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## Rerouting Neurotrauma Recovery

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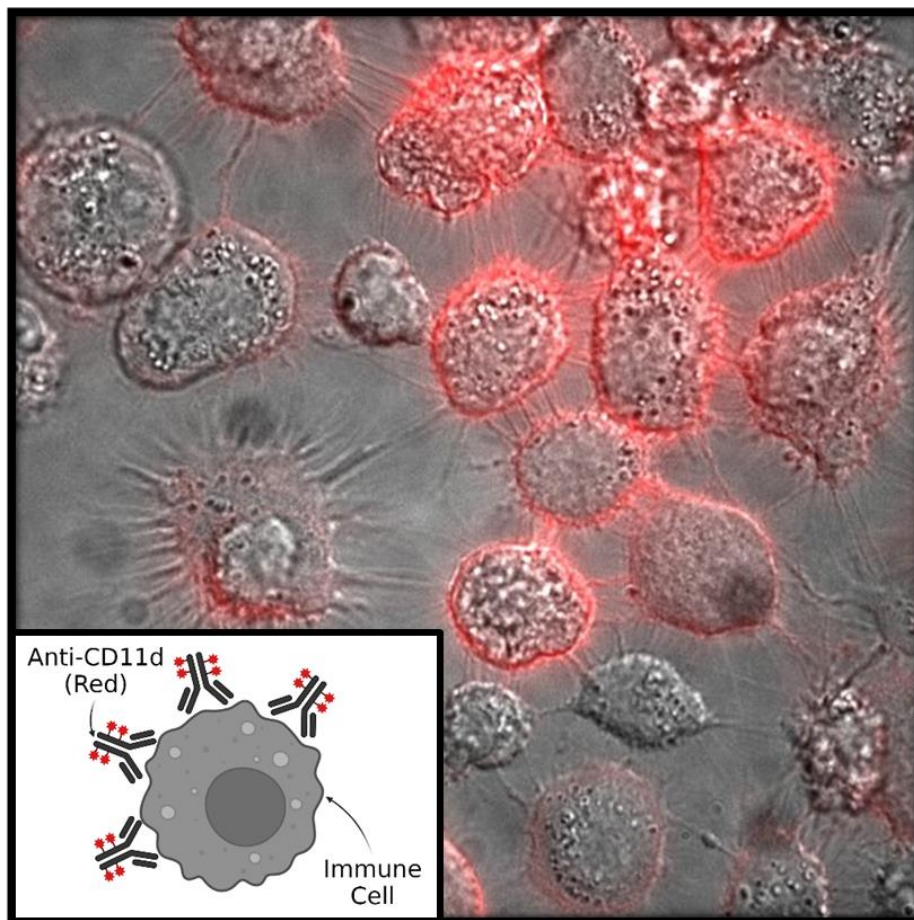
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## Rerouting Neurotrauma Recovery

Eoin Blythe

Neurotrauma is an encompassing term used to describe injuries to the brain or spinal cord. Common in car accidents and falls, these debilitating injuries are incredibly complex. Following the initial physical injury, waves of both harmful and beneficial immune cells rush to the wound. The unfortunate net result of these immune cells is an exacerbated injury. Currently, no therapeutic drug is available to effectively treat neurotrauma and improve patient recovery. A collaboration at Robarts Research Institute has developed a new neurotrauma drug (anti-CD11d) to reroute immune cells during recovery. Unlike previous attempts which eliminated all immune cells, anti-CD11d selectively blocks waves of harmful immune cells and improves neurotrauma recovery. By using novel microscopy techniques, we can characterize molecular interactions between the anti-CD11d drug and immune cells. Understanding these interactions allows us to progress the development of anti-CD11d and address the global need for an effective neurotrauma therapy.



A merge microscope image of anti-CD11d (red) binding to live THP-1 immune cells under 1000X magnification.