

4. Department of Bacteriology I

- 1) Arakawa T, Fujimaru T, Ishizaki T, Takeuchi H, Kageyama M, Ikemi T, Hanada N, Watanabe H, Senpuku H: Unique functions of hydroxyapatite to adherence of mutans streptococci. *Quint Int* 2010, 41:e11-9.
- 2) Bhuiyan NA, Bhuiyan NA, Nusrin S, Alam M, Morita M, Watanabe H, Ramamurthy T, Cravioto A, Nair GB: Changing genotypes of cholera toxin (CT) of *Vibrio cholerae* 0139 in Bangladesh and description of three new CT genotypes. *FEMS Immunol Med Microbiol* 2009, 57: 136-141.
- 3) Nusrin S, Alam M, Morita M, Watanabe H, Ramamurthy T, Cravioto A, Nair GB: Changing genotypes of cholera toxin (CT) of *Vibrio cholerae* 0139 in Bangladesh and description of three new CT genotypes.
- 4) Chang B, Taguri T, Sugiyama K, Amemura-Maekawa J, Kura F, Watanabe H: Comparison of ethidium monoazide and propidium monoazide for the selective detection of viable *Legionella* cells. *Jpn J Infect Dis* 2010, 63: 119-123.
- 5) Chiou CS, Watanabe H, Wang YW, Wang WL, Terajima J, Thong KL, Phung DC, Tung SK: Utility of multilocus variable-number tandem-repeat analysis as a molecular tool for phylogenetic analysis of *Shigella sonnei*. *Journal of Clinical Microbiology* 2009, 47:1149-54.
- 6) Fujibayashi T, Nakamura M, Tominaga A, Satoh N, Kawarai T, Narisawa N, Shinozuka O, Watanabe H, Yamazaki T, Senpuku H: Effects of IgY against *Candida albicans* and *Candida* spp. adherence and biofilm formation. *Jpn J Infect Dis* 2009, 62: 337-342.
- 7) Fujioka K, Arakawa E, Kita J, Aoyama Y, Okuda T, Manome Y, Yamamoto K: Combination of real-value smell and metaphor expression aids yeast detection. *PLoS One.* 2009 Nov 20;4(11):e7939.
- 8) Hanaoka N, Matsutani M, Kawabata H, Yamamoto S, Fujita H, Sakata A, Azuma Y, Ogawa M, Takano A, Watanabe H, Kishimoto T, Shirai M, Kurane I, Ando S: Diagnostic assay for *Rickettsia japonica*. *Emerg Infect Dis* 2009, 15: 1994-1997.
- 9) Hanaoka N, Sakata A, Takano A, Kawabata H, Watanabe H, Kurane I, Kishimoto T, Ando S: Development of a pUC19-based recombinant plasmid to serve as a positive control in PCR for *Orientia tsutsugamushi*. *Microbiol Immunol* 2009, 53: 305-308.
- 10) Helbig JH, Amemura-Maekawa J: Serotyping of *Legionella pneumophila* and epidemiological investigations. *Nowa Medycyna* 2009, 16:69-75.
- 11) Hirata Y, Sata M, Makiuchi Y, Morikane K, Wada A, Okabayashi Ne, Tomoike H: Comparative analysis of *Micrococcus luteus* isolates from blood culture of patients with pulmonary hypertension receiving epoprostenol continuous infusion. *J. Infect. Chemother.* 2009, 15:424-425.
- 12) Honda N, Iyoda S, Yamamoto S, Terajima J, Watanabe H: LrhA positively controls the expression of the locus of enterocyte effacement genes in enterohemorrhagic *Escherichia coli* by differential regulation of their master regulators PchA and PchB. *Mol Microbiol* 2009, 74:1393-1411.
- 13) Ikebe T, Ato M, Matsumura T, Hasegawa H, Sata T, Kobayashi K, Watanabe H: Highly frequent mutations in negative regulators of multiple virulence genes in group A streptococcal toxic shock syndrome isolates. *PLoS Pathog* 2010, 6:e1000832.
- 14) Inaba E, Uematsu H, Nishiyama Y, Watanabe H, Senpuku H: The role of anti-PAc (361-386) peptide SIgA antibody in professional oral hygiene of the elderly. *Gerodontol* 2009, 26:259-267.
- 15) Izumiya H, Tada Y, Ito K, Morita-Ishihara T, Ohnishi M, Terajima J, Watanabe H: Characterization of *Shigella sonnei* isolates from travel-associated cases in Japan. *J Med Microbiol* 2009, 58: 1486-1491.
- 16) Koba H, Okuda K, Watanabe H, Tagami J, Senpuku H: Role of lysine in interaction between surface protein peptides of *Streptococcus gordonii* and

- agglutinin peptide. *Oral Microbiol Immunol* 2009, 24:162–169.
- 17) Kobayashi H, Kanazaki M, Ogawa T, Iyoda S, Hara-Kudo Y: Changing prevalence of O-serogroups and antimicrobial susceptibility among STEC strains isolated from healthy dairy cows over a decade in Japan between 1998 and 2007. *J Vet Med Sci* 2009, 71: 363–366.
- 18) Koizumi N, Gamage CD, Muto M, Kularatne SAM, Budagoda SBDS, Rajapakse JRPV, Tamashiro H, Watanabe H: Serological and genetic analysis of leptospirosis in patients with acute febrile illness in Kandy, Sri Lanka. *Jpn J Infect Dis* 2009, 62:474–475.
- 19) Koizumi N, Muto M, Tanikawa T, Mizutani H, Sohmura Y, Hayashi E, Akao N, Hoshino M, Kawabata H, Watanabe H: Human leptospirosis cases and prevalence of rats harboring *Leptospira interrogans* in urban areas of Tokyo, Japan. *J Med Microbiol* 2009, 58: 1227–1230.
- 20) Koizumi N, Muto M, Yamada A, Watanabe H: Prevalence of *Leptospira* spp. in the kidneys of wild boars and deer in Japan. *J Vet Med Sci* 2009, 71: 797–799.
- 21) Koizumi N, Uchida M, Makino T, Taguri T, Kuroki T, Muto M, Kato Y, Watanabe H: Isolation and characterization of *Leptospira* spp. from raccoons in Japan. *J Vet Med Sci* 2009, 71:425–429.
- 22) Koizumi N, Watanabe H: Leptospirosis. In: *Vaccines for Biodefense and Emerging and Neglected Diseases* 2009, 1291–1308. Elsevier, UK.
- 23) Kumada M, Motegi M, Nakao R, Yonezawa H, Yamamura H, Tagami J, Senpuku H: Inhibiting effects of *Enterococcus faecium* non-biofilm strain on *Streptococcus mutans* biofilm formation. *J Microbiol Immunol Infect* 2009, 42: 188–196.
- 24) Kuroki T, Ishihara T, Ito K, Kura F: Bathwater-associated cases of legionellosis in Japan, with a special focus on *Legionella* concentrations in water. *Jpn J Infect Dis* 2009, 62: 201– 205.
- 25) Matsui-Inohara H, Uematsu H, Narita T, Satoh K, Yonezawa H, Kuroda K, Ito T, Yoneda S, Kawarai T, Sugiya H, Watanabe H, Senpuku H: E2F-1-deficient NOD/SCID mice developed showing decreased saliva production. *Exp Biol Med* 2009, 234:1525–1536.
- 26) Matsumoto M, Yamaguchi I, Sasano M, Hori M, Ikezaki K, Shimizu S, Nishiyama Y, Sato N, Tsuchiyah, Suzuki M, Minagawa H, Working Group for Beta-Haemolytic Streptococci in Japan: T serotyping of *Streptococcus pyogenes* in Aichi Prefecture, Japan isolated between 2003 and 2007. *Jpn J Infect Dis* 2009, 62:168–169.
- 27) Matsuura M, Takahashi H, Watanabe H, Kawahara K: Immunomodulatory effects of *Yersinia pestis* lipopolysaccharides on human macrophages. *Clinical Vaccine Immunol* 2010, 17:49–55
- 28) Morita-Ishihara T, Terajima J, Watanabe H, Izumiya H: Interaction between Enterohemorrhagic *Escherichia coli* 0157:H7 EspFu and IRSp53 induces dynamic membrane remodeling in epithelial cells. *Jpn J Infect Dis* 2009, 62: 351–355.
- 29) Nakamura M, Fujibayashi T, Tominaga A, Satoh N, Kawarai T, Shinozuka O, Watanabe H, Yamazaki T, Senpuku H: Hinokitiol inhibits *Candida albicans* adherence to oral epithelial cells. *J Oral Biosci* 2010, 52: 42–50.
- 30) Niwa H, Anzai T, Izumiya H, Morita-Ishihara T, Watanabe H, Uchida I, Tozaki T, Hobo S: Antimicrobial resistance and genetic characteristics of *Salmonella typhimurium* isolated from horses in Hokkaido, Japan. *J Vet Med Sci* 2009, 71: 1115–1119.
- 31) Ohnishi M, Watanabe Y, Ono E, Takahashi C, Oya H, Kuroki, T, Shimuta K, Okazaki N, Nakayama S, Watanabe H: Spread of a chromosomal cefixime-resistant *penA* gene among different *Neisseria gonorrhoeae* lineages. *Antimicrobial Agents Chemotheraphy*. 2010, 54 1060–1067.
- 32) Onoyama S, Ogata R, Wada A, Saito M, Okada K,

- Harada T: Neonatal bacterial meningitis caused by *Streptococcus gallolyticus* subsp. *pasteurianus*. J. Med. Microbiol. 2009, 58:1252–1254.
- 33) Ooka T, Ogura Y, Asadulghani M, Ohnishi M, Nakayama K, Terajima J, Watanabe H, Hayashi T: Inference of the impact of insertion sequence (IS) elements on bacterial genome diversification through analysis of small-size structural polymorphisms in *Escherichia coli* 0157 genomes. Genome Research 2009, 19:1809–16.
- 34) Ooka T, Terajima J, Kusumoto M, Iguchi A, Kurokawa K, Ogura Y, Asadulghani M, Nakayama K, Murase K, Ohnishi M, Iyoda S, Watanabe H, Hayashi T: Development of a multiplex PCR-based rapid typing method for enterohemorrhagic *Escherichia coli* 0157 strains. Journal of Clinical Microbiology 2009, 47:2888–94.
- 35) Sakamoto R, Ohno A, Nakahara T, Satomura K, Iwanaga S, Kouyama Y, Kura F, Kato N, Matsubayashi K, Okumiya K, Yamaguchi K: *Legionella pneumophila* in rainwater on roads. Emerg Infect Dis 2009, 15: 1295 –1297.
- 36) Sakamoto R, Ohno A, Nakahara T, Satomura K, Iwanaga S, Koyama Y, Kura F, Noami M, Kusaka K, Funato T, Takeda M, Okumiya K, Kato N, Yamaguchi K: Is driving a car a risk for Legionnaires disease? Epidemiol Infect 2009, 137: 1615–1622.
- 37) Sato H, Takano A, Kawabata H, Une Y, Watanabe H, Mukhtar MM: *Trypanosoma* cf. *varani* in an imported ball python (*Python regnus*) from Ghana. J Parasitol 2009, 95: 1029–1033.
- 38) Shimuta K, Ohnishi M, Iyoda S, Goto N, Koizumi N, Watanabe H: The hemolytic and cytolytic activities of *Serratia marcescens* phospholipase A (PhlA) depend on lysophospholipid production by PhlA. BMC Microbiology 2009, 9:261.
- 39) Suzuki T, Mochizuki S, Yamamoto S, Arakawa H, Kinashi H: Regulation of lankamycin biosynthesis in *Streptomyces rochei* by two SARP genes, *srrY* and *srrZ*. Biosci Biotechnol Biochem 2010, 74:819–827.
- 40) Takada N, Fujita H, Kawabata H, Ando S, Sakata A, Takano A: Chaithong U. Spotted fever group *Rickettsia* sp. closely related to *Rickettsia japonica*, Thailand. Emerg Infect Dis 2009, 15: 610–611.
- 41) Takano A, Ando S, Kishimoto T, Fujita H, Kadosaka T, Nitta Y, Kawabata H, Watanabe H: Novel *Ehrlichia* sp. found in *Ixodes granulatus* infested to rodents in Okinawa, Japan. Microbiol Immunol 2009, 53: 101–106.
- 42) Takano A, Muto M, Sakata A, Ogasawara Y, Ando S, Hanaoka N, Tsurumi M, Sato F, Nakamura N, Fujita H, Watanabe H, Kawabata H: Relapsing fever spirochete in seabird tick, Japan. Emerg Infect Dis 2009, 15: 1528–1530.
- 43) Takaya A, Kitagawa N, Kuroe Y, Endo K, Okazaki M, Yokoyama E, Wada A, Yamamoto T: Mutational analysis of reduced telithromycin susceptibility of *Streptococcus pneumoniae* isolated clinically in Japan. FEMS Microbiol. Lett. 2010, 307:87–93.
- 44) Tamura S, Yonezawa H, Motegi M, Nakao R, Yoneda S, Watanabe H, Yamazaki T, Senpuku H: Inhibiting effects of *S. salivarius* on CSP-dependent biofilm formation bu mutans streotococci. Oral Microbiol Immunol 2009, 24:152–161.
- 45) Toh H, Oshima K, Toyoda A, Ogura Y, Ooka T, Sasamoto H, Park SH, Iyoda S, Kurokawa K, Morita H, Itoh K, Taylor TD, Hayashi T, Hattori M: Complete genome sequence of the wild-type commensal *Escherichia coli* strain SE15, belonging to phylogenetic group B2. J Bacteriol 2010, 192: 1165–1166.
- 46) Yamamoto S, Morita M, Izumiya H, Watanabe H: Chitin disaccharide (GlcNAc)₂ induces natural competence in *Vibrio cholerae* through transcriptional and translational activation of a positive regulatory gene *tfoXVC*. Gene 2010, 457:42–49.
- 47) Yamauchi T, Tabara K, Kanamori H, Kawabata H, Arai S, Katayama T, Fujita H, Yano Y, Takada N, Itagaki

A: Tick fauna associated with sika deer density in the Shimane Peninsula, Honshu, Japan. Med Entomol Zool 2009, 60: 297-304.

48) Mohsan S, Suzuki R, Kondo M, Aizaki H, Kato T, Mizuochi T, Wakita T, Watanabe H, Suzuki T. Evaluation of hepatitis C virus core antigen assays in detecting the recombinant viral antigens of various genotypes. J Clin Microbiol. 2009, 47:4141-4143.

49) Hasegawa M, Inamo Y, Fuchigami T, Hashimoto K, Morozumi M, Ubukata K, Watanabe H, Takahashi T. Bronchial casts and pandemic (H1N1) 2009 virus infection. Emerg Infect Dis. 2010, 16(2):344-346.

50) Shiino T, Okabe N, Yasui Y, Sugawara A, Ujike M, Obuchi M, Kishida N, Hong Xu, Takashita E, Anraku A, Ito R, Doi T, Ejima M, Sugawara H, Horikawa H, Yamazaki S, Kato Y, Fujita N, Odagiri T, Tashiro M, and Watanabe H. Molecular evolutionary analysis of the influenza A(H1N1)pdm viruses, May-September, 2009: Temporal and spatial spreading profile of viral isolates in Japan. 2010, PloS One. 10: 5, e11057.

51) Niaz Rahim, D. J. Gomes, H. Watanabe, Sabita R. Rahman, Alejandro Cravioto, Hubert Ph. Endtz, and Munirul Alam. Antibacterial activity of *Psidium guajava* leaf and bark against multi-drug resistant *Vibrio cholerae*: implication for cholera control. Jpn. J. Inf. Dis. 2010, 63: 271-274.

52) Benacer D, Thong KL, Watanabe H, Puthucheary SD. Characterization of drug resistant *Salmonella enterica* Serotype Typhimurium by antibiograms, plasmids, integrons, resistance genes and PFGE. Journal of Microbiology and Biotechnology. 2010, 20: 1042-1052.