Leverhulme Trust, Royal Society and University of Ghana: workshop on molecular biology, pathogenesis, and diagnostics of neglected diseases

		Faculty Talks	Student Presentations	Lab work	Discussion Groups	
		Monday 6	**Tuesday 7**	**Wednesday 8**	**Thursday 9**	**Friday 10**
8.30	**Student Presentations**	Welcome and Introductions to Students, Faculty and the Course	Successful diagnostics in use today	Journal Club 1 (4 groups)	Identification of human or livestock diseases that require a new diagnostic	Journal Club 2 (3 groups)
9.30	**Research Seminars**	**Why the shape of trypanosomes is important** Jack Sunter	**How does the trypanosme interact with its host** Mark Carrington	**Characterization of lifetime infections with trypanosomes in individual cattle in Ghana** Theresa Manful Gwira	**Why do we need protein structures?** Simone Weyand	**Careers in Science in Ghana/Ghana Biochemical Society** Nana Yaw Asare Yeboah
10.30	**Coffee**					
11.00		**What are diagnostics used for?** Mark Carrington	**PCR and PCR diagnostics** Lydia Mosi		**Bioinformatics and analysis of sequences** James Abugri	
		DNA melting, why Mg2+ is important in PCR reactions	Design and set up PCR	PCR from blood DNA prepared from local cattle	Optimising PCR sensitivity	Testing experimental species-specific oligos
13.00	**Lunch**					
				Antibody capture and antigen capture diagnostics Jack Sunter		
19.00	**Dinner**					

Monday 13	**Tuesday 14**	**Wednesday 15**	**Thursday 16**	**Friday 17**
Recombinant protein production Mark Carrington	Journal Club 3 (4 groups)	Design a PCR-based diagnostic	Journal Club 4 (3 groups)	Design an antigen based diagnostic
Proteomic Analysis of Persister Drug Response in Mycobacterium bovis (BCG) Patrick Arthur	Monica Mugnier	**Erythrocytes invasion mechnisms** Gordon Awandare	Jayne Raper	Neil Stahl
Making Green Fluorescent Protein 1	Making Green Fluorescent Protein 2	Microscopy of some selected pathogenic organisms	Participant designed experiments	Participant designed experiments
How do you identify a diagnostic marker Mark Carrington	**Science funding** Gordon Awandare			