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## Secondary metabolites from soft coral *Sarcophyton trocheliophorum* and *Sinularia* sp.

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Human *cytomegalovirus* (HCMV), a member of Herpesviridae, is an ubiquitous pathogens among human population. Global prevalence rates are around 60 to 99% in geological distribution. For most of the health people, the HCMV remains life-long latency. Nevertheless, the HCMV is a leading etiological agent causing fetal congenital defects in central nerve system. Moreover, the reactivation of latent HCMV infection can be detrimental or even fatal for those susceptible groups, the organ transplant recipients, and the immunocompromised patients. Especially, cancer is a leading cause of death worldwide. Previous studies demonstrated that HCMV UL76 targets ubiquitin-proteasome system (UPS) which is involved in every phase of viral lytic cycle. In addition, many proteasome inhibitors have been demonstrated to effectively inhibit HCMV replication and to treat malignant tumor. Previous studies demonstrated that UL76 interacts with S5a (Rpn10, PSMD4), the major acceptor of polyubiquitinated proteins in UPS, resulting in the impairment of UPS proteolysis. Consequently, their association leads to nuclear aggresome formation. We have constructed an S5a (Rpn10, PSMD4)-based target-focus high throughput screening system. A workflow for the image-based high content screening has been established and the screening assays are undergoing. For this project, we will isolate bioactive compounds from three marine organisms by S5a (Rpn10, PSMD4)-based target-focus high throughput screening.

### Biography

Chang-Yih Duh has completed his PhD at the age of 31 years from University of Illinois. He is currently a professor of Marine Natural Products at National Sun Yat-sen University. He has published more than 180 papers in reputed journals.

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### Notes: