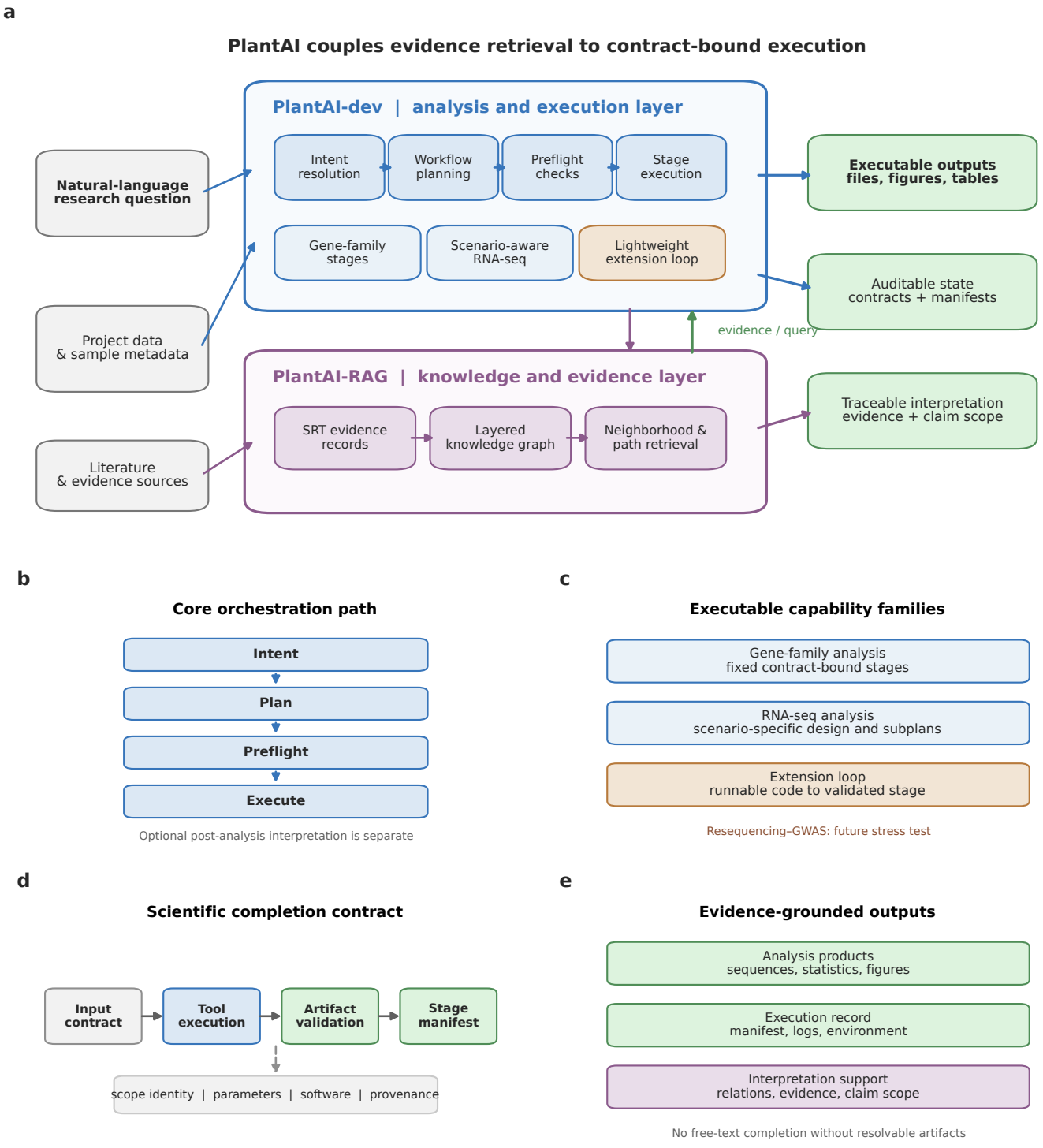

a
PlantAI couples evidence retrieval to contract-bound execution
PlantAI-dev | analysis and execution layer
Intent resolution
Workflow planning
Preflight checks
Stage execution
Gene-family stages
Scenario-aware RNA-seq
Lightweight extension loop
Natural-language research question
Project data & sample metadata
Literature & evidence sources
Executable outputs files, figures, tables
Auditable state contracts + manifests
evidence / query
PlantAI-RAG | knowledge and evidence layer
SRT evidence records
Layered knowledge graph
Neighborhood & path retrieval
Traceable interpretation evidence + claim scope
b
Core orchestration path
Intent
Plan
Preflight
Execute
Optional post-analysis interpretation is separate
c
Executable capability families
Gene-family analysis
fixed contract-bound stages
RNA-seq analysis
scenario-specific design and subplans
Extension loop
runnable code to validated stage
Resequencing-GWAS: future stress test
d
Scientific completion contract
Input contract
Tool execution
Artifact validation
Stage manifest
scope identity | parameters | software | provenance
e
Evidence-grounded outputs
Analysis products
sequences, statistics, figures
Execution record
manifest, logs, environment
Interpretation support
relations, evidence, claim scope
No free-text completion without resolvable artifacts