

Curriculum Vitae



Masamichi Imajo, PhD

Present appointment: Specially Appointed Associate Professor, Institute for Chemical Reaction Design and Discovery (WPI-ICReDD), Hokkaido University (Since 2019)

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Qualifications: PhD (Kyoto University)

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DIPLOMAS (TRAINING AND EDUCATION)

2010, PhD, Graduate School of Biostudies, Kyoto University, Japan.

2006-2010, PhD student, Graduate School of Biostudies, Kyoto University, Japan

2004-2006, Master student, Graduate School of Biostudies, Kyoto University, Japan

2000-2004, Bachelor, Faculty of Science, Kyoto University, Japan

PROFESSIONAL RESEARCH ACTIVITIES

2019-, current appointment

2012-2019, Assistant Professor, Laboratory of Bioimaging and Cell Signaling (Prof. Michiyuki Matsuda), Graduate School of Biostudies, Kyoto University, Japan

2010-2012, Postdoctoral Fellow, Department of Cell and Developmental Biology (Prof. Eisuke Nishida), Graduate School of Biostudies, Kyoto University, Japan

Grants/External Funding

1. Japan Society for the Promotion of Science (JSPS) KAKENHI, Grant-in-Aid for Scientific Research on Innovative Areas, Integrated analysis and regulation of cellular diversity [18H05100] (2018/04-2020/03), 4,420,000 JPY, Representative
2. Japan Society for the Promotion of Science (JSPS) KAKENHI, Grants-in-Aid for Scientific research (C) [18K06929] (2018/04-2021/03), 7,800,000 JPY, Representative
3. Japan Society for the Promotion of Science (JSPS) KAKENHI, Grants-in-Aid for Young Scientists (B) [16k21106] (2016/04-2018/03), 4,160,000 JPY, Representative
4. Takeda Science Foundation (Life Science Research), 2015/07-2018/05, 2,000,000 JPY, Representative

5. Japan Society for the Promotion of Science (JSPS) KAKENHI, Grants-in-Aid for Young Scientists (B) [25870363] (2013/04-2016/03), 4,420,000 JPY, Representative
6. The Kyoto University Research Fund for Young Scientists (Start-up) (2012/04-2013/03), 850,000 JPY, Representative
7. Japan Society for the Promotion of Science (JSPS) KAKENHI, Grant-in-Aid for JSPS Research Fellows (DC1) [06J03387] (2006/04-2009/03), 2,800,000 JPY, Representative

Publications

1. **Masamichi Imajo*** (corresponding author). Hemagglutinating Virus of Japan Envelop (HVJ-E)-Guided Gene Transfer to the Intestinal Epithelium. *Methods Mol. Biol.* [Intestinal Stem Cells], in press
2. **Masamichi Imajo*** (corresponding author). Analysis of Retinoic Acid Receptor Signaling in Colorectal Cancer. *Methods Mol. Biol.* [Retinoid and Rexinoid Signaling], 85-93 (2019)
3. Yu Muta, Michiyuki Matsuda, **Masamichi Imajo*** (corresponding author). Divergent Dynamics and Functions of ERK MAP Kinase Signaling in Development, Homeostasis and Cancer: Lessons from Fluorescent Bioimaging. *Cancers* 11, 513 (2019)
4. Yu Muta, Michiyuki Matsuda, **Masamichi Imajo*** (corresponding author). Dynamic ERK signaling regulation in intestinal tumorigenesis. *Mol. Cell. Oncol.* 5:5, e1506684 (2018)
5. Yu Muta, Yoshihisa Fujita, Kenta Sumiyama, Atsuro Sakurai, Makoto M. Taketo, Tsutomu Chiba, Hiroshi Seno, Kazuhiro Aoki, Michiyuki Matsuda, **Masamichi Imajo*** (corresponding author). Composite regulation of ERK activity dynamics underlying tumour-specific traits in the intestine. *Nature Commun.* 9, Article number: 2174(2018)
6. Eri Ikeguchi, Norio Harada, Yoshinori Kanemaru, Akiko Sankoda, Shunsuke Yamane, Kanako Iwasaki, Masamichi Imajo, Yuki Murata, Kazuyo Suzuki, Erina Joo, and Nobuya Inagaki*. Transcriptional factor Pdx1 is involved in age-related GIP hypersecretion in mice. *Am. J. Physiol. Gastrointest. Liver Physiol.* 315, G272-G282 (2018)
7. Yumi Konagaya, Kenta Terai, Yusuke Hirao, Kanako Takakura, **Masamichi Imajo**, Yuji Kamioka, Norio Sasaoka, Akira Kakizuka, Kenta Sumiyama, Tomoichiro Asano, Michiyuki Matsuda*. A highly sensitive FRET biosensor for AMPK exhibits heterogeneous AMPK responses among cells and organs. *Cell Reports* 21, 2628-2638 (2017)
8. **Masamichi Imajo*** (corresponding author), Kunio Kondoh, Takuya Yamamoto, Kei Nakayama, May Nakajima-Koyama, Eisuke Nishida. Antagonistic interactions between ERK MAP kinase and retinoic acid receptor signaling in colorectal cancer cells. *Mol. Cell. Biol.* 37: e00012-17 (2017)
9. Yoshihisa Okuchi, **Masamichi Imajo**, Rei Mizuno, Yuji Kamioka, Hiroyuki Miyoshi, Makoto Mark Taketo, Satoshi Nagayama, Yoshiharu Sakai, Michiyuki Matsuda. Identification of Aging-Associated Gene Expression Signatures That Precede Intestinal Tumorigenesis. *PLoS ONE* 11(9): e0162300 (2016)
10. Paloma Ordóñez-Morán, Caroline Dafflon, **Masamichi Imajo**, Eisuke Nishida, Joerg Huelsken. HOXA5 counteracts stem cell traits by inhibiting Wnt signaling in colorectal cancer. *Cancer Cell* 28, 815-829 (2015)

11. **Masamichi Imajo*** (corresponding author), Miki Ebisuya, Eisuke Nishida*. Dual role of YAP and TAZ in renewal of the intestinal epithelium. *Nature Cell Biol.* 17, 7-19 (2015)
12. Rei Mizuno, Yuji Kamioka, Kenji Kabashima, **Masamichi Imajo**, Kenta Sumiyama, Eiji Nakasho, Takeshi Ito, Yoko Hamazaki, Yoshihisa Okuchi, Yoshiharu Sakai, Etsuko Kiyokawa, Michiyuki Matsuda. In vivo imaging reveals PKA regulation of ERK activity during neutrophil recruitment to inflamed intestine. *J. Exp. Med.* 211, 1123-1136 (2014)
13. **Masamichi Imajo**, Koichi Miyatake, Akira Imura, Atsumu Miyamoto, Eisuke Nishida. A molecular mechanisms that links Hippo signalling to the inhibition of Wnt/ β -catenin signaling. *EMBO J.* 31, 1109-1122 (2012)
14. **Masamichi Imajo**, Eisuke Nishida. Human Tribbles homolog 1 functions as a negative regulator of retinoic acid receptor. *Genes Cells* 15, 1089-1097 (2010)
15. **Masamichi Imajo**, Yoshiki Tsuchiya, Eisuke Nishida. Regulatory mechanisms and functions of MAP kinase signaling pathways. *IUBMB Life* 58, 312-317 (2006)

Other publications

1. **今城 正道**, 松田 道行. 増大特集 タンパク質・核酸の分子修飾 II. 細胞質/オルガネラでの分子修飾 リン酸化 (セリン/スレオニン/チロシン). *生体の科学*. 69 (5), 430-431 (2018)
2. **今城 正道**, 西田 栄介. 腸上皮恒常性におけるHippoシグナル伝達の役割. *実験医学*. 33 (18), 2926-2933 (2015)
3. **今城 正道**. 特集 細胞シグナル操作法 I. 分子からみたシグナル操作法 4. その他 Wntシグナル. *生体の科学*. 66 (5), 438-439 (2015)
4. **Masamichi Imajo**, Miki Ebisuya, Eisuke Nishida. HVJ-E-mediated gene transfer into the intestinal epithelium. *Protoc. Exch.* doi: 10.1038/protex.2014.049 (2014)

Presentations (invited talks)

1. **今城 正道**, 牟田 優, 松田 道行. 腸上皮における細胞増殖シグナルの動態とその生理的意義. 文部科学省 科学研究費補助金 新学術領域研究 (研究領域提案型) 細胞社会ダイバーシティの統合的解明と制御 第3回公開シンポジウム「1細胞統合解析を駆使した組織内ダイバーシティ解明への挑戦」, 2019年1月15日, 東京大学 弥生講堂・一条ホール
2. **Masamichi Imajo**, Yu Muta, Michiyuki Matsuda. Molecular mechanisms controlling intestinal stem cell functions and their alterations in intestinal tumorigenesis. The 16th Joint Mini-Symposium 2017 of National Taiwan University, Kyoto University, and University of Tsukuba, Sep. 24th, 2017, University of Tsukuba
3. **今城 正道**, 西田 栄介. 腸上皮の幹細胞依存的な更新におけるHippo経路の役割. BMB2015 (第38回日本分子生物学会年会, 第88回日本生化学会大会 合同大会), 2015年12月3日, 神戸ポートアイランド
4. **今城 正道**. 組織幹細胞の制御におけるHippo経路の新たな役割. 第8回Symphony, 2015年9月26日, ホテルメトロポリタンエドモント飯田橋
5. **今城 正道**, 西田 栄介. 生体内遺伝子導入法により解明された腸上皮幹細胞機能の新たな制御

機構. 第66回日本細胞生物学会大会, 2014年6月13日, 奈良県新公会堂

6. **今城 正道**, 西田 栄介. 腸上皮ホメオスタシスを制御するシグナル伝達ネットワークの解析. 第84回日本生化学会大会, 2011年9月23日, 国立京都国際会館