

EES Catalysis

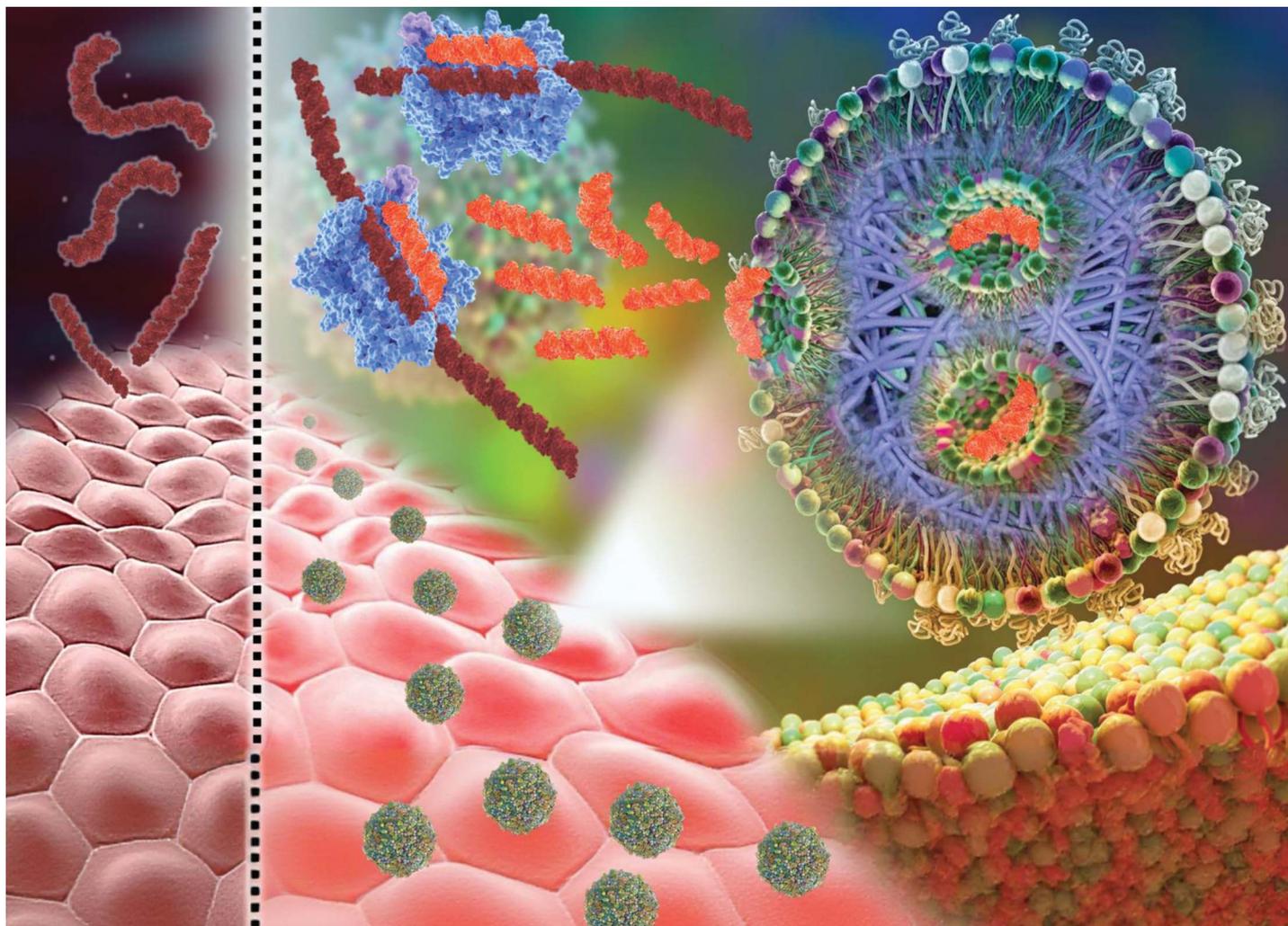
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Fundamental questions
Elemental answers



Showcasing research from the laboratories of Dr. Suresh Gadde and Dr. Kevin D. Burns, Department of Cellular and Molecular Medicine, University of Ottawa; Kidney Research Centre, Ottawa Hospital Research Institute, Ottawa, ON, Canada.

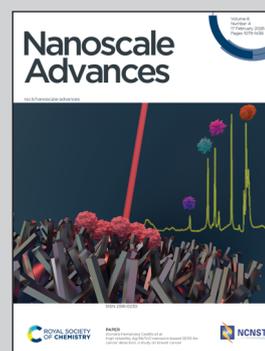
Nanoparticle-delivered miR-486-5p inhibits H₂O₂-induced injury in cultured endothelial and kidney tubular epithelial cells

Current treatment options for acute kidney injury (AKI) are limited, necessitating novel therapeutic strategies. This study demonstrates the protective and anti-inflammatory effects of miR-486-5p-encapsulating lipid-polymeric hybrid nanoparticle (HNP) systems in injured endothelial and tubular epithelial cells, highlighting their capacity as a potential nano-therapy for AKI and paving the way for *in vivo* studies and clinical applications.

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As featured in:



See Kevin D. Burns, Suresh Gadde *et al.*, *Nanoscale Adv.*, 2026, **8**, 1213.