

What is Health: allostasis and the evolution of human design

March 29th, 8:30AM - 9:30AM

Via Zoom, Please register in advance [Here](#)

Join us for a special System of Care partner meeting for a discussion with renowned Neuroscientist and author Peter Sterling pertaining to his recent JAMA publication: [Deaths of Despair](#). This discussion will engage us all in questions surrounding how we can take part in making our life and the lives of all community members a little healthier.

Are you familiar with the term "homeostasis"? It's like a thermostat, to help keep our body in a certain health range. Many in the helping professions are taught that



WHAT IS HEALTH?

Allostasis and the Evolution of Human Design

Peter Sterling

health is a list of normal lab values dictated by principles of homeostasis:

- The body is viewed as a self-regulating machine which steadies these values automatically, like a thermostat.
- When something causes a sustained deviation, that is *un*-health or *dis*-ease.
- That we restore the ideal value with a drug, and that is health.

This view explains many *immediate* causes of mortality - for example, if blood pressure rises for long periods, it causes vessels to clog and rupture, as in heart attack or stroke, and the idea is to block this rise with a drug. However, it *doesn't* explain what causes the pressure to rise, nor why it doesn't self-correct. It also doesn't address why, despite drugs to reduce pressure, hypertension persists as a major killer or why hypertension is more prevalent among African Americans. This body-centered view of homeostasis always blames "bad genes".

But this view omits the brain!

- The brain monitors all internal values, such as pressure, temperature, sugar, salt and so on to predict what will be needed.
- The brain also evaluates external context, such as availability of nutrients, water, shelter, and danger.
- The brain then integrates needs plus context to select behaviors, physiology, and metabolism that provide "just enough, just in time".
- such predictive control, because it prevents errors, is highly efficient.

Once we grasp that the brain is in charge, we reach a new definition of health: health is not constancy or homeostasis. Rather it is **responsiveness—the capacity to adapt to constant change. This is allostasis**. Allostasis is similar to homeostasis, but instead of responding to the environment to keep our body healthy, allostasis helps our bodies predict and prepare for what's coming, based on what we've learned before.

Join the discussion and gain new insights to take with you in reconsidering What is Health? This opportunity is open to any student regardless of course of study, but might be of particular interest to anyone who is considering a career anywhere within the allied health professions.

The consequences include addiction, obesity, type 2 diabetes, and climate change. There is hope though! We will discuss how we can all take part in making our lives and the lives of our community members just a little healthier. If you are

curious to dive deeper, you're invited to consider Peter's most recent book: [What is Health?: Allostasis and the Evolution of Human Design](#)



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