

Natural protein may halt colorectal cancer's spread

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Medical College of Wisconsin Cancer Center researchers in Milwaukee have learned that a protein, CXCL12, that normally controls intestinal cell movement, has the potential to halt colorectal cancer spreading. These studies represent a potential mechanism by which CXCL12 may slow cancer spreading. Controlling this process could lead to new biological therapies for colorectal cancers.

"Colorectal [cancer](#) ranks third in cancer-related deaths in the United States in 2008," says principal investigator Michael Dwinell, Ph.D., professor of microbiology and [molecular genetics](#). "Finding therapies to prevent its spread to secondary organs would increase patient prognosis considerably." Luke Drury, a graduate student in the interdisciplinary program for biomedical research at the Medical College, was his research associate. Their abstract will be presented at the American Association for Cancer Research meeting in Denver, April 21.

Normal intestinal cells stick to underlying proteins, which provide survival signals to maintain cell health. If they become unstuck, the floating cells undergo a programmed cell death. In cancer, cells have acquired [genetic changes](#) that allow them to survive during loss of attachment. Previously, the researchers found that colorectal cancer cells lacked CXCL12 expression. In these studies, they re-introduced CXCL12 expression in colorectal [cancer cells](#) which prevented their ability to adhere to underlying proteins. Plus, the floating cells underwent programmed cell death.

Source: Medical College of Wisconsin ([news](#) : [web](#))

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