VIET NAM NATIONAL UNIVERSITY HO CHI MINH CITY

# BUILDING THE RESEARCH INTEGRITY AND OPEN DATA ECOSYSTEM




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VIETNAM NATIONAL UNIVERSITY HO CHI MINH CITY

# VNUHCM STRUCTURE OF ORGANIZATION

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DEPARTMENT OF EXTERNAL RELATIONS AND PROJECT DEVELOPMENT
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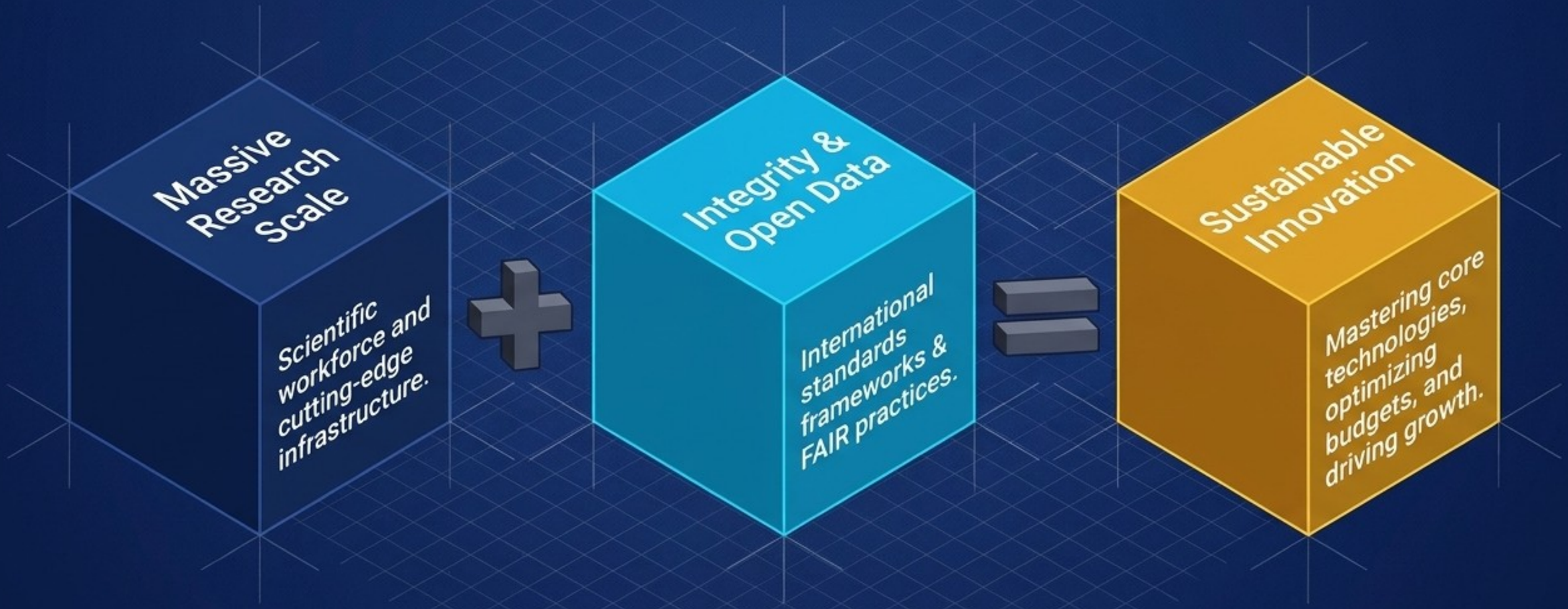
MEMBER UNIVERSITIES AND INSTITUTE

27 AFFILIATED UNITS#

#List of Affiliated Units: https://vnuhcm.edu.vn/about-us/33396864/316864

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# Executive Summary




**VNUHCM does not leave integrity to chance. We are engineering academic culture through a synchronized governance architecture.**

# The Scale of VNUHCM

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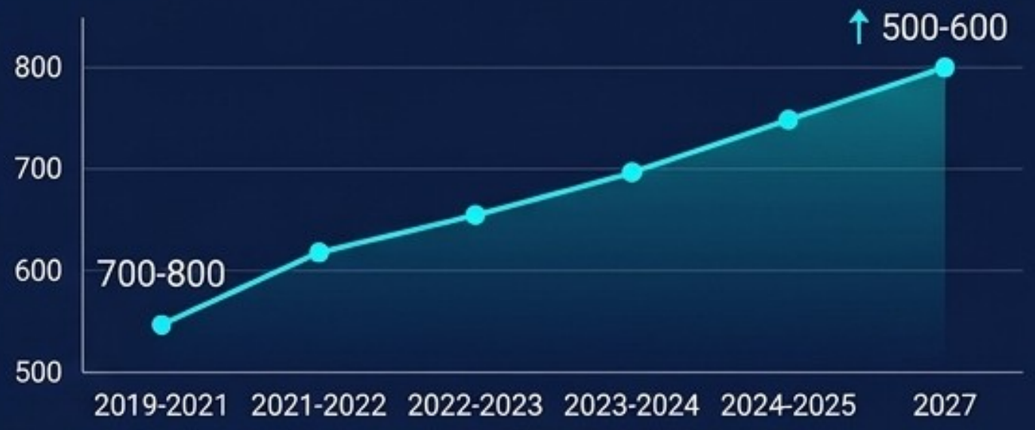
## Institutional Dashboard

**>100,000**
Students & >10,000 Postgrads.

**>1,600**
Elite Scholars (Professors, Assoc. Profs, PhDs).

**17**
Strong Research Groups (AI, Semiconductors, Biotech, Materials).

### Ranking Trend




Top 801-850 Leading Global Universities (2024-2025)

### Scopus Article Quantities




Leading the nation in 2025

With massive knowledge production, transparent data governance is a survival requirement to protect reputation and advance national science.

# The Paradigm Shift

**Decisions 78 & 79/QĐ-ĐHQG** (Jan 24, 2025) officially mark this institutional turning point.



## The Past

- **Positioning:** Purely academic research university.
- **Governance:** Procedural, scattered resource allocation.
- **Integrity Focus:** Punitive, end-stage violation handling.
- **Output:** Fragmented projects stopping at lab results.

## The Future

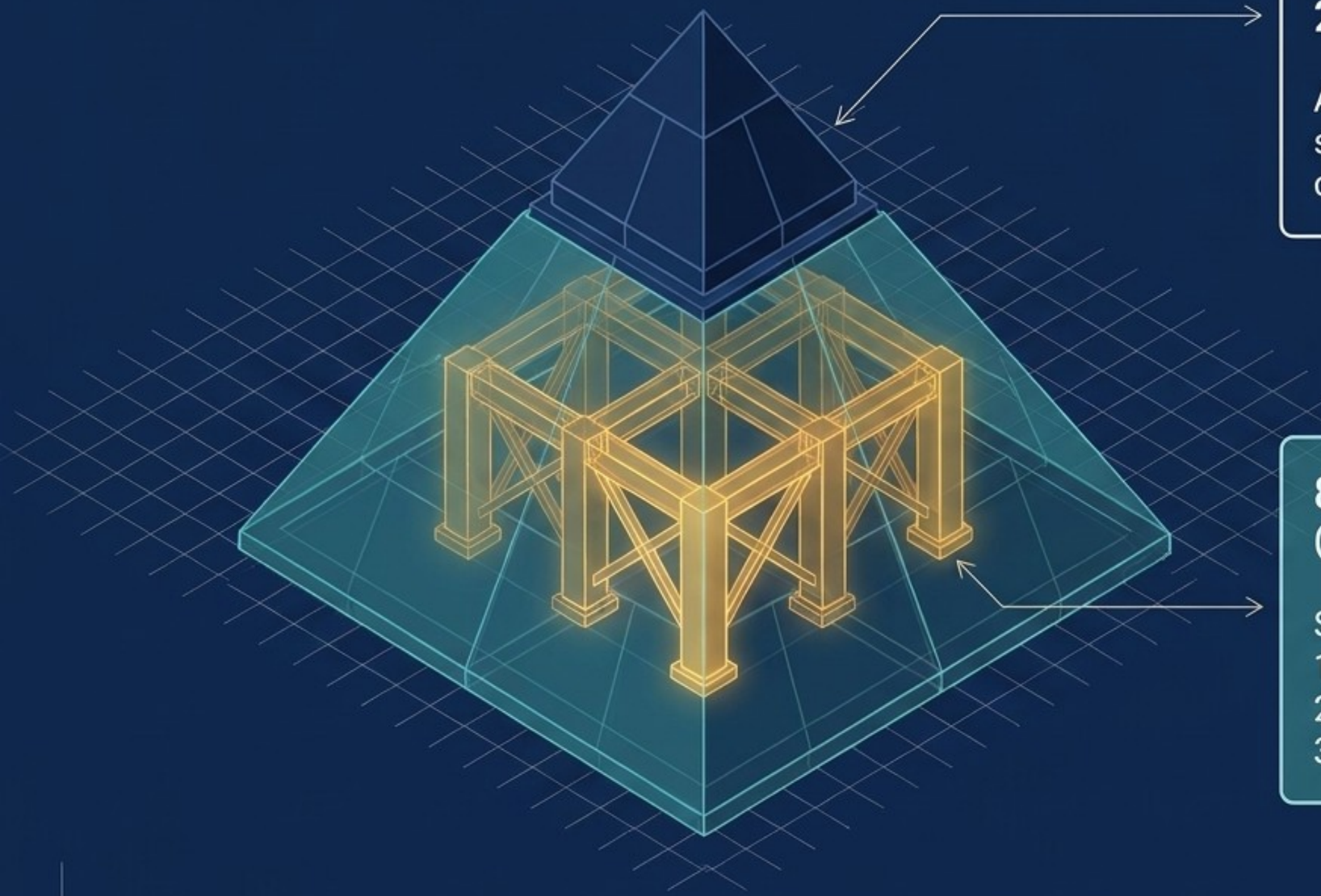
- **Positioning:** Advanced & Innovative University.
- **Governance:** Results-based, package funding, post-audit.
- **Integrity Focus:** Preventive & self-directed education (protecting the entire research lifecycle).
- **Output:** Mastering core technology, open data serving the nation.

# The Core Philosophy




Integrity and open data cannot operate on technology alone.
The core focus is substantive academic culture and training.

# The 80/20 Reality



## 20% - Policy & Enforcement

Administrative documents, barriers, and surface-level disciplinary measures. It only contributes 20% to overall effectiveness.

## 80% - Cultural Ecosystem
**(Responsible Conduct of Research - RCR)**

Supported by 3 hidden pillars:
1) Mandatory Training,
2) Mentor Role Modeling,
3) Specialized Support Service Networks.

# Localizing Global Standards

**Ethical Foundation**
(Singapore Statement 2010)

Honesty, Accountability, Good stewardship.

**Evaluation Mechanism**
(Hong Kong Principles 2019)

Moving beyond superficial JIF metrics; recognizing data sharing practices.




**Open Strategy**
(UNESCO Open Science 2021)

As open as possible, as closed as necessary.

**Technical Standards**
(FAIR Data 2016)

Findable, Accessible, Interoperable, Reusable.

# The 4 Pillars of Transformation

**Policy:** Synchronized legal corridors, 3-layer governance framework (Decisions 78 & 79).

**Education:** Integrating awareness and skills from undergrads to PhDs.

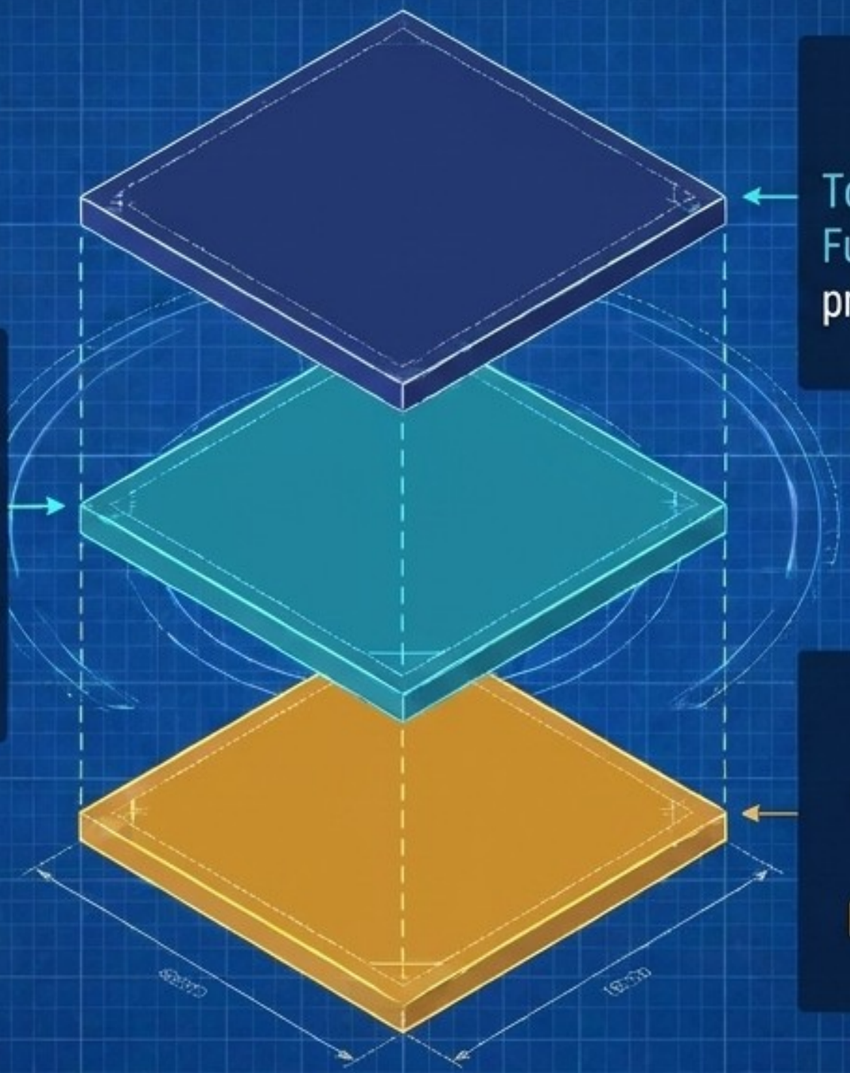



**Incentives:** Innovating funding mechanisms and recognizing data contributions.

**Support Services:** Restructuring the library into a direct Research Support Hub.

**Warning:** Missing any single pillar turns data sharing into an immediate administrative burden for scientists.

# The 3-Layer Governance Model



## Layer 1 - General Standards (VNUHCM Level)

Tools: Regulations 78 (Integrity) & 79 (Ethics).
Function: Defining violations, minimum data principles, creating system-wide uniformity.

## Layer 2 - Disciplinary Workflow (Member Unit Level)

Tools: Specialized data workflows, access classification.
Function: Ensuring feasibility across specific fields (Natural Sciences, Engineering, Biomedicine, Social Sciences).

## Layer 3 - Shared Services (Research Support Hub)

Tools: Central Library, Dept of Sci & Tech, Legal, IP.
Function: Reducing administrative burden, providing direct technical support.

# Accountability Matrix: Eliminating the Management Blank Space

| | |
|---|---|
| Lecturers & Scientists | Honest primary data; min 5-year retention; declare conflicts of interest; IP compliance. |
| Mentors | Set the standard; directly inspect student logbooks; approve Data Management Plans (DMP). |
| Students | Strict compliance; no data fabrication/purchasing; proactive error reporting. |
| Management / Institutes | Organize RCR courses; establish Advisory Councils; build safe environments. |

# The 3-Step Education Evolution



## Awareness

**Content:** Authorship, identifying plagiarism, conflicts of interest, responsible AI use.

**Goal:** Avoid unintentional violations.

## Skills

**Content:** Research Data Management (RDM) - logging, file naming, version control, metadata.

**Goal:** Implementing FAIR standards.

## Practice

**Content:** Navigating complex ethical dilemmas and ensuring long-term data stewardship.

# Evolving Infrastructure



## Traditional Library (Past)

**Position:** Intervening at the end of the research lifecycle (passive archiving of theses/reports).

## Research Support Hub (Present & Future)

**Position:** Intervening directly from idea formation.

1. Consulting & appraising Data Management Plans (DMP).
2. Guiding FAIR metadata standardization.
3. Issuing persistent identifiers (DOI) for datasets.
4. Advising on Creative Commons sharing licenses.

# Shifting the Incentives

## Superficial Quantitative Metrics

Reducing pure reliance on paper volume and Journal Impact Factor (JIF).

Reason: Chasing JIF leads to data hiding and predatory risks.



## Recognizing Diverse Contributions (Hong Kong Principles)

Officially recognizing Datasets, Code, and Protocols with DOIs.

Converting community citations of shared products into competition and title points.

# Impact on National Sustainable Development




### SDG 3 (Health & Well-being)

Impact: Transparent biomedical data governance ensures precise treatment protocols while absolutely protecting patient privacy.

### SDG 13 & 15 (Climate & Environment)

Impact: Open data enables the reuse of long-term observation data chains, saving expensive survey budgets and increasing forecast accuracy.

### Public Finance Efficiency

Impact: Eliminating post-acceptance data loss, ensuring that knowledge assets funded by the state budget accumulate long-term.

# Strategic Recommendations & Vision

Ministry of Science & Technology (MOST): Issue a National DMP Guidance Framework; mandate raw data DOIs upon project acceptance to release state funds.

**NAFOSTED & Funding Agencies:** Add FAIR data sharing criteria to review regulations; officially convert points for datasets/code with DOIs.

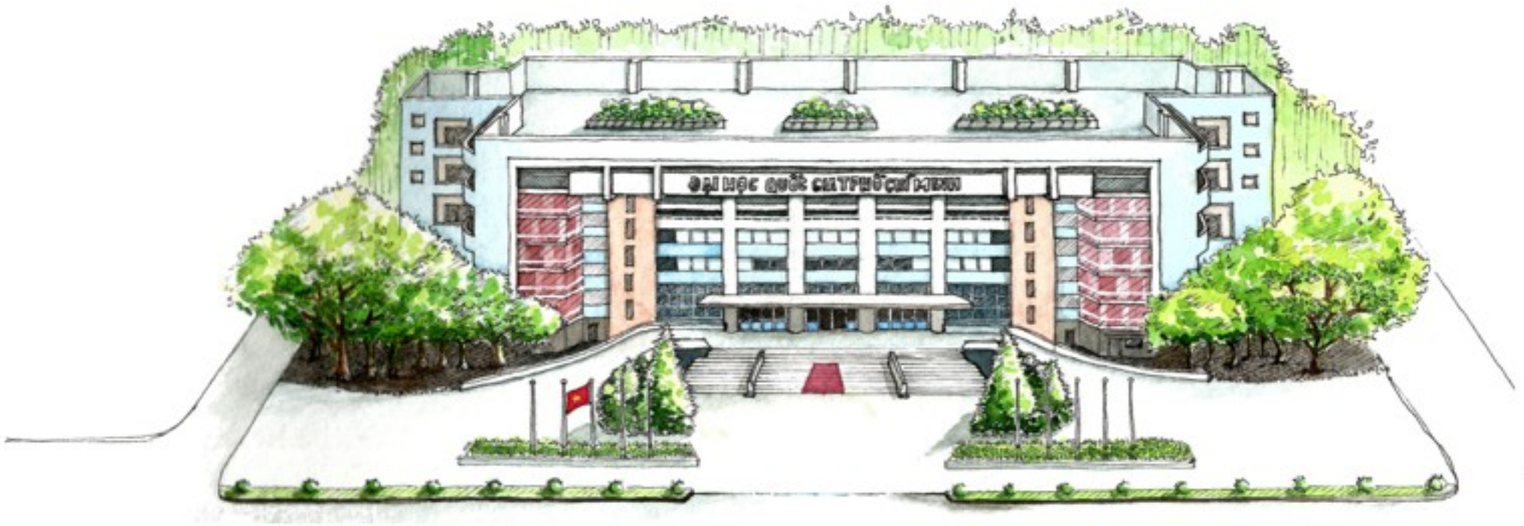
**Higher Education Institutions:** Mandate RCR/RDM modules in postgraduate training; restructure libraries into Research Support Hubs.

Open data is only meaningful when that data is trustworthy. Research integrity is only sustainable when it is no longer a regulation, but a **self-directed culture nurtured through daily training and mentorship**.

— VNUHCM Vision

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# THANK YOU FOR YOUR ATTENTION



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