

# **Curriculum Vitae**

## Hideyuki Nishiofuku, M.D. Ph.D.

### **PRESENT TITLE & AFFILIATION:**

Assistant professor, Radiology, Interventional Radiology Center, Nara Medical University

### **OFFICE ADDRESS:**

Radiology, Nara Medical University  
840 Shijo-cho Kashihara-city, Nara, JAPAN, 634-8522

### **SUMMARY OF QUALIFICATIONS:**

- 15 years' experience in Diagnostic and Interventional radiology field in JAPAN.
- Have successful a lot of paper awards.
- Well familiar with clinically interventional oncology.
- Well familiar with experimental study in rat and rabbit using interventional techniques.

### **EDUCATION**

- 2011.5     Acquisition of PhD from Nara Medical University  
2004.4- 2015.11     Diagnostic and Interventional Radiology, Nara Medical University  
2004.1- 2004.3     Clinical Residency of Emergency Room, Nara Medical University  
2003.5- 2003.12     Clinical Residency of Radiology, Nara Medical University  
2003.5     Acquisition of Doctor's license from Japan  
2003.3     Graduation of Nara Medical University  
1997.4- 2003.3     Nara Medical University, Nara, Japan

### **WORK EXPERIENCES:**

- 2017 – present              Assistant professor, Radiology and Interventional radiology center, Nara Medical University, JAPAN  
2016 – 2017              Visiting scientist, Interventional Radiology, MD Anderson Cancer Center, USA  
2007 – 2016              Assistant professor, Radiology and Interventional radiology

2005 – 2007	Clinical Residency, Diagnostic and Interventional radiology, Aichi Cancer Center Hospital, JAPAN
2003 – 2005	Clinical Residency, Radiology, Nara Medical University, JAPAN

### **HONORS & AWARDS:**

- 2006 The best paper award, The Japanese society of Interventional radiology  
2009 The best paper, Japanese Society of Implantable Port  
2010 The best paper, Society for Research of Loco-regional Cancer Therapy  
2012 The best paper, Japanese Society of Clinical Oncology  
2013 The best paper, Japanese Society of Implantable Port  
2014 JVIR Editor's Award: Outstanding Clinical Research Paper  
2014 Cum Laude award, Radiological Society of North America  
2015 Certificate of Futured abstract, International Japanese Society of Interventional Radiology  
2015 The best paper, Japanese Society of Implantable Port  
2017 JVIR Editor's Award: Top of the Outstanding Laboratory Investigation Award  
2018 The best paper, Japanese Society for Palliative Medicine

### **DOCTORAL DISSERTATION:**

#### **2011.5. From Nara Medical University**

Nishiofuku H, Tanaka T, Aramaki T, Boku N, Inaba Y, Sato Y, Matsuoka M, Otsuji T, Arai Y, Kichikawa K.

Clin Colorectal Cancer. 2010;9(5):305-10.

Hepatic arterial infusion of 5-fluorouracil for patients with liver metastases from colorectal cancer refractory to standard systemic chemotherapy: a multicenter, retrospective analysis.

### **SELECTED PUBLICATION**

#### **(Peer-reviewed original research articles):**

- Fukuoka Y, Tanaka T, **Nishiofuku H**, Sato T, Masada T, Tatsumoto S, Marugami N, Sakaguchi H, Kichikawa K. Development of Repeatable Microcatheter Access Port forIntra-arterial Therapy of Liver Cancer. Cardiovasc Intervent Radiol. 2019

Feb;42(2):298-303.

- Sato Y, **Nishiofuku H**, Yasumoto T, Nakatsuka A, Matsuo K, Kodama Y, Okubo H, Abo D, Takaki H, Inaba Y, Yamakado K, Multicenter Phase II Clinical Trial of Sorafenib Combined with Transarterial Chemoembolization for Advanced Stage Hepatocellular Carcinomas (Barcelona Clinic Liver Cancer Stage C): STAB Study. *J Vasc Interv Radiol*,29(8)1061-1067,2018
- Sato T, Tanaka T, **Nishiofuku H**, Fukuoka Y, Masada T, Tatsumoto S, Marugami N, Morita K, Obayashi C, Hori S, Kaneko M, Kijima A, Kichikawa K, Superabsorbent Polymer Microspheres Prepared with Hypertonic Saline to Reduce Microsphere Expansion. *Cardiovasc Intervent Radiol*,41(9)1412-1418,2018
- Tanaka T, Masada T, **Nishiofuku H**, Fukuoka Y, Sato T, Tatsumoto S, Marugami N, Higashi S, Kichikawa K, Development of pumping emulsification device with glass membrane to form ideal lipiodol emulsion in transarterial chemoembolization. *Eur Radiol*,28(5)2203-2207,2018
- Sato Y, Inaba Y, Ura T, **Nishiofuku H**, Yamaura H, Kato M, Takahari D, Tanaka T, Muro K. Outcomes of a Phase I/II Trial of Hepatic Arterial Infusion of Oxaliplatin Combined with Intravenous 5-Fluorouracil and L-Leucovorin in Patients with Unresectable Liver Metastases from Colorectal Cancer After Systemic Chemotherapy Failure. *J Gastrointest Cancer*,49(2)132-137,2018
- Moriguchi M, Aramaki T, **Nishiofuku H**, Sato R, Asakura K, Yamaguchi K, Tanaka T, Endo M, Itoh Y, Sorafenib versus Hepatic Arterial Infusion Chemotherapy as Initial Treatment for Hepatocellular Carcinoma with Advanced Portal Vein Tumor Thrombosis. *Liver Cancer*,6(4)275-286,2017
- Masada T, Tanaka T, **Nishiofuku H**, Fukuoka Y, Sato T, Tatsumoto S, Marugami N, Kichikawa K, Techniques to Form a Suitable Lipiodol-Epirubicin Emulsion by Using 3-Way Stopcock Methods in Transarterial Chemoembolization for Liver Tumor. *J Vasc Interv Radiol*,28(10)1461-1466,2017
- **Nishiofuku H**, Tanaka T, Fukuoka Y, Sato T, Masada T, Tatsumoto S, Sho M, Yamato I, Yasuda S, Matsushima S, Takano M, Ohbayashi C, Kichikawa K, Intraarterial Therapy Using Micellar Nanoparticles Incorporating SN-38 in a Rabbit Liver Tumor Model. *J Vasc Interv Radiol*,28(3)457-464,2017
- Sato T, Tanaka T, **Nishiofuku H**, Fukuoka Y, Sakaguchi H, Masada T, Tatsumoto S, Marugami N, Takano M, Yamato I, Sho M, Ohbayashi C, Hirai T, Kichikawa K, Pharmacokinetics and Histopathological Findings of Chemoembolization Using Cisplatin Powder Mixed with Degradable Starch Microspheres in a Rabbit Liver Tumor Model. *Cardiovasc Intervent Radiol*,40(3)438-444,2017

- Matsushima S, Sato T, **Nishiofuku H**, Sato Y, Murata S, Kinoshita Y, Era S, Inaba Y, Equivalent cross-relaxation rate imaging and diffusion weighted imaging for early prediction of response to bevacizumab-containing treatment in colorectal liver metastases-preliminary study. *Clin Imaging*, 41, 1-6, 2017
- Hashimoto A, Tanaka T, Sho M, **Nishiofuku H**, Masada T, Sato T, Marugami N, Anai H, Sakaguchi H, Kanno M, Tamamoto T, Hasegawa M, Nakajima Y, Kichikawa K, Adjuvant Hepatic Arterial Infusion Chemotherapy After Resection for Pancreatic Cancer Using Coaxial Catheter-Port System Compared with Conventional System. *Cardiovasc Interv Radiol*, 39(6) 831-9, 2016
- **Nishiofuku H**, Tanaka T, Marugami N, Sho M, Akahori T, Nakajima Y, Kichikawa K. Increased tumor ADC value during chemotherapy predicts improved survival in unresectable pancreatic cancer. *European Radiology*. 2015 26(6) 1835-42, 2016.
- Kawaguchi C, Sho M, Tanaka T, Akahori T, Kinoshita S, Nagai M, Yasuda S, Nishiwada S, **Nishiofuku H**, Kichikawa K, Nakajima Y. Impact of Smoking on Pancreatic Cancer Patients Receiving Current Chemotherapy. *Pancreas*. 2015 Oct;44(7):1155-60.
- Nagai M, Sho M, Akahori T, Tanaka T, Kinoshita S, **Nishiofuku H**, Nishiwada S, Ohbayashi C, Kichikawa K, Nakajima Y. Impact of preoperative asymptomatic renal dysfunction on clinical course after pancreateoduodenectomy. *J Hepatobiliary Pancreat Sci*. 2015 ;22(11):810-8
- Sho M, Akahori T, Tanaka T, Kinoshita S, Nagai M, Nishiwada S, Tamamoto T, **Nishiofuku H**, Ohbayashi C, Hasegawa M, Kichikawa K, Nakajima Y. Optimal indication of neoadjuvant chemoradiotherapy for pancreatic cancer. *Langenbecks Arch Surg*. 2015 May;400(4):477-85.
- Fukuoka Y, Tanaka T, **Nishiofuku H**, Sato T, Kichikawa K. Compatibility of an Ultraselective Microcatheter and Epirubicin Loaded 300-500- $\mu$ m DC Bead in Ex Vivo Study. *Cardiovasc Intervent Radiol*. 2015 38(5)1284-7
- Tanaka T, Arai Y, Inaba Y, Inoue M, **Nishiofuku H**, Anai H, Hori S, Sakaguchi H, Kichikawa K. Current role of hybrid CT/angiography system compared with C-arm cone beam CT for interventional oncology. *Br J Radiol*. 2014 Sep;87(1041):20140126.
- Tanaka T, **Nishiofuku H**, Hukuoka Y, Sato T, Masada T, Takano M, Gilbert CW, Obayashi C, Kichikawa K. Pharmacokinetics and antitumor efficacy of chemoembolization using 40  $\mu$ m irinotecan-loaded microspheres in a rabbit liver tumor model. *J Vasc Interv Radiol*. 2014 Jul;25(7):1037-1044.

- Tanaka T, Maeda S, Nishiofuku H, Masada T, Sato T, Anai H, Sakaguchi H, Kichikawa K. An early-stage, non-hypervascular HCC successfully treated by superselective, bland transarterial embolization using 40-μm microspheres. *Anticancer Res.* 2014 Apr;34(4):1947-51.
- Masada T, Tanaka T, Sakaguchi H, Nakagomi M, Miura Y, Hidaka T, Sato Y, Sato T, Inoue M, Furuichi K, Nishiofuku H, Kichikawa K. Coils versus gelatin particles with or without intraarterial antibiotics for partial splenic embolization: a comparative evaluation. *J Vasc Interv Radiol.* 2014 Jun;25(6):852-8.
- Miyayama S, Yamakado K, Anai H, Abo D, Minami T, Takaki H, Kodama T, Yamanaka T, Nishiofuku H, Morimoto K, Soyama T, Hasegawa Y, Nakamura K, Yamanishi T, Sato M, Nakajima Y. Guidelines on the use of gelatin sponge particles in embolotherapy. *Jpn J Radiol.* 2014 Apr;32(4):242-50.
- Akahori T, Sho M, Tanaka T, Nishiofuku H, Kinoshita S, Nagai M, Kichikawa K, Nakajima Y. Significant efficacy of new transcatheter arterial chemoembolization technique for hepatic metastases of pancreatic neuroendocrine tumors. *Anticancer Res.* 2013 Aug;33(8):3355-8.
- Tanaka T, Nishiofuku H, Maeda S, Masada T, Anai H, Sakaguchi H, Kichikawa K. Repeated bland-TAE using small microspheres injected via an implantable port-catheter system for liver metastases: an initial experience. *Cardiovasc Intervent Radiol.* 2014 Apr;37(2):493-7.
- Nishiofuku H, Marugami N, Tanaka T, Anai H, Maeda S, Masada T, Takano M, Mitoro A, Kichikawa K. Isolated fat-containing pancreatic metastasis from hepatocellular carcinoma. *Jpn J Radiol.* 2013 Jun;31(6):408-11.
- Maeda S, Anai H, Sueyoshi S, Tanaka T, Nishiofuku H, Masada T, Sakaguchi H, Kichikawa K. Initial experience of transcatheter arterial chemolipiodolization with miriplatin for recurrent hepatocellular carcinoma. *Gan To Kagaku Ryoho.* 2012 Nov;39(12):1840-2.
- Masada T, Anai H, Sueyoshi S, Tanaka T, Nishiofuku H, Maeda S, Sakaguchi H, Kichikawa K. A case of radiofrequency ablation with hepatic venous balloon occlusion and transient hepatic arterial embolization using degradable starch microspheres for a large well-differentiated hepatocellular carcinoma. *Gan To Kagaku Ryoho.* 2012 Nov;39(12):1822-4.
- Nishiofuku H, Tanaka T, Matsuoka M, Otsuji T, Anai H, Sueyoshi S, Inaba Y, Koyama F,

- Sho M, Nakajima Y, Kichikawa K.  
Transcatheter arterial chemoembolization using cisplatin powder mixed with degradable starch microspheres for colorectal liver metastases after FOLFOX failure: results of a phase I/II study. *J Vasc Interv Radiol.* 2013 Jan;24(1):56-65.
- Nishiofuku H, Tanaka T, Anai H, Sueyoshi S, Maeda S, Masada T, Kichikawa K.  
Hepatic arterial thrombosis: a critical complication during combination therapy of arterial chemoinfusion and sorafenib. *Anticancer Res.* 2012 Sep;32(9):4121-4.
  - Sho M, Akahori T, Tanaka T, Kinoshita S, Tamamoto T, Nomi T, Yamato I, Hokuto D, Yasuda S, Kawaguchi C, Nishiofuku H, Marugami N, Enomonoto Y, Kasai T, Hasegawa M, Kichikawa K, Nakajima Y.  
Pathological and clinical impact of neoadjuvant chemoradiotherapy using full-dose gemcitabine and concurrent radiation for resectable pancreatic cancer. *J Hepatobiliary Pancreat Sci.* 2013 Feb;20(2):197-205.
  - Tanaka T, Sho M, Nishiofuku H, Sakaguchi H, Inaba Y, Nakajima Y, Kichikawa K.  
Unresectable pancreatic cancer: arterial embolization to achieve a single blood supply for intraarterial infusion of 5-fluorouracil and full-dose IV gemcitabine. *AJR Am J Roentgenol.* 2012 Jun;198(6):1445-52.
  - Hashimoto A, Nishiofuku H, Tanaka T, Sho M, Anai H, Nakajima Y, Kichikawa K.  
Safety and optimal management of hepatic arterial infusion chemotherapy after pancreatectomy for hepatobiliary cancer. *AJR Am J Roentgenol.* 2012 Apr;198(4):923-30.
  - Tanaka T, Nishiofuku H, Tamamoto T, Sho M, Anai H, Sueyoshi S, Sakaguchi H, Hasegawa M, Nakajima Y, Kichikawa K.  
Intra-arterial chemoinfusion prior to chemoradiotherapy with full-dose systemic gemcitabine for management of locally advanced pancreatic cancer. *Anticancer Res.* 2011 Nov;31(11):3909-12.
  - Nishiofuku H, Matsushima S, Taguchi O, Inaba Y, Yamaura H, Sato Y, Tanaka T, Kichikawa K.  
Cellular Imaging Using Equivalent Cross-Relaxation Rate Technique in Rabbit VX-2 Tumor Model. *Cancer Inform.* 2011;10:227-32.
  - Takaki S, Sakaguchi H, Anai H, Tanaka T, Yamamoto K, Morimoto K, Nishiofuku H, Inoue M, Sueyoshi S, Nagata T, Hidaka T, Uchida H, Kichikawa K.  
Long-term outcome of transcatheter subsegmental and segmental arterial chemoembolization using lipiodol for hepatocellular carcinoma. *Cardiovasc Interv Radiol.* 2012 Jun;35(3):544-54.
  - Nishiofuku H, Tanaka T, Anai H, Sueyoshi S, Yamamoto K, Morimoto K, Maeda S,

Masada T, Sho M, Nakajima Y, Tamamoto T, Hasegawa M, Sakaguchi H, Kichikawa K. Locally advanced pancreatic cancer successfully treated by arterial infusion chemotherapy combined with stereotactic radiotherapy--a case report. *Gan To Kagaku Ryoho*. 2010 Nov;37(12):2315-8.

- Nishiofuku H, Tanaka T, Aramaki T, Boku N, Inaba Y, Sato Y, Matsuoka M, Otsuji T, Arai Y, Kichikawa K.  
Hepatic arterial infusion of 5-fluorouracil for patients with liver metastases from colorectal cancer refractory to standard systemic chemotherapy: a multicenter, retrospective analysis. *Clin Colorectal Cancer*. 2010 Dec;9(5):305-10.
- Sho M, Tanaka T, Yamada T, Nomi T, Akahori T, Doh J, Yamato I, Hokuto D, Nishiofuku H, Marugami N, Kanehiro H, Kichikawa K, Nakajima Y.  
Novel postoperative adjuvant strategy prevents early hepatic recurrence after resection of pancreatic cancer. *J Hepatobiliary Pancreat Sci*. 2011 Mar;18(2):235-9; discussion 239-40.
- Nishiofuku H, Matsushima S, Inaba Y, Yamaura H, Sato Y, Morishima Y, Kichikawa K.  
Cellular density evaluation for malignant lymphoma using equivalent cross-relaxation rate imaging - initial experience. *Korean J Radiol*. 2010 May-Jun;11(3):327-32.
- Tanaka T, Yamamoto K, Sho M, Nishiofuku H, Inoue M, Sueyoshi S, Anai H, Sakaguchi H, Nakajima Y, Kichikawa K.  
Pharmacokinetic evaluation of pancreatic arterial infusion chemotherapy after unification of the blood supply in an animal model. *J Vasc Interv Radiol*. 2010 Jan;21(1):116-21.
- Doh J, Sho M, Tanaka T, Yamada T, Nomi T, Akahori T, Yamato I, Nishiofuku H, Tamamoto T, Hasegawa M, Kichikawa K, Nakajima Y.  
A case of postoperative multiple liver metastases of pancreatic cancer successfully treated by combination chemotherapy with weekly high-dose 5-FU hepatic arterial infusion plus systemic infusion of gemcitabine. *Gan To Kagaku Ryoho*. 2009 Nov;36(12):2087-9.
- Tanaka T, Sakaguchi H, Sho M, Yamamoto K, Nishiofuku H, Nakajima Y, Kichikawa K.  
A novel interventional radiology technique for arterial infusion chemotherapy against advanced pancreatic cancer. *AJR Am J Roentgenol*. 2009 Apr;192(4):W168-77.
- Marugami N, Tanaka T, Kitano S, Hirohashi S, Nishiofuku H, Takahashi A, Sakaguchi H, Matsuoka M, Otsuji T, Takahama J, Higashiura W, Kichikawa K.  
Early detection of therapeutic response to hepatic arterial infusion chemotherapy of liver metastases from colorectal cancer using diffusion-weighted MR imaging. *Cardiovasc Intervent Radiol*. 2009 Jul;32(4):638-46.
- Nishiofuku H, Tanaka T, Sakaguchi H, Yamamoto K, Inoue M, Sueyoshi S, Shinnkai T, Hasegawa M, Kichikawa K.  
Hepatic arterial infusion chemotherapy combined with venous embolization in a patient

with hepatic metastases with an arteriovenous shunt. *Cardiovasc Interv Radiol.* 2009 Jul;32(4):796-800.

- Mastsushima S, Nishiofuku H, Iwata H, Era S, Inaba Y, Kinoshita Y. Equivalent cross-relaxation rate imaging of axillary lymph nodes in breast cancer. *J Magn Reson Imaging.* 2008 Jun;27(6):1278-83.
- Inaba Y, Yamaura H, Sato Y, Najima M, Shimamoto H, Nishiofuku H, Ura T, Muro K. Central venous access port-related complications in outpatient chemotherapy for colorectal cancer. *Jpn J Clin Oncol.* 2007 Dec;37(12):951-4.
- Yamaura H, Inaba Y, Sato Y, Najima M, Shimamoto H, Nishiofuku H. Bilateral pneumothorax after unilateral transthoracic puncture. *J Vasc Interv Radiol.* 2007 Jun;18(6):793-5.
- Yamaura H, Inaba Y, Sato Y, Shimamoto H, Nishiofuku H, Arai Y. Pseudo-occlusion of the hepatic artery during hepatic arterial infusion chemotherapy. *J Vasc Interv Radiol.* 2006 Nov;17(11 Pt 1):1835-8.
- Sato Y, Inaba Y, Yamaura H, Shimamoto H, Nishiofuku H, Oyama T, Kanemitsu Y, Sawaki A, Arai Y, Muro K. Retrospective analysis of tegafur/uracil (UFT) plus oral leucovorin (LV) regimen in patients with advanced colorectal cancer. *Gan To Kagaku Ryoho.* 2006 Jul;33(7):887-90.
- Tanaka T, Sakaguchi H, Anai H, Yamamoto K, Morimoto K, Nishiofuku H, Kichikawa K. Catheter position for adequate intra-arterial chemotherapy for advanced pancreatic cancer: evaluation with CT during arterial injection of contrast material. *J Vasc Interv Radiol.* 2004 Oct;15(10):1089-97.