



Curriculum Vitae (March 24, 2021)

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Field of Expertise: Biochemistry, Molecular Biology, Toxicology, Toxinology

Education:

Period	Diploma or Degree	Field	Place of Education
June, 1983 to March, 1988	B. Pharmacy, First Honors Degree	–	Chiang Mai University, Chiang Mai, Thailand
April, 1991 to March, 1992	Research Student	Biochemistry	Faculty of Agriculture, The University of Tokyo, Tokyo, Japan
April, 1992 to March, 1994	Master of Science	Agricultural Chemistry	Graduate School of Life Sciences, The University of Tokyo, Tokyo, Japan
April, 1994 to March, 1997	Doctor of Philosophy	Applied Biological Chemistry	Graduate School of Life Sciences, The University of Tokyo, Tokyo, Japan

Administrative Positions:

July 2009 to Sep 2013, Associate Dean for Research and Foreign Affairs, Faculty of Science, Khon Kaen University

Dec 2016 until Sep 2018, Associate Dean for Special Affairs and Organization Development, Faculty of Pharmaceutical Sciences, Khon Kaen University

Oct 2018 until present, Associate Dean for Academic Affairs and Student Development, Faculty of Pharmaceutical Sciences, Khon Kaen University

2013 until now, Vice Director of Protein and Proteomics Research Center for Commercial and Industrial Purposes (ProCCI), Khon Kaen University

2018 until now, Acting Director of Center for Research and Development of Herbal Health Products (CRD-HHP), Faculty of Pharmaceutical Sciences, Khon Kaen University

Data in Scopus:

91 publications, 1177 citations, H-index = 22

Major Publications:

1. Pornsawan Khamtorn, Prapenpuksiri Rungsa, Nisachon Jangpromma, Sompong Klaynongsruang, Jureerut Daduang, Thaneer Tessiri and Sakda Daduang (2020) Partial proteomic analysis of brown widow spider (*Latrodectus geometricus*) venom to determine the biological activities. **Toxicon-X** 8, 100062.

2. Thimo Ruethers, Aya C. Taki, Shaymaviswanathan Karnaneedi, Shuai Nie, Tanja Kalic, Danyi Dai, Sakda Daduang, Michael Leeming, Nicholas A. Williamson, Heimo Breiteneder, Sam S. Mehr, Sandip D. Kamath¹, Dianne E. Campbell, Andreas L.

Lopata (2020). Expanding the allergen repertoire of salmon and catfish. **Allergy** doi: 10.1111/all.14574. Epub ahead of print. PMID: 32860256.

3. Withan Teajaroen, Suphapon Phimwapi, Jureerut Daduang, Sompong Klaynongsruang, Varomyalin Tipmanee, and Sakda Daduang (2020) A Role of Newly Found Auxiliary Site in Phospholipase A1 from Thai Banded Tiger Wasp (*Vespa affinis*) in Its Enzymatic Enhancement: In Silico Homology Modeling and Molecular Dynamics Insights, **Toxins (Basel)** 12, 510.

4. Prapenpuksiri Rungsa, Piyapon Janpan, Yutthakan Saengkun, Nisachon Jangpromma, Sompong Klaynongsruang, Rina Patramanon, Nunthawun Uawonggul, Jureerut Daduang, Sakda Daduang (2019) Heterologous expression and mutagenesis of recombinant *Vespa affinis* hyaluronidase protein (rVesA2), **The Journal of Venomous Animals and Toxins including Tropical Diseases**, 25:e20190030

5. Yutthakan Saengkun, Piyapon Janpan, Prapenpuksiri Rungsa, Mongkol Vesaratchavest, Tewa Upathanpreecha, Patthana Tastub, Sakda Daduang (2019) Characterization of great banded wasp (*Vespa tropica*) venom derived recombinant hyaluronidase produced in bacteria system. Thai Journal of Toxicology. **Thai Toxicology Journal** 34(2), 9-26.

6. Piyapon Janpan, Yutthakan Saengkun, Prapenpuksiri Rungsa, Mongkol Vesaratchavest, Tewa Upathanpreecha, Patthana Tastub, Sakda Daduang (2018) Comparative of Recombinant *Vespa affinis* Hyaluronidase Expressed in Different Cloning Vector and their Biological Properties, **International Journal of Applied and Physical Sciences** 4(2), 38-44.

7. Srisong H, Sukprasert S, Klaynongsruang S, Daduang J, Daduang S (2018) Identification, expression and characterization of the recombinant Sol g 4.1 protein from the venom of the tropical fire ant *Solenopsis geminata*. **The Journal of Venomous Animals and Toxins including Tropical Diseases** 24, 23

8. Prapenpuksiri Rungsa, Steve Peigneur, Sakda Daduang, Jan Tytgat (2018) Purification and biochemical characterization of VesT1s, a novel phospholipase A1 isoform isolated from the venom of the greater banded wasp *Vespa tropica* **Toxicon** 148, 74-84.

9. Paroonkorn Incamnoi, Rina Patramanon, Sompong Thammasirirak, Arunrat Chaveerach, Wandee Bunyatratchata, Nunthawun Uawonggul, Sophida Sukprasert, Teerawat Namonsai, Kowit Noikotr, Prapenpuksiri Rungsa, Jureerut Daduang, Sakda Daduang (2018) Sequence analysis and 3-dimensional molecular modelling of Heteroscorpine from the venom of *Heterometrus* spp. **Maejo International Journal of Science and Technology**, Maejo Int. J. Sci. Technol. 12(03), 187-198.

10. Prapenpuksiri Rungsa, Paroonkorn Incamnoi, Sophida Sukprasert, Nunthawun Uawonggul, Sompong Klaynongsruang, Jureerut Daduang, Rina Patramanon, Sittiruk Roytrakul and Sakda Daduang (2016) Cloning, structural modelling and characterization of VesT2s, a wasp venom hyaluronidase (HAase) from *Vespa tropica*. **The Journal of Venomous Animals and Toxins including Tropical Diseases** 22, 28.

11. Raksmont Ubonbal, Saijai Porsoongnoen, Jureerut Daduang, Sompong Klaynongsruang and Sakda Daduang (2017) Purification and characterization of two isoforms of native α amylase from Ok-Rong mango (*Mangifera indica* Linn. cv. Ok-Rong). **Turkish Journal of Biochemistry** 42(6), 624-632.

12. Patumporn Sottirattanapan, Kasem Nantachai, Sakda Daduang, Toshitaka Funahashi, Mamoru Yamada (2017) Purification and characterization of amylase from roots of *Paederia foetida* Linn., **Biocatalysis and Agricultural Biotechnology** 10, 329–335.

13. Supawadee Patathananone, Sompong Thammasirirak, Jureerut Daduang, Jing Gung Chung, Yosapong Temsiripong and Sakda Daduang (2016) Inhibition of HeLa cells metastasis by bioactive compounds in crocodile (*Crocodylus siamensis*) white blood cells extract. **Environmental Toxicology** 31(11), 1329-1336.
14. Prapenpuksiri Rungsa, Paroonkorn Incamnoi, Sophida Sukprasert, Nunthawun Uawonggul, Sompong Klaynongsruang, Jureerut Daduang, Rina Patramanon, Sittiruk Roytrakul, Sakda Daduang (2016) Comparative proteomic analysis of two wasps venom, *Vespa tropica* and *Vespa affinis*. **Toxicon** 119, 159-167.
15. Supawadee Patathananone, Sompong Thammasirirak, Jureerut Daduang, Jing Gung Chung, Yosapong Temsiripong and Sakda Daduang (2016) Bioactive compounds from crocodile (*Crocodylus siamensis*) white blood cells induced apoptotic cell death in Hela cell **Environmental Toxicology** 31(8), 986-997.
16. Muchalin Meunchan, Nunthawun Uawonggul, Paroonkorn Incamnoi, Sophida Sukprasert, Prapenpuksiri Rungsa, Theerasak Somdee, Sittiruk Roytrakul, Sompong Thammasirirak and Sakda Daduang (2016) Identification of Bioactive Molecules from Thai Centipede, *Scolopendra subspinipes dehaani*, Venom. **Chiang Mai Journal of Sciences** 43(1), 1055-1064.
17. Natthaporn Kuendee, Sompong Klaynongsruang, Wandee Bunyatratchata, Bundit Tengjaroenkul, Kittipoj Ngamcharoen, Jureerut Daduang, Piti Ungarreevittaya and Sakda Daduang (2015) Ontogeny of Nile tilapia (*Oreochromis niloticus*) IgM antibody response **Israeli Journal of Aquaculture-Bamidgeh** 67, doi: IJA_67.2015.1214
18. Hathairat Srisong, Sakda Daduang and Andreas L. Lopata (2016) Current advances in ant venom proteins causing hypersensitivity reactions in the Asia-Pacific region **Molecular Immunology** 69, 24-32.
19. Raksmont Ubonbal, Saijai Posoongnoen, Jureerut Daduang, Sompong Klaynongsruang and Sakda Daduang (2015) Amino acid sequence of amylase type alpha, MiAmy, from Ok-rong mango (*Mangifera indica* Linn. cv. Ok-rong) **American Journal of Biochemistry and Biotechnology** 11(3), 119-126.
20. Saijai Posoongnoen, Raksmont Ubonbal, Sompong Thammasirirak, Jureerut Daduang, Hiromichi Minami, Kenji Yamamoto and Sakda Daduang (2015) α -Amylase from Mon Thong durian (*Durio zibethinus* Murr. cv. Mon Thong)-Nucleotide sequence analysis, Cloning and Expression **Plant Biotechnology** 32(1), 1-10.
21. Muchalin Meunchan, Sompong Thammasirirak, Jureerut Daduang, Theerasak Somdee, and Sakda Daduang (2015) Molecular cloning and sequence analysis of serine protease cDNA from the venom of the centipede *Scolopendra subspinipes dehaani*. **Turkish Journal of Biochemistry** 40(2), 181-187.
22. Nunthawun Uawonggul, Sompong Thammasirirak, Sutthidech Preecharram, Paroonkorn Incamnoi, Sophida Sukprasert, Wandee Bunyatratchata, Buabarn Kuaprasert, Jureerut Daduang, Sakda Daduang (2014) Bacterial overexpression of recombinant heteroscorpine-1 (recHS-1), a toxin from *Heterometrus laoticus* scorpion venom: trends for anti-bacterial application and antivenom production, **Biochemical genetics** 52 (11-12), 459-473.
23. Sophida Sukprasert, Prapenpuksiri Rungsa, Nunthawun Uawonggul, Paroonkorn Incamnoi, Sompong Thammasirirak, Jureerut Daduang and Sakda Daduang (2013) Purification and structural characterization of phospholipase A₁, Vespapase (Ves a 1), from Thai banded tiger wasp, *Vespa affinis* venom **Toxicon** 61, 151-164.
24. Paroonkorn Incamnoi, Rina Patramanon, Sompong Thammasirirak, Arunrat Chaveerach, Nunthawun Uawonggul, Sophida Sukprasert, Prapenpuksiri Rungsa,

Jureerut Daduang, Sakda Daduang (2013) Heteromtoxin (HmTx), a novel heterodimeric phospholipase A2 from *Heterometrus laoticus* scorpion venom. **Toxicon** 61, 62-71.

25. Sophida Sukprasert, Nunthawun Uawonggul, Tasanee Jamjanya, Sompong Thammasirirak, Jureerut Daduang and Sakda Daduang (2012) Characterization of the allergen Sol gem 2 from the fire ant venom, *Solenopsis geminata*, **The Journal of Venomous Animals and Toxins including Tropical Diseases** 18 (3), 334-343.

26. Nunthawun Uawonggul, Sompong Thammasirirak, Arunrat Chaveerach, Chattong Chuachan, Jureerut Daduang, Sakda Daduang (2011) Plant extract activities against the fibroblast cell lysis by honey bee venom, **Journal of Medicinal Plants Research** 5 (10), 1978-1986.

27. Nunthawun Uawonggul, Sompong Thammasirirak, Arunrat Chaveerach, Tarinee Arkaravichien, Wandee Bunyatratchata, Wipaporn Ruangjirachuporn, Pornpimol Jearranaiprepame, Takeshi Nakamura, Michiyuki Matsuda, Michimoto Kobayashi, Seisuke Hattori, Sakda Daduang (2007) Purification and Characterization of Heteroscorpine-1 (HS-1) toxin from *Heterometrus laoticus* Scorpion Venom. **Toxicon** 49(1), 19-29.

28. Nunthawun Uawonggul, Arunrat Chaveerach, Sompong Thammasirirak, Tarinee Arkaravichien, Chattong Chuachan and Sakda Daduang. (2006) Screening of plants acting against *Heterometrus laoticus* scorpion venom activity on fibroblast cell lysis. **Journal of Ethnopharmacology** 103(2), 201-207.

29. Sakda Daduang, Suporn Nuchadomrong and Panasun Dumrongwutinon (2005) Glycoprotein and biotin-coupled proteins as taxonomic markers of *Cassia fistula*. **Botanica Lithuanica** 11(3), 135-140.

30. Sakda Daduang, Nison Sattayasai, Jintana Sattayasai, Pattara Tophrom, Achra Thammathaworn, Arunrat Chaveerach and Monruedee Konkchaiyaphum (2005). Screening of plants containing *Naja naja siamensis* cobra venom inhibitory activity using modified ELISA technique. **Analytical Biochemistry** 341(2), 316-325.

31. Nison Sattayasai, Jintana Sattayasai, Sakda Daduang, Thippayarat Chahomchuen, Somporn Ketkaew, Hathairat Puchongkavarin (2003) The nonmitochondrial carboxylase, which shows a relation to glutamate action, is last synthesized in retina of chick embryo. **Journal of Neuroimmunology** 141(1-2), 104-111.

32. Sakda Daduang, Satoshi Nagata, Kotaro Kimura and Yasuhisa Fukui (1998) Density dependent elevation of phosphatidylinositol-3 kinase level in rat 3Y1 Cells. **Biochimica Biophysica Acta** 1401(1), 113-120.

33. Sakda Daduang, Satoshi Nagata, Michiyuki Matsuda, Takao Yamori, Kazukiyo Onodera and Yasuhisa Fukui (1995) Production of monoclonal antibodies specific to carboxyl terminal Region of 85 kDa subunit of phosphatidylinositol 3-kinase: use of the antibodies in recognition of the mutant p85's. **Immunology Cell Biology** 73(2), 134-139.