

CURRICULUM VITAE

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Assistant Professor
Division of Molecular Medicine
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WORK EXPERIENCE

Assistant Professor, April 2010 to present

Division of Molecular Medicine, Graduate School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan

Projects

- Molecular-targeted therapy of chronic heart failure by natural compounds
- Analysis of molecular mechanism of PRMT5/MEP50 methylsome complex and NCoR complex in p300/GATA4 transcription pathway during cardiac hypertrophy

Postdoctoral fellowship, April 2008 to March 2010

Shien-Lab, National Cancer Center Hospital, Tokyo, Japan

Projects

- Molecular-targeted therapy of PI3K/mTOR inhibitor in lung cancer
- Analysis of molecular mechanism of EGFRvIII-induced angiogenesis in glioma
- Anti-lymphangiogenesis therapy using molecular-targeted drugs

EDUCATION

Ph.D. in Pharmaceutical Science, March 2008

Department of Medical Biochemistry, Graduate School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan

Dissertation title: Proteomic identification of novel angiogenesis-related proteins and its application to antineovascular therapy

- Proteomic analysis of VEGF-activated endothelial cells using 2D-DIGE
- Molecular-targeted drug delivery using liposomes and cancer therapy

Supervisors: Prof. N. Oku and Prof. N. Ohashi

Master of Sciences in Pharmaceutical Science, March 2005

Department of Medical Biochemistry, Graduate School of Pharmaceutical Sciences, University of Shizuoka, Shizuoka, Japan

Dissertation title: Proteomic analysis for identification of angiogenesis-related proteins
Supervisors: Prof. N. Oku and Prof. N. Ohashi

Bachelor of Sciences in Pharmaceutical Science, March 2003

Faculty of Pharmaceutical Science, University of Shizuoka, Shizuoka, Japan

PUBLICATIONS

1. Nakamura K, Sano S, Fuster JJ, Kikuchi R, Shimizu I, Ohshima K, **Katanasaka Y**, Ouchi N, Walsh K. Secreted frizzled-related protein 5 diminishes cardiac inflammation and protects the heart from ischemia-reperfusion injury. *J Biol Chem*. 2016;**291**:2566-2575.
2. Sunagawa Y, **Katanasaka Y**, Wada H, Hasegawa K, Morimoto T. Functional Analysis of GATA4 Complex, a Cardiac Hypertrophy-response Transcriptional Factor, Using a Proteomics Approach. *Yakugaku Zasshi*. 2016;**136**:151-156.
3. Morimoto T, **Katanasaka Y**, Sunagawa Y, Hirano S, Miyazaki Y, Funamoto M, Hojo Y, Suzuki H, Morimoto E, Ueno M, Shimatsu A, Satoh-Asahara N, Yamakage H, Wada H, Hasegawa K. Effects of statins on left ventricular diastolic function in patients with dyslipidemia and diastolic dysfunction (STAT-LVDF study). *Biol Pharm Bull*. 2015;**38**:1404-1409
4. Sunagawa Y, Hirano S, **Katanasaka Y**, Miyazaki Y, Funamoto M, Okamura N, Hojo Y, Suzuki H, Doi O, Yokoji T, Morimoto E, Takahashi T, Ozawa H, Imaizumi A, Ueno M, Kakeya H, Shimatsu A, Wada H, Hasegawa K, Morimoto T. Colloidal submicron-particle curcumin exhibits high absorption efficiency-a double-blind, 3-way crossover study. *Journal of nutritional science and vitaminology*. 2015;**61**:37-44
5. Kikuchi R, Nakamura K, MacLauchlan S, Ngo D, Shimizu I, Fuster J, **Katanasaka Y**, et al: An anti-angiogenic isoform of VEGF-A contributes to impaired vascularization in peripheral artery disease. *Nature Medicine*. 2014;**20**:1464-1471
6. Sunagawa Y, Sono S, **Katanasaka Y**, et al. Optimal Dose-Setting Study of Curcumin for Improvement of Left Ventricular Systolic Function After Myocardial Infarction in Rats. *J Pharmacol Sci*. 2014;**126**:329-336.
7. **Katanasaka Y**, et al: Synergistic anti-tumor effects of a novel phosphatidyl inositol-3 kinase/mammalian target of rapamycin dual inhibitor BGT226 and gefitinib in non-small cell lung cancer cell lines. *Cancer Lett*. **347**:196-203, 2014.
8. **Katanasaka Y**, et al. Epidermal growth factor receptor variant type iii markedly accelerates angiogenesis and tumor growth via inducing c-myc mediated angiopoietin-like 4 expression in malignant glioma. *Molecular cancer*;**12**:31, 2013
9. **Katanasaka Y**, et al. Application of curcumin to heart failure therapy. *Biol Pharm Bull*; **36**: 13-17, 2013.
10. Sugiyama T, Asai T, Nedachi YM, **Katanasaka Y**, et al: Enhanced active targeting via cooperative binding of ligands on liposomes to target receptors. *PLoS One*; **8**:e67550, 2013.
11. Morimoto T, Sunagawa Y, **Katanasaka Y**, et al.: Drinkable preparation of Theracurmin exhibits high absorption efficiency--a single-dose, double-blind, 4-way crossover study. *Biol*

Pharm Bull.; **36**: 1708-14, 2013

12. Yunokawa M, Koizumi F, Kitamura Y, **Katanasaka Y**, et al, Tamura K. Efficacy of everolimus, a novel mTOR inhibitor, against basal-like triple-negative breast cancer cells. *Cancer Sci*; **103**:1665-71, 2012.
13. Sunagawa Y, Wada H, Suzuki H, Sasaki H, Imaizumi A, Fukuda H, Hashimoto T, **Katanasaka Y**, et al. A novel drug delivery system of oral curcumin markedly improves efficacy of treatment for heart failure after myocardial infarction in rats. *Biol Pharm Bull*; **35**:139-44, 2012
14. Kodera Y, **Katanasaka Y**, et al, Sunitinib inhibits lymphatic endothelial cell functions and lymph node metastasis in a breast cancer model through inhibition of vascular endothelial growth factor receptor 3. *Breast Cancer Res*; **13**:R66, 2011.
15. Sunagawa Y, Morimoto T, Wada H, Takaya T, **Katanasaka Y**, et al. A natural p300-specific histone acetyltransferase inhibitor, curcumin, in addition to angiotensin converting enzyme inhibitor exerts beneficial effects on left ventricular systolic function after myocardial infarction in rats. *Circ J*; **75**:2151-9, 2011.
16. Sasaki H, Sunagawa Y, Takahashi K, Imaizumi A, Fukuda H, Hashimoto T, Wada H, **Katanasaka Y**, et al. Innovative preparation of curcumin for improved oral bioavailability, *Biol Pharm Bull*; **34**:660-5, 2011.
17. Taguchi F, Kodera Y, **Katanasaka Y**, et al. Efficacy of RAD001 (everolimus) against advanced gastric cancer with peritoneal dissemination. *Invest New Drugs*; **29**:660-5, 2011.
18. **Katanasaka Y**, Ishii T, Asai T, Naitou H, Maeda N, Koizumi F, Miyagawa S, Ohashi N, and Oku N. Cancer antineovascular therapy with liposome drug delivery systems targeted to BiP/GRP78. *Int J Cancer*; **127**:2685-98, 2010.
19. Murase Y, Asai T, **Katanasaka Y**, Sugiyama T, Shimizu K, Maeda N, and Oku N. A novel DDS strategy, "dual-targeting", and its application for antineovascular therapy. *Cancer Lett*; **287**:165-71, 2010.
20. **Katanasaka Y**, Ida T, Asai T, Maeda N, and Oku N. Effective delivery of an angiogenesis inhibitor by neovessel-targeted liposomes. *Int J Pharm*; **360**:219-24, 2008.
21. **Katanasaka Y**, Ida T, Asai T, Shimizu K, Koizumi F, Maeda N, Baba K, and Oku N. Antiangiogenic cancer therapy using tumor vasculature-targeted liposomes encapsulating 3-(3,5-dimethyl-1H-pyrrol-2-ylmethylene)-1,3-dihydro-indol-2-one, SU5416. *Cancer Lett*; **270**:260-68, 2008.
22. Asai T, Miyazawa S, Maeda N, Hatanaka K, **Katanasaka Y**, Shimizu K, Shuto S, and Oku N. Antineovascular therapy with angiogenic vessel-targeted polyethyleneglycol-shielded liposomal DPP-CNDAC. *Cancer Sci*; **99**:1029-33, 2008.
23. Asai T, Suzuki Y, Matsushita S, Yonezawa S, Yokota J, **Katanasaka Y**, Ishida T, Dewa T, Kiwada H, Nango M, and Oku N. Disappearance of the angiogenic potential of endothelial cells caused by Argonaute2 knockdown. *Biochem Biophys Res Commun*; **368**:243-8, 2008.
24. **Katanasaka Y**, Asai T, Naitou H, Ohashi N, and Oku N. Proteomic characterization of angiogenic endothelial cells stimulated with cancer cell-conditioned medium. *Biol Pharm Bull*; **30**:2300-7, 2007.

25. Kondo M, Asai T, **Katanasaka Y**, Sadzuka Y, Tsukada H, Ogino K, Taki T, Baba K, and Oku N. Anti-neovascular therapy by liposomal drug targeted to membrane type-1 matrix metalloproteinase. *Int J Cancer*; **108**:301-6, 2004.

CHAPTERS IN BOOKS

1. **Katanasaka Y** and Morimoto T. Green tea in antiaging. In *Antiaging medicine*, p.23-27. Tokyo: Medical view, ISBN: 9784815917425. (In Japanese), 2015.
2. **Katanasaka Y** and N. Oku. Integrin. In *Liver Metastasis*, M. Monden and N. Matsuura, eds., p. 23-27. Tokyo: Nagai Syoten, ISBN: 9784815917425. (In Japanese), 2005.

GRANTS & AWARDS

Japan Society for the Promotion of Science, Grant-in-Aid for Young Scientist 16K18876, 2016-
Japan Society for the Promotion of Science, Grant-in-Aid for Young Scientist 25860052, 2013-2015.

Japan Society for the Promotion of Science, Grant-in-Aid for Young Scientist (Start-up) 22890153, 2010-2011.

Young Investigator Award, Japanese Society of Pharmaceutical Sciences, 2016.

Poster Award, 1st Japan ISCP, Kyoto, Japan, 2015.

Poster Award, 18th ISCP, Roma, Italy, 2013.

Young Investigator Award, 7th China-Japan Cardiovascular Forum, 2010.

Poster Award, 11th Shizuoka Forum on Health and Longevity, Shizuoka, Japan, 2006.