

## CURRICULUM VITAE

**Name** Niphawan Panti, Ph.D.  
**Position** Lecturer  
**Address** Division of Biotechnology, Faculty of Agro-Industry,  
Chiang Mai University  
**City** Chiang Mai, Thailand 50100  
**Email** niphawan.p@cmu.ac.th  
**Tel.** (+66) 085-6142947



### EDUCATION

---

2017-2021 Ph.D. (Advanced Life Sciences/Biotechnology)  
Department of Biotechnology, College of Life sciences, Ritsumeikan University,  
Shiga, Japan  
**Dissertation:** Enzymatic and Structural Studies of GH Family 87  $\alpha$ -1,3-Glucanase  
from *Streptomyces thermodiastaticus* HF3-3

2015-2017 M.Sc. (Applied Microbiology)  
Department of biology, Faculty of Science, Chiang Mai University, Chiang Mai,  
Thailand  
**Thesis:** Development of Salad Dressing from Soymilk Kefir

2011-2014 B.Sc. (Microbiology)  
Department of biology, Faculty of Science, Chiang Mai University, Chiang Mai,  
Thailand  
**Graduate Project:** Kefir Production from Soy Milk

### SCHOLARSHIPS

---

2017-2021 Innovative Asia 1<sup>st</sup> Batch (Japan International Cooperation Agency, Japan)

2015-2017 Research and Researchers for Industries (Thailand Research Fund, Thailand) in  
collaboration with Work for Health Society Co., Ltd. (Lemon Farm)

### PUBLICATIONS

---

**Panti, N.**, Cherdvorapong, V., Itoh, T., Hibi, T., Suyotha, W., Yano, S., and Wakayama, M. (2021). Functional analysis of  $\alpha$ -1,3-glucanase domain structure from *Streptomyces thermodiastaticus* HF3-3. *Journal of General and Applied Microbiology*. 67, 85-97.

Itoh, T., **Panti, N.**, Hayashi, J., Toyotake, Y., Matsui, D., Yano, S., Wakayama, M. and Hibi, T. (2020). Crystal structure of the catalytic domain of thermostable GH87  $\alpha$ -1,3-glucanase from *Streptomyces thermodiastaticus* strain HF3-3. *Biochemical and Biophysical Research Communications*, 533, 1170-1176.

Cherdvorapong, V., **Panti, N.**, Suyotha, W., Tsuchiya, Y., Toyotake, Y., Yano, S., and Wakayama, M. (2020). Prevention of oral biofilm formation and degradation of biofilm by recombinant  $\alpha$ -1, 3-glucanases from *Streptomyces thermodiastaticus* HF3-3. *Journal of General and Applied Microbiology*, 66, 256-264.

## PRESENTATIONS

---

**Niphawan Panti**, Sittisin Bovonsombut, Sakunnee Bovonsombut. Kefir Production from Soy Milk. The 25<sup>th</sup> International ICFMH | FoodMicro 2016 Conference, University College Dublin, Ireland, 19<sup>th</sup> – 22<sup>nd</sup> July 2016. (Poster presentation)

**Niphawan Panti**, Sittisin Bovonsombut, Sakunnee Bovonsombut. Efficacy of Soymilk Kefir Fermentation by Using Kefir Grains and Kefir Broth. The 7<sup>th</sup> National and International Graduate Study Conference) "Thailand 4.0 Creative Innovation for Sustainable Development, Bangkok, Thailand 20<sup>th</sup> -21<sup>st</sup> July 2017. (Oral presentation)

**Niphawan Panti**, Vipavee Cherdvorapong, Wasana Suyotha, Kazuyoshi Takagi, Shigekazu Yano, Hayashi Junji and Mamoru Wakayama. Characterization recombinant of  $\alpha$ -1,3-glucanase from *Streptomyces thermodiasticus* HF3-3. The International Conference on Biotechnology and Bioengineering, Budapest, Hungary, 24<sup>th</sup> -26<sup>th</sup> October 2018. (Poster presentation)

**Niphawan Panti**, Vipavee Cherdvorapong, Wassana Suyotha, Kazuyoshi Takagi, Shigekazu Yano, Yosuke Toyotake, Mamoru Wakayama. Domain structure and function of  $\alpha$ -1,3-Glucanase from *Streptomyces thermodiastaticus* HF3-3. The 71<sup>st</sup> Annual Meeting of the Society of Biotechnology of Japan (SBJ), Okayama, Japan, 16<sup>th</sup> -18<sup>th</sup> September 2019. (Oral presentation)

**Niphawan Panti**, Vipavee Cherdvorapong, Wassana Suyotha, Kazuyoshi Takagi, Shigekazu Yano, Yosuke Toyotake, Mamoru Wakayama. Structure and Function of  $\alpha$ -1,3-Glucanase from *Streptomyces thermodiastaticus* HF3-3. The International Conference on Enzymology and Molecular Biology, Berlin, Germany, 6<sup>th</sup> -7<sup>th</sup> December 2019. (Poster presentation)

## TECHNICAL EXPERIENCES

---

**Microbiology:** General microbiology skills (aseptic and sterile technique, plating methods, media preparation, microscopy, identification of bacteria, operation of biological safety cabinet etc.), food microbiology, fermented food (kefir, kombucha, yogurt, tempeh, wine, vinegar), water sample analysis, MPN, diagnostic and biochemical screening for enteric bacteria

**Biochemistry and molecular biology:** PCR, Site-directed mutagenesis, molecular cloning, gel electrophoresis, SDS-PAGE, protein extraction, protein purification, protein crystallization, protein modification, structural proteomics, thin-layer chromatography, FPLC, HPLC

## RESEARCH INTERESTS

---

Biotechnology, applied microbiology, probiotics, microbiome, microbial enzymes, enzymes used as dietary supplements, enzymes for food industry, structural biology, fermented food, fermentation, genetic engineering

## WORK EXPERIENCES

---

**Research and Development, Amerz Co., Ltd.** (April 2021 – August 2021)

- Cosmetic product research and development
- Preparation of ISO 22716 (Cosmetic GMP) documents and coordinate the Innovation and Technology Assistant Program (ITAP) in collaboration with System Excellent Co., Ltd and Khonkaen University
- General manager, intra and inter-department coordinator
- Marketing, advertisement, and visual brand identity development
- Packaging designer