

## Division of Molecular Epidemiology

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### General Summary

Despite having identical disease diagnoses, some patients may be cured but others may not. This difference cannot be understood with experimental medicine. On the other hand, clinical practice might also not provide the answer. We combined molecular biology and epidemiology to create the Division of Molecular Epidemiology, to clarify the etiology of disease and to predict factors affecting survival.

### Research Activities

#### *The Jikei clinical research course*

From May 2009 through March 2010, we held 10 seminars about strategies for clinical studies for healthcare practitioners at The Jikei University. In 2009, small-group study courses targeting postgraduate students will be started from the principles of epidemiology and biostatistics by reading textbooks, analyzing real clinical data with STATA software (StataCorp LP, College Station, TX, USA), and designing clinical studies. Our goal is for postgraduate students to develop the skills to construct hypotheses, design protocols, monitor trials, and analyze data.

#### *Original studies*

1. Randomized trial of vitamin D supplement
2. New drug development related to vitamin D
3. Genome and epigenome clinical studies and lead findings

### Publications

**Suzuki Y, Tamez S, Murakami A, Taira A, Mizuhara A, Horiuchi A, Mihara C, Ako E, Muramatsu H, Okano H, Suenaga H, Jomoto K, Kobayashi J, Takifuji K, Akiyama K, Tahara K, Onishi K, Shimazaki M, Matsumoto M, Ijima M, Murakami M, Nakahori M, Kudo M, Maruyama M, Takahashi M, Washizawa N, Onozawa S, Goshi S, Yamashita S, Ono S, Imazato S, Nishiwaki S, Kitahara S, Endo T, Iiri T, Nagahama T, Hikichi T, Mikami T, Yamamoto T, Ogawa T, Ogawa T, Ohta T, Matsumoto T, Kura T, Kikuchi T, Iwase T, Tsuji T, Nishiguchi Y, Urashima M.** Survival of geriatric patients after percutaneous endoscopic gastrostomy in Japan. *World J Gastroenterol* 2010; **16**: 5084-91.

**Gorringe KL, George J, Anglesio MS, Ramak-**

**rishna M, Etemadmoghadam D, Cowin P, Sridhar A, Williams LH, Boyle SE, Yanaihara N, Okamoto A, Urashima M, Smyth GK, Campbell IG, Bowtell DD; Australian Ovarian Cancer Study.** Copy number analysis identifies novel interactions between genomic loci in ovarian cancer. *PLoS One* 2010; **5**: e11408.

**Rocha-Sousa A, Hayashi T, Gomes NL, Penas S, Brandão E, Rocha P, Urashima M, Yamada H, Tsuneoka H, Falcão-Reis F.** A novel mutation (Cys83Tyr) in the second zinc finger of NR2E3 in enhanced S-cone syndrome. *Graefes Arch Clin Exp Ophthalmol* 2011; **249**: 201-8.

**Mezawa H, Sugiura T, Watanabe M, Norizoe C, Takahashi D, Shimojima A, Tamez S, Tsutsumi Y, Yanaga K, Urashima M.** Serum vitamin D levels and survival of patients with colorectal

cancer: post-hoc analysis of a prospective cohort study. *BMC Cancer* 2010; **10**: 347.

**Kimura K, Shimano H, Yokote K, Urashima M, Teramoto T.** Effects of pitavastatin (LIVALO tablet) on the estimated glomerular filtration rate (eGFR) in hypercholesterolemic patients with chronic kidney disease. Sub-analysis of the LIVALO Effectiveness and Safety (LIVES) study. *J Atheroscler Thromb* 2010; **17**: 601-9.

**Yokoyama K, Urashima M, Ohkido I, Kono T, Yoshida T, Muramatsu M, Niu T, Hosoya T.** L-type voltage-dependent calcium channel alpha subunit 1C is a novel candidate gene associated with secondary hyperparathyroidism: an

application of haplotype-based analysis for multiple linked single nucleotide polymorphisms. *Nephron Clin Pract* 2010; **115**: c237-43.

**Teramoto T, Shimano H, Yokote K, Urashima M.** New evidence on pitavastatin: efficacy and safety in clinical studies. *Expert Opin Pharmacother* 2010; **11**: 817-28.

**Shimada T, Urashima M.** Ecological study: land cloud cover and suicide in Japan. *Jikeikai Med J* 2010; **57**: 101-11.

**Shimada T, Urashima M.** Influenza pandemics in Japan during the 20th century. *Jikeikai Med J* 2010; **57**: 89-99.