Aurora Research Initiative (ARI)

Governance Model (v1.0.0)

Author: Shawn C. Wright
Affiliation: Waveframe Labs — Independent Open-Science Research Entity
ORCID: 0009-0006-6043-9295
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Aurora Research Initiative — Governance Model (v1.0.0)

This document defines the **governance model**, **role structure**, **decision boundaries**, and **oversight rules** for the Aurora Research Initiative (ARI). It ensures institutional clarity, prevents governance drift, and establishes consistent, reproducible governance practices across the entire Aurora ecosystem.

Governance is not optional—every component of the ecosystem (AWO, CRI-CORE, case studies) must operate in compliance with ARI's rules.

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1. Governance Philosophy

ARI governance is built on the following principles:

1. **Role separation is mandatory**
   No layer of the system may control all functions (method, tooling, governance, execution).

2. **Audit-first science**
   All decisions must be logged, traceable, and falsifiable.

3. **Human-in-the-loop oversight**
   Humans retain interpretive authority to avoid automated circular approval.

4. **Institutional independence**
   ARI remains independent from AWO execution logic and CRI-CORE tooling.

5. **Reproducibility as identity**
   Governance actions themselves must be reproducible and provenance-bound.

2. Governance Role Structure

ARI consists of the following governance roles:

2.1 Institutional Coordinator (IC)

Primary human oversight role.

Responsibilities: - interprets ARI doctrine
- approves governance amendments
- validates role-separation adherence
- adjudicates ambiguous decisions

The IC has **final interpretive authority** but not unilateral operational authority.

2.2 Method Steward (AWO)

Represents the workflow method.

Responsibilities: - ensure AWO remains compliant with ARI governance
- enforce metadata and documentation structure
- oversee workflow governance boundaries
- coordinate governance-related updates

Limitations: - may not bypass ARI's governance rules
- may not grant itself approval authority for workflow runs

2.3 Tooling Steward (CRI-CORE)

Represents deterministic tooling.

Responsibilities: - enforce deterministic execution
- uphold provenance and integrity rules
- implement identity binding and attestation logic

Limitations: - may not alter ARI governance
- may not assume methodological authority
- may not approve research claims

2.4 Case Study Stewards

One per scientific domain (e.g., Waveframe, Societal Progress Simulator).

Responsibilities: - apply ARI epistemic rules within their domains
- ensure domain artifacts maintain metadata and provenance
- oversee scientific validity and falsifiability

Limitations: - may not influence methodological governance
- may not modify tooling requirements

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3. Governance Responsibilities

ARI enforces:

3.1 Structural Integrity

- folder-level consistency
- metadata block structure
- documentation patterns
- versioning standards

3.2 Epistemic Consistency

- compliance with audit-first doctrine
- truthfulness and falsifiability
- transparency of reasoning

3.3 Provenance & Identity

- artifact reconstruction standards
- cryptographic identity guidelines
- attestation-independence norms

3.4 Oversight of AWO & CRI-CORE

- checks that AWO does not expand beyond method-level roles
- checks that CRI-CORE does not adopt governance authority
- adjudicates conflicts between method and tooling layers

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4. Decision Authority Model

4.1 Changes to ARI Itself

Requires approval of the Institutional Coordinator.
Must be logged in `logs/GOV_LOG.md`.

4.2 Methodological Changes (AWO)

Approved jointly by: - Institutional Coordinator
- Method Steward

Logged in: - ARI governance log
- AWO CHANGELOG

4.3 Tooling Changes (CRI-CORE)

Approved jointly by: - Institutional Coordinator
- Tooling Steward

4.4 Scientific Model Changes (Case Studies)

Approved by: - Case Study Steward
- Institutional Coordinator (if governance implications exist)

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5. Prohibitions

To maintain governance integrity:

- AWO may **not** self-approve governance changes
- CRI-CORE may **not** modify governance rules
- Case studies may **not** define epistemic doctrine
- The IC may **not** modify artifacts without logs
- No role may bypass provenance or documentation standards
- No silent amendments of governance documents are allowed

All changes must generate logs.

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6. Logging Requirements

Every governance decision must be logged.

Minimum logs:

- `logs/INIT_LOG.md`
- `logs/GOV_LOG.md`
- `logs/EVENT_LOG.md`

Each entry must include:

- timestamp
- role(s) involved
- summary
- rationale
- version changes (if any)
- reference anchors

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7. Future Governance Extensions

Future versions of the governance model will add:

- multi-agent governance
- independent validation roles
- conflict-resolution rules
- maturity models for case studies
- CRI-CORE enforcement criteria

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8. Stability & Amendments

This document is **stable through v1.x**.
Amendments require:

1. Institutional Coordinator approval
2. Governance log entry
3. Version bump
4. Backward linkage

This governance model defines ARI's authority, ensures system integrity, and prevents governance drift.