

FY2022

生細胞超解像イメージング研究チーム ／ Live Cell Super-Resolution Imaging Research Team

(1) 原著論文 (accept) を含む ／ Original Papers

1. Hasegawa, Y., Reyes, T. H., Uemura, T., Baral, A., Fujimaki, A., Luo, Y., Morita, Y., Saeki, Y., Maekawa, S., Yasuda, S., Mukuta, K., Fukao, Y., Tanaka, K., Nakano, A., Takagi, J., Bhalerao, R., Yamaguchi, J., and Sato, T., “TGN/EE SNARE protein SYP61 and ubiquitin ligase ATL31 cooperatively regulate carbon/nitrogen-nutrient responses in *Arabidopsis*”, *Plant Cell* 34, 1354-1374 (2022).
2. Rodriguez-Gallardo, S., Sabido-Bozo, S., Ikeda, A., Araki, M., Okazaki, K., Nakano, M., Aguilera-Romero, A., Cortes-Gomez, A., Lopez, S., Waga, M., Nakano, A., Kurokawa, K., Muñiz, M., and Funato, K., “Quality-controlled lipid-based protein sorting into selective ER exit sites”, *Cell Rep.* 39, 110768 (2022).
3. Kakimoto-Takeda, Y., Kojima, R., Shiino, H., Shinmyo, M., Kurokawa, K., Nakano, A., Endo, T., and Tamura, Y., “Dissociation of ERMES clusters plays a key role in attenuating the endoplasmic reticulum stress”, *iScience* 25, 105362 (2022).
4. Jin, Y., Jin, N., Oikawa, Y., Benyair, R., Koizumi, M., Wilson, T.E., Ohsumi, Y., Weisman, L.S., “Bur1 functions with TORC1 for vacuolemediated cell cycle progression”, *EMBO Rep.* 23, e53477 (2022).

(2) 著書・解説など ／ Book Editions, Review Papers

1. Nakano, A., “The Golgi apparatus and its next-door neighbors”, *Frontiers Cell Dev. Biol.* 10, 884360 (2022).
2. Andrews, B., Chang, J.-B., Collinson, L., Dong Li, Lundberg, E., Mahamid, J., Manley, S., Mhlanga, M., Nakano, A., Schöneberg, J., Van Valen, D., Wu, T. C., and Zaritsky, A., “Viewpoint: Imaging cell biology”, *Nat. Cell Biol.* 24, 1180-1185 (2022).
3. 中野明彦, “超解像で何を見るか？”, 超解像イメージングで見る生命現象, *BIO Clinica* 37, 979 (2022).
4. 宮代大輔, “高速超解像顕微鏡法の開発”, *Plant Morphol.* 34, 25-27 (2022)
5. Tojima, T., Miyashiro, D., Kosugi, Y., and Nakano, A., “Super-resolution live imaging of cargo traffic through the Golgi apparatus in mammalian cells”, *Methods Mol. Biol.* 2557, 127-140 (2023).
6. 中野明彦, “分子夾雜の細胞生物学”, CSJ カレントレビュー “生体分子環境の化学”, 45, 22-25, 日本化学会 (2023).

### (3) 招待講演 ／ Invited Talks

1. Nakano, A., “Golgi and its neighbors as seen by super-resolution live imaging”, FASEB Science Research Conference “The Small GTPases in Membrane Processes”, Nova Scotia, Canada, May 16 (2022).
2. Nakano, A., “Mechanisms deduced from comparison between yeast, plant and animal cells”, FASEB Science Research Conference “The Small GTPases in Membrane Processes”, Nova Scotia, Canada, May 19 (2022).
3. Tojima, T., “Dynamics of membrane traffic in the neuronal growth cone revealed by super-resolution live imaging”, Symposium on “Fantastic Voyage into the Intra- and Inter-cellular Structures in the Brain”, the 45th Annual Meeting of the Japan Neuroscience Society (Neuro2022), Ginowan, Japan, July 2 (2022).
4. Nakano, A., “Organization of the Golgi apparatus and its neighbors -- Insights from the comparison between yeast, plant and animal cells”, Symposium on Recent Advances in Interorganellar Dynamics and Network, International Conference of the Korean Society for Molecular and Cellular Biology 2022, Jeju, Korea, September 29 (2022).
5. Nakano, A., “Golgi and its neighbors as seen by super-resolution live imaging”, EMBO Members’ Meeting, Heidelberg, Germany, October 28 (2022).
6. 中野明彦, 戸島拓郎, “ゴルジ体とその周辺における選別輸送—可視化によるメカニズム解明”, シンポジウム “糖鎖生物学の革新へ”, 第95回日本生化学会大会, 名古屋, 11月9日 (2022).
7. 戸島拓郎, “ゴルジ体形成・成熟の時空間ダイナミクス”, シンポジウム “オルガネラの機能連携から見える生命現象の新たな実像”, 第95回日本生化学会大会, 名古屋, 11月9日 (2022).
8. 宮代大輔, 中野明彦, “生細胞観察のための高速超解像顕微鏡の開発”, シンポジウム “情報フォトニクスとホログラフィが織りなす新価値創造”, Optics & Photonics Japan 2022, 宇都宮, 11月14日 (2022).
9. 戸島拓郎, “高速超解像顕微鏡によるゴルジ体の時空間動態の解析”, ExCELLS セミナー, 岡崎, 3月14日 (2023).

### (4) 特筆すべき事項・トピックス（雑誌表紙などの掲載記事）／ Topics

1. 中野明彦, NHK BS プレミアム “ヒューマニエンス 40 億年のたくらみ”, “膜”～それは生命の真理”, 2022 年 4 月 5 日.