

Surgical Oncology

1. Staffs and Students

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	Keiji KATO,	Megumu ENJOJI,
	Shunsuke KATO	
Professor:	Kazuyuki KOJIMA (Minimally invasive surgery center)	
Associate Professor:	Hirotoshi KOBAYASHI	
Associate Professor:	Hiroyuki UETAKE (Translational oncology)	
Assistant Professor:	Toshiaki ISHIKAWA (Translational oncology)	
Associate Junior Professor:	Tetsuro HIGUCHI (Graduate education program for cancer treatment specialists)	
Assistant Professor:	Megumi ISHIGURO (Graduate education program for cancer treatment specialists)	
Graduate Student:	Yoichi TORIYA,	Takashi KUWAYAMA,
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	Haruhiko AOYAGI,	Takatoshi MATSUYAMA,
	Hirohumi SUGITA,	Sayaka SHIMIZU,
	Hiroaki ONO,	Satoshi OKAZAKI,
	Sho OTSUKI,	Yashar MURATE,
	Goshi ODA,	Akifumi KIKUCHI,
	Shunsuke TSUKAMOTO,	Yoshitake FUJIMORI,
	Ahamad KAMAS,	Shinichi YAMAUCHI,
	Kohji MIYAZAKI,	Nobuko TAMURA,
	Hideaki MURASE,	Toshiyuki ISHIBA,
	Sai SUGIMOTO	

2. Purpose of Education

Main objective of surgical oncology in the graduate course is to provide students with opportunity to study oncology in order to become the well-rounded surgeon who has international and scientific feelings.

3. Research Subjects

- 1) Role of Cox-2 and VEGF in growth of solid tumor and angiogenesis
- 2) Identification of predictive factors for chemo-responsiveness and prognosis in cancer by molecular biological technique.

4. Clinical Services

Surgical oncology clinic performs less invasive operation for cancer of stomach, colon and rectum, and breast with new devices including laparoscope, thereby allowing physiological and neurological functions to be preserved. Moreover, treatment with chemotherapeutic agents for cancer is also conducted.

5. Publications

Original Articles

1. Yamada H, Kojima K, Inokuchi M, Kawano T, Sugihara K, Laparoscopy-assisted gastrectomy in patients older than 80. *J Surg Res.* 164: e229-233, 2010
2. Kobayashi H, Mochizuki H, Kato T, Mori T, Kameoka S, Shirouzu K, Saito Y, Watanabe M, Morita T, Hida J, Ueno M, Ono M, Yasuno M, Sugihara K, Is total mesorectal excision always necessary for T1-T2 low rectal cancer? *Ann Surg Oncol.* 17 (4): 973-980, 2010
3. Tadano K, Kawashima K, Kojima K, Tanaka N, Development of a pneumatic surgical manipulator IBIS IV. *Journal of Robotics and Mechatronics* 22(2): 179-188, 2010
4. Kinugasa Y, Sugihara K, Topology of the fascial structures in rectal surgery: complete cancer resection and the

- importance of avoiding autonomic nerve injury. *Seminors in Colon and Rectal Surgery*.21(2): 95-101,2010
5. Yoshida T, Kobayashi T, Itoda M, Muto T, Miyaguchi K, Mogushi K, Shoji S, Shimokawa K, Iida S, Uetake H, Ishikawa T, Sugihara K, Mizushima H, Tanaka H, Clinical omics analysis of colorectal cancer incorporating copy number aberrations and gene expression data. *Cancer Inform*. 29 (9): 147-161, 2010
 6. Motoyama K, Inoue H, Mimori K, Tanaka F, Kojima K, Uetake H, Sugihara K, Mori M. Clinicopathological and prognostic significance of PDCD4 and microRNA-21 in human gastric cancer. *Int J Oncol*. 36 (5): 1089-1095, 2010
 7. Akbari H, Kosugi Y, Kojima K, Tanaka N, Detection and analysis of the intestinal ischemia using visible and invisible hyperspectral imaging. *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*. 57(8): 2011-2017, 2010
 8. Hashimoto H, Shiokawa H, Funahashi K, Saito N, Sawada T, Shirouzu K, Yamada K, Sugihara K, Watanabe T, Sugita A, Tsunoda A, Yamaguchi S, Teramoto T, Development and validation of a modified fecal incontinence quality of life scale for Japanese patients after intersphincteric resection for very low rectal cancer. *J Gastroenterol*.45 (9): 928-935,2010
 9. Muro K, Boku N, Shimada Y, Tsuji A, Sameshima S, Baba H, Satoh T, Denda T, Ina D, Nishida T, Yamaguchi K, Takiuchi H, Esaki T, Tokunaga S, Kuwano H, Komatsu Y, Watanabe M, Hyodo I, Morita S, Sugihara K, Irinotecan plus S-1 (IRIS) versus fluorouracil and folic acid plus randomized phase 2/3 non-inferiority study (FIRIS study) irrinotecan (FOLFIRI) as second-line chemotherapy for metastatic colorectal cancer: *Lancet Oncol*.11 (9): 853-860, 2010
 10. Nagahara M, Mimori K, Kataoka A, Ishii H, Tanaka F, Nakagawa T, Sato T, Ono S, Sugihara K, Mori M, Corelated expression of CD47 and SIRPA in bone marrow and in peripheral blood predicts recurrence in breast cancer patients. *Clin Cancer Res*. 16(18):4625-4635,2010
 11. Oka S, Tanaka S, Kanao H, Ishikawa H, Watanabe T, Igarashi M, Saito Y, Ikematsu H, Kobayashi K, Inoue Y, Yahagi N, Tsuda S, Simizu S, Iishi H, Yamano H, Kudo S, Tsunoda O, Tamura S, Saito Y, Cho E, Fujii T, Sano Y, Nakamura H, Sugihara K, Muto T, Current status in the occurrence of postoperative bleeding, perforation and residual/local recurrence during colonoscopic treatment in Japan. *Dig Endosc*. 22 (4): 376-380, 2010
 12. Shimizu S, Iida S, Ishiguro M, Uetake H, Ishikawa T, Takagi Y, Kobayashi H, Higuchi T, Enomoto M, Mogushi K, Mizushima H, Tanaka H, Sugihara K, Methylated BNIP3 gene in colorectal cancer prognosis. *Oncology Letters* 1 (5): 865-872, 2010
 13. Ito N, Ishiguro M, Tanaka M, Tokunaga K, Sugihara K, Kazuma K, Response shift in quality-of-life assessment in patients undergoing curative surgery with permanent colostomy. *Gastroenterol Nurs*. 33 (6): 408-412,2010
 14. Katai H, Sasako M, Fukuda H, Nakamura K, Hiki N, Saka M, Yamaue H, Yoshikawa T, Kojima K, JCOG Gastric Cancer Surgical Group, Safety and feasibility of laparoscopy-assisted distal gastrectomy with suprapancreatic nodal dissection for clinical stage I gastric cancer: a multicenter phase II trial (JCOG 0703). *Gastric Cancer* 13 (4): 238-244, 2010
 15. Kobayashi H, Enomoto M, Higuchi T, Uetake H, Iida S, Ishikawa T, Ishiguro M, Sugihara K, Validation and clinical use of the Japanese classification of colorectal carcinomatosis: benefit of surgical cytoreduction even without hyperthermic intraperitoneal chemotherapy. *Dig Surg*. 27 (6): 473-480,2010
 16. Matsuyama T, Ishikawa T, Mogushi K, Yoshida T, Iida S, Uetake H, Mizushima H, Tanaka H, Sugihara K, MUC12 mRNA expression is an independent marker of prognosis in stage II and stage III colorectal cancer. *Int J Cancer* 127 (10): 2292-2299, 2010
 17. Enjoji M, Yamada H, Kojima K, Inokuchi M, Kato K, Kawano T, Sugihara K, Scoreing system for evaluating functional disorders following laparoscopy-assisted distal gastrectomy. *J Surg Res*.164:e229-e233,2010
 18. Oshima R, Takayama T, Omata T, Kojima K, Takase K, Tanaka N, Assemblable three-fingered nine-degrees-of-freedom hand for laparoscopic surgery. *IEEE/ASME TRANSACTIONS ON MECHATRONICS* 15 (6): 862-870, 2010

Review Articles

1. Kinugasa Y, Sugihara K. Topology of the fascial structures in rectal surgery: complete cancer resection and the importance for avoiding autonomic nerve injury. *Semin Colon Rectal Surg* 21: 95-101, 2010

Books

1. Makoto Nagahara and Dave S.B. Hoon. Chapter 3. Sex Hormone Receptors and Epigenetics in Breast Cancer. *Female Sex Hormones and Cancers* (Nova Science Publishers);2010. p63-78