

## Division of Molecular Epidemiology

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### General Summary

Despite having the same disease diagnosis, 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 2011 through March 2012, we held 10 seminars' about strategies for clinical studies for healthcare practitioners at The Jikei University. In 2011, small-group study courses targeting postgraduate students will be started from the principles of epidemiology and biostatistics by reading textbooks and by 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. Genome and epigenome clinical studies and lead findings
3. Elective class in Global Health

### Publications

**Kakuda W, Abo M, Shimizu M, Sasanuma J, Okamoto T, Yokoi A, Taguchi K, Mitani S, Harashima H, Urushidani N, Urashima M; NEURO Investigators.** A multi-center study on low-frequency rTMS combined with intensive occupational therapy for upper limb hemiparesis in post-stroke patients. *J Neuroeng Rehabil.* 2012; **9**: 4.

**Hama T, Norizoe C, Suga H, Mimura T, Kato T, Moriyama H, Urashima M.** Prognostic significance of vitamin D receptor polymorphisms in head and neck squamous cell carcinoma. *PLoS One.* 2011; **6**: e29634.

**Suzuki M, Yoshioka M, Hashimoto M, Murakami M, Kawasaki K, Noya M, Takahashi D, Urashima M.** 25-hydroxyvitamin D, vitamin D receptor gene polymorphisms, and severity of Parkinson's disease. *Mov Disord.* 2012; **27**: 264-

71.

**Suzuki M, Hashimoto M, Yoshioka M, Murakami M, Kawasaki K, Urashima M.** The odor stick identification test for Japanese differentiates Parkinson's disease from multiple system atrophy and progressive supra nuclear palsy. *BMC Neurol.* 2011; **11**: 157.

**Yoshimura N, Goda K, Tajiri H, Yoshida Y, Kato T, Seino Y, Ikegami M, Urashima M.** Diagnostic utility of narrow-band imaging endoscopy for pharyngeal superficial carcinoma. *World J Gastroenterol.* 2011; **17**: 4999-5006.

**Hama T, Yuza Y, Suda T, Saito Y, Norizoe C, Kato T, Moriyama H, Urashima M.** Functional mutation analysis of EGFR family genes and corresponding lymph node metastases in head and neck squamous cell carcinoma. *Clin Exp Metastasis.* 2012; **29**: 19-25.

**Yokote K, Shimano H, Urashima M, Teramoto T.** Efficacy and safety of pitavastatin in Japanese patients with hypercholesterolemia: LIVES study and subanalysis. *Expert Rev Cardiovasc Ther.* 2011; **9**: 555-62.

**Kaise M, Miwa J, Tashiro J, Ohmoto Y, Morimoto S, Kato M, Urashima M, Ikegami M, Tajiri H.** The combination of serum trefoil factor 3 and pepsinogen testing is a valid non-endo-

scopic biomarker for predicting the presence of gastric cancer: a new marker for gastric cancer risk. *J Gastroenterol.* 2011; **46**: 736-45.

**Akiyama N, Segawa T, Ida H, Mezawa H, Noya M, Tamez S, Urashima M.** Bimodal effects of obesity ratio on disease duration of respiratory syncytial virus infection in children. *Allergol Int.* 2011; **60**: 305-8.