



Outline of Programme

There will be a morning session (9:30 - 13:00) & an afternoon session (14:00 - 17:30 Room G09 for talks, Teaching Lab for pracs

All mornings start with a short talk or video or both

Each day ends with a debrief to discuss what we have learned

Date	Morning (9:30 - 13:00)	Afternoon (14:00 - 17:30)	Senior Lead
Monday Sept 16th 2013	Theme: Welcome to BCI & Welcome to lab-work	Theme: Cancer cells & how to handle them	John F Marshall
	Welcome Address: What we hope for you. What you hope from	Talk: Cells-DNA-RNA-Protein-Function	
	Video: Health & Safety / How to use research equipment	Video: Growing human cells in tissue culture	
	Practical 1: Solutions and Dilutions	Practical 2: Examining cancer cells with microscopes and basic tissue culture	
		Debrief: 30' at end of day	
Tuesday Sept 17th 2013	Theme: DNA- the recipe book of life	Theme: DNA- the recipe book of life	Richard Grose
	Practical 3a: DNA Isolation & Analysis	Practical 3b: Cloning a gene and blue/white selection	
	Isolating & purifying DNA & analysing on agarose gels	Debrief: 30' at end of day	
Wednesday Sept 18th 2013	Theme: Dismantling cells to study their proteins	Theme: How to win a Nobel Prize	Laura Gay Mike Allen
	Video: SDS-PAGE Electrophoresis	Video: PCR Cartoon	
	Practical 4a: Separating cell proteins on gels 1mm thick	Practical 5: Isolating DNA & performing PCR	
		Debrief: 30' at end of day	
Thursday Sept 19th 2013	Theme: Dismantling cells to study their proteins	Theme: Why you should go to University & How to fund it	Louise Reynolds
	Practical 4b: Western Blotting - Analysing cells for the presence of a protein encoded by a gene that promotes cancer	Talk: Kirsty Wadsley on UCAS FeeS and Finance Visiting the BCI Labs	
		Debrief: 30' at end of day	
Friday Sept 20th 2013	Theme: Using tissue samples to study disease	Practical 6b: Finish morning experiment. Examine normal and cancer tissues through a microscope.	John F Marshall
	Video: Immunohistochemistry	15:00 Complete feedback forms	
	Practical 6a: Labelling cancer associated proteins with antibodies.	15:30 Graduation Ceremony and refreshments	
		17:00 Goodbye and Good Luck	