

**AntiCancer, Inc.**  
**Recent Publications**

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1. Uehara, F., Hiroshima, Y., Miwa, S., Tome, Y., Yano, S., Yamamoto, M., Matsumoto, Y., Maehara, H., Tanaka, K., Bouvet, M., Kanaya, F., Hoffman, R.M. Fluorescence-guided surgery of retroperitoneal-implanted human fibrosarcoma in nude mice delays or eliminates tumor recurrence and increases survival compared to bright-light surgery. *PLoS One* **10**, e0116865, 2015.
2. Miwa, S., Yano, S., Yamamoto, M., Matsumoto, Y., Uehara, F., Hiroshima, Y., Toneri, M., Murakami, T., Kimura, H., Hayashi, K., Yamamoto, N., Efimova, E.V., Tsuchiya, H., and Hoffman R.M. Real-time fluorescence imaging of the DNA damage repair response during mitosis. *J Cell. Biochem.* **116**, 661-666, 2015. DOI: 10.1002/jcb.25021.
3. Bouvet, M. and Hoffman, R.M. Tumor imaging technologies in mouse models. *In: Mouse Models of Cancer. Methods in Molecular Biology*, Vol. 1267, Chap. 16, pp 321-348. Casanova, E., Effert, R., eds. Humana Press, 2015. DOI: 10.1007/978-1-4939-2297-0\_16.
4. Zhang, Y., Hiroshima, Y., Ma, H., Zhang, N., Zhao, M., and Hoffman, R.M.. Complementarity of variable-magnification and spectral-separation fluorescence imaging systems for noninvasive detection of metastasis and intravital detection of single cancer cells in mouse models. *Anticancer Research* **35**, 661-667, 2015.
5. Hiroshima, Y., Zhang, Y., Zhang, N., Uehara, F., Maawy, A., Murakami, T., Mii, S., Yamamoto, M., Miwa, S., Yano, S., Momiyama, M., Mori, R., Matsuyama, R., Chishima, T., Tanaka, K., Ichikawa, Y., Bouvet, M., Endo, I., and Hoffman, R.M. Patient-derived orthotopic xenograft (PDOX) nude mouse model of soft-tissue sarcoma more closely mimics the patient behavior in contrast to the subcutaneous ectopic model. *Anticancer Research* **35**, 697-701, 2015.
6. Yano, S., Miwa, S., Mii, S., Hiroshima, Y., Uehara, F., Kishimoto, H., Tazawa, H., Zhao, M., Bouvet, M., Fujiwara, T., and Hoffman, R.M. Cancer cells mimic *in vivo* spatial-temporal cell-cycle phase distribution and chemosensitivity in 3-dimensional Gelfoam<sup>®</sup> histoculture but not 2-dimensional culture as visualized with real-time FUCCI imaging. *Cell Cycle* **14**, 1-12, 2015.
7. Hiroshima, Y., Maawy, A.A., Katz, M.H., Fleming, J.B., Bouvet, M., Endo, I., and Hoffman, R.M. Selective efficacy of zoledronic acid on metastasis in a patient-derived orthotopic xenograph (PDOX) nude-mouse model of human pancreatic cancer. *J. Surg. Oncol.* **111**, 311-315, 2015.
8. Hiroshima, Y., Zhang, Y., Zhang, M., Maawy, A., Mii, S., Yamamoto, M., Uehara, F., Miwa, S., Yano, S., Murakami, T., Momiyama, M., Chishima, T., Tanaka, K., Ichikawa, Y., Bouvet, M., Murata, T., Endo, I., and Hoffman, R.M. Establishment of a patient-derived orthotopic xenograph (PDOX) model of HER-2-positive cervical cancer expressing the clinical metastatic pattern. *PLoS One* **10**, e0117417, 2015.
9. Zhang, Y., Miwa, S., Zhang, N., Hoffman, R.M., and Zhao, M. Tumor-targeting *Salmonella typhimurium* A1-R arrests growth of breast-cancer brain metastasis. *Oncotarget* **6**, 2615-2622, 2015.
10. Miwa, S., Yano, S., Kimura, H., Yamamoto, M., Toneri, M., Matsumoto, Y., Uehara, F., Hiroshima, Y., Murakami, T., Hayashi, K., Yamamoto, N., Bouvet, M., Fujiwara, T., Tsuchiya, H., and Hoffman, R.M. Cell-cycle fate-monitoring distinguishes individual chemosensitive and chemoresistant cancer cells in drug-treated heterogeneous populations demonstrated by real-time FUCCI imaging. *Cell Cycle* **14**, 621-629, 2015.
11. Kikuchi, S., Kishimoto, H., Tazawa, H., Hashimoto, Y., Kuroda, S., Nishizaki, M., Nagasaka, T., Shirakawa, Y., Kagawa, S., Urata, Y., Hoffman, R.M., and Fujiwara, T. Biological ablation of sentinel lymph node metastasis in submucosally invaded early gastrointestinal cancer. *Molecular Therapy* **23**, 501-509, 2015. DOI: 10.1038/mt.2014.244.
12. Hoffman, R.M. Application of GFP imaging in cancer. *Laboratory Investigation* **95**, 432-452, 2015.

13. Zhang, Y., Miwa, S., Zhang, N., Hoffman, R.M., and Zhao, M. Tumor-targeting *Salmonella typhimurium* A1-R arrests growth of breast-cancer brain metastasis. *Oncotarget* **6**, 2615-2622, 2015.
14. Hoffman, R.M. Circulating tumour cells go green. *Gut* **64**, 528-530, 2015. DOI: 10.1136/gutjnl-2014-307647.
15. Maawy, A.A., Hiroshima, Y., Zhang, Y., Heim, R., Makings, L., Garcia-Guzman, M., Luiken, G.A., Kobayashi, H., Hoffman, R.M., and Bouvet, M. Near infra-red photoimmunotherapy with anti-CEA-IR700 results in extensive tumor lysis and a significant decrease in tumor burden in orthotopic mouse models of pancreatic cancer. *PLoS One* **10**, e0121989, 2015.
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17. Hoffman, R.M., and Bouvet, M. Nanoparticle albumin-bound-paclitaxel: a limited improvement under the current therapeutic paradigm of pancreatic cancer. *Expert Opin. Pharmacother.* **16**, 943-947, 2015.
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20. Suetsugu, A., Jiang, P., Yang, M., Yamamoto, N., Moriwaki, H., Saji, S., and Hoffman, R.M. The use of living cancer cells expressing green fluorescent protein in the nucleus and red fluorescence protein in the cytoplasm for real-time confocal imaging of chromosome and cytoplasmic dynamics during mitosis. *Anticancer Res.* **35**, 2545-2551, 2015.
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22. Hiroshima, Y., Maawy, A., Zhan, Y., Murakami, T., Momiyama, M., Mori, R., Matsuyama, R., Chishima, T., Tanaka, K., Ichikawa, Y., Endo, I., Hoffman, R.M., and Bouvet, M. Fluorescence-guided surgery, but not bright-light surgery, prevents local recurrence in a pancreatic cancer patient-derived orthotopic xenograft (PDOX) model resistant to neoadjuvant chemotherapy (NAC). *Pancreatology* **15**, 295-301, 2015.
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25. Maawy, A.A., Hiroshima, Y., Zhang, Y., Garcia-Guzman, M., Luiken, G.A., Kobayashi, H., Hoffman, R.M., and Bouvet, M. Photoimmunotherapy lowers recurrence after pancreatic cancer surgery. *J. Surg. Res.* **197**, 5-11, 2015.
26. Zhang, L., Wu, C., Bouvet, M., Yano, S., and Hoffman, R.M. Traditional Chinese medicine herbal mixture LQ arrests FUCCI-expressing HeLa cells in G0/G1 phase in 2D plastic, 2.5D Matrigel®, and 3D Gelfoam® culture visualized with FUCCI imaging. *Oncotarget* **6**, 5292-5298, 2015.
27. Hoffman, R.M. Back to the Future: Are tumor-targeting bacteria the next generation cancer therapy? *In: Protocols for Gene Therapy of Solid Tumors. Methods in Molecular Biology* 1317. Wolfgang Waither, Ulrike Stein, eds. 239-260, 2015.
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31. Zhang, Y., Zhang, N., Zhao, M., and Hoffman, R.M. Comparison of the selective targeting efficacy of *Salmonella typhimurium* A1-R and VNP20009 on the Lewis lung carcinoma in nude mice. *Oncotarget* **6**, 14625-14631, 2015.
32. Hiroshima, Y., Zhan, Y., Murakami, Maawy, A., Miwa, S., Yamamoto, M., Yano, S., Sato, S., Momiyama, M., Mori, R., Matsuyama, R., Chishima, T., Tanaka, K., Ichikawa, Y., Bouvet, M., Endo, I., Zhao, M., and Hoffman, R.M. Efficacy of tumor-targeting *Salmonella typhimurium* A1-R in combination with anti-angiogenesis therapy on a pancreatic cancer patient-derived orthotopic xenograft (PDOX) and cell-line mouse models. *Oncotarget* **5**, 12346-12356, 2015.
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36. Cao, W., Li, L., Mii, S., Amoh, Y., Liu, F., and Hoffman, R.M. Long-term extensive ectopic hair growth on the spinal cord of mice from transplanted whisker follicles. *PLoS One* **10**, e0133475, 2015.
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38. Zhang, Y., Zhang, N., Hoffman, R.M., and Zhao, M. Surgically-induced multi-organ metastasis in an orthotopic syngeneic imageable model of 4T1 murine breast cancer. *Anticancer Res.* **35**, 4641-4646, 2015.
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42. Zhang, L., Wu, C., and Hoffman, R.M. Prostate cancer heterogeneous high-metastatic multi-organ-colonizing chemo-resistant variants selected by serial metastatic passage in nude mice are highly enriched for multinucleate giant cells. *PLoS One* **10**, e0140721, 2015.
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44. Hiroshima, Y., Maawy, A., Zhang, Y., Garcia-Guzman, M., Heim, R., Makings, L., Liuken, G., Kobayashi, H., Tanaka, K., Endo, I., Hoffman, R.M., and Bouvet, M. Photoimmunotherapy inhibits tumor recurrence after surgical resection on a pancreatic cancer patient-derived orthotopic xenograft (PDOX) nude mouse model. *Ann. Surg. Oncol.*, Epub ahead of print.
45. Murakami, T., Hiroshima, Y., Zhao, M., Zhang, Y., Chishima, T., Tanaka, K., Bouvet, M., Endo, I., and Hoffman, R.M. Adjuvant treatment with tumor-targeting *Salmonella typhimurium* A1-R reduces recurrence and increases survival after liver metastasis resection in an orthotopic nude mouse model. *Oncotarget* **6**, 41856-41862, 2015.
46. Park, J., Murakami, T., Lee, J., Zhang, Y., Hoffman, R.M., Bouvet, M. Fluorescent-antibody targeting of insulin-like growth factor-1 receptor visualizes metastatic human colon cancer in orthotopic mouse models. *PLoS One* **11**, e0146504, 2016.