

### 3. 誌上発表及び口頭発表

#### 3. 1 誌上発表 (査読あり)

Miller-Schulze P, Paulsen M., Toriba A., Tang N., Hayakawa K., Tamura K., Dong L., Zhang X., Simpson C. D. (2010) Exposures to Particulate Air Pollution and Nitro-Polycyclic Aromatic Hydrocarbons among Taxi Drivers in Shenyang, China. *Environ. Sci. Technol*, 44, 216-21

Mizumura A., Watanabe T., Kobayashi Y., Hirano S. (2010) Identification of arsenite-and arsenic diglutathione-binding proteins in human hepatocarcinoma cells. *Toxicol.Appl.Pharmacol.*, 242 (2), 119-125

Ao K., Suzuki T., Murai H., Matsumoto M., Nagai H., Miyamoto Y., Tohyama C., Nohara K. (2009) Comparison of immunotoxicity among tetrachloro-, pentachloro-, tetrabromo-and pentabromo-dibenzo-p-dioxins in mice. *Toxicology*, 256 , 25-31

Funatake C.J., Ao K., Suzuki T., Murai H., Yamamoto M., Fujii-Kuriyama Y., Kerkvliet N.I., Nohara K. (2009) Expression of constitutively-active aryl hydrocarbon receptor in T-cells enhances the down-regulation of CD62L, but does not alter expression of CD25 or suppress the allogeneic CTL response. *J.Immunotoxicology*, 6 (3), 194-203

Ichinose T, Hiyoshi K, Yoshida S, Takano H, Inoue K, Nishikawa M, Mori I, Kawazato H, Yasuda A, Shibamoto T. (2009) Asian sand dust aggravates allergic rhinitis in guinea pigs induced by Japanese cedar pollen. *Inhal Toxicol.* , 21, 985-993.

Inoue H, Shimada A, Kaewamatawong T, Naota M, Morita T, Ohta Y, Inoue KI, Takano H. (2009) Ultrastructural changes of the air-blood barrier in mice after intratracheal instillation of lipopolysaccharide and ultrafine carbon black particles. *Exp.Toxicol.Pathol.*, 61 (8), 51-58

Inoue K, Takano H, Shimada A, Satoh M. (2009) Metallothionein as an anti-inflammatory mediator. *Mediat Inflamm*, 101659

Inoue K, Takano H, Sato H, Yanagisawa R, Yoshikawa T. (2009) Protective role of urinary trypsin inhibitor in lung expression of proinflammatory cytokines accompanied by lethal liver injury in mice. *Immunopharmacol Immunotoxicol.* , 31, 446-450

Inoue K, Takano H, Koike E, Yanagisawa R, Oda T, Tamura H, Adachi Y, Ishibashi K, Ohno N(2009) Candida soluble cell wall beta-glucan facilitates ovalbumin-induced allergic airway inflammation in mice: Possible role of antigen-presenting cells. *Respiratory Research*, 10, Art. No. 68

Inoue K, Koike E, Yanagisawa R, Adachi Y, Ishibashi K, Ohno N, Takano H. (2009) Pulmonary exposure to soluble cell wall  $\beta$ -(1, 3)-glucan of *Aspergillus* induces proinflammatory response in mice. *Int J Immunopathol Pharmacol* , 22, 287-297

Inoue KI, Takano H, Yanagisawa R., Koike E., Shimada A. (2009) Size effects of latex nanomaterials on lung inflammation in mice. *Toxicol. Appl. Pharmacol.*, 234 (1), 68-76

Inoue KI, Koike E, Yanagisawa R, Takano H. (2009) Effects of pulmonary exposure to diesel exhaust particles on extrathoracic CD4 polarization in asthmatic mice. *Immunopharmacol. Immunotoxicol.*, 31 (1), 71-74

Inoue KI, Koike E, Takano H, Yanagisawa R, Ichinose T, Yoshikawa T. (2009) Effects of diesel exhaust particles on antigen-presenting cells and antigen-specific Th immunity in mice. *Exp.Biol.Med.*, 234, 200-209

Inoue KI, Takano H, Shimada A, Satoh M. (2009) Role of metallothionein in inflammatory lung diseases. *Curr. Respir. Med. Rev.*, 5 (1), 6-11

Inoue KI, Takano H., Koike E., Warabi E., Yanagawa T., Yanagisawa R., Ishii T. (2009) Peroxiredoxin I is a negative regulator of Th2-dominant allergic asthma. *Int.Immunopharmacol.*, 9 (11), 1281-1288

Inoue KI, Koike E, Yanagisawa R, Adachi Y, Ishibashi K., Ohno N, Takano H. (2009) Pulmonary exposure to soluble cell wall beta-(1, 3)-glucan of aspergillus induces proinflammatory response in mice. *Int .J. Immunopathol. Pharmacol.*, 22 (2), 287-297

Inoue KI, Koike E, Yanagisawa R, Hirano S, Nishikawa M, Takano H. (2009) Effects of multi-walled carbon nanotubes on a murine allergic airway inflammation model. *Toxicol. Appl. Pharmacol.*, 237 (3), 306-316

Inoue KI, Takano H, Yanagisawa R, Yoshikawa T. (2009) Airborne particles in pulmonary diseases. *Curr. Respir. Med. Rev.*, 5, 69-72

Inoue KI, Takano H, Oda T, Yanagisawa R, Tamura H, Adachi Y, Ishibashi K, Ohno N. (2009) Soluble cell wall  $\beta$ -glucan of candida induces/enhances apoptosis and oxidative stress in murine lung. *Immunopharmacol. Immunotoxicol.*, 31 (1), 140-145

Kimura A., Naka T., Nakahama T., Chinen I., Masuda K., Nohara K., Fujii-Kuriyama Y., Kishimoto T. (2009) Aryl hydrocarbon receptor in combination with Stat1 regulates LPS-induced inflammatory responses. *J.Exp.Med.*, 206 (9), 2027-2035

Kobayashi Y. Elucidation of the metabolic pathways of selenium and arsenic by analytical toxicology. *J. Health Sci.* 56 (in press)

Koike E., Inoue KI, Yanagisawa R, Takano H. (2009) Di-(2-ethylhexyl) phthalate affects immune cells from atopic prone mice in vitro. *Toxicology*, 259 (1/2), 54-60

Naota M, Shimada A, Morita T, Inoue K, Takano H. (2009) Translocation pathway of the intratracheally instilled C60 fullerene from the lung into the blood circulation in the mouse: Possible association of diffusion and caveolae-mediated pinocytosis. *Toxicol. Pathol.*, 37 (4), 456-462

Naser T.M., Kanda I., Ohara T., Sakamoto K., Kobayashi S., Nitta H., Nataami T. (2009) Analysis of traffic-related NO<sub>x</sub> and EC concentrations at various distances from major roads in Japan. *Atmos. Environ.*, 43 (15), 2379-2390

Nohara K., Suzuki T., Ao K., Murai H., Miyamoto Y., Inouye K., Pan X., Motohashi H., Fujii-Kuriyama Y., Yamamoto M., Tohyama C. (2009) Constitutively active aryl hydrocarbon receptor expressed in T cells increases immunization-induced IFN- $\gamma$  production in mice but does not suppress Th2-cytokine production or antibody production. *Int. Immunol.*, 21 (7), 769-777

Ohta Y., Kobayashi Y., Konishi S., Hirano S., Ohta Y. (2009) Speciation analysis of selenium metabolites in urine and breath by HPLC-and GC-inductively coupled Plasma-MS after administration of selenomethionine and methylselenocysteine to rats. *Chem. Res. Toxicol.*, 22 (11), 1795-1801

Takano H, Inoue KI, Shimada A, Sato H, Yanagisawa R, Yoshikawa T. (2009) Urinary trypsin inhibitor protects against liver injury and coagulation pathway dysregulation induced by lipopolysaccharide/D-galactosamine in mice. *Lab. Invest.*, 89, 833-839

Yamazaki S., Shima M., Ando M., Nitta H. (2009) Modifying effect of age on the association between ambient ozone and nighttime primary care visits due to asthma attack. *J. Epidemiol.*, 19 (3), 143-151

Yanagisawa R, Takano H, Inoue KI, Koike E, Kamachi T, Sadakane K, Ichinose T. (2009) Titanium dioxide nanoparticles aggravate atopic dermatitis-like skin lesions in NC/Nga mice. *Exp. Biol. Med.*, 234, 314-322

Yoshida S, Hiyoshi K, Ichinose T, Takano H, Oshio S, Sugawara I, Takeda K, Shibamoto T. (2009) Effect of Nanoparticles on the Male Reproductive Function of Mice. *Int. J. Androl.*, 32(4), 337-342

Ueda K., Nitta H., Ono M. (2009) Effects of fine particulate matter on daily mortality for specific heart diseases in Japan. *Circ.J.*, 73 (7), 1248-1254

Ueda K., Nitta H., Ono M., Takeuchi A. (2009) Estimating mortality effects of fine particulate matter in Japan: A comparison of time-series and case-crossover analyses. *J. Air Waste Manage. Assoc.*, 59 3. (10), 1212-1218

Ueda K., Nitta H., Ono M. (2009) Effects of fine particulate matter on daily mortality for specific heart diseases in Japan. *Circ.J.*, 73 (7), 1248-1254

Ueda K., Nitta H., Ono M., Takeuchi A. (2009) Estimating mortality effects of fine particulate matter in Japan: A comparison of time-series and case-crossover analyses. *J. Air Waste Manage. Assoc.*, 59 (10), 1212-1218

Ueda K., Nitta H., Ito N., Mizohata A. (2009) Specific chemical components of particulate matter and daily mortality in a Japanese urban city. *Int. Soc. Environ. Epidemiol. Annu. Gen. Meet. 2009, Abstracts*

Asakawa H, Mochitate K, Haruyama T. Seamless signal transduction from live cells to an NO sensor via a cell-adhesive sensing matrix. *Anal. Chem.* 80: 1505-11, 2008.

Cao Q., Wu Q., Jiang R., Tamura K., Kondo Y., Tang N., Song W. (2008) Distribution Characteristics of Particle-bound PAHs with the Changes of Space and Time in a Traffic Area of a City. *J Environ Occup Med*, 25, 1, 13-15

Cui X., Kobayashi Y., Akashi M., Okayasu R. (2008) Metabolism and the paradoxical effects of arsenic: Carcinogenesis and anticancer. *Curr. Med. Chem.*, 15, 2293-2304

Furuyama A, Hosokawa T, Mochitate K. Interleukin-1beta and tumor necrosis factor-alpha have opposite effects on fibroblasts and epithelial cells during basement membrane formation. *Matrix Biol.* 27 429-440, 2008.

Hosokawa T, Betsuyaku T, Odajima N, Suzuki M, Mochitate K, Nasuhara Y, Nishimura M. Role of basement membrane in EMMPRIN/CD147 induction in rat tracheal epithelial cells. *Biochem. Biophys. Res. Commun.* 368: 426-32, 2008.

Ichinose T, Yoshida S, Sadakane K, Takano H, Yanagisawa R, Inoue K, Nishikawa M, Mori I, Kawazato H, Yasuda A, Shibamoto T. (2008) Effects of Asian sand dust, Arizona sand dust, amorphous silica and aluminum oxide on allergic inflammation in the murine lung. *Inhal Toxicol.* , 20, 685-694.

Ichinose T, Yoshida S, Hiyoshi K, Sadakane K, Takano H, Nishikawa, Mori I, Yanagisawa R, Kawazato H., Yasuda A., Shibamoto T. (2008) Effects of microbial materials adhered to Asian sand dust (ASD) on allergic lung inflammation. *Arch. Environ. Contam. Toxicol.*, 55(3) , 348-357

Inoue KI, Takano H, Kumagai Y. (2008) Pin1 blockade in asthma by naphthoquinone?. *J. Allergy Clin. Immunol.*, 121 (4), 1064

Inoue K, Koike E, Yanagisawa R, Takano H. (2008) Effects of pulmonary exposure to diesel exhaust particles on extrathoracic CD4 polarization in asthmatic mice. *Immunopharmacol Immunotoxicol* , 1-6  
Inoue KI, Takano H, Ohnuki M, Yanagisawa R, Sakurai M, Shimada A, Mizushima K, Yoshikawa T. (2008) Size effects of nanomaterials on lung inflammation and coagulatory disturbance. *Int. J. Immunopathol. Pharmacol.*, 21 (1), 197-206

Inoue KI, Takano H., Satoh M. (2008) Protective role of metallothionein in coagulatory disturbance accompanied by acute liver injury induced by LPS/D-GaIN. *Thromb Haemost*, 99, 980-983

Inoue KI, Takano H, Kaewamatawong T, Shimada A, Suzuki J, Yanagisawa R., Tasaka S, Ishizaka A., Satoh M. (2008) Role of metallothionein in lung inflammation induced by ozone exposure in mice. *Free Radical Biol. Med.*, 45 (12), 1714-1722

Inoue KI, Takano H, Koike E, Yanagisawa R, Tasaka S, Ishizaka A, Shimada A. (2008) Effects of pulmonary exposure to carbon nanotubes on lung and systemic inflammation with coagulatory disturbance induced by lipopolysaccharide in mice. *Exp. Biol. Med.*, 233, 1583-1590

Inoue KI, Takano H, Yanagisawa R, Shimada A, Satoh M, Yoshino S, Yamaki K, Yoshikawa T. (2008) Antioxidative role of interleukin-6 in septic lung injury in mice. *Int. J. Immunopathol. Pharmacol.*, 21 (3), 501-507

Inoue KI, Koike E, Yanagisawa R, Takano H. (2008) Impact of diesel exhaust particles on Th2 response in the lung in asthmatic mice. *J. Clin. Biochem. Nutr.*, 43, 199-200

Inoue KI, Takano H, Yanagisawa R, Yoshikawa T. (2008) Protective effects of urinary trypsin inhibitor on systemic inflammatory response induced by lipopolysaccharide. *J. Clin. Biochem. Nutr.*, 43, 139-142

Ito T., Inouye K., Nohara K., Tohyama C., Fujimaki H. (2008) TCDD exposure exacerbates atopic dermatitis-related inflammation in NC/Nga mice. *Toxicol. Lett.*, 177(1), 31-37

Kawaguchi M, Morohoshi K, Saita E, Yanagisawa R, Watanabe G, Takano H, Morita M, Imai H, Taya K., Himi T. (2008) Developmental exposure to pentachlorophenol affects the expression of thyroid hormone receptor  $\beta 1$  and synapsin I in brain, resulting in thyroid function vulnerability in rats. *Endocrine*, 33 (3), 277-284

Kimura A., Naka T., Nohara K., Fujii-Kuriyama Y., Kishimoto T. (2008) Aryl hydrocarbon receptor regulates Stat1 activation and participates in the development of Th17 cells. *Proc.Natl.Acad.Sci.USA*, 105 (28), 9721-9726

Kobayashi Y., Hirano S. (2008) Effects of endogenous hydrogen peroxide and glutathione on the stability of arsenic metabolites in rat bile. *Toxicol.Appl.Pharmacol.*, 232 (1), 33-40

Kobayashi Y., Negishi T., Mizumura A., Watanabe T., Hirano S. (2008) Distribution and excretion of arsenic in cynomolgus monkey following repeated administration of diphenylarsinic acid. *Arch.Toxicol.*, 82, 553-561

Koike E, Takano H, Inoue KI, Yanagisawa R, Aoyagi H, Shinohara R, Kobayashi T. (2008) Pulmonary exposure to carbon black nanoparticles increases the number of antigen-presenting cells in murine lung. *Int. J. Immunopathol. Pharmacol.*, 21(1), 35-42

Koike E, Takano H, Inoue KI, Yanagisawa R, Kobayashi T. (2008) Carbon black nanoparticles promote the maturation and function of mouse bone marrow-derived dendritic cells. *Chemosphere*, 73(3), 371-376

Koike E, Takano H, Inoue KI, Yanagisawa R. (2008) Accelerated differentiation of bone marrow-derived dendritic cells in atopic prone mice. *Int. Immunopharmacol.*, 8 (1314), 1737-1743

Ma L., Shima M., Yoda Y., Yamamoto H., Nakai S., Tamura K., Nitta H., Watanabe H., Nishimuta T. (2008) Airborne Particulate Matter and Respiratory Morbidity in Asthmatic Children. *Journal of Epidemiology*, 18. 97-110

Nakai S., Tamura K. (2008) Relationship between Indoor and Outdoor Particulate Matter Concentrations in Japan. *Asian J. Atmospheric Environment*, 2, 68-74

Nohara K., Ao K., Miyamoto Y., Suzuki T., Imaizumi S., Tateishi Y., Omura S., Tohyama C., Kobayashi T. (2008) Arsenite-Induced thymus atrophy is mediated by cell cycle arrest: A characteristic downregulation of E2F-Related genes revealed by a microarray approach. *Toxicol.Sci.*, 101, 226-238

Odajima H., Yamazaki S., Nitta H. (2008) Decline in peak expiratory flow according to hourly short-term concentration of particulate matter in asthmatic children. *Inhal.Toxicol.*, 20 (14), 1263-1272

小野雅司、田村憲治、新田裕史、中井里史 (2008) Indoor and outdoor levels of particulate matter concentration in a district of Tokyo in the late 1980s. *大気環境学会誌*, 43, 147-160

Ono N, Oshio S, Niwata Y, Yoshida S, Tsukue N, Sugawara I, Takano H, Takeda K. (2008) Detrimental effects of prenatal exposure to filtered diesel exhaust on mouse spermatogenesis. *Arch Toxicol*, 82(11), 851-859

Ozasa K, Nemoto S, Li Y, Hara M, Maeda M, and Mochitate K. Contact angle and biocompatibility of sol-gel prepared TiO<sub>2</sub> thin film for their use as semiconductor-based cell-viability sensors. *Surf. Interface Anal.* 40: 579-583, 2008.

Yanagisawa R, Takano H, Inoue KI, Koike E, Sadakane K, Ichinose T. (2008) Effects of maternal exposure to Di-(2-ethylhexyl) phthalate during fetal and/or neonatal periods on atopic dermatitis in male offspring. *Environ. Health Perspect.*, 116 (9), 1136-1141

Yasuda A, Takano H, Osakabe N, Sanbongi C, Fukuda K, Natsume N, Yanagisawa R, Inoue K, Kato Y, Osawa T, Yoshikawa T. (2008) Cacao liquor proanthocyanidins inhibit lung injury induced by diesel exhaust particles. *Int J Immunopathol Pharmacol.*, 21, 279-288

牛島佳代、成 元哲、川北 稔、向井良人、田村憲治、田中司朗、田中美加、丸山定巳 (2008) 不知火海沿岸地域住民の水俣病補償制度上の位置と日常生活動作能力との関連. *日本衛生学雑誌*, 43, 147-160

Aoki Y, Hashimoto AH, Amanuma K, Matsumoto M, Hiyoshi K., Takano H, Masumura KI, Itoh K, Nohmi T, Yamamoto M. (2007) Enhanced spontaneous and benzo(a)pyrene-induced mutations in the lung of Nrf2-deficient gpt delta mice. *Cancer Res.*, 67(12), 5643-5648

Arimoto T, Takano H, Inoue K, Yanagisawa R, Yoshino S, Yamaki K, Yoshikawa T. (2007) Pulmonary exposure to diesel exhaust particle components enhances circulatory chemokines during lung inflammation. *Int. J. Immunopathol. Pharmacol.* 20, 197-201.

Fujisaki H, Ebihara T, Irie S, Kobayashi T, Adachi E, Mochitate K and Hattori S. Keratinocyte apoptosis on type I collagen fibrils is prevented by Erk1/2 activation under high calcium condition. *Connect Tissue Res.* 48: 159-69, 2007.

Hashimoto AH, Amanuma K, Hiyoshi K., Sugawara Y, Goto S, Yanagisawa R, Takano H, Masumura K, Nohmi T, Aoki Y. (2007) Mutations in the lungs of gpt delta transgenic mice following inhalation of diesel exhaust. *Environ. Mol. Mutagen.*, 48 (8), 682-693

Honda Y., Kabuto M., Ono M., Uchiyama I. (2007) Determination of optimum daily maximum temperature using climate data. *Environ. Health Prev. Med.*, 12(5), 209-216

Hoshiya T, Mochitate K, and Akaike T. Hepatocytes maintain their function on basement membrane formed by epithelial cells. *Biochem. Biophys. Res. Commun.* 359: 151-156, 2007.

Hosokawa, T., Furuyama, A., Katagiri, K., Betsuyaku, T., Nishimura, M., and Mochitate, K. Differentiation of Tracheal Basal Cells to Ciliated Cells and Tissue Reconstruction on the Synthesized Basement Membrane Substratum In Vitro. *Connective Tissue Res.* 48: 9-18, 2007.

Inoue K, Takano H, Yanagisawa R, Sakurai M, Shimada A, Morita T, Sato M, Yoshino S, Yoshikawa T. (2007) Roles of interleukin-6 in toll-like receptor 4 and 2 expression induced by lipopolysaccharide in the lung. *Immunopharmacol. Immunotoxicol.*, 29, 63-68.

Inoue K, Takano H, Yanagisawa R, Sakurai M, Abe S, Yoshino S, Yamaki K, Yoshikawa T. (2007) Effects of components derived from diesel exhaust articles on lung physiology related to antigen. *Immunopharm. Immunotoxicol.*, 29, 403-412.

Inoue K., Takano H., Yanagisawa R., Sakurai M., Ueki N., Yoshikawa T. (Kyoto Pref. Univ. Med.) (2007) Effects of diesel exhaust particles on cytokine production by splenocytes stimulated with lipopolysaccharide. *J. Appl. Toxicol.*, 27, 95-100

Inoue K, Takano H, Hiyoshi K., Ichinose T, Sadakane K, Yanagisawa R, Tomura S, Kumagai Y. (2007) Naphthoquinone enhances antigen-related airway inflammation in mice. *Eur. Respir. J.*, 29(2), 259-267

Inoue KI, Takano H, Yanagisawa R, Hirano S, Kobayashi T, Fujitani Y, Shimada A., Yoshikawa T. (2007) Effects of inhaled nanoparticles on acute lung injury induced by lipopolysaccharide in mice. *Toxicology*, 238, 99-110

Inoue KI, Takano H, Ichinose T, Tamura S, Yanagisawa R, Sakurai M, Sumi D, Cho AK, Hiyoshi K., Kumagai Y. (2007) Effects of naphthoquinone on airway responsiveness in the presence or absence of antigen in mice. *Arch. Toxicol.*, 81, 575-581

Inoue KI, Takano H, Oda T, Yanagisawa R, Tamura H, Ohno N, Adachi Y, Ishibashi K., Yoshikawa T. (2007) Candida soluble cell wall- $\beta$ -D-glucan induces lung inflammation in mice. *Int. J. Immunopathol. Pharmacol.*, 20(3), 499-508

Inoue KI, Takano H, Yanagisawa R, Sakurai M, Abe S, Yoshino S, Yamaki K, Yoshikawa T. (2007) Effects of nanoparticles on lung physiology in the presence or absence of antigen. *Int. J. Immunopathol. Pharmacol.*, 20(4), 737-744

伊藤真人, 小野雅司, 能登美之 (2007) 陸別のブリューワ分光光度計常数校正と紫外域日射量・オゾン全量. *J. Aerol. Obs.*, 67, 33-38

新田裕史 (2007) PM2.5 の健康リスクに関する研究の動向と展開の方向性. *Jpn. J. Risk Anal.*, 17(2), 93-99

Ohtake F., Baba A., Takada I., Okada M., Iwasaki K., Miki H., Takahashi S., Kouzmenko A., Nohara K., Chiba T. (2007) Dioxin receptor is a ligand-dependent E3 ubiquitin ligase. *Nature*, 446, 562-566

Ono N, Oshio S, Niwata Y, Yoshida S, Tsukue N, Sugawara I, Takano H, Takeda K. (2007) Prenatal exposure to diesel exhaust impairs mouse spermatogenesis. *Inhal Toxicol.*, 19(3), 275-281

Ozasa K, Nemoto S, Hara M, Maeda M, and Mochitate K. The passivation/modification of AlGaAs/GaAs surfaces by amorphous TiO<sub>2</sub> for the bio-sensing use in electrolytes. *Surface Sci.* 601: 4536-4540, 2007.

Ozasa K, Nemoto S, Hara M, Maeda M, and Mochitate K. The surface of TiO<sub>2</sub> gate of 2DEG-FET in contact with electrolytes for biosensing use. *Appl. Surf. Sci.* 254: 36 – 39, 2007



Suzuki T., Nohara K. (2007) Regulatory factors involved in species-specific modulation of arylhydrocarbon receptor(AhR)-dependent gene expression in humans and mice. *J.Biochem.*, 142, 443-452

Tomaru M, Takano H, Osakabe N, Yasuda A, Inoue KI, Yanagisawa R, Ohwatari T, Uematsu H (2007) Dietary supplementation with cacao liquor proanthocyanidins prevents elevation of blood glucose levels in diabetic obese mice. *Nutrition*, 23, 351-355

Tomaru M, Takano H, Inoue K, Yanagisawa R, Osakabe N, Yasuda A, Shimada A, Kato Y, Uematsu H. (2007) Pulmonary exposure to diesel exhaust particles enhances fatty changes of the liver in obese diabetic mice. *Int J Mol Med.* , 19, 17-22.

Wakahara K, Tanaka H, Takahashi G, Tamari M, Nasu R, Toyohara T, Takano H, Saito S, Inagaki N, Shimaoka K, Nagai H. (2007) Repeated instillations of *Dermatophagoides farinae* into the airways can induce Th2-dependent airway hyperresponsiveness, eosinophilia and remodeling in mice-Effect of intratracheal treatment of fluticasone propionate-. *Eur. J. Pharmacol.*, 58(1), 87-96

Yamaki K, Taneda S, Yanagisawa R, Inoue K, Takano H, Yoshino S. (2007) Enhancement of allergic responses in vivo and in vitro by butylated hydroxytoluene. *Toxicol. Appl. Pharmacol.*, 223, 164-172.

Yanagisawa R, Takano H, Ichinose T, Mizushima K, Nishikawa M, Mori I, Inoue KI, Sadakane K., Yoshikawa T. (2007) Gene expression analysis of murine lungs following pulmonary exposure to Asian sand dust particles. *Exp. Biol. Med.*, 232, 1109-1118

Yanagisawa R, Takano H, Ichinose T, Mizushima K, Nishikawa M, Mori I, Inoue KI, Sadakane K., Yoshikawa T. (2007) Gene expression analysis of murine lungs following pulmonary exposure to Asian sand dust particles. *Exp. Biol. Med.*, 232, 1109-1118

Yang X., Okada Y., Tang N., Matsunaga S., Tamura K., Lin J.,Kameda T., Toriba A. Hayakawa K. (2007) Long-range transport of polycyclic aromatic hydrocarbons from China to Japan.*Atmospheric Environment* , 41, 2710-2718

Hashimoto AH, Amanuma K, Hiyoshi K., Takano H, Masumura KI, Nohmi T, Aoki Y. (2006) In vivo mutagenesis in the lungs of gpt-delta transgenic mice treated intratracheally With 1,6-Dinitropyrene. *Environ. Mol. Mutagen.*, 47, 277-283

Ichinose T, Sadakane K, Takano H, Yanagisawa R, Nishikawa M, Mori I, Kawazato H, Yasuda A, Hiyoshi K, Shibamoto T. (2006) Enhancement of mite allergen-induced eosinophil infiltration in the murine airway and local cytokine/chemokine expression by Asian sand dust.. *J. Toxicol. Environ. Health A*, 69, 1571-1585

Inoue K, Takano H, Yanagisawa R, Sakurai M, Ueki N, Yoshikawa T. (2006) Effects of diesel exhaust on lung inflammation related to bacterial endotoxin in mice. *Basic Clin. Pharmacol. Toxicol.*, 99, 346-352

Inoue K, Takano H, Yanagisawa R, Sakurai M, Shimada A, Sato M, Yoshino S, Yoshikawa T. (2006) Role of interleukin-6 in fibrinolytic changes induced by lipopolysaccharide in mice. *Blood Coagul. Fibrinolysis* 17, 307-309

Inoue K, Takano H, Shiga A, Fujita Y, Makino H, Yanagisawa R, Kato Y, Yoshikawa T. (2006) Effects of volatile constituents of rosemary extract on lung inflammation induced by diesel exhaust particles. *Basic Clin. Pharmacol. Toxicol.*, 99, 52-57

Inoue K., Takano H, Shimada A, Wada E, Yanagisawa R, Sakurai M, Satoh M, Yoshikawa T. (2006) Role of metallothionein in coagulatory disturbance and systemic inflammation induced by lipopolysaccharide mice. *FASEB J.*, 20(3), 533-535

Inoue K, Takano H, Yanagisawa R, Ichinose T, Sakurai M, Yoshikawa T. (2006) Effects of nano particles on cytokine expression in murine lung in the absence or presence of allergen. *Arch. Toxicol.*, 80, 614-619

Inoue K, Takano H, Yanagisawa R, Hirano S, Kobayashi T, Ichinose T, Yoshikawa T. (2006) Effects of organic chemicals derived from ambient particulate matter on lung inflammation related to lipopolysaccharide. *Arch. Toxicol.*, 80, 833-838

Inoue K, Takano H, Yanagisawa R, Hirano S, Sakurai M, Shimada A, Yoshikawa T. (2006) Effects of airway exposure to nanoparticles on lung inflammation induced by bacterial endotoxin in mice. *Environ. Health Perspect.*, 114(9), 1325-1330

Inoue K., Takano H, Yanagisawa R, Hirano S, Ichinose T, Shimada A, Yoshikawa T. (2006) The role of toll-like receptor 4 in airway inflammation induced by diesel exhaust particles. *Arch. Toxicol.*, 80, 275-279

Inoue K, Takano H, Sakurai M, Oda T, Tamura H, Yanagisawa R, Shimada A, Yoshikawa T. (2006) Pulmonary exposure to diesel exhaust particles enhances coagulatory disturbance with endothelial damage and systemic inflammation related to lung inflammation. *Exp. Biol. Med.*, 231, 1626-1632

Ishimura R., Kawakami T., Ohsako S., Nohara K., Tohyama C. (2006) Suppressive effect of 2,3,7,8-tetrachlorodibenzo-p-dioxin on vascular remodeling that takes place in the normal labyrinth zone of rat placenta during late gestation. *Toxicol.Sci.*, 91(1), 265-274

Ito T., Nagai H., Lin T.-M., Peterson R.E., Tohyama C., Kobayashi T., Nohara K. (2006) Organic chemicals adsorbed onto diesel exhaust particles directly alter the differentiation of fetal thymocytes

through arylhydrocarbon receptor but not oxidative stress responses. *J.Immunotoxicol.*, 3, 21-30

Kabuto M., Nitta H., Yamamoto S., Yamaguchi N., Akiba S., Honda Y., Hagihara J., Isaka K., Saito T., Ojima T. et al. (2006) Childhood leukemia and magnetic fields in Japan: A case-control study of childhood leukemia and residential power-frequency magnetic fields in Japan. *Int.J.Cancer*, 119(3), 643-650

Kaewamatawong T, Shimada A, Okajima M, Inoue H, Morita T, Inoue K, Takano H (2006) Acute and subacute pulmonary toxicity of low dose of ultrafine colloidal silica particles in mice after intratracheal instillation. *Toxicol. Pathol.* 34: 958-965

Kasamatsu J., Shima M., Yamazaki S., Tamura K., Sun G. (2006) Effects of winter air pollution on pulmonary function of school children in Shenyang, China. *Int.J.Hyg.Environ.Health*, 209, 435-444

Kawakami T., Ishimura R., Nohara K., Takeda K., Tohyama C., Ohsako S. (2006) Differential susceptibilities of Holtzman and Sprague-Dawley rats to fetal death and placental dysfunction induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) despite the identical primary structure of the aryl hydrocarbon receptor. *Toxicol.Appl.Pharmacol.*, 212, 224-236

Kobayashi K, Kuroda J, Shibata N, Hasegawa T, Seko Y, Satoh M, Tohyama C, Takano H, H, IMURA N, Sakabe K, Fujishiro H, Himeno S. (2006) Induction of metallothionein by manganese is completely dependent on interleukin-6 production. *J. Pharmacol. Exp. Ther.*, 320(2), 721-727

近藤武, 渡辺俊一, 松島松翠, 浅沼信治, 櫻井四郎, 田村憲治, 安藤満 (2006) 中国四川省フッ素汚染地区の主要食材(乾燥とうもろこし, トウガラシ)のフッ素汚染濃度およびその化学的性質. *日本農村医学会雑誌*, 54, 740-748

Liu Y., Ono M., Yu D., Wang Y., Yu J. (2006) Individual solar-UV doses of pupils and undergraduates in China. *J.Exposure Sci.Environ.Epidemiol.*, 16, 531-537

Murakami Y., Ono M. (2006) Myocardial infarction deaths after high level exposure to particulate matter. *J.Epidemiol.Community Health*, 30, 262-266

Nagai H., Kubo M., Abe R., Yamamoto M., Nohara K. (2006) Constitutive activation of the aryl hydrocarbon receptor in T-lineage cells induces thymus involution independently of the Fas/Fas ligand signaling pathway. *Int.Immunopharmacol.*, 6, 279-286

Nohara K., Ao K., Miyamoto Y., Ito T., Suzuki T., Toyoshiba H., Tohyama C. (2006) Comparison of the 2,3,7,8-tetrachlorodibenzo-p-dioxin(TCDD)-induced CYP1A1 gene expression profile in lymphocytes from mice, rats, and humans: Most potent induction in humans. *Toxicology*, 225, 204-213

Ono M., Omori T., Nitta H. (2006) Is the midnight-to-midnight average concentration of pollutants an appropriate exposure index for a daily mortality study?. *J.Exposure Sci.Environ.Epidemiol.*, 1-4

Ono M., Omori T., Nitta H. (2006) Is the midnight-to-midnight average concentration of pollutants an appropriate exposure index for a daily mortality study?. *J. Exposure Sci. Environ. Epidemiol.*, 1-4

Sugamata M, Ihara T, Takano H, Oshio S, Takeda K. (2006) Maternal diesel exhaust exposure damages newborn murine brains. *J. Health Sci.*, 52(1), 82-84

Takano H., Yanagisawa R., Inoue K., Ichinose T., Sadakane K., Yoshikawa T. (2006) Di-(2-ethylhexyl) phthalate enhances atopic dermatitis-like skin lesions in mice. *Environ. Health Perspect.*, 114(8), 1266-1269

Yanagisawa R, Takano H, Inoue K, Ichinose T, Sadakane K, Yoshino S, Yamaki K, Yoshikawa T, Hayakawa K. (2006) Components of diesel exhaust particles differentially affect Th1/Th2 response in a murine model of allergic airway inflammation. *Clin. Exp. Allergy*, 36, 386-395

Yoshida S, Ono N, Tsukue N, Oshio S, Umeda T, Takano H, Takeda K. (2006) In utero exposure to diesel exhaust increased accessory reproductive gland weight and serum testosterone concentration in male mice. *Environ. Sci.*, 13(3), 139-147

Yoshimi, T., Nakamura, N., Shimada, S., Iguchi, K., Hashimoto, F., Mochitate, K., Takahashi, Y., and Miura, T. Homeobox B3, FoxA1 and FoxA2 interactions in epithelial lung cell differentiation of the multipotent M3E3/C3 cell line. *Eur. J. Cell Biol.* 84: 555-566, 2005.

(総数 128報)

### 3. 2 誌上発表 (査読なし)

小林弥生 (2009) 電気ので植物の環境浄化能を増加させる. *ファルマシア*, 45 (6), 572-573

新田裕史 (2009) 子供の健康と環境. *生活と環境*, 54 (6), 3

新田裕史 (2009) 疫学研究に求められる課題と展望. *大気環境学会誌*, 44 (6), 384-386

新田裕史 (2009) 大気汚染と小児呼吸器疾患. *小児科*, 50 (3), 347-353

田村憲治, 松本幸雄, 佐々木寛介, 椿貴博 (2009) 地球温暖化と大気汚染: 光化学オキシダント濃度への影響と超過死亡リスク. *地球環境*, 14 (2), 271-277

柳澤利枝, 小池英子, 井上健一郎, 高野裕久 (2009) フタル酸ジエチルヘキシルのアトピー性皮膚炎増悪影響. *臨床免疫・アレルギー科*, 52(4), 438-443

細川剛・永野麗子・持立克身. 再構成基底膜構造体 sBM 基質—精緻な人工組織を可能にする培養基質—遺伝子医学 MOOK 別冊 “進みつづける細胞移植治療の実際” (上巻) 211-217, 2008.

井上健一郎, 高野裕久, 吉川敏一 (2008) 酸化ストレスと肺胞傷害. 侵襲と免疫, 17 (2), 13-18

永野麗子・細川剛・古山昭子・持立克身. 基底膜構造体を培養基質に用いた人工組織の構築. 移植 43:10-16, 2008.

高野裕久, 井上健一郎, 柳澤利枝 (2008) プロテアーゼと肺傷害(ALI/ARDS) —ノックアウトマウスを用いた実験的検討を中心に—. 侵襲と免疫, 17 (2), 7-12

高野裕久, 井上健一郎, 柳澤利枝 (2008) プロテアーゼと肺傷害. 侵襲と免疫, 17, 41-46

田村憲治 (2008) 中国の都市大気汚染と健康影響. 環境資源工学, 55, 207-211

田村憲治 (2008) 中国の大気汚染状況と日本への影響. マテリアルステージ, 8, 5, 84-89

田村憲治 (2008) 気候変動がもたらす健康問題—大気汚染. 月刊保団連, 975, 32-35

柳澤利枝, 小池英子, 井上健一郎, 高野裕久 (2008) 環境汚染物質によるアトピー性皮膚炎の増悪. 資源環境対策, 44(5), 59-62

新田裕史 (2007) 西暦 2025 年の生活と環境. 生活と環境, 53(3), 5

小野雅司 (2007) 地球に降り注ぐ紫外線. 太陽紫外線防御研究委員会学術報告, 17(1), 29-35

Takano H, Yanagisawa R, Inoue KI (2007) Components of diesel exhaust particles diversely enhance a variety of respiratory diseases related to infection or allergy: Extracted organic chemicals and the residual particles after extraction differently affect respiratory diseases. J. Clin. Biochem. Nutr., 40, 101-107

Arimoto T, Inoue K, Yanagisawa R, Mason RP, Takano H. (2006) Diesel exhaust particles synergistically enhance lung injury and oxidative stress induced by bacterial endotoxin. J. Clin. Biochem. Nutr., 38, 133-137

井上健一郎, 高野裕久, 柳澤利枝, 吉川敏一 (2006) ナノ粒子のアレルギー性気道炎症への影響. アレルギーの臨床, 26(10), 78-83

井上健一郎, 高野裕久, 柳澤利枝, 島田章則, 吉川敏一 (2006) 炎症に伴う凝固・線溶異常における IL-6 の保護的役割. 炎症, 26(1), 40-43

持立克身・古山昭子・細川剛基底膜形成テクノロジーを用いた人工組織の構築. 再生医療 5: 365-371, 2006.

新田裕史 (2006) 我が国における花粉症対策の展望. 科学技術動向, (59), 11-18

新田裕史 (2006) 大気中微小粒子の環境基準. 生活と環境, 51(7), 5

新田裕史 (2006) 大気中粒子状物質の動態解明と影響評価に関するプロジェクト研究の概要と成果. かんきょう, 31(8), 26-27

Nitta H. (2006) Prospects for measures against pollinosis in Japan. Sci.Technol.Trends Q.Rev., (20), 48-58

野原恵子 (2006) ダイオキシンによる免疫細胞での転写因子 AhR の活性化と免疫毒性. ファルマシア, 42(7), 700-704

大嶋香織里, 飯村文成, 石井康一郎, 小野雅司 (2006) 東京都内における有害紫外線モニタリング結果について. 東京都環境科学研究所編, 東京都環境科学研究所, 111

高野裕久, 井上健一郎, 柳澤利枝 (2006) UTI による局所および全身性急性期炎症反応制御の試み - ノックアウトマウスを用いた実験的検討 -. 侵襲と免疫, 15, 38-40

### 3. 3 書籍

西川雅高, 高野裕久, 市瀬孝道 (2009) 7.3.4 黄砂変質の影響: 動物実験. 西川雅高 他編, 黄砂, 古今書院, 313-317

### 3. 4 口頭発表

国外: 71 件

国内: 150 件 (内シンポジスト 5 件)

### (招待講演)

野原恵子, 鈴木武博 (2008) ダイオキシン類の免疫毒性. 日本薬学会 第 128 年会, 同要旨集

Nohara K., Fujimaki H. (2007) Dioxin and allergy. 第 57 回日本アレルギー学会秋季学術大会, アレルギー - 56, 973

野原恵子 (2009) ヒ素の毒性のゲノミクス・エピゲノミクス. 第 79 回日本衛生学会学術総会, 日衛誌, 64(2), 205

### 3. 5 特許

桑昭苑・白木伸明・樋口裕一郎・持立克身、他 3 名: 細胞の分化誘導法, 特願 2009-136520 号.

小林直哉・山本秀和・岩室雅也・持立克身: i P S 細胞からの肝細胞の分化誘導方法, 特願 2009-181891 号.

持立克身・他5名：表面弾性波デバイスバイオセンサ，特願 2007-161312 号.

持立克身：基底膜標品を用いた再構築人工組織及びその製造方法，特許第 4023597 号.

持立克身・基底膜標品又は人工組織，特許第 3829193 号.

浅川 雅、持立克身、春山哲也：細胞バイオセンサ，特願 2005-185135 号.

持立克身・基底膜の調製方法，特許第 3785532 号.

Katsumi MOCHTATE : Method of preparing basement membrane, method of constructing basement membrane specimen, reconstituted artificial tissue using the basement membrane specimen and process  
米国特許出願番号 : 11/599, 760.