

Abel Garcia-Pino



Current Position: Ph.D. student in the group of Professor Remy Loris in the Department of Molecular and Cellular Interactions at the Vrije Universiteit Brussel in Belgium

Education: M. S. in Molecular Biology at the Vrije Universiteit Brussel in Belgium

I earned my B.S. degree in biochemistry at the University of Havana in Cuba. By the end of my studies I had a fervent interest in structural biology. I began working on the structure and function of bacterial toxin-antitoxin (TA) modules in the group of Professor Remy Loris in Brussels. TA systems are widespread among mobile genetic elements and bacterial genomes. Their function is still far from well understood. They seem to play a major role in bacterial stress physiology by temporarily halting cell division when nutrients are scarce. Our work provides the crystal structure of the toxin Doc from phage P1—in complex with a C-terminal inhibitory fragment of its antitoxin Phd. Doc adopts an unexpected fold closely resembling Fic, a protein involved in the regulation of cell division, and the complex exposes a new mechanism of protein-protein interactions.

Read Abel Garcia-Pino's article entitled: Doc of Prophage P1 Is Inhibited by Its Antitoxin Partner Phd through Fold Complementation

<http://www.jbc.org/cgi/content/full/283/45/30821>