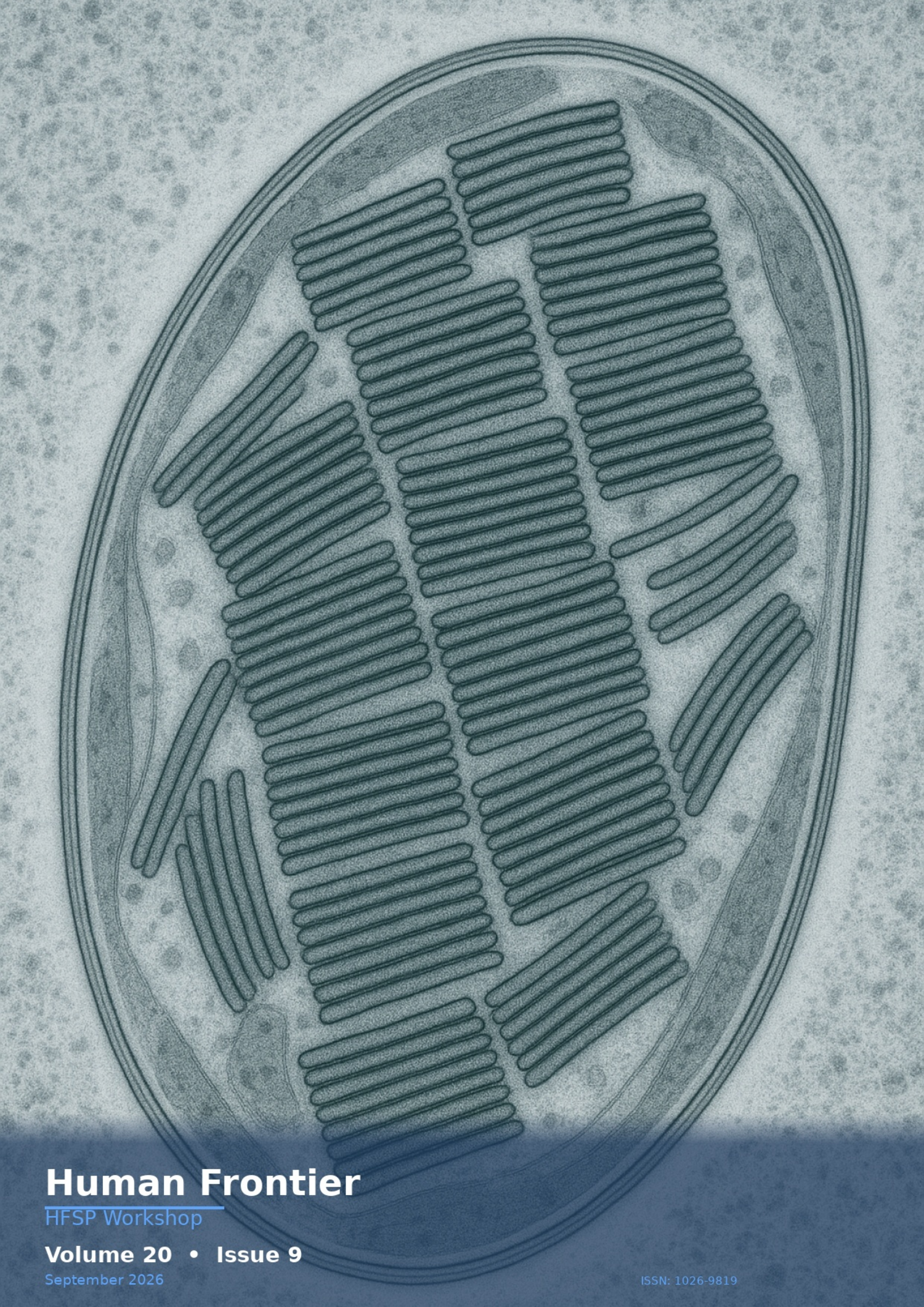

Human Frontier

HFSP Workshop

Volume 20 • Issue 9

September 2026

ISSN: 1026-9819

HFSP Journal

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Diverse Cytokine Profiles in Adaptive Immune Response to Viral Pathogens

Matthias F. Schreiber, Kim Soo-Jin, Aditya R. Nair

Keywords: Adaptive immunity, Cytokine profiles, Viral infections, IL-6, TNF-α, IL-10, Biomarkers, Personalized medicine

2.

Mechanotransduction Pathways and Their Role in Cellular Adaptation to Mechanical Stimuli

Anita Müller, Zhang Li-Qing, Carlos Eduardo Ribeiro

Keywords: mechanotransduction, cellular biomechanics, integrin signaling, focal adhesion, mechanosensitivity, ion channels

3.

Impact of Climatic Changes on Mutualistic Interactions in Temperate Forest Ecosystems

Klaus-Jürgen Bauer, Chen Jia-Yi, Nandi Sandip

Keywords: climate change, mutualism, species interactions, temperate forests, ecological modeling, biodiversity, conservation strategies

4.

Deciphering Host-Pathogen Interactions in Vibrio cholerae-Induced Diarrheal Disease

Heinz Müller, Aiko Matsuo, Nia Mbatha

Keywords: Vibrio cholerae, bacterial pathogenesis, TcpA protein, cholera toxin, host-pathogen interactions, transcriptomic analysis

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5.

Integrating Deep Learning with Genomic Data for Novel Biomarker Discovery in Oncology

Rafael Monteiro, Sun Xiaoli, Miriam Albrecht

Keywords: Deep learning, Genomic data, Biomarker discovery, Oncology, Convolutional neural network, Cancer prognosis

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6.

Neural Correlates of Decision-Making: Insights from Multimodal Cognitive Experiments

Sandra M. van der Veen, Hiroshi Nakamura, Olufemi Adebayo

Keywords: Neural correlates, Decision-making, fMRI, EEG, Prefrontal cortex, Cognitive neuroscience, Brain connectivity

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7.

Enhanced Photosynthetic Efficiency in Arabidopsis thaliana via Genetic Modulation of Rubisco Activase

Matthias J. Neumann, Ananya Rao, Hye-Jin Park

Keywords: photosynthesis, Rubisco Activase, Arabidopsis thaliana, genetic modulation, CRISPR-Cas9, chlorophyll fluorescence, biomass accumulation