

A microscopic image of cells, likely from a tissue sample. The nuclei are stained blue, and the cytoplasm or extracellular matrix shows green fluorescence. The cells are densely packed, and the green staining highlights specific cellular structures or pathways.

Brave New Futures: Embedding Entrepreneurial Competencies for the Class of 2030

Who we are?



Anne Burke-Gaffney
NHLI, FoM
Co-Director, Module
Lead: Innovations,
Sustainability & Ethics



Camille Reltein
Enterprise Lab
Module Lead:
Ideation and
Entrepreneurship



Mark Pope
CLCC
Session Lead:
Sustainability &
Futures



Michael Weatherburn
CLCC
Session Lead:
Ethics & Futures

Daisy Pataki
CLCC
Session Lead: Reflection



Thanks also to:
Nigel Forrest, CEP, Session Lead: Sustainability
Greg Artus, CLCC, Session Lead: Ethics
Blerina Ahmetaj-Shala, Module Lead, Futures

Today's objectives

01 To share our experience of embedded entrepreneurial competencies

02 To give you the opportunity to try some of our tools and reflect on future possibilities

Don't wait until 2030 to start mixing entrepreneurial competencies into your own teaching!

Agenda

01 Overview of Bioscience Futures MSc: Why? How? What?

02 EntreComp Framework & Spotting Opportunities

03 Vision

04 Ethical & Sustainable Thinking

05 Reflection

06 Activity

01 Overview of Bioscience Futures MSc: Why, How, What?



Why the course?



How is it delivered?

Term 1	
Innovations in Bioscience	Ideation & Entrepreneurship
Communication for Impact	
Term 2	
Sustainable & Ethical Business	Bioscience Futures & Foresight
Entrepreneurship in Practice	
Term 3	
Work Placement Project	

Entrepreneurial competencies - *knowing, showing and growing* - capture the knowledge, action, and personal development dimensions of entrepreneurship. Martin Lackéus OECD 2015

What's the output?



Anja and Aine: 1st place
Imperial x Cambridge
FemTech Hackathon 2025



Adanna: ranked 1st in AI
for Longevity Hackathon
with her team Osstrack



Aidan, Havanna & Wisdom: winners at
Green Innovation
Challenge, 2026



02 EntreComp & Spotting Opportunities

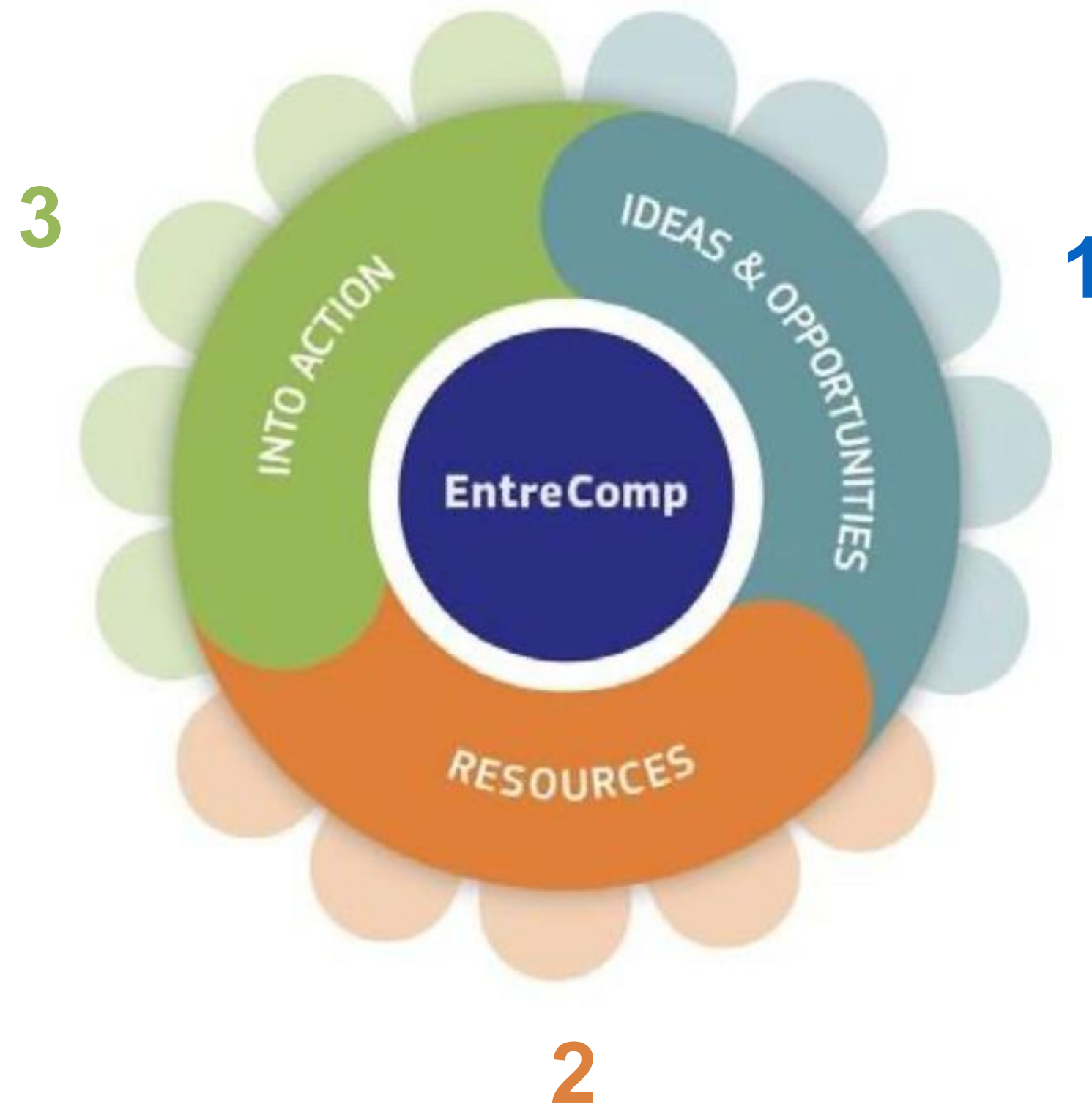
Entrepreneurship as a competence:

“Discovering and acting upon opportunities and ideas and transforming them into value for others – value can be financial, cultural and/or social.”

Introducing...

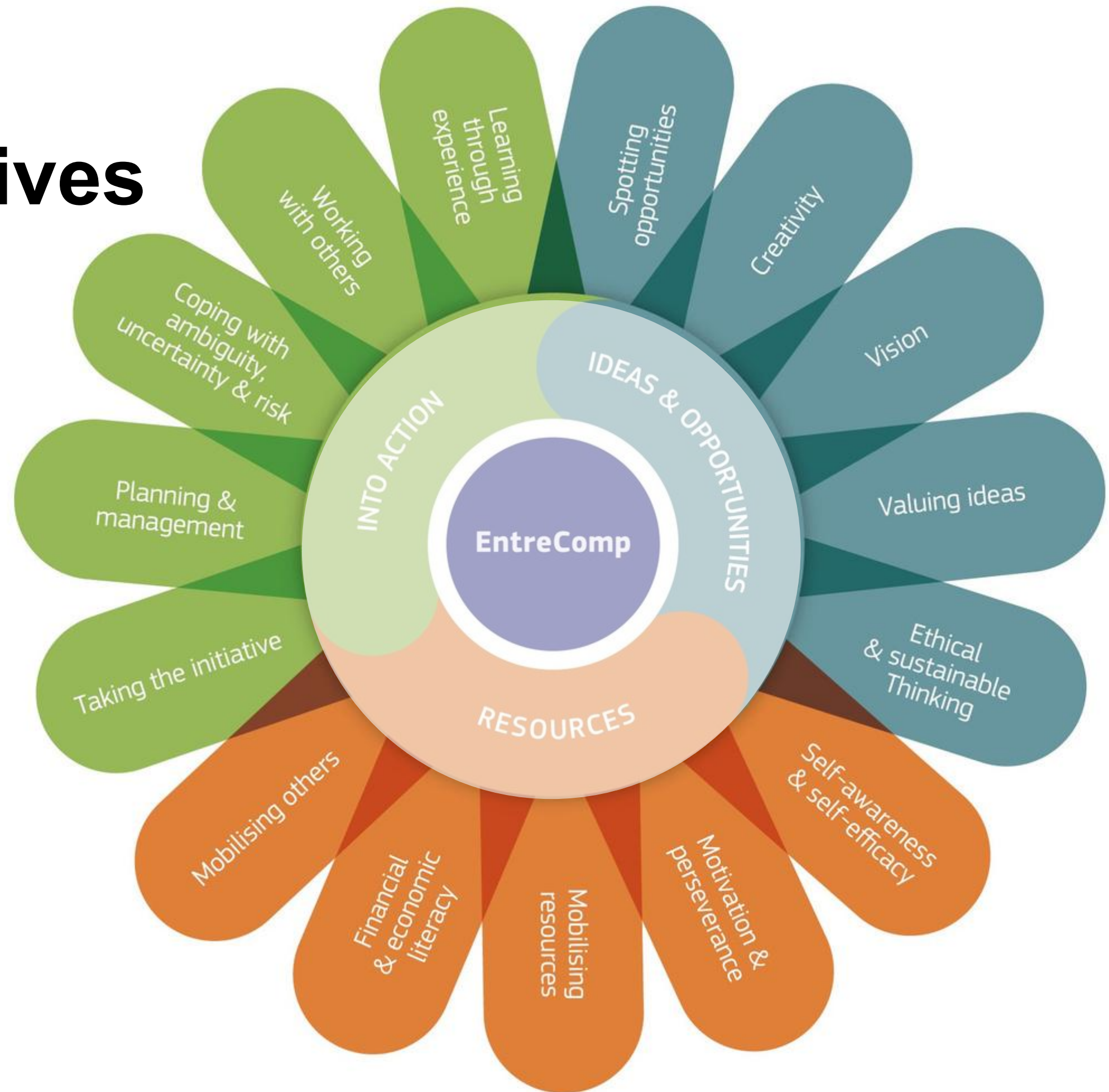
**The Entrepreneurship
Competence Framework**

3 Competence Areas



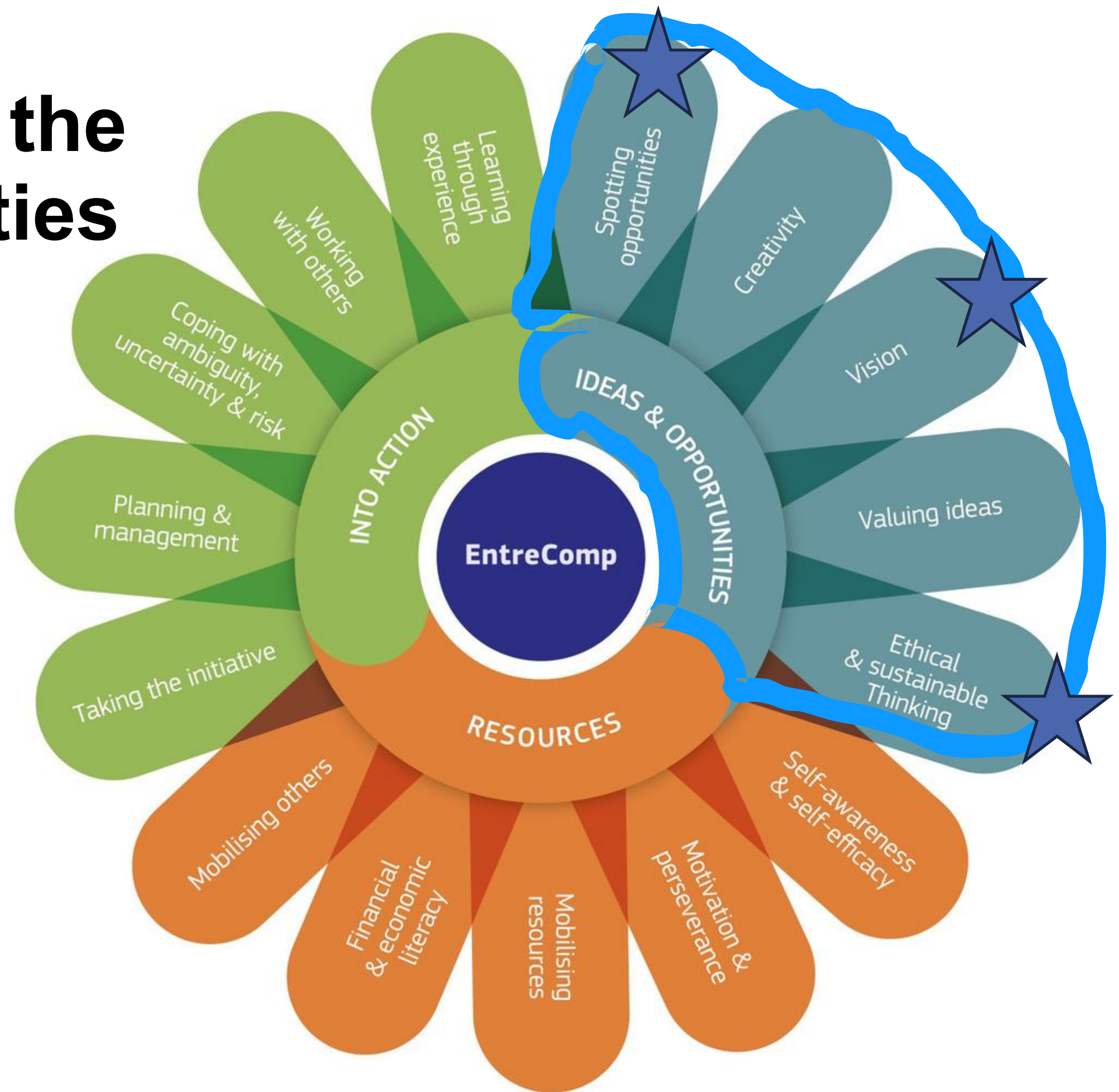
15 Competences

442 Learning Objectives



Today we'll focus on the Ideas and Opportunities quadrant:

- Spotting opportunities
- Vision
- Ethical & Sustainable Thinking

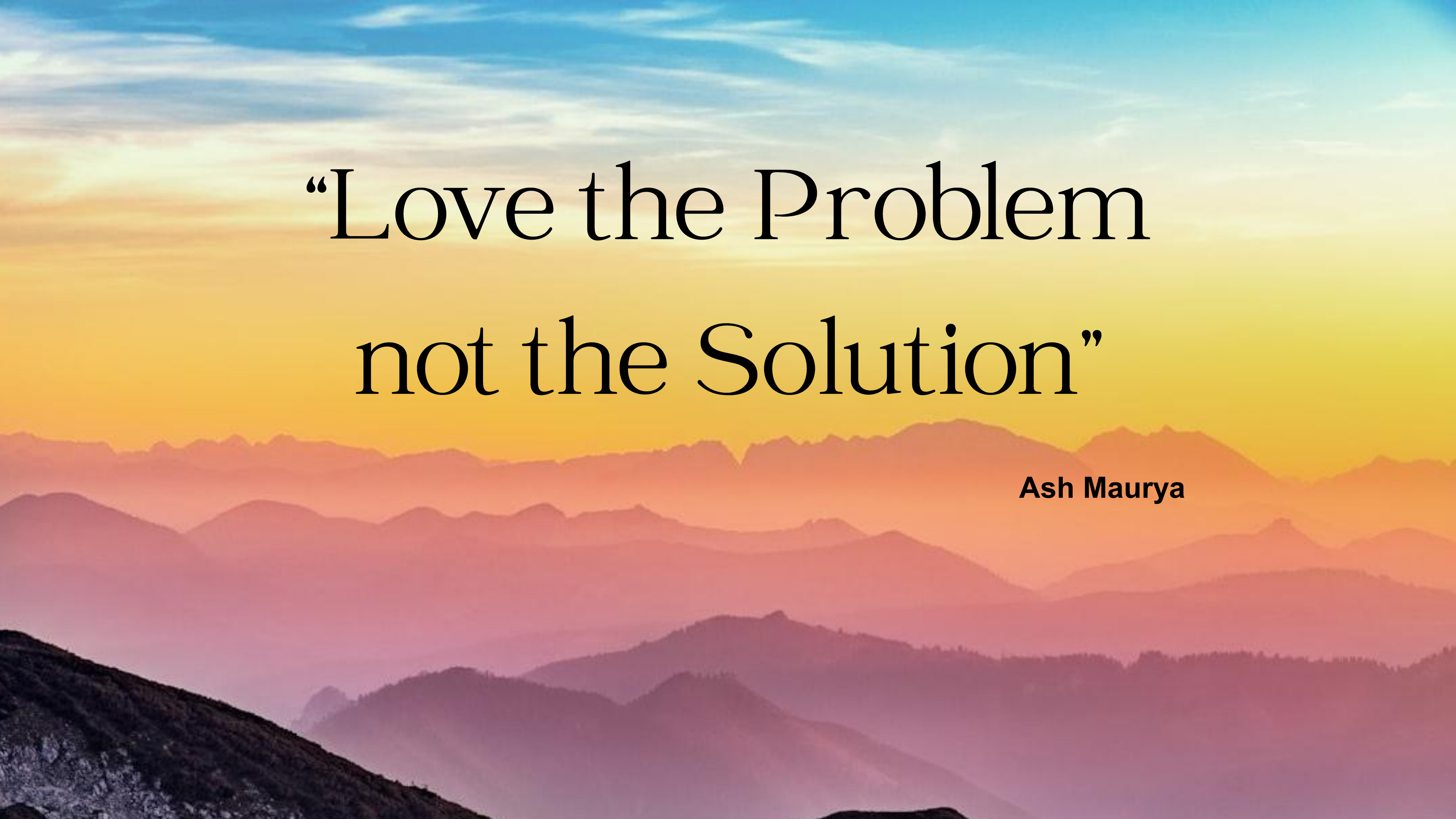


**EntreComp deep dive
available here:**



[Entrepreneurial Self-Assessment - EN - Welcome to E-CAFE](#)

Opportunity spotting



“Love the Problem
not the Solution”

Ash Maurya

**A great starting point
is...**

A person with short brown hair, wearing a blue hoodie and dark pants, is seated in a wheelchair. They are positioned at the bottom of a wide set of stone stairs, looking up the steps. The wheelchair is a standard manual model with large rear wheels and smaller front casters. The background shows the top of the stairs leading to a light-colored building facade with large windows.

**A compelling
problem**



**It can be big
(but make it specific)**

Or small



A diverse group of eight people, including men and women of various ethnicities, are standing in a line with their backs to the camera. They are all embracing each other in a supportive manner, with arms around shoulders and waists. They are positioned in front of a large, dark blue chalkboard. The text "But it must be widely shared" is overlaid in white, bold, sans-serif font across the lower half of the image.

**But it must be
widely shared**



**And you must be
passionate about it!**

Opportunity checklist:

- **Specific**
- **Widely shared**
- **Makes your heart beat faster**

Consider:

- Who is affected (customer, user, stakeholders)?
- Where is this problem occurring (geography)?
- Why does it matter?
- And if you're on the Bioscience Futures MSc: what is the bioscience connection?



03 Vision

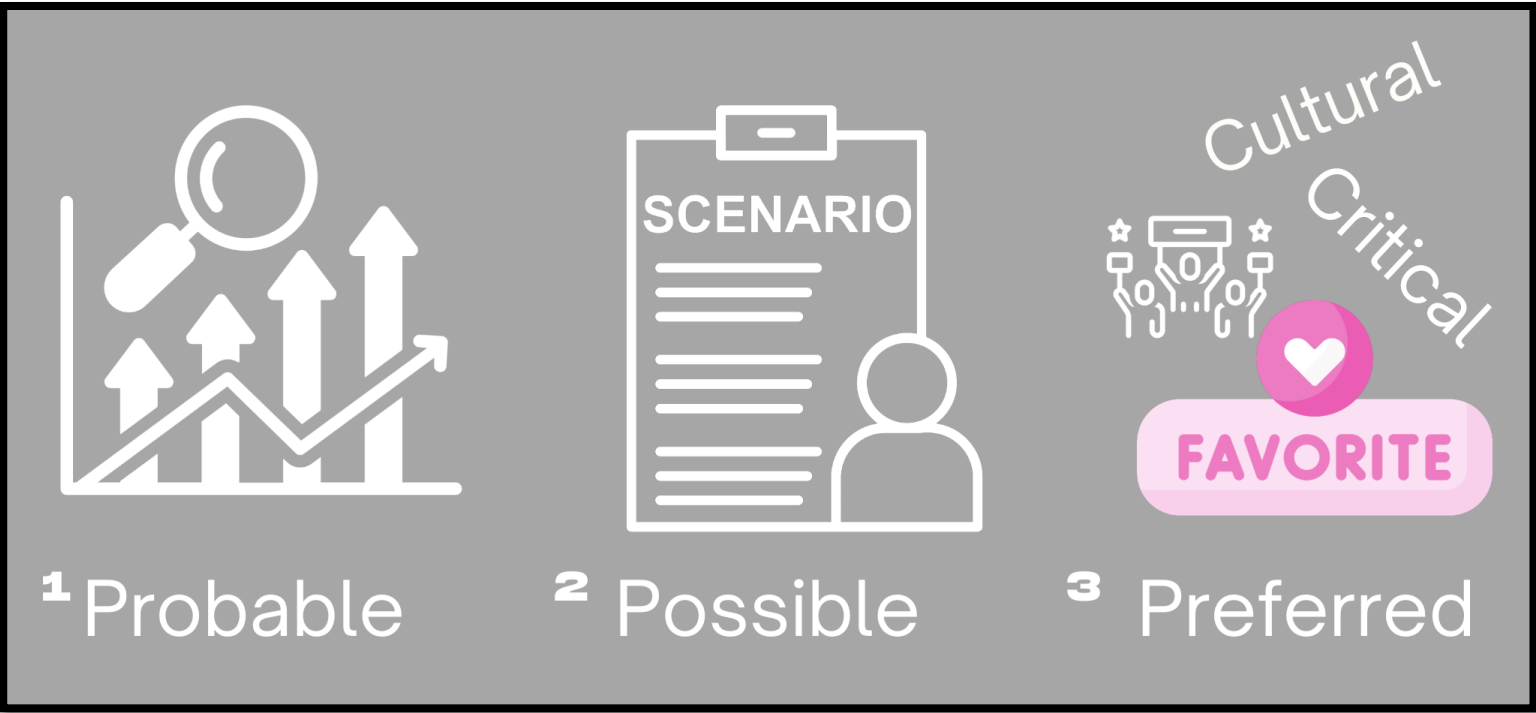
Image of Bioscience Futures. Credit: Justin Chen

Futures Studies and Futures Thinking

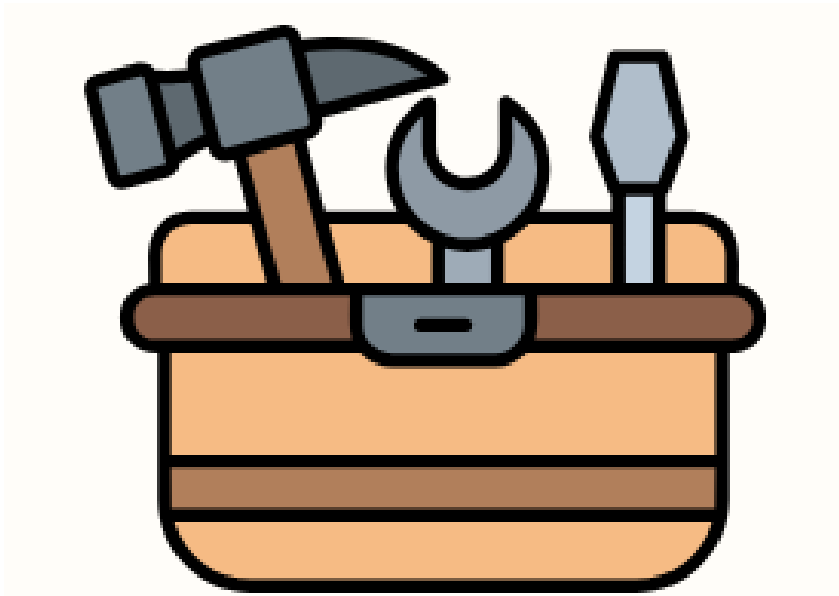
Futures Studies – in action!



Futures Types: Rational, Qualitative



Futures ‘Toolkit’



Interviews E.g. The Delphi Method	Impact Analysis	Predictions
Horizon Scanning (Trends, Emerging Issues, Wild Cards)	The Futures Wheel	Forecasts
Causal Layered Analysis	Drivers Mapping	Scenarios
Systems Thinking	Roadmapping / Backcasting	Visions

See: UK Government (2024) [The Futures Toolkit](#)



04 Ethical & Sustainable Thinking

Ethical thinking

Which do you think will produce a more ethical future?

Pluralist, democratic

RSA EVENT / VIDEO / ONLINE

Who gets to imagine the future?

28 Sep 2021 | 01:00 PM - 02:00 PM

Online via Zoom

COMMUNITIES

COMMUNITY ENGAGEMENT

PUBLIC SERVICES

SOCIAL INNOVATION

RSA

Who gets to imagine the future? | RSA Replay

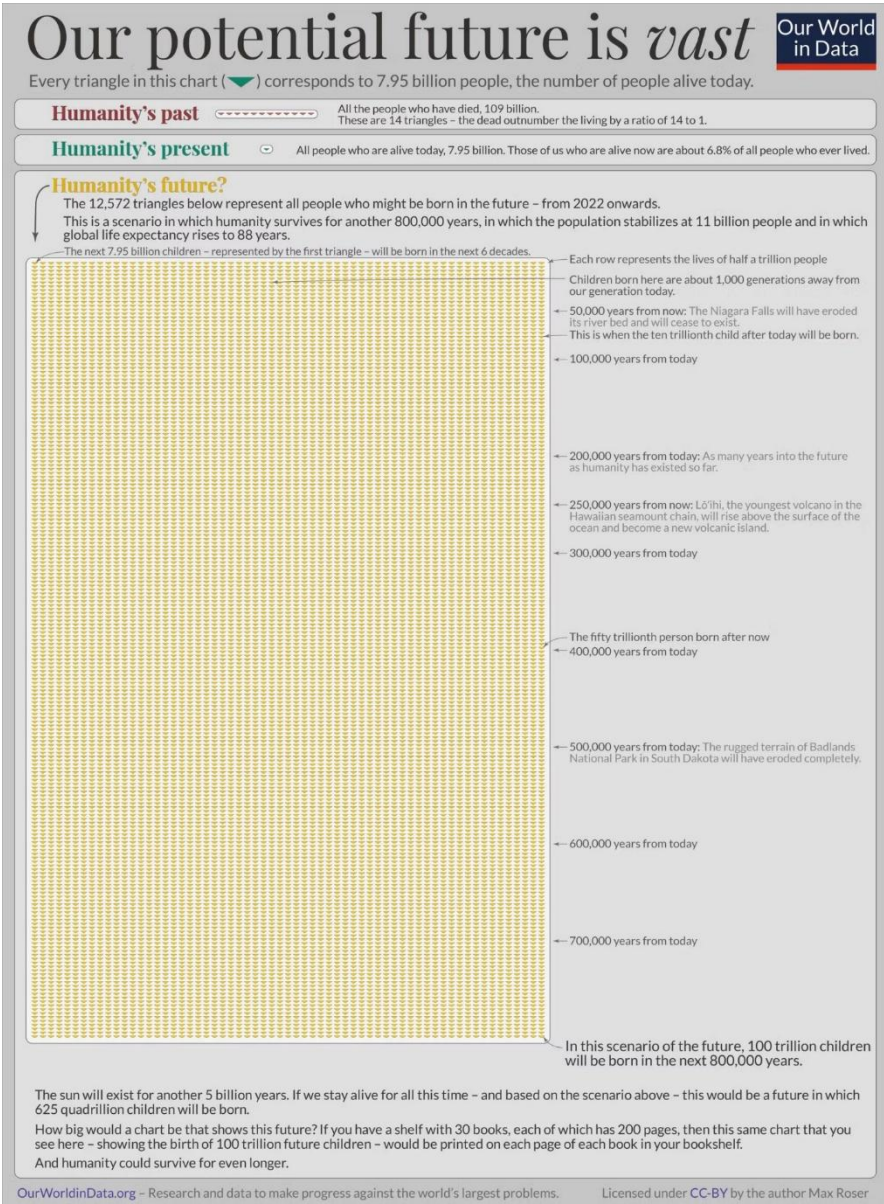


Replay

Watch on  YouTube



Pluralist, instrumental



Ethical frameworks

Consequentialism



Virtue ethics



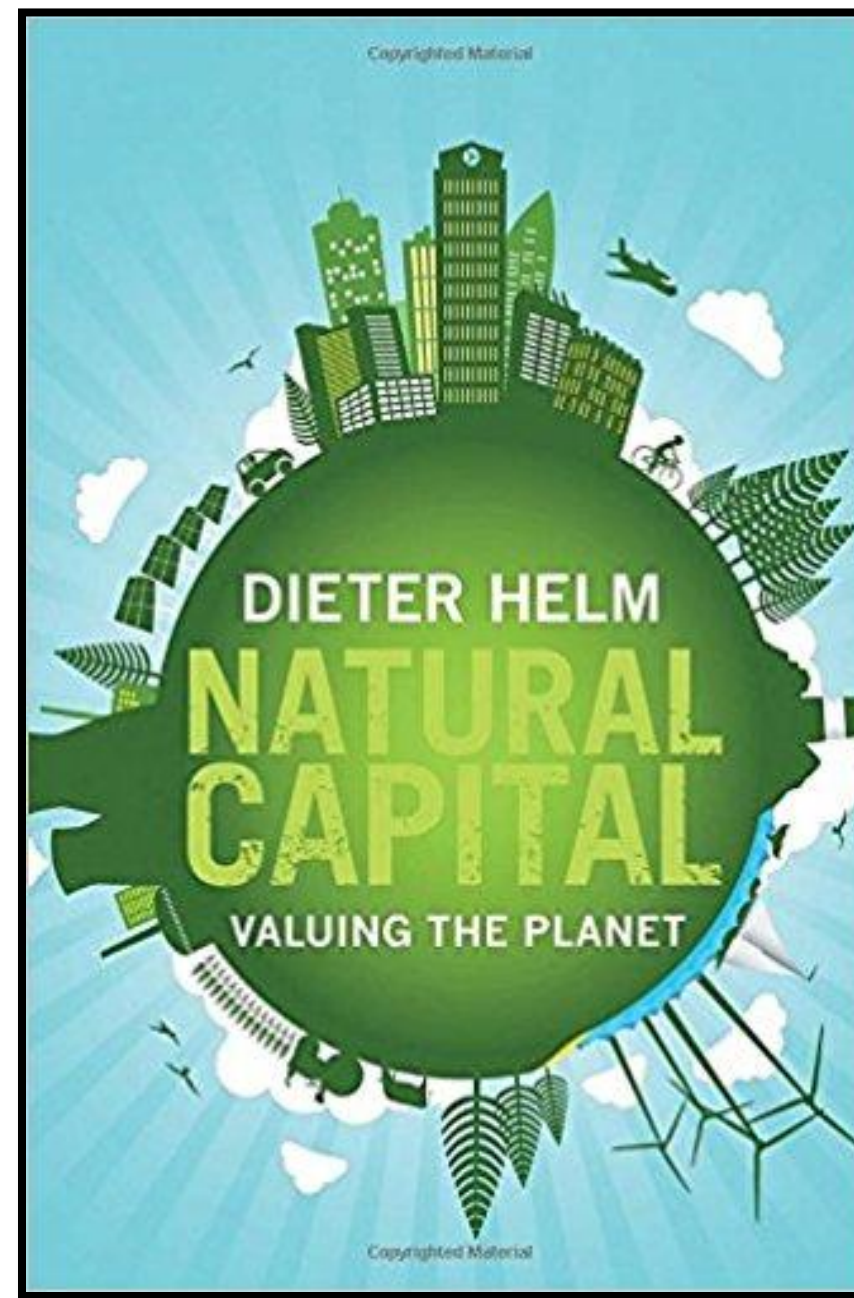
Rules-based/deontological



Social contractarianism



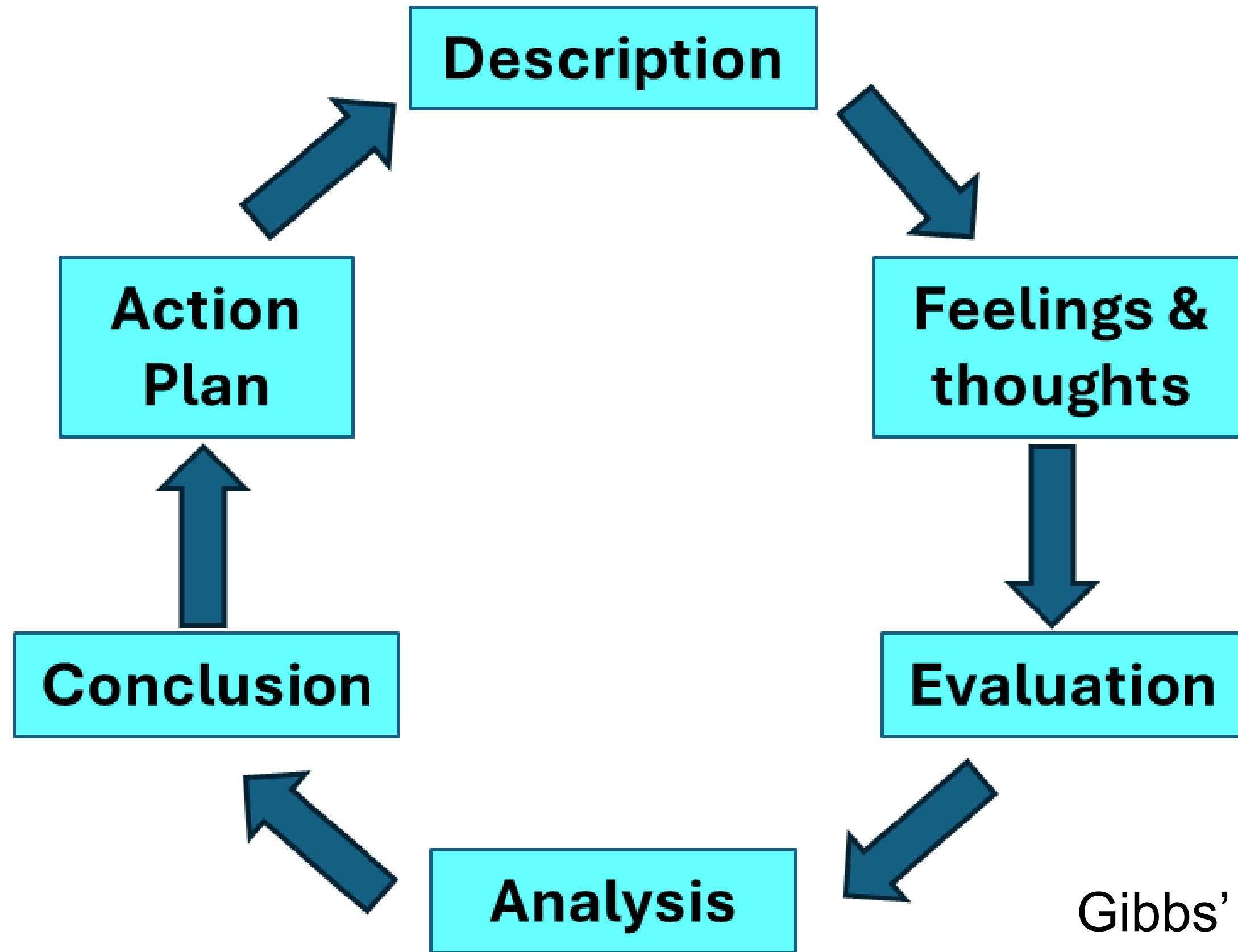
Sustainability frameworks





05 Reflection

Reflection with Gibbs' Reflective Cycle



Gibbs' Reflective Cycle,
after Gibbs (1988)

06 Activity



Activity

**“If Imperial gave you £10 million...
what problem would you tackle; why (& how)?”**

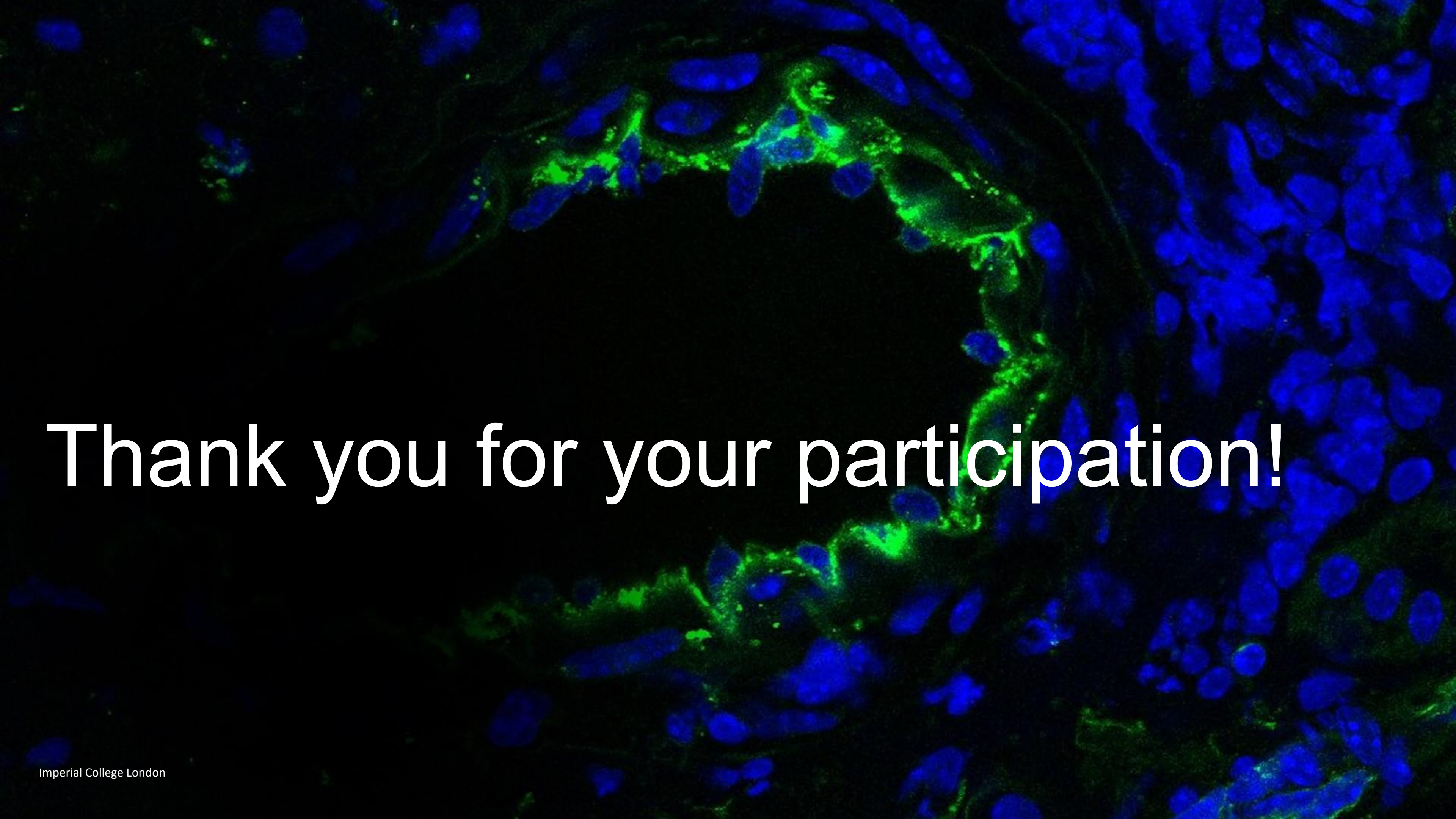


1. Write a clear **problem statement** (use one of our prompts or choose your own). **10 min**
2. Create **three futures**: a probable, a possible, and a preferable future. **5 min**
3. Check your preferable future for **ethical & sustainable** implications. **5 min**
4. Use Gibbs' cycle to **reflect** on how you spent £10 million **10 min**
5. Present your insights back to the whole group. **10 min**

Suggested topics on the theme of:

“Future Focused Education – Imperial’s Class of 2030”

- Competency-based education vs. traditional curricula
- Student mental health in high-tech learning environments
- The future of timetables, calendars, and learning hours



Thank you for your participation!