Tamaki Suganuma, Ph. D
Research Investigator

Education
April 1997 to March 2001: Department of Molecular Embryology, Graduate School, Tokyo Medical and Dental University, Tokyo, Japan.
Awarded the degree of Ph.D. for a thesis entitled "Suppression of Tumor Cell Growth by Reintroduction of p300." Work supervised by Dr. Masa-Aki Ikeda.

Publications
1. Suganuma, T.* (2022), Beyond Moco Biosynthesis—Moonlighting Roles of MoaE and MOCS2. molecules *27*, 3733. (*corresponding author)
2. Suganuma, T.* and Workman, J. L. (2022), MPTAC links alkylation damage signaling to sterol biosynthesis. Redox Biology 51, 102270. (*corresponding author)
3. Suganuma, T.*, Swanson, S. K., Gogol, M., Garrett, T. J., Florens, L., Washburn, M. P., Workman, J. L. (2021), MOCS2 links nucleotide metabolism to nucleoli function. Journal of molecular cell biology 13 (11) 838–840. (*corresponding author)
4. Church, M.C., Workman, J. L., and Suganuma, T.* (2021) (*corresponding author). Macrophages, Metabolites, and Nucleosomes: Chromatin at the Intersection between Aging and Inflammation, International Journal of Molecular Sciences. 22 (19), 10274.
5. Suganuma, T.* and Workman, J. L. (2021) (**corresponding author). Nucleotide Metabolism Behind Epigenetics. Frontiers in Endocrinol. 12:731648. (*corresponding author).
6. Palma, M., Riffo, E.N., Suganuma, T., Washburn, M.P., Workman, J.L., Pincheira, R., and Castro, A.F. (2019). Identification of a nuclear localization signal and importin beta members mediating NUAK1 nuclear import inhibited by oxidative stress. Journal of cellular biochemistry *120*, 16088-16107.
7. Suganuma, T*., Swanson, S.K., Gogol, M., Garrett, T.J., Conkright-Fincham, J., Florens, L., Washburn, M.P., and Workman, J.L. (2018). MPTAC Determines APP Fragmentation via Sensing Sulfur Amino Acid Catabolism. Cell reports *24*, 1585-1596. (*corresponding author)
8. Suganuma, T*., and Workman, J.L. (2018). Chromatin and Metabolism. Annual review of biochemistry *87*, 27-49. (*corresponding author)
9. Oh, S., Suganuma, T*., Gogol, M.M., and Workman, J.L. (2018). Histone H3 threonine 11 phosphorylation by Sch9 and CK2 regulates chronological lifespan by controlling the nutritional stress response. eLife *7*. (*corresponding author)
10. Suganuma, T*., and Workman, J.L. (2016). Histone modification as a reflection of metabolism. Cell Cycle *15*, 481-482. (*corresponding author)
11. Suganuma, T.*, Swanson, S.K., Florens, L., Washburn, M.P., and Workman, J.L. (2016). Moco biosynthesis and the ATAC acetyltransferase engage translation initiation by inhibiting latent PKR activity. Journal of molecular cell biology *8*, 44-50. (*corresponding author)
12. Li, S., Swanson, S.K., Gogol, M., Florens, L., Washburn, M.P., Workman, J.L., and Suganuma, T*. (2015). Serine and SAM Responsive Complex SESAME Regulates Histone Modification Crosstalk by Sensing Cellular Metabolism. Mol Cell *60*, 408-421. (*corresponding

author)
13. Suganuma, T.* (2013). Emerging Areas of Chromatin Research, Fundamentals of Chromatin, Chapter 14, 553-572, Springer. (*corresponding author).
14. Zhang, D., Suganuma, T., and Workman, J.L. (2013). Acetylation regulates Jun protein turnover in Drosophila. Biochim Biophys Acta *1829*, 1218-1224.
15. Suganuma, T*., and Workman, J.L. (2013). Chromatin and signaling. Current opinion in cell biology *25*, 322-326. (*corresponding author)
16. Suganuma, T., and Workman, J.L. (2012). MAP kinases and histone modification. Journal of molecular cell biology *4*, 348-350.
17. Suganuma, T*., Mushegian, A., Swanson, S.K., Florens, L., Washburn, M.P., and Workman, J.L. (2012). A metazoan ATAC acetyltransferase subunit that regulates mitogen-activated protein kinase signaling is related to an ancient molybdopterin synthase component. Molecular & cellular proteomics : MCP *11*, 90-99. (*corresponding author)
18. Steinberg, X.P., Hepp, M.I., Fernandez Garcia, Y., Suganuma, T., Swanson, S.K., Washburn, M., Workman, J.L., and Gutierrez, J.L. (2012). Human CCAAT/enhancer-binding protein beta interacts with chromatin remodeling complexes of the imitation switch subfamily. Biochemistry *51*, 952-962.
19. Suganuma, T., and Workman, J.L. (2011). Signals and combinatorial functions of histone modifications. Annual review of biochemistry *80*, 473-499.
20. Suganuma, T., and Workman, J.L. (2010). WD40 repeats arrange histone tails for spreading of silencing. Journal of molecular cell biology *2*, 81-83.
21.Suganuma, T., and Workman, J.L. (2010). Features of the PHF8/KIAA1718 histone demethylase. Cell research *20*, 861-862.
22. Suganuma, T., Mushegian, A., Swanson, S.K., Abmayr, S.M., Florens, L., Washburn, M.P., and Workman, J.L. (2010). The ATAC acetyltransferase complex coordinates MAP kinases to regulate JNK target genes. Cell *142*, 726-736.
23. Suganuma, T., and Workman, J.L. (2008). Crosstalk among Histone Modifications. Cell *135*, 604-607.
24. Suganuma, T., Pattenden, S.G., and Workman, J.L. (2008). Diverse functions of WD40 repeat proteins in histone recognition. Genes Dev *22*, 1265-1268.
25. Suganuma, T., Gutierrez, J.L., Li, B., Florens, L., Swanson, S.K., Washburn, M.P., Abmayr, S.M., and Workman, J.L. (2008). ATAC is a double histone acetyltransferase complex that stimulates nucleosome sliding. Nature structural & molecular biology *16515*, 364-372.
26. Suganuma, T., and Ikeda, M. (2008). Tumor Growth Suppression by the Coactivator p300. Journal of Oral Bioscience *50*, 115-124.
27. Guelman, S., Suganuma, T., Florens, L., Weake, V., Swanson, S.K., Washburn, M.P., Abmayr, S.M., and Workman, J.L. (2006). The essential gene wda encodes a WD40 repeat subunit of Drosophila SAGA required for histone H3 acetylation. Mol Cell Biol *26*, 7178-7189.
28. Guelman, S., Suganuma, T., Florens, L., Swanson, S.K., Kiesecker, C.L., Kusch, T., Anderson, S., Yates, J.R., 3rd, Washburn, M.P., Abmayr, S.M*., et al.* (2006). Host cell factor and an uncharacterized SANT domain protein are stable components of ATAC, a novel dAda2A/dGcn5-containing histone acetyltransferase complex in Drosophila. Mol Cell Biol *26*,

871-882.
29. Carrozza, M.J., Li, B., Florens, L., Suganuma, T., Swanson, S.K., Lee, K.K., Shia, W.J., Anderson, S., Yates, J., Washburn, M.P*., et al.* (2005). Histone H3 methylation by Set2 directs deacetylation of coding regions by Rpd3S to suppress spurious intragenic transcription. Cell *123*, 581-592.
30. Ma, K., Araki, K., Ichwan, S.J., Suganuma, T., Tamamori-Adachi, M., and Ikeda, M.A. (2003). E2FBP1/DRIL1, an AT-rich interaction domain-family transcription factor, is regulated by p53. Molecular cancer research : MCR *1*, 438-444.
31. Suganuma, T., Kawabata, M., Ohshima, T., and Ikeda, M.A. (2002). Growth suppression of human carcinoma cells by reintroduction of the p300 coactivator. Proc Natl Acad Sci U S A *99*, 13073-13078.
32. Suganuma, T. (2002). [Effect of mutation in the p300 transcription coactivator on transcriptional response and cell proliferation of human carcinoma cell lines]. Kokubyo Gakkai zas Journal of the Stomatological Society, Japan *69*, 139-151.
33.Suganuma, T. (2002). Effect of Mutation in the p300 Transcription Coactivator on Transcriptional Response and Cell Proliferation of Human Carcinoma Cell Lines. The Journal of the Stomatological Society, Japan *71*, 139-151.
34. Ohshima, T**., Suganuma, T**., and Ikeda, M. (2001). A novel mutation lacking the bromodomain of the transcriptional coactivator p300 in the SiHa cervical carcinoma cell line. Biochemical and biophysical research communications *281*, 569-575. **These authors contributed equally to this work.

Publications online

1. Tamaki Suganuma* (2010). The ATAC Acetyltransferase Complex Coordinates MAP kinases to regulate JNK Target Genes., A First Author Review of Life Science Current Research in Top Journal, Japan. (*corresponding author)