“How Understanding Evolution Will Make You a Better Psychiatrist”

Randolph M. Nesse, MD

Research Professor, School of Life Sciences, Arizona State University

Professor Emeritus, Department of Psychiatry, The University of Michigan

http://RandolphNesse.com

Three Learning objectives

1. Participants will be able to describe the difference between proximate and evolutionary explanations and why both are needed for all traits.
2. Participants will be able to explain how natural selection shaped negative emotions to cope with threats and losses.
3. Participants will be able to conduct a Review of Social Systems to assess a patient's life situation

**Biography**

[Randolph Nesse](http://randolphnesse.com/) is a physician/scientist and author notable for his role in creating the field of evolutionary medicine. His 1994 book with George Williams, *Why We Get Sick: The New Science of Darwinian Medicine*, framed a new question about disease; instead of asking only about the mechanisms that make some individuals sick, it encouraged also asking why natural selection has left us all with traits that make us vulnerable to disease. He was Professor of Psychiatry, Professor of Psychology, and Research Professor at the University of Michigan where he led the Evolutionary and Human Adaptation Program, founded the Human Behavior and Evolution Society, and helped to develop one of the first anxiety disorders research clinics. In 2014 he moved to Arizona State University as Founding Director of the [Center for Evolution and Medicine](http://evmed.asu.edu/). He is a Fellow of the AAAS, a Distinguished Life Fellow of the American Psychiatric Association, and the Founding President of the [International Society for Evolution, Medicine & Public Health](http://evolutionarymedicine.org/). His new book, [*Good Reasons for Bad Feelings: Insights from the Frontier of Evolutionary Psychiatry*](http://goodreasons.info/)*,* was published in 2019.

**Abstract**

Evolutionary biology is the foundation for nearly all studies of animal behavior, but its utility for understanding psychopathology is only now being recognized. It can make psychiatry more like the rest of medicine and more effective. For emotional disorders, it recognizes why negative emotions exist at all; like physical pain they were useful in certain situations that recurred during our evolutionary history. The Smoke Detector Principle explains why anxiety and low mood are so often normal but excessive. Relationship problems are illuminated by understanding why relationships exist at all, and how capacities for morality and social sensitivity evolved. Addictions and other behavioral problems result from ancient motivation systems set into vicious cycles by cues that were not present in the Paleolithic. Finally, evolution explains why genetic variations that cause diseases like schizophrenia and autism persist despite strong selection against them. Thinking that diseases are adaptations is a mistake, but trying to understand why natural selection left us with traits that make us vulnerable is an essential foundation for psychiatric research and practice.