

## Curriculum Vitae

**Date Prepared: 2023/06/22**

**Name: Yuuki Imai**

**Place of Birth: Osaka, Japan, Date of Birth: 5<sup>th</sup>, November, 1974**

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### Education

Year	Degree	Field of Study	Institution
1999	M.D.		Osaka City University Medical School
2005	Ph.D.	Orthopaedics	Osaka City University Graduate School of Medicine

### Postdoctoral Training and Positions

Year(s)	Title	Specialty/Discipline	Institution
2005.4-2006.3	Postdoctoral fellow	Orthopaedic Surgery	Osaka City Univ.
2006.4-2007.6	Research Fellow	Institute of Molecular and Cellular Biosciences, The Univ. of Tokyo	
2007.7-2009.3	Research Associate	Orthopaedic Surgery	Osaka City Univ.
2009.4-2010.3	Visiting Scientist	Myles Brown Lab	Dana-Farber Cancer Institute
2010.4-2013.3	Lecturer	Institute of Molecular and Cellular Biosciences, The Univ. of Tokyo	
2013.4-present	Director/Professor	Proteo-Science Center/Graduate School of Medicine, Ehime Univ.	
2014.8-2016.7	Program Officer	Grants-in-Aid for Scientific Research, Ministry of Education, Culture, Sports, Science and Technology, Japan	
2015.4-2021.3	Director	Advanced Research Support Center, Ehime University	
2018.4-2021.3	Associate Director	Ehime University Hospital	
2023.4-present	Vice Director	Proteo-Science Center, Ehime Univ.	

### Committee Services

Year(s) of Membership	Name of Committee	Institution/Organization
2022-present:	Board member, IFMRS	
2022-present:	ECTS Membership Engagement Action Group, East-meets-West Action Group	
2019-present:	Board member, JSBMR	
2017-present:	Chair, Committee of Foreign Affairs, JSBMR	
2016-2020:	Director, United Japanese Researchers Abroad	
2015-present:	Young Investigator Committee, JSBMR	
2014-present:	Big Data Work Group Member, International Federation of Musculoskeletal Research Society (IFMRS)	
2014-2017:	Chair, International Joint Research Committee, JSBMR	
2014-present:	Councilor, Japanese Society of Bone and Mineral Research (JSBMR)	
2009-2013:	Young investigator committee, International Bone and Mineral Society	

### Professional Societies

Year(s) of Membership	Society Name
1999-	The Japanese Orthopaedic Association
2004-	The Japanese Society for Bone and Mineral Research
2005-	The American Society for Bone and Mineral Research

2008-	Japan College of Rheumatology
2010-	The Japan Endocrine Society
2010-	The Molecular Biology Society of Japan
2015-	Japan Muscle Society

### **Editorial Activities**

Associate Editor

2021- *Journal of Bone and Mineral Metabolism*

Section Editor

2022- *Current Osteoporosis Reports*

Editorial Board

2012- *Journal of Bone and Mineral Metabolism*

2013- *Journal of Orthopaedic Science*

2021- *Bone*

2021- *Endocrine Journal*

2022- *Journal of Bone and Mineral Research*

as a Reviewer

*BBA-Molecular Cell Research*

*BBRC*

*Bone*

*Cancer Research*

*Development*

*Endocrinology*

*European Journal of Clinical Investigation*

*Experimental Animals*

*Food and Chemical Toxicology*

*Inflammation Research*

*iScience*

*Journal of Biochemistry*

*Journal of Bone and Mineral Metabolism*

*Journal of Bone and Mineral Research*

*JBMR Plus*

*Journal of Endocrinology*

*Journal of Orthopaedic Science*

*Journal of Steroid Biochemistry and Molecular Biology*

*Molecular and Cellular Endocrinology*

*Nature Medicine*

*Nucleic Acids Research*

*Osteoporosis International*

*PLOS ONE*

*PNAS*

*Scientific Reports*

etc.

### **Honors and Prizes**

Year	Name of Honor/Prize	Awarding Organization
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2022	Ogata Promotion of Science Award	The Japanese Society for Bone and Mineral Research
2020	Distinguished Researcher Award	The Japanese Society for Bone and Mineral Research
2018	East-Meets-West Award	European Calcified Tissue Society
2010	Research Encouragement Award	The Japanese Society for Bone and Mineral Research
2010	Young Investigator Travelling Grant	The American Society for Bone and Mineral Research
2009	Young Investigator Travelling Award	2 <sup>nd</sup> IBMS-ANZBMS
2008	Young Investigator Travelling Grant Award	IBMS Davos Workshop
2008	IBMS-ANZBMS 2009 Travel Award	The Japanese Society for Bone and Mineral Research
2007	Encouragement Award	The Japanese Society for Bone and Mineral Research
2003	Young Investigator Travelling Grant Award	Frontiers for Skeletal Biology

### **Grants**

2023-2024	Bilateral Collaborations	JSPS, Japan
2022-2025	Promotion of Innovation	BRAIN, Japan
2022-2025	Grant-in-Aid for Scientific Research (B)	JSPS, Japan
2022-2023	Academic Research Grant	Chugai Foundation, Japan
2021	Seeds A	AMED, Japan
2020	Seeds A	AMED, Japan
2019-2020	Adaptable and Seamless Technology Transfer Program	JST, Japan
2019-2021	Grant-in-Aid for Scientific Research (B)	JSPS, Japan
2018	Medical Research Grant	Takeda Science Foundation, Japan
2018-2019	Frontier Research Grant	JSBMR, Japan
2017-2018	Grant-in-Aid for Challenging Research	JSPS, Japan
2016	Research Grant	Nakatomi Foundation, Japan
2016	Medical Research Grant	Mitsui Life Social Welfare Foundation, Japan
2016	Research Grant	Japanese Osteoporosis Foundation, Japan
2015-2017	Grant-in-Aid for Scientific Research (B)	JSPS, Japan
2015-2016	Grant-in-Aid for Challenging Research	JSPS, Japan
2014	Research Grant	Naito Science Foundation, Japan
2013	Medical Research Grant	Takeda Science Foundation, Japan
2011-2013	Grant-in-Aid for Early Career Scientist (A)	JSPS, Japan
2011-2012	Grant-in-Aid for Challenging Research	JSPS, Japan
2009-2010	Travelling Fellow Grant	Sankyo Foundation of Life Science, Japan
2009	Travelling Fellow Grant	Kanae Foundation for the Promotion of Medical Science, Japan
2009	Travelling Fellow Grant	Nakatomi Foundation, Japan
2009	Medical Research Grant	The Osaka Medical Research Foundation, Japan
2008	Medical Research Grant	The Osaka Medical Research Foundation, Japan
2007-2008	Grant-in-Aid for Early Career Scientist (B)	JSPS, Japan

### **Invited talks (international)**

1. The 4th Herbert Fleisch Workshop, 2022/11
2. Workshop: “Post-Genome analysis for musculoskeletal biology”, 2022/7

3. International Congress of Osteoporosis 2021, 2021/11
4. ECTS2021 (The European Calcified Tissue Society 2021 annual meeting) 2021/5
5. AOCE-SICEM 2020 (The 17th Asia-Oceania Congress of Endocrinology and the 8th Seoul International Congress of Endocrinology and Metabolism), Symposium, October 28-31, 2020, Virtual meeting.
6. ECTS2020 (The European Calcified Tissue Society 2020 annual meeting), October 22-24, 2020, Working group, Basic Update, Virtual meeting.
7. 29<sup>th</sup> Australian and New Zealand Bone and Mineral Society Annual Scientific Meeting, Plenary speaker, Oct 27-30, 2019, Darwin, Australia.
8. ECTS2019 (The European Calcified Tissue Society 2019 annual meeting), East-Meets-West session symposium, May 11-14, 2019, Budapest, Hungary.
9. Seminar at Semmelweis University, May 9, 2019, Budapest, Hungary.
10. ECTS2018 (The European Calcified Tissue Society 2018 annual meeting), ECTS Academy session symposium, May 26-29, 2018, Valencia, Spain.

### **Contributions for International meetings**

2023 ASBMR2023 annual meeting; Abstract Reviewer  
 2023 ECTS Panel of External Reviewers  
 2022 The 4th Herbert Fleisch Workshop; Steering Committee  
 2022 ASBMR2022 annual meeting; Abstract Reviewer  
 2021 ECTS 2021; Scientific Program Committee  
 2019 EMBO Workshop on Single Cell Biology; Local Organizing Committee  
 2019 ASBMR2019 annual meeting; Abstract Reviewer  
 2019 The 3rd Herbert Fleisch Workshop; Scientific Program Committee  
 2016 The 2nd Herbert Fleisch Workshop; Scientific Program Committee  
 2014 The 1st Herbert Fleisch Workshop; Scientific Program Committee

### **Publication List**

1. Koizumi S, Okada Y, Miura S, Imai Y, Igase K, Ohyagi Y, Igase M.  
 Ingestion of a collagen peptide containing high concentrations of prolyl-hydroxyproline and hydroxyprolyl-glycine reduces advanced glycation end products levels in the skin and subcutaneous blood vessel walls: a randomized, double-blind, placebo-controlled study  
**Biosci Biotechnol Biochem.** 2023 May 27;:zbad065. doi: 10.1093/bbb/zbad065. Online ahead of print.
2. Saeki N, Imai Y.  
 Crosstalk between synovial macrophages and fibroblasts in rheumatoid arthritis  
**Histol Histopathol.** 2023 May 12;:18628. doi: 10.14670/HH-18-628. Online ahead of print.
3. Kato H, Saeki N, Imai M, Onji H, Yano A, Yoshida Y, Sakaue T, Fujioka T, Sugiyama T, Imai Y.  
 LIM1 contributes to the malignant potential of endometrial cancer  
**Front. Oncol.** 2023 Mar 10;:13:1082441. doi: 10.3389/fonc.2023.1082441. eCollection 2023.
4. Saeki N, Imai Y.  
 Isolation and Culture of Primary Synovial Macrophages and Fibroblasts from Murine Arthritis Tissue  
**J Vis Exp.** 2023 Feb 24;:(192): e65196. doi: 10.3791/65196.

5. Yabu A, Suzuki A, Hayashi K, Hori Y, Terai H, Orita K, Habibi H, Salimi H, Kono H, Toyoda H, Maeno T, Takahashi S, Tamai K, Ozaki T, Iwamae M, Ohyama S, Imai Y, Nakamura H. Periostin increased by mechanical stress upregulates interleukin-6 expression in the ligamentum flavum  
**FASEB J.** 2023 Feb;37(2):e22726. doi: 10.1096/fj.202200917RR.
6. Nakata T, Okada M, Nishihara E, Ikedo A, Asoh S, Takagi T, Tokunaga N, Hato N, Imai Y. Effect of hormonal therapy on the otoconial changes caused by estrogen deficiency  
**Sci Rep.** 2022 Dec 30;12:22596. doi: 10.1038/s41598-022-27240-5.
7. Yoshioka H, Komura S, Kuramitsu N, Goto A, Hasegawa T, Amizuka N, Ishimoto T, Ozasa R, Nakano T, Imai Y, Akiyama H. Deletion of Tfam in Prx1-Cre expressing limb mesenchyme results in spontaneous bone fractures  
**J Bone Miner Metab.** 2022 Sep;40(5):839-852. doi: 10.1007/s00774-022-01354-2.
8. Nakamura Y, Saitou M, Komura S, Matsumoto K, Ogawa H, Miyagawa T, Saitou T, Imamura T, Imai Y, Takayanagi H, Akiyama H. Reduced dynamic loads due to hip dislocation induce acetabular cartilage degeneration by IL-6 and MMP3 via the STAT3/periostin/NF- $\kappa$ B axis  
**Sci Rep.** 2022 Jul 16;12(1):12207. doi: 10.1038/s41598-022-16585-6.
9. Satake T, Komura S, Aoki H, Hirakawa A, Imai Y, Akiyama H. Induction of iPSC-derived Prg4-positive cells with characteristics of superficial zone chondrocytes and fibroblast-like synovial cells  
**BMC Mol Cell Biol.** 2022 Jul 23;23(1):30. doi: 10.1186/s12860-022-00431-8.
10. Saeki N, Inoue K, Ideta-Otsuka M, Watamori K, Mizuki S, Takenaka K, Igarashi K, Miura H, Takeda S, Imai Y. Epigenetic regulator UHRF1 orchestrates proinflammatory gene expression in rheumatoid arthritis in a suppressive manner.  
**J Clin Invest.** 2022 Jun 1;132(11):e150533. doi: 10.1172/JCI150533.
11. Sakai H, Sawada Y, Tokunaga N, Tanaka K, Nakagawa S, Sakakibara I, Ono Y, Fukada S, Ohkawa Y, Kikugawa T, Saika T, Imai Y. Uhrf1 governs the proliferation and differentiation of muscle satellite cells  
**iScience.** 2022 Feb 14;25(3):103928. doi: 10.1016/j.isci.2022.103928. eCollection 2022 Mar 18.
12. Haraguchi R, Kitazawa R, Kohara Y, Imai Y, Kitazawa S. Novel animal model of soft tissue tumor due to aberrant hedgehog signaling activation in pericyte lineage  
**Cell Tissue Res.** 2022 Apr;388(1):63-73. doi: 10.1007/s00441-022-03578-0. Epub 2022 Jan 24.
13. Xia Y, Ikedo A, Lee JW, Iimura T, Inoue K, Imai Y. Histone H3K27 demethylase, Utx, regulates osteoblast-to-osteocyte differentiation  
**Biochem Biophys Res Commun.** 2022 Jan 29;590:132-138. doi: 10.1016/j.bbrc.2021.12.102.
14. Kohara Y, Kitazawa R, Haraguchi R, Imai Y, Kitazawa S. Macrophages are requisite for angiogenesis of type H vessels during bone regeneration in mice

- Bone.** 2022 Jan;154:116200. doi: 10.1016/j.bone.2021.116200. Epub 2021 Sep 14.
15. Ikedo A and Imai Y.  
Estrogen receptor  $\alpha$  in mature osteoblasts regulates the late stage of bone regeneration  
**Biochem Biophys Res Commun.** 2021 June 25;559:238-244. doi: 10.1016/j.bbrc.2021.04.112
  16. Sakakibara I, Yanagihara Y, Himori K, Yamada T, Sakai H, Sawada Y, Takahashi H, Saeki N, Hirakawa H, Yokoyama A, Fukada S, Sawasaki T, Imai Y.  
Myofiber androgen receptor increases muscle strength mediated by a skeletal muscle splicing variant of Mylk4  
**iScience.** 2021 Mar 13;24(4):102303. doi: 10.1016/j.isci.2021.102303. eCollection 2021 Apr 23.
  17. Ueyama H, Ohta Y, Imai Y., Suzuki A, Sugama R, Minoda Y, Takaoka K, Nakamura H.  
Topical co-administration of zoledronate with recombinant human bone morphogenetic protein-2 can induce and maintain bone formation in the bone marrow environment.  
**BMC Musculoskelet Disord.** 2021 Jan 20;22(1):94. doi: 10.1186/s12891-021-03971-w.
  18. Iio H, Kikugawa T, Sawada Y, Sakai H, Yoshida S, Yanagihara Y, Ikedo A, Saeki N, Fukada S, Saika T, Imai Y.  
DNA maintenance methylation enzyme Dnmt1 in satellite cells is essential for muscle regeneration  
**Biochem Biophys Res Commun.** 2021 Jan 1;534:79-85. doi: 10.1016/j.bbrc.2020.11.116. Epub 2020 Dec 10.
  19. Saeki N, Imai Y.  
Reprogramming of synovial macrophage metabolism by synovial fibroblasts under inflammatory conditions  
**Cell Commun Signal.** 2020 Nov 30;18(1):188. doi: 10.1186/s12964-020-00678-8.
  20. Kanou M, Nakamura K, Horie K, Sakai H, Yanagihara Y, Sakakibara I, Yamana K, Imai Y.  
Polyamine pathway is associated with muscle anabolic effects by androgen receptor ligand  
**JCSM Rapid Commun.** 2020 Nov 19. doi: 10.1002/rco2.28.
  21. Kiel DP, Kemp JP, Rivadeneira F, Westendorf JJ, Karasik D, Duncan E, Imai Y., Müller R, Flannick J, Bonewald L, Burr N.  
The Musculoskeletal Knowledge Portal: Making Omics Data Useful to the Broader Scientific Community  
**J Bone Miner Res.** 2020 Sep;35(9):1626-1633. doi: 10.1002/jbmr.4147.
  22. Seko D, Fujita R, Kitajima Y, Nakamura K, Imai Y., Ono Y.  
Estrogen receptor  $\beta$  controls muscle growth and regeneration in young female mice  
**Stem Cell Reports.** 2020 Sep 8;15(3):577-586. doi: 10.1016/j.stemcr.2020.07.017. Epub 2020 Aug 20.
  23. Kohara Y, Haraguchi R, Kitazawa R, Imai Y., Kitazawa S.  
Hedgehog inhibitors suppress osteoclastogenesis in ex vivo cultures, and deletion of Smo in macrophage/osteoclast lineage prevents age-related bone loss.  
**Int. J. Mol. Sci.** 2020 Apr 15;21(8):2745. doi: 10.3390/ijms21082745.

24. Sakai H, Sato T, Kanagawa M, Fukada S, Imai Y.  
Androgen receptor in satellite cells is not essential for muscle regeneration.  
**Experimental Results**. 2020 July 29. 1, e21, 1-9. doi:10.1017/exp.2020.14. (Published Online)
25. Nishihara E, Okada M, Kiyoi T, Shudou M, Imai Y, Hato N.  
Evaluation of the structure of the otoconial layer using micro-computed tomography.  
**Auris Nasus Larynx**. 2020 Oct;47(5):734-739. doi: 10.1016/j.anl.2020.02.013. Epub 2020 Mar 13.
26. Sawada Y, Kikugawa T, Iio H, Sakakibara I, Yoshida S, Ikedo A, Yanagihara Y, Saeki N, Györfy B, Kishida T, Okubo Y, Nakamura Y, Miyagi Y, Saika T and Imai Y.  
GPRC5A facilitates cell proliferation through cell cycle regulation and correlates with bone metastasis in prostate cancer.  
**Int J Cancer**. 2020 Mar 1;146(5):1369-1382. doi: 10.1002/ijc.32554. Epub 2019 Jul 22.
27. Ono Y, Miyakoshi N, Kasukawa Y, Imai Y, Nagasawa H, Tsuchie H, Akagawa M, Nagahata I, Yuasa Y, Sato C, Kawatani M, Shimada Y.  
Micro-CT imaging analysis for the effects of ibandronate and eldecalcitol on secondary osteoporosis and arthritis in adjuvant-induced arthritis rats.  
**Biomed Res**. 2019;40(5):197-205. doi: 10.2220/biomedres.40.197.
28. Haraguchi R, Kitazawa R, Kohara Y, Ikedo A, Imai Y, Kitazawa S.  
Recent Insights into Long Bone Development: Central Role of Hedgehog Signaling Pathway in Regulating Growth Plate  
**Int. J. Mol. Sci**. 2019 Nov 20;20(23), 5840; doi: 10.3390/ijms20235840.
29. Uematsu A, Kido K, Takahashi H, Takahashi C, Yanagihara Y, Saeki N, Yoshida S, Maekawa M, Honda M, Kai T, Shimizu K, Higashiyama S, Imai Y, Tokunaga F, Sawasaki T.  
The E3 ubiquitin ligase MIB2 enhances inflammation by degrading the deubiquitinating enzyme CYLD.  
**J Biol Chem**. 2019 Sep 20;294(38):14135-14148. doi: 10.1074/jbc.RA119.010119. Epub 2019 Jul 31.
30. Kojima A, Sakaue T, Okazaki M, Shikata F, Kurata M, Imai Y, Nakaoka H, Masumoto J, Uchita S, Izutani H.  
A simple mouse model of pericardial adhesions.  
**J Cardiothorac Surg**. 2019 Jun 28;14(1):124. doi: 10.1186/s13019-019-0940-9.
31. Hayashi K, Suzuki A, Terai H, Ahmadi SA, Rahmani MS, Hasib MM, Habibi H, Hori Y, Yamada K, Hoshino M, Toyoda H, Takahashi S, Tamai K, Ohyama S, Imai Y, Nakamura H.  
Fibroblast Growth Factor 9 Is Upregulated Upon Intervertebral Mechanical Stress-Induced Ligamentum Flavum Hypertrophy in a Rabbit Model.  
**Spine**. 2019 Oct 15;44(20):E1172-E1180. doi: 10.1097/BRS.0000000000003089.
32. Ikedo A, Kido K, Ato S, Sato K, Lee JW, Fujita S and Imai Y.  
The effects of resistance training on bone mineral density and bone quality in type 2 diabetic rats.  
**Physiol Rep**. 2019 Mar 27; 7(6), e14046. doi:10.14814/phy2.14046
33. Yanagihara Y, Inoue K, Saeki N, Sawada Y, Yoshida S, Lee JW, Imura T and Imai Y.  
Zscan10 suppresses osteoclast differentiation by regulating expression of *Haptoglobin*.

- Bone.** 2019 May;122:93-100. doi: 10.1016/j.bone.2019.02.011. Epub 2019 Feb 13.
34. Yamada T, Nabe S, Toriyama K, Suzuki J, Inoue K, Imai Y, Shiraishi A, Takenaka K, Yasukawa M, Yamashita M.  
Histone H3K27 Demethylase Negatively Controls the Memory Formation of Antigen-Stimulated CD8<sup>+</sup> T Cells  
**J Immunol.** 2019 Feb 15;202(4):1088-1098. doi: 10.4049/jimmunol.1801083. Epub 2019 Jan 9.
35. Ishimaru Y, Oshima Y, Imai Y, Iimura T, Takanezawa S, Hino K, Miura H.  
Raman Spectroscopic Analysis to Detect Reduced Bone Quality after Sciatic Neurectomy in Mice.  
**Molecules.** 2018 Nov 25;23(12). pii: E3081. doi:10.3390/molecules23123081.
36. Suzuki J, Yamada T, Inoue K, Nabe S, Kuwahara M, Takemori N, Takemori A, Matsuda S, Kanoh M, Imai Y, Yasukawa M, Yamashita M.  
The tumor suppressor menin prevents effector CD8 T-cell dysfunction by targeting mTORC1-dependent metabolic activation  
**Nat Commun.** 2018 Aug 17;9:3296. doi:10.1038/s41467-018-05854-6.
37. Haraguchi R, Kitazawa R, Imai Y, Kitazawa S.  
Growth plate-derived hedgehog-signal-responsive cells provide skeletal tissue components in growing bone.  
**Histochem Cell Biol.** 2018 Apr;149(4):365-373. doi: 10.1007/s00418-018-1641-5.
38. Uematsu A, Kido K, Manabe E, Takeda H, Takahashi H, Hayashi M, Imai Y, Sawasaki T.  
DANFIN functions as an inhibitor of transcription factor NF- $\kappa$ B and potentiates the antitumor effect of bortezomib in multiple myeloma.  
**Biochem Biophys Res Commun.** 2018 Jan 15;495(3):2289-2295. doi:10.1016/j.bbrc.2017.12.142
39. Yamashita M, Inoue K, Saeki N, Ideta-Otsuka M, Yanagihara Y, Sawada Y, Sakakibara I, Lee JW, Ichikawa K, Kamei Y, Iimura T, Igarashi K, Takada Y and Imai Y.  
Uhrf1 is indispensable for normal limb growth by regulating chondrocyte differentiation through specific gene expression.  
**Development.** 2018 Jan8;145(1).pii: dev157412. doi 10.1242/dev.157412.
40. Lee JW, Hoshino A, Inoue K, Saitou T, Uehara S, Kobayashi Y, Ueha S, Matsushima K, Yamaguchi A, Imai Y, Iimura T.  
The HIV co-receptor CCR5 regulates osteoclast function.  
**Nat Commun.** 2017 Dec 20;8(1):2226 doi:10.1038/s41467-017-02368-5.
41. Sakamoto Y, Yamamoto T, Sugano N, Takahashi D, Watanabe T, Atsumi T, Nakamura J, Hasegawa Y, Akashi K, Narita I, Miyamoto T, Takeuchi T, Ikari K, Amano K, Fujie A, Kubo T, Tada Y, Kaneuji A, Nakamura H, Miyamura T, Kabada T, Yamaji K, Okawa T, Sudo A, Ohzono K, Tanaka Y, Yasunaga Y, Matsuda S, Imai Y, Akiyama M, Kudo M, Kamatani Y, Iwamoto Y, Ikegawa S.  
Genome-wide Association Study of Idiopathic Osteonecrosis of the Femoral Head.  
**Sci Rep.** 2017 Nov 8;7(1):15035. doi: 10.1038/s41598-017-14778-y.
42. Sakaue T, Sakakibara I, Uesugi T, Fujisaki A, Nakashiro K, Hamakawa H, Kubota E, Joh T, Imai Y, Izutani H, Higashiyama S.



The CUL3-SPOP-DAXX axis is a novel regulator of VEGFR2 expression in vascular endothelial cells.  
**Sci Rep.** 2017 Feb 20;7:42845. doi: 10.1038/srep42845.

43. Mamoto K, Ohta Y, Ichikawa K, Imai Y, Minoda Y, Takaoka K, Nakamura H.  
Co-administration of Systemic Zoledronate Promotes Osteogenesis Induced by a Local Co-delivery of Recombinant Human Bone Morphogenetic Protein-2 and B-tricalcium Phosphate in the Bone Marrow of the Rabbit Femur  
**J Musculoskelet Res.** 2017 Jan 31;19(3):1650015. DOI:// 10.1142/S0218957716500159
44. Ichikawa K, Ohta Y, Mamoto K, Mizokawa S, Minoda Y, Imai Y, Takaoka K, Nakamura H.  
Local co-application of zoledronate promotes long-term maintenance of newly formed bone induced by recombinant human bone morphogenetic protein 2.  
**Biochem Biophys Res Commun.** 2016 Nov 18;480(3):314-320. DOI: 10.1016/j.bbrc.2016.10.034
45. Omata Y, Nakamura S, Koyama T, Yasui T, Hirose J, Izawa N, Matsumoto T, Imai Y, Seo S, Kurokawa M, Tsutsumi S, Kadono Y, Morimoto C, Aburatani H, Miyamoto T, Tanaka S.  
Identification of Nedd9 as a TGF- $\beta$ -Smad2/3 Target Gene Involved in RANKL-Induced Osteoclastogenesis by Comprehensive Analysis.  
**PLoS One.** 2016 Jun 23;11(6):e0157992. doi: 10.1371/journal.pone.0157992. eCollection 2016.
46. Haraguchi R, Kitazawa R, Mori K, Tachibana R, Kiyonari H, Imai Y, Abe T, Kitazawa S.  
sFRP4-dependent Wnt signal modulation is critical for bone remodeling during postnatal development and age-related bone loss.  
**Sci Rep.** 2016 Apr 27;6:25198. doi: 10.1038/srep25198.
47. Ito R, Shimada H, Yazawa K, Sato I, Imai Y, Sugawara A, Yokoyama A.  
Hydroxylation of Methylated DNA by TET1 in Chondrocyte Differentiation of C3H10T1/2 Cells.  
**Biochem Biophys Res Commun.** 2016 March 5:134-140.
48. Inoue K and Imai Y.  
Fatostatin, an SREBP inhibitor, prevented RANKL-induced bone loss by suppression of osteoclast differentiation.  
**BBA-Molecular Basis of Disease.** 2015 Nov;1852(11):2432-41.doi:10.1016/j.bbadis.
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Genome-wide comprehensive analysis reveals critical cooperation between Smad and c-Fos in RANKL-induced osteoclastogenesis.  
**J Bone Miner Res.** 2015 May;30(5):869-77. doi: 10.1002/jbmr.2418.
50. Yano K, Yasuda H, Takaoka K, Takahashi M, Nakamura H, Imai Y, Wakitani S.  
Fate, origin and roles of cells within free bone grafts.  
**J Orthop Sci.** 2015 Mar;20(2):390-6. doi: 10.1007/s00776-014-0673-5.
51. Yu TY, Kondo T, Matsumoto T, Fujii-Kuriyama Y, Imai Y.  
Aryl hydrocarbon receptor catabolic activity in bone metabolism is osteoclast dependent in vivo.  
**Biochem Biophys Res Commun.** 2014 Jul 18;450(1):416-22. doi: 10.1016/j.bbrc.2014.05.114.

52. Shimizu K, Uematsu A, Imai Y, Sawasaki T.  
Pctaire1/Cdk16 promotes skeletal myogenesis by inducing myoblast migration and fusion.  
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Netrin-4 derived from murine vascular endothelial cells inhibits osteoclast differentiation in vitro and prevents bone loss in vivo.  
**FEBS Lett.** 2014 Jun 27;588(14):2262-9. doi: 10.1016/j.febslet.2014.05.009.
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