

## 生命光学技術研究チーム ／ Biotechnological Optics Research Team

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

1. K. Kayamori, Y. Nagai, C. Zhong, S. Kaito, D. Shinoda, S. Koide, W. Kuribayashi, M. Oshima, Y. Nakajima-Takagi, M. Yamashita, N. Mimura, H.J. Becker, K. Izawa, S. Yamazaki, S. Iwano, A. Miyawaki, R. Ito, K. Tohyama, W. Lennox, J. Sheedy, M. Weetall, E. Sakaida, K. Yokote, A. Iwama; “DHODH inhibition synergizes with DNA-demethylating agents in the treatment of myelodysplastic syndromes” *Blood Adv.*, 5 (2) :438-450, (2021).
2. C. Zhong, K. Kayamori, S. Koide, D. Shinoda, M. Oshima, Y. Nakajima-Takagi, Y. Nagai, N. Mimura, E. Sakaida, S. Yamazaki, S. Iwano, A. Miyawaki, R. Ito, K. Tohyama, K. Yamaguchi, Y. Furukawa, W. Lennox, J. Sheedy, M. Weetall, A. Iwama: “Efficacy of the novel tubulin polymerization inhibitor PTC-028 for myelodysplastic syndrome” *Cancer Sci.*, 111 (12) :4336-4347, (2020).
3. S. Chen, L. He, A.J.Y. Huang, R. Boehringer, V. Robert, M.E. Wintzer, D. Polygalov, A.Z. Weitemier, Y. Tao, M. Gu, S.J. Middleton, K. Namiki, H. Hama, L. Therreau, V. Chevaleyre , H. Hioki, A. Miyawaki, R.A. Piskorowski, T.J. McHugh: “A hypothalamic novelty signal modulates hippocampal memory” *Nature*, 586 (7828) :270-274, (2020).
4. Y. Kono, T. Ishizawa, N. Kokudo, Y. Kuriki, R.J. Iwatate, M. Kamiya, Y. Urano, A. Kumagai, H. Kurokawa, A. Miyawaki, K. Hasegawa: “On- Site Monitoring of Postoperative Bile Leakage Using Bilirubin-Inducible Fluorescent Protein” *World J Surg.*, 44 (12) :4245-4253, (2020).
5. N. Kinoshita, A.J.Y. Huang, T.J. McHugh, A. Miyawaki, T. Shimogori “Diffusible GRAPHIC to visualize morphology of cells after specific cell-cell contact” *Sci. Rep.*, 10 (1): 14437, (2020).
6. T.M. Takahashi, G.A. Sunagawa, S. Soya, M. Abe, K. Sakurai, K. Ishikawa, M. Yanagisawa, H. Hama, E. Hasegawa, A. Miyawaki, K. Sakimura, M. Takahashi, T. Sakurai: “A discrete neuronal circuit induces a hibernation-like state in rodents” *Nature*, 583 (7814): 109- 114, (2020).
7. H. Katayama, H. Hama, K. Nagasawa, H. Kurokawa, M. Sugiyama, R. Ando, M. Funata, N. Yoshida, M. Homma, T. Nishimura, M. Takahashi, Y. Ishida, H. Hioki, Y. Tsujihata, A. Miyawaki: “Visualizing and Modulating Mitophagy for Therapeutic Studies of Neurodegeneration.” *Cell*,181(5):1176-1187, (2020).
8. N. Kitada, R. Saito, R. Obata, S. Iwano, K. Karube, A. Miyawaki, T. Hirano, S.A. Maki: “Development of near-infrared firefly luciferin analogue reacted with wild-type and

mutant luciferases” Chirality, 32 (7): 922-931 (2020).

9. S. Furukawa, A. Nagamatsu, M. Nenoi, A. Fujimori, S. Kakinuma, T. Katsume, B. Wang, C. Tsuruoka, T. Shirai, A.J. Nakamura, A. Sakaue- Sawano, A. Miyawaki, H. Harada, M. Kobayashi, J. Kobayashi, T. Kunieda, T. Funayama, M. Suzuki, T. Miyamoto, J. Hidema, Y. Yoshida, A. Takahashi: “Space Radiation Biology for “Living in Space”. Biomed Res Int., 4703286. (2020).

## (2) 招待講演 / Invited Talks

1. 宮脇敦史 , 群馬大学生体調節研究所 , 第 5 回「若手研究者育成プログラムセミナー」, 前橋 , 10 月 12 日 ,(2020).
2. Atsushi Miyawaki, “The real thrill of bioimaging after a phantom FRET”, INAUGRAL ROGER TSIEN CELL SIGNALING DISTINGUISHED LECTURE, San Diego(Web), January, (2021).
3. 宮脇敦史 , 第 119 回日本皮膚科学会総会 , Web, 6 月 7 日 ,(2020).
4. 宮脇敦史 ,“ 脳循環代謝を可視化するための光イメージング技術 ”, 日本脳循環代謝学会 , 横浜 (web), 11 月 13 日 ,(2020).
5. 宮脇敦史 “ 腫瘍・免疫・炎症を観る技術 ”, 東京医科歯科大学 大学院特別講義 , web, 1 月 26 日 , (2021) .