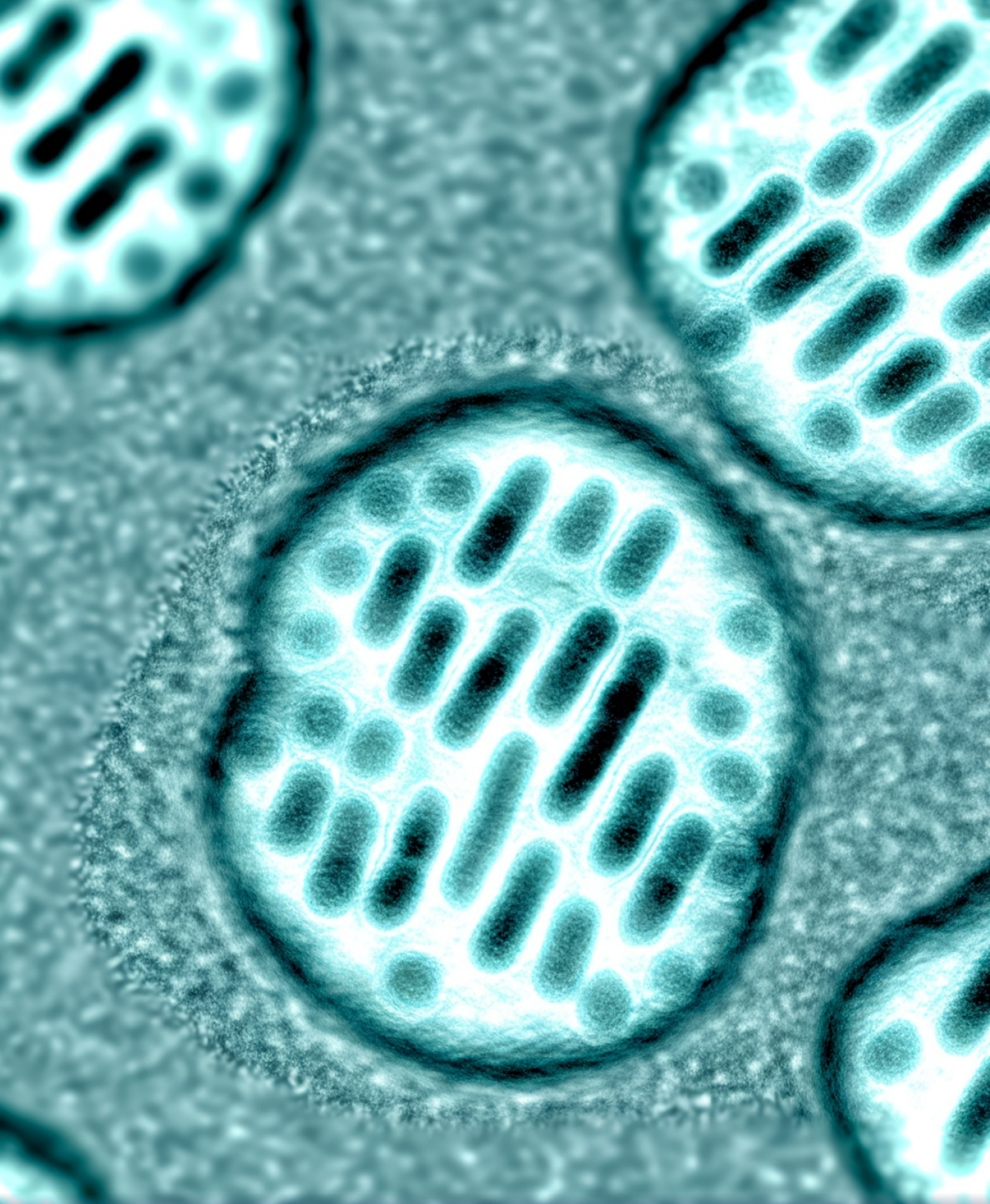

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Katrin E. Müller, Yuko Sato, Andrés M. Pérez

Keywords: plant immunity, Arabidopsis thaliana, signaling pathways, CRISPR-Cas9, transcriptomics, salicylic acid, jasmonic acid, ethylene

2.

Elucidating the Mechanisms of Self-Antigen Recognition in Autoimmune Disorders

Hans-Jürgen Müller, Kim Soo-Jin, Leila Haddad

Keywords: autoimmune diseases, self-antigen recognition, T-cell receptors, cytokines, systemic lupus erythematosus, rheumatoid arthritis

3.

Integrative Network Analysis Enhances Predictive Modeling in Genomic Studies

Levent Ozdemir, Hiroshi Nakamura, Aditi Raghavan

Keywords: Predictive modeling, Genomic analysis, Network integration, Gene expression, Protein interaction, Epigenomics, Cancer genomics

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Hans-Peter Müller, Li Ming-Hu, Priya N. Iyer

Keywords: AMP-activated protein kinase, cryo-electron microscopy, allosteric regulation, molecular dynamics, phosphorylation sites, metabolic disorders

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Lars M. Kaufmann, Min-Jae Lee, Sofia R. Hernandez

Keywords: fMRI, cognitive processing, neural networks, brain connectivity, dynamic causal modeling, independent component analysis, prefrontal cortex

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Adaptive Mechanisms in Viral Evolution: Insights from RNA Virus Mutation Dynamics

Hiroshi Nakamura, Priya S. Menon, Ahmed El-Mansouri

Keywords: RNA virus, mutation dynamics, viral evolution, genetic recombination, genomic surveillance, replication fidelity

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Hiroshi Masuda, Fatima El-Sayed, Kumiko Nishimura

Keywords: protein folding, chaperone proteins, molecular dynamics, Hsp70, protein homeostasis, misfolding, therapeutic strategies