



James Fawcett is Chairman of the Cambridge University Centre for Brain Repair. He trained in medicine at Oxford University and St. Thomas' Hospital London. His early research work was on the formation of connections during brain development and he then became interested in using developmental biology principles to promote repair in the adult nervous system. His main interest has been the part played by molecules of the extracellular matrix in the inhibition of nerve fibre regeneration and in the restriction of plasticity in the adult nervous system. Recent work has shown that plasticity becomes restricted by the formation of matrix structures known as perineuronal nets, that plasticity can be reactivated in the adult CNS by digestion of proteoglycans, and that combining this treatment with rehabilitation produces robust functional recovery. He has also been involved in the design of microchannel devices for electrical recording from regenerated axons.

He has worked with Spinal Research, the Christopher Reeve Foundation and with the international organization of spinal injury charities, the ICCP, to develop guidelines for the conduct of clinical trials in spinal cord injury.

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