

# Population Genetics Group Meeting Programme

## Wednesday 17 December

### Session 1

9.10	Welcome in A2: <b>Adam Eyre-Walker</b>
9.15	<b>Noel Smith</b> The population structure of <i>Mycobacterium bovis</i> : Clonal expansion (In lecture theatre A2)

	A (lecture theatre A1)	B (lecture theatre A2)
10:00	<b>Daniel Falush</b> Traces of human migrations in <i>Helicobacter pylori</i> populations	<b>Joel Peck</b> Sex and the evolution of altruism: Finite-population computer experiments
10:20	<b>Ciara Dolan</b> Distinction of Caucasian (Irish) population structure defined by pathogen response-related genetic variants and other genetic variants	<b>Andy Gardner</b> Spite and the scale of competition
10:40	<b>Sue Mitchell*</b> Genotype by environment interactions in a host-parasite system: too much E for evolutionary biologists?	<b>John Welch*</b> Accumulating Dobzhansky-Muller incompatibilities
11:00	Coffee	

### Session 2

11:30	<b>Kristina Sefc</b> Assessment of ancestral polymorphism and gene flow through multiple host colonisations in brood-parasitic indigobirds ( <i>Vidua</i> spp)	<b>Daniel Jeffares</b> Massive genome scale intron loss in single celled eukaryotes and some implications for the evolution and function of genomes
11:50	<b>Inga Zeisset</b> Host adaptation despite geneflow in parasitic butterflies	<b>Gwenaël Piganeau</b> Challenging the dogma of clonal inheritance in mitochondrial DNA
12:10	<b>Max Reuter*</b> Wolbachia infection affects nuclear gene flow in the ant <i>Formica exsecta</i>	<b>Len Nunney*</b> Detecting natural selection at the molecular level: re-examining some "classic" examples.
12:30	Lunch	

### Session 3

14:00	<b>Nick Miller</b> Evidence for host races in the lettuce root aphid, <i>Pemphigus bursarius</i>	<b>Joe Felsenstein</b> Migration matrices and within-species comparative methods
14:20	<b>Patricia L.M. Lee</b> Population genetic structure of turtle-specific epibiont barnacles	<b>Tini Garske</b> Error thresholds in populations of nucleotide sequences
14:40	<b>Matthew Fisher</b> Molecular epidemiology of the emerging infectious disease <i>Penicillium marneffe</i> in S.E. Asia	<b>Kevin Dawson</b> A Bayesian approach to some model-based clustering problems in population genetics
15:00	<b>Peter Wandeler*</b> Demography and temporal population genetics in a red fox population following a rabies epizootic	<b>David Waxman*</b> Anomalous effects of biased mutation
15:20	Tea	

### Session 4

15:50	<b>Gabriel Marais</b> The evolution of sex chromosomes in dioecious plants	<b>Corneel Vermeulen</b> The evolution and genetic basis of ageing: selection on virgin life span in <i>Drosophila</i>
16:10	<b>Mark Kirkpatrick</b> Sex chromosomes, sexual selection, and speciation	<b>Evert Gutteling</b> Mapping QTLs for plasticity in life-history traits in <i>Caenorhabditis elegans</i>
16:30	<b>Lev Yampolsky*</b> Deleterious mutations, sperm competition, cryptic female choice and the evolution of mating system	<b>Erik Postma*</b> A comparison of environmental and genetic variance components for clutch size and laying date between populations and species, and what we can learn from the differences
18:00	<b>Poster Session</b>	

\* Session chair

# Thursday 18 December

## Session 1

9.15	<b>Laurent Duret</b> Recombination and the evolution of isochores in mammals (In lecture theatre A2)	
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	A (lecture theatre A1)	B (lecture theatre A2)
10:00	<b>Sofia Consuegra</b> Historical changes in census size and effective population size in endangered Atlantic salmon populations	<b>Deborah Charlesworth</b> Diversity and linkage disequilibrium at the self-incompatibility locus of <i>Arabidopsis lyrata</i>
10:20	<b>Meg Woolfit</b> Effective population size and rate of molecular evolution in island species	<b>Toby Johnson</b> Multipoint linkage disequilibrium mapping using multilocus allele frequency data
10:40	<b>Ken Kraaijeveld*</b> Practical implications of female remating in the Mediterranean fruit fly	<b>Mark Beaumont*</b> Identifying adaptive genetic divergence among populations from genome scans
11:00	Coffee	

## Session 2

11:30	<b>Anne Tsitrone</b> Microsatellite measures of inbreeding depression and heterosis in natural populations	<b>Ed Vowles</b> Evidence for widespread convergent evolution around microsatellites
11:50	<b>Jon Slate</b> Heterozygosity-fitness correlations: just what do they measure?	<b>Martin Lercher</b> Gene expression and regionality in evolutionary rates
12:10	<b>Andy Overall*</b> Inbreeding and neonatal survival in the Soay sheep population, St Kilda	<b>Matt Webster*</b> Fixation biases in human SNPs
12:30	Lunch	

## Session 3

14:00	<b>Rory Post</b> Blackfly endemism in the Gulf of Guinea	<b>Xulio Maside</b> Selection on codon usage in <i>Drosophila americana</i>
14:20	<b>Steve Rossiter</b> Sympatric divergence in a mammal	<b>Nicolas Bierne</b> Non-synonymous variation and synonymous codon usage in <i>Drosophila</i> : further evidence for the translational accuracy hypothesis?
14:40	<b>Ilik Saccheri</b> Gene flow along the Peppered Moth melanism cline	<b>Jean-Vincent Chamary</b> Similar rates but different modes of sequence evolution in introns and at exonic silent sites
15:00	<b>Robert Jehle*</b> Contemporary gene flow and drift in subdivided newt populations	<b>Philip Awadalla*</b> Ancient selection drives an X-linked 'speciation' gene in <i>Drosophila</i>
15:20	Tea	

## Session 4

15:50	<b>Catherine Macdonald</b> Tracking parasitoid wasps: spatial distribution at a farmland scale	<b>Montgomery Slatkin</b> Population genetic basis of haplotype blocks in the 5q31 region of the human genome
16:10	<b>Phill Watts</b> Landscape genetics and conservation of the endangered southern damselfly, <i>Coenagrion mercuriale</i>	<b>Elise Belle</b> How can we explain the differential distribution of old and young repetitive elements in the human genome?
16:30	<b>Joe Hoffman</b> Male reproductive success in the Antarctic fur seal	<b>Vini Pereira</b> Selection, insertion bias, and the dynamics of retrotransposons in the A.thaliana genome
16:50	<b>Helen Atterby*</b> Population genetics of the serotine bat ( <i>Eptesicus serotinus</i> )	<b>Colm O'Dushlaine*</b> Tandem repeat sequence length polymorphism in the human population - possible effects on the proteome

\* Session chair

# Friday 19 December

## Session 1

9.15	<b>Tim Birkhead</b> Sexual Selection before and after sex (In lecture theatre A2)
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	<b>A (lecture theatre A1)</b>	<b>B (lecture theatre A2)</b>
10:00	<b>Dave Coltman</b> Evolutionary consequences of trophy hunting	<b>Dmitry Filatov</b> Elevated substitution rate and DNA diversity in the human pseudoautosomal region
10:20	<b>Richard Edwards</b> Using peptides to investigate functional specificity in proteins	<b>Dave Gerrard</b> Adaptive evolution on the mammalian Y chromosome
10:40	<b>Stuart Baird*</b> Inferring range expansion: an application of dancing trees	<b>Michael Stumpf*</b> Recombination rates and their local variation in the human genome
11:00	Coffee	

## Session 2

11:30	<b>Jon Bridle</b> Simulating adaptation at the edge of a species' range	<b>Brian Charlesworth</b> The deleterious mutation rate in <i>Drosophila melanogaster</i>
11:50	<b>Christian Lexer</b> Hybridization and ecological divergence in wild sunflowers ( <i>Helianthus</i> spp.)	<b>Laurence Loewe</b> High deleterious genomic mutation rate in stationary phase of <i>Escherichia coli</i>
12:10	<b>Angus Davison*</b> The ecotype is labile: the same ecotype in different species and the same species has different ecotypes in <i>Mandarina</i> land snails on the Ogasawara Islands	<b>Daniel Gaffney*</b> Frequency of deleterious mutations in rodent noncoding DNA
12:30	Lunch	

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