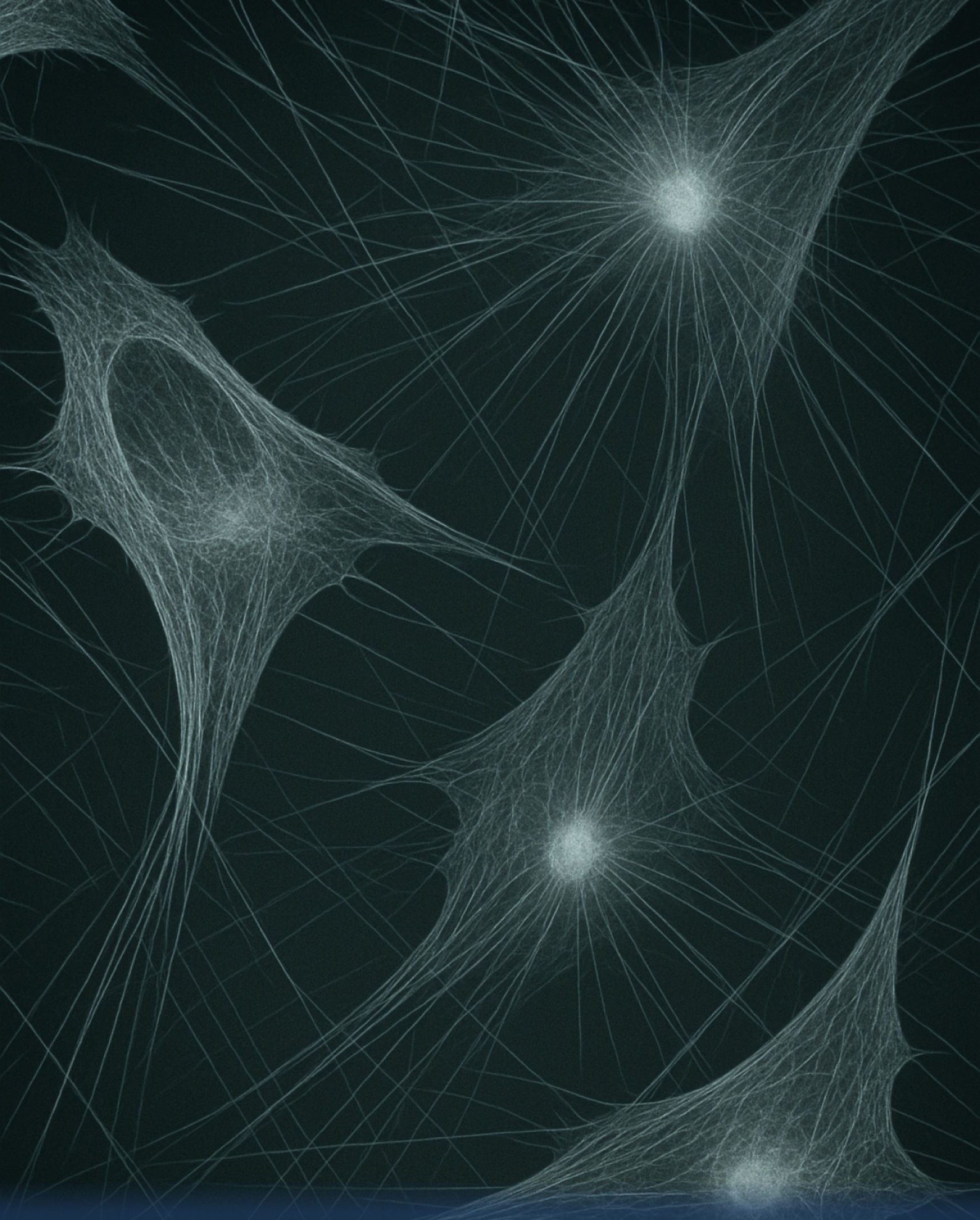




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Lars E. Neumann, Anand Kumar Singh, Mei-Ling Zhang

Keywords: single-molecule studies, protein folding, smFRET, Förster Resonance Energy Transfer, kinetic pathways, biophysics, ubiquitin

2.

Advancements in Proteomic Profiling: Insights into Post-Translational Modifications

Heike M. Bernhardt, Chen Ming-Hua, Arjun V. Patel

Keywords: Proteomics, Post-Translational Modifications, Mass Spectrometry, Phosphorylation, Methylation, Cellular Stress, Signaling Pathways

3.

Dynamical Interactions of Mitochondrial and Peroxisomal Networks in Cellular Homeostasis

Julian M. Schneider, Nisha Patel, Yang Li-Hua

Keywords: organelle dynamics, mitochondria, peroxisomes, cellular homeostasis, oxidative stress, mitofusin-2, live-cell imaging

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Hans M. Vogler, Li Mei-Ping, Tarun N. Patel

Keywords: drought tolerance, wheat improvement, genomic selection, phenotypic evaluation, quantitative trait loci, climate resilience, genome-wide association studies

5.

Delineating Cross-Talk Between Innate and Adaptive Immune Responses in Viral Infections

Anika M. Voigt, Hiroshi Nakamura, Nneka Okafor

Keywords: innate immunity, adaptive immunity, cytokine signaling, viral infections, natural killer cells, antigen-presenting cells

6.

Integrative Mechanisms of Cellular Dynamics in Vertebrate Limb Morphogenesis

Heinrich J. Vogel, Mei-Ling Zhang, Pedro N. Oliveira

Keywords: morphogenesis, vertebrate limb development, fibroblast growth factors, Wnt signaling, cellular dynamics, chondrocyte organization

7.

Integrative Machine Learning for Predictive Modeling of Cellular Dynamics

Katrin M. Svensson, Hiroshi Nakamura, Nneka A. Okoro

Keywords: machine learning, cellular dynamics, predictive modeling, single-cell RNA sequencing, deep neural networks, computational biology