

	Assoc. Prof. Dr. Somying Patntirapong	
	PRESENT APPOINTMENT :	
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	Research profile	Research Dentistry TU > Scopus > Researcher ID > ORCID
	Research Theme	Thammasat University Research Unit in Dental and Bone Substitute Biomaterials
	Areas of Research Expertise	Bone biology: - Diseases and pharmacology related to bone - Bone substitute materials

Research funding

Proposal	funding	Amount	Year
Effects of long-term culture on human dental pulpstem cell activities	Thammasat University Research Fund	250,000	2023
Enhancing the biodegradable property of synthetic hydroxyapatite by cobalt ion addition and evaluating its effect on bone cells	Dentistry Thammasat University Research Fund	300,000	2023
Effect of alendronate discontinuation on osteoblast activities	Thammasat University Research Fund	250,000	2020
Cobalt addition in synthetic hydroxyapatite and its biological effects on osteoblasts	รทท 66	500,000	2020

Presentation of academic

Title	Presentation	funding	About	Year

PUBLICATIONS

Scopus

1	<p><u>Cobalt-Incorporated Hydroxyapatite Conditioned Media Promotes In Vitro Scratch Wound Healing and Mesenchymal Stem Cell Migration</u></p> <p><u>Leelasangsi, W., Thummachot, K., Thammasarnsophon, P., ... Suwanprateeb, J., Patntirapong, S.</u> <u>Journal of Functional Biomaterials, 16(3), 72, 2025</u></p>
2	<p><u>Enhanced remineralisation ability and antibacterial properties of sol-gel glass ionomer cement modified by fluoride containing strontium-based bioactive glass or strontium-containing fluorapatite</u></p> <p><u>Thongsri, O., Thaitalay, P., Srisuwan, S., ... Gough, J., Rattanachan, S.T.</u> <u>Dental Materials, 40(4), pp. 716–727, 2024</u></p>
3	<p><u>Long-term passage impacts human dental pulp stem cell activities and cell response to drug addition in vitro</u></p> <p><u>Patntirapong, S., Khankhow, J., Julamorn, S.</u> <u>Peerj, 12(8), e17913, 2024</u></p>
4	<p><u>Improvement of osteoblast adhesion, viability, and mineralization by restoring the cell cytoskeleton after bisphosphonate discontinuation in vitro</u></p> <p><u>Patntirapong, S., Champakerdsap, C., Mathaveechotikul, P., Vatanasilp, A.</u> <u>Journal of Applied Oral Science, 32, e20240034, 2024</u></p>

5	<p><u>Cell Shape Description as a Tool for Assessing Cell Change after Drug Treatments</u></p> <p>Patntirapong, S. Science and Technology Asia, 28(3), pp. 231–238, 2023</p>
6	<p><u>Zinc and Strontium-Substituted Bioactive Glass Nanoparticle/Alginate Composites Scaffold for Bone Regeneration</u></p> <p>Naruphontjirakul, P., Panpisut, P., Patntirapong, S. International Journal of Molecular Sciences, 24(7), 6150, 2023</p>
7	<p><u>Prevalence of Medication-Related Osteonecrosis of the Jaw in Osteoporotic Patients Treated with Antiresorptive Drugs at Pranangklae Tertiary Care Hospital in Nonthaburi Province, Thailand</u></p> <p>Settavanit, C., Kettratad-Pruksapong, M., Raksamani, N., Patntirapong, S. Journal of the Medical Association of Thailand, 106(4), pp. 341–348, 2023</p>
8	<p><u>Cobalt Incorporation into Hydroxyapatite by a Simple Ion Exchange Technique and Its Effect on Physical Properties</u></p> <p>Mukkayadachochai, T., Suwanprateeb, J., Patntirapong, S. Journal of International Dental and Medical Research, 16(1), pp. 69–74, 2023</p>
9	<p><u>Assessment of Physical/Mechanical Performance of Dental Resin Sealants Containing Sr-Bioactive Glass Nanoparticles and Calcium Phosphate</u></p> <p>Panpisut, P., Praesuwatsilp, N., Bawornworatham, P., ... Patntirapong, S., Young, A.M. Polymers, 14(24), 5436, 2022</p>
10	<p><u>Duration and timing of bisphosphonate treatment as factors determining osteoblast mineralization</u></p> <p>Patntirapong, S. Journal of Oral Biology and Craniofacial Research, 12(5), pp. 575–579, 2022</p>
11	<p><u>Effects of Silver Diamine Nitrate and Silver Diamine Fluoride on Dentin Remineralization and Cytotoxicity to Dental Pulp Cells: An In Vitro Study</u></p> <p>Srisomboon, S., Kettratad, M., Stray, A., ... Patntirapong, S., Panpisut, P. Journal of Functional Biomaterials, 13(1), 16 2022</p>
12	<p><u>Changes in Cell Size and Dimension Characterized by Crystal Violet Staining and Simple ImageJ Analysis</u></p> <p>Patntirapong, S., Charoensukpatana, P., Thaksinawong, T. Journal of International Dental and Medical Research, 15(1), 2022</p>
13	<p><u>Dose-dependent effects of neem crude extract on human dental pulp cell and murine osteoblast viability and mineralization</u></p> <p>Patntirapong, S., Aupaphong, V., Pipatboonyarit, P., Kritsuttsikun, K., Phubai, T. Brazilian Dental Journal, 33(6), pp. 56–64, 2022</p>
14	<p><u>Monomer conversion, dimensional stability, biaxial flexural strength, ion release, and cytotoxicity of resin-modified glass ionomer cements containing methacrylate-functionalized polyacids and spherical pre-reacted glass fillers</u></p> <p>Potiprapanpong, W., Thepveera, W., Khamsuk, C., ... Monmaturapoj, N., Panpisut, P. Polymers, 13(16), 2742, 2021</p>
15	<p><u>Timing of geranylgeraniol addition increases osteoblast activities under alendronate condition</u></p> <p>Mungpayabarn, H., Patntirapong, S.</p>

	<u>Journal of Oral Biology and Craniofacial Research</u> , 11(3), pp. 396–401, 2021
16	<u>Inhibitory Effects of Alendronate on Adhesion and Viability of Preosteoblast Cells on Titanium Discs</u> <u>Lilakhunakon, C., Suwanpateeb, J., Patntirapong, S.</u> <u>European Journal of Dentistry</u> , 15(3), pp. 502–508, EJD20121280, 2021
17	<u>Geranylgeraniol reverses alendronate-induced MC3T3 cell cytotoxicity and alteration of osteoblast function via cell cytoskeletal maintenance</u> <u>Patntirapong, S., Korjai, N., Matchimapiro, M., Sungkaruk, P., Suthamporn, Y.</u> <u>Journal of Oral Pathology and Medicine</u> , 50(2), pp. 191–199, 2021
18	<u>The inhibitory effect of a novel neem paste against cariogenic bacteria</u> <u>Tasanarong, P., Patntirapong, S., Aupaphong, V.</u> <u>Journal of Clinical and Experimental Dentistry</u> , 13(11), pp. 1083–1088, 2021
19	<u>Assessment of bisphosphonate treated-osteoblast behaviors by conventional assays and a simple digital image analysis</u> <u>Patntirapong, S., Chanruangvanit, C., Lavanrattanakul, K., Satravaha, Y.</u> <u>Acta Histochemica</u> , 123(1), 151659, 2021
20	<u>Post-herpetic osteonecrosis of the jaw in a patient on oral ibandronate therapy: A case report</u> <u>Patntirapong, S., Techanunt, C., Limsuvan, P.</u> <u>Journal of the Medical Association of Thailand</u> , 103(4), pp. 106–110, 2020
21	<u>Analysis of sequential dual immobilization of type I collagen and BMP-2 short peptides on hydrolyzed poly(buthylene succinate)/β-tricalcium phosphate composites for bone tissue engineering</u> <u>Singhatanadgit, W., Sungkhaphan, P., Theerathanagorn, T., Patntirapong, S., Janvikul, W.</u> <u>Journal of Biomaterials Applications</u> , 34(3), pp. 351–364, 2019
22	<u>Inhibition of macrophage viability by bound and free bisphosphonates</u> <u>Patntirapong, S., Phupunporn, P., Vanichtantiphong, D., Thanetchaloempong, W.</u> <u>Acta Histochemica</u> , 121(4), pp. 400–406, 2019
23	<u>Alteration of macrophage viability, differentiation, and function by bisphosphonates</u> <u>Patntirapong, S., Poolgesorn, M.</u> <u>Oral Diseases</u> , 24(7), pp. 1294–1302, 2018
24	<u>Osteoinduction of stem cells by collagen peptide-immobilized hydrolyzed poly(butylene succinate)/β-tricalcium phosphate scaffold for bone tissue engineering</u> <u>Patntirapong, S., Janvikul, W., Theerathanagorn, T., Singhatanadgit, W.</u> <u>Journal of Biomaterials Applications</u> , 31(6), pp. 859–870, 2017
25	<u>Stem cell adhesion and proliferation on hydrolyzed poly(butylene succinate)/β-tricalcium phosphate composites</u> <u>Patntirapong, S., Singhatanadgit, W., Meesap, P., ... Toso, M., Janvikul, W.</u> <u>Journal of Biomedical Materials Research Part A</u> , 103(2), pp. 658–670, 2015
26	<u>Development of poly(butylene succinate)/calcium phosphate composites for bone engineering</u> <u>Ngamviriyavong, P., Patntirapong, S., Janvikul, W., ... Meesap, P., Singhatanadgit, W.</u> <u>Composite Interfaces</u> , 21(5), pp. 431–441, 2014
27	<u>Alendronate-induced atypical bone fracture: Evidence that the drug inhibits osteogenesis</u> <u>Patntirapong, S., Singhatanadgit, W., Arphavasini, S.</u> <u>Journal of Clinical Pharmacy and Therapeutics</u> , 39(4), pp. 349–353, 2014

28	<p><u>Enhanced osteogenic activity of a poly(butylene succinate)/calcium phosphate composite by simple alkaline hydrolysis</u> <u>Arphavasin, S., Singhatanadgit, W., Ngamviriyavong, P., ... Meesap, P., Patntirapong, S.</u> <u>Biomedical Materials Bristol</u>, 8(5), 055008, 2013</p>
29	<p><u>Zoledronic acid suppresses mineralization through direct cytotoxicity and osteoblast differentiation inhibition</u> <u>Patntirapong, S., Singhatanadgit, W., Chanruangvanit, C., Lavanrattanakul, K., Satravaha, Y.</u> <u>Journal of Oral Pathology and Medicine</u>, 41(9), pp. 713–720, 2012</p>
30	<p><u>RANKL-RANK signaling regulates expression of xenotropic and polytropic virus receptor (XPR1) in osteoclasts</u> <u>Sharma, P., Patntirapong, S., Hann, S., Hauschka, P.V.</u> <u>Biochemical and Biophysical Research Communications</u>, 399(2), pp. 129–132 2010</p>
31	<p><u>Effects of soluble cobalt and cobalt incorporated into calcium phosphate layers on osteoclast differentiation and activation</u> <u>Patntirapong, S., Habibovic, P., Hauschka, P.V.</u> <u>Biomaterials</u>, 30(4), pp. 548–555, 2009</p>
32	<p><u>Non-invasive optical detection of cathepsin K-mediated fluorescence reveals osteoclast activity in vitro and in vivo</u> <u>Kozloff, K.M., Quinti, L., Patntirapong, S., ... Weissleder, R., Mahmood, U.</u> <u>Bone</u>, 44(2), pp. 190–198, 2009</p>
33	<p><u>VEGF enhancement of osteoclast survival and bone resorption involves VEGF receptor-2 signaling and β3-integrin</u> <u>Yang, Q., McHugh, K.P., Patntirapong, S., ... Wunderlich, L., Hauschka, P.V.</u> <u>Matrix Biology</u>, 27(7), pp. 589–599, 2008</p>

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1	<p>Prevalence of Medication-Related Osteonecrosis of the Jaw in Osteoporotic Patients Treated with Antiresorptive Drugs at Pranangklaio Tertiary Care Hospital in Nonthaburi Province, Thailand <i>Charn Settavanit, Mattana Kettratad-Pruksapong, Nantawat Raksamani, Somying Patntirapong</i> <u>Journal of the Medical Association of Thailand</u> Volume 106, Issue 04, 2023, pp. 341-348</p>
2	<p>Cell Shape Description as a Tool for Assessing Cell Change after Drug Treatments <i>Somying Patntirapong</i> <u>Science and Technology Asia</u> Volume 28, Issue 3, 2023, pp. 231-238</p>
3	<p>Geranylgeraniol increased mineralization in osteoblasts treated with low concentration of alendronate: a preliminary study <i>Somying Patntirapong, Nareerat Korjai, Monticha Matchimapiro, Paphada Sungkaruk, Yauwaluk Suthamporn</i> <u>Mahidol Dental Journal</u> Volume 40, Issue 2, 2020, pp. 113-120</p>

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