

BIOGRAPHICAL SKETCH

NAME in English Chung-Pu Wu	POSITION TITLE Assistant Professor, Department of Physiology and Pharmacology, Chang Gung University		
NAME in Chinese 吳宗圃			
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
University of Cape Town, RSA	B.Sc	11/99	Chemistry and Biochemistry
University of Cape Town, RSA	B.Sc (Hon)	11/00	Pharmacology
University of Cape Town, RSA	M.Sc	02/02	Molecular and Cell Biology
University of Cambridge, UK	Ph.D.	10/05	Pharmacology
National Health Research Institutes, TW	Postdoctoral	03/06	Virology
National Institutes of Health, USA	Postdoctoral	01/10	Cancer Biology

A. Positions and Honors

Positions and Employment

2004-2005	NIH preCARTA Visiting Fellow, Lab of Cell Biology, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA
2005-2006	Postdoctoral Research Fellow, Division of Biotechnology and Pharmaceutical Research, National Health research Institutes, Miaoli, Taiwan
2006-2010	Postdoctoral Research Fellow, Lab of Cell Biology, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA
2010-	Assistant Professor, Department of Physiology and Pharmacology, Chang Gung University, Tao-Yuan, Taiwan

Other Experience and Professional Memberships

2006- Member, American Association for Cancer Research

Honors

1998	Dean's Merit List, University of Cape town, RSA
2000	Graduated with first class distinction, University of Cape town, RSA
2001-2002	National Research Foundation Free-Standing Prestigious Awards, University of Cape town, RSA
2002-2004	Cambridge Commonwealth Trust Scholarship, University of Cambridge, UK
2004-2005	National Institutes of Health preCARTA award, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA
2007	Outstanding Oral Presentation Award, 8th Annual Fellows and Young Investigators Colloquium, National Institutes of Health, Bethesda, MD, USA

B. Selected Peer-reviewed Publications (2005-2010) (in chronological order)

1. Chung-Pu Wu, A Klokouzas, SB Hladky, SV Ambudkar and MA Barrand. Interactions of mefloquine with ABC transporters, MRP1 (ABCC1) and MRP4 (ABCC4), in human erythrocyte cell membranes. *Biochemical Pharmacology* (2005) 70: 500-510.
2. Chung-Pu Wu, AM Calcagno, SB Hladky, SV Ambudkar, and MA Barrand. Modulatory effect of plant polyphenols on human multidrug resistance proteins 1, 4 and 5. *FEBS Journal* (2005) 272: 4725-40.
3. Chung-Pu Wu, DA van Schalkwyk, D Taylor, PJ Smith and K Chibale. Reversal of chloroquine resistance in *Plasmodium falciparum* by 9H-Xanthene derivatives. *International Journal of Antimicrobial Agents* (2005) 26: 170-175.
4. Chung-Pu Wu, H Woodcock, SB Hladky, and MA Barrand. cGMP transport across human erythrocyte membranes: factors influencing its ATP-dependent uptake into inside-out membrane vesicles. *Biochemical Pharmacology* (2005) 69: 1257-62.
5. W Chearwae, Chung-Pu Wu, H-Y Chu, TR Lee, SV Ambudkar and P Limtrakul. Curcuminoids purified from turmeric powder modulate the function of human Multidrug Resistance Protein 1 (ABCC1). *Cancer Chemotherapy and Pharmacology* (2006) 14: 1-13.
6. AM Calcagno, KJ Chewing, Chung-Pu Wu and SV Ambudkar. Plasma membrane calcium ATPase (PMCA4): A housekeeper for RT-PCR relative quantification of polytopic membrane proteins. *BMC Molecular Biology* (2006) 7(29): 1-10.
7. AM Calcagno, I-W Kim, Chung-Pu Wu, S Shukla, and SV Ambudkar. ABC drug transporters as molecular targets for the prevention of multidrug resistance and drug-drug interactions. *Current Drug Delivery* (2007) 4: 324-333.
8. J Golin, ZN Kon, Chung-Pu Wu, J Martello, L Hanson, S Supernavage, SV Ambudkar, and ZE Sauna. Complete inhibition of the Pdr5p multidrug efflux pump ATPase activity by its transport substrate Clotrimazole suggests that ATP as well as GTP may be used as an energy source. *Biochemistry* (2007) 46: 13109-13119.
9. S Shukla, Chung-Pu Wu and SV Ambudkar. The naphthoquinones, vitamin K3 and its structural analog plumbagin, are substrates of the multidrug resistance-linked ABC drug transporter ABCG2. *Molecular Cancer Therapeutics* (2007) 6: 3279-3286.
10. Chung-Pu Wu, S Shukla, AM Calcagno, MD Hall, MM Gottesman and SV Ambudkar. Evidence for dual mode of action of a thiosemicarbazone, NSC73306: a potent substrate of the multidrug resistance-linked ABCG2 transporter. *Molecular Cancer Therapeutics* (2007) 6: 3287-3296.
11. S Shukla, Chung-Pu Wu and SV Ambudkar. Development of inhibitors of ATP-binding cassette drug transporters-present status and challenges. *Expert Opinion on Drug Metabolism & Toxicology* (2008) 4: 1-19.
12. AM Calcagno, JM Fostel, KW To, SE Martin, KJ Chewing, Chung-Pu Wu, SE Bates, NJ Caplen and SV Ambudkar. Single-Step Doxorubicin-Selected Cancer Cells Overexpress the Multidrug Resistance-Linked ABCG2 Transporter through Epigenetic Changes. *British Journal of Cancer* (2008) 98: 1515-1524.

13. Chung-Pu Wu, AM Calcagno and SV Ambudkar. Reversal of ABC drug transporter-mediated multidrug resistance in cancer cells: Evaluation of current strategies. *Current Molecular Pharmacology* (2008) 1:93-105.
14. C-L Dai^{*}, AK Tiwari^{*}, Chung-Pu Wu^{*}, X-D Su^{*}, S-R Wang, D-G Liu, CR Ashby Jr., YH, RW Robey, Y-J Liang, L-M Chen, C-J Shi, SV Ambudkar, Z-S Chen, and L-W Fu. Lapatinib (Tykerb, GW572016) reverses multidrug resistance in cancer cells by inhibiting the activity of ATP-binding cassette subfamily B member 1 and G member 2. *Cancer Research* (2008) 68: 7905-7914. (*co-first authors).
15. C-L Dai, Y-J Liang, L-M Chen, X Zhang, W-J Deng, X-D Su, Z Shi, Chung-Pu Wu, C Ashby Jr, S Akiyama, SV Ambudkar, Z-S Chen and L-W Fu. Sensitization of ABCB1 overexpressing cells to chemotherapeutic agents by FG020326 via binding to ABCB1 and inhibiting its function. *Biochemical Pharmacology* (2009) 78(4): 355-64.
16. JN Orina, AM Calcagno, Chung-Pu Wu, J Shih, S Varma, G Eichler, J Weistein, SV Ambudkar, MM Gottesman, and J-P Gillet. Evaluation of current methods used to analyze the expression profiles of ABC transporters yields an improved drug-discovery database. *Molecular Cancer Therapeutics* (2009) 8(7): 2057-2066.
17. M Kucka, K Kretschmannova, T Murano, Chung-Pu Wu, H Zemkova, SV Ambudkar, SS Stojilkovic. Dependence of multidrug resistance protein-mediated cyclic nucleotide efflux on the background sodium conductance. *Molecular Pharmacology* (2010) 77(2):270-9.
18. I Abraham, S Jain, Chung-Pu Wu, Y Kuang, Z Shi, X Chen, L Fu, SV Ambudkar, KEI Sayed, Z-S Chen. Marine sponge-derived sipholane triterpenoids reverse P-glycoprotein (ABCB1)-mediated multidrug resistance in cancer cells. *Biochemical Pharmacology* (2010) in press.

C. Research Support