



Tara L. Spires-Jones, DPhil

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Tara Spires-Jones, DPhil joined the University of Edinburgh in 2013, where she runs a research group studying the mechanisms and reversibility of synapse degeneration in ageing and neurodegenerative diseases including Alzheimer's disease. Her laboratory studies the synaptic connections between neurons, which facilitate learning and memory in healthy brains. Her work has shown that soluble forms of both of the proteins involved in the neuropathological lesions in Alzheimer's (amyloid beta and tau) contribute to synapse degeneration, and further that reducing the levels of these can prevent and even reverse degeneration. These findings indicate that the plasticity of the brain will allow recovery after treatment, giving hope for some functional recovery in patients.

In addition to conducting her own research, Professor Spires-Jones works to improve the field through engaging with colleagues, the public, and policymakers. She is a FENS-KAVLI Network of Excellence Scholar, working to foster the careers of early career scientists through scientific exchanges, influencing science policy and facilitating exchange between science and society. She is on editorial boards of multiple journals including membership on the Board of Reviewing Editors at Science. She is a member of the Scottish Science Advisory Council, in which role she advises the Scottish Government on science policy.

Professor Spires-Jones received her DPhil from the University of Oxford and was an assistant professor at Massachusetts General Hospital and Harvard Medical School, where she led a team studying Alzheimer's disease pathogenesis with an emphasis on synaptic pathology.