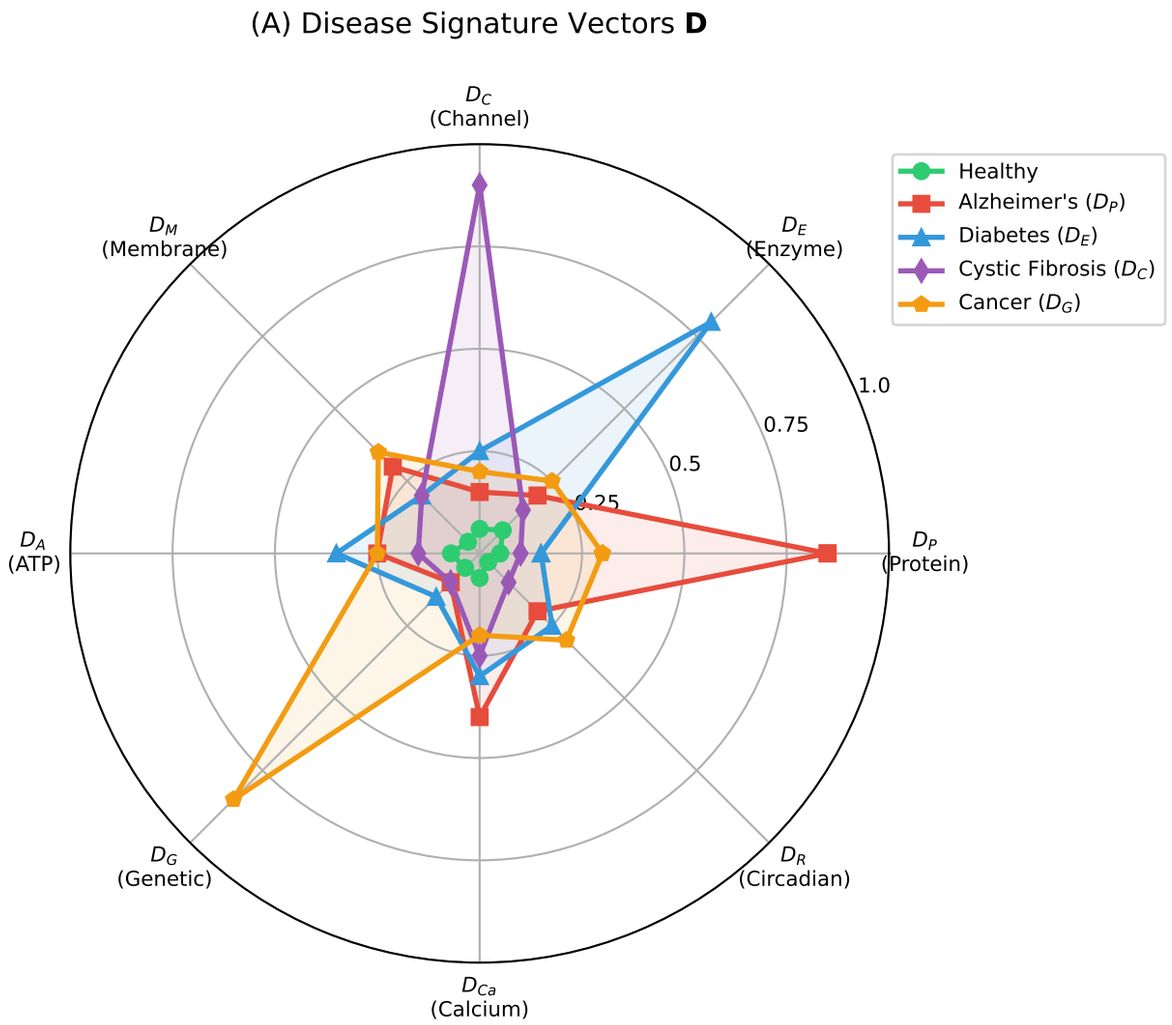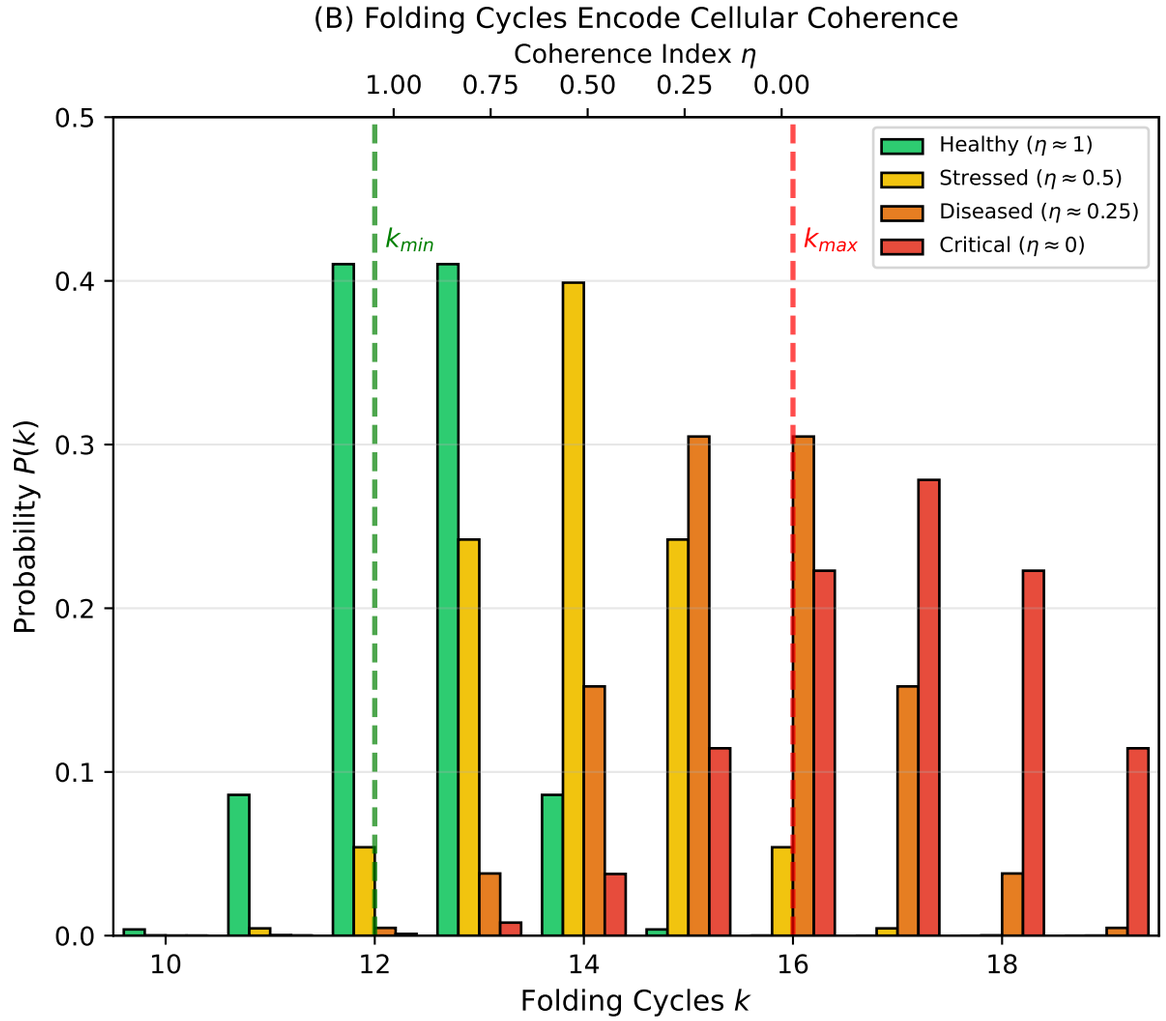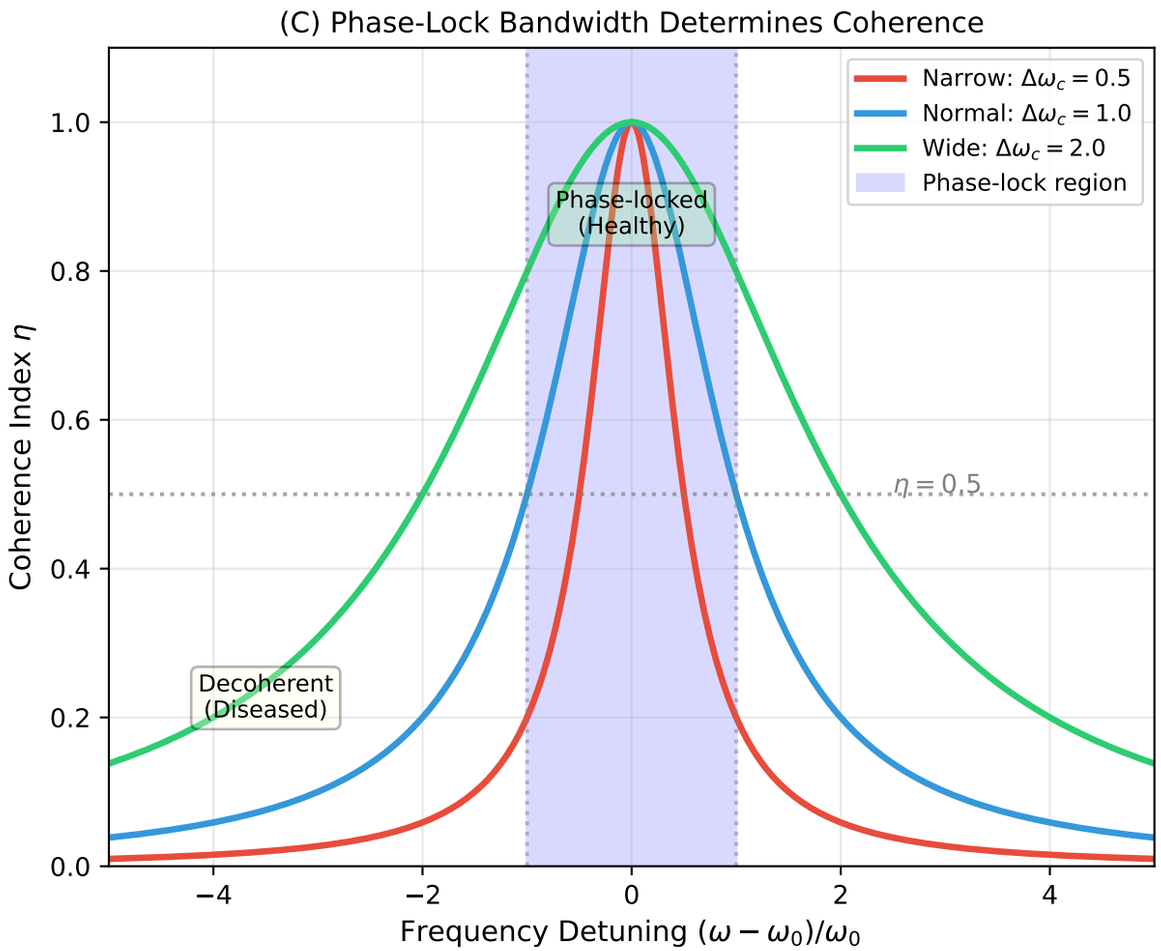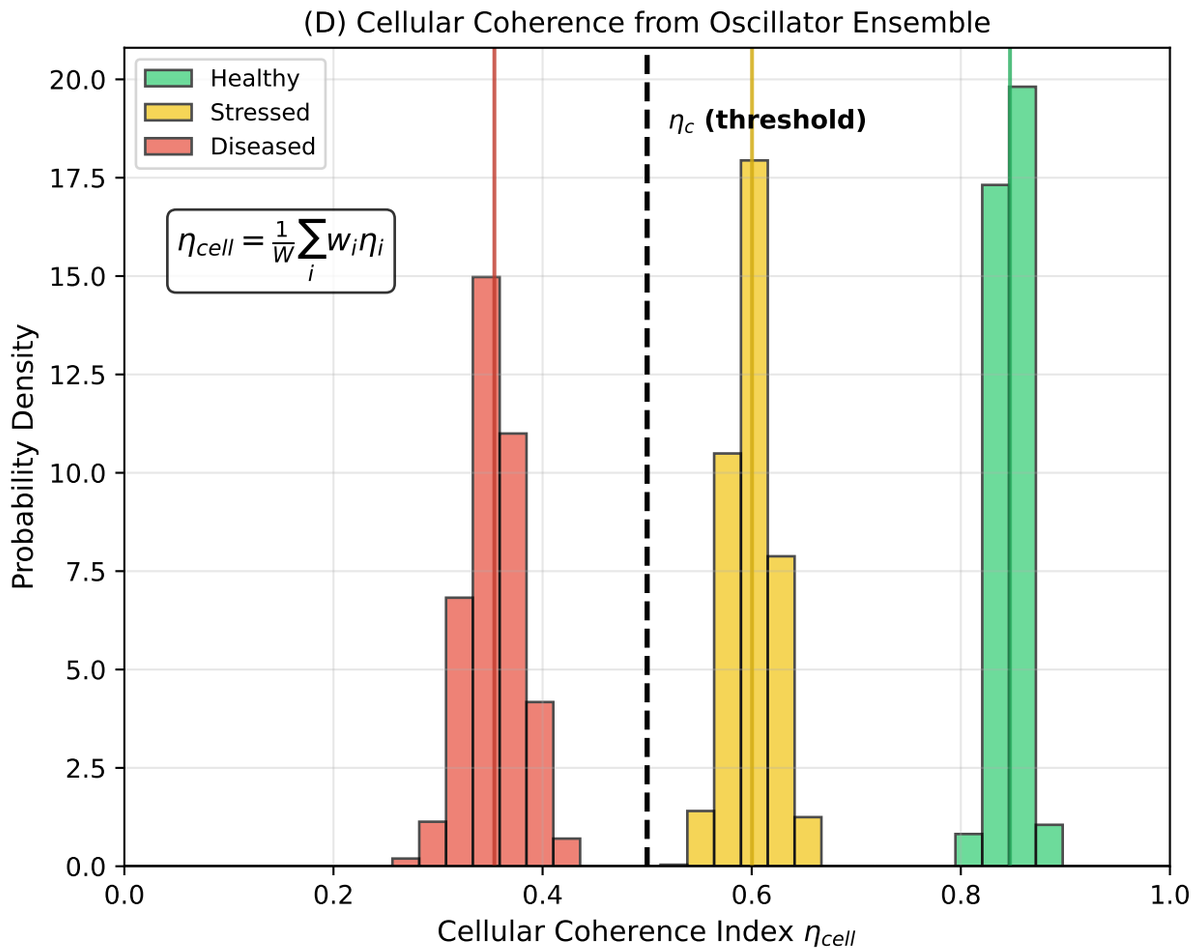Observational Partition Algebra: Diagnostic Framework Validation