

28 October 2005

By: Alina Plesu, World and Business News Editor



Bryostatin, the Drug That Could Cure Alzheimer's

*Tested on the *Hermisenda mollusks**

Initially researched as a drug against cancer, Bryostatin might become a ray of hope for people suffering from Alzheimer's. "Bryostatin is a promising treatment for Alzheimer's disease, both for the neurodegeneration, the underlying cause of the disease, and for the symptoms," Dr. Daniel L. Alkon, from Blanchette Rockefeller Neurosciences Institute in Rockville, Maryland said in a telephone interview with Reuters Health. In a previous study on rats, doctor Alkon observed that bryostatin stops the evolution of the disease by reducing the brain levels of amyloid-beta protein. But the drug does more than to efficiently fight the disease, the researchers discovering that it improves the learning capacity and memory. To do this the researchers used the snail-like creature *Hermisenda*, a biomedical model for learning and memory. Specifically, Alkon and colleagues found that putting bryostatin in the water days before the start of learning sessions led to the synthesis of proteins "necessary and sufficient for subsequent long-term memory formation.", the British news agency informed. In cultured neurons, bryostatin increased overall protein synthesis by up to 60 percent for more than 3 days.