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**Dr. Chul Bum Park**

**Professor/Tier 1 Canada Research Chair in Microcellular Plastics**

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***Times New Roman, 11-pt, single spaced. Maximum-150 words***



Dr. Park received his Ph.D. from MIT in 1993. He is a Professor and the holder of Tier 1 Canada Research Chair in Microcellular Plastics at University of Toronto. As a Fellow of the Royal Society of Canada, the Korean Academy of Science and Technology, and 6 other professional societies, he is an accomplished scientist with an international recognition in the area of polymer foaming. He received numerous awards including the KY Lo Medal from the Engineering Institute of Canada this year. He is the author or co-author of over 500 publications including 20 patents and 200 journal papers. He received numerous honors and awards in his career including the recent NSERC Strategic Network Grant. He is the Editor-in-Chief of the Journal of Cellular Plastics. He has been serving as the conference chair, the technical program chair, and symposium chair for various conferences including Biofoams, FOAMS TopCon, and Polymer Processing Society Conferences. E-mail park@mie.utoronto.ca

**Cyclolinopeptides Compounds as Chemotherapy Agents[[1]](#footnote-1)**

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Flax (*Linum usitatissimum* L.) seed has been associated with numerous health benefits. The flax plant synthesizes an array of biologically active cyclic peptides or cyclolinopeptides (CLs) from two ribosome-derived precursors. CLA for instance, suppresses immunity, induces apoptosis in human epithelial cancer cell lines, and inhibits T-Cell proliferation. The mechanism of action of CLA is unknown. The immunosuppressive activity of CLs and analogues make them potential value-added natural products of flaxseed and should lead to further investigation of their biological activity. Microarray and gene expression analysis indicate that CLs exert their activity, in part, through induction of apoptosis. Responses to CL exposure include: 1) induction of heat shock protein (HSP) 70A production in *Caenorhabditus elegans*. Exposure of nematode cultures to CLA (0.1 µM and 10.0 µM) induced a 30% increase in the production of the HSP 70A protein, while a 3.5-fold increase was induced in the culture treated with 1.0 µM of CLA; 2) induction of apoptosis in human lung epithelial cancer lines; and 3) modulation of regulatory genes in apoptosis in human lung epithelial cancer lines. These diverse activities indicate that CLs could induce apoptosis in cancer cells or act as versatile platforms to deliver a variety of biologically active molecules for cancer therapy. \*Corresponding author; E-mail younyoung.shim@ usask.ca

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