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Degree:

2005 Ph.D.
Tokyo Institute of Technology,
Graduate School of Bioscience and Biotechnology

Education/Training:

2015-present **RIKEN Center for Life Science Technologies,
Division of Bio-Function Dynamics Imaging,
Imaging Application Group,
Pathophysiological and Health Science Team**
Researcher
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2010-2015 **Anatomy and Developmental Biology, Basic Medicine,
Graduate School of Medicine, Kyoto University**
Research Assistant Professor
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2010-2010 **Department of Functional Genomics, Medical Research
Institute, Graduate School of Biomedical Science, Tokyo
Medical and Dental University**
Research Assistant Professor
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2005-2010 **Department of Biological Information / Graduate School of
Bioscience and Biotechnology, Tokyo Institute of Technology**
Assistant Professor
Principle Investigator: Prof. Akira Kudo

2000-2005 **Department of Biological Information / Graduate School of
Bioscience and Biotechnology, Tokyo Institute of Technology**
Graduate Student
Supervisor: Prof. Akira Kudo

1996-2000 **School of Bioscience and Biotechnology,
Tokyo Institute of Technology**
Student

Research Experience:

2010-present **RIKEN Center for Life Science Technologies,
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Molecular, Cellular, and Chemical Biology

- 2010-2015 **Anatomy and Developmental Biology, Basic Medicine, Graduate School of Medicine, Kyoto University**
Molecular, Cellular, and Chemical Biology
Principle Investigator: Prof. Masatoshi Hagiwara
- 2010-2010 **Department of Functional Genomics, Medical Research Institute, Graduate School of Biomedical Science, Tokyo Medical and Dental University**
Molecular, Cellular, and Chemical Biology
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- 2005-2010 **Department of Biological Information / Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology**
Molecular, Cellular, and Developmental Biology
Principle Investigator: Prof. Akira Kudo
- 2000-2005 **Department of Biological Information / Graduate School of Bioscience and Biotechnology, Tokyo Institute of Technology** (as a graduate student)
Bone Cell Biology
Advisor: Prof. Akira Kudo

Honors:

- 2009 Travel Fellowship. The 3rd Mechanobiology Workshop. National University of Singapore, Singapore
- 2004 Young Investigator Award. 26th Annual Meeting of the American Society for Bone and Mineral Research. Seattle, Washington, USA
- 2004 Young Investigator Award. 22th Annual Meeting of the Japanese Society for Bone and Mineral Research. Osaka, Japan

Societies:

The Molecular Biology Society of Japan
The Japanese Society of Chemical Biology
International Chemical Biology Society

Publications:

(Original papers)

24. Yamamoto M, Onogi H, **Kii I**, Yoshida S, Iida K, Sakai H, Abe M, Tsubota T, Ito N, Hosoya T, and Hagiwara M. (2014)
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23. Kurihara T, Sakurai E, Toyomoto M, **Kii I**, Kawamoto D, Asada T, Tanabe T, Yoshimura M, Hagiwara M, Miyata A. (2014)

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22. Kikuchi Y, Kunita A, Iwata C, Komura D, Nishiyama T, Shimazu K, Takeshita K, Shibahara J, **Kii I**, Morishita Y, Yashiro M, Hirakawa K, Miyazono K, Kudo A, Fukayama M, Kashima TG. (2014)
The Niche Component Periostin Is Produced by Cancer-Associated Fibroblasts, Supporting Growth of Gastric Cancer through ERK Activation.
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21. Sakai D, **Kii I**, Nakagawa K, Matsumoto HN, Takahashi M, et al. (2011)
Remodeling of Actin Cytoskeleton in Mouse Periosteal Cells under Mechanical Loading Induces Periosteal Cell Proliferation during Bone Formation.
PLoS ONE 6(9): e24847.
20. Nishiyama, T., **Kii, I.**, Kashima, T.G., Kikuchi, Y., Ohazama, A., Shimazaki, M., Fukayama, M., Kudo, A. (2011)
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19. Fujiwara, M., Kashima, T.G., Kunita, A., **Kii, I.**, Komura, D., Grigoriadis, A.E., Kudo, A., Aburatani, H., Fukayama, M. (2011).
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18. **Kii, I.**,* Shiraishi, A., Hiramatsu, T., Matsushita, T., Uekusa, H., Yoshida, S., Yamamoto, M., Kudo, A., Hagiwara, M., and Hosoya, T.* (2010).
Strain-promoted double-click reaction for chemical modification of azido-biomolecules.
Org Biomol Chem 8, 4051-4055. *Co-corresponding author
17. Ogawa, Y., Nonaka, Y., Goto, T., Ohnishi, E., Hiramatsu, T., **Kii, I.**, Yoshida, M., Ikura, T., Onogi, H., Shibuya, H., et al. (2010).
Development of a novel selective inhibitor of the Down syndrome-related kinase Dyrk1A.
Nat Commun 1, 1-9.
16. **Kii, I.**, Nishiyama, T., Li, M., Matsumoto, K., Saito, M., Amizuka, N., and Kudo, A. (2010).
Incorporation of tenascin-C into the extracellular matrix by periostin underlies an extracellular meshwork architecture.
J Biol Chem 285, 2028-2039.
15. Maruhashi, T., **Kii, I.**, Saito, M., and Kudo, A. (2010).
Interaction between periostin and BMP-1 promotes proteolytic activation of lysyl oxidase.
J Biol Chem 285, 13294-13303.

14. Tanabe, H., Takayama, I., Nishiyama, T., Shimazaki, M., **Kii, I.**, Li, M., Amizuka, N., Katsube, K., and Kudo, A. (2010). Periostin associates with Notch1 precursor to maintain Notch1 expression under a stress condition in mouse cells. *PLoS One* 5, e12234.
13. Takayama, I., **Kii, I.**, and Kudo, A. (2009). Expression, purification and characterization of soluble recombinant periostin protein produced by Escherichia coli. *J Biochem* 146, 713-723.
12. Kashima, T.G., Nishiyama, T., Shimazu, K., Shimazaki, M., **Kii, I.**, Grigoriadis, A.E., Fukayama, M., and Kudo, A. (2009). Periostin, a novel marker of intramembranous ossification, is expressed in fibrous dysplasia and in c-Fos-overexpressing bone lesions. *Hum Pathol* 40, 226-237.
11. Shimazaki, M., Nakamura, K., **Kii, I.**, Kashima, T., Amizuka, N., Li, M., Saito, M., Fukuda, K., Nishiyama, T., Kitajima, S., et al. (2008). Periostin is essential for cardiac healing after acute myocardial infarction. *J Exp Med* 205, 295-303.
10. Kikuchi, Y., Kashima, T.G., Nishiyama, T., Shimazu, K., Morishita, Y., Shimazaki, M., **Kii, I.**, Horie, H., Nagai, H., Kudo, A., et al. (2008). Periostin is expressed in pericryptal fibroblasts and cancer-associated fibroblasts in the colon. *J Histochem Cytochem* 56, 753-764.
9. Moriyama, A., **Kii, I.**, Sunabori, T., Kurihara, S., Takayama, I., Shimazaki, M., Tanabe, H., Oginuma, M., Fukayama, M., Matsuzaki, Y., et al. (2007). GFP transgenic mice reveal active canonical Wnt signal in neonatal brain and in adult liver and spleen. *Genesis* 45, 90-100.
8. **Kii, I.**, Amizuka, N., Minqi, L., Kitajima, S., Saga, Y., and Kudo, A. (2006). Periostin is an extracellular matrix protein required for eruption of incisors in mice. *Biochem Biophys Res Commun* 342, 766-772.
7. Wakabayashi, K., Nakagawa, H., Adachi, T., **Kii, I.**, Kobatake, E., Kudo, A., and Ishikawa, T. (2006). Identification of cysteine residues critically involved in homodimer formation and protein expression of human ATP-binding cassette transporter ABCG2: a new approach using the flp recombinase system. *J Exp Ther Oncol* 5, 205-222.
6. Nishiyama, T., **Kii, I.**, and Kudo, A. (2004). Inactivation of Rho/ROCK signaling is crucial for the nuclear accumulation of FKHR and myoblast fusion. *J Biol Chem* 279, 47311-47319.

5. **Kii, I.**, Amizuka, N., Shimomura, J., Saga, Y., and Kudo, A. (2004).
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4. Suzuki, H., Amizuka, N., **Kii, I.**, Kawano, Y., Nozawa-Inoue, K., Suzuki, A., Yoshie, H., Kudo, A., and Maeda, T. (2004).
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3. Mitomo, H., Kato, R., Ito, A., Kasamatsu, S., Ikegami, Y., **Kii, I.**, Kudo, A., Kobatake, E., Sumino, Y., and Ishikawa, T. (2003).
A functional study on polymorphism of the ATP-binding cassette transporter ABCG2: critical role of arginine-482 in methotrexate transport.
Biochem J 373, 767-774.
2. Kawaguchi, J., Azuma, Y., Hoshi, K., **Kii, I.**, Takeshita, S., Ohta, T., Ozawa, H., Takeichi, M., Chisaka, O., and Kudo, A. (2001).
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1. Kawaguchi, J., **Kii, I.**, Sugiyama, Y., Takeshita, S., and Kudo, A. (2001).
The transition of cadherin expression in osteoblast differentiation from mesenchymal cells: consistent expression of cadherin-11 in osteoblast lineage.
J Bone Miner Res 16, 260-269.