

## 1. C.V.

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## 2. Education & Professional Experiences

Year	Organization	Major	Degree
1997. 2.	Dept. of Biology, Korea University, Seoul, Korea	Biology	B.S.
1999. 2.	School of Life Sciences and Biotechnology, Korea University, Seoul, Korea	Biochemistry	M.S.
2004. 8.	School of Life Sciences and Biotechnology, Korea University, Seoul, Korea	Biochemistry	Ph.D.
2004.9– 2005.8	School of Life Sciences and Biotechnology, Korea University, Seoul, Korea	Biochemistry	Postdoctoral Fellow
2005.9– 2006.8	School of Life Sciences and Biotechnology, Korea University, Seoul, Korea	Biochemistry	Research Fellow
2006.9– 2008.9	Department of Biological Sciences, Stanford University, CA 94305, USA	Cell Biology	Postdoctoral Fellow
2008.10– 2010.8	School of Life Sciences and Biotechnology, Korea University, Seoul, Korea	Cell Biology	Research Professor
2010.9– 2015.8	College of Pharmacy, Sookmyung Women's University, Seoul, Korea	Cell Biology	Assistant Professor
2015.9– 2019.8	College of Pharmacy, Sookmyung Women's University, Seoul, Korea	Cell Biology	Associate Professor
2019.9– Present	College of Pharmacy, Sookmyung Women's University, Seoul, Korea	Cell Biology	Professor

### 3. Publications

42. Seul Kim, Nam Hyun Kim, Ji Eun Park, Jee Won Hwang, Nayeon Myung, Ki-Tae Hwang, Young A Kim, **Chang-Young Jang\***, and Yong Kee Kim\* (2020) PRMT6-mediated H3R2me2a guides Aurora B to chromosome arms for proper chromosome segregation. *Nature Communications* 11(1) 162. (IF 11.878) (\*co-corresponding author)(2020. 1. 30)
41. Dasom Gwon, Jihee Hong and **Chang-Young Jang** (2019) c-Cbl acts as an E3 ligase against DDA3 for spindle dynamics and centriole duplication during mitosis. *Molecules and Cells* 42(12) 840-849. (IF 3.533)
40. Seul Kim, Dasom Gwon, Jeong Ah Kim, Hanl Choi, **Chang-Young Jang** (2019) Bisphenol A disrupts mitotic progression via disturbing spindle attachment to kinetochore and centriole duplication in cancer cell lines. *Toxicology in Vitro* 59, 115-125. (IF 3.105) (2019. 4. 11)
39. Youjin Jung, Hag Dong Kim, Hee Woong Yang, Hye Jin Kim, **Chang-Young Jang** and Joon Kim (2017) Modulating cellular balance of Rps3 mono-ubiquitination by both Hel2 E3 ligase and Ubp3 deubiquitinase regulates protein quality control. *Experimental & Molecular Medicine* 49, (IF 5.063) (2017.11.17)
38. Ji Eun Park, Yu Lim Jang, **Chang-Young Jang** (2017) The tobacco carcinogen NNK disturbs mitotic chromosome alignment by interrupting p53 targeting to the centrosome. *Toxicology Letters* 281 110-118. (IF: 3.858) (2017. 11. 5)
37. Minji Choi\*, Yoo Hong Min\*, Jaehyuk Pyo, Chang-Woo Lee, **Chang-Young Jang** and Ja-Eun Kim (2017) TC Mps1 12, a novel Mps1 inhibitor, suppresses the growth of hepatocellular carcinoma cells via the accumulation of chromosomal instability. *British Journal of Pharmacology* 174 1810-1825. (2017. 4.22) (IF; 5.491)
36. Jeong H, Kim S, Lee J, Park JY, Zhou W, Liu X, Kim SD, Song YS, **Jang CY**, Oh SR, Choi S, Chang M (2017) Characterization of Phase I and Phase II Hepatic Metabolism and Reactive Intermediates of *Larrea nitida* Cav. and Its Lignan Compounds. *Phytotherapy Research* 2017 Jan; 31(1):140-151.
35. Hee Jin Chung, Ji Eun Park, Nam Soo Lee, Hongtae Kim\*, and **Chang-Young Jang\*** (2016) Phosphorylation of Astrin regulates its Kinetochore Function. *Journal of Biological Chemistry* 291(34) 17579-17592. (IF: 4.258) (\*co-corresponding author) (2016. 8. 19)
34. Hye Jin Kwon, Ji Eun Park, Haiyu Song, and **Chang-Young Jang** (2016) DDA3 and Mdp3 modulate Kif2a recruitment onto the spindle to control minus-end spindle dynamics. *J. Cell Sci.* 129 (14) 2719-2725. (IF: 4.706) (2016.7.15)
33. Na-Kyung Han, Dae Hwan Shin, Jung Seok Kim, Kwon Yeon Weon, **Chang-Young Jang**, Jin-Seok Kim (2016) Hyaluronan-conjugated liposomes encapsulating gemcitabine for breast cancer stem cells. *International Journal of Nanomedicine* 11, 1413-1425. (IF. 4.383)(2016.4.5)
32. Sunyi Lee, Ae Lee Jeong, Jeong Su Park, Sora Han, **Chang-Young Jang**, Keun Il Kim, Yonghwan Kim, Jong Hoon Park, Jong-Seok Lim, Myung Sok Lee, Young Yang (2016) IK-guided PP2A suppresses Aurora B activity in the interphase of tumor cells. *Cellular and Molecular Life Sciences* 73 (17), 3375-3386. (IF 5.808) (2016. 9.)
31. Seul Kim and **Chang-Young Jang** (2016) ANKRD53 interacts with DDA3 and regulates chromosome integrity during mitosis. *Biochem. Bioph. Res. Co.* 470(3), 484-491 (IF: 2.297) (2016. 2. 12)
30. Ji Eun Park, Haiyu Song, Hye Jin Kwon and **Chang-Young Jang** (2016) Ska1 cooperates with DDA3 for spindle dynamics and spindle attachment to kinetochore. *Biochem. Bioph. Res. Co.* 470(3), 586-592 (IF: 2.297) (2016. 2. 12)
29. Jin-Ju Kim, Na-Yeon Gil, Xiang Hua Zhang, Kwang-Hoon Chun, Guowei Fang, Joon Kim, Hyeeseong Cho, **Chang-Young Jang\*** and Hyuk-Jin Cha\* (2015) Sirt1 regulates

- microtubule dynamics through negative regulation of Plk1 in mitosis. *J. Cell Biochem.* 116(9), 1898–1907. (IF: 3.263) (2015. 7. 23) (\*co-corresponding author)
28. Haiyu Song, Ji Eun Park and **Chang-Young Jang** (2015) DDA3 targets Cep290 into the centrosome to regulate spindle positioning. *Biochem. Bioph. Res. Co.* 463(1–2), 88–94. (IF:2.281) (2015.7.17)
27. Xianghua Zhang, Hweon Park, Sung-Sik Han, Jung Woo Kim and **Chang-Young Jang** (2015) ERa regulates chromosome alignment and spindle dynamics during mitosis. *Biochem. Bioph. Res. Co.* 456(4), 919–925. (IF:2.281) (2015.1.24)
26. Byung-Soo Choi, Ji Eun Park, **Chang-Young Jang** (2014) Sirt3 controls chromosome alignment by regulating spindle dynamics during mitosis. *Biochem. Bioph. Res. Co.* 444(4), 662–669. (IF:2.406) (2014.2.21)
25. Hua Li, Hwa Jin Lee, Yeon Hwa Ahn, Hye Jin Kwon, **Chang-Young Jang**, Woo-Young Kim, Jae-Ha Ryu (2014) Tussilagone suppresses colon cancer cell proliferation by promoting the degradation of b-catenin. *Biochem. Bioph. Res. Co.* 443(1), 132–137. (IF:2.406) (2014.1.3)
24. Ae Lee Jeong, Sunyi Lee, Jeong Su Park, Sora Han, **Chang-Young Jang**, Jong-Seok Lim, Myung Sok Lee, and Young Yang (2014) Cancerous Inhibitor of Protein Phosphatase 2A (CIP2A) Protein Is Involved in Centrosome Separation through the Regulation of NIMA (Never In Mitosis Gene A)-related Kinase 2 (NEK2) Protein Activity. *Journal of Biological Chemistry* 289(1), 28–40. (IF:4.651) (2014.1.3)
23. Jung-Min Lee, Hyojung Park, A Long Sae Mi Noh, Ju-Hee Kang, Ling Chen, Ting Zheng, Juhyun Lee, Sun-Young Ji, **Chang-Young Jang**, Chan Soo Shin, Hyunil Ha, Zang Hee Lee, Hea-Young Park, Dong-Seok Lee and Mijung Yim (2012) 5-Lipoxygenase Mediates RANKL-Induced Osteoclast Formation via the Cysteinyl Leukotriene Receptor 1. *Journal of Immunology* 189(11), 5284–5292. (IF:5.788)(2012.12.1)
22. **Chang-Young Jang\***, Hag Dong Kim\*, Xianghua Zhang, Jin-Soo Chang and Joon Kim (2012) Ribosomal protein S3 localizes on the mitotic spindle and functions as a microtubule associated protein in mitosis. *Biochem. Bioph. Res. Co.* (\*co-first author) 429(1–2), 57–62. (IF:2.595) (2012.12.7)
21. Hag Dong Kim\*, **Chang-Young Jang\***, Jeong Min Choe, Jeongwon Sohn and Joon Kim (2012) Phenylbutyric acid induces the cellular senescence through a Akt/p21<sup>WAF1</sup> signaling pathway. *Biochem. Bioph. Res. Co.* (\*co-first author) 422(2), 213–218. (IF:2.595) (2012.6.1)
20. **Chang-Young Jang\***, Hag Dong Kim\* and Joon Kim (2012) Ribosomal protein S3 interacts with TRADD to induce apoptosis through caspase dependent JNK activation. *Biochem. Bioph. Res. Co.* (\*co-first author) 421(3), 474–478. (IF:2.595) (2012.5.11)
19. **Chang-Young Jang\***, Hyun-Seock Shin\*, Hag Dong Kim, Jung Woo Kim, Soo-Young Choi, Joon Kim (2011) Ribosomal protein S3 is stabilized by sumoylation. *Biochem. Bioph. Res. Co.* (\*co-first author) 414(3), 523–527. (IF:2.595) (2011.10.28)
18. **Chang-Young Jang\***, Judith A. Coppinger, John R. Yates III and Guowei Fang (2011) Mitotic kinases regulate MT-polymerizing/MT-bundling activity of DDA3. *Biochem. Bioph. Res. Co.* (\*co-corresponding author) 408(1), 174–179. (IF:2.595) (2011.04.29)
17. **Chang-Young Jang\*** and Guowei Fang (2011) DDA3 associates with MCAK and controls chromosome congression. *Biochem. Bioph. Res. Co.* (\*co-corresponding author) 407(3), 610–614. (IF:2.595) (2011. 4. 15)
16. Kim, Hag Dong; Kim, Tae-Sung; Joo, Yoo Jin; Shin, Hyun-Seock; Kim, Sang-Hwa; **Jang, Chang-Young**; Lee, Cheol Eui; Kim, Joon (2010) RpS3 translation is repressed by interaction with its own mRNA. *Journal of Cellular Biochemistry* 110(2), 294–303. (IF:3.540)
15. **Chang-Young Jang**, Judith A. Coppinger, John R. Yates III and Guowei Fang (2010) Phospho-Regulation of DDA3 in mitosis. *Biochem. Bioph. Res. Co.* 393(2), 259–263.

(IF:2.548)

14. **Chang-Young Jang** and Guowei Fang (2009) The N-terminal domain of DDA3 regulates the spindle-association of the microtubule depolymerase Kif2a and controls the mitotic function of DDA3. *Cell cycle*. 8(19), 3165-3171. (IF: 4.120)
13. S.H. Kim, B.H. Oh, J.H. Han, Cheol Eui Lee, J.Y. Choi, K.D. Hahn, **C.Y. Jang**, B.H. Youn, J. Kim (2009) Anisotropic domain-wall dynamics in proton-irradiated KH<sub>2</sub>PO<sub>4</sub>. *Current Applied Physics* 9 (6), 1307-1309. (IF:1.291) (2009.11)
12. Hyun-Seock Shin, **Chang-Young Jang**, Hag Dong Kim, Tae-Sung Kim, Sangduk Kim and Joon Kim (2009) Arginine methylation of ribosomal protein S3 affects ribosome assembly. *Biochem. Biophys. Res. Co.* 385 (2), 273-278. (IF:2.648)
11. **Chang-Young Jang**, Judith A. Coppinger, Akiko Seki, John R. Yates III and Guowei Fang (2009) Plk1 and Aurora A Regulate the Depolymerase Activity and the Cellular Localization of Kif2a. *J. Cell Science* 122 (9), 1334-1341. (IF:6.383)
10. Hui Zhu, Judith A. Coppinger, **Chang-Young Jang**, John R. Yates III and Guowei Fang (2008) FAM29A Promotes Microtubule Polymerization via Recruitment of the NEDD1- $\gamma$ -tubulin Complex to the Mitotic Spindle. *J. Cell Biol.* 183 (5), 835-848. (IF:9.598)
9. Akiko Seki, Judith A. Coppinger, **Chang-Young Jang**, John R. Yates III and Guowei Fang (2008) Bora and the Kinase Aurora A Cooperatively Activate the Kinase Plk1 and Control Mitotic Entry. *Science* 320 (5883), 1655-1658 (IF:26.372)
8. **Chang-Young Jang**, Jim Wong, Judith A. Coppinger, Akiko Seki, John R. Yates III and Guowei Fang (2008) DDA3 Recruits Microtubule depolymerase Kif2a to Spindle Poles and Controls Spindle Dynamics and Mitotic Chromosome Movement. *J. Cell Biol.* 181 (2), 255-267. (IF:9.598)
7. Jim Wong, Robert Lerrigo, **Chang-Young Jang**, and Guowei Fang (2008) Aurora A Regulates the Activity of HURP by Controlling the Accessibility of Its Microtubule-Binding Domain. *Mol. Biol. Cell* 19 (5), 2083-2091. (IF:6.028)
6. Akiko Seki, Judith A. Coppinger, Hining Du, **Chang-Young Jang**, John R. Yates III and Guowei Fang (2008) Plk1- and  $\beta$ -TrCP-Dependent Degradation of Bora Controls Mitotic Progression. *J. Cell Biol.* 181 (1), 65-78. (IF:9.598)
5. Tae-Sung Kim\*, **Chang-Young Jang\***, Hag Dong Kim, Jae Yung Lee, Byung-Yoon Ahn and Joon Kim (2006) Interaction of Hsp90 to ribosomal proteins protects from ubiquitination and proteasome-dependent degradation. *Mol. Biol. Cell* 17 (2), 824-833. (\*coauthor) (IF:6.520)
4. **Chang-Young Jang**, Jae Yung Lee and Joon Kim (2005) DNA repair activity of human rpS3 is operative to genotoxic damage in bacteria. *J. Microbiol. Biotechnol.* 15 (3), 484-490. (IF:1.744)
3. **Chang-Young Jang**, Jae Yung Lee and Joon Kim (2004) RpS3, a DNA repair endonuclease and ribosomal protein, is involved in apoptosis. *FEBS LETT.* 560 (1-3), 81-85. (IF:3.609)
2. Hag Dong Kim, **Chang-Young Jang**, Kimoon Seong, Ha-Chin Sung, Jae Yung Lee, Byeong Jae Lee, and Joon Kim (2003) Human rpS3 is involved in DNA repair and cell cycle control. *J. Photosci.* 10 (2), 195-198.
1. **Chang-Young Jang** and Joon Kim (2002) Multiple functions of human UV DNA repair endonuclease III. *J. Photosci.* 9 (2), 182-185.