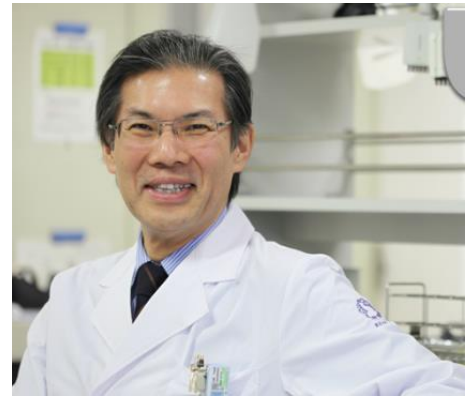


**Chikashi Ishioka** is one of the first JSMO board certified-medical oncologists in Japan and has been the Professor of the Medical Oncology at the Tohoku University Hospital since 2003.



He has been also the Director of the Cancer Center (since 2012), the Director of the Personalized Medicine Center (since 2017) and the Vice President (since 2015) of the Tohoku University Hospital, and contributed for promotion of cancer research and personalized medicine, development of the local cancer medical care as Representative Director of the Tohoku Clinical Oncology Research and Education Society (T-CORE, sine 2004) and the Administration Committee of the Tohoku Cancer Network (since 2008). Also, he has contributed to the training of the cancer medical care specialists such as medical oncologist through the activities as the Coordinator of the Tohoku Cancer Professional Training Promotion Plan (supportive by the MEXT Japan, since 2007).

He obtained MD degree from the Tohoku University School of Medicine in 1984 and PhD (Doctor of Medical Science) degree from the Tohoku University Post-graduate School of Medicine in 1988. After the clinical training on both gastrointestinal oncology and haematological oncology in the Tohoku University and the associated hospitals, he studied cancer molecular genetics, TP53 function and hereditary cancer as a Research Associate in Dr Stephen Friend's lab at the Cancer Center of the Massachusetts General Hospital (MGH) and Harvard Medical School from 1992 to 1994.

He established a lot of functional assays of the cancer-related genes including *TP53*, *PTEN*, *MLH1* and *BRCA1* genes and evaluated the pathogenic significance of the missense mutations by using yeast and mammalian cells (Ishioka C et al. *Nat Genet* 1993, Han SY et al. *Cancer Res* 2000, Ishioka C et al. *PNAS* 1997, Krainer M et al. *NEJM* 1997, Shimodaira H et al. *Nat Genet* 1998, Osada M et al. *Nat Med* 1998, Nichols KE et al. *JCO* 1999, Kato S et al. *PNAS* 2003 etc.). The achievements were adopted for the international database such as the UMD TP53 database (Hamroun D et al. *Hum Mut* 2006) and the IARC TP53 mutation database (Petitjean A et al. *Hum Mut* 2007) and utilized for large international collaborative clinical studies (Iacopetta B at al. *Ann Oncol* 2006, Olivier M et al. *Clin Cancer Res* 2006). He organized a lot of international collaborative studies with Dr Richard D Kolodnar (UC San Diego), Dr Daniel A Haber (MGH) and other scientists.

He has played important roles in the major academic societies of oncology in Japan. From 2019, he has been the President of the Japanese Society of Medical Oncology (JSMO). He was also the Director of the Japanese Society of Clinical Oncology (JSCO) from 2010 to 2013 and the Director of the Japanese Cancer Association (JCA) from 2015 to 2017. He has served on the editorial board of the *Cancer Science* and the *International Journal of Clinical Oncology* for a long period.

His main research interests include chemotherapy of gastrointestinal cancer and other cancers, and translational research such as the development of biomarker for colorectal cancer and breast cancer (the TP53 signature) through multi-omics analysis of cancer tissues. Recently, his research group has identified the genome-wide DNA methylation status is the predictive marker of anti-EGFR treatment in metastatic colorectal cancer (Ouchi K et al. *Cancer Science* 2015). His research group has also identified the novel synthesized depsipeptides as HDAC/PI3K dual inhibitors (Saijo K et al. *Cancer Science* 2012) and has worked on the development of one of the newly synthesized inhibitors as a novel molecular target drug supported by the AMED Japan (Saijo K et al. *Cancer Science* 2015).

# Curriculum Vitae



## PERSONAL INFORMATION

Name (Last name, First name)	<b>ISHIOKA, CHIKASHI</b>
Address (office)	<b>4-1 SEIRYO-MACHI, AOBA-KU, SENDAI 980-8575, JAPAN</b>
Telephone (office)	<b>+81-22-717-8543</b>
Fax (office)	<b>+81-22-717-8548</b>
E-mail (office)	<b>chikashi@tohoku.ac.jp</b>
Nationality	Japanese
Date of birth	17.07.1958
Language	MOTHER TONGUE: JAPANESE, OTHER LANGUAGE: ENGLISH

## WORK EXPERIENCE

- Dates (from – to) 2017-to date
- Name and address of employer Tohoku University Hospital, Sendai, Japan
  - Type of business or sector Personalized Medicine Center
  - Occupation or position held Director
- Dates (from – to) 2016-to date
- Name and address of employer Tohoku University Hospital, Sendai, Japan
  - Type of business or sector Clinical Trial Inspection Center
  - Occupation or position held Director
- Dates (from – to) 2015-to date
- Name and address of employer Tohoku University Hospital, Sendai, Japan
  - Occupation or position held Vice President
- Dates (from – to) 2014-to date
- Name and address of employer Tohoku University School of Medicine Sendai, Japan
  - Type of business or sector Local Cancer Medical Care Promotion Center
  - Occupation or position held Director
- Dates (from – to) 2012-to date
- Name and address of employer Tohoku University Hospital, Sendai, Japan

- Type of business or sector Cancer Center
  - Occupation or position held Director
- Dates (from – to) 2011-to date
  - Name and address of employer Tohoku University Graduate-School of Medicine Sendai, Japan
    - Type of business or sector Tohoku Cancer Professional Training Promotion Plan (MEXT Japan-supported program)
    - Occupation or position held General Coordinator
- Dates (from – to) 2007-2011
  - Name and address of employer Tohoku University Graduate-School of Medicine Sendai, Japan
    - Type of business or sector Tohoku Cancer Professional Training Promotion Plan (MEXT Japan-supported program)
    - Occupation or position held Coordinator
- Dates (from – to) 2006-2012
  - Name and address of employer Tohoku University Hospital, Sendai, Japan
    - Type of business or sector Cancer Center
    - Occupation or position held Vice Director
- Dates (from – to) 2004-to date
  - Name and address of employer Tohoku University Hospital, Sendai, Japan
    - Type of business or sector Chemotherapy Center
    - Occupation or position held Director
- Dates (from – to) 2003-to date
  - Name and address of employer Tohoku University Hospital, Sendai, Japan
    - Type of business or sector Division of Medical Oncology
    - Occupation or position held Professor
- Dates (from – to) 2003-to date
  - Name and address of employer Institute of Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan
    - Type of business or sector Department of Clinical Oncology
    - Occupation or position held Professor
- Dates (from – to) 1997-2003
  - Name and address of employer Tohoku University Hospital, Sendai, Japan
    - Type of business or sector Division of Medical Oncology
    - Occupation or position held Associate Professor
- Dates (from – to) 1997-2003
  - Name and address of employer Institute of Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan
    - Type of business or sector Department of Clinical Oncology
    - Occupation or position held Associate Professor
- Dates (from – to) 1995-1997
  - Name and address of employer Institute of Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan
    - Type of business or sector Department of Clinical Oncology
    - Occupation or position held Senior Assistant Professor
- Dates (from – to) 1994-1995
  - Name and address of employer Institute of Development, Aging and Cancer (IDAC), Tohoku University, Sendai, Japan
    - Type of business or sector Department of Clinical Oncology
    - Occupation or position held Assistant Professor
- Dates (from – to) 1992-1994

- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held
- Dates (from – to)
- Name and address of employer
  - Type of business or sector
  - Occupation or position held

Harvard Medical School and Massachusetts General Hospital (MGH), Boston, USA  
 Division of Molecular Genetics, Cancer Center (Dr. Stephen H Friend's lab)  
 Research Associate

1991-1992

Research Institute for Tuberculosis and Cancer, Tohoku University, Sendai, Japan  
 Department of Cancer Chemotherapy  
 Assistant Professor

1988-1991

Research Institute for Tuberculosis and Cancer Affiliated Hospital, Tohoku University, Sendai, Japan  
 Division of Chemotherapy  
 Research Associate

1984-1988

Sendai Kosei Hospital Sendai, Japan  
 Division of Gastroenterology  
 Resident Physician

## EDUCATION AND TRAINING

- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded
- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded
- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded
- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded
- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded
- Dates (from – to)
- Name and type of organization providing education and training
- Principal subjects/occupational skills covered
- Title of qualification awarded

2006-to date

Japanese Society of Medical Oncology (JSMO)

Medical Oncologist

Board Certified Medical Oncologist (*one of the first board certified medical oncologists in Japan*)

1992-to date

Japanese Society of Internal Medicine

Internal Medicine

Board Certified Membership of Japanese Society of Internal Medicine (#4059)

1990-to date

Japan Gastroenterological Endoscopy Society (JGES)

Gastroenterological Endoscopy

Board Certified Gastroenterological Endoscopy Specialist

1994-1988

Tohoku University Post-graduate School of Medicine

Internal Medicine

PhD (Dr. of Medical Science)

1978-1984

Tohoku University School of Medicine

Medicine

- skills covered
- Title of qualification awarded MD
  - Level in national classification National License No. 279738  
(if appropriate)

**ACTIVITIES IN  
ACADEMIC SOCIETIES**  
(*representative activities only*)

- Dates (from – to) 2019-to date
  - Association Japanese Society of Medical Oncology (JSMO)
- Occupation or position held President
- Dates (from – to) 2005-to-date
  - Association Japanese Society of Medical Oncology (JSMO)
- Occupation or position held Director
- Dates (from – to) 2017-2019
  - Association Japanese Society of Medical Oncology (JSMO)
- Occupation or position held Chairperson, International Affairs Committee
- Dates (from – to) 2012-2016
  - Association Japanese Society of Medical Oncology (JSMO)
- Occupation or position held Chairperson, Education Committee
- Dates (from – to) 2009- 2012
  - Association Japanese Society of Medical Oncology (JSMO)
- Occupation or position held Chairperson, Scientific Program Committee
- Dates (from – to) 2013
  - Association Japanese Society of Medical Oncology (JSMO)
- Occupation or position held Congress President, 13<sup>th</sup> Annual Meeting of JSMO, Sendai, Japan
- Dates (from – to) 2019-to date
  - Association Japanese Cancer Association (JCA)
- Occupation or position held Chairperson, Ethical Committee
- Dates (from – to) 2015-2017
  - Association Japanese Cancer Association (JCA)
- Occupation or position held Director
- Dates (from – to) 2012-2013
  - Association Japanese Society of Clinical Oncology (JSCO)
- Occupation or position held Chairperson, Supervisory Committee of Cancer Clinical Practice Guidelines
- Dates (from – to) 2010-2013
  - Association Japanese Society of Clinical Oncology (JSCO)
- Occupation or position held Chairperson, Education Committee
- Dates (from – to) 2010-2013
  - Association Japanese Society of Clinical Oncology (JSCO)
- Occupation or position held Director
- Dates (from – to) 2005-2010
  - Association Japanese Society of Clinical Oncology (JSCO)

- Occupation or position held Chairperson, Revision Working Group of Clinical Trial Enforcement Guideline
  - Dates (from – to) 2014-to date, 2008-2013
    - Association Japanese Association of Molecular Target Therapy of Cancer (JAMTTC)
- Occupation or position held Director
- Dates (from – to) 2014
  - Association Japanese Association of Molecular Target Therapy of Cancer (JAMTTC)
- Occupation or position held Congress President, 18<sup>th</sup> Annual Meeting of JAMTTC, Sendai, Japan
- Dates (from – to) 2005
  - Association Japanese Society of Familial Tumors (JSFT)
- Occupation or position held Congress President, 11<sup>th</sup> Annual Meeting of JSFT, Fukushima, Japan

**MEMBERSHIP IN  
OVERSEAS ACADEMIC SOCIETIES**

AMERICAN SOCIETY OF CLINICAL ONCOLOGY (ASCO)-ACTIVE MEMBER  
 ASCO-INTERNATIONAL AFFAIRS COMMITTEE (IAC)-MEMBER  
 AMERICAN ASSOCIATION FOR CANCER RESEARCH (AACR) -ACTIVE MEMBER  
 EUROPEAN SOCIETY OF MEDICAL ONCOLOGY (ESMO) -ACTIVE MEMBER  
 ESMO-NATIONAL SOCIETIES COMMITTEE-MEMBER

**ACTIVITIES IN  
OTHER NON-PROFIT OR  
PUBLIC SOCIETIES**

*(current representative activities  
only)*

- Dates (from – to) 2019-to date
  - Association the Cancer Genomic Medicine Promotion Consortium, Ministry of Health, Labour and Welfare, Japan,
- Occupation or position held Member
- Dates (from – to) 2014-to date
  - Association National Meeting for Promotion Plan for the Platform of Human Resource Development for Cancer
- Occupation or position held Vice President
- Dates (from – to) 2012-to date
  - Association Miyagi Prefecture Core Cancer Treatment Hospital Meeting
- Occupation or position held Vice President (2014-todate), President (2012-2014)
- Dates (from – to) 2011-2013
  - Association New Energy Development Organization (NEDO), Japan
- Occupation or position held Technical committee
- Dates (from – to) 2010-2013
  - Association Japan Science and Technology Agency (JST)
- Occupation or position held Overlook Committee, Center for Research and Development Strategy (CRDS)
- Dates (from – to) 2009-to date
  - Association Medical Oncologist Society (Japan)
- Occupation or position held Administration committee (2009-2012 President)

- Dates (from – to) 2009-to date
  - Association Japan Society for the Promotion of Science (JSPS)
- Occupation or position held Expert committee, Grants-in-Aid for Scientific Research
  
- Dates (from – to) 2009-to date
  - Association Miyagi Prefecture Cancer Control Promotion Council
- Occupation or position held Administration committee
  
- Dates (from – to) 2008-to date
  - Association Tohoku Cancer Network
- Occupation or position held Chairperson, Chemotherapy Committee; Administration committee
  
- Dates (from – to) 2007-to date
  - Association Miyagi Prefecture Cancer Registry Committee
- Occupation or position held Administration committee
  
- Dates (from – to) 2006-to date
  - Association Pharmaceuticals and Medical Devices Agency (PMDA)
- Occupation or position held External Expert, External Discussion
  
- Dates (from – to) 2004-to date
  - Association NPO, Tohoku Clinical Oncology Research and Education Society (T-CORE)
- Occupation or position held Director representative

## HONORS

2013 KAHOKU CULTURE PRIZE- AS A MEMBER OF MIYAGI PREFECTURE CANCER REGISTRY COMMITTEE  
 2013 JAPAN SOCIETY OF MEDICAL ONCOLOGY PRIZE FOR SERVICE  
 2003 SAGAWA CANCER RESEARCH FUND GRANT IN AID  
 1997 SAPPORO BIOSCIENCE FOUNDATION GRANT IN AID  
 1996 TOKYO BIOCHEMICAL RESEARCH FOUNDATION RESEARCH FELLOWSHIP  
 1996 OSAKA CANCER MEETING CANCER RESEARCH FUND GRANT IN AID  
 1992-1994 AACR-JFCR FELLOWSHIP  
 1991 TOSHIO KUROKAWA CANCER RESEARCH FUND GRANT IN AID

## EDITORIAL ACTIVITIES

*(current representative editorial activities only)*

CANCER SCIENCE (ASSOCIATE EDITOR)  
 INTERNATIONAL CASE CONFERENCE JOURNAL (EDITOR)  
 ANNALS OF ONCOLOGY (EDITORIAL BOARD)

## PUBLICATIONS

*(English publication only)*

Recent and main publication list: refer to attached separate pages

Full English publication list: visit to the following URL:

[http://www.ncbi.nlm.nih.gov/pubmed?cmd=PureSearch&term=\(\(\(ishioka+c%5Bau%5D+NOT+Ut+yama%5Bau%5D\)+NOT+Nakata+s%5Bau%5D\)+NOT+Fujiwaki%5Bau%5D\)+NOT+Kimata%5Bau%5D+NOT+Asai%5Bau%5D](http://www.ncbi.nlm.nih.gov/pubmed?cmd=PureSearch&term=(((ishioka+c%5Bau%5D+NOT+Ut+yama%5Bau%5D)+NOT+Nakata+s%5Bau%5D)+NOT+Fujiwaki%5Bau%5D)+NOT+Kimata%5Bau%5D+NOT+Asai%5Bau%5D)

**GRANTS**  
*(recent major grants only)*

Development of the method to predict a prognosis and effect of treatment of breast cancer by Gene expression profile of the TP53 status (TP53 signature)  
Supported by Japan Agency for Medical Research and Development (AMED)

Development of depsipeptide analogs as novel HDAC/PI3K dual inhibitors  
Supported by Japan Agency for Medical Research and Development (AMED)

Development of new biomarker, DNA methylation state diagnostic kit predicting an effect of the anti-EGFR antibody on colorectal cancer  
Supported by Japan Agency for Medical Research and Development (AMED)

Study on anti-EGFR antibody-resistant overcome of high DNA methylation type colorectal cancer  
Supported by Grants-in-Aid for Scientific Research, MEXT Japan

**PATENTS** PATENT: 14 APPLICATIONS, 8 ACQUISITIONS

**ADDITIONAL INFORMATION** COI DISCLOSURE (ADOPTED RULE: JAPANESE SOCIETY OF MEDICAL ONCOLOGY JSMO)  
RESEARCH FUND FROM: CHUGAI PHARMACEUTICAL CO. LTD., TAIHO PHARMA, NOVARTIS, YAKURT, ONO PHARMACEUTICAL CO. LTD., TAKEDA PHARMACEUTICAL COMPANY LIMITED, MERCK-SERONO

**SIGNATURE** CHIKASHI ISHIOKA



**DATE OF SIGNATURE** 21/01/2020



## Recent publications (2014-2016)

- Imai, H., Shiota, H., Okita, A., Komine, K., Saijo, K., Takahashi, M., Takahashi, S., Takahashi, M., Shimodaira, H., [Ishioka, C.](#) Efficacy and Safety of Carboplatin and Etoposide Combination Chemotherapy for Extrapulmonary Neuroendocrine Carcinoma: A Retrospective Case Series. *Chemotherapy* 61: 111-6 (2016)
- Tanakaya, K., Yamaguchi, T., Ishikawa, H., Hinoi, T., Furukawa, Y., Hirata, K., Saida, Y., Shimokawa, M., Arai, M., Matsubara, N., Tomita, N., Tamura, K., Sugano, K., [Ishioka, C.](#), Yoshida, T., Ishida, H., Watanabe, T., Sugihara, K. Causes of Cancer Death Among First-Degree Relatives in Japanese Families with Lynch Syndrome. *Anticancer Res* 36: 1985-9 (2016)
- Takahashi, M., Chiba, N., Shimodaira, H., Yoshino, Y., Mori, T., Sumii, M., Nomizu, T., [Ishioka, C.](#) OLA1 gene sequencing in patients with BRCA1/2 mutation-negative suspected hereditary breast and ovarian cancer. *Breast Cancer* (2016)
- Sugiyama, S., Yoshino, Y., Kuriyama, S., Inoue, M., Komine, K., Otsuka, K., Kohyama, A., Yamakoshi, H., [Ishioka, C.](#), Tanaka, M., Iwabuchi, Y., Shibata, H. A Curcumin Analog, GO-Y078, Effectively Inhibits Angiogenesis through Actin Disorganization. *Anticancer Agents Med Chem* 16: 633-47 (2016)
- Kobayashi, A., Takahashi, M., Imai, H., Akiyama, S., Sugiyama, S., Komine, K., Saijo, K., Takahashi, M., Takahashi, S., Shiota, H., Sato, N., Fujishima, F., Shuin, T., Shimodaira, H., [Ishioka, C.](#) Attainment of a Long-term Favorable Outcome by Sunitinib Treatment for Pancreatic Neuroendocrine Tumor and Renal Cell Carcinoma Associated with von Hippel-Lindau Disease. *Intern Med* 55: 629-34 (2016)
- Imai, H., Komine, K., Takahashi, S., Saijo, K., Okada, Y., Kobayashi, A., Okita, A., Chikamatsu, S., Kasahara, Y., Takahashi, M., Oishi, T., Shiota, H., Takahashi, M., Shimodaira, H., [Ishioka, C.](#) Efficacy and Safety Assessment of Paclitaxel in Patients with Docetaxel-Resistant Esophageal Squamous Cell Carcinoma. *Chemotherapy* 61: 262-8 (2016)
- Sugiyama, S., Ishizuka, M., Takahashi, M., Komine, K., Imai, H., Saijo, K., Takahashi, M., Shiota, H., Takahashi, S., Shimodaira, H., [Ishioka, C.](#) Successful sequential treatment of a patient with advanced gastrointestinal stromal tumor using four different molecularly targeted drugs. *Int Canc Conf J* (2016)
- Tanakaya, K., Furukawa, Y., Nakamura, Y., Hirata, K., Tomita, N., Tamura, K., Sugano, K., [Ishioka, C.](#), Yoshida, T., Ishida, H., Watanabe, T., Sugihara, K. Relationship between smoking and multiple colorectal cancers in patients with Japanese Lynch syndrome: a cross-sectional study conducted by the Japanese Society for Cancer of the Colon and Rectum. *Jpn J Clin Oncol* 45: 307-310 (2015)
- Saijo, K., Imamura, J., Narita, K., Oda, A., Shimodaira, H., Katoh, T., [Ishioka, C.](#) Biochemical, biological and structural properties of romidepsin (FK228) and its analogs as novel HDAC/PI3K dual inhibitors. *Cancer Sci* 106: 208-215 (2015)
- Yamaguchi, T., Furukawa, Y., Nakamura, Y., Matsubara, N., Ishikawa, H., Arai, M., Tomita, N., Tamura, K., Sugano, K., [Ishioka, C.](#), Yoshida, T., Moriya, Y., Ishida, H., Watanabe, T., Sugihara, K. Comparison of clinical features between suspected familial colorectal cancer type X and Lynch syndrome in Japanese patients with colorectal cancer: a cross-sectional study conducted by the Japanese Society for Cancer of the Colon and Rectum. *Jpn J Clin Oncol* 45: 153-9 (2015)
- Komine, K., Shimodaira, H., Takao, M., Soeda, H., Zhang, X., Takahashi, M., [Ishioka, C.](#) Functional Complementation Assay for 47 MUTYH Variants in a MutY-Disrupted Escherichia coli strain. *Hum Mutat* 36: 704-711 (2015)
- Watanabe, G., Ishida, T., Furuta, A., Takahashi, S., Watanabe, M., Nakata, H., Kato, S., [Ishioka, C.](#), Ohuchi, N. Combined Immunohistochemistry of PLK1, p21, and p53 for Predicting TP53 Status: An Independent Prognostic Factor of Breast Cancer. *Am J Surg Pathol* 39: 1026-34 (2015)
- Yoshino, Y., [Ishioka, C.](#) Inhibition of glycogen synthase kinase-3 beta induces apoptosis and mitotic catastrophe by disrupting centrosome regulation in cancer cells. *Scientific Reports* 5: 13249 (2015)
- Komatsu, Y., [Ishioka, C.](#), Shimada, K., Yamada, Y., Gamoh, M., Sato, A., Yamaguchi, T., Yuki, S., Morita, S., Takahashi, S., Goto, R., Kurihara, M. Study protocol of the TRICOLORE trial: a randomized phase III study of oxaliplatin-based chemotherapy versus combination chemotherapy with S-1, irinotecan, and bevacizumab as first-line therapy for metastatic colorectal cancer. *BMC Cancer* 15: 626 (2015)

- Mori, T., Sumii, M., Fujishima, F., Ueno, K., Emi, M., Nagasaki, M., Ishioka, C., Chiba, N. Somatic alteration and depleted nuclear expression of BAP1 in human esophageal squamous cell carcinoma. *Cancer Sci* 106: 1118-1129 (2015)
- Inoue, M., Takahashi, S., Soeda, H., Shimodaira, H., Watanabe, M., Miura, K., Sasaki, I., Kato, S., Ishioka, C. Gene-expression profiles correlate with the efficacy of anti-EGFR therapy and chemotherapy for colorectal cancer. *Int J Clin Oncol* 20: 1147-1155 (2015)
- Ouchi, K., Takahashi, S., Yamada, Y., Tsuji, S., Tatsuno, K., Takahashi, H., Takahashi, N., Takahashi, M., Shimodaira, H., Aburatani, H., Ishioka, C. DNA methylation status as a biomarker of anti-EGFR treatment for metastatic colorectal cancer. *Cancer Sci* 106: 1722-1729 (2015)
- Matsuzawa, A., Kanno, S., Nakayama, M., Mochiduki, H., Wei, L., Shimaoka, T., Furukawa, Y., Kato, K., Shibata, S., Yasui, A., Ishioka, C., Chiba, N. The BRCA1/BARD1-interacting protein OLA1 functions in centrosome regulation. *Mol Cell* 53: 101-114 (2014)
- Yoshino, Y., Suzuki, M., Takahashi, H., Ishioka, C. Inhibition of invasion by glycogen synthase kinase-3 beta inhibitors through dysregulation of actin re-organisation via down-regulation of WAVE2. *Biochem Biophys Res Commun* 464: 275-80 (2015)
- Soeda, H., Shimodaira, H., Watanabe, M., Suzuki, T., Gamo, M., Takahashi, M., Komine, K., Kato, S., Ishioka, C. KRAS mutation in patients with metastatic colorectal cancer does not preclude benefit from oxaliplatin-or irinotecan-based treatment. *Mol Clin Oncol* 2: 356-362 (2014)
- Soeda, H., Shimodaira, H., Gamoh, M., Ando, H., Isobe, H., Suto, T., Takahashi, S., Kakudo, Y., Amagai, K., Mori, T., Watanabe, M., Yamaguchi, T., Kato, S., Ishioka, C. Phase II Trial of Cetuximab plus Irinotecan for Oxaliplatin- and Irinotecan-Based Chemotherapy-Refractory Patients with Advanced and/or Metastatic Colorectal Cancer: Evaluation of Efficacy and Safety Based on KRAS Mutation Status (T-CORE0801). *Oncology* 87: 7-20 (2014)
- Shiono, M., Takahashi, S., Kakudo, Y., Takahashi, M., Shimodaira, H., Kato, S., Ishioka, C. Upper arm central venous port implantation: a 6-year single institutional retrospective analysis and pictorial essay of procedures for insertion. *PLoS One* 9: e91335 (2014)
- Imai, H., Kato, S., Sakamoto, Y., Kakudo, Y., Shimodaira, H., Ishioka, C. High throughput RNAi screening identifies ID1 as a synthetic sick/lethal gene interacting with the common TP53 mutation R175H. *Oncol Rep* 31: 1043-50 (2014)
- Shiono, M., Kobayashi, T., Takahashi, R., Ueda, M., Ishioka, C., Hino, O. Transgenic expression of the N525S-tuberin variant in Tsc2 mutant (Eker) rats causes dominant embryonic lethality. *Sci Rep* 4: 5927 (2014)
- Oda, A., Saijo, K., Ishioka, C., Narita, K., Katoh, T., Watanabe, Y., Fukuyoshi, S., Takahashi, O. Predicting the structures of complexes between phosphoinositide 3-kinase (PI3K) and romidepsin-related compounds for the drug design of PI3K/histone deacetylase dual inhibitors using computational docking and the ligand-based drug design approach. *J Mol Graph Model* 54: 46-53 (2014)

### Past major publications (1988-2013)

- Towler, W. I., Zhang, J., Ransburgh, D. J., Toland, A. E., Ishioka, C., Chiba, N., Parvin, J. D. Analysis of BRCA1 variants in double-strand break repair by homologous recombination and single-strand annealing. *Hum Mutat* 34: 439-45 (2013)
- Kais, Z., Chiba, N., Ishioka, C., Parvin, J. D. Functional differences among BRCA1 missense mutations in the control of centrosome duplication. *Oncogene* 31: 799-804 (2012)
- Saijo, K., Katoh, T., Shimodaira, H., Oda, A., Takahashi, O., Ishioka, C. Romidepsin (FK228) and its analogs directly inhibit phosphatidylinositol 3-kinase activity and potently induce apoptosis as histone deacetylase/phosphatidylinositol 3-kinase dual inhibitors. *Cancer Sci* 103: 1994-2001 (2012)
- Kais, Z., Chiba, N., Ishioka, C., Parvin, J. Functional differences among BRCA1 missense mutations in the control of centrosome duplication. *Oncogene* (2011)

- Ransburgh, D. J., Chiba, N., Ishioka, C., Toland, A. E., Parvin, J. D. Identification of breast tumor mutations in BRCA1 that abolish its function in homologous DNA recombination. *Cancer Res* 70: 988-95 (2010)
- Wei, L., Lan, L., Hong, Z., Yasui, A., Ishioka, C., Chiba, N. Rapid Recruitment of BRCA1 to DNA Double-Strand Breaks Is Dependent on Its Association with Ku80. *Mol Cell Biol* 28: 7380-93 (2008)
- Takahashi, S., Moriya, T., Ishida, T., Shibata, H., Sasano, H., Ohuchi, N., Ishioka, C. Prediction of breast cancer prognosis by gene expression profile of TP53 status. *Cancer Sci* 99: 324-32 (2008)
- Takahashi, M., Shimodaira, H., Andreutti-Zaugg, C., Iggo, R., Kolodner, R.D., Ishioka, C. Functional analysis of human MLH1 variants using yeast and in vitro mismatch repair assays. *Cancer Res* 67: 4595-4604 (2007)
- Shibata, H., Takano, H., Ito, M., Shioya, H., Hirota, M., Matsumoto, H., Kakudo, Y., Ishioka, C., Akiyama, T., Kanegae, Y., Saito, I., Noda, T. Alpha-catenin is essential in intestinal adenoma formation. *Proc Natl Acad Sci U S A* 104: 18199-18204 (2007)
- Petitjean, A., Mathe, E., Kato, S., Ishioka, C., Tavtigian, S.V., Hainaut, P., Olivier, M. Impact of mutant p53 functional properties on TP53 mutation patterns and tumor phenotype: lessons from recent developments in the IARC TP53 database. *Hum Mutat* 28: 622-629 (2007)
- Soussi, T., Rubio-Navado, J.M., Ishioka, C. MUT-TP53: a versatile matrix for TP53 mutation verification and publication. *Hum Mutat*: 27(11)1151-1154 (2006)
- Soussi, T., Ishioka, C., Claustres, M., Beroud, C. Locus-specific mutation databases: pitfalls and good practice based on the p53 experience. *Nat Rev Cancer* 6: 83-90 (2006)
- Soussi, T., Asselain, B., Hamroun, D., Kato, S., Ishioka, C., Claustres, M., Beroud, C. Meta-analysis of the p53 Mutation Database for Mutant p53 Biological Activity Reveals a Methodologic Bias in Mutation Detection. *Clin Cancer Res* 12: 62-69 (2006)
- Olivier, M., Langerod, A., Carrieri, P., Bergh, J., Klaar, S., Eyfjord, J., Theillet, C., Rodriguez, C., Lidereau, R., Bieche, I., Varley, J., Bignon, Y., Uhrhammer, N., Winqvist, R., Jukkola-Vuorinen, A., Niederacher, D., Kato, S., Ishioka, C., Hainaut, P., Borresen-Dale, A. The Clinical Value of Somatic TP53 Gene Mutations in 1,794 Patients with Breast Cancer. *Clin Cancer Res* 12: 1157-1167 (2006)
- Mathe, E., Olivier, M., Kato, S., Ishioka, C., Vaisman, I., Hainaut, P. Predicting the Transactivation Activity of p53 Missense Mutants Using a Four-Body Potential Score Derived From Delaunay Tessellations. *Hum Mutat* 27: 163-172 (2006)
- Mathe, E., Olivier, M., Kato, S., Ishioka, C., Hainaut, P., Tavtigian, S.V. Computational approaches for predicting the biological effect of p53 missense mutations: a comparison of three sequence analysis based methods. *Nucleic Acids Res* 34: 1317-1325 (2006)
- Iacopetta, B., Russo, A., Bazan, V., Dardanoni, G., Gebbia, N., Soussi, T., Kerr, D., Elsalem, H., Soong, R., Kandioler, D., Janschek, E., Kappel, S., Lung, M., Leung, C.S., Ko, J.M., Yuen, S., Ho, J., Leung, S.Y., Crapez, E., Duffour, J., Ychou, M., Leahy, D.T., O'Donoghue, D.P., Agnese, V., Cascio, S., Di Fede, G., Chieco-Bianchi, L., Bertorelle, R., Belluco, C., Giaretti, W., Castagnola, P., Ricevuto, E., Ficorella, C., Bosari, S., Arizzi, C.D., Miyaki, M., Onda, M., Kampman, E., Diergaarde, B., Royds, J., Lothe, R.A., Diep, C.B., Meling, G.I., Ostrowski, J., Trzeciak, L., Guzinska-Ustymowicz, K., Zalewski, B., Capella, G.M., Moreno, V., Peinado, M.A., Lonroth, C., Lundholm, K., Sun, X.F., Jansson, A., Bouzourene, H., Hsieh, L.L., Tang, R., Smith, D.R., Allen-Mersh, T.G., Khan, Z.A., Shorthouse, A.J., Silverman, M.L., Kato, S., Ishioka, C. Functional categories of TP53 mutation in colorectal cancer: results of an International Collaborative Study. *Ann Oncol* 17: 842-847 (2006)
- Hamroun, D., Kato, S., Ishioka, C., Claustres, M., Beroud, C., Soussi, T. The UMD TP53 database and website: update and revisions. *Hum Mutat* 27: 14-20 (2006)
- You, F., Chiba, N., Ishioka, C., and Parvin, J. D. Expression of an amino-terminal BRCA1 deletion mutant causes a dominant growth inhibition in MCF10A cells. *Oncogene*, 23: 5792-5798, 2004.
- Kato, S., Han, S. Y., Liu, W., Otsuka, K., Shibata, H., Kanamaru, R., and Ishioka, C. Understanding the function-structure and function-mutation relationships of p53 tumor suppressor protein by high-resolution missense mutation analysis. *Proc Natl Acad Sci U S A*, 100: 8424-8429, 2003.
- Kato, H., Kato, S., Kumabe, T., Sonoda, Y., Yoshimoto, T., Han, S. Y., Suzuki, T., Shibata, H., Kanamaru, R., and Ishioka, C. Functional evaluation of p53 and PTEN gene mutations in gliomas. *Clin. Cancer Res.*, 6: 3937-3943, 2000.
- Han, S. Y., Kato, H., Kato, S., Suzuki, T., Shibata, H., Ishii, S., Shiiba, K., Matsuno, S., Kanamaru, R., and Ishioka, C. Functional evaluation of PTEN missense mutations using in vitro phosphoinositide phosphatase assay. *Cancer Res.*, 60: 3147-3151, 2000.

- Sunahara, M., Shishikura, T., Takahashi, M., Todo, S., Yamamoto, N., Kimura, H., Kato, S., Ishioka, C., Ikawa, S., Ikawa, Y., and Nakagawara, A. Mutational analysis of p51A/TAp63g, a p53 homolog, in non-small cell lung cancer and breast cancer. *Oncogene*, 18: 3761-3765, 1999.
- Shimada, A., Kato, S., Enjo, K., Osada, M., Ikawa, Y., Kohno, K., Obinata, M., Kanamaru, R., Ikawa, S., and Ishioka, C. The transcriptional activities of p53 and its homologue p51/p63: similarities and differences. *Cancer Res.*, 59: 2781-2786, 1999.
- Nichols, K. E., Levitz, S., Shannon, K. E., Wahrer, D. C., Bell, D. W., Chang, G., Hegde, S., Neuberger, D., Shafman, T., Tarbell, N. J., Mauch, P., Ishioka, C., Haber, D. A., and Diller, L. Heterozygous germline ATM mutations do not contribute to radiation-associated malignancies after Hodgkin's disease. *J. Clin. Oncol.*, 17: 1259-1266, 1999.
- Kato, S., Shimada, A., Osada, M., Ikawa, S., Obinata, M., Nakagawara, A., Kanamaru, R., and Ishioka, C. Effects of p51/p63 missense mutations on transcriptional activities of p53 downstream gene promoters<sup>1</sup>. *Cancer Res.*, 59: 5908-5911, 1999.
- Bell, D. W., Wahrer, D. C. R., Kang, D. H., MacMahon, M. S., FitzGerald, M. G., Ishioka, C., Isselbacher, K. J., Krainer, M., and Haber, D. A. Common nonsense mutations in RAD52. *Cancer Res.*, 59: 3883-3888, 1999.
- Shimodaira, H., Filosi, N., Shibata, H., Suzuki, T., Radice, P., Kanamaru, R., Friend, S. H., Kolodner, R. D., and Ishioka, C. Functional analysis of human MLH1 mutations in *Saccharomyces cerevisiae*. *Nature Genet.*, 19: 384-389, 1998.
- Osada, M., Ohba, M., Kawahara, C., Ishioka, C., Kanamaru, R., Katoh, I., Ikawa, Y., Nimura, Y., Nakagawara, A., Obinata, M., and Ikawa, S. Cloning and functional analysis of human p51, which structurally and functionally resembles p53. *Nature Med.*, 4: 839-843, 1998.
- FitzGerald, M. G., Marsh, D. J., Wahrer, D., Bell, D., Caron, S., Shannon, K. E., Ishioka, C., Isselbacher, K. J., Garber, J. E., Eng, C., and Haber, D. A. Germline mutations in PTEN are an infrequent cause of genetic predisposition to breast cancer. *Oncogene*, 17: 727-731, 1998.
- Krainer, M., Arrieta, S. S., FitzGerald, M. G., Shimada, A., Ishioka, C., Kanamaru, R., MacDonald, D. J., Unsal, H., Finkelstein, D. M., Bowcock, A., Isselbacher, K. J., and Haber, D. A. Differential contributions of BRCA1 and BRCA2 to early-onset breast cancer. *N. Engl. J. Med.*, 336: 1416-1421, 1997.
- Goi, K., Takagi, M., Iwata, S., Delia, D., Asada, M., Rosangela, D., Tsunematsu, Y., Nakazawa, S., Yamamoto, H., Yokota, J., Tamura, K., Saeki, Y., Utsunomiya, J., Takahashi, T., Ueda, R., Ishioka, C., Eguchi, M., Kamata, N., and Mizutani, S. DNA damage-associated dysregulation of the cell cycle and apoptosis control in cells with germ-line p53 mutation. *Cancer Res.*, 57: 1895-1902, 1997.
- Ishioka, C., Suzuki T, FitzGerald M, Krainer M, Shimodaira H, Shimada A, Nomizu T, Isselbacher KJ, Haber D, Kanamaru R. Detection of heterozygous truncating mutations in the BRCA1 and APC genes by using a rapid screening assay in yeast. *Proc Natl Acad Sci U S A.* 94:2449-53, 1997.
- Delia, D., Goi, K., Mizutani, S., Yamada, T., Aiello, A., Fontanella, E., Lamorte, G., Iwata, S., Ishioka, C., Stanislaw, K., Reed, J. C., and Pierotti, M. Dissociation between cell cycle arrest and apoptosis can occur in Li-Fraumeni cells heterozygous for p53 gene mutations. *Oncogene*, 14: 2137-2147, 1997.
- Ishioka, C., Englert, C., Winge, P., Yan, Y.-X., Engelstein, M., and Friend, S. H. Mutational analysis of the carboxy-terminal portion of p53 using both yeast and mammalian cell assays in vivo. *Oncogene*, 10: 1485-1492, 1995.
- Ishioka, C., Ballester, R., Engelstein, M., Vidal, M., Kassel, J., The, I., Bernards, A., Gusella, J. F., and Friend, S. H. A functional assay for heterozygous mutations in the GTPase activating protein related domain of the neurofibromatosis type 1 gene. *Oncogene*, 10: 841-847, 1995.
- Ishioka, C., Frebourg T, Yan YX, Vidal M, Friend SH, Schmidt S, Iggo R. Screening patients for heterozygous p53 mutations using a functional assay in yeast. *Nat Genet.* 5:124-9, 1993.
- Ishioka, C., Kanamaru R, Sato T, Dei T, Konishi Y, Asamura M, Wakui A. Inhibitory effects of prostaglandin A2 on c-myc expression and cell cycle progression in human leukemia cell line HL-60. *Cancer Res.* 48:2813-8, 1988.