## **Associate Professor Sim Tiow Suan's Representative Publications**

Chua CS, Low H, Lehming N, Sim TS (2012) Molecular analysis of Plasmodium falciparum co-chaperone Aha1 supports its interaction with and regulation of Hsp90 in the malaria parasite. **Int J Biochem. Cell Biol.** 44: 233-245

Goo KS, Sim TS (2010) Designing New  $\beta$ -Lactams: Implications from their Targets, Resistance Factors and Synthesizing Enzymes. Curr Comput Aided Drug Des. 7(1):53-80.

Chua CS, Low H, Goo KS, <u>Sim TS</u> (2010) Characterization of *Plasmodium falciparum* co-chaperone p23: its intrinsic chaperone activity and interaction with Hsp90. **Cell Mol Life Sci.** 67(10): 1675-86.

Low H, Chua CS, <u>Sim TS</u> (2009) Regulation of *Plasmodium falciparum* Pfnek3 relies on phosphorylation at its activation loop and at threonine 82. **Cell Mol Life Sci.** 66(18): 3081-90.

Prodromou C, Nuttall JM, Millson SH, Roe SM, Sim TS, Tan D, Workman P, Pearl LH, Piper PW. Structural basis of the radicicol resistance displayed by a fungal hsp90. **ACS Chem Biol.** 4(4): 289-97.

Goo KS, Chua CS, Sim TS (2009) Directed evolution and rational approaches to improving *Streptomyces clavuligerus* deacetoxycephalosporin C synthase for cephalosporin production. **J. Ind. Microbiol. Biotechnol.** 36(5): 619-33.

Goo KS, Chua CS, <u>Sim TS</u> (2008) Relevant double mutations in bioengineered Streptomyces clavuligerus deacetoxycephalosporin C synthase result in higher binding specificities which improve penicillin bioconversion. **Appl. Environ. Microbiol.** 74:1167-1175.

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Chan M, Tan DSH and <u>Sim TS</u> (2007) *Plasmodium falciparum* pyruvate kinase as a novel target for antimalarial drug-screening. **Travel Med. Infect. Dis.** 5:125-131 Elsevier.

Lye YM, Chan M and Sim TS (2006) Pfnek3: an atypical activator of a MAP kinase in *Plasmodium falciparum*. **FEBS Lett.**580:6083-6092 Elsevier.

Chan M, Tan DSH, Wong SH and <u>Sim TS</u> (2006) A relevant in vitro eukaryotic live-cell system for the evaluation of plasmodial protein localization. **Biochimie.** 88:1367-1375 Elsevier.

Goh SL, Goh LL and <u>Sim TS</u> (2005) Cysteine protease falcipain 1 in Plasmodium falciparum is biochemically distinct from its isozymes. **Parasitol. Res.** 97:295-301.

Goh LL and <u>Sim TS</u> (2005) Characterization of amino acid variation at strategic positions in parasite and human proteases for selective inhibition of falcipains in *Plasmodium falciparum*. **Biochem. Biophys. Res. Commun.** 335:762-770.

Chan C, Goh LL and <u>Sim TS</u> (2005) Differences in biochemical properties of the *Plasmodial falcipain-2* and berghepain-2 orthologues: Implications for in vivo screens of inhibitors. **FEMS Microbiol. Lett.** 249:315-321.

Goh LL and <u>Sim TS</u> (2004) Homology modelling and mutagenesis analyses of *Plasmodium falciparum* falcipain 2A: implications for rational drug design. **Biochem. Biophys. Res. Commun**. 323:565-572.