# **CURRICULUM VITAE**

## Dr. Benjamart Cushnie (née Warasiha) Assistant Professor

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Faculty of Pharmacy, Mahasarakham University, Kantarawichai District, Mahasarakham, Thailand 44150

## **Education:**

- **Ph.D.** (Pharmacology), School of Pharmacy, Robert Gordon University, United Kingdom
- M.Sc. (Pharmacology), Faculty of Medicine, Khon Kaen University, Thailand.
- **B.NS.** Faculty of Nursing, Khon Kaen University, Thailand.

## Academic appointment at Faculty of Pharmacy, MSU:

- Lecturer in Pharmacology: June 2000 Present
  - Undergraduate students e.g., PharmD and Nursing students
  - Postgraduate students e.g., M.Sc. (Herbals and Thai Traditional Medicine) and Ph.D.
- Deputy Dean for Research and International Relations, 2008-2010
- Committee of M.Sc. (Herbals and Thai Traditional Medicine) curriculum
- Assistant Professor, 2012

## Awards & Grants:

- World Scientist and University Ranking 2022 #57 in Mahasarakham University (AD Scientific Index)
- [2008] Mahasarakham University, granted for the project in title 'Effect of pharmaceutical care in cancer patients receiving cancer chemotherapy at Khon Kaen hospital'
- [2007] British Association Cancer Research, travel award to attend the National Cancer Research Institute (NCRI) Cancer Conference at International Conventional Centre in Birmingham on 1-3 October 2007.
- [2006] British Association Cancer Research, travel award to attend the National Cancer Research Institute (NCRI) Cancer Conference at International Conventional Centre in Birmingham on 8-11 October 2006.
- [2004] American Institute for Cancer Research, travel award to attend the AICR/WCRF International Research Conference on Food, Nutrition and Cancer on July 15-16, 2004 at the Capital Hilton Hotel in Washington, DC.
- [2003-2007] Funding from Thai Government Scholarship for PhD studies.
- [1997-1999] Funding from University Developing Commissions (UDC) Grant, Ministry of University Affairs, Thailand for MSc studies.

## **Research interest:**

- Antidiabetic and antioxidant activities of natural products
- Antidiabetic phytochemicals from Thai medicinal plants
- Role of drug-metabolizing enzymes in cancer

# **Publications:**

Original articles:

- 1. **Cushnie B**, Promlaruk A, Boonchoo C, Singban W, Khaodee T, Boonradom B, Pulburt P. Antioxidant and antidiabetic activities of ethanolic extract of *Ficus botryocarpa* Miq. fruit. Trop J Nat Prod Res. 2022; 6(7): 1119-1123.
- 2. Cushnie TPT, **Cushnie B**, Echeverria J, Fowsantear W, Thammawat S, Dodgson J, Law S, Clow SM. Bioprospecting for antibacterial drugs: A multidisciplinary perspective on natural product source material, bioassay selection and avoidable pitfalls. Pharm Res. 2020;37(7); Article number: 125.
- Jaruchotikamol A, Sributta H, Yongnoo L, Cushnie B, Pulbutr P. Anti-lipid peroxidation and antioxidant activities of aqueous extract of edible parts of *Momordica cochinchinensis* Lour. (Spreng.). J Sci Technol (MSU). 2019; 38(6):562-571.
- 4. **Cushnie B**, Promlaruk A, Boonchoo C, Singban W, Khaodee T, Boonradom B, Jaruchotikamol A, Pulbutr P. Alpha-amylase inhibition and antioxidant activities of ethanolic crude extract of *Ficus racemosa* Linn. fruit. J Sci Technol (Thammasat University). 2019; 27(5):1029-1040.
- 5. Saelim D, Sakda W, **Cushnie B**, Jaruchotikamol A, Pulbutr P. Development and evaluation of computer-assisted instruction program entitled 'Pharmacology of antihypertensive agents'. J Sci Technol (Thammasat University). 2019; 27(2):349-359.
- 6. Khunawattanakul W, Boonma P, Kampetch R, Jaruchotikamol A, **Cushnie B**, Rattanakiat S, Pulbutr P. Inhibitory actions of *Lagerstroemia speciosa* (L.) Pers. aqueous and ethanolic leaf extracts against carbohydrate-digesting enzymes. Pharmacogn J. 2018; 10(6) Suppl: s113-s118.
- 7. **Cushnie B**, Sakulsuttiwat J, Samaipanit N, Jaruchotikamol A, Pulbutr P. Effectiveness of computer-assisted instruction (CAI) in pharmacology of antipeptic ulcer drugs. J Sci Technol (Thammasat University). 2018; 26(6):1029-1040.
- 8. Pulbutr P, Saramunee K, Anusornsangiam W, **Cushnie B**, Jaruchotikamol A. Effects of flipped classroom learning model in the lessons on pharmacology of antidiabetic agents in pharmacy students at Mahasarakham University. Thai J Pharm Prac. 2017; 9(2):422-432.
- 9. Pulbutr P, Nualkaew S, Rattanakiat S, **Cushnie B**, Jaruchotikamol A. Inhibitory actions of Pseuderanthemum palatiferum (Nees) Radlk. leaf ethanolic extract and its phytochemicals against carbohydrate-digesting enzymes. Asian Pac J Trop Biomed. 2016; 6(2):93-99.
- Rattana S, Cushnie B, Taepongsorat L, Phadungkit M. Chemical constituents and *in vitro* anticancer activity of Tiliacora Triandra leaves. Pharmacogn J. 2016; 8(1):1-3.

- 11. **Cushnie B**, Pimarn W, Wanchoserm P, Singthong F, Pase P, Sawasdirak S. Effects of pharmaceutical care with oral cryotherapy in preventing oral mucositis in cancer patients undergoing 5-fluorouracil (5-FU) regimens at Khon Kaen hospital. Thai Cancer J. 2016; 36(4):127-138.
- 12. Cushnie T, Cushnie B, Lamb A. Alkaloids: An overview of their antibacterial, antibiotic-enhancing and antivirulence activities. Int J Antimicrob Ag. 2014; 44(5):377–386.
- Pulbutr P, Jaruchotikamol A, Cushnie B, Rattanakiat S, Nualkaew S. Anti-lipolytic, alpha-amylase inhibitory and antioxidant actitivities of *Pseuderanthemum palatiferum* (Nees) Radlk. Leaf ethanolic extract. J Med Plants Res. 2014;8(28):967-974.
- 14. Phimarn W, **Cushnie B**, Netwong K, Areechat P, Sriyotha S. The development and evaluation of computer-assisted instruction program of pharmacology in anticancer drugs. Isan J Pharm Sci. 2014; 9(supplement):104-108.
- 15. Phimarn W, Pimdee A, Cushnie B. The Evaluation and development of computerassisted instruction program in pharmacology: antiepileptic drugs. Isan J Pharm Sci. 2013; 9(2):50-59.
- 16. Cushnie B. Role of cytochrome P450 enzymes in cancer treatment. Thai Pharm Health Sci J. 2012; 7(1):44-51.
- 17. Phimarn W, Anakeveang A, Hirunpanich Sato V, **Cushnie B**. The evaluation and development of computer-assisted instruction program in pharmacology of asthma. Thai Pharm Health Sci J. 2012; 7(1):16-21.
- 18. Cushnie B, Maneephan P. Effects of pharmaceutical care in colorectal cancer patients receiving cancer chemotherapy at Khon Kaen hospital. Thai Pharm Health Sci J. 2011; 6(1):25-31.
- 19. Cushnie B, Hatsarin S. Effects of pharmaceutical care among breast cancer patients undergoing chemotherapy at Udonthani regional cancer center, Thailand. Thai Cancer J. 2011: 31(3);93-105.
- 20. Kukongviriyapan V, Prawan A, **Warasiha B**, Tassaneyakul W, Aiemsa-ard J. Polymorphism of N-acetyltransferase 1 and correlation between genotype and phenotype in a Thai population. Eur J Clin Pharmacol. 2003; 59(4):277-281.
- 21. Kukongviriyapan V, Prawan A, Tassaneyakul W, Aiemsa-Ard J, **Warasiha B**. Arylamine N-acetyltransferase-2 genotypes in the Thai population. Br J Clin Pharmacol. 2003; 55(3):278-281.

#### • <u>Abstract</u>:

 Warasiha B, Knott R, Boyle S. Investigation of the role of xenobiotic metabolising enzymes in breast cancer development. *J Nutr.* 2004 Dec; 134(12 Suppl): 3525S. (Poster presented as part of the International Research Conference on Food, Nutrition and Cancer held in Washington, DC, USA, July 15-16, 2004).

#### • <u>Conference proceedings</u>:

1. Jaruchotikamol A, Pulbutr P, **Cushnie B.** Antioxidant activities of cycloalliin. In the proceeding of the Fifth International Conference on Natural Products for Health and Beauty (NATPRO5) May 6-8, 2014 at Moevenpick Resort & Spa Karon Beach Phuket, Thailand.

- 2. Pulbutr P, Punjaruk W, Jaruchotikamol A, **Cushnie B.** *In vitro* study on  $\alpha$ -amylase enzyme activity of *Pseuderanthemum palatiferum* ethanolic leaf extract. In the proceeding of the Fifth International Conference on Natural Products for Health and Beauty (NATPRO5) May 6-8, 2014 at Moevenpick Resort & Spa Karon Beach Phuket, Thailand.
- 3. Pulbutr P, Jaruchotikamol A, **Cushnie B**, Rattanakiet S, Punjaruk W, Nualkaew S. Effects of *Pseuderanthemum palatiferum* ethanolic extract on rat adipocytes lipolysis and *in vitro*  $\alpha$ -amylase activity. In the proceeding of NAPA2013 International Conference on Nutrition and Physical Activity in Aging, Obesity and Cancer. August 14-17, 2013 at Centara Grand Mirage Beach Resort, Pattaya, Chonburi, Thailand. (Poster presentation).
- 4. Phadungkit M, Rattana S, **Cushnie B**, Taepongsorat L. Chemical constituents and in vitro anticancer activity of *Tiliacora Triandra* leaves. In the proceeding of 8th Annual Conference of the European Nutraceutical Association (ENA) Nutraceuticals and Brain Health Hot Topics in Neutraceuticals November 3, 2012, Munich, Germany. (Poster presentation).
- 5. Phimarn W, Anakeveang A, Sato VH, **Cushnie B**. Development and evaluation of computer-assisted instruction program in asthma pharmacology for PharmD students. In the proceedings of US-Thai Consortium for the development of Pharmacy Education in Thailand 1-3 June 2011 at Phuket Graceland Resort&spa, Phuket, Thailand. (Poster presentation).
- 6. Jaruchotikamol A, *Pannangpetch P*, Itharat A, **Cushnie B**, Nobuo Nemoto. Expression of drug metabolizing enzymes modified by water extract of *Hibiscus* sabdariffa L. Calyces. In the proceedings of The 9th NRCT-JSPS Joint Seminar: "Natural Medicine Research for the Next Decade: New Challenges and Future Collaboration" 8-9 December 2010 at Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok Thailand. (Poster presentation).
- 7. Prasawang J, Trachoo N, **Cushnie B**. Survival of probiotic and antioxidant activity on health beverage from fermented purple rice supplemented with probiotic. In the proceedings of 2010 International conference on biology, environment and chemistry (ICBEC 2010) 28-30 December 2010 at Hong Kong. (Oral presentation).
- 8. **Warasiha B**, Knott R, McFadyen M. (2007) Comparative analysis of Cytochrome P450 mRNA Expression between Human Caucasian and Afro-Caribbean Breast Cancer Cell Lines. In the proceedings of National Cancer Research Institute (NCRI) Cancer Conference October 2007 at the ICC in Birmingham, UK. (Oral and poster presentation).
- 9. **Warasiha B**, Knott R, McFadyen M. (2007) Differential Cytochrome P450 mRNA Profile between Non-invasive and Invasive Breast Cancer Phenotypes. In the proceedings of National Cancer Research Institute (NCRI) Cancer Conference October 2007 at the ICC in Birmingham, UK. (Poster presentation).
- 10. Kay G, Cairns D, McCaughan B, **Warasiha B.** (2007) The Design, Synthesis and Biological Evaluation of Novel Prodrugs for the Treatment of Cystinosis. In the proceedings of British Conference Pharmaceutical (BCP) September 2007 at the Manchester central in Manchester, UK. (Poster presentation).
- 11. Kay G, **Warasiha B**, Melville M, Mincher DJ. (2007) Design, Synthesis and Biological Evaluation of Novel DNA Binding Agents. In the proceedings of British Conference Pharmaceutical (BCP) September 2007 at the Manchester central in Manchester, UK. (Poster presentation).
- 12. **Warasiha B**, Knott R, McFadyen M. (2006) Profile of cytochrome P450 mRNA expression in oestrogen positive and negative breast cancer cell lines. In the

Proceedings of National Cancer Research Institute (NCRI) Cancer Conference October 2006 at the ICC in Birmingham, UK. (Poster presentation).

- 13. Warasiha B, Knott R, Boyle S. (2004). Investigation of the role of xenobiotic metabolising enzymes in breast cancer development. In the Proceedings of American International Cancer Research and World Cancer Research Fund (AICR/WCRF) International Research Conference on Food, Nutrition and Cancer, July 2004, Washington DC, USA. (Poster presentation).
- 14. **Warasiha B**, Kukongviriyapan V, Tassaneeyakul W, Yongvanit P. (2000) Phenotype of N-acetyltransferase1 (NAT1) in Association with Cholangiocarcinoma. In the Proceedings of Annual Conference of Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand, October 2000. (Oral presentation).
- 15. Kukongviriyapan V, Aiamsa-ard J, **Warasiha B**, Tassaneeyakul W, Bhuddhisawasdi V, Saeseow O-T, Thinkhamrop B. Arylamine N-acetyltransferase Phenotype Polymorphism in Associated with Cancer Risk. In the Proceedings of Annual Conference of Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand, October 2000. (Oral presentation).
- 16. Kukongviriyapan V, Aiamsa-ard J, Warasiha B, Tassaneeyakul W, Bhuddhisawasdi V, Saeseow O-T. Arylamine N-acetyltransferase Polymorphism in Cholangiocarcinoma Thailand. In the Proceedings of the 8th Southeast Asian-Western Pacific Regional Meeting of Pharmacologists. Taipei, Taiwan November 1-5, 1999. (Poster presentation).