

Theoretical Analysis in Genome Project

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About the Editor

Kirk Bryant is assistant professor of molecular biology. His research is focused on understanding the structural and functional aspects of membrane proteins and their interactions with other proteins in compartmentalized microdomains of cells and their roles in health and diseases. The central question he is asking "how do interactions among membrane proteins and various scaffolding proteins regulate their physiological functions and what happens to those interactions in pathophysiological conditions". He has been using the CFTR chloride channel protein, which is dysfunctional in cystic fibrosis, and the interleukin-8 receptor B (CXCR2), which is implicated in many inflammatory diseases (such as atherosclerosis, cystic fibrosis, cancer cell metastasis, inflammatory bowel disease, etc.) as models to explore the interactions and regulation of membrane proteins and their interacting partners.



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