

DAFTAR PUSTAKA

1. Bradley E, Shelton A, Hodge T, Morris D, Bekker H, Fletcher S, et al. Patient-reported experience and outcomes from orthodontic treatment. *J Orthod.* 2020 Jun 1;47(2):108.
2. Rafiuddin S, Kumar Yg P, Biswas S, Prabhu SS, Bm C, Mp R. Iatrogenic Damage to the Periodontium Caused by Orthodontic Treatment Procedures: An Overview. *Open Dent J.* 2015;9(1):228.
3. Alhasyimi AA, Suparwitri S, Christnawati C. Effect of Carbonate Apatite Hydrogel-Advanced Platelet-Rich Fibrin Injection on Osteoblastogenesis during Orthodontic Relapse in Rabbits. *Eur J Dent.* 2021 Jul 1;15(3):412–3.
4. Prameswari N, Mulawarmanti D. Bone-immune interaction in osteogenesis relapse orthodontic after Nanopowder Stichopus hermanii application. *Journal of International Dental and Medical Research [Internet].* 2018;11(1):323, 327. Available from: <http://www.jidmr.com>
5. Prameswari N, Brahmanta A, Revianti S. The effect of stichopus hermanii to TLR-4 in mediating periodontal ligament remodeling during orthodontic relapse. *Systematic Reviews in Pharmacy.* 2020;11(3):667–8, 671.
6. Littlewood SJ, Kandasamy S, Huang G. Retention and relapse in clinical practice. *Aust Dent J.* 2017 Mar 1;62(1):51–2, 55.
7. Alhasyimi AA, Rosyida NF, Rihadini MS. Postorthodontic Relapse Prevention by Administration of Grape Seed (*Vitis vinifera*) Extract Containing Cyanidine in Rats. *Eur J Dent.* 2019;13(4):629.

8. Prameswari N, Pudji Rahayu R. Osteogenesis at Tension Site by *Stichopus hermanii* Application as Relapse Orthodontic Prevention. *Int J Chemtech Res.* 2016;9(6):690–2.
9. Adam M, Thahir H, Achmad H, Wahyu Putri S, Eka Satya D. The Potential of Golden Sea Cucumber (*Stichopus hermanii*) in the Regeneration of Periodontal Tissues: a Literature Review. *Annals of RSCB* [Internet]. 2021;25(6):4413, 4416. Available from: <http://annalsofrscb.ro>
10. Arundina I, Soesilawati P, Damaiyanti DW, Maharani D. The effects of golden sea cucumber extract (*Stichopus hermanii*) on the number of lymphocytes during the healing process of traumatic ulcer on wistar rat's oral mucous. *Dental Journal (Majalah Kedokteran Gigi)* [Internet]. 2015;48(2):100–3. Available from: <http://e-journal.unair.ac.id/index.php/MKG>
11. Pringgenies D, Rudiyanti S, Yudiat E. Exploration of Sea Cucumbers *Stichopus hermanii* from Karimunjawa Islands as Production of Marine Biological Resources. *IOP Conf Ser Earth Environ Sci.* 2018 Mar 8;116(1):1–2.
12. Prameswari N, Brahmanta A. The role of active ingredients nanopowder *Stichopus hermanii* gel to bone resorption in tension area of orthodontic tooth movement. *Dental Journal (Majalah Kedokteran Gigi)*. 2017 Dec 30;50(4):188–9.
13. Windari HAS, Tarman K, Safithri M, Setyaningsih I. Antioxidant activity of spirulina platensis and sea cucumber *Stichopus hermanii* in streptozotocin-induced diabetic rats. *Trop Life Sci Res.* 2019;30(2):120.
14. Sari RP, Revianti S. The activity of *Stichopus hermanii* extract on triglyceride serum level in periodontitis. *Dent J.* 2011;44(2):107.

15. Maleki SJ, Crespo JF, Cabanillas B. Anti-inflammatory effects of flavonoids. Vol. 299, Food Chemistry. Elsevier Ltd; 2019. p. 2–3.
16. Kalantar M. The Importance of Flavonoids in Ruminant Nutrition. Archives of Animal Husbandry & Dairy Science. 2018 Nov 26;1(1):1.
17. Yamada S, Sugahara K, Özbek S. Evolution of glycosaminoglycans: Comparative biochemical study. Vol. 4, Communicative and Integrative Biology. 2011. p. 150.
18. Sulistyowati W, Titiek IA, Arbai A, Yatmasari E. Glucosamine and Chondroitin Sulphate Content of Shark Cartilage (*Prionace glauca*) and its Potential as Anti-Aging Supplements. Int J Chemtech Res. 2015;8(10):166.
19. Mikami T, Kitagawa H. Biosynthesis and function of chondroitin sulfate. Vol. 1830, Biochimica et Biophysica Acta - General Subjects. 2013. p. 4719.
20. Meneghetti MCZ, Hughes AJ, Rudd TR, Nader HB, Powell AK, Yates EA, et al. Heparan sulfate and heparin interactions with proteins. Vol. 12, Journal of the Royal Society Interface. Royal Society of London; 2015. p. 56.
21. Stewart MD, Sanderson RD. Heparan sulfate in the nucleus and its control of cellular functions. Vol. 35, Matrix Biology. Elsevier; 2014. p. 56.
22. Janakiram NB, Mohammed A, Rao C v. Sea cucumbers metabolites as potent anti-cancer agents. Vol. 13, Marine Drugs. MDPI AG; 2015. p. 2909.
23. Arundina I, Suardita K, Setiabudi H, Ariani MD. Golden sea cucumbers (*stichopus hermanii*) as growth factors of stem cells. Journal of International Dental and Medical Research [Internet]. 2016;9(3):246–7. Available from: <http://www.ektodermaldisplazi.com/journal.htm>

24. Revianti S, Parisihni K. Potency of *Stichopus hermanii* extract as oral candidiasis treatment on epithelial rat tongue. *Dental Journal (Majalah Kedokteran Gigi)*. 2016 Dec 5;49(1):11–5.
25. Sari RP, Kurniawan H. Effectiveness of *Anadara granosa* shell-*Stichopus hermanni* granules at accelerating woven bone formation fourteen days after tooth extraction. *Dental Journal (Majalah Kedokteran Gigi)*. 2019 Dec 31;52(4):181.
26. Li Y, Jacox LA, Little SH, Ko CC. Orthodontic tooth movement: The biology and clinical implications. Vol. 34, *Kaohsiung Journal of Medical Sciences*. Elsevier (Singapore) Pte Ltd; 2018. p. 209.
27. Li Y, Zhan Q, Bao M, Yi J, Li Y. Biomechanical and biological responses of periodontium in orthodontic tooth movement: up-date in a new decade. Vol. 13, *International Journal of Oral Science*. Springer Nature; 2021. p. 2–3.
28. Rajendran M, Usha R, Selvam A. Transseptal fibers-crosslinking convolutes: A review. *International Journal of Contemporary Dental and Medical Reviews*. 2015;23(1):1–2.
29. de Jong T, Bakker AD, Everts V, Smit TH. The intricate anatomy of the periodontal ligament and its development: Lessons for periodontal regeneration. Vol. 52, *Journal of Periodontal Research*. Blackwell Munksgaard; 2017. p. 966.
30. Srivastava KR, Tandon R, Singh K, Chandra P, Rohmetra A. Retention and relapse: An anamnesis. *Indian Journal of Orthodontics and Dentofacial Research*. 2020 Dec 28;4(1):16–20.
31. Dyer KC, Vaden JL, Harris EF. Relapse revisited - Again. *American Journal of Orthodontics and Dentofacial Orthopedics*. 2012 Aug;142(2):221.

32. Alhasyimi AA, Pudyani PP, Asmara W, Ana ID. Enhancement of post-orthodontic tooth stability by carbonated hydroxyapatite-incorporated advanced platelet-rich fibrin in rabbits. *Orthod Craniofac Res.* 2018 May 1;21(2):112.
33. Gomez M, Herrera LE, Suarez A, Sanchez G. Post-orthodontic retention effectiveness of two types of fixed retainers in patients aged between 12 and 35: a systematic literature review. *Odontoestomatologia.* 2017;19(29):2.
34. Sutjiati R, Rubianto, Narmada IB, Sudiana IK, Rahayu RP. The Inhibition of Relapse of Orthodontic Tooth Movement by NaF Administration in Expressions of TGF- β 1, Runx2, Alkaline Phosphatase and Microscopic Appearance of Woven Bone. *International Scholarly and Scientific Research & Innovation.* 2017;11(10):567.
35. Qi J, Kitaura H, Shen WR, Kishikawa A, Ogawa S, Ohori F, et al. Establishment of an orthodontic retention mouse model and the effect of anti-c-Fms antibody on orthodontic relapse. *PLoS One.* 2019 Jun 1;14(6):1–2.
36. Jiang N, Guo W, Chen M, Zheng Y, Zhou J, Kim SG, et al. Periodontal Ligament and Alveolar Bone in Health and Adaptation: Tooth Movement. *Front Oral Biol.* 2015;18:1.
37. Jiang C, Li Z, Quan H, Xiao L, Zhao J, Jiang C, et al. Osteoimmunology in orthodontic tooth movement. Vol. 21, *Oral Diseases.* Blackwell Publishing Ltd; 2015. p. 694.
38. Feng L, Yang R, Liu D, Wang X, Song Y, Cao H, et al. PDL Progenitor-Mediated PDL Recovery Contributes to Orthodontic Relapse. *J Dent Res.* 2016 Aug 1;95(9):1049.
39. Lau F, Kuziemsky C. *Handbook of eHealth Evaluation: An Evidence-based Approach.* 2016. 504 p.

40. Prameswari N, Handayani B. Stichopus hermanii stimulation to Runx2 expression as Periodontal Remodeling Biomarkers to accelerate Orthodontic Tooth Movement. IOP Conf Ser Earth Environ Sci. 2019 Jan 9;217(1):2–4.
41. Aziza LS, Parisihni K, Mulawarmanti D. The Effect of Golden Sea cucumber (*Stichopus hermanii*) and Hyperbaric Oxygen Therapy to The Expression of Osteoprotegerin in Diabetes Mellitus Induce by *Porphyromonas gingivalis* Bacteria. Denta J Ked Gigi. 2016;10(2):167–72.
42. Adam M, Achmad H, Nasir M, Putri W, Azizah A, Satya DE. Osteoblast and Osteocalcin in the Bone Regeneration Stimulation of Osteoblast and Osteocalcin in the Bone Regeneration By Giving Bonegraft Golden Sea Cucumber. Journal of International Dental and Medical Research [Internet]. 2022;15(1):142–5. Available from: <http://www.jidmr.com>
43. Prameswari N, Brahmanta. Integrin $\alpha 2\beta 1$ and bmp-2 regulated in bone remodelling to accelerate orthodontic tooth movement by giving stichopus hermanii. Dentisphere [Internet]. 2016;173–7. Available from: www.hangtuah.ac.id
44. Prananingrum W, Sari RP, Teguh PB, Revianti S, Nurlaily HR, Laihad FM. The effects of blood cockle's shell and golden sea cucumber on osteoblast-osteoclast in vivo. IADR-SEA. 2017;
45. Prameswari N, Brahmanta A, Sucahyo B. SMAD 3, Integrin and VEGF Expression in a Periodontal Ligament During Orthodontic Tooth Movement Induced by Hyperbaric Oxygen Therapy and *Stichopus hermanii*. Clin Cosmet Investig Dent. 2022;14:142–9.



SURAT PENUGASAN
No. 2852/UN4.13/TD.06/2021

Dari : Dekan Fakultas Kedokteran Gigi Universitas Hasanuddin

Kepada : **Prof. Mansjur Nasir, drg., Ph.D**

Isi : 1. Menugaskan kepada Saudara sebagai Dosen Pembimbing Skripsi mahasiswa pada Program Studi Pendidikan Kedokteran Gigi Fakultas Kedokteran Gigi Universitas Hasanuddin, yakni:

Angkatan 2019:

- Maudy Anggi Arizki (J011191058)
 - Fiona Veronica Sangian (J011191060)
 - Rahma Sania Syahrir (J011191036)
2. Bawa Saudara yang namanya tersebut pada surat penugasan ini dipandang cakap dan memenuhi syarat untuk melaksanakan tugas tersebut.
3. Agar penugasan ini dilaksanakan dengan sebaik-baiknya dengan penuh rasa tanggung jawab.
4. Surat penugasan ini berlaku sejak tanggal ditetapkan, dengan ketentuan bahwa apabila dikemudian hari terdapat kekeliruan dalam surat penugasan ini, akan diadakan perbaikan sebagaimana mestinya



Tembusan Yth:

1. Wakil Dekan Bidang Akademik, Riset dan Inovasi FKG Unhas;
2. Kepala Bagian Tata Usaha FKG Unhas.



KARTU KONTROL SKRIPSI

Nama : Fiona Veronica Sangian
Stambuk : J011191060
Dosen Pembimbing : Prof. drg. Mansjur Nasir, Ph.D
Judul : Peran Teripang Emas (*Stichopus hermanii*) Dalam Mencegah Relaps Ortodonti

No.	Hari/ Tanggal	Materi Konsultasi	Paraf	
			Pembimbing	Mahasiswa
1.	13 September 2021	Penyerahan Surat Penugasan	<i>Ale</i>	<i>f</i>
2.	13 September 2021	Menghubungi Dosen Pembimbing	<i>Ale</i>	<i>f</i>
3.	26 September 2021	Mengajukan Judul	<i>Ale</i>	<i>f</i>
4.	10 November 2021	ACC Judul	<i>Ale</i>	<i>f</i>
5.	11 Maret 2022	Menghubungi pembimbing mengajukan BAB I-IV	<i>Ale</i>	<i>f</i>
6.	11 Mei 2022	Menghubungi pembimbing mengajukan revisi BAB I-IV	<i>Ale</i>	<i>f</i>
7.	27 April 2022	ACC PPT	<i>Ale</i>	<i>f</i>
7.	24 Mei 2022	ACC revisi BAB I-IV	<i>Ale</i>	<i>f</i>
8.	8 Juni 2022	Seminar Proposal	<i>Ale</i>	<i>f</i>
9.	25 Oktober 2022	Menghubungi pembimbing mengajukan BAB V-VII	<i>Ale</i>	<i>f</i>



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10.	1 November 2022	ACC PPT	<i>Ale</i>	<i>#</i>
11.	15 November 2022	ACC BAB V-VII	<i>Ale</i>	<i>#</i>
12.	21 November 2022	Seminar Hasil	<i>Ale</i>	<i>#</i>
13.	23 November 2022	Pengajuan revisi akhir	<i>Ale</i>	<i>#</i>
14.	25 November 2022	Pengesahan dan tanda tangan	<i>Ale</i>	<i>#</i>

Makassar, 25 November 2022

Pembimbing

Prof. drg. Mansjur Nasir, Ph.D



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Nomor : 093/UN4.13.7 /DA.04.09/2022 Makassar, 6 Juni 2022
Lampiran : -
Hal : Undangan Penguji Seminar Proposal Skripsi

Kepada Yth.

drg. Baharuddin M Ranggang, Sp.Ort(K).

drg. Zilal Islamy Paramma, Sp.Ort.

Di –

Tempat

Dengan Hormat,

Bersama ini kami mengundang Bapak/ Ibu Dosen Penguji Seminar Proposal Skripsi Departemen Ortodonti, untuk menghadiri Seminar Proposal Skripsi (secara daring) mahasiswa atas nama sebagai berikut:

Nama	: Fiona Veronica Sangian
NIM	: J011191060
Judul	: Peran Kandungan dalam Stichopus Hermani untuk Mencegah Relaps Ortodonti.
Dosen Pembimbing	: Prof. drg. Mansjur Nasir, Ph.D.
Penguji I	: drg. Zilal Islamy Paramma, Sp.Ort.
Penguji II	: drg. Baharuddin M Ranggang, Sp.Ort(K).

Yang akan dilaksanakan pada :

Hari/ tanggal	: Rabu, 8 juni 2022
Waktu	: 17.00 WITA - Selesai
Tempat	: Via Daring (Zoom)

Atas kehadiran Bapak/ Ibu Dosen Penguji, kami mengucapkan terima kasih.



Mengetahui,
Ketua Departemen Ortodonti,

Dr. Eka Erwansyah, drg., M.Kes., Sp.Ort (K).
NIP. 19701228 200012 1 002

Catatan :

Meeting ID dan password akan diinformasikan
kemudian Pedoman Penilaian ujian skripsi
(terlampir)



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Nomor : 246/UN4.13.7 /DA.04.09/2022 Makassar, 21 November 2022
Lampiran : -
Hal : Undangan Penguji Seminar Hasil Skripsi

Kepada Yth.

drg. Baharuddin M Ranggang, Sp.Ort(K).

drg. Zilal Islamy Paramma, Sp.Ort.

Di –

Tempat

Dengan Hormat,

Bersama ini kami mengundang Bapak/ Ibu Dosen Penguji Seminar Hasil Skripsi Departemen Ortodonti, untuk menghadiri Seminar Hasil Skripsi (secara daring) mahasiswa atas nama sebagai berikut:

Nama	:	Fiona Veronica Sangian
NIM	:	J011191060
Judul	:	Peran Teripang Emas (Stichopus hermanii) dalam Mencegah Relaps Ortodonti.
Dosen Pembimbing	:	Prof. drg. Mansjur Nasir, Ph.D.
Penguji I	:	drg. Zilal Islamy Paramma, Sp.Ort.
Penguji II	:	drg. Baharuddin M Ranggang, Sp.Ort(K).

Yang akan dilaksanakan pada :

Hari/ tanggal	:	Senin, 21 November 2022
Waktu	:	13.00 WITA - Selesai
Tempat	:	Via Daring (Zoom)

Atas kehadiran Bapak/ Ibu Dosen Penguji, kami mengucapkan terima kasih.



Catatan :

Meeting ID dan password akan diinformasikan
kemudian Pedoman Penilaian ujian skripsi
(terlampir)

SEMINAR PROPOSAL

The slide has a red header section containing the university logo and text: DEPARTEMEN ORTODONTI, FAKULTAS KEDOKTERAN GIGI, UNIVERSITAS HASANUDDIN. Below this is the title: SYSTEMATIC REVIEW: PERAN KANDUNGAN DALAM STICHOPUS HERMANII UNTUK MENCEGAH RELAPS ORTODONTI. A video player window on the right shows a woman's face, identified as Fiona Veronica Sangian.

DATA PENulis:

Nama	: Fiona Veronica Sangian
NIM	: J011191060
Pembimbing	: Prof. drg. Mansjur Natsir, Ph. D
Penguji	: 1. drg. Baharuddin M Ranggang, Sp.Ort(K) 2. drg. Zilal Islamy Paramma, Sp.Ort

SEMINAR HASIL

The slide has a pink circular graphic in the center. The text reads: PERAN TERIPANG EMAS (STICHOPUS HERMANII) UNTUK MENCEGAH RELAPS ORTODONTI: SYSTEMATIC REVIEW. To the left is an image of a sea cucumber. To the right is a video call interface showing three participants: Fiona Veronica Sangian, Mansjur Nasir, and Baharuddin Sp.... The video call controls at the bottom include Unmute, Stop Video, Participants (10), Chat, Share Screen, Record, Reactions, Apps, and Leave.

DATA PENulis:

Nama : Fiona Veronica Sangian
NIM: J011191060
Pembimbing: Prof. drg. Mansjur Natsir, Ph. D
Penguji: 1. drg. Zilal Islamy Paramma, Sp.Ort
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