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## 학력

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## 경력

- 2009-2010 Rockefeller Univ., Post-doc. (Robert Darnell, HHMI)  
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## 대표 발표 논문

1. Eom S\*, Peak J\*, Park J\*, Ahn SH\*, Cho YK, Jeong Y, Lee HS, Lee J, Ignatova E, Lee SE, Hong Y, Gu D, Kim GWD, Lee DC, Hahm JY, Jeong J, Choi D, Jang ES, Chi SW (2023) "Widespread 8-oxoguanine modifications of miRNA seeds differentially regulate redox-dependent cancer development" *Nature Cell Biology*. 25, 1369-1383
2. Hahm JY\*, Park J\*, Jang ES, Chi SW (2022) "8-Oxoguanine: from oxidative damage to epigenetic and epitranscriptional modification" *Exp Mol Med*. 54, 626-1642
3. Gu D\*, Ahn SH\*, Eom S\*, Lee HS, Ham J, Lee DH, Cho YK, Koh Y, Ignatova E, Jang ES, Chi SW (2021) "AGO-accessible anticancer siRNAs designed with synergistic miRNA-like activity" *Molecular Therapy: Nucleic Acids* 23:1172-1190
4. Seok H, Lee H, Lee S, Ahn SH, Lee HS, Kim GWD, Peak J, Park J, Cho YK, Jeong Y, Gu D, Jeong Y, Eom S, Jang ES, Chi SW (2020) "Position-specific oxidation of miR-1 encodes cardiac hypertrophy" *Nature* 584, 279-285
5. Park S\*, Ahn SH\*, Cho ES\*, Cho YK, Jang ES, Chi SW (2018) "CLIPick: a sensitive peak caller for expression-based deconvolution of HITS-CLIP signals" *Nucleic Acids Research* 46(21):11153-11168
6. Lee HS\*, Seok H\*, Lee DH\*, Ham J\*, Lee W, Youm EM, Yoo JS, Lee YS, Jang ES, Chi SW (2015) "Abasic pivot substitution harnesses target specificity of RNA interference". *Nature Communications* 6:10154
7. Kim KK, Ham J, Chi SW (2013) "miRTCat: a comprehensive map of human and mouse microRNA target sites including non-canonical nucleation bulges". *Bioinformatics* 29(15):1898-9
8. Chi SW\*, Hannon GJ and Darnell RB\* (2012) An alternative mode of microRNA target recognition. *Nature Structural and Molecular Biology* 19: 321-327. (\*corresponding author)
9. Chi SW, Zang JB, Mele A, Darnell RB (2009) Argonaute HITS-CLIP decodes miRNA-mRNA interaction maps. *Nature* 460 (7254): 479-86