ประวัติ
อาจารย์ ดร. ศิริมา พ่วงประพันธ์

1. ชื่อ-สกุล นางสาวศิริมา พ่วงประพันธ์
   Miss Sirima Puangpraphant

2. หน่วยงานที่อยู่ที่ติดต่อได้สะดวก
   ภาควิชาเทคโนโลยีทางอาหาร
   คณะวิทยาศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
   ถนนพญาไท เขตปทุมวัน กรุงเทพฯ 10330
   โทร. 02-218-5515-6 แฟกซ์ 02-254-4314

3. ประวัติการศึกษา

วท.บ. (เกียรตินิยม)	พัฒนาผลิตภัณฑ์อุตสาหกรรมเกษตร มหาวิทยาลัยเกษตรศาสตร์	พ.ศ. 2544
M.S.	Food Science and Human Nutrition University of Illinois at Urbana-Champaign	พ.ศ. 2550
Ph.D.	Food Science and Human Nutrition University of Illinois at Urbana-Champaign	พ.ศ. 2554

4. สาขาวิชาที่มีความชำนาญพิเศษ
   - การวิเคราะห์สารสำคัญจากพืช (Phytochemicals)
   - การทดสอบความเป็นพิษ (Cytotoxicity), ฤทธิ์ต้านอนุมูลอิสระ (Antioxidant capacity), ฤทธิ์ต้านการอักเสบ (Anti-inflammation) และฤทธิ์การต้านมะเร็ง (Anti-cancers) ของสารสำคัญจากพืช
   - การศึกษาผลของกระบวนการแปรรูปอาหารต่อสารสำคัญจากพืชในผลิตภัณฑ์อาหาร (The Impact of Food Processing on Phytochemicals and/or Bioactive Compounds in Foods/Food Products)
   - การพัฒนาผลิตภัณฑ์อาหารเพื่อสุขภาพ (Product Development of Functional Foods and Nutraceuticals)

5. ผลงานทางวิชาการ

International publications

Uriarte-Aceves, P. M.; Cuevas-Rodríguez, E. O.; Gutiérrez-Dorado, R.; Mora-Rochín, S.; Reyes-Moreno, C.; **Puangpraphant, S**.; Milán-Carrillo, J. Physical, Compositional, and Wet-Milling Characteristics of Mexican Blue Maize (*Zea mays* L.) Landrace. *Cereal Chemistry Journal.* 2015, 92:5, 491-496.

Puangpraphant, S.; Dia, V.P.; de Mejia, E.G.; Garcia, G.; Berhow, M.A.; Wallig, M.A. Yerba mate tea and mate saponins prevented azoxymethane-induced inflammation of rat colon through suppression of NF-**K**B p65ser^{311} signaling via I**K**B-α and GSK-3β reduced phosphorylation. *BioFactors.* 2013, 39, 430-440.

Puangpraphant, S.; Berhow, M.A.; Vermillion, K.; Potts, G.; de Mejia, E. G. Dicaffeoylquinic acids in yerba mate (*Ilex paraguariensis* St. Hilaire) inhibit NF-**K**B nucleus translocation in macrophages and induce apoptosis by activating caspases-8 and -3 in human colon cancer cells. *Molecular Nutrition and Food Research.* 2011, 55, 1509-1522.

Puangpraphant, S.; Berhow, M.; de Mejia, E.G. Mate (*Ilex paraguariensis* St. Hilaire) saponins induce caspase-3-independent apoptosis in human colon cancer cells *in vitro*. *Food Chemistry.* 2011, 125, 1171-1178.

Puangpraphant, S., Berhow, M., & de Mejia, E. G. (2010, April). Saponins from Yerba Mate (Ilex paraguariensis St. Hilaire) leaves inhibit markers of inflammation in vitro through NF kappa B pathways. In *FASEB JOURNAL* (Vol. 24). 9650 ROCKVILLE PIKE, BETHESDA, MD 20814-3998 USA: FEDERATION AMER SOC EXP BIOL.

Cadwallader, K.R.; Kim, H.; **Puangpraphant, S**.; Lorjaroenphon, Y. Changes in the aroma components of pecans during roasting. In *Expression of Multidisciplinary Flavor Science*; Blank, I., Wüst, M., Yeretzian, C., Eds.; Zürcher Hochschule für Angewandte: Winterthur, Switzerland, 2010; pp 301-304.

Puangpraphant, S.; de Mejia, E.G. Saponins in yerba mate tea (*Ilex paraguariensis* A. St.-Hil.) and quercetin synergistically inhibit iNOS and COX-2 in lipopolysaccharide-induced macrophages through NF**K**B pathways. *Journal of Agricultural and Food Chemistry.* 2009, 57, 8873-8883.

de Mejia, E.G.; Ramirez-Mares, M.V.; **Puangpraphant, S.** Bioactive components of tea: Cancer, Inflammation and Behavior. *Brain, Behavior, and Immunity.* 2009, 23, 721-731.

Book Chapters

Puangpraphant, S.; Berhow, M.A.; de Mejia, E. G. Yerba mate (*Ilex Paraguariensis* St. Hilaire) saponins inhibit human colon cancer cell proliferation. In: "Hispanic Foods: Chemistry and Bioactive Compounds". Tunick and de Mejia (Eds.), ACS Symposium Series 1109. Oxford University Press. 2012, pp. 307-321.

Gonzalez de Mejia, E.; **Puangpraphant, S.;** Eckhoff, R. Chapter 47 - Tea and Inflammation. In: "Tea in Health and Disease Prevention". Preedy V.R. (Ed.), Elsevier Science. Academic Press. 2012, pp. 563-579.

Cadwallader, K. R., & **Puangpraphant, S**. (2009). *Flavor and Volatile Compounds in Tree Nuts* (pp. 109-126). C. Alasalvar, & F. Shahidi (Eds.). CRC Press: Boca Raton, FL.

Proceedings

Puangpraphant, S., Chantasuwanno, C., Rinthapol, N., Heinchasri, P. Influence of Pectin and Rebaudioside A on the Stability of Anthocyanins and Antioxidant Activity of Roselle (Hibiscus sabdariffa L.) Juice. The 3rd ISHS Southeast Asia Symposium on Quality Management in Postharvest Systems (SEAsia2015). August 13-15, 2015. Apsara Angkor Resort & Conference Center, Siem Reap, Cambodia.

Puangpraphant, S., Worakulpisut, W., Kunarayakul, S. Factors affecting anthocyanin stability and its antioxidant activity of Ma-kiang (*Cleitocalyx nervosum* var. paniala) juice. The 3rd Asia Pacific Symposium on Postharvest Research, Education and Extension (APS 2014). December 9-11, 2014. Victory Hotel, Ho Chi Minh City, Viet Nam.

Sakulprasert, K., Borompichaichartkul, C., **Puangpraphant, S.** Effects of drying methods on the content of phenolic substances and antioxidant activity of leaf extracted from Pak-wan-pa (*Melientha suavis* Pierre.). The 2nd International Conference on Food and Applied Bioscience. February 6-7, 2014. The Empress Hotel, Chiang Mai, Thailand.

Gonzalez de Mejia, E.; **Puangpraphant, S.;** Berhow, M.A. Yerba mate (*Ilex paraguariensis*) tea and its purified saponins modulate pathways of inflammation. The American Chemical Society. 2012. San Diego, CA, USA.

Puangpraphant, S.; Berhow, M.A.; Gonzalez de Mejia, E. Saponins from Yerba Mate (*Ilex paraguariensis*St. Hilaire) leaves inhibit markers of inflammation *in vitro* through NF**K**B pathways. Experimental Biology 2010. Aneheim, CA, USA.

Potts, G.; **Puangpraphant, S.;** González de Mejía, E. Purification and anti-inflammatory capacity of dicaffeoylquinic acids in yerba mate (*Ilex paraguariensis*) dry leaves. The American Chemical Society. 2010. San Franscisco, USA.

Puangpraphant, S.; Gonzalez de Mejia, E. Yerba mate tea phytochemicals inhibit inducible nitric oxide synthase/nitric oxide and cyclooxygenase-2/prostaglandin E2 pathways in lipopolysaccharide-induced macrophages. The IFT Annual Meeting. 2009. Anaheim, CA, USA.