



Name Associate Professor Dr. Kusumawadee Utispan
Affiliation Faculty of Dentistry, Thammasat University
E-mail address kusumawadee.utispan@gmail.com

Position

- Head of Department of Oral Biology, Faculty of Dentistry, Thammasat University (2019 - present)
- Associate Professor of Oral Biology, Faculty of Dentistry, Thammasat University (2020 - present)
- Lecturer at Faculty of Dentistry, Thammasat University (2013 – present)

Education Background

PhD. (Medical Biochemistry), Faculty of Medicine, Khon Kaen University, Thailand (2010)
B.Sc. (Medical Technology) (second class honors), Faculty of Associated Medical Sciences, Khon Kaen University, Thailand (2004)

Research Interested

Head and neck squamous cell carcinoma

- Molecular biology of cancers cells and tumor microenvironment

- Tumor markers and signaling pathway
- Effects of natural products on cancer cells and dental biofilm

International Publications, h-index 10 (2018-2023)

1. Luengthamchat N, Koontongkaew S, **Utispan K**. Bitter taste perception and dental biofilm cariogenicity in orthodontics. *Int Dent J*. **2022**, 72(6), 805-810. (**Impact factor 2.60, Scopus Q1**)
2. Thanetchaloempong W, Koontongkaew S, **Utispan K** (2022). Fixed orthodontic treatment increases cariogenicity and virulence gene expression in dental biofilm. *J. Clin. Med.* 11, 5860. [https://doi.org/ 10.3390/jcm11195860](https://doi.org/10.3390/jcm11195860) (**Impact factor 4.96, Scopus Q1**)
3. Jongjitaree S, Koontongkaew S, Niyomtham N, Yingyongnarongkul BE, **Utispan K**. The oral wound healing potential of Thai propolis based on its antioxidant activity and stimulation of oral fibroblast migration and proliferation. *Evid Based Complement Alternat Med*. **2022**, doi: 10.1155/2022/3503164. (**Impact factor 2.65, Scopus Q2**)
4. **Utispan K**, Koontongkaew S. Mucin 1 regulates the hypoxia response in head and neck cancer cells. *J Pharmacol Sci*. **2021**, 147(4), 331-339. (**Impact factor 3.57, Scopus Q2**)
5. Niyomtham N, Yingyongnarongkul BE, Koontongkaew S, **Utispan K**. *Apis mellifera* propolis enhances apoptosis and invasion inhibition in head and neck cancer cells. *PeerJ*. **2021**, 9:e12139 DOI 10.7717/peerj.12139 (**Impact factor 3.06, Scopus Q1**)
6. **Utispan K**, Koontongkaew S. Macrophage migration inhibitory factor modulates proliferation, cell cycle, and apoptosis activity in head and neck cancer cell line. *J Dent Sci*. **2021**, 16(1), 342-348. (**Impact factor 3.71, Scopus Q2**)
7. **Utispan K**, Koontongkaew S. High nitric oxide adaptation in isogenic primary and metastatic head and neck cancer cells. *Anticancer Res*. **2020**, 40(5), 2657-2665. (**Impact factor 2.48, Scopus Q2**)
8. **Utispan K**, Niyomtham N, Yingyongnarongkul BE, Koontongkaew S. Ethanolic extract of *Ocimum sanctum* leaves reduced invasion and matrix metalloproteinase activity of head and neck cancer cell lines. *Asian Pac J Cancer Prev*. **2020**, 21(2), 363-370. (**Impact factor 2.52, Scopus Q3**)
9. Sonongbua J, Siritungyong S, Thongchot S, Kamolhan T, Utispan K, Thuwajit P, Pongpaibul A, Wongkham S, Thuwajit C. Periostin induces epithelial-to-mesenchymal transition via the integrin $\alpha 5\beta 1$ /TWIST-2 axis in cholangiocarcinoma. *Oncol Rep*. **2020**, 43(4), 1147-1158. (**Impact factor 4.13, Scopus Q2**)
10. Kokilakanit P, Koontongkaew S, Roytrakul S, **Utispan K**. A novel non-cytotoxic synthetic peptide, Pug-1, exhibited an antibiofilm effect on *Streptococcus mutans* adhesion. *Lett Appl Microbiol*. **2020**, 70(3), 151-158. (**Impact factor 2.81, Scopus Q2**)

11. Le Van, Leelakriangsak M, Lee Seong, Panphon S, **Utispan K**, Koontongkaew S. Characterization and safety evaluation of partially purified bacteriocin produced by *Escherichia coli* E isolated from fermented pineapple *Ananas comosus* (L.) Merr. *Braz J Microbiol.* **2019**, 50(1):33-42. (Impact factor **3.49**, Scopus **Q3**)
12. **Utispan K**, Pugdee K, Koontongkaew S. *Porphyromonas gingivalis* lipopolysaccharide-induced macrophages modulate proliferation and invasion of head and neck cancer cell lines. *Biomed Pharmacother.* **2018**, 101: 988–995. (Impact factor **7.41**, Scopus **Q1**)
13. **Utispan K**, Chitkul B, Koontongkaew S. Cytotoxic activity of propolis extracts from the stingless bee *Trigona Sirindhornae* against primary and metastatic head and neck cancer cell lines. *Asian Pac J Cancer Prev.* **2017**, 18(4): 1051–1055. (Impact factor **2.52**, Scopus **Q3**)
14. **Utispan K**, Chitkul B, Monthanapisut P, Meesuk L, Pugdee K and Koontongkaew S. Propolis extracted from the stingless bee *Trigona sirindhornae* inhibited *S. mutans* activity in vitro. *Oral Health Prev Dent.* **2017**, 15: 279-284. (Impact factor **1.59**, Scopus **Q2**)
15. **Utispan K**, Koontongkaew S. Fibroblasts and macrophages: Key players in the head and neck cancer microenvironment. *J Oral Biosci.* **2017**, 59: 23–30. (Scopus **Q2**)
16. Rinchai D, Riyapa D, Buddhisa S, **Utispan K**, Titball W R, Stevens P M, Stevens M J, Ogawa M, Tanidae I, Koike M, Uchiyama Y, Ato M and Lertmemongkolchai G. Macroautophagy is essential for killing of intracellular *Burkholderia pseudomallei* in human neutrophils. *Autophagy*, **2015**, 11(5): 748-755. (Impact factor **16.14**, Scopus **Q1**)
17. Kewcharoenwong C, Rinchai D, **Utispan K**, Suwannasaen D, Bancroft J G, Ato M and Lertmemongkolchai G. Reduced Cytokine Production of human Polymorphonuclear Neutrophil response to *B. pseudomallei* in Diabetes Mellitus. *Scientific report.* **2013**, 28 (3): 3363. (Impact factor **4.99**, Scopus **Q1**)
18. **Utispan K**, Sonongbua J, Thuwajit P, Chua-in S, Pairojkul C, Wongkham S and Thuwajit C. Periostin activates integrin $\alpha 5\beta 1$ through a PI3K/AKT-dependent pathway in invasion of cholangiocarcinoma. *Int J Oncol.* **2012**, 41: 1110-1118. (Impact factor **5.88**, Scopus **Q2**)
19. **Utispan K**, Thuwajit P, Abiko Y, Charngkaew K, Paupairoj A, Chau-in S and Thuwajit C. Gene expression profiling of cholangiocarcinoma-derived fibroblast reveals alterations related to tumor progression and indicates periostin as a poor prognostic marker. *Mol Cancer* **2010**, 9; 13 doi: 10. 1186/1476-4598-9-13. (Impact factor **41.44**, Scopus **Q1**)

Book

1. **Utispan K**, Koontongkaew S, Aupapong V. (eds.) Scientific basis of dental caries prevention. I Group Press, Bangkok, **2020** (in Thai)