DNA, Determinism and Free Will

Excerpts from
The Mysterious Epigenome: What Lies Beyond DNA
by Thomas E. Woodward and James P. Gills

The Human Genome Project, launched in 1990, aimed to map the entire human genome. This herculean task took nearly a decade of labor by thousands of scientists and the expenditure of billions of dollars. The project was completed in 2003 and a final draft of the genome was published. At last, scientists had delivered a complete map of our human DNA. Spelling out the encyclopedic text of our DNA is indeed a major scientific achievement. Yet perhaps what has been missing, at least in connection with human health, is an equally important genome-related frontier – one that lies beyond DNA and is just now coming into focus.

In probing the operation of DNA, scientists have learned much more about a second biological encyclopedia of information that resides above the primary information stored within our DNA. Researchers have discovered a complex system of in the cell – sophisticated “software” situated beyond DNA – that directs DNA’s functions and is responsible for our embryonic development and the differentiation of a single fertilized egg cell into more than two hundred cell types in a mature body. This “information beyond DNA” plays a crucial role in each of our 60 trillion cells, telling the genes exactly when, where, and how they are to be expressed. This is biology’s mysterious new frontier – the epigenome.

The most exciting aspect of this explosion of epigenetic information is the potential for our proactive role in reprogramming our epigenome... to allow for improved health for everyone. Some aspects of this epigenetic improvement can even be passed on to future generations....

Perhaps the most sobering discovery that has emerged from this research is that crucial changes in a person’s epigenetic code can be inherited by succeeding generations. In other words, scientists have found that our system of epigenetic control is not only modified and re-edited by our lifestyle, but these changes can also be locked in to some extent; they can be passed down to our children, and even to our grandchildren and perhaps beyond....

Several lines of evidence, summarized in various books and research articles, have shown that many patterns of daily living – including diet, stress, smoking, and exercise – have the power to partially reprogram our epigenetic system and that of our offspring....

Our purpose in writing The Mysterious Epigenome is to recount the discoveries that have opened up a transformed picture of our genome and its crucial companion, the epigenome.... Because we are dealing with such foundational discoveries, we decided to ask the relevant “So what?” questions throughout this book. First, what is the practical impact of these new truths on

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Bruce Phillips

My years spent growing up in a mainline church in New York in the 1950s encouraged knowledge about Christianity, but did not foster commitment or passion. Years of secular education took their toll, and resulted in a twenty-five year self-imposed exile from a relationship with Christ.

My rejection was rooted in my perception that the Christian message was not rational. How could God be good and yet allow evil? What were we to make of miracles in light of science?

During my exile I met and married Pamela. We lived and worked for many years in Asia and the UK, neither hotbeds of Christian influence. We were blessed with four wonderful daughters so it was a family of six that arrived in Atlanta in 1989. By that time we had graduated to seekers who knew there must be something more to life. Our worldview was simply not providing the answers we all needed.

A chance invitation from a daughter’s friend brought us to the periphery of Eastside Baptist Church in Marietta. Because God is good we actually listened and read everything in sight! Today we are a family of believers – but this time with passion and commitment!

Shortly thereafter I discovered Christian apologetics. Intelligent and well trained people were making cogent arguments defending the rationality of Christian theism. I was hooked. While my primary interest focuses on the boundaries between science and faith, I find myself drawn increasingly to philosophy. My hope is to help others, especially young people, avoid the kinds of poor decisions about faith that I made along the way!

By day I am a Certified Financial Planner™. We remain actively involved at Eastside where I teach apologetics. The opportunity to serve with and support the Areopagus has been a great blessing. Come join us!

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our physical health and way of life? How can we live life to the fullest while ensuring that our lifestyle promotes not only our own wellness but also that of family members who will inherit our epigenetic code?

Equally important – ultimately more important by far – is the question of how these findings affect our spiritual health. How does the new breathtakingly complex view of the genome/epigenome system affect our view of origins? [W]hat or who designed this massive multilevel system?... How do these discoveries reopen old questions about whether life is “designed with a purpose in mind”?...

As we probe the connection between epigenetic research and the realm of spiritual and social health, we thought it would help to frame the issues by means of five key questions.... First, epigenetic discoveries can provide some of the most powerful evidence for the central role of intelligence in fashioning the biological world, which may lead to (or confirm one’s belief) in a master creator of life....

The Areopagus Calendar

SCIENCE & FAITH
Are They Really in Conflict?

A Special Discovery Institute and Areopagus Forum

Dr. John Lennox
Professor of Mathematics, Oxford University, and internationally renowned speaker on science, philosophy and religion

Dr. Stephen Meyer
Director of the Center for Science & Culture, The Discovery Institute, and author of Darwin’s Doubt: The Case for Intelligent Design

Eric Metaxas
The voice of BreakPoint and author of Bonhoeffer: Pastor, Martyr, Prophet, Spy

Sunday, April 6th
7:00 PM
Mt. Paran Christian School
Murray Arts Center
Kennesaw, Georgia

New Publication

The Spiritual and Cultural Legacy of The Beatles and Their Impact on American Society

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