What's behind the road names?

Before becoming a housing development, the area of land west from Colney Lane to the A47, known as Newfound Farm (excluding the original farmhouse and Newfound Court buildings) was owned by the <u>John Innes Foundation</u> (JIF), a charity that supports <u>The John Innes Centre</u> (JIC) on the Norwich Research Park. JIC is a world-leading research centre for plant and microbial science. The land was used as the John Innes farm and held a collection of fruit trees bred by the John Innes Institute (JII, as it was known before becoming JIC). When building began, the Newfound name was abandoned by the developers and the estate was named Cringleford Heights. The Parish Council wished to link the estate with the area and its history and named each of the roads after a notable deceased member of the John Innes Centre.

Here is a brief biography of each person behind the road names. Many of them were linked with the breeding programme that created the trees planted in <u>Newfound Community Orchard</u>. The colour of the individual's name corresponds to the colour on the street map of the whole estate that can be found below. You can find the history of the area here.

Road name	Biography
Atchison Avenue	Elizabeth (Liz) Atchison MBE (1932-1998) was head of the library for many years, but her passion was the Special Collection of Rare Books which she developed with funding from the John Innes Foundation. She brought the collection 'to life' by holding exhibitions, opening it to interested groups and used funding to purchase additional rare books for the collection. Liz, the first to recognise the importance of the Institute's rare botanical books, was awarded an MBE and an Honorary Fellowship of the Linnaean Society in recognition of her work.
Bateson Road	William Bateson FRS (1861-1926), who was awarded the Darwin Medal in 1904 and the Royal Medal in1920, was the first Director of JII. He coined the word 'genetics' and became its founding father in Britain. He was a key figure in late 19th/early 20th century debates on evolution, variation and heredity and is celebrated today as one of the important figures in evolutionary and developmental biology.
Brown Close	(Andrew) Gavin Brown MBE (1910-1987) started at the JII as a student gardener in 1930 and came to lead JII's tree fruit breeding work from 1950s-70s. He also bred most of the John Innes Cape Primrose varieties and was Curator of the Gardens. The RHS awarded him the Jones-Bateman Cup (1960), and the Veitch Memorial Gold Medal (1979) for services to horticulture.
Crane Close	Morley Benjamin Crane FRS (1890-1983) arrived at the JII as one of the first intake of student gardeners and rose to become an eminent researcher and breeder of fruit trees. He raised many of the seedlings that were later released as 'Merton' fruit

	varieties that are still sold today. The RHS awarded him the first Jones-Bateman Cup and Medal, and the Victoria Medal of Honour.
Davies Drive	D. Roy Davies OBE (1932-2018), as Head of the Department of Applied Genetics, changed its focus from fruit breeding studies to exploiting the new science of biochemical and molecular genetics, placing emphasis on peas as an economically important UK crop. He played a crucial role in teaching and university duties at UEA becoming Dean of Biological Sciences. From 1977-1994 he was Deputy Director of the JII. He was a key player in discussions on the siting of the new Norwich and Norfolk Hospital next to the Institute.
Darlington Drive	Cyril Dean Darlington FRS (1903-1981) was President of the Genetical Society from 1943 to 1946. He had an international reputation in cytology, studying chromosomes during cell division. His distinguished career was devoted to the study of chromosomes, the gene, and evolution (including human evolution). He became the Sherardian Professor of Botany at Oxford University when he left the JII.
De Winton Drive	Dorothea de Winton (1890-1982) spent many years on plant breeding work that, together with her knowledge of plant variants, led to landmark papers with Professor Haldane on inheritance of genes close together on chromosomes (1931-5). She later worked with Sir Kenneth Mather on breeding systems in Primula that led to important contributions to the understanding of the genetics of flower structure that prevent self-fertilization.
Haldane Drive	John Burdon Sanderson Haldane FRS (1892-1964) was awarded the Croonian Medal in 1946, and the Darwin Medal in 1952. He was President of the Genetical Society from 1932 to 1936, and was recognised as a biochemist and geneticist who developed a quantitative theory of evolution using concepts of changing gene frequency in populations. He was also a notable public figure, author, broadcaster, and committed science populariser.
Holliday Avenue	Robin Holliday FRS (1932-2014) made a world-leading contribution to understanding the changes that occur in DNA whereby pieces are broken and reformed to produce new combinations. His model of DNA-strand exchange (proposed 1964) incorporated a junction known today as the 'Holliday junction'. He made important contributions to studying changes in gene function that do not involve changes in DNA sequence and he proposed that adding methyl groups to modify DNA was a mechanism for controlling the ways genes are expressed in higher organisms. He was awarded the Royal Society's Royal Medal in 2011 for his discoveries.
Innes Place	The John Innes Institute (originally the John Innes Horticultural Institute) took the name of its founder, John Innes (1829-1904), who was its founding benefactor and originator of the scheme for a 'horticultural institution'. Funds were bequeathed in his will to set up the institution. The road is named after him and his great nephew, Lt Col. James (Jimmy) Innes JP (1915-

	2004). Jimmy Innes was instrumental in securing an independent future for the JII after its move to Colney. He was a long-serving Chairman of the JIF (former owners of Newfound Farm), a John Innes Charity Trustee and Governing Council member on which he served for 40 years.
La Cour Lane	Leonard La Cour OBE FRS (1907-1984) joined the JII as a lab assistant in 1922 at the age of 15, when his duties included cleaning laboratory windows. Len La Cour rose to become a research worker in his own right. His election as FRS was a rare honour for someone who had received no formal scientific training. The award of the OBE was in recognition of La Cour's forty years of pioneering work developing techniques for studying the chromosomes of plants and animals.
Lamb Lane	Chris Lamb CBE FRS (1950-2009) was the fourth Director of the JII (by then JIC) at Colney. He made world-leading contributions to understanding the molecular mechanisms that underpin how plants defend themselves against attack by pathogens. As Director, he firmly established the JIC as a world centre for plant and microbial science and took a leading role working with adjacent research organisations to implement a science vision for the Norwich Research Park.
Janaki-Ammal Avenue	Edavalath Kakkat Janaki-Ammal (1897-1984) worked as a sugarcane geneticist in India before joining the JII. She co-authored the first edition of the 'Chromosome Atlas of Cultivated Plants' (1945), a significant contribution to cytogenetics and plant geography. She received many honours, including being elected Fellow of the Indian Academy of Sciences in 1935, the Indian Science Academy in 1957 and was awarded an honorary Doctor of Laws (LLD) by the University of Michigan, USA.
Markham Mews	Roy Markham FRS (1916-1980) was the first Director of the JII at Colney. He was one of the three John Innes Professors appointed at UEA when the JII came to Norwich. He pioneered biochemical and biophysical investigations of plant viruses.
Mather Mews	Sir Kenneth Mather CBE FRS (1911-1990) was President of the Genetical Society from 1949 to 1952. He was awarded the first JII PhD. His work with JII colleagues was summarized in his first book 'Biometrical Genetics' (1948), the first of several books Mather contributed to this branch of genetics. In the journal 'Nature' it was noted that he was known for his 'revolutionary outlook' in studying evolution. He later became Vice Chancellor of the University of Southampton (1965-71).
Pellew Place	Caroline Pellew (1882-1963) joined the JII in 1910 as a 'Minor Student' and worked initially with William Bateson (the first JII Director) specialising on pea (Pisum) research. She became a pivotal member of his research group. They used pea material to test T. H. Morgan's (a Nobel Prize-winning evolutionary biologist) theory on the role chromosomes play in heredity. She was the author of numerous papers on the genetics of Pisum

	and Primula, and the author of a book — Genetical and Cytological Studies on the Relations Between Asiatic and European Varieties of <i>Pisum sativum</i> (1931).
Scoti-Moncrief Street	Rose Scott-Moncrieff (1903-1991) published ground-breaking papers that established the genetics and biochemistry of pigments in flowering plants and the field of biochemical genetics. She conceived the idea that genes determine enzyme activity (later known as the 'one gene-one enzyme' concept.)
Upcott Drive	Margaret Blanche Upcott (1909-1985) started at the JII as a 'Volunteer Worker' (i.e. unpaid). In 1934 she was appointed 'Assistant Cytologist' and studied for her PhD under Cyril Darlington. She published 18 papers in several prestigious scientific journals over her five-year career, resigning in 1939 for 'family responsibilities', although remaining as a 'volunteer'. She inspired Darlington's theories on the coiling of chromosomes when she explained how hanks of wool were unwound to create smaller balls of wool.
Wheldale Way	Muriel Wheldale Onslow (1880-1932) was a biochemist who pioneered anthocyanin (a purple-coloured plant pigment) research. She was William Bateson's first choice for one of his new Studentships at the John Innes Horticultural Institution. She published several books under her maiden name (Wheldale) — 'The Anthocyanin Pigments of Plants' (1916), 'Practical Plant Biochemistry' (1920), and 'The Principles of Plant Biochemistry, Part 1' (1931).
Woolhouse Way	Harold W. Woolhouse (1932-1996) was the second Director of the JII at Colney. He made substantial scientific contributions to our understanding of the biochemistry of photosynthesis. Harold Woolhouse facilitated the founding of The Sainsbury Laboratory on the JII campus and brought to Norwich two other research institutes — the Unit of Nitrogen Fixation, University of Sussex, and part of the Plant Breeding Institute, Cambridge. The new people and the facilities added by these and many other initiatives introduced by him laid the foundations of the John Innes Centre as it is today.

