

# **Artificial Intelligence**

## Transforming Health Professions Education

**“Capabilities, Risks, and Responsible Use”**



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# What we will explore together

- How AI is currently being used in health professions education
- What AI can and cannot realistically support in learning contexts
- Common questions, concerns, and boundaries educators raise
- A simple way to think about responsible AI exploration in education

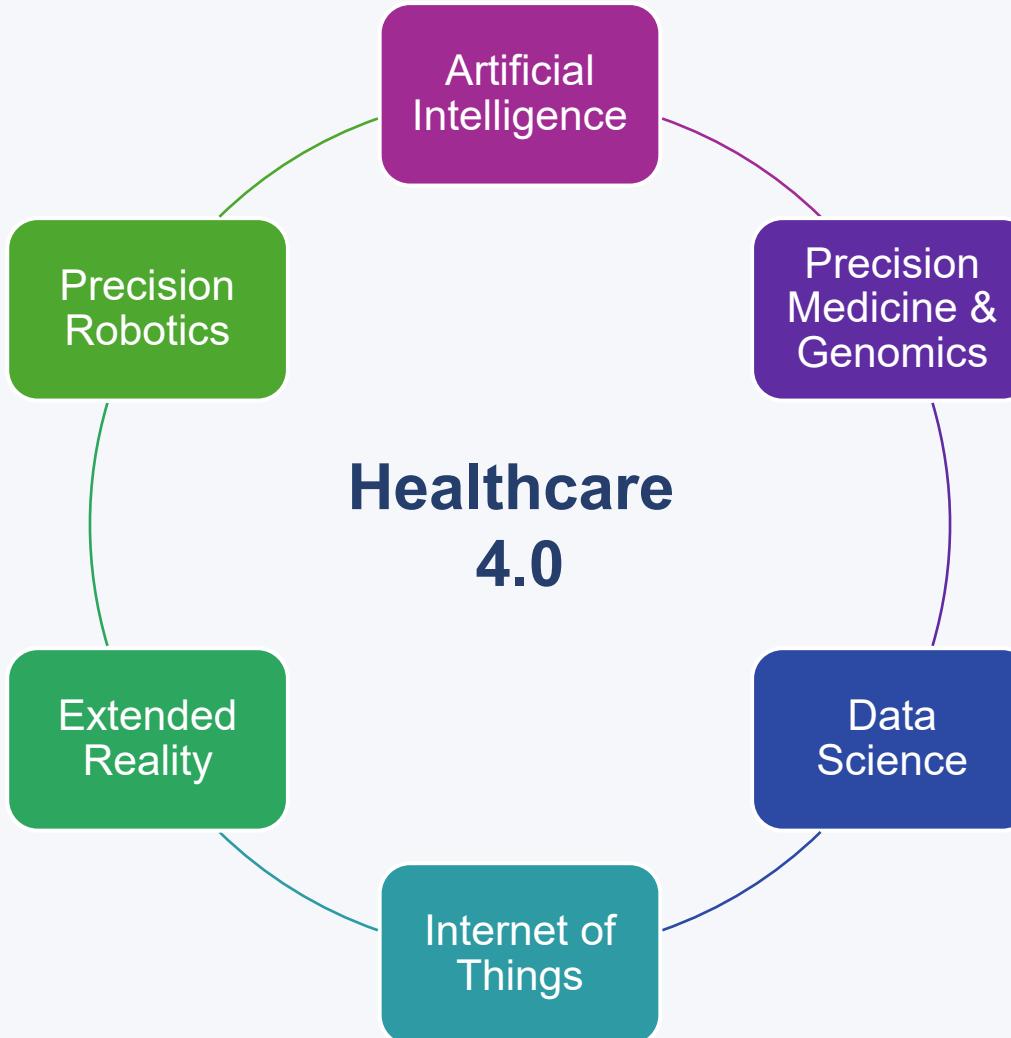
Let's explore AI

# Think – Pair - Share

- What felt helpful about that interaction?
- What felt uncomfortable or raised concern?
- Where could this support learning?
- Where would you want clear boundaries?

# Why This Moment Matters

AI as part of a broader transformation in healthcare



# What Do Health Professionals Need to Know About AI?

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- AI systems are designed to perform specific tasks, not general human reasoning
- AI outputs are probabilistic and context-dependent, not authoritative
- AI performance depends on data quality, design choices, and oversight
  
- **AI does not replace professional judgment** — it reshapes how judgment is applied

# Core AI Capabilities in Health Professions Education

## Pattern recognition & classification

Identifying trends in learner performance, behaviors, or errors across datasets

## Natural language interaction

Supporting conversational learning, feedback, reflection, and simulated dialogue

## Content generation & transformation

Drafting cases, questions, feedback, or adapting content to learner level

## Adaptive support & personalization

Adjusting prompts, difficulty, or feedback based on learner input and context

## Data synthesis & augmentation

Combining multiple information sources to support insight — not decisions

# Common Risks & Limitations of AI in Health Professions Education

- **Overconfidence and automation bias**

Learners or educators may over-trust AI outputs without sufficient critical appraisal

- **Bias and representational gaps**

AI systems reflect their training data, including omissions and inequities

- **Hallucinations and confident errors**

AI may generate plausible but incorrect or unsupported information

- **Context collapse**

Educational nuance, situational factors, and learner intent may be flattened or misunderstood

- **Misalignment with educational goals**

AI use may drift toward convenience rather than learning outcomes without intentional design

# The Current Moment in AI and Education

- Rapid experimentation with AI across learning environments
- Inconsistent alignment across tools, curriculum, pedagogy, and assessment
- Growing need for shared language, evidence, and design principles to guide AI use

# Small Group Discussion

1. What excites you about the potential of AI to support teaching and learning?
2. As an educator, what concerns or worries does AI raise for you?



# The SCOPE Framework for Responsible AI Integration



# Simple Map of AI Capabilities in Education

## Generative AI

Creates new content such as text, images, or scenarios

## Predictive AI

Estimates future trends based on past data

## Perceptive AI

Observes and identifies patterns in performance or learning data

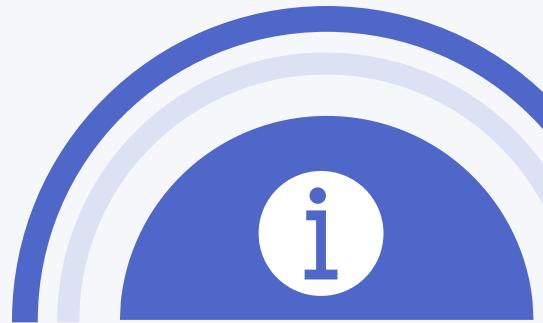
## Agentic AI

Acts autonomously to initiate tasks or decisions



# Partnering with AI: Levels of Responsibility

## AI Autonomy



### Assistive

AI provides information or organization to support learning without shaping judgment or decisions



### Augmentative

AI offers prompts or suggestions that support human thinking while leaving interpretation and decisions entirely to people



### Adaptive

AI tailors learning experiences for individuals over time within transparent, human-defined boundaries

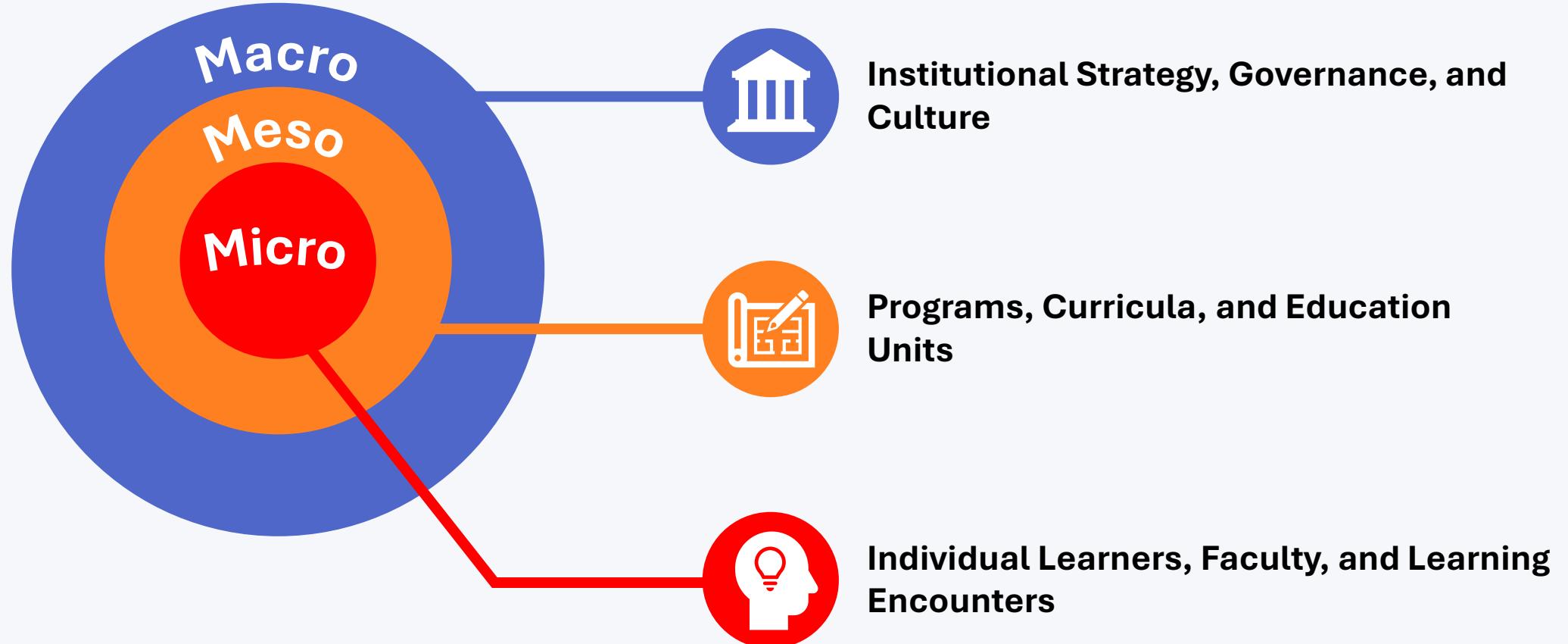


### Autonomous

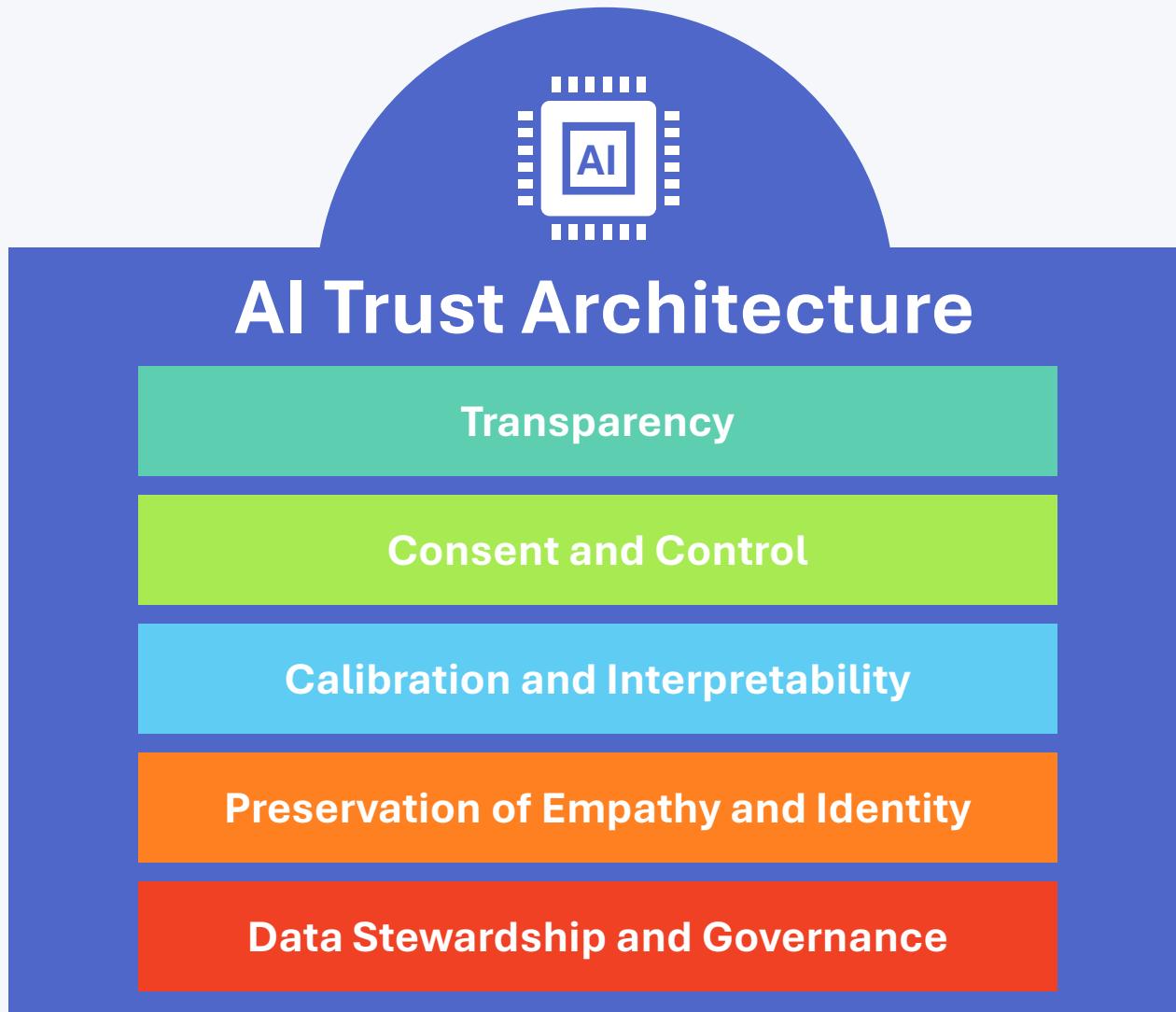
AI initiates limited actions independently under predefined constraints and ongoing human accountability

Human Always in the Loop

# Aligning AI Decisions Across the Educational System



# Designing AI We Can Trust



# SCOPE Institutional Maturity Levels



# From Curiosity to Capability

***“Exploration doesn’t mean adoption. It means learning enough to make informed decisions.”***

- Trying AI without committing to adoption
- Experimenting in low-stakes environments
- Sharing successes and failures openly
- Maintaining human judgment and accountability
- Aligning exploration with institutional readiness and long-term support

# Let's Think Together

Questions, reflections, and ideas are welcome

“Individually, we are one drop. Together, we are an ocean.”

— *Ryunosuke Satoro, Japanese writer*