

## Big Cross Disciplinary Questions

What are academic questions that cross disciplines, span faculties, even embrace the whole university?

Faculty and graduate students in the U.S. identify big questions and topics that cross disciplines in their fields and universities.

### **A. From the Boston Faculty Fellowship, professors from Harvard, Massachusetts Institute of Technology (MIT) and Brandeis University, and others.**

#### **Sociology, Politics, International Political Economy, Education . . . .**

Does international trade hurt the poor?

Are schools the great “equalizers?”

Are randomized controlled trials (RCTs) the gold standard for informed public policy-making?

Is quantification the gold standard for measuring change?

Is globalization inexorable?

Does policy intervention help people?

#### **Biological, Physical Sciences**

How is it possible to reach sustainability of resources in agriculture, energy, healthcare, resources, and environment?

Artificial intelligence

Biotechnology

Solar system exploration

#### **Humanities and Education**

How to use discourse and narrative to empower the oppressed?

How does meaning get constructed, i.e., the question of truth? What are criteria for the making of meaning? (Harvard, MIT, Brandeis)

What is the role of the researcher in history and literature, given competing lens, versions of the truth?

What are the best practices in teaching? How do we help students become critical thinkers? (Harvard, MIT, Brandeis)

For Chinese public intellectuals who have fled science and converted to Christianity, how can their Reformed theology influence China right now?

### **Cross-University**

How do we understand types of security – food, economic, confidentiality, privacy, safety, crime?

How do we best manage health – ageing, healthcare?

How do science and society relate to each other and how should they relate – questions technology, regulation and ethics? (Harvard, MIT, Brandeis)

### **B. From a Faculty and Doctoral Student Retreat, Michigan, US.**

How do we move towards workforce equity? We want to be supporting people in human flourishing to redress inequity. How do we do that? How do we create educational access, opportunity?

How can we balance equality with liberty?

What is the relationship between religion and politics? E.g., how does religion fit into democracy?

What are the legacies of colonialism on post-colonial societies?

Why are some countries poor, some rich?

How can we program an autonomously driven vehicle to build in ethical choices? E.g., in a pending accident, what are the ethics of a choice between hitting a baby carriage or elderly lady?

What does music contribute to human flourishing?

How do musicians demonstrate to society that that we do is valuable, worthwhile, useful, and relevant? How can we keep music alive if the market or society seems not to value musicians?

What is human flourishing? How do we attain it?

In the biomedical sciences, what is the responsibility of researchers for ways their research is used downstream? Does the researcher bear responsibility for how companies produce drugs, how they are priced, who they prioritize?

Should biomedical researchers be thinking about negative uses of scientific discovery?

**C. From a Graduate Student Retreat, Northern California**

- What is it to be a human who does science? What is the human element in science? What would we gain or lose if we had AI designing our experiments?
- Funding: should we be funding people, not projects? Interdisciplinary rather than disciplinary projects?
- Moral questions within academia – how do we share credit and collaborate?
- On Beauty: creating beauty; where does it come from? Why do we find things beautiful? Where do we see beauty in our scientific practice?
- Why does engineering have this thirst for things that are beautiful when there's no real functional reason for it?
- How do we think about stress – in geophysical sciences, engineering, psychology, literature, everyday academic life?

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**Event topic:** Academics as Salt & Light in the University

**Participants:** Faculty from Harvard, MIT, Brandeis, Boston University

**Place:** Tipni Retreat Center, New Hampshire

**Language:** English