Beautiful Brains

You took part in a creative workshop to learn about your incredible brain, and what goes wrong in dementia. Scientists are trying to understand more which brings hope for new medicines.

Alzheimer’s Disease is the most common form of dementia in the UK. It is a progressive disease effecting the brain. The name comes from Dr Alois Alzheimer, who first described a patient in 1906 with memory and language loss together with unpredictable behaviour. After the woman died he looked under the microscope at her brain tissue and noticed clumps ‘plaques’ (amyloid protein) and ‘tangles’ of damaged neurons. Clues to prevent and treat dementia may come from looking at how tiny bits of proteins misfold and stick together causing neurons to die.

Scientists are looking at origami at a tiny scale; to the left is a drawing of a protein fragment (amyloid) that can fold up and stick together to create beautiful shapes seen below and over the page. Understanding these shapeshifting proteins gives clues for the future.

Drawings by Dr Lizzie Burns are based on looking at models of the real proteins. Add colour to make these proteins beautiful. You also met a scientist from the Alzheimer’s Research UK Network.

Find out more including games: https://kids.alzheimersresearchuk.org/

www.oxfordsparks.ox.ac.uk/content/discovering-life-changing-dementia-treatments
