## Faculty of Medicine Research Conference

Thursday 19 June 2014

Lecture Theatres 1 & 2, South Academic Block

Southampton General Hospital

## PROGRAMME

08:40-09:10	Coffee and Registration, Lecture theatre foyer Level B, South Academic Block		
09:10 - 9.15	Introduction and Welcome Professor David Wilson		
Venue	Lecture Theatre 1	Lecture Theatre 2	
	Session 1a	Session 1b	
Chair:	Professor Richard Oreffo	Professor Caroline Fall	
	Wen Chean Lim Clinical and Experimental Sciences	Chern Siang Lee Cancer Sciences	
09:15-09:30	Immunological functions of human endothelial cells: promotion of CD4+ T cell proliferation and enhancement of regulatory T cell suppressive activity		
	<b>Charikleia Kranidioti</b> Clinical and Experimental Sciences	<b>Emma Lofthouse</b> Human Development and Health	
09:30-09:45	Immunological parameters associated with nucleos(t)ide analogs (Nas) discontinuation in patients with chronic HBeAg negative hepatitis B	The effect of flow on placental amino acid transfer in the isolated perfused placenta	
	<b>Tsiloon Li</b> Human Development and Health	Liku Tezera Clinical and Experimental Sciences	
09:45-10:00	Effect of In-Utero Vitamin D Depletion on Offspring Skeletal Development	Bioelectrospray-based cell encapsulation for in vitro modelling of Mycobacterium tuburculosis induced granuloma formation	
	Marta Larrayoz Cancer Sciences	<b>Mark Edwards</b> Human Development and Health	
10:00-10:15	Spliceostatin A: a new promising theraputic agent in chronic lymphocytic leukaemia	Bone microarchitecture assessed by high resolution peripheral quantative computed tomography is associated with fracture status in older men and women	
	Mengya Liu Clinical and Experimental Sciences	Marina Parry Cancer Sciences	
10:15-10:30	Large scale analysis of peptide repertoire presented by HLA subtypes	Next-generation targeted resequencing describes the genetic landscape of splenin Marginal Zone Lymphoma	
10.30-11.15	POSTER SESSION 1 with Coffee		

Venue	Lecture Theatre 1	Lecture Theatre 2
	Session 2a	Session 2b
Chair:	Professor Martin Glennie	Professor Paul Roderick
11:15-11.30	<b>Sam Watts</b> Primary Care and Population Sciences	<b>Tom Tipton</b> Cancer Sciences
	PROstate Cancer Support Intervention for ACTIVE Surveillance (PRO ACTIVE): a feasibility study into the design and evaluation of a phsycho-educational support intervention for managing distress in prostate cancer patients undergoing active surveillance	Antigenic modulation limits the effector cell mechanisms employed by anti-CD20 antibodies
11:30-11:45	<b>David Gibbs</b> Human Development and Health	Massimiliano Mellone Cancer Sciences
	Clay Nanoparticles enhance oseogenic response to Bone Morphogenic Protien	Fibroblast to myofibroblast differentiation in fibrosis and tumour microenvironment: role of DNA damage response DDR pathway
11:45-12:00	Harvey Johnston Cancer Sciences	Helen Parker Cancer Sciences
	Quantitative Proteomic Profiles of Eµ- myc and Eµ-TCL1 Mouse B-cell Cancer Models	Genome-wide genetic analysis reveals global deregulation of methyltransferase genes in chronic lymphocytic leukemia
12:00-12:15	Abigail Coughtrie Clinical and Experimental Sciences	<b>Mildrey Mosquera</b> Human Development and Health
	Ecological and evolutionary perspectives on microbial carriage in the upper respiratory tract	Does FTO determine amino acid transporter expression in human placenta?
12:15-12:30	Matthew Rose-Zerilli Cancer Sciences	<b>Rocio Teresa Martinez-Nunez</b> Clinical and Experimental Sciences
	Ultra-Deep Targeted DNA Sequencing identified low-level driver mutations in patients with aggressive leukaemia	A microRNA network in asthma regulates IL-6 production in bronchial epithelial cells
12:30-13:30	POSTER SESSIO	N 2 with Lunch

Venue	Lecture Theatre 1	Lecture Theatre 2	
	Session 3a	Session 3b	
Chair:	Professor Elaine Dennison	Dr Sarah Ennis	
13:30-13:45	<b>Lily Lai</b> Primary Care and Population Sciences	Alison Hill Clinical and Experimental Sciences	
	Polycystic Ovary syndrome: Randomised feasibility pilot study using Chinese Herbal medicine to explore Impact on Dysfunction - The ORCHID study	Poly(I:C)-activated epithelial cells enhance IL-6 release in a co-culture model of the epithelial-mesenchymal trophic unit via an interleukin- 1 alpha-dependent mechanism	
13:45-14:00	Alastair Watson Clinical and Experimental Sciences	<b>Eleonora Scorletti</b> Human Development and Health	
	Investigating the Structure/Function Relationship of Lung Collectins	Benefits of docosahexanoic acid tissue enrichment in non-alcoholic fatty liver disease: results from the randomised double blind placebo controlled *WELCOME study testing the effects of omega 3 fatty acid treatment	
14:00-14:15	Anna Litwic Human Development and Health	Silvia Lanati Cancer Sciences	
	Baseline inflammatory markers do not influence rate of progression of knee osteoarthritis over 10 years: results from the Hertfordshire Cohort Study	Manipulation of Fc gamma receptors in macrophages to enhance anti-GD2 immunotherapy in neuroblastoma	
14:15-14:30	<b>Richard Latouche</b> Clinical and Experimental Sciences	Samantha Drennan Cancer Sciences	
	Geochemical characterisation of Middle Eastern dust thought to play a role in the pathogenesis of Constrictive Bronchiolitis	The immunoregulatory phenotype of tumour B-cells in Chronic Lymphocytic Leukaemia cell fractions with varying surface IgM levels	
14:30-15:15	POSTER SESSION 3 with Afternoon Tea		

	Lecture Theatre 1	
	Invited Speaker	
15:15-16:15	Professor Barre-Sinoussi	
Chair:	Dr Delphine Boche	

	Presentations by winners of the Research Prizes	
Chair:	Professor Tim Elliott	
16:15-16:30	Postdoctoral Association Research Prize Dr Andy Van Hateren Cancer Sciences A mechanistic basis for the co-evolution of chicken tapasin and major histocompatibility complex class I (MHC I) proteins	
16:30-16:45	Wessex Medical Research Prize Dr Elina Zotova Clinical and Experimental Sciences Inflammatory components in human Alzheimer's disease and after active amyloid-β42 immunisation	
16:45-17:00	NIHR/SoCAT Research Prize Dr Hazel Everitt Primary Care and Population Sciences Management of irritable bowel syndrome in primary care: the results of an exploratory randomised controlled trial of mebeverine, methylcellulose, placebo and a self-management website	

17:00-17:15	Prize ceremony	
17:15 Closing remarks		
	Professor Tim Elliott	

The conference will be followed by a cheese and wine reception

## POSTER PRESENTATIONS

	POSTER SESSION 1			
Poster Number	Author	Title	Academic Unit	
101	Chern Siang Lee	Activity of ibrutinib in mantle cell lymphoma and potential mechanisms of resistance	Cancer Sciences	
102	Yu Hin Man	Synthesising epithelial morphology using 3D patterned gel moulds	Human Development and Health	
103	Nicole Yager	A novel phosphatidylinositol-3-kinase (PI3K) inhibitor decreases activation of ribosomal protein S6 in psoriatic T cells	Clinical and Experimental Sciences	
104	Alan Morris	Defining the failure of elimination of Aβ from the brain in the search for a robust therapy for Alzheimer's Disease	Clinical and Experimental Sciences	
105	Edwin Garcia	Developing model systems to understand the functional and clinical significance of somatic genetic variations in oesophageal cancer	Cancer Sciences	
106	Sarah Tonkin- Crine	Managing patients with advanced chronic kidney disease in primary care: a qualitative study with GPs	Primary Care and Population Sciences	
107	Gareth Ward	Design of a synthetic biocompatible basement membrane for ocular applications	Clinical and Experimental Sciences	
108	Joanna Greenghouhg	The significance of Bcl-2-associated athanogene-1 (BAG-1)-mediated protein interactions in bone development	Human Development and Health	
109	Lisa Loughney	Exercise regiMen Post chemOradiotherapy in patients With opErable Rectal cancer (EMPOWER)	Clinical and Experimental Sciences	
110	Akul Singhania	Characterizing the role of peripheral airways in severe asthma using a whole transcriptomics approach	Clinical and Experimental Sciences	
111	Vinay Saunders	Expression and potential miRNA regulation of Thymosin $\beta$ 4, a cardioprotective protein, in the foetal human heart	Human Development and Health	
112	Sara Afshar	The Global Burden of Multimorbidity	Primary Care and Population Sciences	
113	Annette West	Incorporation of omega-3 fatty acids into plasma phosphatidylcholine when consumed in different structural forms	Human Development and Health	
114	Ray Allan	Targeting pneumococcal metabolism to improve treatment success in biofilm- associated middle ear infections	Clinical and Experimental Sciences	
115	Leo Westbury	Self-reported walking speed: a useful marker of physical performance among community dwelling older people?	Human Development and Health	
116	Alex Allen	Anergy of memory B cell populations	Cancer Sciences	

117	Caroline Barker	The role of Bag-1L in cell metabolism and anoikis evasion during breast cancer development	Cancer Sciences
118	Emma Budd	MicroRNAs in Skeletogenesis	Human Development and Health
119	Rose-Marie Mackay	Surfactant protein D concentrations are affected by <i>streptococcus pneumoniae</i> infections but not HIV infections in children with pneumonia	Clinical and Experimental Sciences
120	Chester Lai	Regulatory T cells suppress effector T cell functions in cutaneous squamous cell carcinoma and promote subsequent metastasis	Clinical and Experimental Sciences
121	Eloise Cook	DXA measures of childhood bone mineral are associated with CDKN2A promoter methylation at birth	Human Development and Health
122	Khiyam Hussain	Predicting the toxicity of therapeutic monoclonal antibodies	Cancer Sciences
123	Holly Syddall	Social inequalities in musculoskeletal ageing among community dwelling older men and women in the United Kingdom	Human Development and Health
124	Jo Bailey	Super-oscillatory imaging to reveal nanoscale dynamics of axonal degeneration	Institute for Life Sciences
125	Jay Amin	Effect of active Aβ immunotherapy on neurons in Alzheimer's disease	Clinical and Experimental Sciences
126	Ines Moreno	The chorioallantoic membrane (CAM) as a capillary bed for human bone angiogenic analysis: the potential of laponite clay gel for growth factor delivery ex vivo	Human Development and Health
127	Marina Aguilar- Hernandez	Modulation of B Cell Receptor Signaling By IL 4 In Chronic Lymphocytic Leukaemia	Cancer Sciences
128	Lang Dou	In vivo manipulation of Fc gamma receptor expression and activity through macrophage polarization	Cancer Sciences
129	Akosua Agyemang- Prempeh	Inflammation: A key contributer to age- related hearing loss	Institute for Life Sciences
130	Hajir Al Saihati	The role of epithelial mesenchymal transtion driven CCL5/RANTES expression in colon cancer	Cancer Sciences
131	Harry Whitwell	Nanoparticles, Their Protein Corona and Immpact on the Immune Function of Human Lung Cells	Clinical and Experimental Sciences
132	Jason Fleming	TENSIN REGULATION OF TUMOUR CELL MOVEMENT: A LINK BETWEEN METABOLISM AND MOTILITY	Cancer Sciences
133	Alicja Baczynska	Volunteer-assisted mobilisation of older people in hospital – systematic review	Human Development and Health
134	Priya Sukhtankar	Preliminary Data from the DINOSAUR Study: Duration of Intravenous and Oral Antibiotic Therapy for Acute Osteomyelitis and Septic Arthritis in a Paediatric Population	Clinical and Experimental Sciences
135	Rakic, Sonja	The impact of systemic infection on microglia and the cytokine profile of the human brain affected by Alzheimer's disease	Clinical and Experimental Sciences

		POSTER SESSION 2	
01	Michael Olding	Serum Lipids Modulate the Angiogenic Potential of Endothelial Cells In Vitro	Clinical and Experimental Sciences
202	Claire Simner	Placental amino acid transport may be regulated by maternal vitamin D and vitamin D-binding protein: results from the Southampton Women's Survey	Human Development and Health
203	Reuben Pengelly	Identification of novel aetiological MTHFD1 mutations in a folate-responsive primary immunodeficiency	Human Development and Health
204	Xiaoli Chen	The Potential of Limbal Neurosphere Cells to Differentiate into Retinal Cell Phenotypes	Clinical and Experimental Sciences
205	Agnieszka Janeczek	Skeletal stem cell-targeted Wnt delivery in liposome nanoparticles for bone regeneration	Human Development and Health
206	Katherine Pike	Late preterm birth: relations with asthma, wheeze and lung function in 6-year-old children within the Southampton Women's Survey	Clinical and Experimental Sciences
207	Melanie Jannaway	The effect of resolvins on carbachol- constricted rat airway segments	Clinical and Experimental Sciences
208	Matthew Carter	The Eµ-Tcl1 model exhibits hallmarks of antigenic drive and microenvironment support akin to that observed in Chronic Lymphocytic Leukaemia	Cancer Sciences
209	Matthew Blunt	The dual PI3K/mTOR inhibitor PF-04691502 induces substantial apoptosis in Chronic Lymphocytic Leukaemia cells independently of prognostic markers	Cancer Sciences
210	Elodie Siney	ADAM10 & 17 blockade increases migration of Glioblastoma stem cells	Clinical and Experimental Sciences
211	Jennifer Dewning	Reprogramming of Primary Human Fetal Fibroblasts towards cardiomyocytes	Human Development and Health
212	Amel Albibas	DNA extraction from actinic keratosis for identification of genetic alterations	Clinical and Experimental Sciences
213	Camille Parsons	Impact of bone marrow lesion on the progression of knee osteoarthritis in the SEKOIA study	Human Development and Health
214	Ben Ainsworth	Using 7.5% CO2 challenge to evaluate novel psychological treatments for anxiety	Clinical and Experimental Sciences
215	Nicola Weston-Bell	Hairy cell leukemia cell lines lack both the signature BRAF mutation of typical disease and MAP2K1 mutations of atypical disease	Cancer Sciences
216	Edoardo Scarpa	Stem-cell specific targeting of polymersomes for bone regeneration	Human Development and Health
217	Muchaala Swana	Generating therapeutic antibodies against the inhibitory receptor ILT5 to treat cancer and autoimmune diseases	Cancer Sciences
218	Rachel Ryves	Understanding and perceptions of mindfulness-based interventions and development of an adapted mindfulness intervention for breast cancer patients	Primary Care and Population Sciences

219	Adam Linley	Stimulation of surface IgM of chronic lymphocytic leukaemia cells reprograms cellular metabolism	Cancer Sciences
220	Carol Wareham	Can immunostimulatory monoclonal antibodies be used to enhance the efficacy of anti-GD2 immunotherapy?	Cancer Sciences
221	Elizabeth Lemm	Chronic lymphocytic leukaemia and the tumour microenvironment: the development of a novel 3D co-culture system	Cancer Sciences
222	Theresa Hydes	The human liver contains a greater percentage of NK cells expressing markers of immaturity and a novel group of liver specific CD49a+CD49b- NK cells	Clinical and Experimental Sciences
223	Jay Laver	S-nitrosylation of a subset of host cell proteins is modulated by the ability of Neisseria meningitidis to detoxify nitric oxide (NO): a quantitative proteomics approach	Clinical and Experimental Sciences
224	Marcin Knut	Application of RNA-Seq for gene fusion identification in myeloid malignancies	Human Development and Health
225	Christine Gast	The prevalence of familial kidney diseases (FKD) in a cohort of chronic kidney disease (CKD) patients	Human Development and Health
226	Lekh Dahal	Manipulating macrophage phenotype and function for anti-tumour immunity	Cancer Sciences
227	Helena Fisk	Effect of Apolipoprotein-E genotype on plasma omega-3 fatty acid response to high dose fish oil intervention	Human Development and Health
228	Beatriz Valle- Argos	B-cell receptor signalling enhances glycolysis in chronic lymphocytic leukaemia	Cancer Sciences
229	David Christensen	Role of environmental oxygen tension in the regulation of human embryonic stem cell metabolism	Human Development and Health
230	Samantha Sodergren	The EORTC Symptom Based Questionnaire Study: Using patient and health care professional interviews and focus groups to identify side effects of targeted therapies used in the treatment of breast cancer, gastro-intestinal stromal tumours and chronic myeloid leukaemia	Cancer Sciences
231	Samantha Dias	Chronic lymphocytic leukaemia and the microenvironment: Investigating the interplay between CLL cells, fibroblasts and myofibroblasts	Cancer Sciences
232	Samantha Sodergren	The EORTC Symptom Based Questionnaire Study: Using systematic literature reviews to identify side effects of targeted therapies used in the treatment of breast cancer, gastro-intestinal stromal tumours and chronic myeloid leukaemia	Cancer Sciences
233	Ruth Britton	A Comparison of anti-CD20 Chimeric Antigen Receptors for Targeting B-cell Malignancies	Cancer Sciences
234	Sarah Buchan	Co-inhibitory blockade and agonistic co- stimulation synergize to downregulate anergic molecular programs and restore functions of chronically stimulated CD8+ T cells	Cancer Sciences
235	Franco Conforti	Evaluation of the HDAC inhibitor, FK228, as a potential treatment for idiopathic pulmonary fibrosis IPF	Clinical and Experimental Sciences

		POSTER SESSION 3	
301	Louise Docherty	Using genome-wide DNA methylation analysis of patients with complex imprinting disorders to identify novel candidate imprinted genes	Human Development and Health
302	Simon Fraser	Risk of acute kidney injury in people with chronic kidney disease – a retrospective cohort study using the Hampshire Health Record	Primary Care and Population Sciences
303	Mariko Taga	Involvement of a brain "Metaflammasome" in neurodegeneration	Clinical and Experimental Sciences
304	Richard Dodds	Grip strength across the life course: normative data from twelve British studies	Human Development and Health
305	Marta Polak	The role of PI3K-gamma in regulation of allergic cutaneous inflammation	Clinical and Experimental Sciences
306	Steven Frampton	Eps8 - a master regulator of myofibroblast transdifferentiation	Cancer Sciences
307	Mohammed Mumtaz Naiyer	KIR2DS2 binding peptide activates Natural Killer Cells	Clinical and Experimental Sciences
308	Rebecca Stead	Developmental Priming of the Microvasculature by Maternal High Fat Diets	Human Development and Health
309	Jessica Sampson	Identification and characterisation of human foetal progenitor cells	Human Development and Health
310	Warayut Chotprakaikiat	Development of a plant-expressed HER2 targeting vaccine for breast cancer	Cancer Sciences
311	Anna Pilgrim	Appetite Assessment: the use of the Simplified Nutritional Appetite Questionnaire to Measure Appetite in Older Medical Inpatients	NIHR Evaluation, Trials and Studies Coordinating Centre
312	Rachel Ryves	Understanding the delayed prescribing of antibiotics for respiratory tract infection in primary care: A qualitative interview study	Primary Care and Population Sciences
313	Risat Haque	Construction and characterisation of a panel of meningococcal denitrification mutants: their role on bronchial epithelial cell physiology and biofilm formation	Clinical and Experimental Sciences
314	Kirstie Cleary	Understanding antibody immunotherapy: distance of antibody binding from the cell membrane impacts the depletion mechanisms engaged	Cancer Sciences
315	Jessica Donaldson	Characterisation of the Thymic Stromal Lymphopoietin Response in Co-Cultures of Human Bronchial Fibroblasts and Epithelial Cells	Clinical and Experimental Sciences
316	Mohannad Fallatah	Cancer immunotherapy through stimulation of members of the TNFR super family	Cancer Sciences
317	Lihui Zhuang	Optimising conditions for natural killer cell therapy for hepatocellular carcinoma	Clinical and Experimental Sciences

318	Christine Reitmayer	The insect glial cell response as an indicator for neuronal dysfunction	Clinical and Experimental Sciences
319	Antigoni Manousopoulou	Phenotypic effects on cerebral cortex in mice following in utero and after weaning exposure to high-fat diet: A case for quantitative proteomics	Institute for Life Sciences
320	Rosanna Upstill- Goddard	Genetic studies to characterise the role of genetic variation in early-onset breast cancer	Human Development and Health
321	Robert Oldham	Development of the human CD20 tcl-1 transgenic mouse as a model for anti-CD20 immunotherapy	Cancer Sciences
322	Gessa Sugiyarto	Characterising Treg induced immuno- suppression of GSW11-specific T cells, involved in tumour rejection	Cancer Sciences
323	Abbie Mead	The Warburg effect: Regulation of integrin endocytosis and function	Cancer Sciences
324	Daniel Meron	Transcranial Direct Current Stimulation (tDCS) in depression - systematic review and meta-analysis	Clinical and Experimental Sciences
325	Miriam Santer	Supporting self-care for families of children with eczema: pilot RCT of web-based intervention with health care professional support	Primary Care and Population Sciences
326	Ana Francisco Garcia	The involvement of microRNAs in macrophage response to viruses in asthma exacerbations	Clinical and Experimental Sciences
327	Richard McKendry	Modulation of PD-1 and PD-L1 expression in response to acute viral infection of human lung tissue	Clinical and Experimental Sciences
328	Giaia Andreoletti	Whole exome sequencing identifies novel FLNA mutation in familial Ebstein's anomaly	Human Development and Health
329	Jeanne Trill	Alternative Treatments of Adult Female Urinary Tract Infection: Quality Control and Antimicrobial Activity of an Herbal Medicinal Product	Primary Care and Population Sciences
330	Desiree Ludwig	Allergic drug reactions and the identification of those at risk of severe symptoms: Mast cell and basophil activation as key cellular mechanisms	Clinical and Experimental Sciences
331	Geraint Dingley	MiR23a is up-regulated in the proximal tubules of patients with Diabetic Nephropathy and increases NF-kB mediated pro-inflammatory cytokine production by targeting A20	Clinical and Experimental Sciences
332	Lyndsy Ambler	A Role for WISP-1 in IPF	Clinical and Experimental Sciences
333	Jane Vennik	Improving primary care management of glue ear: a qualitative evaluation of parents' and nurses' experiences from the AIR study	Primary Care and Population Sciences
334	Andrew Causon	A meta-analysis for predictors of hearing preservation after hybrid cochlear implant surgery	Institute for Life Sciences
335	Lindsay Smith	Cross-talk between CXCR4 and the B-cell receptor in chronic lymphocytic leukaemia	Cancer Sciences