

ARC Centre of Excellence for Electromaterials Science (ACES)



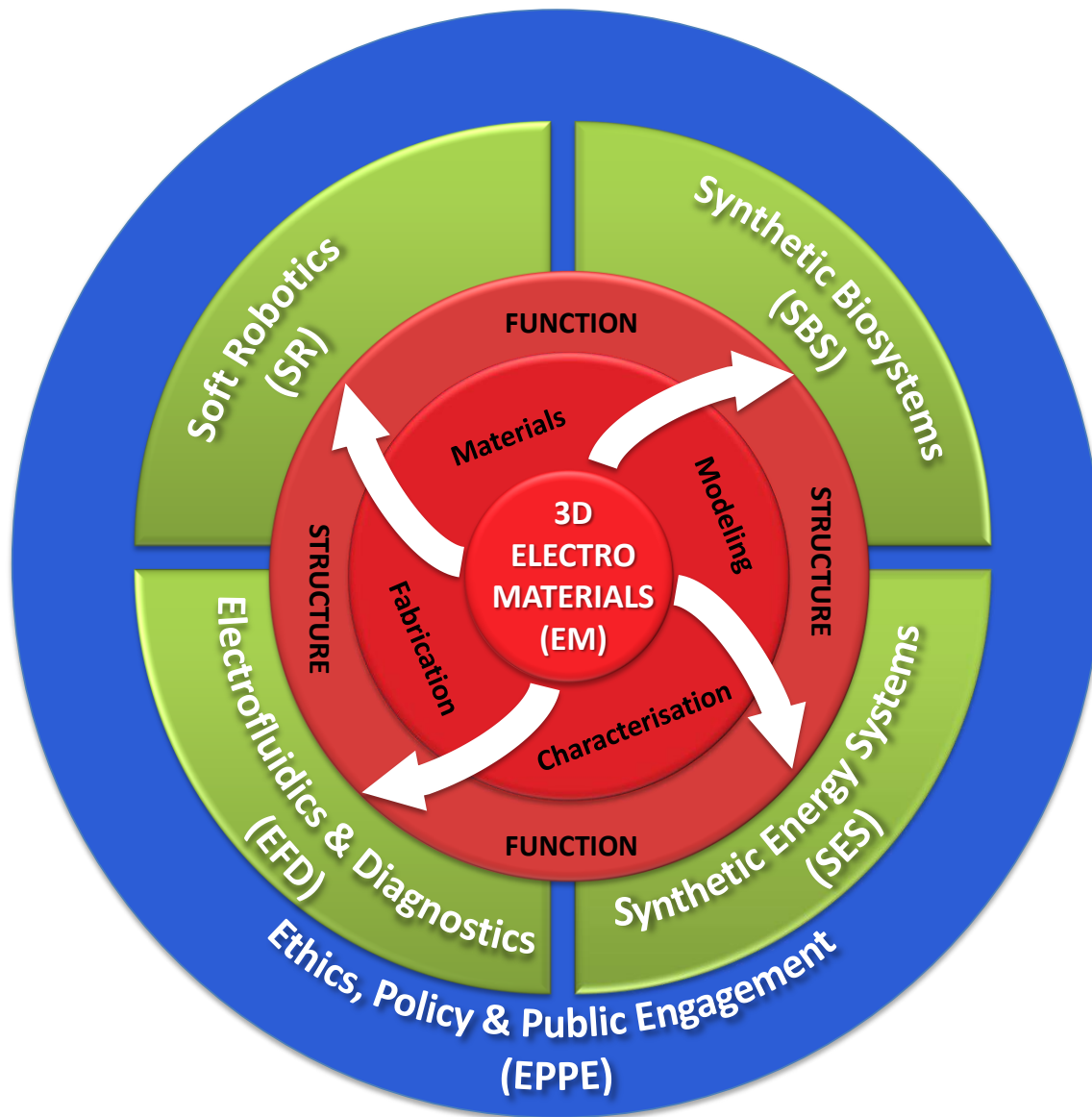
Materials

Health

Energy

Ethics

Exploring
New Dimensions



CHALLENGING THE TRADITIONAL APPROACH TO MATERIALS RESEARCH

Materials,
Source, Impact,
Access

Materials,
Design &
Discovery

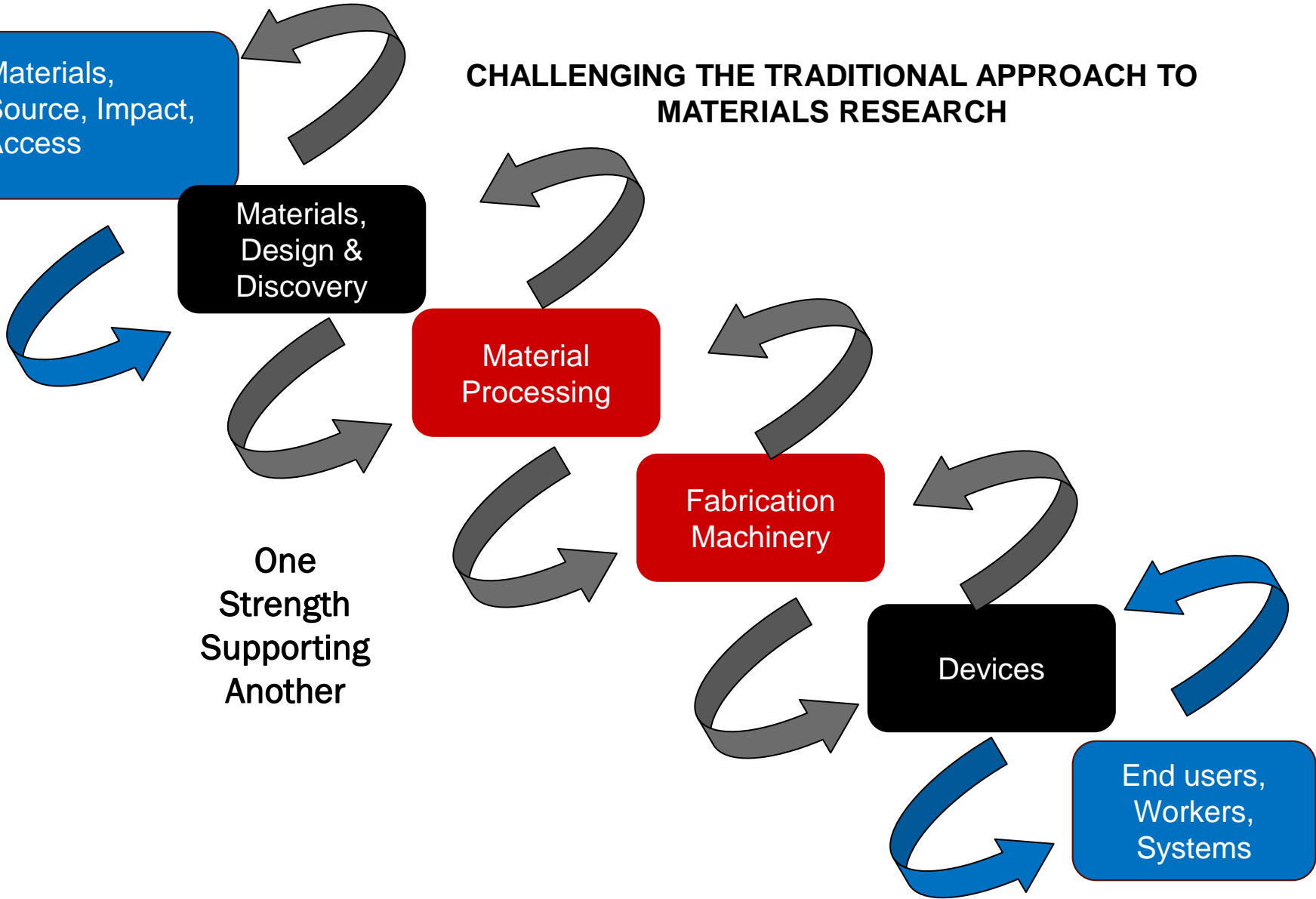
Material
Processing

Fabrication
Machinery

Devices

End users,
Workers,
Systems

One
Strength
Supporting
Another



Milestone	Year	Description
EPE1	3	Identified the potential ethical and legal responsibilities of manufacturers to end users for prosthetic organs.
EPE2	4	Identified the ethical implications of assumptions about disability therapy and enhancement.
EPE3	4	Developed an approach to engagement of key stakeholders in new energy technologies.
EPE4	6	Identified the epistemic and ethical limitations of randomised clinical trials for regulation and approval of personalised medicine.
EPE5	7	Identified the policy and supply chain aspects of renewables to assess their impact on equity, access, conflict and resilience.
EPE6	7	Identified implications of new medical diagnostic systems for access to health care and international aid policy.



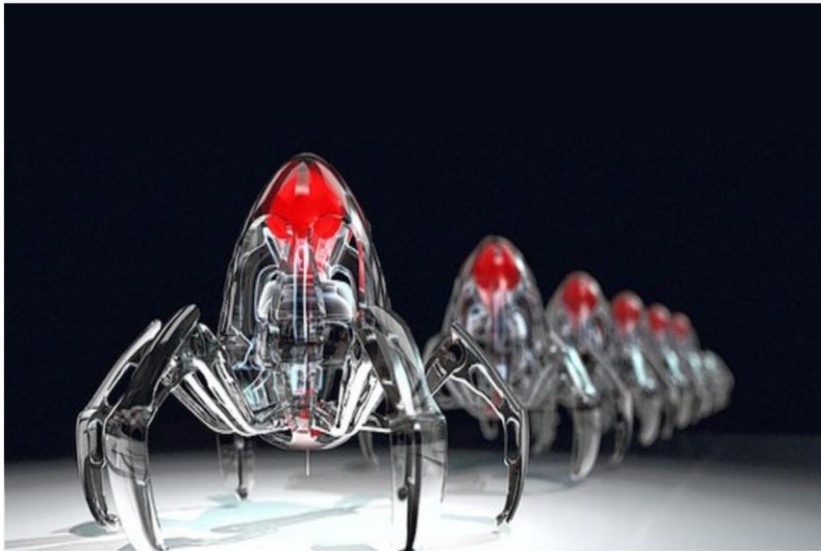
Impact on the culture of research

- Thinking about social, ethical, economic and environmental impact from the beginning and throughout
- Articulating arguments about value
- Anticipating social responses
- Considering approaches to enhance impacts
- Cross-disciplinary and public communication of science
- Engaging in wider social debates

Examples: new research through collaboration

- Identification of conflict materials & supply chains
- Ethical relevance of 3D printed food; 3D printed tissue
- Research on the phenomenological experience of neural implants
- Engaging people with disability in design of soft robotic hand
- Moral status of neural organoids
- Opportunities to improve disaster resilience through renewables

- Genuine engagement (not tacked on)
- Trust and respect
- Communication and perseverance
- Commitment to inter-disciplinarity from the top
- Fun



The EPPE Team



Chief Investigators

Susan Dodds, Philosophy
Linda Hancock, Political Science
Robert Sparrow, Philosophy



Research Fellows

Eliza Goddard, Philosophy
Natalie Ralph, Political Science
Mary Walker, Philosophy



PhD candidates

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Mathew Cherian, Political Science
Linda Wollersheim, Political Science



ACES EPPE Affiliates

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