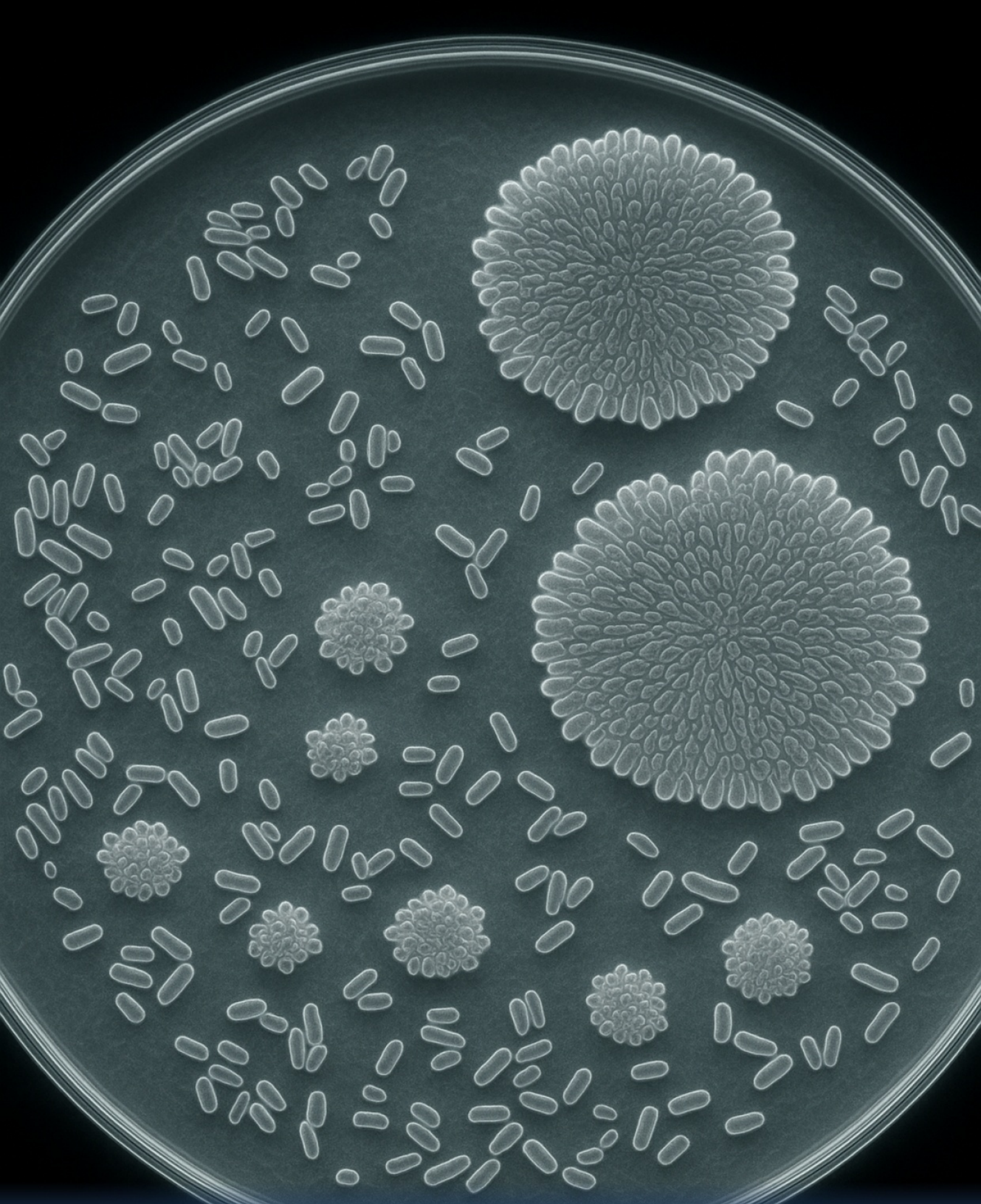

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Sebastian Müller, Nobuko Yamamoto, Aarav Desai

Keywords: biodiversity, adaptive management, landscape fragmentation, habitat corridors, species richness, genetic diversity, reforestation

2.

Advancements in mRNA Vaccine Platforms: A Promising Avenue for Immunotherapeutic Developments

Hans-Jürgen Bauer, Meera N. Venkataraman, Sung-Min Park

Keywords: mRNA vaccines, immunogenicity, seroconversion rate, translational efficiency, viral antigens, vaccine platforms

3.

Transcriptional Dynamics and Regulatory Mechanisms in Early Human Embryonic Gene Expression

Anita K. Langer, Chen Hui-ming, Ayaan Al-Mansour

Keywords: gene expression, transcriptional dynamics, embryonic stem cells, chromatin accessibility, pluripotency, enhancer regions, histone modifications

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Elucidating the Role of Calcium Oscillations in Modulating T-Cell Receptor Signaling Pathways

Anja L. Müller, Hiroshi Yamamoto, Nneka Chukwuma

Keywords: Calcium oscillations, T-cell receptor, NFAT signaling, MAPK pathway, live-cell imaging, immune modulation

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Hans Müller, Sofia González-Mendez, Li Wei-Tao

Keywords: axolotl, limb regeneration, Wnt signaling, gene regulation, CRISPR-Cas9, miRNA, blastema

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Deciphering the Catalytic Triad Mechanism in Serine Proteases: A Comparative Study

Jürgen F. Schmidt, Lin Shuang-Yuan, Amal O. Al-Rashid

Keywords: serine proteases, catalytic triad, enzyme kinetics, site-directed mutagenesis, substrate specificity, molecular dynamics

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Integrative Genomic Approaches for Unveiling Gene-Environment Interactions in Complex Traits

Hans-Peter Müller, Akira Yoshida, Priyanka Patel

Keywords: genomics, gene-environment interactions, complex traits, computational biology, machine learning, epigenomics, transcriptomics

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Elucidating the Role of Auxin in Regulating Lateral Root Development in Arabidopsis thaliana

Lena M. van Dijk, Arun B. Natarajan, Hiroto Yamashita

Keywords: auxin, lateral root development, Arabidopsis thaliana, CRISPR-Cas9, ARF7, ARF19, gene expression