



Surrey Network

Universities of the Third Age

GENETICS

Development of Personalised Medicine & Treatment of Disease

A Study Day on Friday, 20th September 2019

At The Menuhin Hall, Stoke d'Abernon (map on next page)

Speakers – Daniel Biggs, Felicia Anna Tucci & Justin Whalley

The Wellcome Centre for Human Genetics, University of Oxford

From DNA basics and what it is, to genes, chromosomes, the cell cycle and the processes of Mitosis and Meiosis then on to genetics, the expression and regulation of genes, inheritance and evolution. There exists a wealth of techniques for manipulating DNA for genetic editing, giving great precision and control in engineering genetics. This advancement will allow for personalised medicines.

Genetics can be useful for understanding, tracking and treating immune diseases. Some examples will be given from current research in B and T cell receptor sequencing and how these can be used to best treat patients.

When the virus of an infectious disease spreads between people it will probably carry small, genetic changes due to imperfect duplication. We can sequence the genomes of the virus in lots of those infected. Can we use the genetic differences between the viruses to work backwards to patient zero or the infection's source?

Programme

- 9.30 Registration
- 10.00 Introduction to Genetics - Daniel Biggs
- 11.00 Coffee / Tea
- 11.30 Genetic Engineering and Personalised Medicine - Daniel Biggs
- 12.30 Lunch - Bring your own – Tea / Coffee available
- 1.30 Genetics in Understanding and Treating Immune Diseases – Felicia Anna Tucci
- 2.30 Tea / Coffee
- 3.00 Infectious Diseases and Genetics - Justin Whalley
- 4.00 Departure

Speakers – See page 2.

To book send the slip below, with a cheque for £10 (non-U3A guest £12) payable to 'Surrey U3A Network', or bank transfer to HSBC acct 11519018 40-27-07, ref 'Event month(s)' e.g. Feb, Mar, to John Kennedy – U3A, 20 Greville Park Road, Ashted, KT21 2QT, Tel 01372 273561, e-mail surreyu3astudyday@btinternet.com. Enclose a SAE or e-mail address for confirmation. Fees are not normally refundable. Website, see the next page.

Genetics Study Day **See - Nut Allergy & Other Notes on page 2** 20th September 2019

Please print Confirm by ticking E-mail or enclosed SAE Cheque or Bank Transfer



TitleFirst NameSurnameName of U3A

Address

Post Code Telephone E-mail

See page 2 if you need disabled parking, tick , or a wheelchair space in the hall, tick

Speakers – Daniel Biggs is a Research Assistant at the Wellcome Centre. He is part of the Transgenic Core at the centre providing mutated models for further research. He has been at the centre for 9 years. He is an active STEM ambassador and part of the public engagement committee at the Wellcome Centre. **Dr Felicia Anna Tucci** is a molecular biologist with a background in B cell immunology and viral infection, and in using genetics to understand B cell responses.

Dr Justin P. Whalley is a senior postdoc at the Wellcome Centre concentrating on genetics and immunity. He is currently researching why we have such varied reactions to infection. Previously he worked at the Centro Nacional de Análisis Genómico in Barcelona, Spain, where he worked on the problem of combining cancer genomic datasets to help understand the similarities and differences between various cancers. He is active in public engagement, running workshops for local schools and giving talks as part of Pint of Science and University of Oxford events.

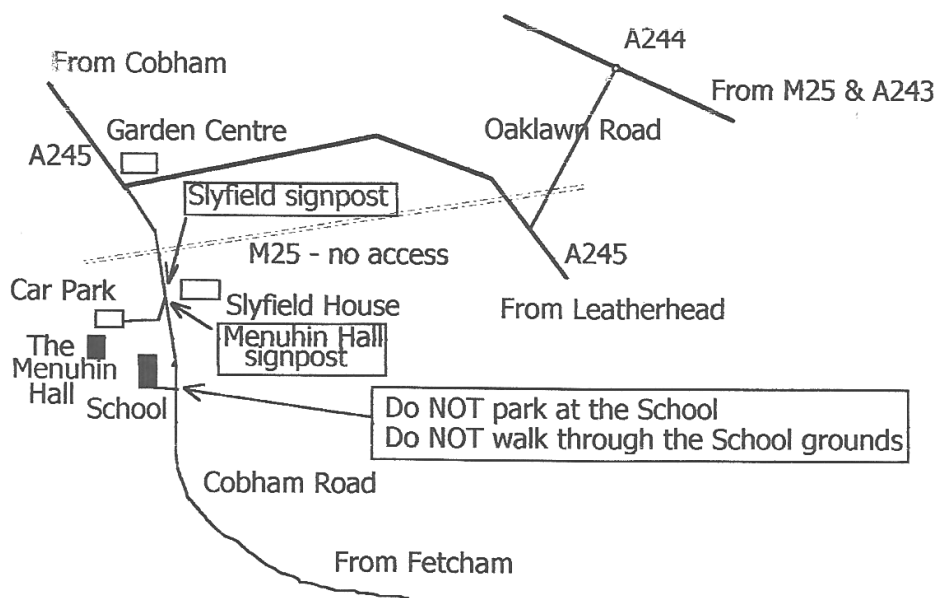
The Menuhin Hall

Cobham Road, Stoke d'Abernon, KT11 3QQ

Map ref: TQ 132 579 on Landranger 187, Explorer 146

Telephone 07763 805046 (emergency, on day only)
or Menuhin Hall Office 08700 842020

There is a Garden Centre (01932 862530), about 800 metres to the north of the Menuhin Hall where light lunches are available. Reservations not required.



Surrey Network Website - <http://u3asites.org.uk/surreyu3anetwork/> has application forms for study days and other events plus information about the Surrey Network and links to Surrey U3A websites.

Nut Allergy. The Menuhin School has pupils who have an allergic reaction to nuts and the staff have taken the decision to make the school and the Menuhin Hall a nut free environment. Please ensure that your lunch does not contain any trace of nuts.

Disabled Parking. There are six spaces behind the hall, there are more in the main car park. If you have a blue badge and need level access to the hall then tick “Disabled parking” on the booking slip. You will then be allocated a space at the back of the hall if available and sent a permit. If you can manage from the main car park (i.e. you are able to manage some steps with handrails) then please do not tick “Disabled parking”. That will leave the back of the hall spaces for those that are very immobile.

There is a “drop off” space at the back of the hall where disabled who are not the driver can gain level access to the hall.

Wheelchair spaces. If you need a seat removed in the hall to accommodate a wheelchair then tick Wheelchair on the booking slip.