



Napamane Kornthong

Curriculum vitae

E-mail address napamaneenatt@gmail.com
napamaneekornthong@gmail.com
napanatt@tu.ac.th

Tel +66 2-5644440 ext.4434

Citizenship Thai

Position Associate professor (Anatomy), Chalabhorn International College of Medicine, Thammasat University

Education

2002- 2005 B.Sc. (Nursing science, 2nd Honors), Ramathibodi school of nursing, Faculty of medicine Ramathibodi hospital, Mahidol University, Thailand

2007-2013 Ph.D. (Anatomy and Structural biology), Anatomy department, Faculty of science, Mahidol University, Thailand

Job experiences

2005-2007 Register nurse, Emergency unit, Ramathibodi hospital

Training experiences

2011-2012 Molecular biology laboratory training at genecology laboratory, University of the sunshine coast, Queensland, Australia

Teaching experiences

2013-2014 Gross anatomy, Histology and Neuroanatomy for second year medical students, Faculty of sciences, Mahidol university, and Faculty of medicine, Thammasat university, Thailand

2014-Now Gross anatomy, Histology, Development and Neuroanatomy for second year medical students, Chulabhorn International College of Medicine

Research interests

Cell structure and biological functions, molecular biology and hormonal manipulation in reproduction and diseases, Transcriptomic approach on putative proteins in echinoderm and its effect on the degenerative diseases

Research experiences

1. Anatomical organization of the central nervous system and gonad in crustaceans
2. Hormonal distribution in the central nervous system and gonad in crustaceans
3. Molecular cloning, characterization, and expression of reproductive genes
4. Transcriptomic gene analysis in the crustaceans and echinoderms
5. Application of biotechnology in the aquatic animals
5. Effect of sea cucumber on osteoblast cell proliferation and differentiation

Research skills

RT-PCR, Real time PCR, Cloning, Gene expression, Histology, Immunohistochemistry, Cell culture, *In-situ* hybridization, Blast2go program and CLC workbench

Publications

International Journals

1. Saetan J, Duangprom S, Songkoomkrong S, Amonruttanapun P, Phanaksri T, Surinlert P, Samhuay C, Tamtin M, Suwansa-ard S., Cummins S. F, Sobhon P, **Kornthong N.** (2023) Potent Ovarian Development as Being Stimulated by Cocktail Hormone in the Female *Scylla olivacea*. *Front. Mar. Sci.* (Accepted manuscript)
2. Nonkhwao S, Rungsa P, Buraphaka H, Klaynongsruang S, Daduang J, **Kornthong N,** Daduang S. (2023) Characterization and Localization of Sol g 2.1 Protein from *Solenopsis geminata* Fire Ant Venom in the Central Nervous System of Injected Crickets (*Acheta domestica*). *Int. J. Mol. Sci.* 24, 14814. <https://doi.org/10.3390/ijms241914814>
3. Kruangkum T, Duangprom S, Songkoomkrong S, Chotwiwatthanakun C, Vanichviriyakit R, Sobhon P and **Kornthong N.** (2022) Discovery of a hidden form of neuropeptide F and its presence throughout the CNS–gut axis in the mud crab, *Scylla olivacea*. *Front. Mar. Sci.* 9:951648. doi: 10.3389/fmars.2022.951648
4. Duangprom S, Saetan J, Phanaksri T, Songkoomkrong S, Surinlert P, Tamtin M, Sobhon P, **Kornthong N.** 2022 Acceleration of ovarian maturation in the female mud crab with RNA interference of the vitellogenesis-inhibiting hormone (VIH). *Front. Mar. Sci.* 9:880235. doi: 10.3389/fmars.2022.880235
5. **Kornthong N,** Phanaksri T, Saetan J, Duangprom S, Lekskul B, Vivattanasarn T, Songkoomkrong S, Jattujan P, Cummins S. F., Sobhon P, Suwansa-ard S. 2021. Identification and localization of growth factor genes in the sea cucumber, *Holothuria scabra*. *Heliyon* 7: e08370
6. Saetan J, **Kornthong N,** Duangprom S, Phanthong P., Kruangkum T, Sobhon P. The oxytocin/vasopressin-like peptide receptor mRNA in the central nervous system and ovary of the blue swimming crab, *Portunus pelagicus*. *Comp. Biochem. Phys. A* 2021, 110983
7. Thongbuakaew T, Sumpownon C, Engsusophon A, **Kornthong N,** Chotwiwatthanakun C, Meeratana P, Sobhon P. Characterization of prostanoid pathway and the control of its activity by the eyestalk optic ganglion in the female giant freshwater prawn, *Macrobrachium rosenbergii*. *Heliyon* 2021, e05898
8. **Kornthong N.,** Saengsuwan J., Duangprom S., Songkoomkrong S., Vivattanasarn T., Suwansa-ard S., Manochantr S., Sobhon P. (2020) The effect of sea cucumber extract (*Holothuria scabra*) on the proliferation of human placenta derived mesenchymal stromal cells. *Journal of the Medical association of Thailand.* 103, 3., Q3
9. Sukprasert S., Deenonpoe R., Yimsoo T., Yingmema W., Prasopdee S., Krajang A., **Kornthong N.,** Pattaraarchachai J., Daduang S. (2020) Antidote activity

- and protective effects of *Lysiphyllum strychnifolium* (Craib) A. Schmitz extract against organophosphate pesticide in omethoate-treated rats. *Journal of Traditional and Complementary Medicine*, (Article In Press), Q1
10. Nakeima J., **Kornthong N.**, Saetan J., Duangprom S., Sobhona P., Sretarugsaa P. (2020), Presence of serotonin and its receptor in the central nervous system and ovary and molecular cloning of the novel crab serotonin receptor of the blue swimming crab, *Portunus pelagicus.*, *Acta Histochemica.*, 122: 151457, **Corresponding author.** IF: 1.719, Q2
 11. **Kornthong N.**, Duangprom S., Suwansa-ard S., Saetan J., Phanaksri T., Songkoomkrong S., Kheowkae S., Pollawat J. and Sobhon P. (2019), Molecular characterization of a vitellogenesis-inhibiting hormone (VIH) in the mud crab (*Scylla olivacea*) and temporal changes in abundances of VIH mRNA transcripts during ovarian maturation and following neurotransmitter administration, *Animal Reproduction Science* 208:106122 **Corresponding author.** IF: 1.81, Q1
 12. Khornchatri K., Saeton J, Thongbuakaew T., Senarai T., Kruangkum T., **Kornthong N.**, Tinikul Y., Sobhon P. (2018) Distribution of abalone egg-laying hormone-like peptide in the central nervous system and reproductive tract of male mud crab, *Scylla olivacea*. *Acta Histochemica.* 121: 143-150
 13. Duangprom S., Ampansri W., Suwansa-ard S., Chotwiwatthanakhun C., Sobhon P., **Kornthong N.** (2018) Identification and expression of prostaglandin E synthase (PGES) gene in the central nervous system and ovary during ovarian maturation of the female mud crab, *Scylla olivacea*. *Animal Reproduction Science* 198: 220-232 **Corresponding author.**
 14. Duangprom S., **Kornthong N.**, Suwansa-ard S., Srikawnawan W., Chotwiwatthanakhun C., Sobhon P. (2017) Distribution of crustacean hyperglycemic hormones (CHH) in the mud crab (*Scylla olivacea*) and their differential expression following serotonin stimulation. *Aquaculture* 468: 481–488 (Impact factor 2.345) **Corresponding author.**
 15. Suwansa-ard S., Kankuan W., Thongbuakaew T., Saetan J., **Kornthong N.**, Kruangkum T., Khornchatri K., Cummins S.F., Isidoro C. and Sobhon P. (2016) Transcriptomic analysis of the autophagy machinery in crustaceans. *BMC genomics* 17:587 (Impact factor 4.34)
 16. Khornchatri K., **Kornthong N.**, Saeton J., Tinikul Y., Chotwiwatthanakun C., Cummins S.F., Hanna P.J., Sobhon P. (2015) Distribution of serotonin and dopamine in the central nervous system of the female mud crab, *Scylla olivacea* (Herbst). *Acta Histochemica* 117: 196-204 (Impact factor 1.760)
 17. **Kornthong N.**, Cummins S.F., Chotwiwatthanakun C., Khornchatri K., Engsusophon A., Sobhon P. (2014) Identification of genes associated with reproduction in the mud crab (*Scylla olivacea*) and their differential expression following Serotonin stimulation. *Plos One*, 9:e115867 (Impact factor 3.534)

18. **Kornthong N**, Tinikul Y, Khornchatri K, Saeton J, Magerd S, Suwansa_Ard S, Kruankum T, Hanna P, Sobhon P. (2014) Neuronal classification and distribution in the central nervous system of the female mud crab, *Scylla olivacea*. *Microscopic Research Technique* 77: 189-200. (Impact factor 1.17)
19. **Kornthong N**, Chotwiwatthanakun C, Chansela P, Tinikul Y, Cummins SF, Hanna PJ, Sobhon P. (2013) Characterization of red pigment concentrating hormone (RPCH) in the female mud crab (*Scylla olivacea*) and the effect of 5-HT on its expression. *General and Comparative Endocrinology*. 185. (Impact factor 2.674)
20. Chansela P, Goto-Inoue N, Zaima N, Hayasaka T, Sroyraya M, **Kornthong N**, Engsusophon A, Tamtin M, Chaisri C, Sobhon P, Setou M. (2012) Composition and localization of lipids in *Penaeus merguensis* ovaries during the ovarian maturation cycle as revealed by imaging mass spectrometry. *PLoS One*. 7:e33154. (Impact factor 3.534)
21. Tinikul Y, Poljaroen J, **Kornthong N**, Chotwiwatthanakun C, Anuracpreeda P, Poomtong T, Hanna PJ, Sobhon P. (2011) Distribution and changes of serotonin and dopamine levels in the central nervous system and ovary of the Pacific white shrimp, *Litopenaeus vannamei*, during ovarian maturation cycle. *Cell and Tissue Research*. 345:103-24. (Impact factor 3.333)
22. Tinikul Y, Poljaroen J, Nurai P, Anuracpreeda P, Chotwiwatthanakun C, Phoungpetchara I, **Kornthong N**, Poomtong T, Hanna PJ, Sobhon P. (2011) Existence and distribution of gonadotropin-releasing hormone-like peptides in the central nervous system and ovary of the Pacific white shrimp, *Litopenaeus vannamei*. *Cell and Tissue Research* 343: 579-593 (Impact factor 3.333)
23. Sroyraya M, Chotwiwatthanakun C, Stewart MJ, Soonklang N, **Kornthong N**, Phoungpetchara I, Hanna PJ, Sobhon P. (2010) Bilateral eyestalk ablation of the blue swimmer crab, *Portunus pelagicus*, produces hypertrophy of the androgenic gland and an increase of cells producing insulin-like androgenic gland hormone. *Tissue and Cell* 42: 293-300 (Impact factor 1.049)

Conferences

1. **Napamanee Kornthong**, Yotsawan Tinikul, Charoonroj Chotwiwatthanakun, Prasert Sobhon. Distribution of serotonin (5-HT) in the Central Nervous System and Ovary during Ovarian Maturation in the Mud crab, *Scylla serrata*. The 32nd Annual Meeting of the Anatomy Association (Thailand), 29-30 April – 1 May, 2009, Rayong, Thailand. (Poster presentation)
2. **Napamanee Kornthong**, Yotsawan Tinikul, Charoonroj Chotwiwatthanakun, Piyachat Chansela, Prasert Sobhon. Distribution of serotonin (5-HT) in the Central Nervous System and Ovary during Ovarian Maturation in the Mud crab, *Scylla serrata*. The CHE-USDC Congress II, August, 27-29, 2009, Pattaya, Thailand. (Poster presentation)

3. **Napamane Kornthong**, Yotsawan Tinikul, Charoonroj Chotwiwatthanakun, Piyachat Chansela, Peter J. Hanna, Prasert Sobhon. Distribution of serotonin (5-HT) in the Central Nervous System and Ovary during Ovarian Maturation in the Mud crab, *Scylla serrata*. The 32nd Annual Meeting of the Anatomy Association (Thailand), April, 28-30, 2010, Nakorn Rachasima, Thailand. (Poster presentation)
4. **Napamane Kornthong**, Charoonroj Chotwiwatthanakun, Scott Cummins, Peter J. Hanna, Prasert Sobhon. Cloning, Characterization and phylogenetic analysis of the red-pigment concentrating hormone (RPCH) gene in the Mud crab (*Scylla olivacea*), and its relationship to GnRH-AKH-Crz superfamily. The Annual Symposium: Hormonal controls of the crustacean reproduction, and possible applications in aquaculture, September 29, 2010, Bangkok, Thailand. (Oral presentation)
5. **Napamane Kornthong**, Charoonroj Chotwiwatthanakun, Scott Cummins, Piyachat Chansela, Peter J. Hanna, Prasert Sobhon. Cloning, expression, and characterization of red pigment concentrating hormone (RPCH) in female mud crab (*Scylla olivacea*). The Annual Symposium: Hormonal controls of the crustacean reproduction, and possible applications in aquaculture, September 2, 2011, Bangkok, Thailand. (Oral presentation)
6. **Napamane Kornthong**. PhD overview: A molecular study into how serotonin-induced changes influence reproduction of the mud crab, *Scylla olivacea*. The minisymposium: Towards enhancing aquaculture of crustaceans and fish: Molecular mechanisms of reproduction. February 27, 2012, University of the sunshine coast, Queensland, Australia. (Oral presentation)
7. **Napamane Kornthong**, Charoonroj Chotwiwatthanakun, Scott F. Cummins, Piyachat Chansela, Narin Changklungmoa, Kanchana Kornchatri, Thanapong Khruangkum, Yotsawan Tinikul, Peter J. Hanna, Prasert Sobhon. Characterization and expression of red pigment concentrating hormone (RPCH) in the female mud crab (*Scylla olivacea*) and the effect of 5-HT on its expression. 2nd IASCBC & 36th AAT Annual Conference, 6-8 December 2012, Chiangmai, Thailand. (Poster presentation)
8. Jutarat Saengsuwan, **Napamane Kornthong**, Supawadee Duangprom, Wittawas Srikawnawan, Sirikul Manochantr, Prasert Sobhon. The proliferative effect of sea cucumber extract (*Holothuria scabra*) on human placenta-derived mesenchymal stem cells. The 11th Asia-Pacific Microscopy Conference under the auspices of the Council of Asia-Pacific Societies for Microscopy (CAPSM), the International Federation of Societies for Microscopy (IFSM), the Microscopy Society of Thailand (MST), Phuket, Thailand, May 23 to 27, 2016.
9. **Napamane Kornthong**, Jutarat Saengsuwan, Srikul Manochatr, Supawadee Duangprom, Prasert Sobhon. The effect of sea cucumber extract on mesenchymal stem cell proliferation: Preliminary study and its perspectives. Diversity on Multidisciplinary Approach to Patient Self Care. Faculty of Medicine, Thammasat University, June 7 to 9, 2017. (Invited speaker)

10. **Napamane Kornthong**, Jutarat Saengsuwan, Supawadee Duangprom, Sirikul Manochantr and Prasert Sobhon. Identification of Growth Factors in Transcriptome of the Sea Cucumber, *Holothuria Scabra*, and its Roles on Proliferation of Human Mesenchymal Stem Cells. 2018 5th International conference on Biomedical and Bioinformatics engineering (ICBBE2018), at Okinawa Institute of Science and technology Graduate University, Japan, November 12 to 14, 2018. (Oral presentation)
11. **Napamane Kornthong**, Saowaros Suwansa-ard, Jutarat Saengsuwan, Supawadee Duangprom, Sirikul Manochantr and Prasert Sobhon. Identification of Growth Factors in Transcriptome of the Sea Cucumber, *Holothuria Scabra*, and its Roles on Proliferation of Human Mesenchymal Stem Cells. *International Journal of Arts and Sciences' (IJAS)* academic conference in Freiburg, Germany, December 3 to 6, 2018. (Oral presentation)

Award

- Outstanding young researcher award, Thammasat university, 2015
- Best oral presentation award in 2018 5th International conference on Biomedical and Bioinformatics engineering (ICBBE2018), at Okinawa Institute of Science and technology Graduate University, japan
- Outstanding young researcher award (First runner up), Chulabhorn International College of Medicine, Thammasat university, 2019
- รางวัลบุคลากรที่ได้สร้างชื่อเสียงให้แก่มหาวิทยาลัย ของ ม.ธรรมศาสตร์ ประจำปี 2562

Funding

1. The Commission on Higher Education (CHE) Scholarship 2007-2011 to Napamane Kornthong.
2. TU Research scholar 2015 Thammasat University to Napamane Kornthong
3. CICM research scholar 2015, Chulabhorn Interantional college of medicine, Thammasat university to Napamane Kornthong
4. TU Research scholar 2017, Thammasat University to Napamane Kornthong
5. The Thailand Research Fund 2018-2019 to Napamane Kornthong
6. CICM research scholar 2018, 2019, 2021 Chulabhorn Interantional college of medicine, Thammasat university to Napamane Kornthong and Colleagues
7. National research council of Thailand 2019 to Napamane Kornthong and Colleagues
8. Thai Science Research and Innovation Fundamental Fund 2020-2022 to Napamane Kornthong