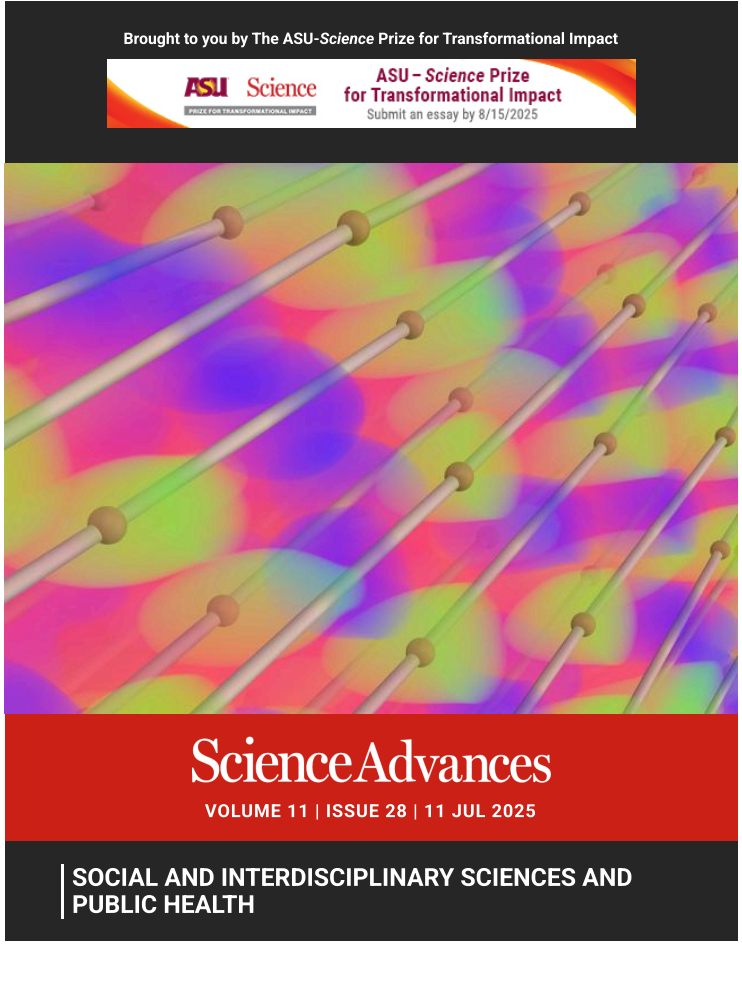

Science Advances
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Developmental Pb exposure increases rate of forgetting on a delayed matching-to-sample task among Mexican children

BY KATHERINE SVENSSON, JAMIL M. LANE, *ET AL.*

Developmental Pb exposure impairs memory by enhancing the rate of forgetting as measured by a delayed matching-to-sample test.

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Striatal dopamine signals errors in prediction across different informational domains

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Dopamine reflects prediction errors not only about reward but also about valueless stimuli, challenging many current theories.

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Change-of-mind neuroeconomic decision-making is modulated by LINC00473 in medial prefrontal cortex in a sex-dependent manner

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Long non-coding RNA LINC00473 in mPFC alters change-of-mind re-evaluative decision-making behavior related to negative rumination.

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Cypin regulates K63-linked polyubiquitination to shape synaptic content

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K63-polyubiquitin chains enable cypin protein to simultaneously modify pre- and postsynaptic content.

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Synthetic efferocytic receptor microglia enhances anti-inflammatory clearance of amyloid-β for AD treatment in mice

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Microglia with a synthetic receptor show enhanced Aβ clearance without inflammation, opening pathways for AD treatment.

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G proteins of the G_{12} family expressed by POMC neurons regulate key metabolic functions

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Activation of G proteins of the G_{12} family expressed by POMC neurons causes marked improvements in glucose homeostasis.

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Microglial BDNF modulates arketamine's antidepressant-like effects through cortico-accumbal pathways

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Microglial BDNF modulates NAc-projecting mPFC neurons, contributing to the antidepressant-like effects of arketamine.

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Brain-wide functional imaging and network analysis in zebrafish larvae uncover parallels with human brain networks.

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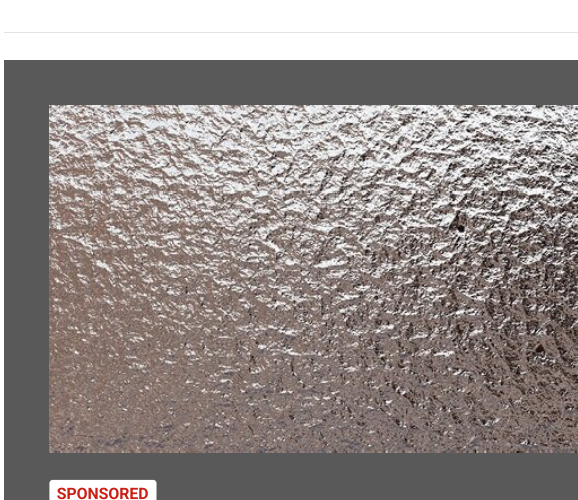

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Upon desiccation, the Mediterranean level rose because of the erosional capture of surrounding lacustrine basins.

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Miralga, a recently discovered Australian meteorite impact structure, contains the oldest known shocked rocks on Earth.

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Encapsulating a MXene-based gas sensor in a siloxane layer improves its stability, extending its half life span by more than 200%.

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Electrification cuts the energy cost for dry (CO_2) reforming of CH_4, enabling net CO_2-negative emissions with low-carbon powers.

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Biorhythms derived from consumer wearables predict postoperative complications in children

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By insertion of six bacterial genes into the genome, autonomously glowing mice were generated.

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TMEM9B-AS1, down-regulated in type 2 diabetes, regulates ribosomal biogenesis in muscle by promoting IGF2BP1-MYC mRNA interaction.

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NLRP3 inflammasome–driven hemophagocytic lymphohistiocytosis occurs independent of IL-1β and IL-18 and is targetable by BET inhibitors

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Stripe rust fungi hijack a host transcriptional repressor to induce TaSWEET14d for enhanced sugar uptake in wheat

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Stripe rust effector Pst15882 manipulates host SWEET transporter TaSWEET14d for sugar acquisition, facilitating fungal invasion.

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