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澳門科技大學(MUST)醫學院
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教育經歷:

2015-2019	博士	食品科學與營養	馬塞諸塞大學阿姆斯特分校 (美國)
2013-2015	碩士	食品科學	佐治亞大學 (美國)
2008-2012	本科	生物技術	西北農林科技大學

工作經歷

2022.09-至今	助理教授	醫學院 食品與營養科學系	澳門科技大學
2020-2022.09	副教授	食品科學與生物工程學院	江蘇大學
2015-2019	助理研究員	食品科學與營養系	馬塞諸塞大學阿姆斯特分校 (美國)
2013-2015	助理研究員	食品安全與營養系	佐治亞大學 (美國)

主授課程

- 農場到餐桌的管理概論 Food Management from Farm to Table
- 科研設計及論文撰寫 Research Design and Paper Writing
- 生物化學及分子生物學 Biochemistry and Molecular Biology
- 食品毒理學 Food Toxicology

研究方向

- ◆ 食品中生物活性組分對衰老，脂肪與葡萄糖代謝的作用及機理研究。
- ◆ 建立肌肉細胞體外模型和小鼠體內模型研究生物活性成分如菊苣酸，牡荊素等對糖類代謝的影響及機制。
- ◆ 生物可替代蛋白及多肽的开发，功能及特性研究。
- ◆ 主要從事環境污染物（殺蟲劑）對糖類和脂質代謝異常的影響及作用機制。如氯蟲苯甲醯胺對脂肪積累的作用機制，該研究方向獲得國家自然科學基金青年基金。

榮譽與獲獎

2020-2022	江蘇省雙創博士
2021-2022	年度高被引論文
2019	年度 Francis presentation competition 第一名
2018	Citri-Fiber 產品研發大賽二等獎
2015- 2019	Peter Salmon 獎學金
2015- 2018	馬塞諸塞大學研究生獎學金
2013- 2015	佐治亞大學研究生全額獎學金

代表性文章

1. Wang L, Yang H, Li X, Liao Y, Lang J, Hong Z, Qiu J, Wang J, Xiao Y*, & **Peng Y***. (2025). Health Benefits, Supply Chain Challenges and Opportunities of Minor Tropical Fruits: A Review. *Food Reviews International* 1-18; DOI: 10.1080/87559129.2025.2520454.
2. Huang R, Chen X, Chen J, Zhang R, Yang Y*, **Peng Y***, & Sun Q*. (2025). Hydroxycinnamic Acids in Chicory: Implications for Gut Health and Ulcerative Colitis Mitigation. *Food Science and Human Wellness* (Accepted).
3. Liu, Z., Gao, T., Chang, H., Xu, Y., Wang, L., Wang, X., Xiao Y*, **Peng, Y***. (2025). Hawthorn leaf and its extract alleviate high-fat diet-induced obesity and modulate gut microbiome in mice. *Current Research in Food Science*, 10: 101025.
4. Gao J., Xie Z., Wang Z., Yu Y., Zhong T., Yu X., Feng K., **Peng Y***., Xiao Y*. (2024) Toxicities of human exposure to Polybrominated Diphenyl Ethers and their derivatives: A comprehensive review. *Current Research in Food Science*, 100918.
5. Xu, Y., Tong, X., Lu, Y., Lu, Y., Wang, X., Han, J., **Peng Y***. **Sun, Q***. (2024). Microalgal proteins: Unveiling sustainable alternatives to address the protein challenge. *International Journal of Biological Macromolecules*, 133747.
6. Wang, Y., Wang, Z., Lin, Y., Qin, Y., He, R., Wang, M., **Peng, Y***. (2024). Nanocellulose from agro-industrial wastes: A review on sources, production, applications, and current challenges. *Food Research International*, 114741.
7. Gu T., Lin J., Yang J., Mumby W., **Peng Y.**, Sun Q*. (2024) Chlorantraniliprole exposure aggravates high-fat diet-induced metabolic disorders in mice by regulating gut microbiota and its metabolites. *Food Science and Human Wellness*. DOI: 10.26599/FSHW.2024.9250079.
8. Chang H., Tong X., Yang H., **Peng Y***., Sun Q*. (2024) Chinese yam (*Dioscorea opposita*) and its bioactive compounds: the beneficial effects on gut microbiota and gut health. *Current Opinion in Food Science*, 55, 101121.
9. Yang J., Lin J., Gu T., Sun Q., Xu W*, **Peng Y***. (2024) Chicoric Acid Effectively Mitigated Dextran Sulfate Sodium (DSS)-Induced Colitis in BALB/c Mice by Modulating the Gut Microbiota and Fecal Metabolites. *Int J Mol Sci.* 10;25(2):841.
10. Gao J, Xu Y., Zhong T., Yu X., Wang L., Xiao Y., **Peng Y***, Sun Q*. (2023) A review of food contaminant 2,3,7,8-tetrachlorodibenzo-p-dioxin and its toxicity associated with metabolic disorders. *Current Research in Food Science*, 7, 100617.
11. **Peng Y.**, Qi Z., Xu Y., Yang X., Cui Y., Sun Q*. (2023) AMPK and metabolic disorders: The opposite roles of dietary bioactive components and food contaminants. *Food Chemistry*, 437, 137784.

12. Lin X., Wang F., Lu Y., Wang J., Chen J., Yu Y., Tao X., Xiao Y*, **Peng Y***. (2023) A review on edible insects in China: Nutritional supply, environmental benefits, and potential applications. *Current Research in Food Science*, 7, 100596.
13. Yang J., Gu T., Lu Y., Xu Y., Gan R.Y., Ng S.B., Sun Q., **Peng Y***. (2023) Edible *Osmanthus fragrans* flowers: aroma and functional components, beneficial functions, and applications. *Crit Rev Food Sci Nutr*, 7:1-14. doi: 10.1080/10408398.2023.2220130.
14. **Peng Y.**, Gu T., Zhong T., Xiao Y., Sun Q*. (2022) Endoplasmic reticulum stress in metabolic disorders: opposite roles of phytochemicals and food contaminants. *Current Opinion in Food Science*, 48, 100913.
15. Chen G., Wang G., Xu W., Xiao Y., **Peng Y***. (2022) Transcriptome analysis of fat accumulation in 3T3-L1 adipocytes induced by chlorantraniliprole. *Front Nutr*, 15;9:1091477. doi: 10.3389/fnut.2022.1091477.
16. Wang G., Huang Y., Gao Y., Chen G., Cui L., **Peng Y.**, Sun Q.* (2023) The fat accumulation promotion effects of dihydxytetraphenylmethane and its underlying mechanisms via transcriptome analysis, *Current Research in Food Science*, 7, 100534.
17. Cao Q, Wang G, and Peng Y*. (2021) A critical review on phytochemical profile and biological effects of turnip (*Brassica rapa* L.). *Frontiers in Nutrition*, 8(459), 1-6.
18. Xu, W., Li, J., Qi, W., and **Peng, Y***. (2021). Hypoglycemic effect of vitexin in C57BL/6J mice and HepG2 models. *Journal of Food Quality*, 2021(1): 5535476.
19. **Peng, Y.**, Gan, R., Li, H., Yang, M., McClements, D. J., Gao, R., and Sun, Q. (2020) Absorption, metabolism, and bioactivity of vitexin: recent advances in understanding the efficacy of an important nutraceutical. *Critical Reviews in Food Science and Nutrition*, 27, 1-16.
20. **Peng, Y.**, Sun, Q., Gao, R., & Park, Y. (2019). AAK-2 and SKN-1 are involved in chicoric-acid-induced lifespan extension in *Caenorhabditis elegans*. *Journal of Agricultural and Food Chemistry*, 67(33), 9178-9186.
21. **Peng, Y.**, Sun, Q., & Park, Y. (2019). Chicoric acid promotes glucose uptake and Akt phosphorylation via AMP-activated protein kinase α -dependent pathway. *Journal of Functional Foods*, 59, 8-15.
22. **Peng Y**, Sun Q, & Park Y. (2019). The bioactive effects of chicoric acid as a functional food ingredient. *Journal of Medicinal Food*, 22 (7), 645-652.
23. **Peng, Y.**, Sun, Q., Xu, W., He, Y., Jin, W., Yuan, L., & Gao, R. (2019). Vitexin ameliorates high fat diet-induced obesity in male C57BL/6J mice via the AMPK α -mediated pathway. *Food & Function*, 10(4), 1940-1947.

24. Yuan, L, Lin, J., **Peng, Y***, Gao, R., and Sun, Q.* (2019). Chlorantraniliprole induces adipogenesis in 3T3-L1 adipocytes via the AMPK α pathway but not the ER stress pathway. *Food Chemistry*, 311, 125953.
25. Sun, Q.#, **Peng, Y.#**, Park, Y. (2018). Permethrin decreased insulin-stimulated AKT phosphorylation dependent on extracellular signal-regulated kinase-1 (ERK), but not AMP-activated protein kinase α (AMPK α), in C2C12 myotubes. *Food and Chemical Toxicology*, 109(1), 95-105.
26. Sun, Q., Lin, J., Peng, Y., **Peng, Y***. (2018). Flubendiamide enhances adipogenesis and inhibits AMPK α in 3T3-L1 adipocytes. *Molecules*, 23(11), 2950.
27. Liu, J., **Peng, Y.**, Yue, Y., Shen, P., Park, Y. (2018). Epigallocatechin-3-Gallate reduces fat accumulation in *Caenorhabditis elegans*. *Preventive Nutrition and Food Science*, 23(3), 214–219.
28. Sun Q#, **Peng Y#**, Qi W, Kim Y, Clark J, Kim D, & Park Y*. (2017). Permethrin decreased insulin-stimulated AKT phosphorylation dependent on extracellular signal-regulated kinase-1 (ERK), but not AMP-activated protein kinase α (AMPK α), in C2C12 myotubes. *Food and Chemical Toxicology*, 109: 95-101.
29. **Peng, Y.**, Deng, X., Harrison, M. A., Alali, W. Q. (2016). *Salmonella* levels associated with skin of turkey parts. *Journal of Food Protection*, 79(5), 801-805.

Meeting Presentations and Abstracts

1. **Peng, Y.**, Park, Y. Chicoric acid promotes glucose uptake via AMP-activated protein kinase α -dependent pathway. Annual Board Advisor Meeting, Food Science Department, UMass, Amherst. 5 April 2019 (oral presentation).
2. **Peng, Y.**, Sun, Q., Yue, Y, Park, Y. Effects of Chicoric acid on lifespan extension in *Caenorhabditis elegans*. The 56th Society of Toxicology Annual Meeting, Baltimore, Maryland, 12-16 March 2017 (oral presentation).
3. **Peng, Y.**, Cui, Y., Alali, W. *Salmonella* levels associated with skin of turkey parts. International Association of Food Protection, Portland, 26-28 July 2015 (oral presentation).

Grants (As Principal Investigator)

1. National Natural Science Foundation of China, Title: Molecular mechanism of chlorantraniliprole-induced adipogenesis via FGF10 pathway, PI: Peng, Y., CNY240,000, Jan.2020-Dec.2022. 2.
2. The Science and Technology Development Fund of Macau, Title: The fat accumulation inhibition mechanism study of vitexin via activating AMPK α and functional foods development, PI: Peng, Y., MOP1,646,000, May. 2023-May. 2026

3. The Science and Technology Development Fund of Macau, Title: Microencapsulation of *Lactobacillus plantarum* Y-1 and antihyperlipidemic probiotic functional food development, PI: Peng, Y., MOP451,500, Nov. 2023-Dec. 2025.
4. The Science and Technology Development Fund of Macau, Title: High-value processing technology for biowaste sturgeon fish heads: Developing functional food components to alleviate intestinal inflammation, PI: Peng, Y., MOP\$1,550,000, May 2025 -May. 2028.