G., and Bustamante, C. D. (2005): Genomic scans for selective sweeps using SNP data. *Genome Res.*, 15: 1566-1575.

Jensen, J. D., Kim, Y., Bauer DuMont, V., Aquadro, C. F. & Bustamante, C. D. (2005): Distinguishing between selective sweeps and demography using DNA polymorphism data. *Genetics*, 170:1401-1410.

Betancourt, A. J., Kim, Y. & Orr, H. A. (2004): A pseudohitchhiking model of X vs. autosomal diversity, *Genetics*, 168:2261-2269.

Meiklejohn, C. D., Kim, Y., Hartl, D. L. & Parsch, J. (2004): Identification of a locus under complex positive selection in *Drosophila simulans* by haplotype mapping and composite likelihood estimation, *Genetics*, 168:265-279.

Innan, H. & Kim, Y. (2004): Pattern of polymorphism after strong artificial selection in a domestication event, *PNAS*, 101:10667-10672.

Kim, Y. & R. Nielsen (2004): Linkage disequilibrium as a signature of selective sweeps, *Genetics*, 167:1513-1524.

Kim, Y. (2004): Effect of strong directional selection on weakly selected mutations at linked sites: implication for synonymous codon usage, *Molecular Biology and Evolution*, 21:286-294.

Kim, Y. & Stephan, W. (2003): Selective sweeps in the presence of interference among partially linked loci. *Genetics*, 164:389-398.

- Stephan, W. & Kim, Y. (2002): Recent applications of diffusion theory to population genetics. pp. 72-93. In: *Modern Developments in Theoretical Population Genetics* (M. Slatkin and M. Veuille, eds), Oxford University Press.
- Kim, Y. & Stephan, W. (2002): Detecting a local signature of genetic hitchhiking along a recombining chromosome. *Genetics* 160: 765-777.
- Kim, Y. & Stephan, W. (2000): Joint effects of genetic hitchhiking and background selection on neutral variation. *Genetics* 155:1415-1427.
- Kim, Y. & Stephan, W. (1999): Allele frequency changes in artificial selection experiments: statistical power and precision of QTL mapping. *Genetical Research* 73:177-184.
- Stephan, W. & Kim, Y. (1998): Persistence of microsatellite arrays in finite populations. *Molecular Biology and Evolution* 15:1332-1336.
- Orr, H. A. & Kim, Y. (1998): An adaptive hypothesis for the evolution of the Y chromosome. *Genetics* 150:1693-1698.

Manuscripts in preparation

Kim, Y. "Is adaptation faster with genetic robustness", to be submitted to *Evolution*.