Why is herpes simplex virus disease risk so much greater for newborns?

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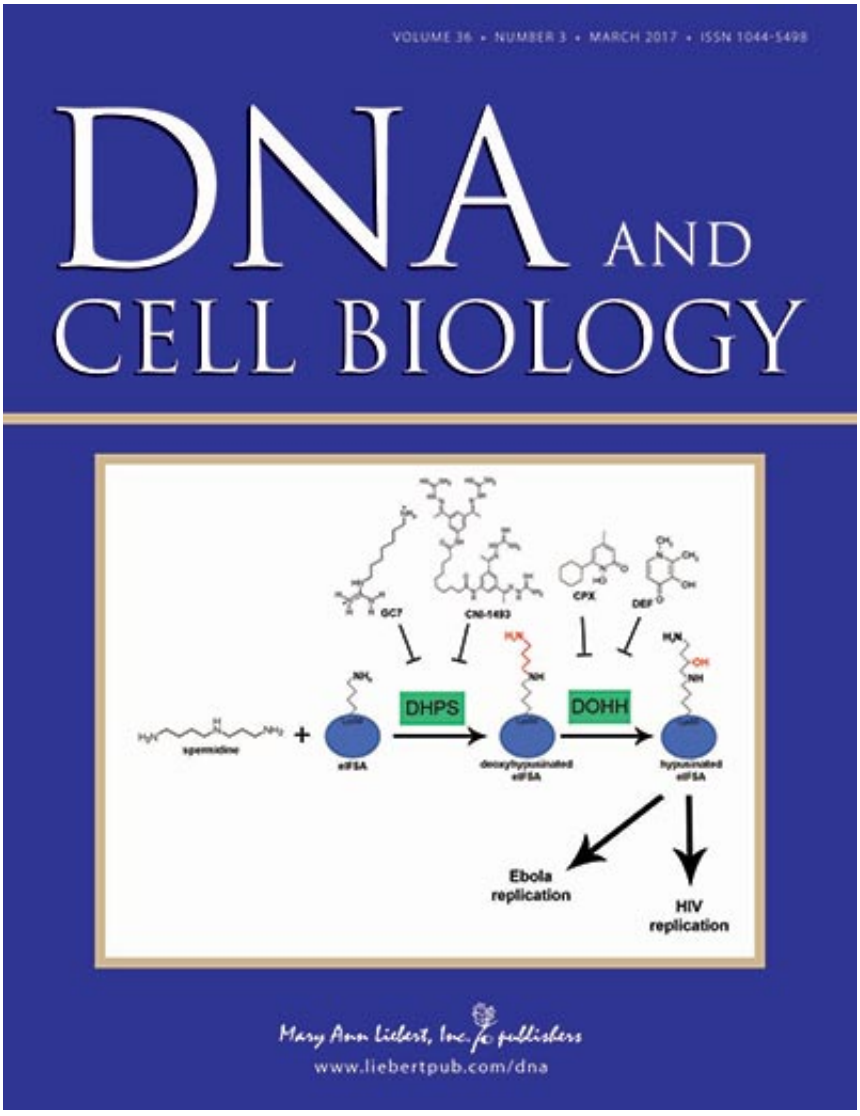

Credit: Mary Ann Liebert, Inc., publishers

Interferon is a crucial component of the human immune system's response to infection by herpes simplex virus type 1 (HSV-1), but how important a role it plays in determining the severity of disease and explaining why newborns are so much more susceptible to HSV-1 infection than adults remains unclear. A comprehensive review of the contribution of type I interferon (IFN) to controlling HSV-1 infection is presented in an article published in *DNA and Cell Biology*.

In the article entitled "The Type I Interferon Response and Age-Dependent Susceptibility to Herpes Simplex Virus Infection," Daniel Giraldo, Douglas Wilcox, and Richard Longnecker, Northwestern University Feinberg School of Medicine, Chicago, IL, provide an in-depth look at the IFN response to HSV-1 infection. The authors examine the factors that may explain why newborns infected with HSV-1 are at greater risk for serious and potentially life-threatening diseases such as herpes simplex encephalitis, whereas in adults orolabial lesions are the more likely result of HSV-1 infection.

"HSV is ubiquitous and approximately 70% of the population is infected with this virus. It may maintain a life-long relationship with the host establishing latency and reappearing upon stress. This study is important because it gives us insight into the differences between infection of young hosts and older individuals," says Carol Shoshkes Reiss, PhD, Editor-in-Chief, of *DNA and Cell Biology* and Professor, Departments of Biology and Neural Science, and Global Public Health at New York University, NY.

More information: Daniel Giraldo et al, The Type I Interferon Response and Age-Dependent Susceptibility to Herpes Simplex Virus Infection, *DNA and Cell Biology* (2017). DOI: 10.1089/dna.2017.3668