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• Current Position: Director, Digital Healthcare Institute

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• Educational Background:

- POSTECH B.S. in Life Science / B.S. in Computer Science (Dual Degree)
- POSTECH Ph.D. in Computational Biology

• Professional Experience:

- Visiting Researcher, Stanford University, Department of Chemical and Systems Biology
- Research Assistant Professor, Seoul National University College of Medicine, Cancer Research Institute
- Project Manager, Institute of Convergence Technology, KT Corporation
- Research Assistant Professor, Seoul National University Hospital, Biomedical Research Institute

• Professional Organizations:

- KoSAIM (Korean Society of Artificial Intelligence in Medicine)

• Main Scientific Publications:

Choi YS*, Yoon S*, Kim KL, Yoo J, Song P, Kim M, Shin YE, Yang WJ, Noh J, Cho H, Kim S, Chung J, Ryu SH, "Computational Design of Binding Proteins to EGFR Domain II" *PLoS One*. 2014 Apr 7;9(4):e92513.

Kim J, Kim I, Yang JS, Shin YE, Hwang J, Park S, **Choi YS**, Kim S. "Rewiring of PDZ domain-ligand interaction network contributed to eukaryotic evolution." *PLoS Genet*. 2012 Feb;8(2):e1002510. [Epub 2012 Feb 9.]

Kim EK, Yun SJ, Ha JM, Kim YW, Jin IH, Woo DH, Song SH, Ha HK, Choi YS, Lee TG, Bae SS. "Loss of Akt1 evokes epithelial-mesenchymal transition by autocrine regulation of transforming growth factor-β1." *Adv Biol Regul*. 2012 Jan;52(1):88-96.

Jeon J, Nam HJ, **Choi Y**, Yang JS, Hwang J, Kim S. "Molecular evolution of protein conformational changes revealed by a network of evolutionarily-coupled residues." *Mol Biol Evol*. 2011 Sep;28(9):2675-85.



Choi YS*, Han SK*, Kim J, Yang J, Jeon J, Ryu SH, Kim S. "ConPlex: a server for the evolutionary conservation analysis of protein quaternary structures." *Nucleic Acids Res.* 2010 Jul;38(Web Server issue):W450-6.

Kim J, **Choi YS**, Lim S, Yea K, Yoon JH, Jun DJ, Ha SH, Kim JW, Kim JH, uSh PG, yRu SH, Lee TG. "Comparative analysis of the secretory proteome of human adipose stromal vascular fraction cells during adipogenesis." *Proteomics*. 2010 Feb;10(3):394-405.

Lee CS, Kim KL, Jang JH, **Choi YS**, Suh PG, Ryu SH. "The roles of phospholipase D in EGFR signaling." *Biochim Biophys Acta*. 2009 Sep;1791(9):862-8.

Choi YS, Yang JS, Choi Y, Ryu SH, Kim S. "Evolutionary conservation in multiple faces of protein interaction.", *Proteins*. 2009 Oct;77(1):14-25.

Yoon JH, Yea K, Kim J, **Choi YS**, Suh PG, Ryu SH, "Comparative proteomic analysis of the insulin-induced L6 myotube secretome.", *Proteomics*, 2008 Jan;9(1):51-60.

Tsai TY*, **Choi YS***, Ma W, Pomerening JR, Tang C, Ferrell JE Jr. "Robust, tunable biological oscillations from interlinked positive and negative feedback loops.", *Science*, 2008 Jul 4;321(5885):126-9.

Choi YS, Yang JS, Ryu SH, Kim S, "Retrieving Protein Domain Encoding DNA Sequences Automatically through Database Cross-referencing.", *Bioinformatics and Biosystems*, 2006