



Youngbin Lim

Sr Res Scientist-Basic Life

Biology

 Curriculum Vitae available Online

Bio

ACADEMIC APPOINTMENTS

- Senior Research Scientist, Biology

HONORS AND AWARDS

- National Junior Researcher Fellowship, National Research Foundation of Korea (2010-2015)
- Outstanding Poster & Presentation Award, 108th Korean Chemical Society Meeting (2011)
- National Science & Technology Undergraduate Scholarship, National Research Foundation of Korea (2004)

Publications

PUBLICATIONS

- **Structural roles of guide RNAs in the nuclease activity of Cas9 endonuclease.** *Nature communications*
Lim, Y., Bak, S. Y., Sung, K., Jeong, E., Lee, S. H., Kim, J. S., Bae, S., Kim, S. K.
2016; 7: 13350
- **Lumen expansion is initially driven by apical actin polymerization followed by osmotic pressure in a human epiblast model.** *Cell stem cell*
Indana, D., Zakharov, A., Lim, Y., Dunn, A. R., Bhutani, N., Shenoy, V. B., Chaudhuri, O.
2024; 31 (5): 640-656.e8
- **Mechanical expansion microscopy.** *Methods in cell biology*
Fan, Y. n., Lim, Y. n., Wyss, L. S., Park, S. n., Xu, C. n., Fu, H. n., Fei, J. n., Hong, Y. n., Wang, B. n.
2021; 161: 125–46
- **Mechanically resolved imaging of bacteria using expansion microscopy.** *PLoS biology*
Lim, Y., Shiver, A. L., Khariton, M., Lane, K. M., Ng, K. M., Bray, S. R., Qin, J., Huang, K. C., Wang, B.
2019; 17 (10): e3000268
- **Recent advancement of light-based single-molecule approaches for studying biomolecules** *WILEY INTERDISCIPLINARY REVIEWS-SYSTEMS BIOLOGY AND MEDICINE*
Croop, B., Zhang, C., Lim, Y., Gelfand, R. M., Han, K.
2019; 11 (4)
- **Incorporation of STED technique into single-molecule spectroscopy to break the concentration limit of diffusing molecules in single-molecule detection** *CHEMICAL COMMUNICATIONS*
Kim, N., Kwon, J., Lim, Y., Kang, J., Bae, S., Kim, S.
2018; 54 (69): 9667–70
- **Noncanonical DNA-binding mode of repressor and its disassembly by antirepressor** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Kim, M., Kim, H. J., Son, S. H., Yoon, H. J., Lim, Y., Lee, J. W., Seok, Y., Jin, K. S., Yu, Y. G., Kim, S. K., Ryu, S., Lee, H. H.

2016; 113 (18): E2480-E2488

- **New sub-diffraction-limit microscopy technique: Dual-point illumination AND-gate microscopy on nanodiamonds (DIAMOND)** *OPTICS EXPRESS*

Kwon, J., Lim, Y., Jung, J., Kim, S. K.

2012; 20 (12): 13347-13356

PRESENTATIONS

- Single-molecule study for cooperative translocation motion of nsP13 helicase during duplex DNA unwinding - 108th Korean Chemical Society Meeting
- Real-time Single-Molecule Observation of the Proofreading Process during DNA Replication - 54th Biophysical Society Annual Meeting