



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)
/ Publications of IISER Mohali (/jspui/handle/123456789/4)
/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/2235>


Title:	Structural Basis and Functional Implications of the Membrane Pore-Formation Mechanisms of Bacterial Pore-Forming Toxins
Authors:	Mondal, A.K. (/jspui/browse?type=author&value=Mondal%2C+A.K.) Sreekumar, Amritha (/jspui/browse?type=author&value=Sreekumar%2C+Amritha) Kundu, Nidhi (/jspui/browse?type=author&value=Kundu%2C+Nidhi) Kathuria, R. (/jspui/browse?type=author&value=Kathuria%2C+R.) Verma, Pratima (/jspui/browse?type=author&value=Verma%2C+Pratima) Gandhi, S. (/jspui/browse?type=author&value=Gandhi%2C+S.) Chattopadhyay, K. (/jspui/browse?type=author&value=Chattopadhyay%2C+K.)
Keywords:	Pore-forming toxin Cholesterol-dependent cytolysin Oligomerization Membrane
Issue Date:	2018
Publisher:	Springer New York LLC
Citation:	Advances in Experimental Medicine and Biology, 1112, pp. 281-291
Abstract:	Pore-forming toxins (PFTs) are a distinct class of membrane-damaging protein toxins documented in a wide array of life forms ranging from bacteria to humans. PFTs are known to act as potent virulence factors of the bacterial pathogens. Bacterial PFTs are, in general, secreted as water-soluble molecules, which upon encountering target host cells assemble into transmembrane oligomeric pores, thus leading to membrane permeabilization and cell death. Interaction of the PFTs with the target host cells can also lead to plethora of cellular responses having critical implications for the bacterial pathogenesis processes, host-pathogen interactions, and host immunity. In this review, we present an overview of our current understanding of the structural aspects of the membrane pore-formation processes employed by the bacterial PFTs. We also discuss the functional implications of the PFT mode of actions, in terms of eliciting diverse cellular responses.
URI:	https://link.springer.com/chapter/10.1007/978-981-13-3065-0_19 (https://link.springer.com/chapter/10.1007/978-981-13-3065-0_19) http://hdl.handle.net/123456789/2235 (http://hdl.handle.net/123456789/2235)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format
Need to add pdf.odt (/jspui/bitstream/123456789/2235/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text

[View/Open \(/jspui/bitstream/123456789/2235/1/Need%20to%20add%20pdf.odt\)](#)

Show full item record (</jspui/handle/123456789/2235?mode=full>)

 (</jspui/handle/123456789/2235/statistics>)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.