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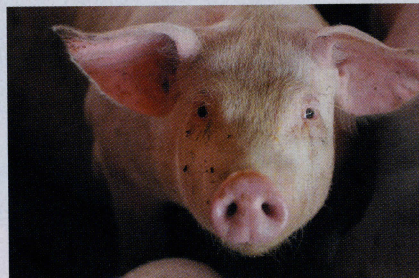
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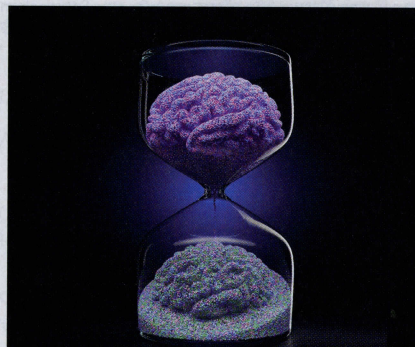
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Turning back time

The mammalian brain is extremely sensitive to fluctuations in oxygen supply. In this week's issue, Nenad Sestan and colleagues reveal BrainEx, a technological platform and surgical procedure that can restore microcirculation and cellular functions, including synaptic activity but not global electrical activity, in an isolated porcine brain multiple hours after death. **PAGES 299, 302 & 336**

orchestrates skin homeostasis and ageing

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351 CARDIAC DISEASE Nitrosative stress drives heart failure with preserved ejection fraction

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