

Asia Pacific Psychological Forum (APPF)
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Guidelines and Instructions for Abstract Submission

The APPF invites abstract submission for oral and poster presentation in the various mini symposia as well as free paper sessions. Abstracts should be submitted online via the conference website (<http://umconference.um.edu.my/APPF2017>). Submission must be based on new, previously unpublished material. The abstract should be concise, containing not more than 250 words. The contents should consist of brief background, primary aim, methods, significant findings and conclusion of the study. Do not include references in the abstract.

Format

Authors are advised to prepare their abstract using the attached template. The abstract should be submitted as MS Word (not PDF) file.

- **Title:** Use Times New Roman 14 point (pt.) font size, bold faced, aligned to the left of the page.
- **Authors' names:** Use 12 pt. font size; underline the presenter's name. A superscript (*) should be added after corresponding author's name.
- **Authors' affiliations:** Use 11 pt. font size with regular font style.
- **E-mail:** E-mail address of the corresponding author, 11 pt. font size.
- **Text:** Use 12 pt. font size, single spaced throughout and justified on both left and right margins. It should not contain any undefined abbreviations
- **Keywords:** Provide 3 to 5 keywords.

Deadline for abstract submission: **30 March 2017**

Sample of Abstract

Inhibitory activities of microalgal extracts against Epstein-Barr virus (EBV)

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Epstein-Barr virus (EBV) is a gammaherpes virus associated with the pathogenesis of a variety of human tumors including Burkitt's lymphoma (BL), Hodgkin's disease and nasopharyngeal carcinoma. The aim of this study was to assess the antiviral activities of methanol extracts from the microalgae *Ankistrodesmus convolutus* UMACC 101, *Synechococcus elongatus* UMACC 105 and *Spirulina platensis* UMACC 161 against EBV in three Burkitt's lymphoma (BL) cell lines. The antiviral activities were assessed based on the reduction in number of cell-free viral particles being released by chemically induced lytic BL cells. The cell-free DNA was quantified using real-time PCR. In addition, the inhibition of microalgal extracts against the expression of the viral proteins LMP1, EBNA1 and ZEBRA in BL cells was assessed using immunocytochemistry technique. Methanol extracts from *Ankistrodesmus convolutus* and *Synechococcus elongatus* displayed low cytotoxicity and potent effect in reducing cell-free EBV DNA (EC₅₀ < 0.01 µg/mL) with high therapeutic index (>28,000). After fractionation by column chromatography, the fraction from *Synechococcus elongatus* (SEF1) reduced the cell-free EBV DNA most effectively (EC₅₀=2.9 µg/mL; therapeutic index > 69). Upon further fractionation by HPLC, the sub-fraction SEF1'a was most active in reducing the cell-free EBV DNA (EC₅₀=1.38 µg/mL; therapeutic index > 14.5). At 100 µg/mL, methanol extracts of *Ankistrodesmus convolutus* and *Synechococcus elongatus* were most active in inhibiting the expression of ZEBRA in Akata cells (90% and 83% respectively). This study suggests that the microalgae extracts displayed inhibitory activities against the release of EBV from host cells and expression of viral proteins.

Key words: Epstein-Barr virus (EBV), microalgae, *Ankistrodesmus convolutus*, *Synechococcus elongatus*, *Spirulina platensis*