REGIONAL CENTRE FOR BIOTECHNOLOGY
Seminar series

Mass spectrometry based identification of trans-splicing in *Giardia lamblia* Hsp 90

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Thursday, June 7, 2012
12:00 Noon
Seminar Room

My laboratory is interested in examining *in vivo* roles of molecular chaperones in protozoa, many of which cause infectious diseases in humans and animals. Over the years my group has examined Hsp90 gene expression and function from *Dictyostelium discoideum*, *Plasmodium falciparum*, *Trypanosoma evansi* as well as *Giardia lamblia*. Using pharmacological inhibition as well as genetic knock out approaches we have shown a critical role played by Hsp90 in the growth of some of the above. In addition to revealing its fascinating biology, our studies implicate Hsp90 to be a potential drug target against malaria, trypanosomiasis as well as giardiasis and inhibitors specific to Hsp90 as candidate drugs. To better appreciate the functions of Hsp90 we have initiated a systematic analysis of chaperone complexes and their networks using cell biological, bioinformatics as well as proteomic analysis of Hsp90 in laboratory models as well as clinical samples obtained from patients. In my talk I will specifically describe our recent results incorporating mass spectrometric anlaysis of Hsp90 from *G.lamblia*, which revealed a novel trans-splicing based expression of GlHsp90 in this minimalist protozoan parasite.