



GSCS Monthly e-newsletter

“The official voice of straight chiropractic in NJ”

JUNE 2021

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From The Prez

Consistency

I know this is a topic we brought up before but I want to bring it up in a slightly different way. Our organization has worked to be just that, consistent. This year we have been quote checking ourselves to make sure that we are delivering to you a consistent non therapeutic objective straight chiropractic message. This is what BJ called slipping and checking. It may be time to take some stock in all we do in our offices and see if we are consistent with this message. Look forward to see improvement in our organization as we seek to serve you better!

Jay Yuhas, D.C.

Legacy and Lifestyle: Epigenetics and the potential for Chiropractic

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There weren't many exciting days in my high-school biology class. The class was interesting, though, and we had an excellent teacher. One day stands out in my memory. The excitement in the teacher's voice was contagious.

He brought forth a model from the back room and carried it to the demonstration table in the front of the lab. We were told the story of Watson and Crick's work on the double helix – DNA – and that it was the "*blueprint of life.*"



Our teacher could hardly contain his enthusiasm for sharing the secret of life with us, describing how the sequencing of the pyrimidines cytosine and thymine, and the purines adenine and guanine, encoded our identities and our futures. This was cutting-edge stuff in the '60s, and we were mesmerized.

The "*dogma of genetic supremacy*" followed me from high school to college and then professional school. Even in chiropractic classes, it was suggested that the "*limitations of matter*" were defined by our genetic legacy. But there was something brewing shortly after I left my teaching position at Palmer in 1979. Guy Riekeman and Joe Flesia held a symposium at which I first heard the term epigenetic. The environment, we were taught, determined gene expression. The speaker was Ron Pero, PhD. Little did I suspect that one day I would co-author a paper with him on DNA repair and chiropractic care.¹

Fast-forward 25 years or so to an interview with Bruce Lipton, PhD, for the "*On Purpose*" audio series. Bruce had the same zeal for his message as my high-school biology teacher. But like Pero, his message was very different: "*It is now recognized that the environment, and more specifically, our perception (interpretation) of the environment, directly controls the activity of our genes. Environment controls gene activity through a process known as epigenetic control.*"²

The significance of this hit me squarely between the eyes. We are not slaves to our DNA. Our environment controls the activity of our genes. Our interpretation of the environment determines how our genes express themselves, and we can direct our interpretation of life's events. In short, we are not slaves to biochemical caprice. As sentient beings, we sculpt our biology.

A growing body of scientific literature addresses how lifestyle choices affect gene expression. Sanchis-Gomar, et al.,³ observed that eu-stress, or positive stress, is an effector for gene expression. "*We propose herein that stress may stimulate genetic adaptations through epigenetics that, in turn, modulate the link between the environment, human lifestyle factors and genes ... How an individual physically adapts to the prevailing environmental conditions might influence epigenetic mechanisms and modulate gene expression.*" The authors also note, "*Physical exercise positively influences epigenetic mechanisms and improves health.*"

A broad array of lifestyle factors affects epigenetic mechanisms. According to Alegria-Torres, et al.⁴ "*The concept of 'lifestyle' includes different factors such as nutrition, behavior, stress, physical activity, working habits, smoking and alcohol consumption. Increasing evidence shows that environmental and lifestyle factors may influence epigenetic mechanisms, such as DNA methylation, histone acetylation and miRNA expression. It has been identified that several lifestyle factors such as diet, obesity, physical activity, tobacco smoking, alcohol consumption, environmental pollutants, psychological stress and working on night shifts might modify epigenetic patterns.*"

Other authors have addressed the interplay of early-life nutritional programming on obesity, inflammation and epigenetic outcomes,⁵ dietary and lifestyle factors of DNA methylation,⁶ genetic and environmental factors in the etiology of depression⁷ and epigenetic aspects of digestive diseases.⁸

Articles on epigenetics are also seen in the popular press. Medical physician Dean Ornish wrote in

Newsweek,⁹ "New research shows that improved diet, meditation and other non-medical interventions can actually 'turn off' the disease-promoting process in men with prostate cancer ... Earlier this week, my colleagues and I published the first study¹⁰ showing that improved nutrition, stress management techniques, walking, and psychosocial support actually changed the expression of over 500 genes in men with early-stage prostate cancer."

Discover Magazine featured an article whose title boldly proclaimed, "DNA is Not Destiny."¹¹ The author wrote, "A human liver cell contains the same DNA as a brain cell, yet somehow it knows to code only those proteins needed for the functioning of the liver. Those instructions are found not in the letters of the DNA itself but on it, in an array chemical markers and switches along the length of the double helix, known collectively as the epigenome, that lie along the length of the double helix. These epigenetic switches and markers in turn help switch on or off the expression of particular genes."

The take home-message is stunning: "Epigenetic signals from the environment can be passed on from one generation to the next, sometimes for several generations, without changing a single gene sequence ... Put simply, and as bizarre as it may sound, what you eat or smoke today could affect the health and behavior of your great-grandchildren ... Epigenetics is proving we have some responsibility for the integrity of our genome ... Before, genes predetermined outcomes. Now everything we do ... can affect our gene expression and that of future generations. Epigenetics introduces the concept of free will into our idea of genetics."

For the chiropractor, correction of nerve interference takes on a deeper significance. Subluxation distorts our perception of the environment, and compromises our ability to respond to it. As every DC knows, following an adjustment, patients frequently report a heightened state of perceptual awareness and well-being. Quite simply, correcting interference may well affect not only the genetic expression of the patient, but also the bodies and brains of their progeny.

We now know that there are two ways that correction of vertebral subluxations may affect genetic mechanisms:

- Chiropractic care could influence basic physiological processes affecting oxidative stress and DNA repair.
- Correction of vertebral subluxations may change a person's perception of the environment and facilitate constructive, appropriate responses to environmental change.

This knowledge positions the chiropractor as a facilitator in determining the legacy of humanity. That's the power you hold in the very hollow of your hands.

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Practice Tip

We've got Your Number...

A few years ago, we updated our entrance form to include cell phone numbers and email addresses. I've seen quite a number of case histories from doctors' offices where these are NOT included. These two inclusions can be priceless for a couple of reasons.



First- the cell phone number...many people these days only have cell phones, and have cancelled their land lines. So, it would be a good idea to update your records to assure you have the correct phone numbers.

I only know one person in our practice who does NOT own a cell phone (by choice!). She's near 80 and tells me she never drives at night and only travels from her home town (our town) to the next town, so there's no need. Even with that knowledge, her daughter is still insisting she get one. Everyone else, on the other hand, has one.

Now for the reason: If you really need to get in touch with your patient/practice member, there's no better way than a personal cell phone number. The kids or the spouse probably won't be picking up the voicemail and forgetting to give it to the intended person. So you may be asking, "What would be so important that you'd have to call them?" A perfect example would be this past summer when a hurricane hit the East Coast. Fortunately, we didn't lose electric and resumed our practice hours immediately. Others were not so lucky. Either of these situations would probably require a phone call...to let them know whether or not you're there and are operational.

Also, there's a company called TNC <http://www.TNC.com> that you get to use for about 5-10 cents per phone call. Once you download your patient's names & phone numbers, you can either call your message in or do it through any computer. We've used it to remind patients/practice members of appointments, vacations and holidays, etc. It's an awesome way to stay connected for a fraction of the cost of staff spending hours making the same call. Check it out.. they may give you a "sample" test run to see how it works... no minimums!

Now for the second: Email addresses.. hopefully you know the reason for this one. It's so you can email them your newsletter, along with any other info they may need to know about upcoming holidays, contests or other events, etc. We have a list of over 450 emails that we send out to weekly. Just remember to send them BCC (blind carbon copy) on the recipient line. How easy is that??

submitted by Martin Brown, DC

Philosophy article

Summum Bonum

It's tempting, natural even, to measure your life by what you've accomplished. How many battles you've won. How much money you've made. The pleasure you've had. All the honors you've received.



But Stoics know that ultimately these things are meaningless. In the end, they are nothing. What happened to Alexander the Great, Marcus asked? He was buried in the same ground as his mule driver. Look at the things the conquerors and the tyrants and the perverts have given up to get what they chased, he said. What is the applause now? What was the cheering ever really? Dust. Nothing. A clacking of tongues.

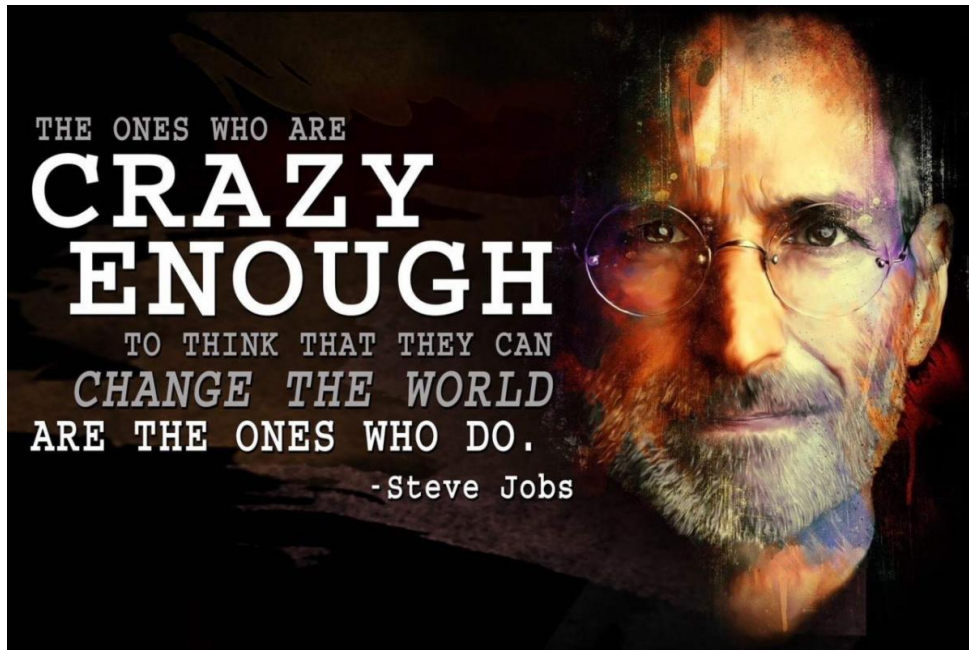
No, we have to measure our life by only one thing: virtue. Did we do right? Did we hold true? Whether we did so on an epic scale or in the quiet confines of our own home—that's what matters. Socrates and Cato were great men, according to the Stoics, not because of the fame they achieved, but because of the unswerving commitment they had to principle. That this brought them fame was an accident—it was irrelevant.

Summum Bonum: the highest good. Virtue. That's what we measure a life by in these trying times. In the good times too. What did we do for others? Did we embody good character? **Did we embody the philosophy—not just talk about it?**

That's what success is. That's what we're reaching for.

*Thank you to The Daily Stoic: Ancient Wisdom for Everyday Life for this article.
Submitted by Daria Messina & Joe Sasso, DCs.*

Today's quote



Become a GSCS member

Not a member? Are you a student considering practicing in NJ? Are you a DC affiliated with an organization that just doesn't represent you and your understanding on chiropractic? Are you a DC who just has not gotten around to joining a state organization yet?

Join Us!

The GSCS is New Jersey's oldest and most respected chiropractic organization. Our mission has never wavered. And now is a great time to join the GSCS.

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