

# CURRICULUMVITAE

## NAME: Noriyuki Miyoshi

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## EDUCATION

Ph.D. in Bioagricultural Science, Nagoya University Graduate School of Bioagricultural Sciences, March 2004

M.S. in Food and Nutritional Science, University of Shizuoka, Graduate School of Nutritional and Environmental Sciences, March 2001

B.S. in Life Science, Tottori University, Faculty of Medicine, March 1999.

## EXPERIENCE:

Professor October 2024 to present

Associate Professor April 2016-

Assistant Professor September 2007-

Laboratory of Biochemistry, Graduate School of Integrated Pharmaceutical and Nutritional Sciences, University of Shizuoka, Japan.

## SOCIETIES:

Japan Society for Bioscience, Biotechnology and Agrochemistry

Japanese Cancer Association

Japanese Association for Cancer Prevention

## AREA OF EXPERTISE:

Functional food science, cell biology, analytical chemistry, mass spectrometry

## Publications (last 3 years)

1. Andrade EDS, Santos RA, Guillermo LVC, \*Miyoshi N, \*Ferraz da Costa DC. Immunomodulatory Effects of Green Tea Catechins and Their Ring-Fission Metabolites in a Tumor Microenvironment Perspective. *Molecules*, (2024) *in press*
2. \*Suzuki S, Gi M, Kobayashi T, Miyoshi N, Yoneda Nao, Uehara S, Yokota Y, Noura I, Fujioka M, Vachiraarunwong A, Kakehashi A, Shimizu H, \*Wanibuchi H. 4,4'-Methylenebis(2-chlorobenzeneamine) induced urinary bladder carcinogenesis in humanized-liver mice but not in the non-humanized liver mice: identification of carcinogenic urinary metabolite. *Toxicol Sci*, (2024) *in press*
3. Kobayashi T, Oishi S, Matsui M, Hara K, Hashimoto H, Watanabe K, Yoshioka Y, \*Miyoshi N. Tyrosine phenol-lyase inhibitor quercetin reduces fecal phenol levels in mice. *PNAS Nexus*, (2024) **3**, 265.
4. Oishi S, Yoshioka Y, Dohra H, \*Miyoshi N. Chickpea proteins are potential sources of bioactive peptides that induce glucose uptake via AMP-activated protein kinase. *Food Bioscience*, (2024) **59**, 104029.
5. \*Yoshioka Y, Onishi K, Yasui K, Miyoshi N. PA YEAST SC-1, polyamine-rich *Saccharomyces cerevisiae*, induces muscle hypertrophy in C2C12 myotubes. *J. Nutr. Sci. Vitaminol. (Tokyo)*, (2024) **70**, 53-60.
6. Nagata A, Oishi S, Kirishita N, Onoda K, Kobayashi T, Terada Y, Minami A, Senoo N, Yoshioka Y, Uchida K, Ito K, Miura S, \*Miyoshi N. Allyl isothiocyanate maintains DHA-containing glycerophospholipids and ameliorates the cognitive function decline in OVX mice. *ACS omega*, (2023) **8**, 43118-43129.
7. Yoshioka Y, Oishi S, Onoda K, Shibata K, \*Miyoshi N. Diosgenin prevents dexamethasone-induced myotube atrophy in C2C12 cells. *Arch Biochem Biophys*, (2023) **747**, 109759.
8. \*Toyoda T, Kobayashi T, Miyoshi N, Matsushita K, Akane H, Morikawa T, Ogawa K. Mucosal damage and γ-H2AX formation in the rat urinary bladder induced by aromatic amines with structures similar to *o*-toluidine and *o*-anisidine. *Arch Toxicol*, (2023) **97**, 3197-3207.
9. Suzuki T, Ohishi T, Tanabe H, \*Miyoshi N, Nakamura Y. Anti-inflammatory effects of dietary polyphenols through inhibitory activity against metalloproteinases. *Molecules*, (2023) **28**, 5426.
10. Kato M, Yamaguchi M, Ooka A, Takahashi R, Suzuki T, Onoda K, Yoshikawa Y, Tsunematsu Y, Sato M, Yoshioka Y, Igarashi M, Hayakawa S, Shoji K, Shoji Y, Ishikawa T, Watanabe K, \*Miyoshi N. Non-target GC-MS analyses of fecal VOCs in NASH-hepatocellular carcinoma model STAM mice. *Sci. Rep.*, (2023) **13**, 8924.
11. Sato T, Umebayashi S, Senoo N, Akahori T, Ichida H, Miyoshi N, Yoshida T, Sugiura Y, Goto-Inoue N, Kawana H, Shindou H, Baba T, Maemoto Y, Kamei Y, Shimizu T, Aoki J, Miura S. LPGAT1/LPLAT7 regulates acyl chain profiles at *sn*-1 position of phospholipids in murine skeletal muscle. *J. Biol Chem.*, (2023) **299**, 104848.
12. Iguchi K, Nagashima K, Mochizuki J, Yamamoto H, Unno K, Miyoshi N. Enokitake mushroom and its active component, adenosine, which restores testosterone production in impaired and fatigued mouse models. *Nutrients*, (2023) **15**, 2142.
13. Yoshioka Y, Imi Y, Kawabata K, Shibata K, Terao J, Miyoshi N. Theophylline prevents dexamethasone-induced atrophy in C2C12 myotube. *J. Nutr.*

14. Zhou T, Ando T, Kudo A, Sato M, Miyoshi N, Mutoh M, Ishikawa H, Wakabayashi K, Watanabe K. Screening method toward C1bP-specific inhibitors. *Genes Environ.*, (2023) **45**, 8.
15. Onoda K, Kato M, Tsunematsu Y, Eto F, Sato M, Yoshioka Y, Yoshida T, Tamura K, Yao I, Dohra H, Watanabe K, \*Miyoshi N. Biosynthetic gene expression and tissue distribution of diosgenin in *Dioscorea japonica*. *J. Agric. Food. Chem.*, (2023) **71**, 4292-7.
16. Ohishi T, Hayakawa S, \*Miyoshi N. Involvement of microRNA modifications in anticancer effects of major polyphenols from green tea, coffee, wine, and curry. *Crit. Rev. Food Sci. Nutr.*, (2023) **63**, 7148-79.
17. Ohishi T, Miyoshi N, Mori M, Sagara M, Yamori Y. Urinary biomarkers for health effects of soy isoflavones and green tea catechins on cancer and cardiovascular diseases. (Review) *Molecules*, (2022) **27**, 8899.
18. Hayakawa S, Ohishi T, Oishi Y, Isemura M, \*Miyoshi N. Contribution of non-coding RNAs to anticancer effects of dietary polyphenols: Chlorogenic acid, curcumin, epigallocatechin-3-gallate, genistein, quercetin and resveratrol. *Antioxidants*, (2022) **11**, 2352.
19. \*Toyoda T, Kobayashi T, Miyoshi N, Matsushita K, Akane H, Morikawa T, Ogawa K. Toxicological effects of two metabolites derived from *o*-toluidine and *o*-anisidine after 28-day oral administration to rats. *J. Toxicol. Sci.*, (2022) **47**, 457-466.
20. Kobayashi T, Kishimoto S, Watanabe S, Yoshioka Y, Toyoda T, Ogawa K, Watanabe K, Totsuka Y, Wakabayashi K, \*Miyoshi N. Cytotoxic homo- and hetero-dimers of *o*-toluidine, *o*-anisidine, and aniline formed by *in vitro* metabolism. *Chem. Res. Toxicol.*, (2022) **35**, 1625-1630.
21. Yoshioka Y, Ohishi T, Nakamura Y, Fukutomi R, \*Miyoshi N. Anti-cancer effects of dietary polyphenols via ROS-mediated pathway with their modulation of microRNAs. (Review) *Molecules*, (2022) **27**, 3816.
22. Narita T, Tsunematsu Y, Miyoshi N, Komiya M, Hamoya T, Fujii G, Yoshikawa Y, Sato M, Kawanishi M, Sugimura H, Iwashita Y, Totsuka Y, Terasaki M, Watanabe K, Wakabayashi K, Mutoh M. Induction of DNA damage in mouse colorectum by administration of colibactin-producing *Escherichia coli*, isolated from a patient with colorectal cancer. *In vivo*, (2022) **36**, 628-634.
23. Matsuda S, Tsunematsu Y, Matsushita T, Ogata Y, Hachiya S, Kishimoto S, Miyoshi N, \*Watanabe K. Toward engineered biosynthesis of drugs in human cells. *ChemBioChem.*, (2022) **23**, e202100645.