Curriculum Vitae

Asst. Prof. Dr. Pochanart Kanjan

ผู้ช่วยศาสตราจารย์ ดร.พจนารถ แก่นจันทร์

Current Position

Asst. Prof. at Food Science and Technology program Faculty of Agro-Industry Prince of Songkla University

Hat Yai, Songkhla 90110 Thailand

Email: pochanart.k@psu.ac.th



2009 B.Sc. (Agro-Industry) 2st Class Honors, Prince of Songkla University, Thailand

2017 Ph.D. (Biotechnology) Prince of Songkla University, Thailand

Ph. D Thesis Title: Screening of probiotic bacteria isolated from infant feces for controlling foodborne pathogens in vitro using colon model system

Employment

2018 to present: Asst. Prof at Food Science and Technology program, Faculty of Agro-Industry, Prince of Songkla University, Hat Yai, Thailand

2015 to 2016: visiting research fellowship to conduct the research under the topic of "Immune effects of β -glucan are determined by combined effects on Dectin-1, TLR2, 4 and 5" at Department of Pathology and Medical Biology, University of Groningen, University Medical Center Groningen, Hanzeplein 1, The Netherlands

Field of interest

- 1. Antibacterial and antifungal activity of lactic acid bacteria
- 2. Enhancement of probiotic survival in health food products
- 3. Antagonistic mechanisms involved in probiotic function in controlling foodborne pathogens in the highly competition of fecal microflora
- 4. Development of synbiotic formula to control and prevent growth of foodborne pathogens in humans



Current researches (Principal 2018-2022)

- 1. Prebiotic efficacy of sulfated polysaccharides from red seaweed *Gracilaria fisheri* on human gut microbiota and its application as *L. plantarum* TISTR 2390 protective agent
- 2. Dietary supplementation of yeast *Saccharomyces cerevisiae* combined with *Weissella cibaria* on growth, survival, immune response and microbial dynamics of Pacific white shrimp (*Litopenaeus vannamei*) in net cage culture
- 3. Effect of lactic acid bacteria and yeast as probiotics on growth performance, immunological response and disease resistance of Asian sea bass, (*Lates calcarifer*)
- 4. Application of synbiotic products containing prebiotics and probiotics in as feed additives in layer diets
- 5. Development of Budu production by inoculation of starter culture
- 6. Application of yeast and lactic acid bacteria as probiotic to control *Vibrio parahaemolyticus* in white shrimps
- 7. Development of probiotic product isolated from the intestine of Pacific white shrimp (*Litopenaeus vannamei* Boone) on controlling of *Vibrio* spp.
- 8. Development in shelf-life extension of *Tai-pla* curry paste by application of bio-preservative producing lactic acid bacteria
- 9. Product development of Budu powder for halal prototype
- 10. Development of powdered starter culture in Budu production for halal prototype

<u>International publications (* Corresponding author)</u>

- 1. Sakpetch, P., Benchama, O., Masniyom, P., Salaipeth, L and **Kanjan* P.** 2022. Physicochemical characteristics and flavor profiles of fermented fish sauce (budu) during fermentation in commercial manufacturing plant. Journal of Food Science and Technology. 59, 693–702.
- 2. Kanjan*, P., Kimtun, A., Chaimongkol, S. and Sakpetch, P. 2022. Probiotic Weissella cibaria KY10 derived from digestive tract of healthy shrimp exhibits strong antibacterial effects against Vibrio parahaemolyticus causing AHPND in shrimp aquaculture. Aquaculture Research. 53, 2597-2607.
- **3.** Kraiprom, T., Jantarat, S., **Kanjan, P.,** Incharoen, T., Phasinam, K. and Yeamkong, S. 2022. Quality of Raw Goat Milk in Lower Southern Thailand. Forest Chemical Review. 592-599.
- **4. Kanjan*, P.,** Sakpetch, P., Masniyom, P. and Hongpattarakere, T. 2021. Quality characteristics of high salt fermented fish sauce (budu) produced using autochthonous *Virgibacillus halodenitrificans* PS21 and *Staphylococcus simulans* PMRS35. International Journal of Food Science and Technology. 56, 4098-4107.

- **5. Kanjan*, P.** and Sakpetch, P. 2020. Functional and safety assessment of *Staphylococcus simulans* PMRS35 with high lipase activity isolated from high salt-fermented fish (Budu) for starter development. LWT-Food Science and Technology. 124. https://doi.org/10.1016/j.lwt.2020.109183.
- **6. Kanjan*, P.,** Sahasrabudhe, N. M., de Haan, B. J. and de Vos, P. 2017. Immune effects of β glucan are determined by combined effects on Dectin-1, TLR2, 4 and 5. Journal of Functional Foods. 37, 433-440.
- **7. Kanjan, P.** and Hongpattarakere, T. 2017. Prebiotic efficacy and mechanism of inulin combined with inulin-degrading *Lactobacillus paracasei* I321 in competition with *Salmonella*. Carbohydrate Polymers, 169, 236-244.
- **8. Kanjan, P.** and Hongpattarakere, T. 2016. Antibacterial metabolites secreted under glucose-limited environment of the mimicked proximal colon model by lactobacilli abundant in infant feces. Applied Microbiology and Biotechnology, 100, 7651-7664.

National publications

ธนภรณ์ เริ่มวงศ์, ภัทร ศักดิ์เพชร, เสาวนีย์ ชูจิต และ **พจนารถ แก่นจันทร์.** 2023. การสกัดซัลเฟตพอลิแซ็ก คาไรด์จากสาหร่ายสีแดง (*Gracilaria fisheri*) และการส่งเสริมการเจริญเติบโตของแบคทีเรียโพร ไบโอติก. วารสารวิทยาศาสตร์บูรพา ปีที่28 (ฉบับที่ 2) พฤษภาคม – สิงหาคม พ.ศ. 2566.

Patents

- กรรมวิธีการผลิตบูดูผงและผลิตภัณฑ์ที่ได้จากกรรมวิธีนี้ หมายเลขคำขอ 2003001660 ผู้ประดิษฐ์ นางสาวพจนารถ แก่นจันทร์ นายวิริยะ ดวงสุวรรณ และนายภัทร ศักดิ์เพชร
- กรรมวิธีการผลิตบูดูด้วยกล้าเชื้อ หมายเลขคำขอ 2203000720 ผู้ประดิษฐ์นางสาวพจนารถ แก่น จันทร์ และนายภัทร ศักดิ์เพชร