

Steven Roberts Transcript
NIEHS

Dr. Roberts describes APOBEC proteins and their function in the human body. (MP3 – 00:00:29, 231 KB)

Proteins named APOBECs normally inactivate viruses that invade our bodies, but it appears that these enzymes can inadvertently mutate our own DNA, sometimes quite overwhelmingly. The creation of all these mutations is likely a major cancer risk. The amount of the protein and how accurate they are depends on several environmental exposures including infection. Once we understand what factors regulate APOBEC activity, we may be able to develop cancer prevention strategies that minimize these proteins' negative effects, while maintaining their normal functions in immunity.