

UMA DEVI M.PALANISAMY, PhD (Cambridge)



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Monash University, Malaysia

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Malaysia

Education

2012-2013	Graduate Certificate in Higher Education	Monash University
1995-1998	PhD Biotechnology	University of Cambridge
1989-1991	MPhil Biochemistry	University Malaya
1982-1986	BSc (Honours) Biochemistry	University Malaya

Key Attributes

- National and International recognition for research in the area of Natural Product Drug Discovery.
 - Impressive records of patents filed and its subsequent exploitation.
 - Extensive collaborations with industry and institutions of higher learning.
 - Outstanding track record for successful grant awards.
 - Strong leadership qualities in curriculum management and workplace excellence.
 - Excellent supervisory skills, evident by HDR students' achievement
 - Commendable dedication and passion for community engagement activities involving governmental bodies and NGO's.
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Work Experience

Feb- Aug 2013	Sabbatical at the Risk Factor Modification Centre, Department of Nutrition, University of Toronto, ON, Canada
2012- present	Associate Professor of Biochemistry, School of Medicine and Health Sciences, Monash University, Malaysia
2008-2012	Senior Lecturer of Biochemistry, School of Medicine and Health Sciences, Monash University, Malaysia
1998-2007	Senior Research Officer at SIRIM Bhd (A National Research Institute)
1991-1997	Research Officer at SIRIM Bhd (A National Research Institute)

Research Expertise

- Exposure to randomized clinical trials in nutritional research, particularly on the effect of dietary modification on glycemic control and CVD risk factors in Type 2 Diabetes patients
 - Identify and evaluate bioactives from natural sources for its potential health benefits, with particular interest in plant bioactives for diabetes and obesity.
 - Screening of local natural resources for cosmeceutical, nutraceutical and pharmaceutical content and develop medium-throughput screening techniques to aid the growth of the natural product research in Malaysia
 - Purification and characterisation of bioactives from various plant sources intended for cosmeceutical, nutraceutical or pharmaceutical application
 - Computational and combinatorial chemistry tools to aid drug discovery
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Honors & Awards

2012	PVC Award for Research, Monash University Sunway Campus
2011	PVC Award for Research, Monash University Sunway Campus
2011	Dean's Award for Workplace Excellence and Equity, Monash Australia
2011	Poster Award, International Conference of Oxidative Stress, Havana, Cuba
2009	PVC Award for Teaching, Monash University Sunway Campus
2009	PVC Award for Research, Monash University Sunway Campus
2007	Best Research Group, SIRIM Bhd
2005	Silver Award-Skin Whitening Formulation
1998	Third Year Student's Prize from the Institute of Biotechnology, Cambridge,
1997	Roche "Young Investigators Award"
1996	"Queens' Award for Technological Advancement", UK
1995	Government of Malaysia Postgraduate Scholarship Award
1994	SIRIM Bhd Merit Award
1987	University Malaya Fellowship

National & International Contributions

Invited Speaker to eleven international conferences and symposiums;

Toronto International Pharmacy Conference (2012), First Euro - India International Conference on Diabetes (2012), TCM & NP Active Ingredients and Standardizations Symposium and 2nd International Mangiferin Research Forum, Guangxi, P.R.China (2011), Havana Redox 2011 Conference, Havana, Cuba

Editorial Boards

- Food and Nutritional Sciences (Scientific Research Publishing)
- Journal of Medicinal Plants Research (JMPR), Academic journals
- Journal of Biotechnology, BioTek journal
- Oxidants and Antioxidants in Medical Science, ScopeMed
- International Journal of Biotechnology for Wellness Industries, Lifescience Global
- Journal of Community Practise, Taylor & Francis
- Journal of Food and Nutritional Sciences(SciencePG)

Reviewer of Journals

- Toxicology *in Vitro* (Elsevier)
- Food Chemistry (Elsevier)
- Separation and Purification Technology(Elsevier)
- Journal of Molecular Recognition (Wiley)
- Journal of Herbs, Spices and Medicinal Plants (Taylor & Francis)
- Food Research International (Elsevier)
- Molecules (MDPI)
- Botany (NRC Research Press)
- Malaysian Journal of Science (University Science Malaysia Press)
- African Journal of Pharmacy and Pharmacology [Academic journals]
- Industrial Crops and Products (Elsevier)

Other Past and Current Positions

- Council Member of the International Society for Phytocosmetic Science.
- Committee Member of the International Association of Mangiferin Research For Free Radical Research (Asia/Malaysia),
- Advisory Member to SIRIM's Research Panel
- University Malaya Technical committee evaluating marine science grants
- External and University Technology Petronas
- Advisory Board Examiner HDR programs: University Malaya, International Medical University Member for the Australian Degree Transfer, INTI College
- Panel Member of the National Science Fund (NSF) scholarship
- Journal Editor of Executive SIRIM's Industrial Technology

Publications (last 5 years)

1. Alexis Y. S. Chung, Sunil Gurtu, Ton So Ha, **Uma D. Palanisamy**. Geraniin Ameliorates Metabolic Risks in High-Fat Diet-Induced Obese Sprague Dawley Rats. Evidence-based Complementary and Alternative Medicine. (in press)
2. **Uma D. Palanisamy** and T. Manaharan. Antioxidant, antidiabetic and chemical composition of *Syzygium aqueum* leaf extracts (2013). First Euro - India International Conference on Diabetics, Apple Academic Press, Canada (Research Book chapter)
3. **Uma D. Palanisamy**, Thamilvaani Manaharan and Theanmalar Masilamani (2013). Tropical Plant Extracts as Potential Antihyperglycemic Agents . Acta Hort. (ISHS).(in press)
4. Thamilvaani Manaharan, Cheng Hwee Ming and **Uma D. Palanisamy**. *Syzygium aqueum* leaf extract and its bioactive compounds enhances pre-adipocyte differentiation and 2-NBDG uptake in 3T3-L1 cells. Food Chem 2013, 136 (2) , 354-363
5. Shonia Subramaniam, Srikumar Chakravarthi, **Uma Devi Palanisamy**, Ammu Radhakrishnan and Nagaraja Haleagrahara. Acute and Sub Chronic Oral Toxicity Assessment of the Ethanolic Extract from the Rind of *Nephelium lappaceum* in Rats. Journal of Pharmacology and Toxicology 2012, 7 (8), 378-385
6. Shashi Kumar, Srikumar Chakravathi, Gan Seng Chiew, Thavamanithevi Subramaniam, **Uma Devi Palanisamy**, Ammu Radhakrishnan and Nagaraja Haleagrahara. Protective effects of *Nephelium lappaceum* rind extract against Collegen-induced arthritis in dark agouti rats. Journal of Biological Sciences 2012, 12 (7), 385-392
7. Asiri Perera, David Appleton, Loh Hwee Ying, Sumita Elendran and **Uma D. Palanisamy**. Large scale purification of geraniin from *Nephelium lappaceum* rind waste using reverse-phase chromatography. Separation and Purification Technology 2012, 98(19), 145–149
8. Thamilvaani Manaharan, **Uma D. Palanisamy** and Cheng Hwee Ming. Tropical Plant Extracts as Potential Antihyperglycemic Agents. Molecules 2012, 17(5), 5915-5923
9. Lai Teng Ling and **U.D. Palanisamy**. Review: Potential Antioxidants from Tropical Plants. Source: Food Industrial Processes - Methods and Equipment, ISBN 978-953-307-905-9. Edited by: Benjamin Valdez. Publisher: InTech, February 2012.
10. Lai T Ling, Yoshiro Saito, **Uma D. Palanisamy**, Hwee M Cheng, Noriko Noguchi. Cytoprotective effects of geraniin against peroxy-nitrite- and peroxy radical-induced cell death via free radical scavenging activity. Food Chem 2012, 132(4), 1899–1907
11. Thamilvaani Manaharan, David Appleton, Hwee Ming Cheng, **Uma D. Palanisamy**. Flavonoids isolated from *Syzygium aqueum* leaf extract as potential antihyperglycemic agents. Food Chem 2012, 132(4), 1802–1807.
12. Fatima Megala Nathan, Vivek Ajit Singh, Amreeta Dhanoa and **Uma D. Palanisamy**. Oxidative Stress and Antioxidant Status in Primary Bone and Soft Tissue Sarcoma. *BMC Cancer* 2011, 11, 382-389.
13. Thamilvaani Manaharan, Ling Lai Teng, David Appleton, Cheng Hwee Ming, Theanmalar Masilamani and **Palanisamy, U.D.** Antioxidant and Antiglycemic Potential of *Peltophorum pterocarpum* Plant Parts. Food Chem 2011, 129(4), 1355-1361.
14. **Uma D. Palanisamy**, S. Muniswaran, Ammu K. Radhakrishnan, Nagaraja H.S., Thavamanithevi Subramaniam, and Gan Seng Chiew. Optimizing ostrich oil bleaching technique. Molecules 2011, 16(7), 5709-5719.
15. **Palanisamy, U.D.**, Ling, L.T., Manaharan, T., Appleton, D. Rapid Isolation of Geraniin from *Nephelium lappaceum* rind waste and its anti hyperglycemic activity, Food Chem 2011, 127(1), 21-27.
16. **Palanisamy, U.D.**, Manaharan, T., Ling, L.T., Radhakrishnan, A. K.C. and Masilamani, T. Rambutan rind in the management of hyperglycemia, Food Research International 2011, 44(7), 2278-2282.
17. **U. D. Palanisamy**, L. T. Ling, T. Manaharan, V. Sivapalan, T. Subramaniam, M. H. Helme and T. Masilamani. Standardized extract of *Syzygium aqueum*: a safe cosmetic Ingredient. International Journal of Cosmetic Science 2011, 33(3), 269-275.
18. Puziah Hashim, Hamidah Sidek, Mohd Helme M. Helan, Aidawati Sabery, **Uma Devi Palanisamy** and Mohd Ilham. Triterpene Composition and Bioactivities of *Centella asiatica*, Molecules 2011, 16(2), 1310-22.

19. Lai Teng Ling, **Uma D. Palanisamy** and Hwee Ming Cheng. Prooxidant/Antioxidant Ratio (ProAntidex) as a Better Index of Net Free Radical Scavenging Potential. *Molecules* 2010, 15(11), 7884-7892.
 20. Lai Teng Ling , Ammu Kutty Radhakrishnan, Thavamanithevi Subramaniam, Hwee Ming Cheng and **Uma D. Palanisamy**. Assessment of Antioxidant Capacity and Cytotoxicity of Selected Malaysian Plants. *Molecules* 2010,15(4), 2139-2151.
 21. **Palanisamy, U.**,Thavamanithevi, S., Sivapalan, V. and Masilamani, T. The Valorization of Tropical Plant Extracts. *Acta Hort. (ISHS)*. 2009, 837, 41-52. http://www.actahort.org/books/837/837_3.htm
 22. Lai Teng Ling, Su-Ann Yap, Ammu K. Radhakrishnan, Hwee, Ming Cheng and **Uma D. Palanisamy**. *Standardised Mangifera indica extract an ideal antioxidant*, *Food Chem* 2009, 113, 1154–1159.
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Teaching

2008-2013	MBBS, B Pharm, B Sc, B Biotech and B BioMedSci
2008-2013	Postgraduate supervision M BioMedSci, MSc, PhD

Academic Leadership

2010-2013	Academic Convenor, Community Based Practice Program, MBBS
2011-2013	Coordinator, Community Engagement for B Pharm
2008-2010	Coordinator, Selectives program, MBBS