

## 論文/Articles

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### [2018 年度/FY2018]

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### [2019 年度/FY2019]

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5. Morishita, H., Zhao, Y.G., Tamura, N., Nishimura, T., Kanda, Y., Sakamaki, Y., Okazaki, M., Li, D., \*Mizushima, N. A critical role of VMP1 in lipoprotein secretion. *eLife* 8:e48834 (2019), DOI: 10.7554/eLife.48834
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### [2020 年度/FY2020]

8. Sakai, Y., Koyama-Honda, I., Tachikawa, M., Knorr, R.L., \*Mizushima, N. Modeling membrane morphological change during autophagosome formation. *iScience* 23:101466 (2020), DOI: 10.1016/j.isci.2020.101466.
9. Agudo-Canalejo, J., Schultz, S.W., Chino, H., Migliano, S., Saito, C., Koyama-Honda, I., Stenmark, H.,

- Brech, A., May, A.I., Mizushima, N., \*Knorr, R. L. Wetting regulates autophagy of phase separated droplets and the cytosol. **Nature** 591:142-146 (2021)
10. Maeda, S., Yamamoto, H., Kinch, N. L., Garza, C.M., Takahashi, S., Otomo, C., Grishin, V. N., Forli, S., Mizushima, N., \*Takanori Otomo. Structure, lipid scrambling activity and role in autophagosome formation of ATG9A. **Nat. Struct. Mol. Biol.** 27:1194-1201 DOI: 10.1038/s41594-020-00520-2
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12. Okawa, F., Hama, Y., Zhang, S., Morishita, H., Yamamoto, H., Levine, T.P., \*Mizushima, N. Evolution and insights into the structure and function of the DedA superfamily containing TMEM41B and VMP1. **J. Cell Sci.** 134:jcs255877 (2021)

### [2021 年度/FY2021]

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15. Yamamoto, Y., Chino, H., Tsukamoto, S., Ode, K.L., Ueda, H.R., \*Mizushima, N. NEK9 regulates primary cilia formation by acting as a selective autophagy adaptor for MYH9/myosin IIA. **Nat. Commun.** 12:3292 (2021)
16. Kusumaatmaja, H., May, A.I., Feeney, M., McKenna, J.F., Mizushima, N., Frigerio, L., \*Knorr, R.L. Wetting of phase-separated droplets on plant vacuole membranes leads to a competition between tonoplast budding and nanotube formation. **Proc. Natl. Acad. Sci. USA**. 118: e2024109118 (2021)
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20. Chino, H., Yamasaki, A., Ode, K.L., Ueda, H.R., \*Noda, N.N., \*Mizushima, N. Phosphorylation by casein kinase 2 ensures ER-phagy receptor TEX264 binding to ATG8 proteins. **EMBO Rep.** 23:e54801 (2022).
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- phosphatidylethanolamine in organellar membranes. **Mol. Cell** 82: 3677-3692 (2022).  
DOI:10.1016/j.molcel.2022.08.008
22. Ohshima, T., Yamamoto, H., Sakamaki, Y., Saito, C., \*Mizushima, N. NCOA4 drives ferritin phase separation to facilitate macroferritinophagy and endosomal microferritinophagy. **J Cell Biol.** 221:e202203102 (2022).
23. Yim, W.W., \*Yamamoto, H., \* Mizushima, N. A pulse-chase reporter processing assay for mammalian autophagic flux with HaloTag. **eLife** 11:e78923 (2022)
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25. Sakai, Y., Takahashi, S., Koyama-Honda, I., Saito, C., \*Mizushima, N. Experimental determination and mathematical modeling of standard shapes of forming autophagosomes. **bioRxiv** 2022.07.20.500884; doi: <https://doi.org/10.1101/2022.07.20.500884>
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27. Shimasawa, M., Sakamaki, J.I., Mizushima, N. The pH-sensing Rim101 pathway regulates cell size in budding yeast. **J. Biol. Chem.** 299: 102973 (2023)
28. Ishii, S., Chino, H., Ode, K.L., Kurikawa, Y., Ueda, H.R., Matsuura, A., \* Mizushima, N., \*Itakura, E. CCPG1 recognizes ER luminal proteins for selective ER-phagy. **Mol Biol Cell.** 34:ar29 (2023) doi: 10.1091/mbc.E22-09-0432
29. \*Nishimura, T., Lazzeri, G., Mizushima, N., \*Covino, R., Tooze, S. Unique Amphipathic  $\alpha$ -helix Drives Membrane Insertion and Enzymatic Activity of ATG3. **Sci Adv** 9: eadh1281 (2023)

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33. Yang, Z., Yoshii, S.R., Sakai, Y., Chino, H., Knorr, R.L., \*Mizushima, N. Autophagy adaptors mediate Parkin-dependent mitophagy by forming sheet-like liquid condensates. ***bioRxiv*** 2023.09.11.557117; doi: <https://doi.org/10.1101/2023.09.11.557117>
34. Shinoda, S., Sakai, Y., Matsui, T., Uematsu, M., Koyama-Honda, I., Sakamaki, J.I., Yamamoto, H., \*Mizushima, N. Syntaxin 17 recruitment to mature autophagosomes is temporally regulated by PI4P accumulation. **eLife** Reviewed Preprint, <https://doi.org/10.7554/eLife.92189.1>
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