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A super pan-genomic landscape of rice
Revealing why depression compromises antiviral immunity
Arc weakens synapses by modulating PSD phase separation
Female sterility mutation enables mechanized hybrid rice breeding



Center for Excellence in Molecular Cell Science
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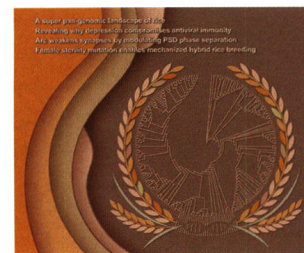
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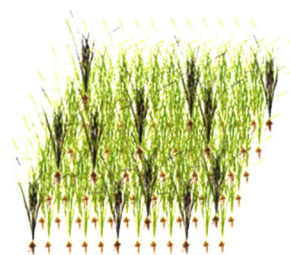
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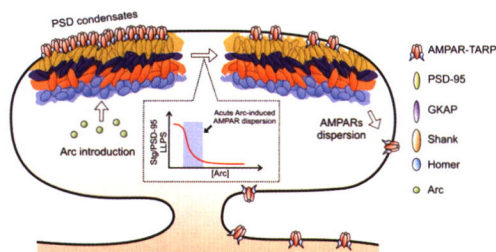
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Cover: The phylogenetic tree covering 251 different varieties of rice forms a badge together with the ear of rice consisting of rice grains in different colors. This badge pattern is the epitome of the work that rice super pan-genome from large natural populations captures genetic diversity and reveals genomic complexity. Meanwhile, it can be seen as a tribute to our ancestors who created the iconic terraces (illustrated in paper cut style) in rice farming civilization for their wisdom and diligence. Cover art is contributed by Zisong Ma. See page 878–896 by Liangang Shang et al. for details.



The lack of self-seed production from the restorer line *tfs1* (female-sterile line) enables direct harvesting of hybrid seeds from the field. See page 931–945 by Haoxuan Li et al. for details.



A model depicting that rise of Arc concentration can sensitively disperse AMPAR clustering via reversing phase separation of Stg and PSD-95. See page 914–930 by Xudong Chen et al. for details.

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A novel protein RASON encoded by a lncRNA controls oncogenic RAS signaling in KRAS mutant cancers

Open
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Dynamic O-GlcNAcylation coordinates ferritinophagy and mitophagy to activate ferroptosis
Cell Discov. 2022 May 3;8(1):40. doi: 10.1038/s41421-022-00390-6.

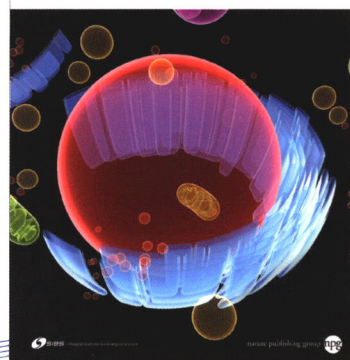
Treatment of SARS-CoV-2-induced pneumonia with NAD⁺ and NMN in two mouse models
Cell Discov. 2022 Apr 29;8(1):38. doi: 10.1038/s41421-022-00409-y.

CRISPR signal conductor 2.0 for redirecting cellular information flow
Cell Discov. 2022 Mar 15;8(1):26. doi: 10.1038/s41421-021-00371-1.

Cross-species metabolomic analysis identifies uridine as a potent regeneration promoting factor
Cell Discov. 2022 Feb 1;8(1):6. doi: 10.1038/s41421-021-00361-3.

Histone lysine methacrylation is a dynamic post-translational modification regulated by HAT1 and SIRT2
Cell Discov. 2021 Dec 28;7(1):122. doi: 10.1038/s41421-021-00344-4.

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