

SPECIAL SEMINAR

THURSDAY 1 MARCH 2012 AT 11.00AM
B FLOOR MEETING ROOM, CBCRC, QIMR

Molecular cell biology of pathogens and the diseased cell



Dr Jude Przyborski
Department of Parasitology
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Dr Przyborski obtained his PhD in Parasitology from the University of Heidelberg in Germany in 2004. Following this, he was recruited to the Department of Parasitology at the University of Marburg as a Group Leader. His research is focused on understanding how parasite proteins are trafficked to and through the malaria infected red blood cell, and elucidating their function within this compartment.

Dr Przyborski is a board member of the German Society of Parasitology and runs a biennial *Short Course for Young Parasitologists* allowing Honours and PhD Students to gain a broader perspective on Parasitology. Dr Przyborski was recently appointed a visiting lecturer at the University of Zululand, South Africa where he will be involved in the education of young African students.

Plasmodium falciparum changes the structural and biochemical properties of its host cell and it is Dr Przyborski's goal to understand the molecular basis of this process. His laboratory is particularly interested in the role of chaperone and co-chaperone proteins.

By genetic transformation and protein biochemical methods his laboratory recently demonstrated that the malaria parasite exports several Hsp40 proteins to novel parasite-induced structures in the host cell, and that these structures are likely to be involved in protein transport processes. Dr Przyborski's laboratory can now show that an unusual Hsp70 is also trafficked to the host cell, where it seems to form a complex with the exported Hsp40s.

Current studies are aimed at identifying further components of this complex.