

Research Center for Medical Sciences Division of Molecular Epidemiology

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General Summary

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

Research Activities

The Jikei clinical research course

We have held 20 seminars about strategies for clinical studies for healthcare practitioners at The Jikei University. In 2015, small-group study courses targeting postgraduate students were 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. Elective class of Global Health
3. Randomized trial to prevent food allergy

Publications

Eto K, Urashima M, Kosuge M, Ohkuma M, Noaki R, Neki K, Ito D, Takeda Y, Sugano H, Yanaga K. Standardization of surgical procedures to reduce risk of anastomotic leakage, reoperation, and surgical site infection in colorectal cancer surgery: a retrospective cohort study of 1189 patients. *Int J Colorectal Dis.* 2018 Jun; **33**: 755-62. Epub 2018 Mar 30.

Morikawa A¹, Hayashi T¹, Kobayashi M¹, Kato Y¹, Shirahige K¹, Itoh T², Urashima M, Okamoto A, Akiyama T¹ (¹Univ Tokyo, ²Tokyo Institute of Technology). Somatic copy number alterations have prognostic impact in patients with ovarian clear cell carcinoma. *Oncol Rep.* 2018 Jul; **40**: 309-18. Epub 2018 May 8.

Akiba T, Morikawa T, Odaka M, Nakada T, Kamiya N, Yamashita M, Yabe M, Inagaki T,

Asano H, Mori S, Tsukamoto Y, Urashima M. Vitamin D Supplementation and Survival of Patients with Non-small Cell Lung Cancer: A Randomized, Double-Blind, Placebo-Controlled Trial. *Clin Cancer Res.* 2018 Sep 1; **24**: 4089-97. Epub 2018 Jul 17.

Ikemura A, Yuki I, Suzuki H, Suzuki T, Ishibashi T, Abe Y, Urashima M, Dahmani C¹ (¹Siemens Healthineers Japan), Murayama Y. Time-resolved magnetic resonance angiography (TR-MRA) for the evaluation of post coiling aneurysms; A quantitative analysis of the residual aneurysm using full-width at half-maximum (FWHM) value. *PLoS One.* 2018 Sep 7; **13**: e0203615. eCollection 2018.

Nakashima A, Yokoyama K, Kawanami D, Ohkido I, Urashima M, Utsunomiya K, Yokoo

T. Association between resistin and fibroblast growth factor 23 in patients with type 2 diabetes mellitus. *Sci Rep.* 2018 Sep 18; **8**: 13999.

Urashima M, Asaka D, Endo T, Omae S, Sugimoto N, Takaishi S, Mitsuyoshi R, Nakayama T, Nagakura H¹ (*Nagakura Ear, Nose and Throat Allergy Clinic*), **Endo T²** (*Endo Ear, Nose and Throat Allergy Clinic*), **Akutsu T, Tachimoto H, Kojima H.** Japanese cedar pollinosis in Tokyo residents born after massive national afforestation policy. *Allergy.* 2018 Dec; **73**: 2395-7. Epub 2018 Aug 16.

Martineau AR¹, Jolliffe DA¹, Greenberg L¹, Aloia JF², Bergman P³, Dubnov-Raz G⁴, Esposito S⁵, Ganmaa D⁶, Ginde AA⁷, Goodall EC⁸, Grant CC⁹, Janssens W¹⁰, Jensen ME¹¹, Kerley CP¹², Laaksi I¹³, Manaseki-Holland S¹⁴, Mauger D¹⁵, Murdoch DR¹⁶, Neale R¹⁷, Rees JR¹⁸, Simpson S¹⁹, Stelmach I²⁰, Trilok Kumar G²¹, Urashima M, Camargo CA²², Griffiths CJ, Hooper RL¹ (*Queen Mary Univ London*, ²*Winthrop University Hosp*, ³*Karolinska Institutet*,

Stockholm, ⁴*Edmond and Lily Safra Children's Hosp*, ⁵*Univ Milano*, ⁶*Harvard Sch Public Health*, ⁷*Univ Colorado Sch Med*, ⁸*McMaster Univ*, ⁹*Univ Auckland*, ¹⁰*Universitaire ziekenhuizen Leuven*, ¹¹*Univ Newcastle*, ¹²*Dublin City Univ*, ¹³*Univ Tampere*, ¹⁴*Univ Birmingham*, ¹⁵*The Pennsylvania State Univ*, ¹⁶*Univ Otago*, ¹⁷*Queensland Institute of Medical Research Berghofer Medical Research Institute, Brisbane, QLD, Australia*, ¹⁸*Geisel Sch Med at Dartmouth*, ¹⁹*Univ Tasmania*, ²⁰*Med Univ ódź, ódź*, ²¹*Univ Delhi*, ²²*Harvard Med Sch*). Vitamin D supplementation to prevent acute respiratory infections: individual participant data meta-analysis. *Health Technol Assess.* 2019 Jan; **23**: 1-44.
Okuyama M, Mezawa H, Kawai T, Urashima M (*National Center for Child Health and Development*). Elevated Soluble PD-L1 in Pregnant Women's Serum Suppresses the Immune Reaction. *Front Immunol.* 2019 Feb 18; **10**: 86. eCollection 2019.