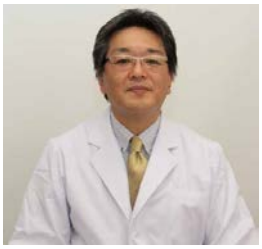
Pediatric Surgery



Principal Investigator Kouji Masumoto
E-mail.address kmasu@md.tsukuba.ac.jp
URL www.md.tsukuba.ac.jp/clinical-med/ped-surg/

Other Faculty Members
Associate Professor Hajime Takayasu: hajimeta@md.tsukuba.ac.jp
Assistant Professor Toko Shinkai: tshinkai@md.tsukuba.ac.jp
Assistant Professor Yasuhisa Urita: y-urita@md.tsukuba.ac.jp
Assistant Professor Takahiro Jimbo: tjimbo-ncd@umin.ac.jp
Assistant Professor Kentaro Ono: ono-tuk@md.tsukuba.ac.jp
Assistant Professor Fumiko Chiba: fumikoc@md.tsukuba.ac.jp
Assistant Professor Takato Sasaki: tasasaki-kyu@umin.ac.jp

Major Scientific Interests of the Group

1. Nutrition Therapy for Children
   - 1.1 Lipid malmetabolism after massive small bowel resection
   - 1.2 Analysis of lipid metabolism change after small bowel resection in mice
   - 1.3 Clinical research of trace elements' deficiency in children
   - 1.4 Study of nutritional management for children with short bowel syndrome
2. Congenital Diaphragmatic Hernia
   - 2.1 Molecular mechanisms of pulmonary hypertension and lung hypoplasia in congenital diaphragmatic hernia
   - 2.2 Analysis of clinical outcome of the patients with congenital diaphragmatic hernia
   - 2.3 Tissue engineering by mesenchymal stem cells for hypoplastic lung in congenital diaphragmatic hernia
3. Pediatric Oncology
   - 3.1 Novel application of cytokines to intractable pediatric solid tumors
4. Pediatric Endoscopic Surgery
   - 4.1 The development of pediatric laparoscopic training simulator with objective evaluation system

Projects for Regular Students in Doctoral or Master's Programs

1) Lipid Metabolism in Short Bowel Syndrome

Selected Publications

1) Masumoto K. Trace elements deficiency in children receiving nutritional management. Nihon Rinsho. 2016;74(7):1214-9.

2) Takayasu H, Masumoto K, Jimbo T, Sakamoto N, Sasaki T, Uesugi T, Gotoh C, Urita Y, Shinkai T. Analysis of risk factors of long-term complications in congenital diaphragmatic hernia: A single institution's experience. Asian J Surg. 2017; 40(1):1-5.

3) Takayasu H, Hagiwara K, Masumoto K. Suppressed erythropoietin expression in a nitrofen-induced congenital diaphragmatic hernia. Pediatr Pulmonol. 2017; 52(5): 606-615.

4) Masumoto K, Esumi G, Teshiba R, Nagata K, Taguchi T. Usefulness of exchanging a tunneled central venous catheter using a subcutaneous fibrous sheath. Nutrition 27(5): 526-529, 2011
5) Masumoto K, Nagata K, Oka Y, Kai H, Yamaguchi S, Wada M, Kusuda T, Hara T, Hirose S, Iwasaki A, Taguchi T. Successful treatment of an infected wound in infants by a combination of negative pressure wound therapy and arginine supplementation. Nutrition 27(11-12): 1141-1145, 2011
6) Jimbo T, Ieiri S, Obata S, Uemura M, Souzaki R, Matsuoka N, Katayama T, Masumoto K, Hashizume M, Taguchi T. Effectiveness of short-term endoscopic surgical skill training for young pediatric surgeons: a validation study using the laparoscopic fundoplication simulator. Ped Surg Int 31(10) 963-969, 2015.
7) Takayasu H, Masumoto K, Goishi K, Hayakawa M, Tazuke Y, Yokoi A, Terui K, Okuyama H, Usui N, Nagata K, Taguchi T; Japanese Congenital Diaphragmatic Hernia Study Group: Musculoskeletal abnormalities in congenital diaphragmatic hernia survivors: Patterns and risk factors: report of a Japanese multicenter follow-up survey. Pediatr Int 58(9):877-80, 2016
8) Jimbo T, Ieiri S, Obata S, Uemura M, Souzaki R, Matsuoka N, Katayama T, Masumoto K, Hashizume M, Taguchi T. A new innovative laparoscopic fundoplication training simulator with a surgical skill validation system. Surg Endosc 31(2): 1688-1696, 2017