

Introduction to biosocial concepts and frameworks

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The aim of this session is to provide an overview of what ‘biosocial’ research is, and how your research fits within this field.

We will cover:

- Definitions and disciplinary perspectives
- Development of a biosocial lifecourse framework
- Your research questions and where they fit

What is biosocial research?

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- Biosocial research examines the interplay between social, behavioural and biological factors
- Attempts to resolve challenges in isolating causal processes

Different meanings and definitions

- Disciplinary perspectives
- Funders of research

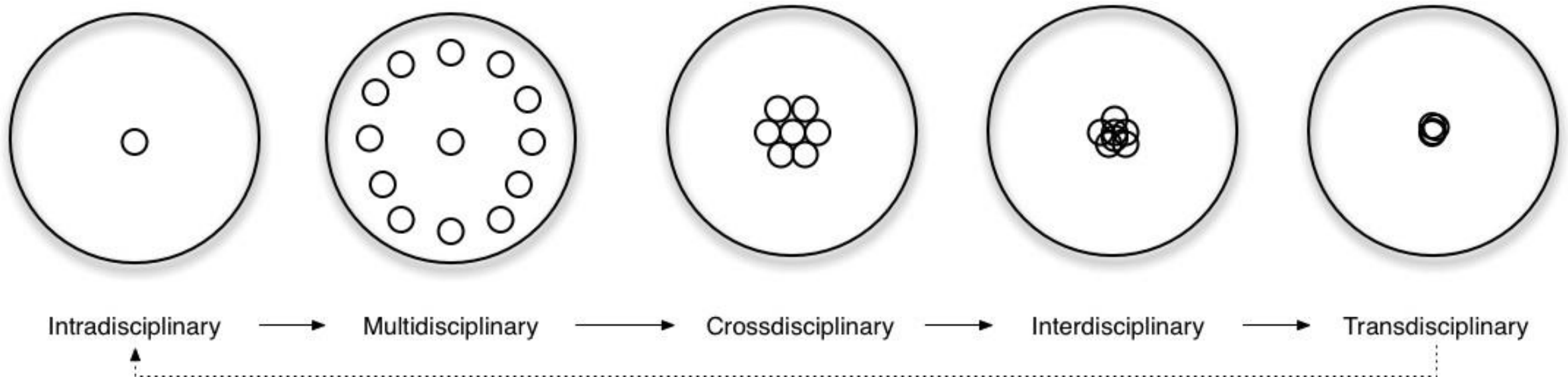
What is biosocial research?

ESRC: Biosocial research ...

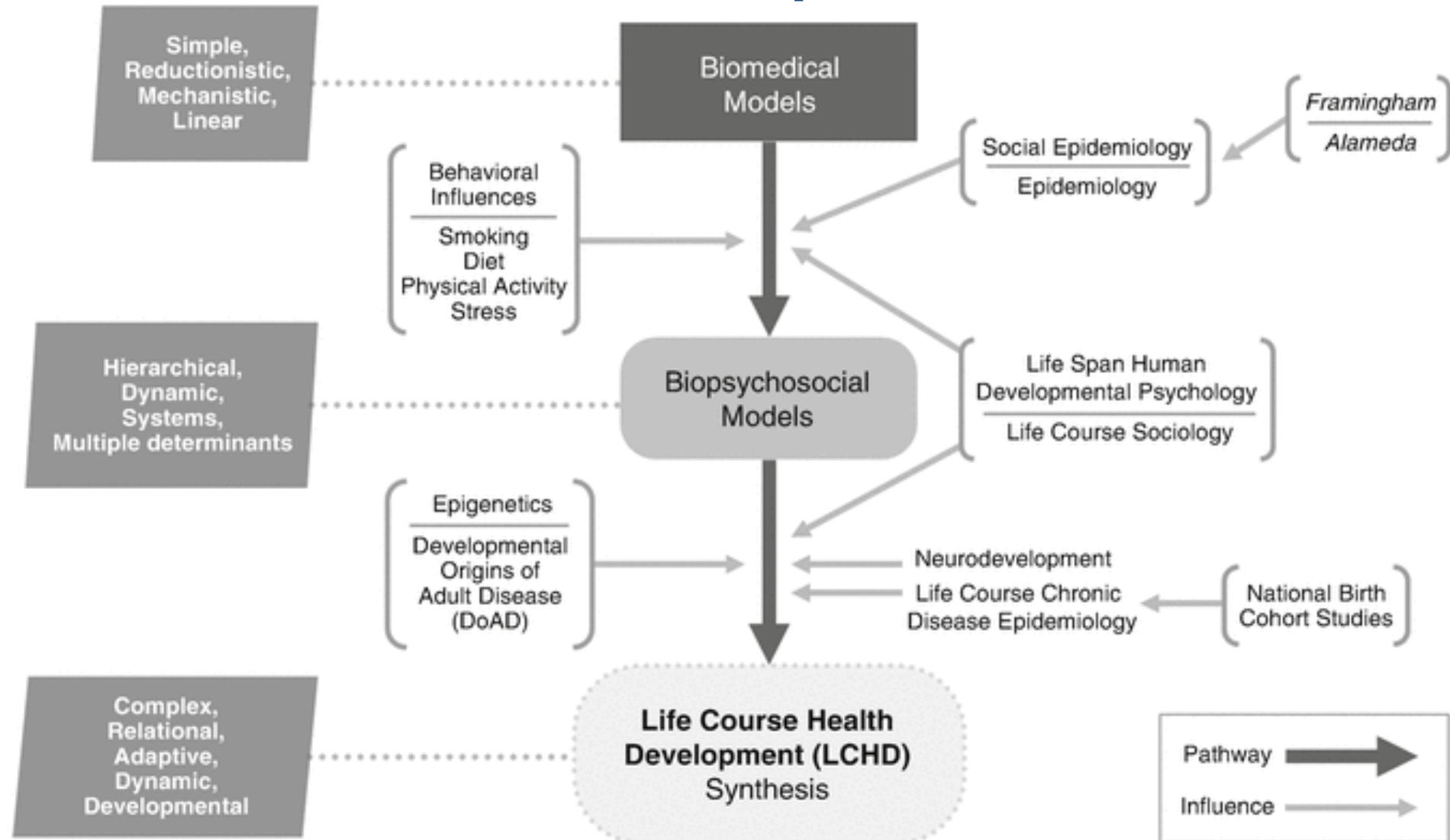
- is concerned with the dynamic interplays between ***biology, experiences and behaviours*** over the life course.
- encompasses ***multidisciplinary science***, brings together expertise from the biological, medical and social sciences.
- enables ***understanding of the complex pathways and mechanisms*** that shape physical and mental health, social behaviours and outcomes, and genomic, neurological and physiological systems.

Soc-B (ESRC-BBSRC funded) studentships are required to be based at least 50% in the social sciences

Intradisciplinary to Transdisciplinary



Halfon and Forrest – The evolution of conceptual models of health development



The biosocial lifecourse

Emerging framework with multiple disciplinary perspectives

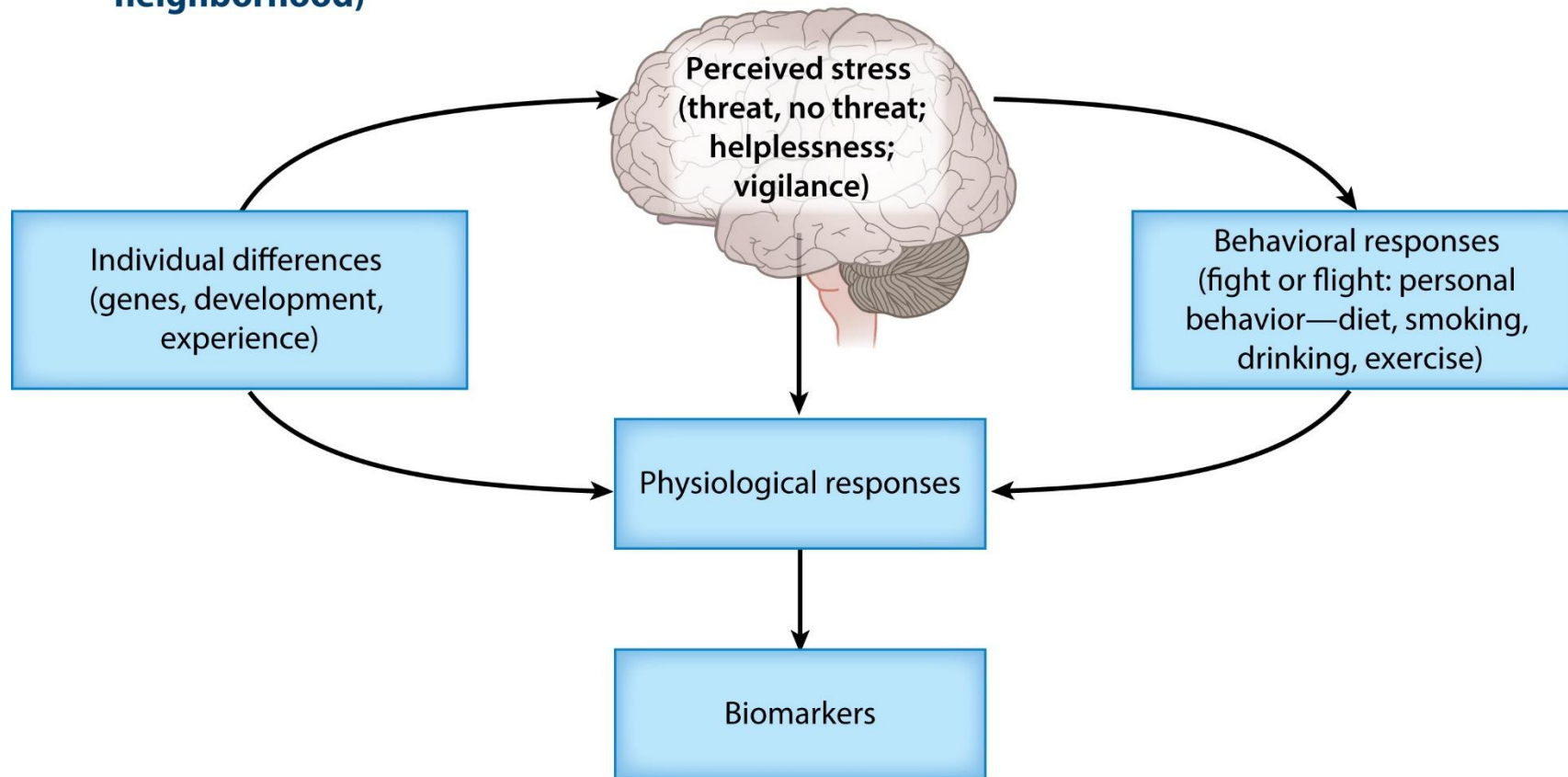
- Bronfenbrenner (1977) bioecological model
- Dahlgren & Whitehead (1991) proximal and distal influences
- Krieger (1994) embodiment/ecosocial approach
- Kuh & Ben Shlomo (1997) lifecourse framework
- Hertzman (1999) biological embedding
- McEwen (2006) protective and damaging effects of stress mediators: central role of the brain
- Kubansky, Seeman & Glymour (2014) biologically plausible mechanisms
- Harris & Schorpp (2018) integrating biomarkers in social stratification and health research

Harris & Schorpp integrating biomarkers in social stratification and health research

Environmental stressors
(work, home, school,
neighborhood)

Major life events

Trauma, abuse



Physiological and behavioral response to stressors.

Shown here is an adapted stress process model for different types of environmental and experiential stressors.

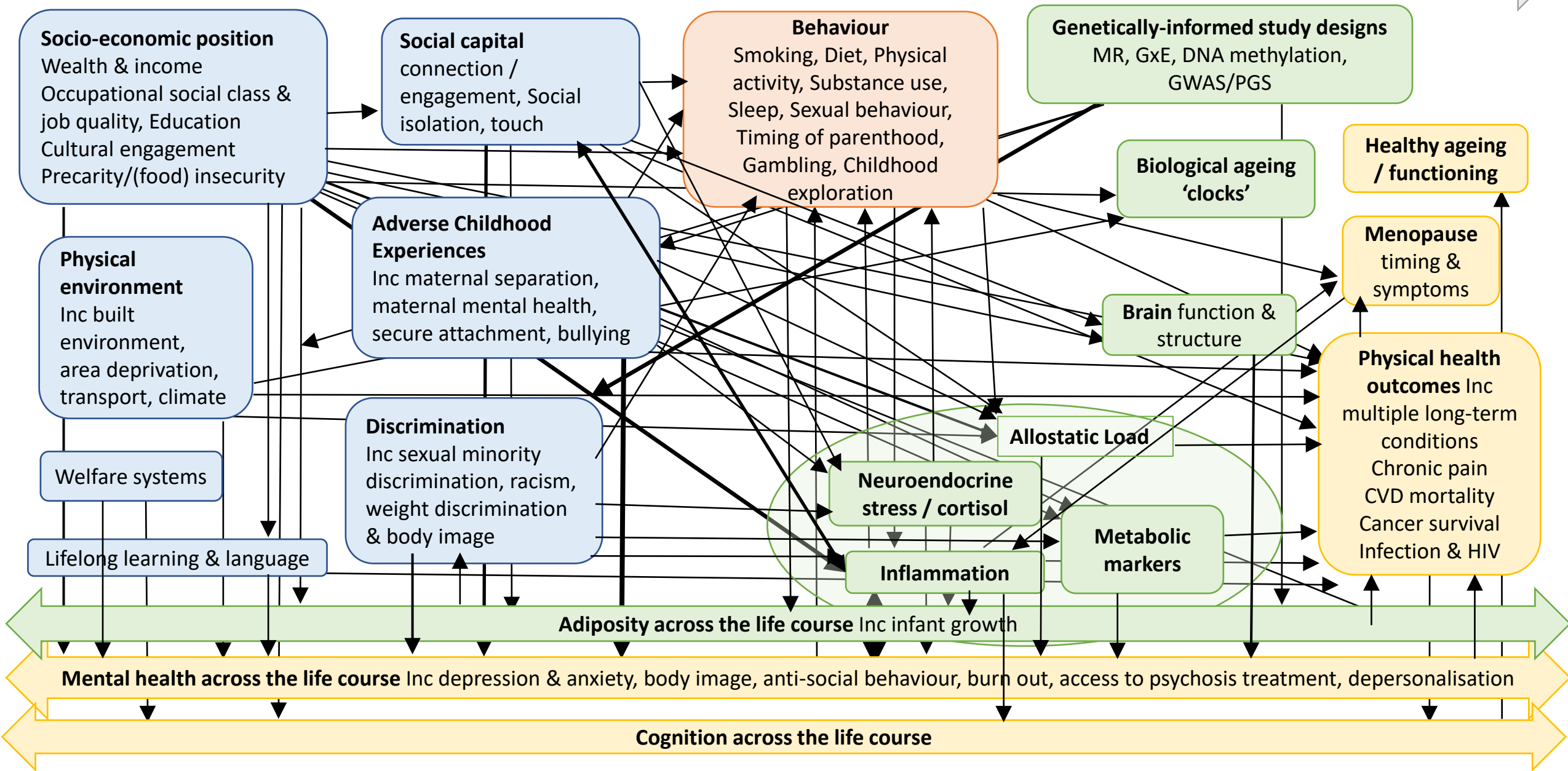
Perceived stress results in physiological responses that can be measured by biomarkers and behavioral responses that, in turn, affect physiology.

Individual differences influence both perception of stress and the physiological and behavioral responses to stress.

Adapted with permission from McEwen (1998).

Soc-B student biosocial projects

Projects focused on particular life stages (e.g. early or later life) or across the life course

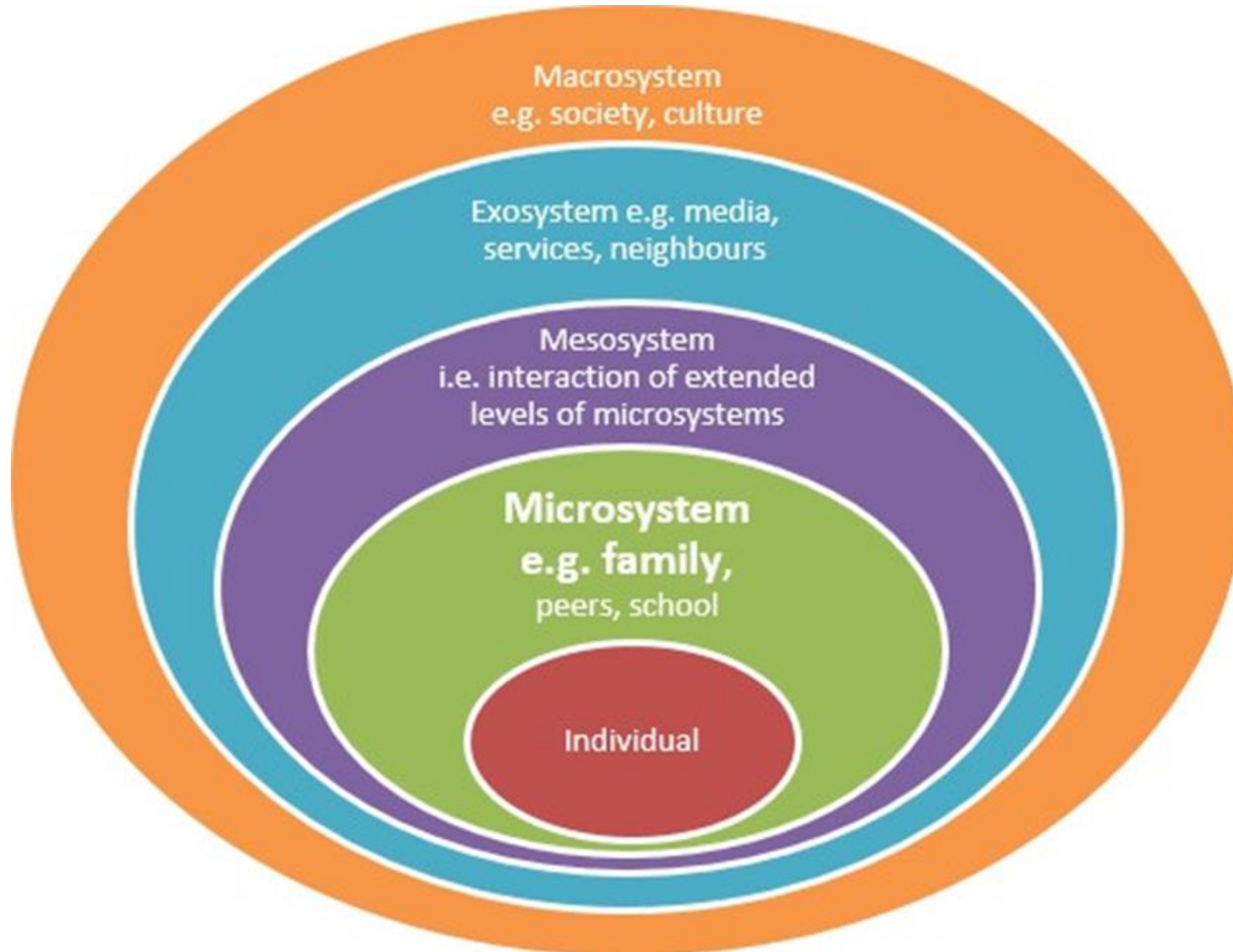


Is my research question biosocial?

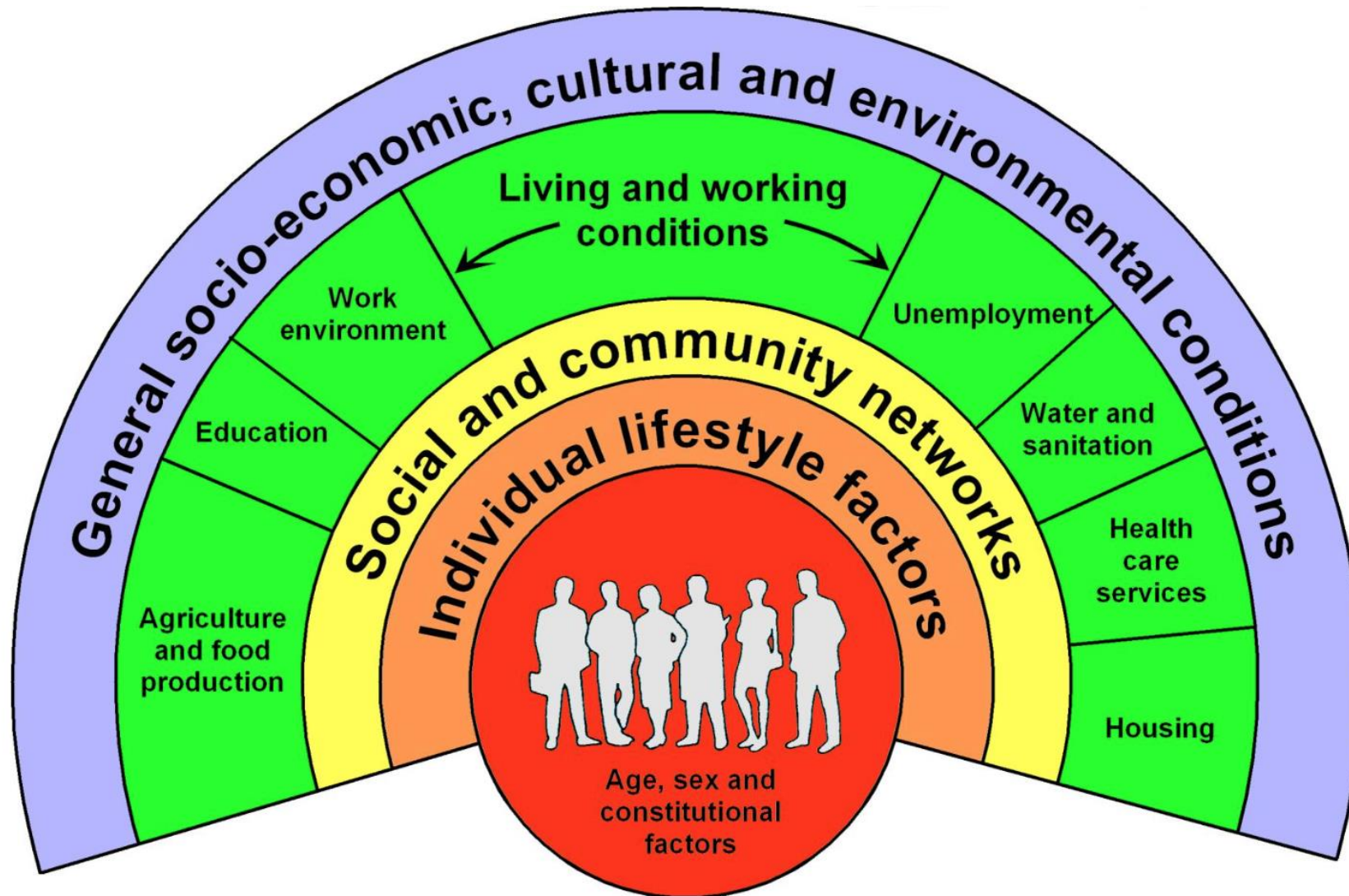
Summary

- Understanding what 'biosocial' is and where your research fits
- Disciplinary perspectives
- Development of a biosocial lifecourse framework – from Bronfenbrenner to Harris & Schorpp

Bronfenbrenner bioecological model

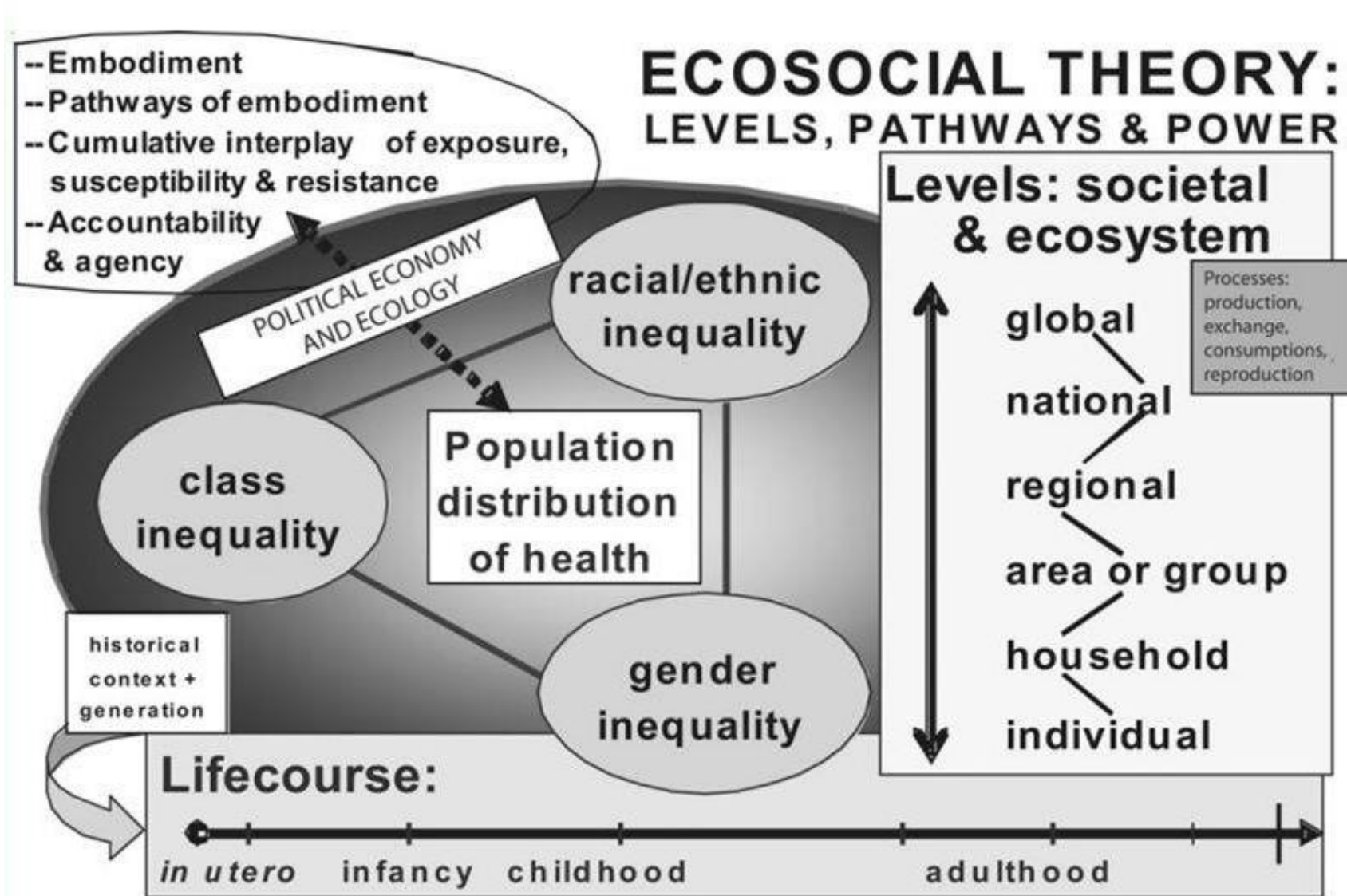


Dahlgren & Whitehead proximal and distal influences

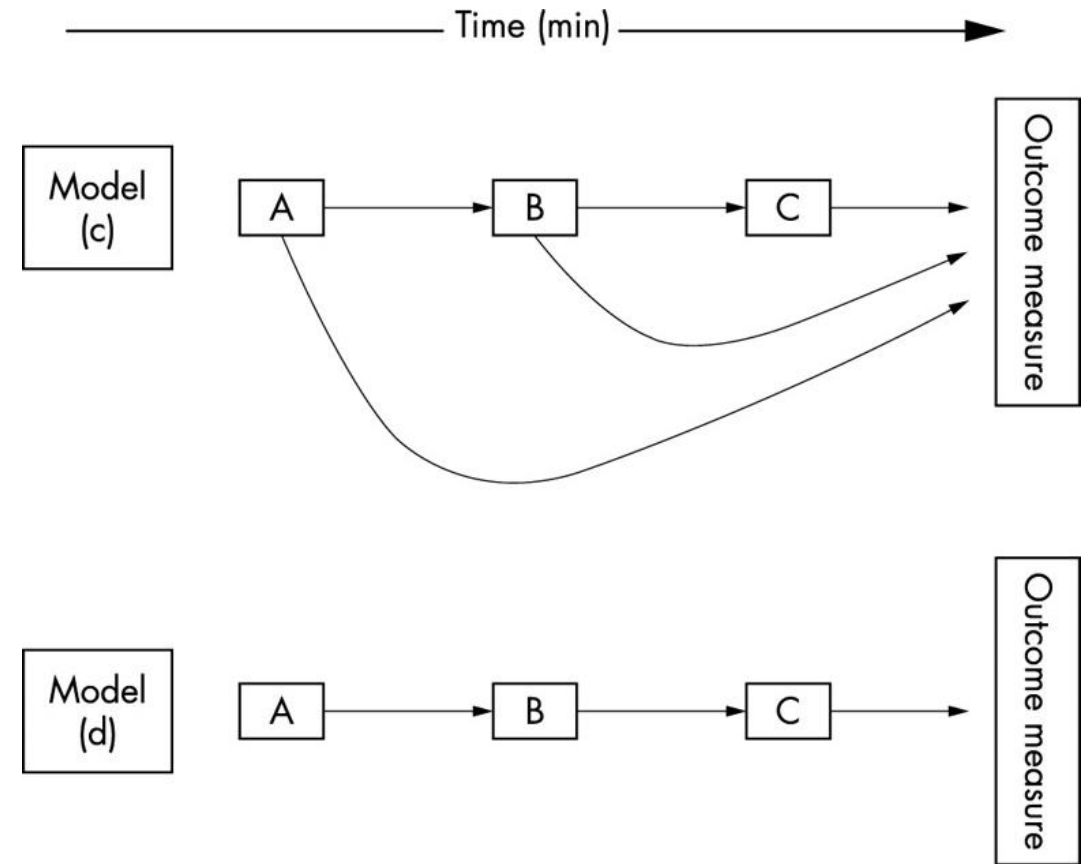
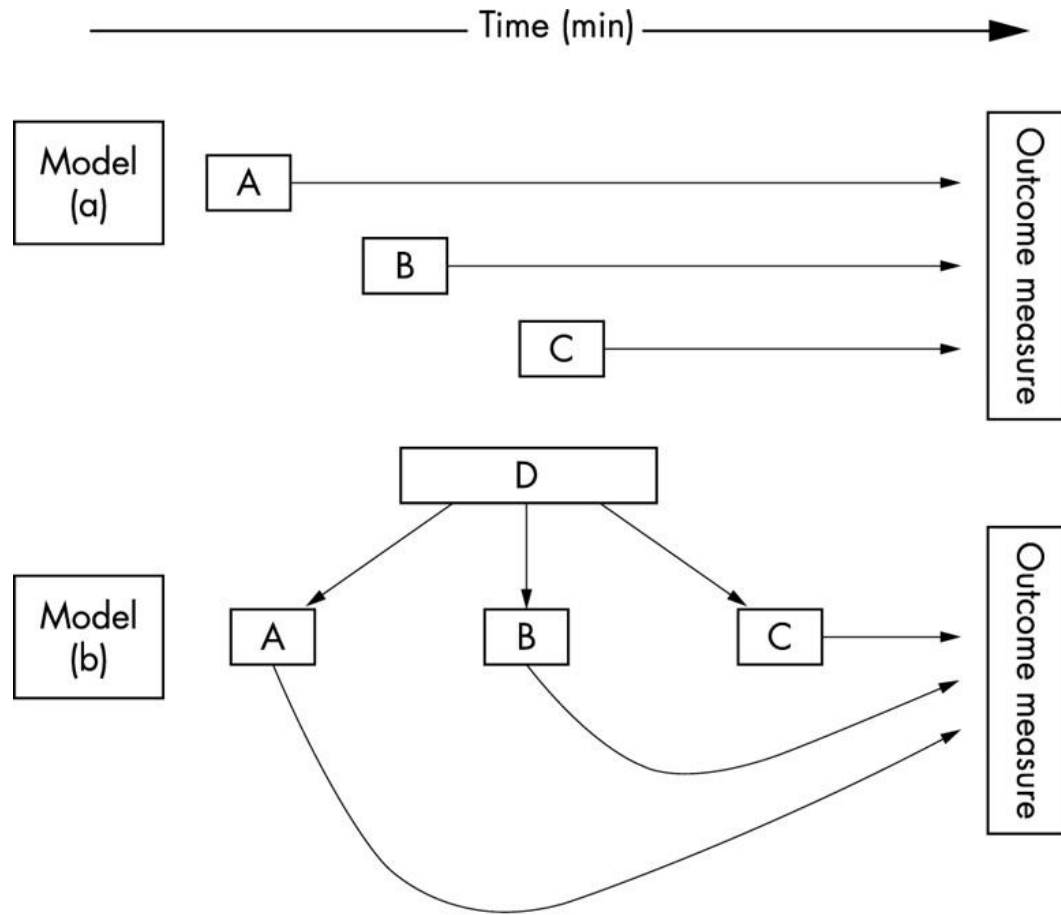


Source: Dahlgren and Whitehead, 1991

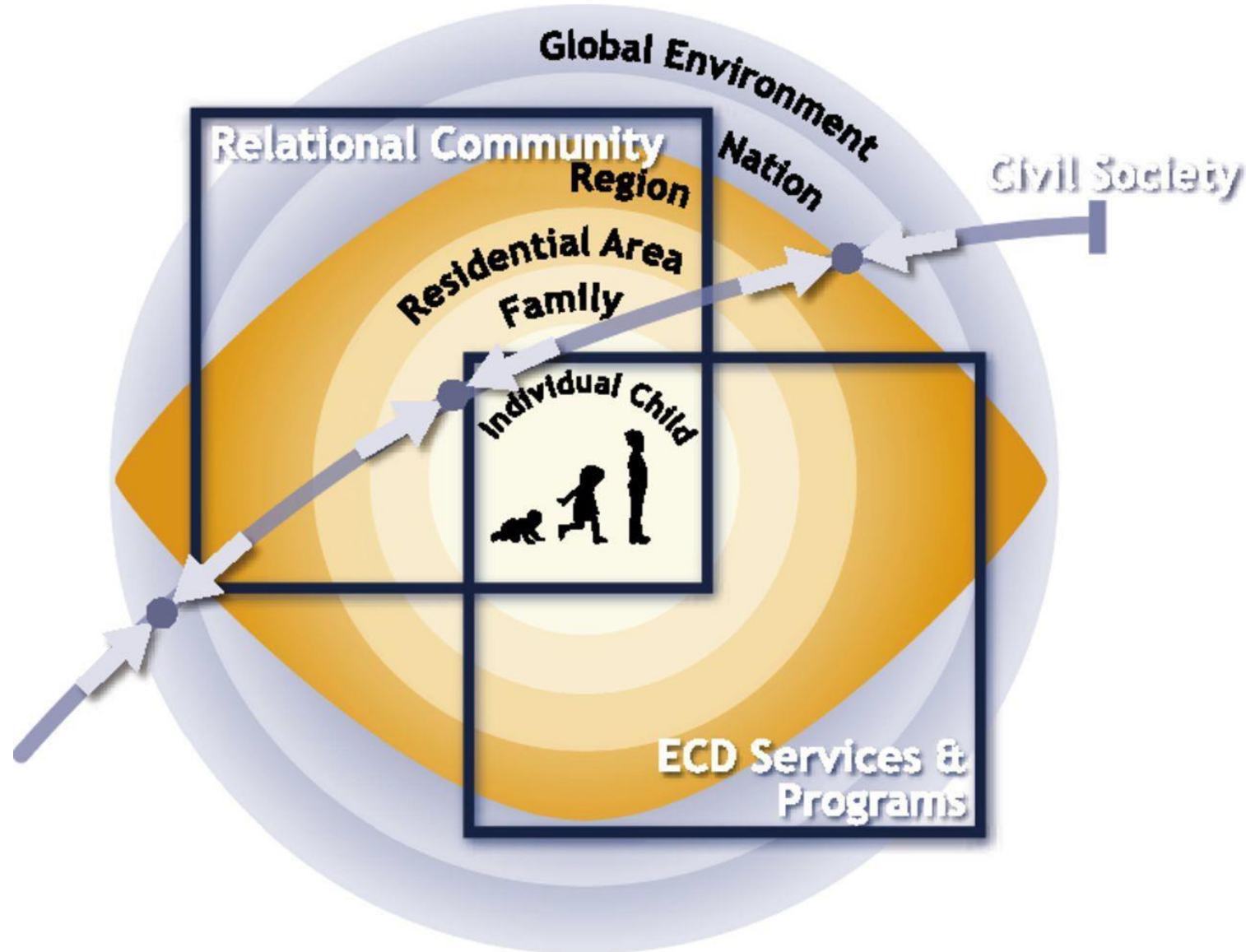
Krieger embodiment/ecosocial approach



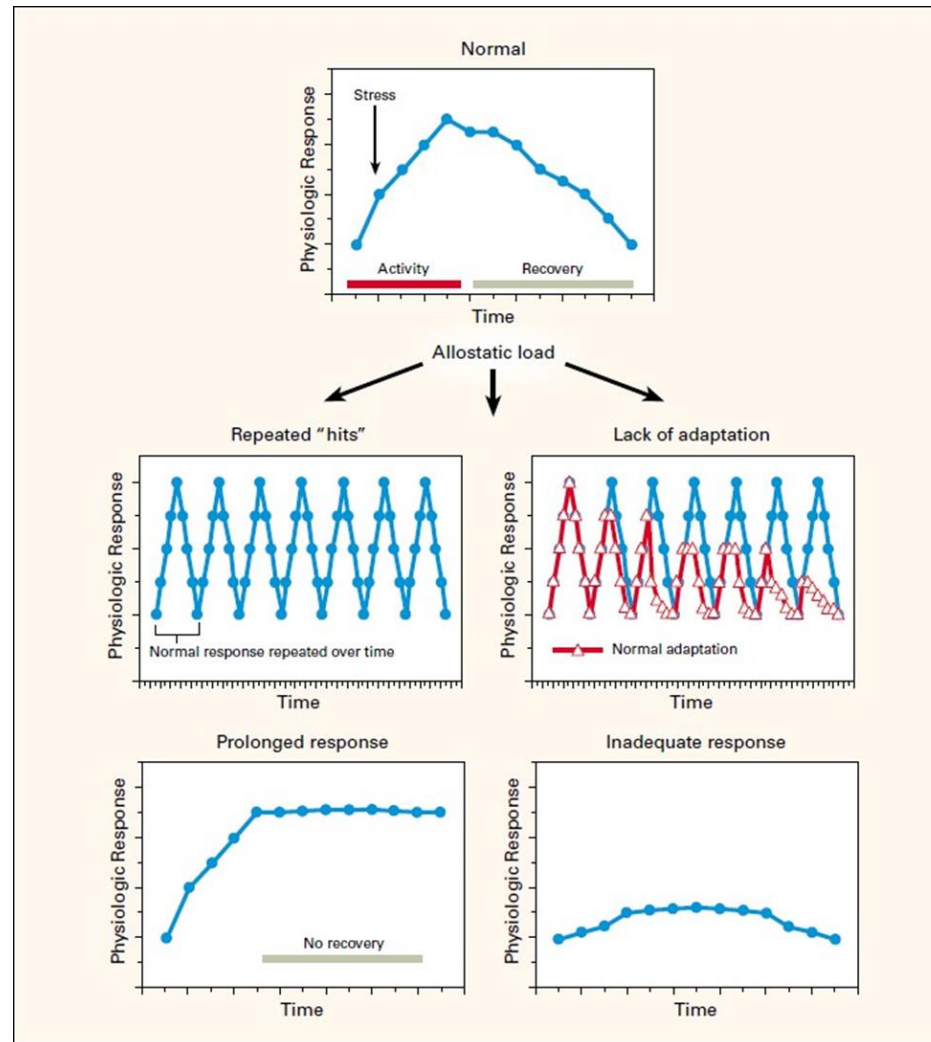
Kuh & Ben Shlomo lifecourse framework



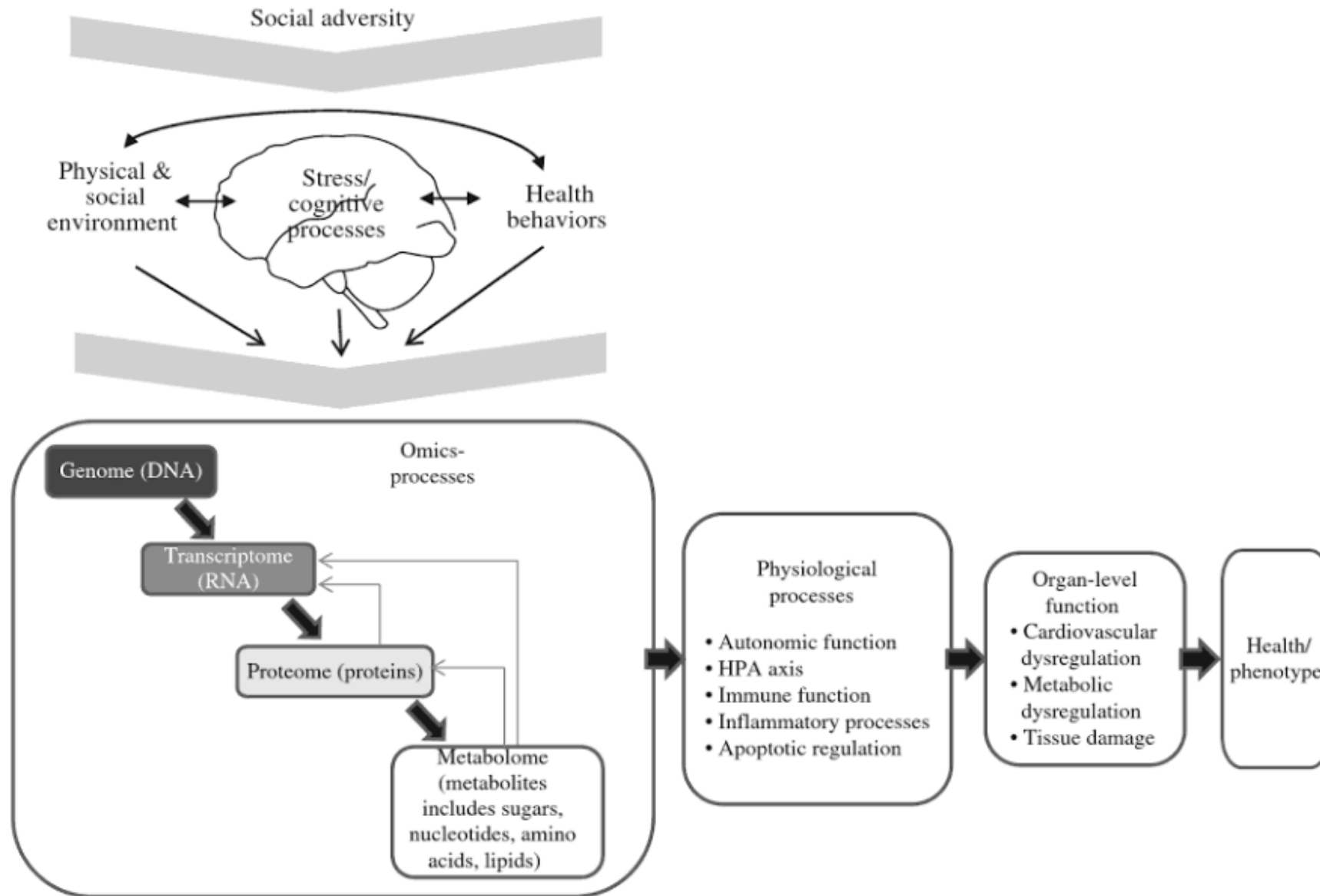
Hertzman biological embedding



McEwen Protective and damaging effects of stress mediators - Homeostasis, Allostasis, Robustness, and Weathering

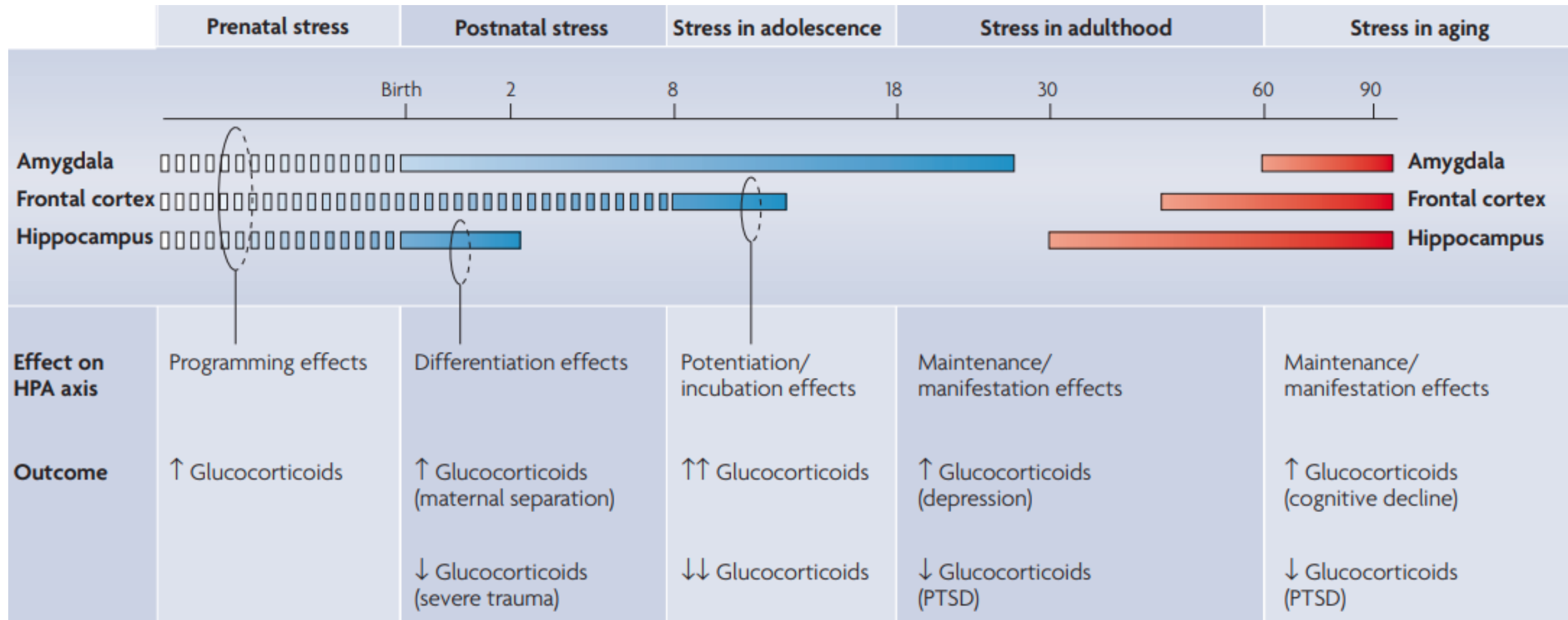


Kubansky, Seeman & Glymour biologically plausible mechanisms

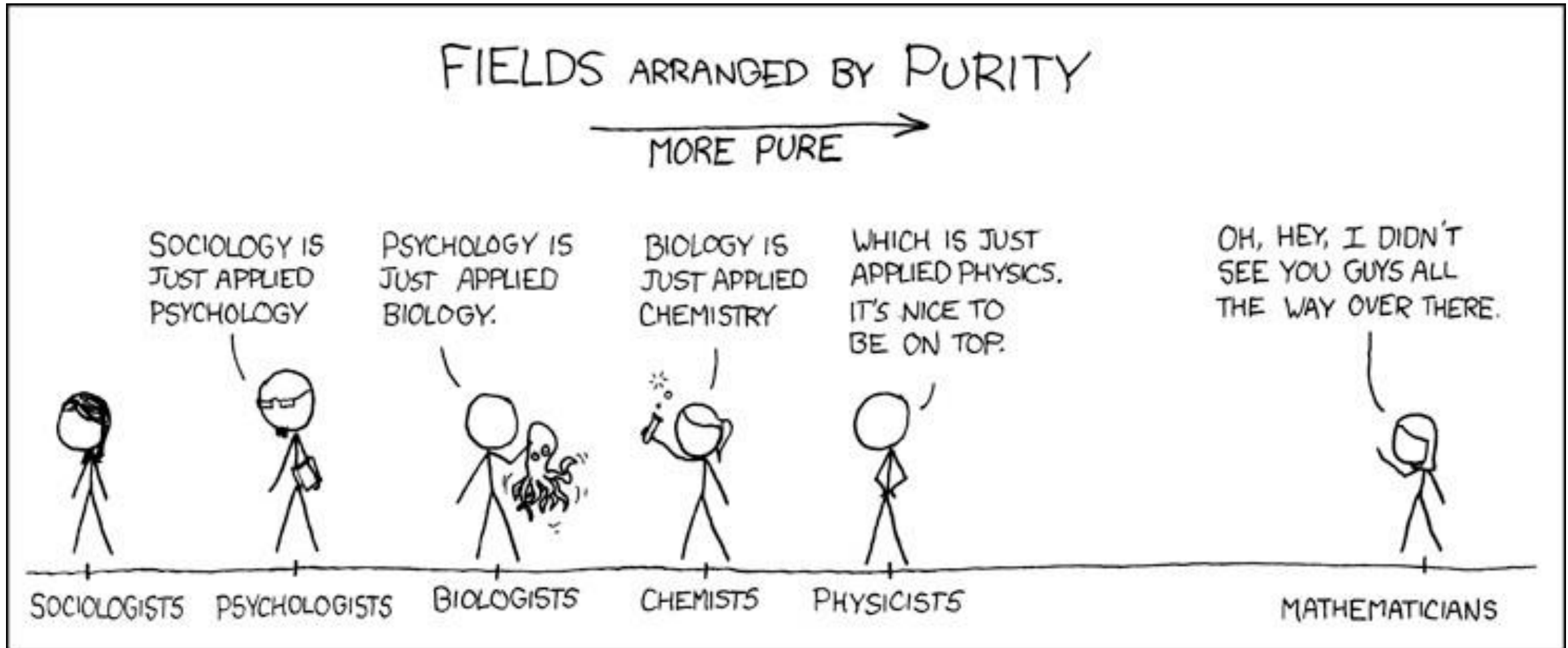


References

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Disciplinary rankings by purity



But it's good to think outside the box

