



Assoc. Prof. Dr. CHAROONROJ CHOTWIWATTHANAKUN (Ph.D.)

Experience

- 2543-2546 ดำรงตำแหน่ง อาจารย์ สังกัด คณะสหเวชศาสตร์ มหาวิทยาลัยศรีนครินทรวิโรฒ
- 2552-2556 ดำรงตำแหน่ง อาจารย์ สังกัด โครงการจัดตั้งวิทยาเขตนครสวรรค์ สำนักงาน อธิการบดี มหาวิทยาลัยมหิดล
- 2556-2560 ดำรงตำแหน่ง ผู้ช่วยศาสตราจารย์ สาขาวิชาชีวเคมี สังกัดฝ่ายวิชาการและ หลักสูตร โครงการจัดตั้งวิทยาเขตนครสวรรค์ สำนักงานอธิการบดีมหาวิทยาลัยมหิดล
- 2560-ปัจจุบัน ดำรงตำแหน่ง รองศาสตราจารย์ สาขาวิชาชีวเคมี สังกัดฝ่ายวิชาการและหลักสูตร โครงการจัดตั้งวิทยาเขตนครสวรรค์ สำนักงานอธิการบดีมหาวิทยาลัยมหิดล
- 2564 - ปัจจุบัน ดำรงตำแหน่ง กรรมการสภาคณาจารย์ มหาวิทยาลัยมหิดล วาระดำรงตำแหน่งปี พ.ศ. 2564- 2566

Publication

1. **Chotwiwatthanakun C**, Pratanaphon R, Akesowan S, Sriprapat S, Ratanabanangkoon K. Production of potent polyvalent antivenom against three elapid venoms using a low dose, low volume, multi-site immunization protocol. *Toxicon*. 2001; 39(10): 1487-94.
2. Sriprapat S, Aeksowan S, Sapsutthipas S, **Chotwiwatthanakun C**, Suttijitpaisal P, Pratanaphon R, Khaw O, Sitprija V, Ratanabanangkoon K. The impact of a low dose, low volume, multi-site immunization on the production of therapeutic antivenoms in Thailand. *Toxicon*. 2003; 41(1): 57-64.
3. **Chotwiwatthanakun C**, Ngophon J, Unajak S, Jitrapakdee S. the ribophorin I from *Penaeus monodon* shrimp: cDNA cloning, expression and phylogenetic analysis. *Comp Biochem Physiol B Biochem Mol Biol*. 2008; 150(3):331-7.
4. Duangsuwan, P., Tinikul, Y., **Chotwiwatthanakun, C.**, Vanichviriyakit, R., Sobhon, P. Changes in the histological organization and spheroid formation in lymphoid organ of *Penaeus monodon* infected with yellow head virus. *Fish and Shellfish Immunology*, 2008; 25 (5): 560-569.
5. Sittidilokratna, N., **Chotwiwatthanakun, C.**, Wijagoonawardane, P.K., Unajak, S., Boonnad, A., Wangnai, W., Jitrapakdee, S., Cowley, J.A., Walker, P.J.A virulent isolate of yellow head nidovirus contains a deformed envelope glycoprotein gp116 *Virology*, 2009; 384 (1):192-200.
6. Panyarachun, B., Sobhon, P., Tinikul, Y., **Chotwiwatthanakun, C.**, Anupunpisit, V., Anuracpreeda, P. *Paramphistomum cervi*: Surface topography of the tegument of adult fluke *Experimental Parasitology*, 2010; 125(2): 95-99.
7. Anuracpreeda P, Songkoomkrong S, Sethadavit M, **Chotwiwatthanakun C**, Tinikul Y, Sobhon P. *Fasciola gigantica*: Production and characterization of a monoclonal antibody against recombinant cathepsin B3 *Experimental Parasitology*.2011; 127(2):340-5.
8. Sroyraya M, **Chotwiwatthanakun C**, Stewart MJ, Soonklang N, Kornthong N, Phoungpetchara I, Hanna P, Sobhon P. 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 Cell*. 2010; 42(5): 293-300.

+ (66)8-168-84310

Charoonroj.cho@mahidol.edu

www.na.mahidol.ac.th

Mahidol University, Nakhon Sawan
Campus 402/1 Moo 5, Kaohong
Phayahakiri Nakhon Sawan,
6013030

EDUCATION

1997 : **Bachelor of Science**
(Biochemistry and Biochemical
Technology)
Chiang Mai University

2000 : **Master of Science**
Microbiology
Mahidol University

2008 : **Doctor of Philosophy**
(Biochemistry)
Mahidol University

EXPERTISE

- Molecular biology of crustacean endocrinology
- Molecular biology of crustacean pathogen-host interaction
- Aquatic animal diseases
- Biotechnology for crustacean diseases prevention and therapy
- Biochemistry and microbiology



Publication

9. Tinikul Y, Poljaroen J, Nuurai P, Anuracpreeda P, **Chotwivatthanakun C**, Phoungpetchara I, Kornthong N, Poomtong T, Hanna PJ, Sobhon P. Existence and distribution of gonadotropin-releasing hormone-like peptides in the central nervous system and ovary of the Pacific white shrimp, *Litopenaeus vannamei*. *Cell Tissue Res.* 2011; 343(3):579-93.
10. Phoungpetchara I, Tinikul Y, Poljaroen J, **Chotwivatthanakun C**, Vanichviriyakit R, Sroyraya M, Hanna PJ, Sobhon P. Cells producing insulin-like androgenic gland hormone of the giant freshwater prawn, *Macrobrachium rosenbergii*, proliferate following bilateral eyestalk-ablation. *Tissue Cell.* 2011; 43(3):165-77.
11. Tinikul Y, Poljaroen J, Kornthong N, **Chotwivatthanakun C**, Anuracpreeda P, Poomtong T, Hanna PJ, Sobhon P. 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 Tissue Res.* 2011, 345(1):103-24.
12. Duangsuwan P, Tinikul Y, Withyachumnarnkul B, **Chotwivatthanakun C**, Sobhon P. Cellular targets and pathways of yellow head virus infection in lymphoid organ of *Penaeus monodon* as studied by transmission electron microscopy. *Songklanakarin J. Sci. Technol.* 2011; 33 (2): 121-127.
13. Saewu A, Asuvapongpatana S, **Chotwivatthanakun C**, Tantiwongse A, Weerachayanukul W, Thitilertdecha S. Cathepsin D in Human Reproductive Tissues: Cellular Localization in Testis and Epididymis and Surface Distribution in Different Sperm Conditions. *J. Androl.* 2012; 33(4): 726-34.
14. Anuracpreeda P, Panyarachun B, Ngamniyom A, Tinikul Y, **Chotwivatthanakun C**, Poljaroen J, Sobhon P. *Fischoederius cobboldi*: A scanning electron microscopy investigation of surface morphology of adult rumen fluke. *Exp. Parasitol.*, 2012; 130(4): 400-7
15. Phoungpetchara I, Tinikul Y, Poljaroen J, Changklungmoa N, Siangcham T, Sroyraya M, **Chotwivatthanakun C**, Vanichviriyakit R, Hanna PJ, Sobhon P. Expression of the male reproduction-related gene (Mar-Mrr) in the spermatid duct of the giant freshwater prawn, *Macrobrachium rosenbergii*. *Cell Tissue Res.* 2012; 348(3):609-23.
16. Asuvapongpatana S, Saewu A, **Chotwivatthanakun C**, Vanichviriyakit R, Weerachayanukul W. Localization of cathepsin D in mouse reproductive tissues and its acquisition onto sperm surface during epididymal sperm maturation. *Acta Histochem.* 2013; 115(5):425-33.
17. Anuracpreeda P, Poljaroen J, **Chotwivatthanakun C**, Tinikul Y, Sobhon P. Antigenic components, isolation and partial characterization of excretion-secretion fraction of *Paramphistomum cervi*. *Exp Parasitol.* 2013; 133(3):327-33.
18. Kornthong N, **Chotwivatthanakun C**, Chansela P, Tinikul Y, Cummins SF, Hanna PJ, Sobhon P. Characterization of red pigment concentrating hormone (RPCH) in the female mud crab (*Scylla olivacea*) and the effect of 5-HT on its expression. *Gen Comp Endocrinol.* 2013; 29;185C:28-36.
19. Kruangkum T, **Chotwivatthanakun C**, Vanichviriyakit R, Tinikul Y, Anuracpreeda P, Wanichanon C, Hanna PJ, Sobhon P. Structure of the olfactory receptor organs, their GABAergic neural pathways, and modulation of mating behavior, in the giant freshwater prawn, *Macrobrachium rosenbergii*. *Microscopy Research and Technique*, 2013; 76(6):572-87.
20. Magerd S, Asuvapongpatana S, Vanichviriyakit R, **Chotwivatthanakun C**, Weerachayanukul W. Characterization of thrombospondin (TSP)-II gene in *Penaeus monodon* and a novel role of TSP-like proteins in an induction of shrimp sperm acrosome reaction. *Mol Reprod Dev.* 2013; 80(5):393-402.
21. Anuracpreeda P, Chawengkirtikul R, Tinikul Y, Poljaroen J, **Chotwivatthanakun C**, Sobhon P. Diagnosis of *Fasciola gigantica* infection using a monoclonal antibody-based sandwich ELISA for detection of circulating cathepsin B3 protease. *Acta Trop.* 2013; 127(1):38-45.
22. Anuracpreeda P, Srirakam T, Pandonlan S, Changklungmoa N, **Chotwivatthanakun C**, Tinikul Y, Poljaroen J, Meemon K, Sobhon P. Production and characterization of a monoclonal antibody against recombinant cathepsin L1 of *Fasciola gigantica*. *Acta Trop.* 2014;136:1-9.
23. Tinikul Y, Poljaroen J, Tinikul R, Anuracpreeda P, **Chotwivatthanakun C**, Senin N, Poomtong T, Hanna PJ, Sobhon P. Effects of gonadotropin-releasing hormones and dopamine on ovarian maturation in the Pacific white shrimp, *Litopenaeus vannamei*, and their presence in the ovary during ovarian development. *Aquaculture.* 2014; 420-421: 79-88.
24. Kornthong N, Cummins SF, **Chotwivatthanakun C**, Khornchatri K, Engsusophon A, Hanna PJ, Sobhon P. Identification of Genes Associated with Reproduction in the Mud Crab (*Scylla olivacea*) and Their Differential Expression following Serotonin Stimulation. *PLoS One.* 2014 Dec 26;9(12):e115867.
25. Jariyapong P, **Chotwivatthanakun C**, Somrit M, Jitrapakdee S, Xing L, Cheng HR, Weerachayanukul W. Encapsulation and delivery of plasmid DNA by virus-like nanoparticles engineered from *Macrobrachium rosenbergii* nodavirus. *Virus Res.* 2014;179:140-6.



+ (66)8-168-84310

Charoonroj.cho@mahidol.edu

www.na.mahidol.ac.th

Mahidol University, Nakon Sawan
Campus 402/1 Moo 5, Kaohong
Phayahakiri Nakhon Sawan,
6013030

EDUCATION

1997 : Bachelor of Science
(Biochemistry and Biochemical
Technology)
Chiang Mai University

2000 : Master of Science
Microbiology
Mahidol University

2008 : Doctor of Philosophy
(Biochemistry)
Mahidol University

EXPERTISE

- Molecular biology of crustacean endocrinology
- Molecular biology of crustacean pathogen-host interaction
- Aquatic animal diseases
- Biotechnology for crustacean diseases prevention and therapy
- Biochemistry and microbiology



Publication

26. Jariyapong P, **Chotwiwatthanakun C**, Direkbusarakom S, Hirono I, Wuthisuthimethavee S, Weerachatanukul W. Delivery of double stranded RNA by Macrobrachium rosenbergii nodavirus-like particles to protect shrimp from white spot syndrome virus Aquaculture, 2015; 435: 86-9
27. Tinikul Y, Poljaroen J, Tinikul R, **Chotwiwatthanakun C**, Anuracpreeda P, Hanna PJ, Sobhon P. Alterations in the levels and distribution of octopamine in the central nervous system and ovary of the Pacific white shrimp, Litopenaeus vannamei, and its possible role in ovarian development. Gen Comp Endocrinol. 2015 ;210:12-22.
28. Khornchatri K, Kornthong N, Saetan J, Tinikul Y, **Chotwiwatthanakun C**, Cummins SF, Hanna PJ, Sobhon P. Distribution of serotonin and dopamine in the central nervous system of the female mud crab, Scylla olivacea (Herbst). Acta Histochem. 2015;117(2):196-204.
29. Jariyapong P, Weerachatanukul W, Direkbusarakom S, Hirono I, Wuthisuthimethavee S, **Chotwiwatthanakun C**. Enhancement of shrimp immunity against white spot syndrome virus by Macrobrachium rosenbergii nodavirus-like particle encapsulated VP28 double-stranded RNA. Aquaculture, 2015; 446: 325-332.
30. Kruangkum T, Vanichviriyakit R, **Chotwiwatthanakun C**, Saetan J, Tinikul Y, Wanichanon C, Cummins SF, Hanna PJ, Sobhon P. Spermatophore affects the egg-spawning and egg-carrying behavior in the female giant freshwater prawn, Macrobrachium rosenbergii. Anim Reprod Sci. 2015; 161:129-137.
31. **Chotwiwatthanakun C**, Sangatit J, Santimanawong W, Surinlert P, Prommoon J, Weerachatanukul W, Withayachumnarnkul B, Vanichviriyakit R. Expression of Penaeus monodon ortholog of Niemann-Pick type C-2 in the spermatid tract, and its role in sperm cholesterol removal. Mol Reprod Dev. 2016; 83(3): 259-270.
32. Sangfuang M, Chusongsang Y, Limpanont Y, Vanichviriyakit R, **Chotwiwatthanakun C**, Sobhon P, Preyavichyapugdee N. Schistosoma mekongi cathepsin B and its use in the development of an immunodiagnosis. Acta Trop. 2016: 155: 11-19.
33. Assawasuparek K, Vanichviriyakit R, **Chotwiwatthanakun C**, Nobsathian S, Rawangchue T, Wittayachumnankul B. Scabaside D Extracted from Holothuria scabra Induces Apoptosis and Inhibits Growth of Human Cholangiocarcinoma Xenografts in Mice. Asian Pac J Cancer Prev. 2016;17(2):511-7
34. Somrit M, Watthammawut A, **Chotwiwatthanakun C**, Weerachatanukul W. The key molecular events during Macrobrachium rosenbergii nodavirus (MrNV) infection and replication in Sf9 insect cells. Virus Res. 2016;223:1-9.
35. Somrit M, Watthammawut A, Chotwiwatthanakun C, Ounjai P, Suntimanawong W, Weerachatanukul W. C-terminal domain on the outer surface of the Macrobrachium rosenbergii nodavirus capsid is required for Sf9 cell binding and internalization. Virus Res. 2017; 227: 41-48.
36. Duangprom S, Kornthong N, Suwansa-ard S, Srikawnawan W, **Chotwiwatthanakun C**, Sobhon P. Distribution of crustacean hyperglycemic hormones (CHH) in the mud crab (Scylla olivacea) and their differential expression following serotonin stimulation. Aquaculture 2017; 468: 481-8.
37. Jariyapong P, Pudgerd A, Weerachatanukul W, Hirono I, Senapin S, Dhar AK, **Chotwiwatthanakun C**. Construction of an infectious Macrobrachium rosenbergii nodavirus from cDNA clones in Sf9 cells and improved recovery of viral RNA with AZT treatment. Aquaculture, 2018; 483: 111-9.
38. **Chotwiwatthanakun C**, Santimanawong W, Sobhon P, Wongtripop S, Vanichviriyakit R. Inhibitory effect of a reproductive-related serpin on sperm trypsin-like activity implicates its role in sperm maturation of Penaeus monodon. Mol. Reprod Dev. 2018; 85: 205-14.
39. Duangprom S, Ampansri W, Suwansa-Ard S, **Chotwiwatthanakun C**, Sobhon P, Kornthong N. 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. Anim Reprod Sci. 2018;198: 220-32.
40. Kiatmetha P, **Chotwiwatthanakun C**, Jariyapong P, Santimanawong W, Ounjai P, Weerachatanukul W. Nanocontainer designed from an infectious hypodermal and hematopoietic necrosis virus (IHNV) has excellent physical stability and ability to deliver shrimp tissues. PeerJ. 2018; 18;6:e6079. doi: 10.7717/peerj.6079. eCollection 2018.
41. Jariyapong P, Pudgerd A, Cheloh N, Hirono I, Kondo H, Vanichviriyakit R, Weerachatanukul W, **Chotwiwatthanakun C**. Hematopoietic tissue of Macrobrachium rosenbergii plays dual roles as a source of hemocyte hematopoiesis and as a defensive mechanism against Macrobrachium rosenbergii nodavirus infection. Fish Shellfish Immunol. 2019;86:756-763.
42. Kruangkum T, Saetan J, **Chotwiwatthanakun C**, Vanichviriyakit R, Cummins SF, Wanichanon C, Sobhon P. Existence of an egg-laying hormone-like peptide in male reproductive system of the giant freshwater prawn, Macrobrachium rosenbergii. Acta Histochem. 2019; 121(2):156-163.
43. Jariyapong P, **Chotwiwatthanakun C**, Pooljun C, Weerachatanukul W. Infectious hypodermal and hematopoietic necrosis virus-like particles encapsulating VP28 double-stranded RNA protect shrimp from white spot syndrome virus. 2019; Aquaculture 504, pp. 260-266



+ (66)8-168-84310

Charoonroj.cho@mahidol.edu

www.na.mahidol.ac.th

Mahidol University, Nakon Sawan
Campus 402/1 Moo 5, Kaohong
Phayahakiri Nakhon Sawan,
6013030

EDUCATION

1997 : Bachelor of Science
(Biochemistry and Biochemical
Technology)
Chiang Mai University

2000 : Master of Science
Microbiology
Mahidol University

2008 : Doctor of Philosophy
(Biochemistry)
Mahidol University

EXPERTISE

- Molecular biology of crustacean endocrinology
- Molecular biology of crustacean pathogen-host interaction
- Aquatic animal diseases
- Biotechnology for crustacean diseases prevention and therapy
- Biochemistry and microbiology



Publication

44. Pudgerd A, **Chotwivatthanakun C**, Kruangkum T, Itsathitphaisarn O, Sritunyalucksana K, Vanichviriyakit R. The hematopoietic organ of *Macrobrachium rosenbergii*: Structure, organization and immune status. *Fish Shellfish Immunol.* 2019; 88:415-423.
45. Kolaka R, **Chotwivatthanakun C**, Chutabhakdikul N. Fetal exposure to high levels of maternal glucocorticoids alters reelin signaling in the prefrontal cortex of rat pups. *Int J Dev Neurosci.* 2019; 78:185-190.
46. Kruangkum T, Saetan J, **Chotwivatthanakun C**, Vanichviriyakit R, Thongrod S, Thintharua P, Tulyananda T, Sobhon P. Co-culture of males with late premolt to early postmolt female giant freshwater prawns, *Macrobrachium rosenbergii* resulted in greater abundances of insulin-like androgenic gland hormone and gonad maturation in male prawns as a result of olfactory receptors. *Anim Reprod Sci.* 2019; 210:106198.
47. Jariyapong P, Vanichviriyakit R, **Chotwivatthanakun C**, Pudgerd A. Alteration of the haemocyte parameters, expression of immune-related and neurohormone bursicon genes of giant river prawn *Macrobrachium rosenbergii* (de Man) in the response to salinity stress and ammonia stress. *Aquaculture Res* 2020; 51(6): 2573-81.
48. Surinlert P, Sukonset C, Khongkha T, **Chotwivatthanakun C**, Vanichviriyakit R, Weerachatanukul W, Asuvapongpatana S. Existence and distribution of Niemann-Pick type 2C (NPC2) in prawn reproductive tract and its putative role as a cholesterol modulator during sperm transit in the vas deferens. *Cell Tissue Res.* 2020; ;382(2):381-390.
49. Pudgerd A, Kruangkum T, Sritunyalucksana K, Vanichviriyakit R, Imsonpang S, **Chotwivatthanakun C**. Immunopathogenesis of hematopoietic tissues in response to *Vibrio parahaemolyticus* (VPAHPND) infection in *Macrobrachium rosenbergii*. *Fish Shellfish Immunol.* 2021; 110:10-22.
50. Thongbuakaew T., Sumpownon C., Engsusophon A., Kornthong N., **Chotwivatthanakun 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; 7: e05898.
51. Wuthisathid K, Chaijarasphong T, **Chotwivatthanakun C**, Somrit M, Sritunyalucksana K, Itsathitphaisarn O. Co-expression of double-stranded RNA and viral capsid protein in the novel engineered *Escherichia coli* DualX-B15(DE3) strain. *BMC Microbiol.* 2021;21(1):88.
52. Weerachatanukul W, **Chotwivatthanakun C**, Jariyapong P. Dual VP28 and VP37 dsRNA encapsulation in IHNV virus-like particles enhances shrimp protection against white spot syndrome virus. *Fish Shellfish Immunol.* 2021;113:89-95.
53. Thansa K, Kruangkum T, Pudgerd A, Chaichandee L, Amparyup P, Suebsing R, **Chotwivatthanakun C**, Vanichviriyakit R, Sritunyalucksana K. Establishment of hematopoietic tissue primary cell cultures from the giant freshwater prawn *Macrobrachium rosenbergii*. *Cytotechnology.* 2021;73(2):141-157.
54. Grataitong K, Huault S, **Chotwivatthanakun C**, Jariyapong P, Thongsum O, Chawiwithaya C, Chakrabandhu K, Hueber AO, Weerachatanukul W. Chimeric virus-like particles (VLPs) designed from shrimp nodavirus (MrNV) capsid protein specifically target EGFR-positive human colorectal cancer cells. *Sci Rep.* 2021;11(1):16579.
55. Laphyai P, Kruangkum T, **Chotwivatthanakun C**, Semchuchot W, Thajjongrak P, Sobhon P, Tsai PS, Vanichviriyakit R. Suppression of a Novel Vitellogenesis-Inhibiting Hormone Significantly Increases Ovarian Vitellogenesis in the Black Tiger Shrimp, *Penaeus monodon*. *Front Endocrinol (Lausanne).* 2021;12:760538.
56. Weerachatanukul W, Pooljun C, Hirono I, Kondo H, **Chotwivatthanakun C**, Jariyapong P. Infectious hypodermal and hematopoietic necrosis virus-like particle (IHNV-VLP) induces peroxiredoxin expression and activity in *Fenneropenaeus merguensis*. *Fish Shellfish Immunol.* 2022;121:53-61.
57. Thajjongrak P, **Chotwivatthanakun C**, Laphyai P, Prachumwat A, Kruangkum T, Sobhon P, Vanichviriyakit R. Molecular characterization and expression profiling of transformer 2 and fruitless-like homologs in the black tiger shrimp, *Penaeus monodon*. *PeerJ.* 2022;10:e12980. doi: 10.7717/peerj.12980. eCollection 2022.
58. Kruangkum, T., Duangprom, S., Songkoomkrong, S., **Chotwivatthanakun, C.**, Vanichviriyakit., Sobhon, P., Kornthong, N. Discovery of a hidden form of neuropeptide F and its presence throughout the CNS-gut axis in the mud crab, *Scylla olivacea*. *Frontiers in Marine Science*, 2022, 9, 951648.
59. Grataitong, K., **Chotwivatthanakun, C.**, Thongsum, O., Chakrabandhu, K., Weerachatanukul, W., Chimeric MrNV-GE11-VLPs serve as a nano-container to deliver Doxorubicin into cancer cells. *Songklanakarin J. Sci. Technol.* 2022; 44(6), 1517-1523.
60. Semchuchot W, **Chotwivatthanakun C**, Santimanawong W, Kruangkum T, Thajjongrak P, Withyachumnarnkul B, Vanichviriyakit R. Sesquiterpenoid pathway in the mandibular organ of *Penaeus monodon*: Cloning, expression, characterization of PmJHAMT and its alteration response to eyestalk ablation. *Gen Comp Endocrinol.* 2023; 331:114176.



+ (66)8-168-84310

Charoonroj.cho@mahidol.edu

www.na.mahidol.ac.th

Mahidol University, Nakon Sawan
Campus 402/1 Moo 5, Kaohong
Phayahakiri Nakhon Sawan,
6013030

EDUCATION

1997 : Bachelor of Science
(Biochemistry and Biochemical
Technology)
Chiang Mai University

2000 : Master of Science
Microbiology
Mahidol University

2008 : Doctor of Philosophy
(Biochemistry)
Mahidol University

EXPERTISE

- Molecular biology of crustacean endocrinology
- Molecular biology of crustacean pathogen-host interaction
- Aquatic animal diseases
- Biotechnology for crustacean diseases prevention and therapy
- Biochemistry and microbiology



Publication

61. Weerachatanukul W, Pooljun C, Hirono I, **Chotwiwatthanakun C**, Jariyapong P. Infectivity and virulence of the infectious *Macrobrachium rosenbergii* nodavirus produced from *Drosophila melanogaster* cell using *Penaeus merguensis* as an infection model. *Fish Shellfish Immunol.* 2023 ;132:108474.
62. Weerachatanukul W, Kiatmetha P, Raksat P, Boonkua S, Thongsom O, Jariyapong P, **Chotwiwatthanakun C**, Ounjai P, Metlagel Z. Viral Capsid Change upon Encapsulation of Double-Stranded DNA into an Infectious Hypodermal and Hematopoietic Necrosis Virus-like Particle. *Viruses.* 2023, 15(1), 110.
63. Tongnunui, S., Sooksawat, T., **Chotwiwatthanakun, C.**, Weerayuth, S., Wattanakornsiri, A., Beamish, F.W.H. Seasonal Changes in Upper Thermal Tolerances of Freshwater Thai Fishes. *Water (Switzerland)*, 2023, 15(2), 350. (Co-author)



+ (66)8-168-84310

Charoonroj.cho@mahidol.edu

www.na.mahidol.ac.th

Mahidol University, Nakhon Sawan
Campus 402/1 Moo 5, Kaothong
Phayahakiri Nakhon Sawan,
6013030

EDUCATION

1997 : **Bachelor of Science**
(Biochemistry and Biochemical
Technology)
Chiang Mai University

2000 : **Master of Science**
Microbiology
Mahidol University

2008 : **Doctor of Philosophy**
(Biochemistry)
Mahidol University

EXPERTISE

- Molecular biology of crustacean endocrinology
- Molecular biology of crustacean pathogen-host interaction
- Aquatic animal diseases
- Biotechnology for crustacean diseases prevention and therapy
- Biochemistry and microbiology