BIOGRAPHICAL SKETCH			
NAME **Karuppaiyah, Selvendiran**	POSITION TITLE Research Scientist		
eRA COMMONS USER NAME KARUPPAIYAH01			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Bharathidhasan University, Trichy, India	BS	1993-96	Zoology, Chemistry
Bharathidhasan University, Trichy, India	MS	1996-98	Biochemistry
University of Madras, Chennai, India	PhD	1999-03	Biochemistry

A. Positions and Honors

Positions and Employment

2008 Research Scientist, Davis Heart & Lung Research Institute, The Ohio State University, Columbus, Ohio

2006-2008 Post-doctoral Research Fellow, Davis Heart & Lung Research Institute, The Ohio State University, Columbus, OH

2003-2006 Post-doctoral Research Fellow, Liver Cancer Research Division Innovative Cancer Therapy, Kurume Medical University Kurume, Japan

1999-2003 Research Fellow, Department of Medical Biochemistry, University of Madras, Chennai, India

Honors

2008 Outstanding Achievement Award in The Ohio State University Comprehensive Cancer Center for Annual Research program

2003-2006 Postdoctoral Research Fellowship awarded by COE program for Medical Science, Japan

2001-2003 Senior Research Fellowship awarded by Council of Scientific and Industrial Research (CSIR), Govt. Of India

2001-2002 Research Fellowship Awarded by UGC, Govt. of India

B. Selected peer- reviewed publications

1. Thirunavukkarasu C, Prince Vijeya Singh J, **Selvendiran K,** and Sakthisekaran D (2001). Chemopreventive efficacy of selenium against N-nitrosodiethylamine induced hepatoma in albino rats. *Cell Biochem. Funct.*, 19: 265-271.
2. Thirunavukkarasu C, Prince Vijeya Singh J, Thangavel, **Selvendiran K** and Sakthisekaran D (2002). Dietary influence of selenium on the incidence of N-nitrosodiethylamine induced hepatoma with reference to drug and glutathione metabolizing enzymes. Cell Biochem. Funct., 20: 347-356.
3. Thirunavukkarasu C, **Selvendiran K**, Prince Vijaya Singh J, Senthilnathan P and Sakthisekaran D (2003). Effect of sodium selenite on lipids and lipid metabolizing enzymes in N-nitrosodiethylamine-induced hepatoma-bearing rats. *J. Trace Elem. Exper. Med*., 16: 1 –15
4. **Selvediran K**, Prince Vijeya Singh J, Babakrishnan K and Sakthisekaran D (2003). Cytoprotective effect of piperine against Benzo(a)pyrene induced lung cancer in Swiss albino mice with reference to lipidperoxidation and antioxidant system. *Fitoterapia*, 74: 109-115.
5. **Selvendiran K**, Senthilnathan P, Magesh V and Sakthisekaran D (2004) Modulatory effect of piperine an altered mitochondrial antioxidants in B(a)p induced lung carcinogenesis in Swiss albino mice. *Phytomedicine*, 11: 85-89.
6. **Selvendiran K**, Banu SM and Sakthisekaran D (2004). Protective effect of piperine on benzo(a)pyrene-induced lung carcinogenesis in Swiss albino mice. Clin. Chim. Acta 350: 73-78.
7. **Selvendiran K** and Sakthisekaran D (2004). Chemopreventive effect of piperine on modulating lipid peroxidation and membrane bound enzymes in benzo(a)pyrene induced lung carcinogenesis. Biomed. Pharmocother 58 : 264-267
8. Singh JP, **Selvendiran K**, Banu SM, Padmavathi R and Sakthisekaran D (2004). Protective role of Apigenin on the status of lipid peroxidation and antioxidant defense against hepatocarcinogenesis in Wistar albino rats. *Phytomedicine*., 11: 309-314.

9. Banu SM, **Selvendiran K**, Singh JP, Sakthisekaran D (2004). Protective effect of Emblica officinalis ethanolic extract against 7,12-dimethylbenz(a) anthracene (DMBA) induced genotoxicity in Swiss albino mice. *Human Exp. Toxicol*., 23: 527-531.
10. **Selvendiran K**, Padmavathi R, Magesh V, Sakthisekaran D (2005). Preliminary study on inhibition of genotoxicity by piperine in mice. *Fitoterapia,* 76: 296-300.
11. **Selvendiran K**, Thirunavukkarasu C, Singh JP, Padmavathi R and D. Sakthisekaran (2005). Chemopreventive effect of piperine on mitochondrial TCA cycle and phase-I and glutathione-metabolizing enzymes in benzo(a)pyrene induced lung carcinogenesis in Swiss albino mice. *Mol. Cell. Biochem*. 271: 101-107.
12. **Selvendiran K**, Banu SM and D. Sakthisekaran (2005). Oral supplementation of piperine leads to altered phase II enzymes and reduced DNA damage and DNA-protein cross links in B(a)p induced experimental lung carcinogenesis. *Mol. Cell. Biochem*., 268: 141-147.
13. **Selvediran K**, Prince Vijeya Singh J, and Sakthisekaran D (2005). In vivo effect of piperine on serum and tissue glycoprotein levels in benzo (a) pyrene induced lung carcinogenesis in Swiss albino mice. *Pulm. Pharmacol. Ther*, 18:521-526.
14. Hashimoto O, Shinkawa M, Torimura T, Nakamura T, **Selvendiran K**, Sakamoto M, Koga H, Ueno T, and Sata M (2006) Cell cycle regulation by the Wee1 Inhibitor PD0166285, Pyrido [2,3-d] pyimidine, in the B16 mouse melanoma cell line. BMC Cancer 6; 292-297.
15. Magesh V, Singh JP, **Selvendiran K**, Ekamparam G and Sakthisekaran D. Antitumour activity of crocetin in accordance to tumor incidence, antioxidant status, drug metabolizing enzymes and histopathological studies. Mol Cell Biochem. 2006 : 287 :127-135.
16. **Selvendiran K**, Koga H, Ueno T, Yoshida T, Maeyama M, Torimura T, Yano H, Kojiro M and Sata M (2006). Luteolin Promotes Degradation in Signal Transducer and Activator of Transcription (STAT)3 in Human Hepatoma Cells : an Implication for Anti-tumor Potential of Flavonoids. *Cancer Research* 66: 4826 – 4834.
17. **Selvendiran K**, Weir N.M., Kutala VK, Tong L, Vishwanath S, Rajaram M, Tridandapani S, Anant S, Kuppusamy P (2007). Curcumin induces G2/M arrest and apoptosis in cisplatin-resistant human ovarian cancer cells by modulating Akt and p38 MAPK. Cancer Biology & Therapy 6: 178-184.
18. **Selvendiran K,** Bratasz A, Liyue Tong, and Kuppusamy P (2007). NCX-4016, a nitro-derivative of aspirin, inhibits EGFR and STAT3 Signaling and Modulates Bcl-2 Proteins in Cisplatin-Resistant Human Ovarian Cancer Cells and Xenografts. Cell Cycle 1: 81-88
19. **Selvendiran K**, Tong L, Vishwanath S, Bratasz A, Trigg NJ, Kutala VK, Hideg K, and Kuppusamy P (2007). EF24 induces G2/M arrest and apoptosis in cisplatin-resistant human ovarian cancer cells by inhibiting PTEN proteasomal degradation. J. Biol. Chem. 282: 28609-28618.
20. Bratasz A**, Selvendiran K,** Wasowicz T**,** Bobko A**,** Khramtsov VV**,** Ignarro LJ and Kuppusamy P (2008). NCX-4040, a nitric oxide-releasing aspirin, sensitizes drug-resistant human ovarian xenograft tumors to cisplatin by depletion of cellular thiols. *Journal of Translational Medicine* 26 (1) ; 9 -20
21. Mohan IK, Khan M, Wisel S, **Selvendiran K,** Sridhar A, Carnes CA, Bognar B, Kalai T, Hideg K, Kuppusamy P (2008). Cardioprotection by HO-4038, a Novel Verapamil Derivative, Targeted against Ischemia and Reperfusion-mediated Acute Myocardial Infarction*. Am J Physiol Heart Circ Physiol.* 296 :H140-51
22. Maeyama M, Koga H, **Selvendiran K,** Yanagimoto C, Hanada S, Taniguchi E, Kawaguchi T, Harada M, Ueno T, Sata M (2008). Switching in discoid domain receptor expressions in SLUG-induced epithelial-mesenchymal transition. Cancer. 113(10):2823-31.
23. Sivakumar R, Koga H, **Selvendiran K,** Maeyama M, Ueno T, Sata M (2009)**.** Autocrine loop for IGF-I receptor signaling in SLUG-mediated epithelial-mesenchymal transition. Int J Oncol. 34 : 329-338.

C. Research Support

Ongoing Research Support

Kaleidoscope of Hope Karuppaiyah (PI) 03/10/2008-03/09/2009
Foundation for Ovarian Cancer Research – Pilot Grant Award
Safe, targeted antitumor therapeutics (STAT3 inhibitors) for ovarian cancer
Role: PI