

## Ealing U3A – Summer 2019 Programme of talks

The theme for this years' Summer programme is to commemorate the anniversaries of important events or figures from the past. Our thanks go to **Gillian Dare** for organising this programme. Dates and subjects for these talks are:

DATES	DETAILS OF TALK
25 July 19	<p><b>Dr. Jaclyn Bell</b>, Imperial College, London</p> <p>Jackie has a keen interest in all Science, Technology, Engineering and Mathematics subjects and graduated from the University of Liverpool with a Masters in Mathematics Sciences and a PhD in Theoretical Particle Physics in 2016. Currently based at Imperial College London, Jackie has a huge passion for communicating science and inspiring others to pursue science careers.</p> <p><b>The impact of Apollo and the future of human spaceflight</b></p> <p>In July 1969, Neil Armstrong and Buzz Aldrin took their first steps on the moon. It was a result of national pride and immense teamwork that transformed what was previously considered science fiction into fact and allowed them to arrive there safely. As a trainee astronaut herself, Jackie will talk us through that monumental moment 50 years ago and the progress and achievements human space exploration has made since.</p> <p>Will we go back to the moon? Join Jackie as she talks about her own experiences and the plans NASA and ESA have to return humans safely to the moon almost 47 years after we last set foot there.</p>
8 August 19	<p><b>Dr George Beccaloni</b></p> <p>George is a zoologist, evolutionary biologist and historian of science, who worked at London's Natural History Museum as an entomologist (specializing in cockroaches and butterflies) for 20 years. He has studied Wallace's life and work for about 18 years and in 2002 he was instrumental in helping the Museum acquire the world's most important collection of Wallace's letters and other manuscripts from his grandsons. George is the founder and Director of the Wallace Correspondence Project which has been running since 2010. In 2016 he left the Museum to work full-time on the Project, which is now based in an office in north-east London.</p> <p><b>Alfred Russel Wallace and Natural Selection: The Real Story</b></p> <p>Alfred Russel Wallace (1823-1913) was the co-discoverer of evolution by natural selection with Charles Darwin in 1858, more than a year before <i>Origin of Species</i> was published 160 years ago. Sadly, however, his extraordinary quest to understand how evolution works is not very well known and some seem even think that he discovered natural selection by chance, but this is very far from the truth. This talk charts the development of Wallace's ideas about evolution, from his early life in Neath in Wales where he first became interested in the subject, through his four year expedition to the Amazon (which ended with the destruction of his irreplaceable specimens and notes), to his epic eight year journey around the Malay Archipelago where he finally discovered the process which drives the evolution of life on Earth.</p>
22 August 19	<p><b>Dr Matthew Landrus</b></p> <p>Research Fellow, Wolfson College and History Faculty, University of Oxford Co-teacher, History Faculty, University of Oxford, MSt/MPhil in History course, Theories and Methods in Historical Analysis.</p> <p>Dr Landrus has also published a number of books on Leonardo da Vinci</p> <p><b>Leonardo da Vinci and the science of observation and invention</b></p> <p>As 2019 marks the 50<sup>th</sup> anniversary of the first moon landing, there is also an opportunity to revisit early approaches to science by Leonardo da Vinci, as this year also marks the 500<sup>th</sup> anniversary of his death. Dr Matthew Landrus will discuss brief notes by Leonardo on his observations of the moon, while also addressing the polymath's approaches to flight, and other engagements with natural science and technology.</p> <p>Much of this work began for Leonardo in 1489, when Duke Ludovico Sforza asked him to write about the superiority of painting among the liberal arts. Painting is a science, argues Leonardo, not only because of its use of mathematically accurate perspective, but also because it can faithfully recreate illusions of sight, sound, poetry, sculpture, movement, and almost anything in nature. Subsequently, he continued to study and write about his technical observations and inventions, referring to them as governed by science, or 'Necessity'.</p>
	Autumn term starts <b>5th Sept 2019</b>

These Summer sessions will begin at our usual meeting time (10.00am). There is a charge of £3 pp for each one.